INVITATION TO SUBSCRIBE FOR SHARES IN IRRAS AB

SOLE GLOBAL COORDINATOR

ABG SUNDAL COLLIER

FINANCIAL ADVISOR

VATOR SECURITIES

IMPORTANT INFORMATION

This offering circular (the "**Offering Circular**") has been prepared in connection with the offering to the public in Sweden and admission to trading of the shares in IRRAS AB, reg. no. 556872-7134 (a Swedish public limited liability company) on Nasdaq First North Premier (the "**Offering**" and the "**Shares**", respectively). In this Offering Circular, "**IRRAS**", or the "**Company**" means, depending of the context, IRRAS AB, the group in which IRRAS AB is the parent company or a subsidiary in the group. The "**Parent Company**" means IRRAS AB. The "**Group**" means the company group in which IRRAS AB is the parent company and IRRAS USA, Inc. and IRRAS GmbH are subsidiaries. The "**Main Shareholders**" comprise Vandel Medical Equipment (CY) Limited, Serendipity Ixora AB (publ), F.EX Endotherapy Limited, Bacara Holdings Limited and Timoben Medical Holding. "**ABGSC**" or the "**Sole Global Coordinator**" refers to ABG Sundal Collier AB. ABGSC is Sole Global Coordinator in the Offering. "**Vator**" refers to Vator Securities AB. Vator is Financial Advisor in the Offering.

Certain financial information and other information presented in this Offering Circular have been rounded off to make information easily accessible to the reader. As a consequence, the figures in certain columns do not necessarily tally with the totals stated. Unless otherwise indicated, all financial amounts are expressed in Swedish kronor ("**SEK**".) "**TSEK**" refers to one thousand SEK. For definitions of other terms used in this Offering Circular, please see the section "*Glossary*".

The Offering does not constitute an offer to sell, or solicitation of an offer to buy, Shares in any jurisdiction in which such offer or solicitation would be unlawful. The Shares have not been, and will not be, registered under the United States Securities Act of 1933, as amended (the "**Securities Act**"), or with any securities regulatory authority of any state or other jurisdiction of the United States and may be offered or sold within the United States only to persons reasonably believed to be qualified institutional buyers ("**QIBs**") as defined in, and in reliance on, Rule 144A under the Securities Act ("**Rule 144A**") or pursuant to another exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, and outside the United States only in offshore transactions in reliance on Regulation S. Prospective purchasers are hereby notified that sellers of the Shares may be relying on the exemption from the provisions of Section 5 of the Securities Act provided by Rule 144A. The Shares in the Offering have not been reviewed or recommended by any federal or state securities commission or regulatory authority in the United States. Nor have the aforementioned authorities confirmed the accuracy , or determined the adequacy, of the Offering Circular. Any representation to the contrary is a criminal offense in the United States. For further information on certain restrictions on transfers of the Shares, see "Transfer Restrictions".

This Offering Circular has been prepared on the basis that any offer of Shares in any Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "**Relevant Member State**"), other than offers (the "**Permitted Public Offers**") which are contemplated in the Offering Circular in Sweden once the Offering Circular has been approved by the Swedish Financial Supervisory Authority and published, will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of Shares. Accordingly any person making or intending to make an offer in that Relevant Member State of Shares which are the subject of the Offering contemplated in this Offering Circular, other than the Permitted Public Offers, may only do so in circumstances in which no obligation arises for the Company or the Sole Global Coordinator to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive, in each case, in relation to such offer. Neither the Company nor the Sole Global Coordinator have authorized, nor do they authorize, the making of any offer (other than Permitted Public Offers) of Shares in circumstances in which an obligation arises for the Company or the Sole Global Coordinator to publish or supplement a prospectus for such offer. The expression "Prospectus Directive" means Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in the Relevant Member State.

This Offering Circular is only being distributed to and is only directed at: persons who (1) are outside the United Kingdom; (2) have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "**Order**"); (3) are persons falling within Article 49(2)(a) to (d) of the Order (high net worth companies, unincorporated associations, etc); or (4) are persons to whom this Offering Circular may otherwise lawfully be communicated (all such persons together being referred to as "**relevant persons**"). Any person who is not a relevant person should not act or rely on this Offering Circular or any of its contents. Any investment or investment activity to which this Offering Circular relates is available only to relevant persons and will be engaged in only with relevant persons.

This Offering Circular is provided on a confidential basis solely to allow a potential investor to consider purchase of the specific securities described. The information in the Offering Circular has been provided by the Company and other sources identified herein. Distribution of the Offering Circular to other persons than those recipients specified by the Managers or their representatives is prohibited, as it is to persons who may have been hired to inform the recipient about the matter, and any disclosure of the contents without the prior written permission of the Company is prohibited. Any reproduction or distribution of this Offering Circular, in its entirety or parts thereof, and all disclosure of the content to other persons is prohibited. The Offering Circular is personal to each recipient and does not constitute an offer to any other person or to the general public in any other country than Sweden to subscribe for shares in the Offering.

This Offering Circular is a translation of a Swedish language prospectus (the "**Prospectus**") which has been approved and registered by the Swedish Financial Supervisory Authority in accordance with the provisions of Chapter 2, §§ 25 and 26 of the Swedish Financial Instruments Trading Act (1991:980). Neither the approval nor registration of the Prospectus implies a guarantee from the FSA that the factual information in the Prospectus is accurate or complete. In the event of any inconsistency between the Prospectus and the Offering Circular, the Prospectus shall take precedence. The Offering and the Offering Circular are governed by Swedish law. Any dispute arising in connection with the Offering or the Offering Circular will be resolved exclusively by a Swedish court of law.

Forward-looking information

The Offering Circular contains certain forward-looking information that reflect IRRAS's current views of future events and financial and operational performance. Words such as "intends", "anticipates", "expects", "can", "plans", "estimates" and similar expressions regarding indications or forecasts of future developments or trends, and which are not based on historical facts, constitute forward-looking information. Forward-looking information is inherently associated with both known and unknown risks and uncertainties because it is dependent on future events and circumstances. Forward-looking information is not a guarantee of future results or developments and actual results may differ materially from those in the forward-looking information, or fail to meet expectations expressly or implicitly assumed or described in such information or to turn out to be less favorable than the results expressly or implicitly assumed or described in such information. Accordingly, prospective investors should not place undue reliance on the forward-looking information herein, and are advised to read the Offering Circular as a whole. Neither the Company, the Main Shareholders, ABGSC nor Vator can guarantee the accuracy of such information or whether predicted developments will occur. In light of the risks, uncertainties and assumptions associated with forward-looking information, it is possible that future events mentioned in the Offering Circular may not occur. Moreover, the forward-looking information derived from third party studies may prove to be inaccurate. Actual results, performance or events may differ materially from those presented in such information due to, without limitation: changes in general economic conditions, in particular economic conditions in the markets in which the Company operates, changes affecting interest rate levels, changes affecting currency exchange rates, changes in competition levels, changes in laws and regulations, and occurrence of accidents or environmental damages.

Factors that could cause IRRAS's future results and developments to differ from those in the forward-looking information include, but are not limited to, those described under "Risk Factors". Forward-looking information in the Offering Circular is only applicable on the date of issue of the Offering Circular. Neither IRRAS nor the Sole Global Coordinator give any commitment to publish updates or revision of any forward-looking statements as a result of new information, future events or similar circumstances other than those required by applicable legislation.

Industry and market information

This Offering Circular contains information about the Company's geographic and product markets, market size, and other market-related information pertaining to IRRAS's operations and market. Unless otherwise stated, such information is based on the Company's analysis of several different sources, including statistics and information from external industry or market reports, market surveys, publicly available information and commercial publications. Such information as originates from third parties has been accurately reproduced and, and as far as IRRAS is aware and can confirm through comparison with other information published by the relevant third party, no information has been omitted in any way which could render the reproduced information inaccurate or misleading. As a rule, industry and market publications state that, while the information in this publication has been obtained from sources deemed reliable, the accuracy and completeness of such information cannot be guaranteed. The Company has not independently verified, and cannot therefore guarantee the accuracy of the market information that is contained in this Offering Circular and which has been taken from or derived from these market publications. Neither the Company nor the Sole Global Coordinator assume any responsibility for the accuracy of any industry or market information from third parties which is included in the Offering Circular. The content on the Company's website or the websites of third parties referred to herein does not constitute part of the Offering Circular. In their nature, market information and statistics are forward-looking and subject to uncertainty. They may therefore be interpreted subjectively, and may not necessarily reflect actual or future market conditions. Such information and statistics are based on market surveys, which in turn are based on extracts, subjective interpretations and assessments, including assessments of the types of products and transactions which should be covered by the relevant market, both by those carrying out the surveys and the respondents. As a result, potential investors should be aware of the fact that the financial information, market information, as well as the forecasts and estimates of market information contained in this Offering Circular, do not necessarily represent reliable indicators of IRRAS's future performance.

Stabilization

In connection with the Offering, the Sole Global Coordinator may carry out transactions with the aim of keeping the market price of the share at a level higher than what otherwise might have been the case in the market. Such stabilization transactions may be carried out on Nasdaq Stockholm, the OTC market or otherwise, and may be carried out at any time during the period beginning on the first day when the shares are traded on Nasdaq Stockholm and ending no later than 30 calendar days thereafter. However, the Sole Global Coordinator is under no obligation to carry out stabilization of any kind, nor is there any guarantee that stabilization will be carried out. See also under "Stabilization" in the section "*Legal considerations and supplementary information*".

The fact that the Sole Global Coordinators has the opportunity to implement stabilization measures does not mean that such measures will necessarily be taken. Any such stabilization measures may also be discontinued at any time. When the stabilization period (30 calendar days) has expired, the Sole Global Coordinator, through the Company, will announce whether stabilization measures have been taken, the date when any stabilization measures have been taken, including the final date for such measures, and the price range within which the stabilization transactions were carried out.

IMPORTANT INFORMATION REGARDING SUBSCRIBED SHARES

Allotment of subscribed shares to the Swedish general public will be notified by the sending out of a contract note, which is expected to happen on or around November 22, 2017. Once payment for the allotted shares has been processed by the Sole Global Coordinator, the shares paid for will be transferred to a custody account or securities account that is designated by the subscriber. The time required for the transfer of payment, and the transfer of paid shares to subscribers of the shares in IRRAS, may mean that such subscribers will not have the shares they have been alotted available in the designated custody or securities account earlier than November 24, 2017. Trading in IRRAS's shares on Nasdaq Stockholm is expected to commence on or around November 22, 2017. Note the possibility that shares may not be available in the subscriber's custody or securities account before November 24, 2017 at the earliest may mean that the subscriber is not able to sell these shares on the stock exchange as of the date upon which trading in the shares commenced. Instead, they will be able to do so when the shares are available in their securities or custody account.

IMPORTANT INFORMATION ABOUT NASDAQ FIRST NORTH PREMIER

Nasdaq First North Premier is an alternative marketplace (MTF) operated by the different exchanges within Nasdaq. It does not have the same legal status as a regulated market. Companies on Nasdaq First North Premier are regulated by Nasdaq First North Premier's rules and not by the legal requirements that applies for admission to trading on regulated markets An investment in a company traded on Nasdaq First North Premier is more risky than an investment in a company on a regulated market. All companies whose shares are admitted to trading on Nasdaq First North Premier have a Certified Advisor. IRRAS has appointed Wildeco to be its Certified Advisor. It is Nasdaq Stockholm AB that approves the admission to trading on Nasdaq First North Premier.

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SUMMARY OF THE OFFERING

Number of shares offered
Maximum 7,777,777 shares

Offering price
SEK 45–50 per share

Indicative timetable

Application period for the public in Sweden	November 14–20, 2017
Application period for institutional investors	November 14–21, 2017
Publication of the Offering Price	November 22, 2017
First day of trading	November 22, 2017
Settlement date	November 24, 2017

Other information

Marketplace	Nasdaq First North Premier
Ticker symbol	IRRAS
ISIN code	SE0008321202

Financial calendar

Year-end report	February 21, 2018
Interim report Q1	May 29, 2018
Annual general meeting 2018	May 29, 2018
Interim report Q2	August 30, 2018
Interim report Q3	November 7, 2018

SUMMARY

The summary of the Offering Circular consists of information requirements set out in "Items". The items are numbered in the sections A – E (A.1 – E.7).

The summary in the Offering Circular contains all the items required in a summary for the relevant type of security and issuer. However, since some items do not apply to all types of offering circulars, there may be gaps in the item numbering.

While it is required that an item be included in the summary of the relevant securities and issuers, it is possible that no relevant information can be given on that item. In that case, the information is replaced with a brief description of the item, along with the comment "Not applicable".

SECTION A – INTRODUCTION AND WARNINGS

A.1	*Introductions and warnings*	This summary should be considered an introduction to the Offering Circular. Investors should base any decision to invest in IRRAS on an assessment of the Offering Circular as a whole. If a claim relating to the information contained in the Offering Circular is brought to court, the investor claimant may, under the national laws of the Member States, have to bear the costs of translating the Offering Circular before the legal proceedings are initiated. Civil liability may only be imposed on persons who have submitted the summary, including any translation thereof, but only if the summary is misleading, inaccurate or inconsistent with other parts of the Offering Circular, or if the summary and other parts of the Offering Circular are inadequate in providing investors with the key information they require to consider whether or not to invest in IRRAS.
A.2	*Consent to use of the Offering Circular*	Not applicable. IRRAS does not consent to the use of the Offering Circular by financial intermediaries for the purposes of subsequent resale or placement of the securities covered by this Offering Circular.

SECTION B – ISSUER

B.1	*Corporate name and trading name*	The name of the Company (and its trading name) is IRRAS AB and its company reg. no. is 556872-7134. The Company's trade name (ticker) on Nasdaq First North Premier will be IRRAS.
B.2	*Domicile and legal form*	IRRAS is a Swedish public limited liability company, established in Sweden and registered in the municipality of Stockholm. The Company has been established under Swedish law and its organization structure is governed by the Swedish Companies Act (2005:551).
B.3	*Description of the issuer's activities*	IRRAS is a commercial stage medical technology company that is currently focused on designing, developing and commercializing innovative solutions to facilitate surgical procedures in the treatment of various brain pathologies, with a goal of dramatically improving patient outcomes, reducing patient-time in both the intensive care unit and medical wards, and providing significant health economic benefits to hospitals and healthcare providers. The Company's initial product focus is on intracranial fluid management solutions that utilize its proprietary platform technology, IRRA*flow*, which is a CE-marked, fully integrated, closed-circuit medical device system that enables intelligent intracranial fluid management as well as accurate, real-time monitoring of intracranial pressure (ICP). The Company's initial commercial markets for IRRA*flow* are hemorrhagic stroke and chronic subdural hematoma. The Company commenced a full commercial launch of IRRA*flow* in Germany in May 2017 and has since expanded commercial sales of IRRA*flow* outside Germany by signing agreements with 21 distributors in 42 countries.

B.4a *A description of significant trends in the industry*

During 2015 approximately 250,000 patients in EU and 210,000 patients in US suffered from hemorrhagic stroke. The Company estimates the number of strokes per annum to increase in the future, among other things, as a result of the ageing population.

The Company expects downward pressure on price in connection with sales of and reimbursements for the use of IRRA*flow* due to the trend towards managed care, the increasing influence of healthcare organizations, additional legislative changes and downward pressure on healthcare costs in general.

B.5 *The Group*

IRRAS is parent company of a group comprising one German subsidiary, IRRAS GmbH, and one US subsidiary, IRRAS USA, Inc., a Delaware corporation.

B.6 *Major shareholders and control of the Company*

OWNERSHIP STRUCTURE

As per September 30, 2017 there were approximately 200 shareholders in IRRAS. In the table below the Company's ten largest shareholders are presented. The ownership structure as per September 30, 2017 is shown in column 1 and columns 2 and 3 respectively show the ownership structure immediately after completion of the Offering, in terms of whether the Over-allotment Option is exercised or not. The calculations regarding the ownership structure after the completion of the Offering is based on the assumption that the share price is set at the midpoint of the price range, i.e. SEK 47.50, and that the Investing shareholders do not receive any allocation in the Offering.

	Ownership as per September 30, 2017		Ownership after the Offering if the Over-allotment option is not exercised		Ownership after the Offering if the Over-allotment Option is exercised in full	
Shareholder	Number	Percent	Number	Percent	Number	Percent
Vandel Medical Equipment (CY) Limited	3,259,000	18.93%	3,259,000	13.26%	3,259,000	12.69%
Serendipity Ixora AB (publ)	3,188,107	18.52%	3,188,107	12.97%	3,188,107	12.41%
F.EX Endotherapy Limited	3,030,800	17.60%	3,030,800	12.33%	3,030,800	11.80%
Bacara Holdings Limited	956,107	5.55%	956,107	3.89%	956,107	3.72%
Timoben Medical Holding	652,000	3.79%	652,000	2.65%	652,000	2.54%
Stella Corrente AB	277,143	1.61%	277,143	1.13%	277,143	1.08%
Förvaltnings AB Vretensborg	140,000	0.81%	140,000	0.57%	140,000	0.54%
Mathias Malmgren	137,142	0.80%	137,142	0.56%	137,142	0.53%
Strategic Wisdom Nordic AB	128,571	0.75%	128,571	0.52%	128,571	0.50%
Acto AS	127,142	0.74%	127,142	0.52%	127,142	0.49%
Other present shareholders	5,321,407	30.91%	5,321,407	21.64%	5,321,407	20.71%
New shareholders	–	–	7,368,421	29.97%	7,626,316	29.68%
Total	**17,217,419**	**100.00%**	**24,585,840**	**100.00%**	**25,691,103**	**100.00%**

B.7 *Selected historical financial information*

The financial information presented below has been derived from IRRAS's unaudited condensed consolidated interim financial statements for the nine month period that ended September 30, 2017, IRRAS's audited consolidated financial statements for the fiscal year that ended December 31, 2016 and the Parent Company's audited financial statements for the fiscal years that ended December 31, 2016, 2015 and 2014. IRRAS's condensed consolidated interim financial statements are presented in accordance with IAS 34 Interim Financial Reporting and the Swedish Annual Accounts Act, and reviewed by IRRAS independent auditors. The consolidated financial statements for the fiscal year 2016 has been prepared in accordance with International Financial Reporting Standards ("**IFRS**"), as adopted by the EU and audited by IRRAS's independent auditors. The financial statements for the Parent Company have been prepared in accordance with the Swedish Annual Accounts Act and RFR2 and audited by IRRAS's independent auditors. Note that the financial information derived from the Parent Company's audited financial statements for the fiscal years 2016, 2015 and 2014 have been included for comparative purposes, as the IRRAS group was formed in 2016 by establishment of IRRAS GmbH and IRRAS USA Inc. which are wholly-owned subsidiaries of the Parent Company (jointly the "**Group**"). The accounting principles of the Parent Company are consistent in all material respects with the accounting principles of the Group. Figures stated in this section may have been rounded up or down in certain cases, which means that the totals in the tables do not necessarily tally.

STATEMENT OF LOSS

	Group[1]		Group[2]	Parent[3]		
Amounts in TSEK (unless otherwise stated)	2017-01-01 2017-09-30	2016-01-01 2016-09-30	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Revenue	11,304	–	–	–	–	–
Cost of sales	–3,616	–	–	–	–	–
Gross profit	**7,688**	**–**	**–**	**–**	**–**	**–**
Other operating income	490	201	239	239	465	934
Sales and marketing expenses	–10,653	–5,730	–9,136	–4,270	–2,040	–555
Administrative expenses	–28,955	–12,628	–17,935	–17,394	–5,054	–5,575
Research and development expenses	–6,327	–2,169	–3,335	–2,722	–4,322	–2,865
Other operating expenses	–	–441	–662	–662	–123	–12
Operating loss	**–37,756**	**–20,767**	**–30,828**	**–24,808**	**–11,074**	**–8,073**
Net financial items	104	–774	–1,070	–783	–1,787	21
Loss before tax	**–37,653**	**–21,541**	**–31,898**	**–25,591**	**–12,861**	**–8,052**
Tax	–	–	–	–	–	–
Loss for the period	**–37,653**	**–21,541**	**–31,898**	**–25,591**	**–12,861**	**–8,052**
Earnings per share for the period before and after dilution (SEK)	–2.19	–1.51	–2.12	–1.70	–1.09	–0.68

1) Derived from IRRAS's unaudited condensed consolidated interim financial statement for the nine month period that ended on September 30, 2017.
2) Derived from IRRAS's audited consolidated financial statements for the fiscal year that ended on December 31, 2016.
3) Derived from IRRAS's audited financial statements for the fiscal years that ended on December 31, 2016, December 31, 2015 and December 31, 2014. .

B.7 *Selected historical financial information, cont.*

STATEMENT OF COMPREHENSIVE LOSS

Amounts in TSEK	Group[1] 2017-01-01 2017-09-30	Group[1] 2016-01-01 2016-09-30	Group[2] 2016-01-01 2016-12-31	Parent[3] 2016-01-01 2016-12-31	Parent[3] 2015-01-01 2015-12-31	Parent[3] 2014-01-01 2014-12-31
Loss for the period	**–37,653**	**–21,541**	**–31,898**	**–25,591**	**–12,861**	**–8,052**
Other comprehensive income for the period:						
Items that may be subsequently reclassified to profit or loss						
Translation differences	–727	–61	392	–	–	–
Other comprehensive income for the period, net of tax	**–727**	**–61**	**392**	**–**	**–**	**–**
Total comprehensive loss/income for the period	**–38,379**	**–21,602**	**–31,506**	**–25,591**	**–12,861**	**–8,052**

1) Derived from IRRAS's unaudited condensed consolidated interim financial statement for the nine month period that ended on September 30, 2017.
2) Derived from IRRAS's audited consolidated financial statements for the fiscal year that ended on December 31, 2016.
3) Derived from IRRAS's audited financial statements for the fiscal years that ended on December 31, 2016, December 31, 2015 and December 31, 2014.

B.7 *Selected historical financial information, cont.*

STATEMENT OF FINANCIAL POSITION

	Group[1]		Group[2]	Parent[3]		
Amounts in TSEK	2017-09-30	2016-09-30	2016-12-31	2016-12-31	2015-12-31	2014-12-31
ASSETS						
Non-current assets						
Capitalized development costs	32,464	16,906	24,033	24,033	9,016	3,667
Patents	2,611	2,927	2,847	2,847	3,164	3,480
Tangible non-current assets	228	17	16	–	–	–
Investments in subsidiaries	–	–	–	11,193	–	–
Receivables from Group Companies	–	–	–	4,082	–	–
Total non-current assets	**35,304**	**19,850**	**26,897**	**42,156**	**12,180**	**7,147**
Current assets						
Inventories	5,057	–	–	–	–	–
Receivables from Group Companies	–	–	–	563	–	–
Other current receivables	9,725	579	489	454	359	627
Prepaid expenses and accrued income	219	67	60	60	–	–
Cash and cash equivalents	28,516	81,669	70,814	60,460	18,408	6,777
Total current assets	**43,516**	**82,316**	**71,363**	**61,537**	**18,767**	**7,404**
TOTAL ASSETS	**78,820**	**102,166**	**98,260**	**103,693**	**30,947**	**14,550**
EQUITY						
Share capital	517	86	86	86	59	59
Fund for research & development[4]	–	–	–	15,017	–	–
Other paid in capital	175,780	176,211	176,211	–	–	–
Capital surplus	–	–	–	142,635	27,164	27,164
Reserves	−335	−61	392	–	–	–
Retained earnings incl. result for the period	−104,515	−74,755	−81,575	–	–	–
Retained earnings	–	–	–	−31,117	−14,233	−6,181
Loss for the period	–	–	–	−25,591	−12,861	−8,052
Total equity	**71,448**	**101,481**	**95,115**	**101,030**	**129**	**12,990**
LIABILITIES						
Current liabilities						
Accounts payable	3,828	261	2,485	2,206	1,161	1,021
Other liabilities	222	199	191	–	–	–
Accrued expenses and prepaid income	3,322	225	469	457	151	539
Convertible bonds	–	–	–	–	29,505	–
Total current liabilities	**7,372**	**685**	**3,145**	**2,663**	**30,817**	**1,561**
TOTAL EQUITY AND LIABILITIES	**78,820**	**102,166**	**98,260**	**103,693**	**30,947**	**14,550**

1) Derived from IRRAS's unaudited condensed consolidated interim financial statement for the nine month period that ended on September 30, 2017.
2) Derived from IRRAS's audited consolidated financial statements for the fiscal year that ended on December 31, 2016.
3) Derived from IRRAS's audited financial statements for the fiscal years that ended on December 31, 2016, December 31, 2015 and December 31, 2014.
4) This is restricted equity under the Swedish Annual Accounts Act and is included in Other paid in capital in the consolidated equity.

B.7 *Selected historical financial information, cont.*

STATEMENT OF CASH FLOWS

Amounts in TSEK	Group[1] 2017-01-01 2017-09-30	Group[1] 2016-01-01 2016-09-30	Group[2] 2016-01-01 2016-12-31	Parent[3] 2016-01-01 2016-12-31	Parent[3] 2015-01-01 2015-12-31	Parent[3] 2014-01-01 2014-12-31
Cash flow from operating activities						
Loss for the period	–37,756	–20,767	–30,828	–24,808	–11,074	–8,073
Adjustments for non-cash items						
– Depreciation and amortization	1,874	238	318	316	316	316
– Incentive schemes, recognized in statement of loss	14,712	7,456	10,993	8,438	–	–
Interest received	–	23	1	1	1	21
Interest paid	–1	19	–4	–4	0	0
Increase / decrease in inventory	–5,057	–	–	–	–	–
Increase / decrease in operating receivables	–9,395	–288	–189	–704	268	–368
Increase / decrease in operating payables	4,334	–711	1,517	1,351	–249	614
Cash flow used in operating activities	**–31,289**	**–14,029**	**–18,192**	**–15,409**	**–10,737**	**–7,490**
Cash flow from investing activities						
Investments in subsidiaries	–	–	–	–8,638	–	–
Investments in capitalized development expenses	–10,062	–7,890	–15,017	–15,017	–5,350	–3,667
Investments in tangible assets	–219	–18	–18	–	–	–
Change in financial non-current assets	–	–	–	–4,082	–	–
Cash flow used in investing activities	**–10,282**	**–7,908**	**–15,035**	**–27,737**	**–5,350**	**–3,667**
Cash flow from financing activities						
Proceeds from issue of share capital	–	85,198	85,198	85,198	–	9,193
Proceeds from issue of convertible bonds	–	–	–	–	27,718	–
Cash flow from financing activities	**–**	**85,198**	**85,198**	**85,198**	**27,718**	**9,193**
Cash flow for the period	**–41,570**	**63,261**	**51,971**	**42,052**	**11,631**	**–1,964**
Cash and cash equivalents at the beginning of the period	70,814	18,408	18,408	18,408	6,777	8,741
Exchange rate differences in cash and cash equivalents	–728	-	435	–	–	–
Cash and cash equivalents at the end of the period	**28,516**	**81,669**	**70,814**	**60,460**	**18,408**	**6,777**

1) Derived from IRRAS's unaudited condensed consolidated interim financial statement for the nine month period that ended on September 30, 2017.
2) Derived from IRRAS's audited consolidated financial statements for the fiscal year that ended on December 31, 2016.
3) Derived from IRRAS's audited financial statements for the fiscal years that ended on December 31, 2016, December 31, 2015 and December 31, 2014.

B.7 *Selected historical financial information, cont.*

KEY PERFORMANCE MEASURES

	Group		Group	Parent		
	2017-01-01 2017-09-30	2016-01-01 2016-09-30	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Revenue, SEKm	11.3	–	–	–	–	–
Sales growth, %[1]	–	–	–	–	–	–
Gross margin, %[1]	68.1	–	–	–	–	–
EBITDA, SEKm[1]	–35.9	–20.5	–30.5	–24.5	–10.8	–7.8
EBITDA margin, %	–	–	–	–	–	–
EBIT (operating profit), SEKm	–37.8	–20.8	–30.8	–24.8	–11.1	–8.1
EBIT margin, %[1]	–	–	–	–	–	–
Equity to assets ratio, %[1]	90.6%	99.3%	96.8%	97.4%	0.4%	89.3%
Number of full time employees[1, 2]	17	14	14	2	8	7

1) Alternative key performance measure, not defined in IFRS.
2) The key performance measure for the Group is calculated based on 2 employees and 19 consultants during Jan – Sep 2017, 2 employees and 14 consultants in 2016 and only consultants during Jan – Sep 2016 and during the years 2016, 2015 and 2014 in the Parent Company.

DEFINITIONS OF ALTERNATIVE PERFORMANCE MEASURES

Alternative key performance measures	Definition	Reason for usage
Sales growth, %	The difference in revenue between periods in relation to revenue for the same period last year	Management uses this key performance measure to track its sales performance
Gross margin, %	Revenue for the period minus cost of goods sold for the period in relation to revenue for the period	Management uses this key performance measure to track gross profitability. The gross margin represents the portion of each SEK of revenue that the Company retains to cover other expenses and gives an indication of the profit margin
EBITDA	Operating loss for the period before interest, taxes, depreciation and amortization	EBITDA shows an alternative performance measure of the results generated in current operations
EBITDA margin, %	Operating loss for the period before interest, taxes, depreciation and amortization in relation to revenue for the period	This key performance measure is used to analyze the value creation from current operations
EBIT margin, %	Operating loss for the period before interest and taxes in relation to revenue for the period	This key performance measure is used to analyze the value creation from the operational activities
Equity to assets ratio %	Shareholders' equity in relation to total assets	Management uses this key performance measure as an indication of the financial stability of the Company
Number of full time employees (FTEs)	An FTE is defined as an employee working at least 2,080 hours per year and is calculated on the basis of hours from both consultants and employees	Management uses this key performance measure to track costs in relation to full-time employees

B.7	*Selected historical financial information, cont.*	**RECONCILIATION OF ALTERNATIVE PERFORMANCE MEASURES** The table set out below contains the derivation of the alternative performance measure EBITDA, showing the different components of the performance measure. **Group** / **Group** / **Parent** SEKm: 2017-01-01 2017-09-30 | 2016-01-01 2016-09-30 | 2016-01-01 2016-12-31 | 2016-01-01 2016-12-31 | 2015-01-01 2015-12-31 | 2014-01-01 2014-12-31 EBIT[1)]: −37.8 | −20.8 | −30.8 | −24.8 | −11.1 | −8.1 Depreciation and amortization: 1.9 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 **EBITDA**: **−35.9** | **−20.5** | **−30.5** | **−24.5** | **−10.8** | **−7.8** 1) Operating loss for the period before interest and taxes.
B.8	*Pro-forma financial statement*	Not applicable. No pro-forma financial statement is presented in the Offering Circular.
B.9	*Earnings forecast*	Not applicable. No earnings forecast is presented in the Offering Circular.
B.10	*Notes in the audit report*	Not applicable. There are no notes in the audit reports for the periods included in the historical financial information.
B.11	*Insufficient working capital*	IRRAS estimates that the current working capital is insufficient to meet the Company's needs over the next twelve months. IRRAS's need for working capital over the next twelve months is mainly assignable to the planned entry into the US market, the strengthening and building of the organization, particularly within marketing and sales, and the further development of IRRA*flow*. The execution of IRRAS's strategy for accelerated growth and development of the product portfolio requires significant investments. Based on the accelerated growth and development plans, the Company estimates that there is a deficit of approximately SEK 260 million for the period up until the operations become self-sufficient, whereof approximately SEK 50 million is attributable to the next twelve months depending on how the Company's development projects are prioritized and executed but that the current working capital will at least be sufficient until the beginning of the third quarter 2018. In addition, the Company assesses that a financial buffer of approximately SEK 55 million is needed for potential unforeseen costs and delays in the implementation of the commercial strategy and the Company's research and development activities. The Company's intention is to secure the financing needed in order to implement the Company's growth strategy, develop the product portfolio and cover the working capital deficiency until the operations are self-sufficient with funds from the Offering. If the Offering is completed and fully subscribed, the Company will receive SEK 316 million after deduction of costs attributable to the Offering. Should the Offering not be completed and the Company, as a consequence thereof, would not be provided with any funds from the Offering – and the Company would not be able to finance its operations through, e.g., the raising of credit and/or new issues of financial instruments – IRRAS will postpone the recruitment of the personnel needed to expand into the US market and also postpone one or several of the development projects that aims to expand the product portfolio. IRRAS has assessed that such a revised strategy would result in significantly lower levels of spending and that its working capital, following the aforementioned revisions, would cover the Company's working capital needs for the next twelve months.

SECTION C – SECURITIES

C.1	*Securities offered*	Shares in IRRAS AB (ISIN SE0008321202).
C.2	*Currency*	The shares are denominated in Swedish kronor (SEK).
C.3	*Shares issued*	As per the date of the Offering Circular, the Company's share capital amounts to SEK 516,522.57 divided between 17,217,419 shares, each with a quota value of SEK 0.03. The Company only has one class of shares.

SECTION C – SECURITIES

C.4	*Rights associated with the securities*	The shares in IRRAS have been issued in accordance with the Swedish Companies Act (2005:551), and the rights associated with shares issued by the Company, including those pursuant to the Articles of Association, may only be amended in accordance with the procedures set out in the Swedish Companies Act. Each share carries one (1) vote at the Company's General Meeting. Each shareholder entitled to vote may vote for all shares held and represented by him or her at the General Meeting. Each share carries equal rights to the Company's assets and profits. In the event of a liquidation of the Company, shareholders are entitled to a share of the surplus in proportion to the number of shares held by the shareholder. No restrictions exist regarding the transfer of shares.
C.5	*Transfer restrictions, if any*	Not applicable. The shares covered by the Offering are freely transferable.
C.6	*Admission for trading on the regulated market*	Not applicable; the board of directors of IRRAS has applied for listing of the Company's shares on Nasdaq First North Premier, a multilateral trading facility (MTF) that does not have the same legal status as a regulated market. Provided that Nasdaq First North Premier approves the Company's application, the first day of trading is expected to take place on November 22, 2017. A condition for approval is that the distribution requirement for the Company's shares must be met on the date of commencement of trading. The Company's shares will be traded on Nasdaq First North Premier under the ticker IRRAS.
C.7	*Dividend policy*	IRRAS will continue to focus on further developing and expanding the Company's operations and sales. Available financial resources and the reported results shall therefore be reinvested in the business to finance the Company's long-term strategy. The board's intention is not to propose a dividend to shareholders before the Company is able to generate long-term sustainable profitability. Any future dividends and the size thereof will be determined on the basis of the Company's long-term growth, earnings trend and capital requirements, taking into account the current objectives and strategies adopted. Dividends shall, in so far as dividends are proposed, be well-balanced with respect to the Company's targets, scope and risk.

SECTION D – RISKS

D.1	*Principal risks relating to IRRAS and the industry*	An investment in IRRAS is associated with risks. The Company's operations can be affected by a number of factors, fully or partly beyond the Company's control. Investors considering an investment in the share should carefully analyze the following risk factors, described in no particular order or in detail, but which are considered to be the principal risk that could have a material negative impact on the Company's operations, financial position and earnings. • Risks related to the regulatory environment for medical device products, such as high costs for regulatory compliance, in particular regarding the requirements in the EU directive on medical device products and similar national and regional regulations on medical device products, impacts from regulatory changes and consequences of failure to comply with applicable regulations. • Risks related to the conduction and outcome of clinical studies, such as studies being expensive and time consuming and may be delayed or cancelled due to a number of factors, including lack of study approvals, lack of patient requirement, undesired side-effects or lack of clinical benefit. • Risks related to failed market acceptance from healthcare providers, patients and payers, such as perceived advantages over competing treatments, prevalence and severity of adverse side-effects the cost of treatment in relation to alternative treatments as well as risks related to lack of adequate reimbursement which may lead to a reluctance to use the Company's products. • Risks related to current and additional financing such as IRRAS not reaching sufficient levels of revenue or positive cash flow in the future in order to finance its operations or is unable to secure additional funding when required.

D.1	*Continue*	• Risks related to manufacturing, supply and storage, such as the Company's suppliers and manufacturers not performing their services to the satisfaction of the Company or having their operations restricted by authorities, which could lead to costly and time consuming procedures for the Company in order to replace or find new suppliers. • Risks related to competition and that the Company has a limited product portfolio based on one technology platform, such as competing products proving to be better or gaining greater market acceptance or that the Company's product candidates do not demonstrate enough potential for further development. • Risks related to key personnel and qualified employees, such as the Company being dependent of its senior management team and other key personnel and if the Company loses key personnel, or fails to recruit necessary personnel, it could delay or impair the continued operations and product development. • Risks related to intellectual property rights, such as the Company's patent protection not being sufficient to protect its operations, that the Company infringes third-party rights or that the Company becomes involved in proceedings regarding intellectual property. • Risks related to potential product liability claims and insurance matters, such as the Company facing risk for substantial liability for damages if its products or product candidates were to cause patients side effects that cause illness, bodily injury or death and the Company fails to maintain its insurance cover or that the insurance cover is insufficient.
D.3	*Principal risks relating to securities*	Investment in securities is associated with risk. Such risks may cause the price of the Company's shares to fall significantly, and that investors may lose all or parts of their investment. Principal risks deemed relevant for IRRAS's shares, and described in no particular order, are: • Risks related to that the price in the Offering will not match the price at which the shares in IRRAS will be traded on Nasdaq First North Premier after the Offering, that the shares are subject to substantial fluctuations on the stock market or that active trading will not be developed and established after the completion of the Offering. • Risks related to that IRRAS has previously not paid any dividends and the existence and size of any future dividends will be dependent on the Company's future development. • Risks related to that sales of shares are made by major shareholders as well as general market expectation that such sales will take place may come to have a negative impact on the price of the Company's share and a possible new share issue may lead to dilution of the shareholdings of present shareholders. • Risks related to that the existing shareholders Serendipity Ixora AB (publ) and Vandel Medical Equipment Ltd. (together the "Investing shareholders") will not be able to fulfill their undertakings, since these undertakings are not secured by bank guarantee, blocked funds or pledging or similar arrangement, which could have a negative impact on the completion of the Offering.

SECTION E – THE OFFERING

E.1	*Proceeds and costs relating to the Offering*	Based on the assumption that the Offering will be fully subscribed, IRRAS's proceeds from the Offering are estimated to be approximately SEK 350 million before costs related to the Offering. IRRAS's costs attributable to the Offering, including compensation to issuing agents and other advisors, and other estimated transaction costs, are estimated to amount to no more than SEK 34 million.
E.2a	*Rationale for making the Offering*	By marketing IRRA*flow* for patients with hemorrhagic stroke and chronic subdural hematoma, and following the promising EU commercial launch in May 2017, the Company has received product revenues from the sale of IRRA*flow* control unit and consumables in Germany and other certain EU countries of SEK 11.3 million in total[1]. In addition, the Company submitted a 510(k) application for IRRA*flow* with the FDA in June 2017, and expects to receive a final response from the FDA in the first quarter of 2018 and commercially launch IRRA*flow* in the United States following receipt of FDA approval. Due to the significant interest and uptake of IRRA*flow* since the commercial launch, the Company believes that significant value can be created from an accelerated commercialization strategy. In addition, the Company believes its IRRA*flow* platform has multiple expansion opportunities in addition to the patient populations that IRRA*flow* is already addressing (hemorrhagic stroke and chronic subdural hematoma). The product pipeline includes a smaller version of IRRA*flow,* an add-on feature to the IRRA*flow* for continuous monitoring of brain elastance, an IRRA*flow* version for body pathologies (outside the CNS) and a novel drug delivery system. IRRAS estimates that the current working capital is insufficient to meet the Company's needs over the next twelve months. The execution of IRRAS's marketing initiatives and expansion strategy will require significant investments during the years to come. The Company estimates that there is a deficit of a total of approximately SEK 260 million during this period. To secure the financing needed to deliver on its growth strategy, develop the product pipeline and to support the working capital needs until the Company becomes self-sufficient, IRRAS has decided to carry out a new share issue in connection with the listing on Nasdaq First North Premier. Assuming that the Offering is fully subscribed, the gross proceeds will amount to SEK 350 million and SEK 316 million after expenses related to the Offering. The Company intends to use such proceeds as per the following. • Commercial expansion of the neurosurgical operations, including entry to the US market and reinforcement of the sales organization in the EU – approximately SEK 90 million • Development of IRRA*flow* for new functions within neurosurgery, including a smaller version of the IRRA*flow* catheter – approximately SEK 40 million • Development of IRRA*flow* for new indications in the body – approximately SEK 40 million • Development of a new drug delivery system for IRRA*flow* – approximately SEK 90 million • Buffer for unforeseen costs and delays in the execution of the commercial strategy and the Company's research and development strategy – approximately SEK 55 million Should the Offering not be completed and the Company, as a consequence thereof, would not be provided with any funds from the Offering – and the Company would not be able to finance its operations through, e.g., the raising of credit and/or new issues of financial instruments – IRRAS will postpone the recruitment of the personnel needed to expand into the US market and also postpone one or several of the development projects that aims to expand the product portfolio. 1) Until and including September 2017.
E.3	*Terms of the Offering*	N/A
E.4	*Interests and conflicts of interest*	ABGSC is Sole Global Coordinator in the Offering and Vator Securities is Financial Advisor in the Offering. The Sole Global Coordinator and the Financial Advisor provide financial advice and other services to the Company in connection with the Offering. ABGSC and Vator Securities do not own shares in the Company, and they will not receive any financial interests in IRRAS other than previously agreed fees for their services.

E.5	*Lock-up agreements*	Through the Placing Agreement the Main Shareholders, the shareholding board members and the Company's senior management will undertake, under certain conditions, not to sell their respective shareholdings for a certain period of time after the trade on Nasdaq First North Premier has commenced (the "**Lock-up period**"). The Lock-up period for the Main Shareholders will be 365 days. For shareholding board members and the Company's senior management, as well as all participants in the Company's share-related incentive schemes, the Lock-up period will be 365 days. The lock up-undertaking does not comprise shares acquired in the Offering. Serendipity Ixora AB (publ), which is one of the Main Shareholders, has advised that it intends to distribute its shares in IRRAS after the completion of the Offering. Serendipity Group AB, a company ultimately owned by the Serendipity Group's founders, Saeid Esmaeilzadeh and Ashkan Pouya, owns approximately 56 percent of Serendipity Ixora AB (publ) as at the date of this Offering Circular. The remaining 44 percent is owned by approximately 300 Swedish private individuals. The shares distributed to Serendipity Group AB will be covered by the abovementioned 365 day Lock-up period. The shares distributed to the remaining owners of Serendipity Ixora AB (publ) will subject to a reduced 180 day Lock-up period, and will further be placed on an escrow account to ensure the efficiency of the escrow mechanics.
E.6	*Share dilution*	With full subscription in the Offering and assuming a price in the Offering that corresponds to the midpoint of the price range (i.e. SEK 47.50 per share), the number of shares in IRRAS will increase by 7,368,421 shares, from 17,217,419 to 24,585,840, which corresponds to a dilution of approximately 30.0 percent of the total number of shares in the Company after the Offering. If the Offering is fully subscribed, the Over-allotment Option is fully utilized and the price in the Offering is determined at the midpoint of the price range (i.e. SEK 47.50 per share), the Offering will comprise 8,473,684 shares in IRRAS, corresponding to approximately 33.0 percent of the total number of shares in the Company after the Offering.
E.7	*Costs for the investor*	Not applicable. No costs will be imposed on investors in the Offering.

RISK FACTORS

Investment in securities is associated with risk. When considering a possible investment decision it is important to carefully analyze the risk factors considered to be of significance to the Company and the share's future development. The following describes risk factors considered to be of importance for IRRAS, without any specific ranking. This applies for both risks regarding circumstances that are attributable to IRRAS or the industry and those of a more general nature, and risks associated with the shares and the Offering. Certain risks lie outside the Company's control. The following account does not claim to be complete and all risk factors can naturally not be predicted or described in detail, which is why an overall assessment must also include other information in the Offering Circular as well as a general assessment. The risks and uncertainty factors below can have a significant negative impact on IRRAS's operations, financial position and/or earnings. They can also cause the shares of IRRAS to decreases in value, which could lead to shareholders in IRRAS losing all or part of their invested capital. Additional factors that are not currently known to IRRAS, or that are currently not deemed to pose risks, may also have a corresponding negative impact.

The Offering Circular contains forward-looking statements that may be affected by future events, risks and uncertainties. The Company's actual results could differ materially from those anticipated in these forward-looking statements due to a variety of factors, including but not limited to, those described below and elsewhere in the Offering Circular.

RISKS RELATED TO IRRAS, ITS INDUSTRY AND BUSINESS

Risks related to the regulatory framework for medical devices

From a regulatory perspective, IRRAS's platform technology, IRRA*flow*, is considered to be a medical device. Medical devices are subject to extensive regulations, supervised by regulatory authorities around the world, for example the US Food and Drug Administration ("FDA") and applicable national authorities in relevant European countries. The regulatory framework covers all parts of the Company's business such as research, development, design, manufacturing, safety, reporting, testing, labeling, packaging, storage, installation, servicing, marketing, sales and distribution. The Company is and may also be, in addition to these industry-specific regulations, subject to numerous other ongoing regulatory obligations, such as data protection, environmental, health and safety laws and restrictions. The costs of compliance with applicable regulations, requirements or guidelines could be substantial. Furthermore, the regulatory environment has generally become more stringent and extensive over time. Failure to comply with these regulations could result in sanctions including fines, injunctions, civil penalties, denial of applications for marketing approval of the Company's products, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions, partial suspension or total shutdown of production and criminal prosecutions, any of which could significantly increase the Company's costs, restrict the sales of its current products, delay the development and commercialization of its product candidates and substantially impair its ability to generate revenues and achieve profitability. If any of these risks are realized, it could have a material adverse effect on the Company's operations, financial position and earnings.

Risks related to the regulatory process of introducing medical devices on new markets

IRRAS's products and product candidates are subject to regulatory assessment, clearance or approval before they are introduced on markets in various jurisdictions.

To market a medical device within the European Economic Area (the "EEA"), the product must be CE-marked, a mark that requires that certain legal requirements are fulfilled. IRRA*flow* is CE marked and may therefore be marketed within the EEA. In the CE-marking process, medical devices are divided between four classes, Class I, IIa, IIb and Class III, where products falling within classes IIb and III are considered as having higher risk potential compared to products in lower classes. The IRRA*flow* catheter falls within Class III and the IRRA*flow* cassette and IRRA*flow* control unit fall within Class IIb. For these products an assessment must be made by an independent third party, a so called notified body, as to whether the device complies with the requirements relating to safety and manufacturing. Products may only be CE-marked after such granting being received. Decisions taken by notified bodies are valid for a maximum of five years and may be extended

for further periods of five years at a time. The renewal process relating to decisions made by notified bodies can be time consuming, especially if the original product file is extended with new indications or otherwise is essentially modified.

With reference to that the framework for medical devices in the EEA is changing, which change will inter alia increase the requirements for transparency and traceability, there is a risk that future application processes will be more time consuming and costly.

Further, in order to market a medical device within the US an approval from the FDA is needed. IRRAS has submitted a 510(k) application for IRRA*flow* with the FDA, concerning intracranial pressure (ICP) monitoring and CSF drainage. The Company expects to receive a final marketing approval from the FDA in the first quarter of 2018. Following receipt of FDA clearance, the Company plans to commercially launch IRRA*flow* in the United States. The FDA could decline the application for marketing approval IRRA*flow*, request additional data, which could delay the marketing approval, or give a narrower label than the one requested in the application which would affect the Company's ability to successfully market the product on the US market.

The regulatory approval process is expensive and time consuming and the timing and outcome of the approval process is difficult to predict. Each regulatory authority may impose its own requirements and may refuse to grant or may require additional data before granting clearance or marketing approval even if granted by authorities in other jurisdictions.

The Company has also to consider that the approval process for medical devices in the US and the EU, as well as other key markets in the world, may change. The regulatory pathway for future clearances or approvals may also change due to reinterpretation of applicable regulations. Such changes or reassessments could lead to increased costs and require more clinical studies, changes to manufacturing methods and increased documentation requirements. Any increased costs or extensive requirements at any stage of the process may delay market access of future products and thus negatively impact the Company's operations, and subsequently, earnings.

Even following clearance or approval, the Company could be forced to conduct post-market or vigilance studies, which can be expensive and time-consuming. The Company's products may be withdrawn from the market for various reasons, including if they are shown to be unsafe or ineffective.

As part of the planned drug delivery projects, the Company may be required to file a device/drug application to the FDA. Such filings are associated with a high level of complexity and there is a risk that such application process may take longer time than initially expected, as well as other set-backs including that such application is ultimately declined.

If any of the above-mentioned risks are realized, it could have a material adverse effect on the Company's operations, financial position and earnings.

Risks related to macro-economic factors including pricing and demand of medical devices

Since IRRAS plans to market and sell IRRAflow globally, including also to expand sales in the US and other key markets in the world, the Company is affected by the general demand and pricing of the IRRA*flow* control unit (which is the device system that controls irrigation and aspiration) and the consumables (cassette and catheter). Political factors such as political initiatives to reduce healthcare costs could also impact on the Company's operations. IRRAS cannot anticipate the development of financial markets, the economic and political climate or foresee macro-economic events, and an economic down-turn or an otherwise weak or declining economy could strain the markets for IRRA*flow* and lead to increased pressure on hospitals, third-party payers and authorities to reduce medical costs, potentially lowering the willingness to pay for medical device products in general, including IRRA*flow*.

If any of the above-mentioned risks were to occur, it could have a material adverse effect on IRRAS's operations, financial position and earnings.

Risks related to development, manufacturing, supply and storage (including dependence on third party agreements)

IRRAS currently relies, and expects to continue to rely, on third-party suppliers and manufacturers for its products. There is always a risk that such external parties, for various reasons, do not perform their services to the satisfaction of the Company, do not meet agreed or required quantitative or quality standards and/or are not able to deliver on a timely basis. If that would occur, continued production could incur additional costs, be delayed or even stopped and IRRAS may have to contract other external parties to perform such services, which could be time-consuming and costly.

Furthermore, the manufacturers engaged by the Company are obliged to follow the applicable regulations for the process of manufacturing, testing, quality

control and documentation of the product concerned. The production facilities will be inspected by regulatory authorities on a recurring basis, which could lead to remarks and new requirements on the manufacturing process. With reference to that the framework for medical devices in the EEA is changing, which change will inter alia increase the requirements for transparency and traceability, there is a risk that future requirements on the production of medical devices will make the production process more complex, which may entail increased costs. Should the Company's external manufacturers not fulfil these requirements, previously granted authorizations may be revoked, which could lead to increased costs, delays or stoppage, and potentially to other sanctions such as fees, fines, confiscation of products, operational restrictions and criminal sanctions.

Production of the IRRA*flow* system currently takes place in California, USA. Manufacturing is made by three different subcontractors that produce different parts of the IRRA*flow* system, such as catheter, cassette and control unit. If IRRAS needs to engage new suppliers or manufacturers, or exchange current suppliers or manufacturers, there is a risk that such process will be time consuming and costly. To avoid shortages of key components during this process, the Company must maintain sufficient storage levels and therefore there is a risk that such components are exposed to contamination or quality reduction or that the storage levels are not sufficient for the Company's needs until new manufacturers are engaged. Further, there is a risk that the Company cannot replace existing suppliers or manufacturers, or contract with new suppliers or manufacturers, on terms acceptable to the Company.

Should any of the above-mentioned risks occur, it could have a material adverse effect on the Company's operations, financial position and earnings.

Risks related to the carrying out and outcome of clinical trials

IRRAS may sponsor studies on human participants, i.e., clinical studies, especially in the course of the regulatory process of a novel drug delivery system. Such clinical studies are performed to support regulatory approvals for market access or to generate evidence relating to clinical benefits and cost benefits of using IRRAS's products. Clinical studies are costly and time consuming and associated with risks such as finding trial sites, recruitment of suitable patients, the actual cost per patient exceeding budget and inadequacies in the execution of the trials. There is also a risk of delays in the performance of clinical studies, which can occur for a variety of reasons. For example, delays in obtaining regulatory approval to commence a trial, reaching agreements on acceptable terms with prospective contract research organizations and clinical investigational sites, obtaining institutional review board approval at each site, difficulties in patient enrolment, patients failing to complete a trial or return for follow-up, adding new sites or obtaining sufficient supplies of products or clinical sites dropping out of a trial. If delays persist, there is a risk that studies eventually are suspended or terminated if the delays occur due to circumstances that a sponsor of a clinical trial has difficulties controlling, or is unable to control, or if the measures required for conducting the studies further are deemed too costly or extensive in relation to the scopes and goals of the studies.

There are many factors which may affect patient enrolment. Amongst these are the size and nature of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the design of the clinical study and competing clinical studies. Furthermore, clinicians' and patients' perceptions as to the potential advantages of the product being studied in relation to other available therapies, including any new products that may be approved for the indications the company is investigating. Clinical studies may also be suspended or terminated if participating subjects are exposed to unacceptable health risks or undesired side-effects.

Furthermore, there is a risk that clinical studies may not demonstrate the required clinical benefit for the prospective indication the trial is aimed at. Failure in premarketing clinical studies could lead to market clearance or approvals not being obtained which could delay or jeopardize the Company's ability to develop, market and sell the product candidate being studied. At any stage of the development the Company may discontinue its products and product candidates based on review of available pre-clinical and clinical data, the estimated costs of continued development, market considerations and other factors. Furthermore, with respect to the clinical studies conducted by third parties, the Company may have less control over their timing or outcome.

If any of the risks described above were to materialize, it could have a material adverse effect on the Company's operations, financial position and earnings.

Earthquake or fire damage to the Company's facilities could result in business interruptions

The manufacturing facilities of the Company's suppliers who manufacture the Company's products are located in San Diego County, California, the US. These facilities are vulnerable to natural disasters such as earthquakes and wild fires, as well as other events that could disrupt the Company's operations and result in delays in the Company's commercial manufacturing operations as well as research and development operations. If one or more of the facilities used for manufacturing of the Company's products by the Company's suppliers are damaged or destroyed due to an earthquake or fire, or if the Company's facilities or stock is damaged or destroyed in connection with such event, the Company's business, financial position, and earnings could be adversely affected.

Risks related to failure of obtaining broad adoption by healthcare providers

There is a risk that a product that has gained market approval does not successfully reach the desired level of acceptance from physicians, hospitals, patients, third-party payers and the medical community in general, which could prevent the Company from generating revenues or becoming profitable. Market acceptance of IRRA*flow* and the Company's future products by physicians, hospitals, patients and third-party payers will depend on a number of factors, many of which are beyond the Company's control, including: the clinical indications for which each product is approved, acceptance by physicians, hospitals, patients and third-party payers of each product as a safe and effective treatment, relative convenience, ease of administration and other perceived advantages over competing treatments, prevalence and severity of adverse side-effects, the cost of treatment in relation to alternative treatments, the extent to which the product is approved for inclusion on formularies of hospitals and managed care organizations and limitations or warnings contained in a product's approved labeling. There is also a risk that improper handling of IRRA*flow* causes harm, which in turn may affect market acceptance negatively.

In addition, there is an increased demand to demonstrate clinical and economic evidence to healthcare providers, decision-makers and third-party payers, for example through so called Health Economics and Outcomes Research ("HEOR") that complement traditional clinical development information such as efficacy, safety and quality. If any data developed by the Company through clinical studies is unfavorable, it could impact the acceptance or success of the Company's products in the market.

The Company's efforts to raise awareness and educate health care providers of IRRA*flow*'s benefits compared to other techniques and procedures may not be successful. Insufficient actions on this matter may lead to misuse of the technology which in turn can result in unsatisfactory patient outcomes, patient injury, negative publicity or lawsuits. Media reports may limit widespread acceptance of the products which can increase the risk for unexpected results on the market.

Any failure in market acceptance from the medical community could adversely affect IRRAS's reputation, the overall demand for the products and impair commercial success for current and future products, which could have a material adverse effect on the Company's operation, financial position and earnings.

Risks related to reimbursement and capital investment

The availability of adequate reimbursement is an important factor for any company attempting to successfully commercialize a healthcare product. There are various types of reimbursement systems used in the different countries where IRRA*flow* is marketed. IRRA*flow* is currently reimbursed via the diagnosis-related groups (DRG) system for inpatient services in the EU, and is expected to be reimbursed using the DRG system in the United States, if FDA clearance is received. A DRG-system classifies inpatient medical activity into groups based on diagnosis type for classification and payment of the activity. Individual patients' treatments are via DRGs categorized into a number of clinically meaningful and economically homogeneous categories. Under a DRG-based reimbursement system, a hospital is reimbursed a fixed amount for a specific activity within the scope of that DRG group based on resource use, including costs of use of medical devices, such as IRRA*flow*, and duration of stay.

United States

In the United States, providers are paid directly by patients and by a range of public and private third party payers, principally federal Medicare (funded through the Hospital Insurance Trust Fund and the Supplementary Medical Insurance Trust Fund), state Medicaid (a social health care program for families and individuals with limited resources) and private health insurance plans.

However, there is no uniform policy for coverage and reimbursement among third-party payers. Therefore, coverage and reimbursement for procedures can differ significantly from payer to payer. As a result, the coverage determination process is often a time-consuming and costly process that will require the Company to

provide scientific and clinical support for the use of IRRA*flow* to each payer separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

In addition, in the US, alternative third-party payer payment models that are meant to reduce the cost of care by influencing provider utilization patterns, like newly created Accountable Care Organizations, are being adopted in the United States. Accountable Care Organizations are groups of healthcare organizations that come together voluntarily to give coordinated high quality care to patients. The goal of coordinated care is to ensure that patients get the right care at the right time, while avoiding unnecessary duplication of services and preventing medical errors. The Company expects to experience pricing pressures in connection with the sale and reimbursement for use of IRRA*flow* due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, additional legislative changes and downward pressure on healthcare costs in general. Additionally, the control units will likely fall outside the scope of reimbursement in the United States, and hospitals may be reluctant to make a capital investment in the control unit in order to use IRRA*flow*. If physicians, hospitals and other medical facilities are unable to obtain favorable reimbursement from third-party payers for procedures involving use of IRRA*flow*, or if hospitals are unwilling to make a capital investment in the control unit, the Company's business, financial condition and results of operations could be affected.

European Union

As of September 30, 2017, IRRA*flow* have been approved for reimbursement in a total of 14 EU countries. Currently, IRRA*flow* is covered by existing DRG codes in each of the 14 EU countries where the product is being marketed at the date of this Offering Circular. The Company believes that the product also will be covered by existing DRG codes in most, if not all, remaining EU countries. The reimbursement schemes applicable are subject to changes. If physicians, hospitals and other medical facilities are unable to obtain favorable reimbursement from third-party payers for procedures involving use of IRRA*flow*, or if reimbursement from third-party payers for the relevant pathologic procedures significantly declines, it may lead to reluctance to use IRRA*flow*.

The control units generally fall outside the scope of reimbursement and are capital investment made by the hospital, which may lead to a delayed market penetration for IRRA*flow*.

If physicians, hospitals and other medical facilities are unable to obtain favorable reimbursement from third-party payers for procedures involving use of IRRA*flow*, or if hospitals are unwilling to make a capital investment in the control unit, the Company's business, financial condition and results of operations could be adversely affected.

Risks related to health care laws and regulations in the United States

IRRAS will be subject to healthcare regulation and enforcement by the US federal government and the states in which IRRAS commercializes IRRA*flow* if FDA clearance is received. In addition to the FDA's restrictions on marketing of medical devices, the US healthcare laws and regulations that may affect the Company's ability to operate include: the federal fraud and abuse laws, including the federal anti-trust and anti-kickback regulations as well as false claims laws; federal data privacy and security laws; and federal transparency laws related to payments and/or other transfers of value made to physicians and other healthcare professionals and teaching hospitals. Many states have similar laws and regulations that may differ from each other and federal law in significant ways, thus complicating compliance efforts. For example, states may have anti-kickback and false claims laws that may be broader in scope than analogous federal laws and may apply regardless of payer. In addition, state data privacy laws that protect the security of health information may differ from each other and may not be preempted by federal law. Moreover, several states have enacted legislation requiring device manufacturers to, among other things, establish marketing compliance programs, file periodic reports with the state, and make periodic public disclosures on sales and marketing activities, and prohibiting certain other sales and marketing practices. These laws may adversely affect the Company's sales, marketing and other activities with respect to IRRA*flow* or any other product candidate for which the Company receives clearance or approval to market in the United States by imposing administrative and compliance burdens on the Company.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exceptions, it is possible that some of the Company's business activities, particularly any sales and marketing activities after a product candidate has been cleared or approved for marketing in the United States, could be subject to legal challenge and enforcement actions. If the Company's operations are found to be in violation of any of the US federal and state laws described above or any other governmental regulations that apply to the Company,

the Company may be subject to significant civil, criminal, and administrative penalties, including, without limitation, damages, fines, imprisonment, exclusion from participation in government healthcare programs, additional reporting obligations and oversight if the Company becomes subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of the Company's operations, any of which could adversely affect the Company's ability to operate its business and its results of operations.

Among federal and state policy makers and payers in the United States, there is significant interest in promoting changes in the healthcare system with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the device industry has been significantly affected by major legislative initiatives, including the passage of the Patient Protection and Affordable Care Act (ACA). There have been judicial and US Congressional challenges to the ACA and there may be additional challenges and amendments to the ACA in the future, including repeal and replacement of certain provisions of the ACA. It remains to be seen, however, precisely what the new legislation will provide, when it will be enacted and what impact it will have on the availability of healthcare and containing or lowering the cost of healthcare. If IRRA*flow* receives FDA clearance, the Company expects that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria, and in additional downward pressure on reimbursement for procedures using IRRA*flow* in the United States and the price that the Company receives for the control unit. Moreover, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their commercial products that has resulted in US Congressional inquiries as well as proposed federal and state pricing legislation. The Company cannot predict what healthcare reform initiatives may be adopted in the future or how new legislative initiatives will impact the Company's business, financial condition and results of operations.

Risks related to marketing and sales

IRRAS currently commercializes IRRA*flow* directly in Germany and through distributors in the rest of EU countries. As of today, the Company does not have a commercialization infrastructure in place for the United States. The Company has also established distribution agreements for key markets outside of the EU and United States, including China, India and Japan.

IRRAS needs to further increase and develop its sales and marketing infrastructure. This will require recruitment of additional personnel and further development of sales and marketing strategies, which is likely to be both costly and time consuming. If the Company's efforts in this respect are delayed or unsuccessful, there is a risk that the Company will not have the sales and marketing capabilities to reach its growth targets, which could have a material adverse effect on IRRAS's operations, future sales, financial position and earnings.

If the Company's operations are found to be in violation of the anti-trust and anti-kickback regulations which apply on the Company's markets, or any other regulations that apply to the Company on such markets, the Company may be subject to significant civil, criminal, and administrative penalties. Such penalties could have a material adverse effect on IRRAS's operations, future sales, financial position and earnings.

Risks related to competition and dependence on one single platform technology

Competitors may have substantially larger research and development organizations than IRRAS. Consequently these companies are often able to invest greater financial resources in clinical studies and the marketing approval process. There is a risk that other companies will develop techniques and products which will prove superior to IRRAS's techniques and products. Competing companies with larger marketing budgets than the Company may further succeed with the marketing of equally effective products, or even less effective products than the Company's, and still achieve greater market acceptance. Furthermore, medical advances or rapid technological development by competitors may result in the Company's products and product candidates becoming non-competitive or obsolete before the Company is able to recover its research and development and commercialization expenses. This could have a material adverse effect on the Company's operations, financial position and earnings.

IRRAS's business is dependent on its proprietary platform technology, IRRA*flow*. The Company's future profitability depends on the Company's ability to continue to grow sales of IRRA*flow* as well as to develop and commercialize new product candidates based on IRRA*flow*. If other companies develop competing technologies which would prove to be better or achieve greater market acceptance, IRRAS's future earning capabilities may be adversely affected.

The Company's product candidates, such as the smaller version of IRRA*flow* and the drug delivery feature, are

currently in a development stage and will therefore require research and development in order to achieve relevant market authorizations. There is a risk that the Company's product candidates will not demonstrate the efficacy and safety required to progress into further development and subsequently to achieve market approvals. If the continued development of the Company's product candidates is unsuccessful, IRRAS's future earning capabilities may be adversely affected. Failure to continue to grow sales of existing products or achieve commercialization of new product candidates, for whichever reasons, could mean that the Company is unable to maintain operations in its current form, or ultimately, need to discontinue its operations.

Cyber security risks

IRRAS is reliant on technology and infrastructure. These systems are potentially vulnerable to risks like failure or disruptions due to fire, power outages, system failures or access by an unauthorized party. An employee's or a consultant's possible failure to comply with the applicable data policy can result in the risk of unauthorized access to the Company's data systems or the loss of data in the system. The expanded use and development of technology, especially in cloud-based services, increases the risk for the unintended transfer or deliberate destruction of confidential information stored in the Company's systems or on non-encrypted portable storage devices. IRRAS also risks experiencing business interruptions, theft of confidential information or damage to its reputation as a result of industrial espionage, malicious code or other types of cyber-attacks. Such attacks against IRRAS can furthermore lead to data leaks, either internally or externally. There is a risk that system breakdowns or other attacks directed at IRRAS's systems, which can have significant negative effects on IRRAS's reputation, business, earnings or financial position. If IRRAS does not adhere to the personal data laws applicable from time to time, there is a risk that competent authorties resolve on harsh fines, which may have an adverse effect on the Company's operations, financial position and earnings.

Risks related to recruiting and retaining key personnel and qualified employees on competitive terms

IRRAS has an experienced management team with a substantial collective experience regarding development of innovative medical devices and therapeutics. This experience also includes significant operational, commercial, marketing and financial experience with medical device and emerging biotechnology companies. The Company's advisors provide significant guidance to the management team in all the aspects of the business. The Company's personnel in the United States, including the CEO and President, has been employed on terms customary on the US market, which *inter alia* means that the notice periods are generally shorter than what would typically be the case for Swedish personnel and that following the termination of an employment non-solicitation undertakings are generally not enforceable to the same extent that they are in Sweden.

The Company's success depends in part on its continued ability to attract, retain and motivate highly qualified clinical scientific personnel and on its ability to develop and maintain important relationships with leading academic institutions, clinicians and scientists. The Company may not be able to attract or retain qualified personnel on acceptable terms in the future due to the intense competition for qualified personnel within the industry for medical devices as well as other related industries. The departure of some or several key employees could delay or impair IRRAS's business and continued product development. Furthermore, if the Company does not continue to recruit and retain top talent with relevant knowledge and expertise, there is a risk that it cannot reach its growth targets. Thus, loss of key employees or failure to attract new employees could have a material adverse effect on IRRAS's operations, financial position and earnings.

Risks related to IRRAS's protection of its intellectual property rights

Patents and other intellectual property rights are key assets to the Company and therefore, the Company's current and future success is dependent on the possibilities to maintain existing patents and to obtain patent protection for pending and future patent applications for the Company's technology platform. However, the patent positions for companies within the medical device industry, including the Company, are generally uncertain and involve complex medical, legal and technical assessments that may give rise to uncertainty as to the validity, scope and priority of a particular patent.

There is a risk that the Company will fail to develop products that are patentable, that patents will not be granted under pending or future applications, that patents will not be of sufficient breadth to provide adequate protection against competitors with similar technologies or products, or that patents granted to the Company are successfully challenged. If the Company does not obtain patents in respect of its technologies or if its patents are cancelled (for example, as a result of the discovery of prior art), third parties may use the technologies without payment to the Company, if they possess the necessary know-how. Furthermore, such proce-

dures could result in considerable legal costs for the Company, result in the diversion of management's time and efforts and require the Company to pay damages.

A third party's ability to use unpatented technologies is enhanced by the fact that the published patent application contains a detailed description of the relevant technology. In addition, the medical technology industry is characterized by a high level of innovation and rapid technology development, which is why new technologies and products could be developed by third parties, which could cause the Company's intellectual property rights to be bypassed or replaced. It should also be noted that patents are only granted for a limited time period. Additionally, if the combination of patents, trade secrets and contractual provisions that the Company relies upon to protect its intellectual property is inadequate, its ability to commercialize its products successfully will be harmed, and it may not be able to operate its business profitably.

In the event that the Company's patent or other intellectual property rights should be lost or curtailed, or if the Company is otherwise unable to maintain the requisite patent protection, this could have a material adverse effect on the Company's operations, financial position and earnings.

Risks related to infringement on third party patents or other intellectual property rights

IRRAS's technology is patented in 39 countries and consists of three patent families. A first patent family covers the initial invention (IRRA*flow* 1.0) and its method of use. A second patent family expands on claims coverage and key enabling features. A third family has been filed to protect designs and methods of the clinically tested product (IRRA*flow* 2.0) as well as potentially competitive concepts. Nevertheless, the Company's success will depend in part on its ability to operate without infringing or misappropriating the proprietary rights of others. The Company may spend significant time and effort and may incur substantial costs if required to defend such claims or to assert its proprietary rights against third parties.

Furthermore, there is a risk that the Company's efforts to search for existing proprietary rights, so called freedom to operate analyses, before embarking on a research and development program with respect to a particular technology or product, will not be able to uncover all relevant third party rights relating to such technology or product. As a result, competitors of the Company may have obtained or may in the future obtain patents in respect of technologies or products similar to or competitive with those of the Company. If this occurs, the Company may have to obtain appropriate licenses under such patents or cease and/or alter certain of its activities or processes, initiate proceedings to have these patents revoked or declared invalid, or develop or otherwise obtain alternative technology. The Company's inability to secure such licenses on commercially reasonable terms, to have such patents revoked or declared invalid, or to develop or otherwise obtain alternative technology may have a material adverse effect on its operations, financial position and earnings.

The Company's patent portfolio includes both patents developed by the Company as well as one patent that was acquired by the Company's founder in 2012. IRRAS has performed two freedom to operate analyses. The first one was updated in 2014 and considers delivery, drainage, infusion, lumen and clinical trials documented or patented by other parties. The second analysis was performed in early 2017 with and focused on freedom to operate considerations related to the IRRA*flow* 2.0 version. There is a risk that the Company's freedom to operate analyses has not disclosed all possible intellectual property issues relating to its activities. If the Company's freedom-to-operate analyses turn out to be incomplete, or if the Company becomes subject to infringement allegations, it could adversely affect the Company's operations, financial position and earnings.

Risks related to know-how and trade secrets

In addition to registered intellectual property rights, IRRAS has developed substantial know-how which is not protected by registration in the same way as other intellectual property. The Company protects its know-how and tradesecrets by way of non-disclosure agreements which are entered into with personnel, consultants and business partners. There is a risk that such obligations to maintain the confidentiality of the Company's or its collaborators' trade secrets or know-how is breached, or would not be possible to enforce by courts or that such trade secrets or know-how will otherwise become known in circumstances in which the Company has no practical means of redress. Furthermore, competitors and other third parties could independently develop similar know-how, which could be damaging to IRRAS's business. If any of the above mentioned risks occur, it could have a material adverse effect on IRRAS's operations, financial position and earnings.

Risks related to expenses associated with unforeseen product quality issues

IRRA*flow* is a relatively new product which has not yet been used extensively. Unforeseen product quality issues or other unforeseen negative effects can cause delays to the market for new products or mandatory recalls for marketed products, the Company could also

be subject to legal liabilities and harm to its business reputation. The cost of the delay is variable from lost revenues, weeks to months and extending to punitive fees. In the course of conducting its business, IRRAS must adequately address quality issues that may arise with its products, as well as defects in third-party components included in its products. Furthermore, a malfunction by one of IRRAS's products may not be detected for an extended period of time, which may result in delay or failure to remedy the condition for which the product was prescribed. Should product quality issues occur, it could have a material adverse effect on the Company's operations, financial position and earnings.

Risks related to potential product liability claims and insurance

Since the Company develops and sells medical devices and may in the future conduct clinical trials, the Company is exposed to liability risks. These risks encompass, inter alia, product liability risks which may arise in association with manufacturing, clinical studies, improper handling and marketing and sales of products. Patients participating in clinical studies may suffer unwanted adverse effects or be harmed in other ways.

Furthermore, the Company may not be able to accurately predict the possible side-effects that may result from use of its products or product candidates. The Company faces the risk of substantial liability for damages if its products or product candidates were to cause that patients who participate in clinical studies or others who come in contact with the Company's products or product candidates suffer side effects that cause illness, bodily injury, death, or other damage. There is a risk that the the Company's insurance policies will not be applicable or that they do not provide sufficient coverage in the event of a product liability claim. There is also a risk that the Company fails to obtain or maintain adequate insurance coverage on acceptable terms in the future. Any claims relating to e.g. improper handling, storage or disposal of biological materials could be time consuming and costly, cause harm to the Company's reputation if the market perceives its products to be unsafe or ineffective due to unforeseen side-effects and may limit or prevent the sales or further development or commercialization of the Company's products and products candidates. If any of these risks were to occur, it could have a material adverse effect on the Company's operations, financial position and earnings.

Risks related to disputes and legal procedures

IRRAS is not and has not been a party in any legal proceedings or arbitration proceedings (including matters not yet decided or such that the Company is aware may arise) during the past twelve months, which have recently had or could have had a significant impact on IRRAS's financial position or profitability. However, the Company may, in the future, be involved in such disputes relating to the Company's ongoing operations. Such disputes may involve alleged intellectual property infringements, the validity of certain patents and other commercial disputes. Disputes and claims can be time consuming, disrupt operations, involve considerable amounts or fundamentally important issues and result in significant costs and materially adversely affect the Company's operations, financial position and earnings.

Risks related to that the financial targets included in the Offering Circular may differ materially from IRRAS's actual results

The financial targets set forth in this Offering Circular and elsewhere are IRRAS's expectations concerning growth and profitability. These objectives are based on a number of factors, which are inherently subject to significant business, operational, economic and other risks, many of which are outside the Company's control. The Company has detailed the assumptions the senior management and the board of directors have made when setting out its targets, but there is a risk that these assumptions may not continue to reflect the commercial, regulatory and economic environment in which the Company operates. Accordingly, such assumptions may change or may not materialize at all. In addition, unanticipated events may adversely affect the actual results that the Company achieves in future periods whether or not its assumptions otherwise prove to be correct. As a result, IRRAS's actual result may vary materially from these targets and investors should not place undue reliance on them.

Risks related to current and additional financing

The amount and timing of expenditure needed to implement the Company's business plan, including development and commercialization programs, will depend on numerous factors, including the progress, costs, timing and results of its research and development activities (including clinical studies), the costs and timing of obtaining regulatory approval, the costs of obtaining, maintaining and enforcing its patents and other intellectual property rights, the costs and timing of obtaining or maintaining manufacturing for its products and product candidates, the costs and timing of establishing sales and marketing capabilities, whether or not the Company enters into strategic collaborations or partnerships and

the terms and timing of establishing such collaborations, license agreements and other partnerships. Some of these factors are outside the Company's control.

There is a risk that IRRAS will not reach sufficient levels of revenue or positive cash flow in the future in order to finance the Company's operations. Furthermore, if IRRAS is unable to obtain suitable financing or unable to pursue attractive business opportunities, it could limit the Company's ability to maintain its market position or the competitiveness of its product offering, which could have a material adverse effect on the Company's operations, financial position and earnings. IRRAS may also need to seek additional external financing to continue its operations. Such financing can come from third parties or from existing shareholders through public or private financing initiatives. There is a risk that new capital cannot be raised when needed or on satisfactory terms or that capital raised is not sufficient to finance operations in accordance with established development plans and objectives. This could result in the Company being forced to restrict its development activities or, ultimately, to discontinue its operations. The terms of available financing could also have a negative impact on the Company's operations as debt financing, if available to the Company, could contain restrictive conditions which could limit the Company's flexibility.

Furthermore, the Company's future capital requirements may differ from the management's estimates. The future capital requirements depend on several factors, including the costs of development and commercialization of product candidates, as well as timing and size of sales revenues from current and future products. Failure to adequately estimate the Company's future capital requirements could have various material adverse effects on the Company's operations, financial position and earnings.

Risks related to profitability

IRRAS has incurred significant operating losses since its foundation and experienced net losses of approximately SEK –27 million in 2016. These losses have resulted principally from costs incurred in research and development, business development (including sales activities in Germany) and clinical testing as well as from general and administrative costs associated with the Company's operations. In the future, the Company will be required to conduct further significant research and development, business development (including marketing and sales activities), clinical testing and regulatory compliance activities. Such activities, together with anticipated general and administrative expenses and the anticipated increase of costs and expenses associated with the expected growth of the Company, could result in the Company sustaining significant losses for the foreseeable future.

There is a risk that the Company will not earn sufficient revenues or achieve profitability to conduct its operations in accordance with set goals and strategies, which could impair the Company's ability to sustain the scope of operations or obtain any required additional funding. If the Company does achieve profitability in the future, it may not be able to sustain profitability in subsequent periods. In addition, the Company may experience uneven cash flows. As a result, period-to-period comparisons of financial results are not necessarily meaningful and results of operations in prior periods should not be relied upon as an indication of future performance. Any future deviations in results of operations expected by securities analysts or investors could have a material adverse effect on the market price of the Company's shares.

Risks related to currency rate fluctuations and that IRRAS's customers do not fulfill their payment obligations

The Company's financial accounting and functional currency is SEK. However, an increasing part of the Company's operating costs and revenue in the future will be denominated in EUR and USD. As a result, the Company will be subject to risks related to currency exchange rates in respect of cash flows inside and outside Sweden and the Euro zone, such as fluctuating exchange rates after entering into an agreement and until payment is made pursuant to the terms of the agreement, so called transaction exposure. Moreover, the Company expects to have financial liabilities such as loans, and financial assets such as receivables, denominated in EUR and USD which also expose the Company to currency rate fluctuations.

Fluctuations in currency exchange rates between the Company's billing currency (SEK, USD or EUR) and the customer's local currency may come to affect the demand of the Company's products. The Company is also exposed to credit risks, i.e., that the Company's customers do not fulfill their payment obligations and that the Company therefore does not receive payments for its claims due. If the Company's customers fail to meet their payment obligations, it will affect the Company's cash flow and could have a material adverse effect on the Company's operations, financial position and earnings.

Risks related to exposure to tax claims and changes in tax regulations

The tax considerations made by IRRAS are based on interpretations of the current tax laws, tax treaties and other tax regulations and the requirements of the rele-

vant tax authorities. There is a risk that tax audits and reviews may result in IRRAS having additional tax imposed or deductions denied, for example due to financings or intra group transactions.

In the event that IRRAS's interpretation of tax laws, treaties and other tax regulations or their applicability is incorrect, if one or more governmental authorities successfully make negative tax adjustment with regard to IRRAS, or if the applicable tax laws, tax treaties, regulations or governmental interpretations thereof or administrative practice in relation thereto change, including with retroactive effect, the Company's past or current tax positions may be reassessed. In the event of tax authorities succeeding with such claims, an increased tax cost could result, including tax charges and interest costs which could have a material adverse effect on the Company's operations, financial position and earnings.

Laws, treaties and other regulations on taxation have historically been subject to frequent changes and future changes could have a significant impact on IRRAS's tax burden, as well as a material adverse effect on the Company's operations, financial position and earnings.

Risks related to accumulated tax losses

IRRAS has accumulated tax losses that as per December 31, 2016 amount to SEK –78 million. The accumulated tax losses could in the future reduce any taxable profits that the Company makes, and thus reduce the corporate tax that would arise on future profits. Tax losses and the use thereof are subject to extensive restrictions rules. IRRAS's opportunity to utilize, in full or in part, the accumulated tax losses in the future will be determined, amongst other factors, by future changes in ownership of the Company. IRRAS's opportunity to utilize, in full or in part, the accumulated tax losses may also be affected by changes in the applicable tax legislation. If the tax losses carried forward cannot be used to reduce the tax on future profits, it will mean that the Company's income tax will be higher, which could have a material adverse effect on the Company's future operations, financial position and earnings.

RISKS RELATED TO THE SHARES AND THE OFFERING

Share-related risks

Share ownership is always associated with risks and risk-taking. Since the value of an investment in shares can both rise and fall, there is a risk that investors will not regain invested capital. Both the general development of the stock market and the specific company's stock price depend on a number of factors that include the development of the Company's business and product portfolio, changes in the Company's earnings and financial position, changes in the market's expectations of future profits and dividends, as well as supply and demand for the Company's shares. IRRAS's share price can also be affected by factors completely beyond the Company's control, such as competitor activity and market position.

Prior to the Offering, there has been no organized market for shares in IRRAS. There is a risk that the offer price will not match the price at which the shares in IRRAS will be traded on the stock market after the Offering and that active trading will not be developed and established after the Listing. There is a risk that the shares will be subject to significant fluctuations on the stock market in general. Such fluctuations may occur regardless of how IRRAS performs. The share price and trading in IRRAS's shares is influenced by, among other factors, supply and demand, changes in earnings forecasts or actual results, conditions on the stock market in general or in the Company's industry in particular, regulatory developments or economic and political changes and events in Sweden and abroad.

In addition, the stock price is affected by monitoring and reporting on the Company by equity and industry analysts. If one or more of these analysts stop following the Company or do not publish periodic reports, the Company may become less visible in the financial markets, which in turn can lead to fluctuations in share price and/or trading volumes.

Future dividends

Investors who participate in the Offering may be eligible for any future dividends which are decided after the listing. Historically, IRRAS has not paid any dividends and the existence and size of any future dividends will be dependent, among other things, on the Company's future earnings, financial position, cash flows, working capital requirements, legal and financial constraints and other factors. There is thus a risk that dividends will not be paid in the future, and for as long as no dividends are paid, investors' potential returns will depend solely on future share price performance.

Shareholders with significant influence

Provided that the Offering is subscribed in full, that the Offering Price is fixed at the midpoint of the price range (i.e. SEK 47.50), and that the Over-allotment Option is fully utilized, and that the Investing Shareholders receive full allocation in the Offering, the Main Shareholders will own approximately 46.0 percent of the shares and votes in IRRAS after the Offering. Thus, the Main Shareholders will continue to have significant influence over the Company after the Offering, and most of the decisions that are subject to voting on general meetings. Such matters include election of the board of directors, issue of new shares and share related securities which can entail dilution for current shareholders, and decisions on

payments of potential dividends or sales of all or significant parts of the Company's assets. There is a risk that the Main Shareholders interests differ from or conflict with the interests of other shareholders, and the Main Shareholders may come to use their influence in the Company in a way that is conflicting with the interests of other shareholders.

Future sales of major shareholdings and new share issues

Significant sales of shares which are made by major shareholders, as well as a general market expectation that further sales will be carried out, could have a negative effect on the price of IRRAS's shares. Moreover, any possible issue of new shares would lead to a dilution of ownership for shareholders who do not participate in such an issue or choose not to exercise their right to subscribe for shares. The same applies if an issue is directed to persons other than the Company's shareholders.

Through the Placing Agreement the Main Shareholders, the shareholding board members and the Company's senior management will undertake, under certain conditions, not to sell their respective shareholdings for a certain period of time after the trade on Nasdaq First North Premier has commenced (the "**Lock-up period**"). The Lock-up period for the Main Shareholders will be 365 days. Lock-up for Main Shareholders does not include Shares acquired in the Offering. For shareholding board members and the Company's senior management, as well as all participants in the Company's share-related incentive schemes, the Lock-up period will be 365 days.

Serendipity Ixora AB (publ), which is one of the Main Shareholders, has advised that it intends to distribute its shares in IRRAS after the completion of the Offering.

Serendipity Group AB, a company ultimately owned by the Serendipity Group's founders, Saeid Esmaeilzadeh and Ashkan Pouya, owns approximately 56 percent of Serendipity Ixora AB (publ) as at the date of this Offering Circular. The remaining 44 percent is owned by approximately 300 Swedish private individuals. The shares distributed to Serendipity Group AB will be covered by the abovementioned 365 day Lock-up period. The shares distributed to the remaining owners of Serendipity Ixora AB (publ) will subject to a reduced 180 day Lock-up period, and will further be placed on an escrow account to ensure the efficiency of the escrow mechanics.

The Sole Global Coordinator may come to grant exeptions from the relevant commitments. After the expiration of the Lock-up Period, the shareholders concerned will be free to sell their shares in the Company. The sale of large quantities of shares of the Principal Shareholders or other shareholders in the Company after the expiration of the lock up period (or during the lock up period after receiving approval), as well as an expectation that such sales could occur, could cause IRRAS's share price to fall. Subscription undertakings are not guaranteed.

Subscription undertakings are not guaranteed

The existing shareholders Serendipity Ixora AB (publ) and Vandel Medical Equipment Ltd. (together the "**Investing Shareholders**") have agreed to subscribe for shares in the Offering corresponding to a total of SEK 35 million, which corresponds to 10 percent of the Offering (excluding the Over-allotment Option). The Investing Shareholders are entitled to determine the final allocation of the shares covered by the above commitment, which means that each of the Investing Shareholders has formally undertaken to subscribe for all the shares covered by the commitment.

The Investing Shareholders' commitments are not covered by any bank guarantee, blocked funds or pledging or similar arrangement, wherefore there is a risk that these undertakings will not be fulfilled. In the event that the Investing Shareholders do not fulfil their undertakings, such event could have an adverse effect on the execution of the Offering.

Risk related to certain tax regulations in the United States

In general, if at least 75 percent of the Company's gross income for any taxable year consists of passive income or at least 50 percent of the average quarterly value of assets is attributable to assets that produce passive income or are held for the production of passive income, including cash, then the Company will be classified as a passive foreign investment company (a "PFIC") for US federal income tax purposes. Passive income for this purpose generally includes dividends, interest, royalties, rents and gains from securities transactions. Passive assets for this purpose generally include assets held for the production of passive income. However, rents and gains derived in the active conduct of a trade or business in certain circumstances may be considered active income. Although the Company does not believe it was a PFIC for its 2016 tax year and does not expect to be a PFIC for the 2017 or subsequent tax years, the determination of PFIC status can only be made at the end of a taxable year. In particular, the Company's PFIC status may be affected by changes in the nature of the Company's income or assets, the rate at which the Company utilizes the proceeds of the Offering, or a decrease in the trading price of the Company's shares. If the Company were a PFIC for any taxable year during a

US investor's holding period for the shares, the Company would ordinarily continue to be treated as a PFIC for each subsequent year during which the US investor owned the shares. If the Company were treated as a PFIC, US Holders would generally be subject to special punitive tax rules with respect to any "excess distribution" received from the Company and any gain realized from a sale or other disposition (including a pledge) of the shares.

Specific risks for foreign shareholders

IRRAS's shares will be quoted in SEK and any dividends will be paid in SEK. This means that shareholders outside Sweden may experience an adverse effect on the value of shareholdings and dividends when these are converted into other currencies, if SEK decreases in value against the currency in question.

If IRRAS issues new shares in a rights issue, as a general rule shareholders have preferential rights to subscribe for new shares in proportion to the number of shares held prior to the issue. Shareholders in certain countries may be subject to limitations that mean they are unable to participate in such a rights issue, or that participation is made more difficult or restricted in other ways. For example, shareholders in the US may be unable to exercise such preferential right if the shares and subscription rights are not registered under the Securities Act, unless an exemption from the registration requirements of the Securities Act is applicable. Shareholders in other jurisdictions outside Sweden may be affected in the same way if the subscription rights or the new shares are not registered or approved by the competent authorities in these jurisdictions.

IRRAS has no obligation to apply for registration under the Securities Act or to apply for the equivalent approvals under the laws of any jurisdiction outside of Sweden with respect to such shares and subscription rights, and to do so in the future may be impractical and costly. To the extent that IRRAS's shareholders in jurisdictions outside Sweden cannot exercise their rights to subscribe for new shares in any preferential rights issue, their proportionate ownership in IRRAS will decrease.

Nasdaq First North Premier is not a regulated market

Nasdaq First North Premier is an alternative marketplace (MTF) operated by the different exchanges within Nasdaq. It does not have the same legal status as a regulated market. Companies on Nasdaq First North Premier are regulated by Nasdaq First North Premier's rules and not by the legal requirements that applies for admission to trading on regulated markets An investment in a company traded on Nasdaq First North Premier is more risky than an investment in a company on a regulated market.

INVITATION TO SUBSCRIBE FOR SHARES IN IRRAS

In order to further finance IRRAS's next phase of accelerated commercialization and expand the IRRA*flow* platform, the Company's board of directors has resolved to carry out a new share issue in IRRAS, which is directed to the general public[1] in Sweden and to institutional investors[2] in Sweden and abroad (the "**Offering**"). In conjunction therewith, IRRAS's board of directors has also applied for admission to trading of the Company's shares on Nasdaq First North Premier, and on November 13, 2017, Nasdaq Stockholm decided to admit the Company's shares to trading subject to certain customary conditions. The first day of trading on Nasdaq First North Premier is expected to be November 22, 2017.

Investors are hereby invited, in accordance with the terms and conditions set out in this Offering Circular, to subscribe for a maximum of newly issued shares that provides the Company with proceeds of not more than SEK 350 million. The new shares will be issued pursuant to the authorization given at the extraordinary general meeting on September 1, 2017. The price in the Offering will be established in the range of SEK 45 – 50 per share through a book-building procedure and will consequently be based on demand and the overall market conditions. Ultimately, the price in the Offering will be determined by the Company's board of directors in consultation with the Sole Global Coordinator. The Offering price to the general public will not exceed SEK 50 per share. The final price in the Offering will be announced through a press release on or around November 22, 2017. Assuming that the price in the Offering is set to SEK 45 per share, corresponding to the low end of the price range, the new share issue will comprise 7,777,777 shares. If the final price is set to SEK 50 per share, the new share issue will comprise 7,000,000 shares.

Assuming that the Offering is fully subscribed and that the Over-allotment Option is not exercised, the new share issue is expected to generate net proceeds to IRRAS of SEK 316 million after deduction of expenses related to the Offering.[3] If the Offering is fully subscribed and assuming that the final price in the Offering corresponding to the midpoint of the price range (i.e. SEK 47.50 per share), the number of shares in IRRAS will increase by 7,368,421 shares, from 17,217,419 to 24,585,840, which corresponds to a dilution of 30.0 percent of the total number of shares in the Company after the Offering.

In order to cover any over-allotment in connection with the Offering, the Company has committed to issue, at the request of the Sole Global Coordinator, additional shares, which corresponds to a maximum of 15 percent of the total number of shares in the Offering and up to a maximum of 4.7 percent of the total number of shares in the Company after the Offering (the "**Over-allotment Option**"). If the Offering is fully subscribed, the Over-allotment Option is exercised in full, and assuming a final price corresponding to the midpoint of the price range (i.e. SEK 47.50 per share), the Offering will encompass a total of 8,473,684 shares in IRRAS, representing 33.0 percent of the total number of shares in the Company after the Offering.

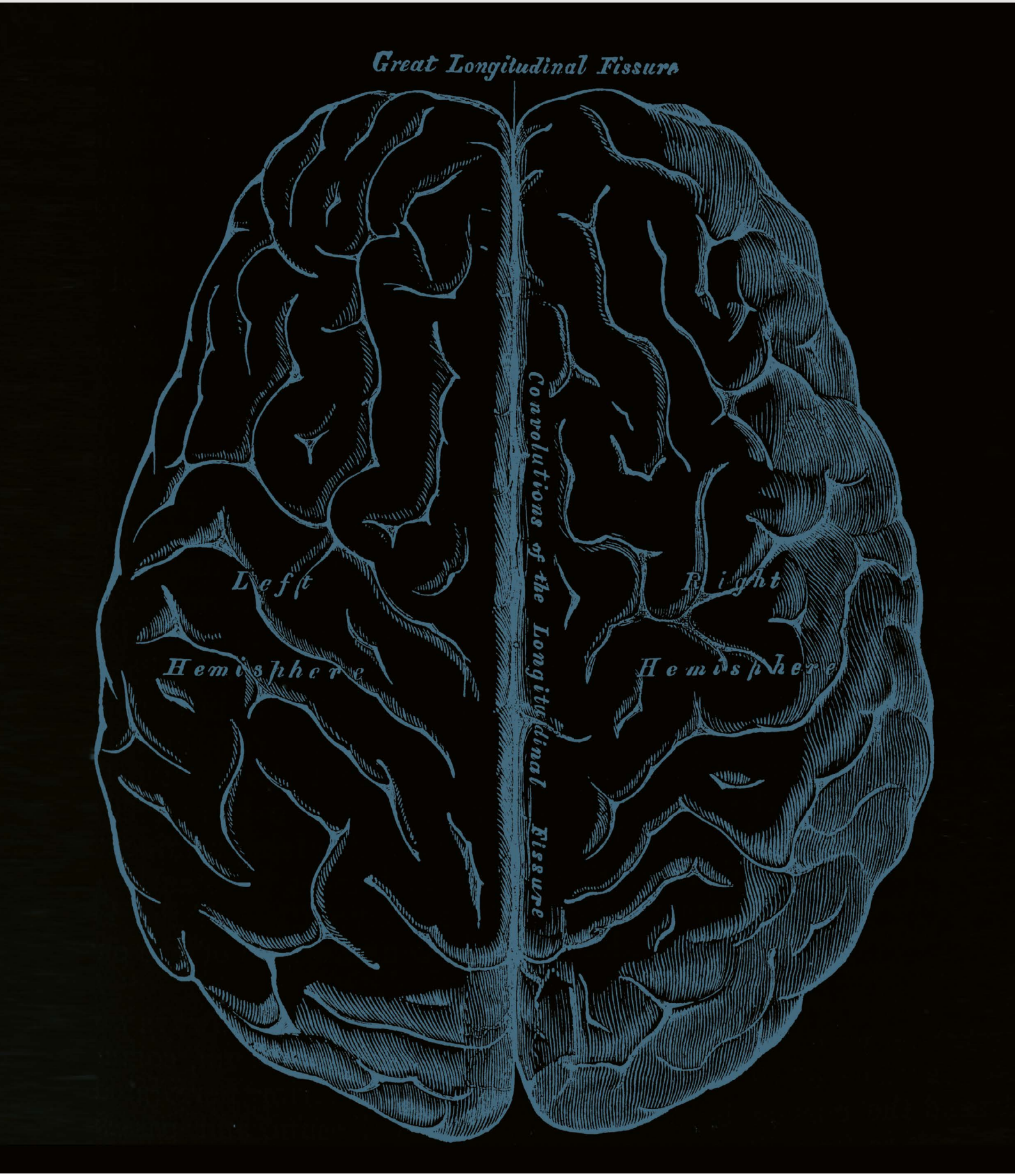
The existing shareholders Serendipity Ixora AB (publ) and Vandel Medical Equipment Ltd. (together the "**Investing Shareholders**") have agreed to subscribe for shares in the Offering corresponding to a total of SEK 35 million, which corresponds to 10 percent of the Offering (excluding the Over-allotment Option). The Investing Shareholders are entitled to determine the final allocation of the shares covered by the above commitment, which means that each of the Investing Shareholders has formally undertaken to subscribe for all the shares covered by the commitment.

The total value of the Offering amounts to approximately SEK 350 million and approximately SEK 403 million should the Over-allotment Option be fully exercised.

Please refer otherwise to the contents of this Offering Circular, which has been prepared by the board of directors in IRRAS by reason of the Offering.

Stockholm, November 13, 2017
IRRAS AB
The board of directors

1) The general public includes private individuals and legal persons in Sweden who subscribe for a maximum of 22,500 shares.
2) Institutional investors include private individuals and legal persons who subscribe for more than 22,500 shares.
3) IRRAS's costs for the Offering are estimated to amount to a maximum of SEK 34 million, see also under "*Costs related to the Offering*" in the section "*Legal considerations and supplementary information*".


Great Longitudinal Fissure
Convolutions of the Longitudinal Fissure
Left
Hemisphere
Right
Hemisphere

BACKGROUND AND RATIONALE

IRRAS is a commercial stage medical technology company focused on designing, developing and commercializing innovative solutions for various brain pathologies, with a goal of dramatically improving patient outcomes, reducing patient-time in the intensive care unit and medical ward, and providing significant health economic benefits to hospitals and healthcare providers.

The Company's initial product focus is on intracranial fluid management solutions that utilize its proprietary platform technology, IRRA*flow*, which is a CE-marked[1], fully integrated, closed-circuit medical device system that enables intelligent intracranial fluid management as well as accurate, real-time monitoring of intracranial pressure.

By marketing IRRA*flow* for patients with hemorrhagic stroke and chronic subdural hematoma, and following the promising EU commercial launch in May 2017, the Company has received product revenues from the sale of IRRA*flow* units and consumables in Germany and other certain EU countries of SEK 11.3 million in total.[2] In addition, the Company submitted a 510(k) application for IRRA*flow* with the FDA in June 2017, and expects to receive a final response from the FDA in the first quarter of 2018 and commercially launch IRRA*flow* in the United States based on such FDA approval.

Due to the significant interest and uptake of IRRA*flow* since the commercial launch, the Company believes that significant value can be created from an accelerated commercialization strategy. In addition, the Company believes its IRRA*flow* platform has multiple expansion opportunities in addition to the patient populations that IRRA*flow* is already addressing (hemorrhagic stroke and chronic subdural hematoma). The product pipeline includes a smaller version of IRRA*flow,* an add-on feature to the IRRA*flow* for continuous monitoring of brain elastance, an IRRA*flow* version for body pathologies (outside the CNS) and a novel drug delivery system.

IRRAS estimates that the current working capital is insufficient to meet the Company's needs over the next twelve months. The execution of IRRAS's marketing initiatives and expansion strategy will require significant investments during the years to come. The Company estimates that there is a deficit of a total of approximately SEK 260 million during this period. To secure the financing needed to deliver on its growth strategy, further develop the product pipeline and to support the working capital needs until the Company becomes self-sufficient, IRRAS has decided to carry out a new share issue in connection with the listing on Nasdaq First North Premier. Assuming that the Offering is fully subscribed, the gross proceeds will amount to SEK 350 million and SEK 316 million after expenses related to the Offering.[3] The Company intends to use such proceeds as per the following:

- Commercial expansion of the neurosurgical operations, including entry to the US market and reinforcement of the sales organization in the EU – approximately SEK 90 million
- Development of IRRA*flow* for new functions within neurosurgery, including a smaller version of the IRRA*flow* catheter – approximately SEK 40 million
- Development of IRRA*flow* for new indications in the body – approximately SEK 40 million
- Development of a new drug delivery system for IRRA*flow* – approximately SEK 90 million
- Buffer for unforeseen costs and delays in the execution of the commercial strategy and the Company's research and development strategy – approximately SEK 55 million

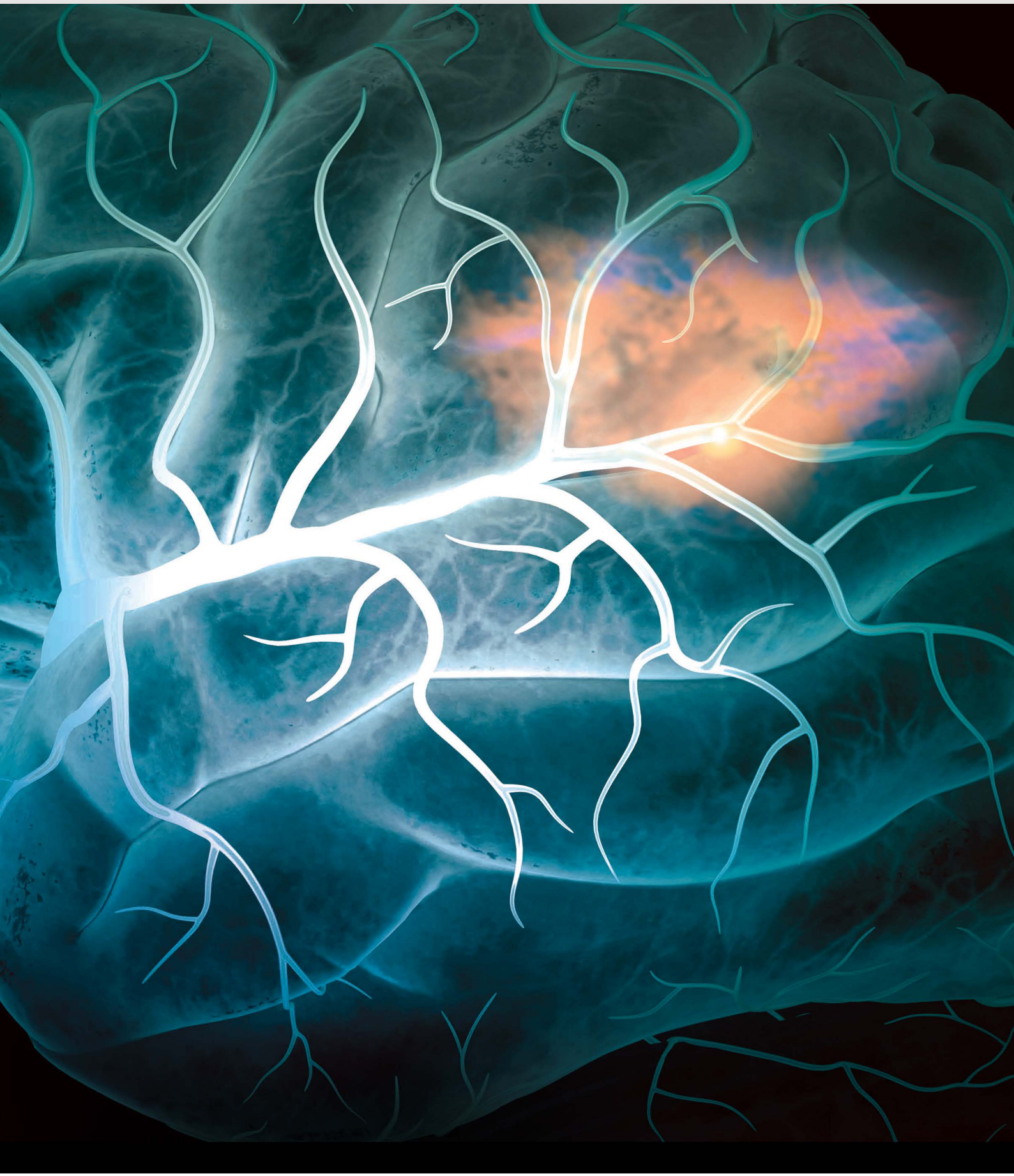
In view of the above, IRRAS believes that it has come to a phase where it is appropriate to list its shares on Nasdaq First North Premier which, in addition to expanding the Company's ownership base, also would give access to Swedish and international capital markets. In addition, IRRAS expects the listing to contribute to improved possibilities for IRRAS to attract and retain key personnel, something that is particularly important in the commercialization and growth phase that the Company has just begun. Further, it is the objective of IRRAS's board of directors to, subject to, inter alia, prevailing market conditions, list the Company on Nasdaq Stockholm's main market within twelve months from the completion of the listing on Nasdaq First North Premier.

Please refer otherwise to the contents of this Offering Circular, which has been prepared by the board of directors in IRRAS by reason of the Offering.

The board of directors of IRRAS is responsible for the content of this Offering Circular. It is hereby assured that the board has taken all reasonable precautionary measures to ensure that the information in this Offering Circular, as far as the board of directors is aware, corresponds to the actual circumstances and that nothing has been omitted that could affect its meaning.

Stockholm, November 13, 2017
IRRAS AB
The board of directors

1) For a further description of the meaning of a CE-mark, please refer to the heading "Regulatory" in the section "*Description of the business*".
2) Up to and including September 2017.
3) The Offering is conditional upon generating net proceeds of a minimum of SEK 260 million assuming that the Over-allotment Option is not exercized. In the event that the required subscription rate is not achieved, the Offering will be withdrawn and the subsequent listing on Nasdaq First North Premier will not take place. See also statement regarding working capital in the section "*Capital structure and other financial information*".



DESCRIPTION OF THE BUSINESS

OVERVIEW

IRRAS is a commercial stage medical technology company that is currently focused on designing, developing and commercializing innovative solutions to facilitate surgical procedure in the treatment of various brain pathologies, with a goal of dramatically improving patient outcomes, reducing patient-time in both the intensive care unit and medical wards, and providing significant health economic benefits to hospitals and healthcare providers. The Company's initial product focus is on intracranial fluid management solutions that utilize its proprietary platform technology, IRRA*flow*, which is a CE-marked, fully integrated, closed-circuit medical device system that enables intelligent intracranial fluid management as well as accurate, real-time monitoring of intracranial pressure (ICP).

Elevated ICP is a common cause of neurological damage and death in patients with any neurosurgical intracranial pathology. Continuous ICP monitoring and catheter drainage of cerebrospinal fluid (CSF) or pathological intracranial fluid in order to lower ICP is consequently important to patient outcomes. Using conventional draining systems, both the above functions are frequently interrupted by catheter blockage, thus putting patient outcome at risk as attempts to unblock the catheter increases infection risk and are often unsuccessful, leading to reoperations for new catheter insertions. The Company believes IRRA*flow* offers significant treatment advantages over conventional ICP monitoring and drainage tools due to its proprietary product features that minimize the risk of catheter blockage and associated infection risk, and enable continuous monitoring and calibration of ICP through a dynamic fluid exchange system.

The Company's initial commercial markets for IRRA*flow* are hemorrhagic stroke and chronic subdural hematoma. The Company commenced a full commercial launch of IRRA*flow* in Germany in May 2017 and has since expanded commercial sales through the appointment of distributors in a total of 42 countries, including China, India and Japan. As of November 8, 2017, IRRA*flow* is covered by so-called DRG codes in 14 countries in total. This means that the authorities in each country have approved the product and gives a fixed monetary reimbursement for each treatment completed with IRRA*flow*. In addition, the Company expects that IRRA*flow* will fit within the existing DRG codes which are applied by most, if not all, of the remaining EU countries. Since the commercial launch of IRRA*flow* in late May 2017 through September 30, 2017, the Company received sales proceeds of SEK 11.3 million from the sale of IRRA*flow* control units and consumables in Germany and other EU countries.

In June 2017, the Company submitted a 510(k) application for IRRA*flow* to the US Food and Drug Administration (FDA) for ICP monitoring and CSF drainage and expects to receive a final response from the FDA in the first quarter of 2018 and commercially launch IRRA*flow* in the United States if FDA clearance is received.

During 2015, approximately 250,000 patients in the EU[1] and 210,000 patients in the United States suffered a hemorrhagic stroke, and these numbers are projected to increase to 335,000 in the EU and 260,000 in the United States by the year 2030 primarily due to the aging of the population.[2] The Company estimates that its total annual market opportunity for IRRA*flow* is approximately EUR 470 million in the European Union and approximately EUR 420 million in the United States.[3]

The Company believes its IRRA*flow* platform device system has multiple additional application opportunities. The Company's initial growth strategy is to pursue additional indications for IRRA*flow*, including a smaller version of IRRA*flow* for intracranial bleedings and IRRA*flow* for fluid management when treating of diseases in other parts of the body than the central nervous system (e.g. abdominal abscesses). In addition, the Company believes it can develop its core IRRA*flow* technology into a novel drug delivery system that would address the historically poor administration of all therapeutics to the brain. Furthermore, the Company believes IRRA*flow* will be able to locally deliver therapeutics to other parts of the body that have been historically difficult to treat.

1) Data refers to number of patients in Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Germany, Estonia, Greece, Spain, France, Ireland, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden and Great Britain.
2) Company estimate is based on approximate number of hemorrhagic stroke cases (250,000 in the major EU countries and 210,000 in the United States), multiplied by 30 percent , which is the projected increase due to the aging of the population. SAFE Report: The Burden of Stroke in Europe. / American heart Association Report: Heart Disease and Stroke Statistics – 2017 Update.
3) Company estimate based on approximate number of surgically operated hemorrhagic stroke cases (190,000) and chronic subdural hematoma cases (155,000) in the EU and the United States, multiplied by EUR 2,600, which is the average selling price of the single-use consumable components (IRRA*flow* cassette and catheter) of the IRRA*flow* system.

HISTORY

2017

Reimbursement codes officially issued from ~14 countries in the EU for IRRA*flow* device.

CE Mark and ISO certificate renewed through 2019.

Initiated first sale of IRRA*flow* in Germany.

510K application filed in the United States.

2016

Closed pivotal financing round.

Expanded IRRAS operations into the United States. US headquarters in La Jolla, CA.

2014

CE Mark and ISO certificate received in the EU.

2012

The Company's first patent family is acquired from Christos Panotopoulos (Chief Scientific Officer and Founder). Work with development and commercialisation of IRRA*flow* commences.

Study published in Asian Journal of Neurosurgery: *Innovative approach for prevention and treatment of post subarachnoid hemorrhage vasospasm: A preliminary report.*

2011

IRRAS AB founded as joint venture between Serendipity Innovations AB, Vandel Group and Jaymore Enterprises Limited.

First IRRA*flow* patent was granted in the European Patent Office (EPO).

Case Report accepted at the 14th European Congress for Neurosurgery.

2006

First patent filed: Fluid Exchange Catheter System.

2000

Dr. Christos Panotopoulos initiated the development of the IRRA*flow*

FINANCIAL TARGETS

IRRAS's board of directors have adopted the following financial targets:

Sales

- The long-term growth target is to achieve revenue exceeding SEK 250 million in the fiscal year 2020.

Gross margin

- The gross margin target for the fiscal year 2020 is to have a gross margin exceeding 70 percent.

Operating profit

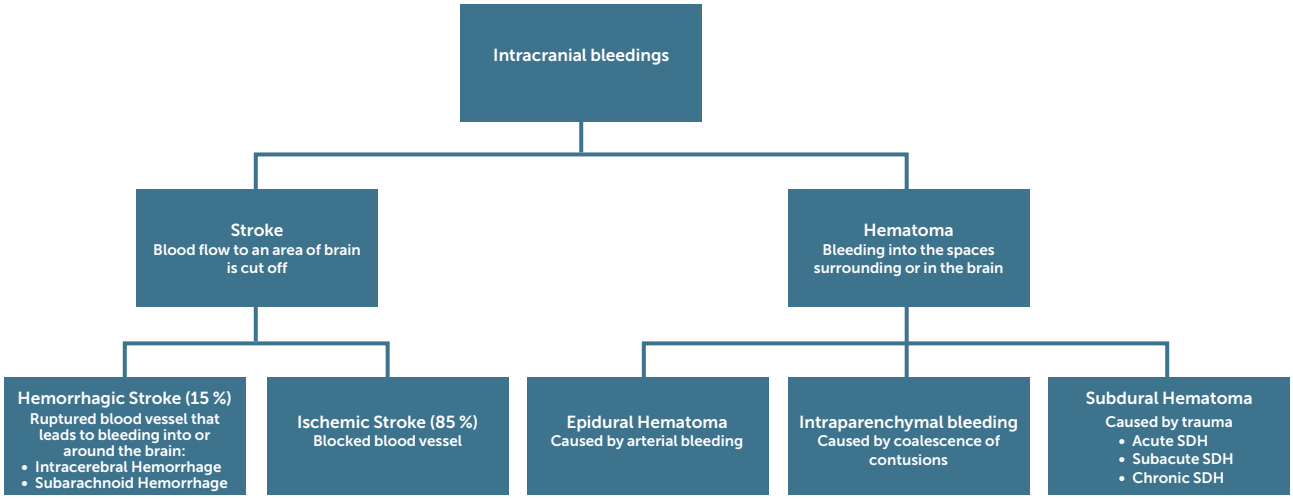
- The Company's shall be profit making at an operating profit level for the fourth quarter 2019.

The targets are formulated based on the Company's overall assessment and based on the Company's assumption of market penetration, manufacturing costs, operating expenses as well as other conditions described in this Prospectus. The financial targets described in the left column represent forward-looking statements. These forward-looking statements are no guarantees of the Company's future financial or operational performance and IRRAS's actual results could differ materially from those expressed or implied by these forward-looking statements as a result of many factors, including but not limited to those described under the section "*Risk factors*". Investors are urged not to place undue reliance on any of the statements set forth to the left. Please refer also to "*Important information – Forward-looking information*".

Market

Intracranial bleedings

IRRAS is initially marketing IRRA*flow* for ICP monitoring and intracranial fluid management in patients with hemorrhagic stroke and chronic subdural hematoma in the European Union. Subject to regulatory approval, IRRAS further expects to initiate marketing in the United States during 2018.



Hemorrhagic stroke

Hemorrhagic stroke is caused by a sudden rupture in a blood vessel leading to bleeding into or around the brain. Hemorrhagic stroke is responsible for five percent of all deaths in the United States.[1] The main risk factors for hemorrhagic stroke are hypertension, older age, anti-coagulant medications, smoking and high alcohol intake, cerebral amyloid angiopathy, coagulation factor deficiency and a family history of hemorrhagic stroke.

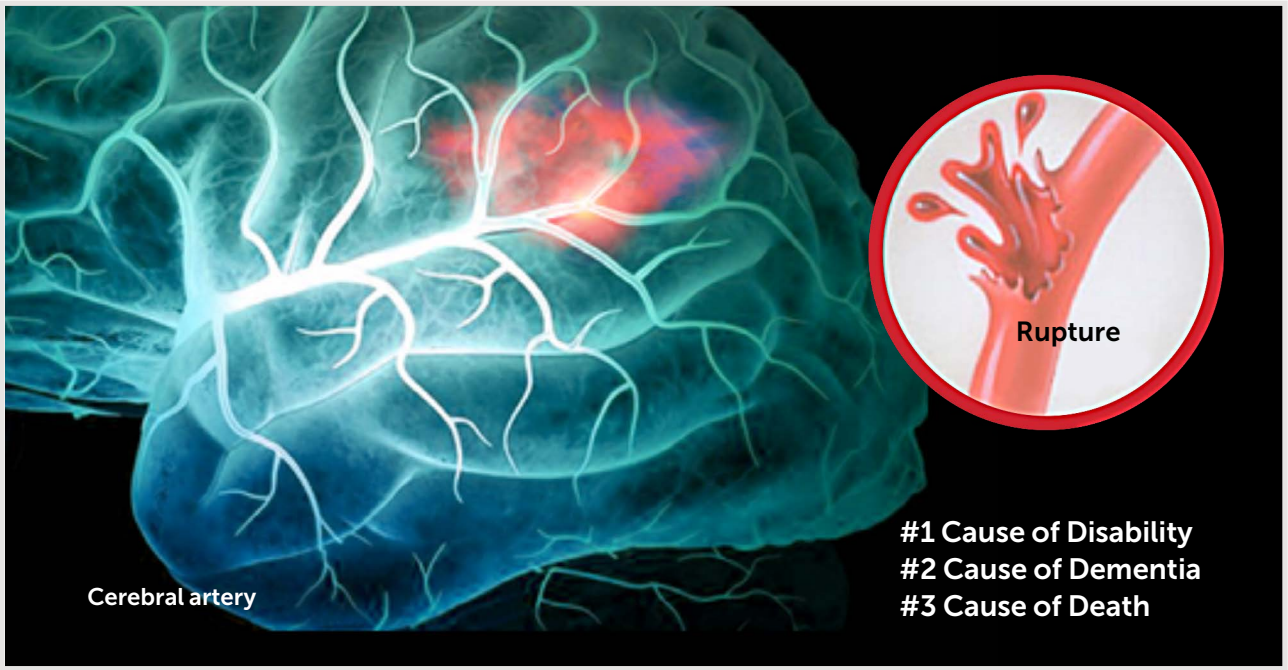
Approximately 3.6 million people worldwide suffer a hemorrhagic stroke each year. Approximately 250,000 people suffer a hemorrhagic stroke in the European Union and approximately 210,000 people suffer a hemorrhagic stroke in the United States annually. Of the total number of hemorrhagic strokes in the European Union and the United States, more than 40 percent are surgically operated.[2] This implies that approximately 190,000 cases of hemorrhagic stroke in the European Union and the United States are eligible for IRRA*flow*.

Seventy-five percent of all hemorrhagic strokes occur in people aged over 65 in the European Union and in the United States.[3] The number of hemorrhagic stroke events in the European Union is expected to increase by 34 percent by the year 2035[4] and, similarly, the number of hemorrhagic stroke events in the United States is expected to increase by 24 percent by the year 2030,[5] primarily as a result of the aging population.

Approximately 40 percent of all hemorrhagic stroke cases result in death within 30 days, and approximately one-third of cases result in brain damage and permanent disability.[6] The estimated direct health costs and indirect costs due to the cost of informal care by family and friends and lost productivity caused by morbidity or death of hemorrhagic stroke was EUR 45 billion in the European Union[7] during the year 2015 and USD 33 billion in the United States during the year 2013.[8]

Strokes are a global health problem

Hemorrhagic stroke is the most severe form



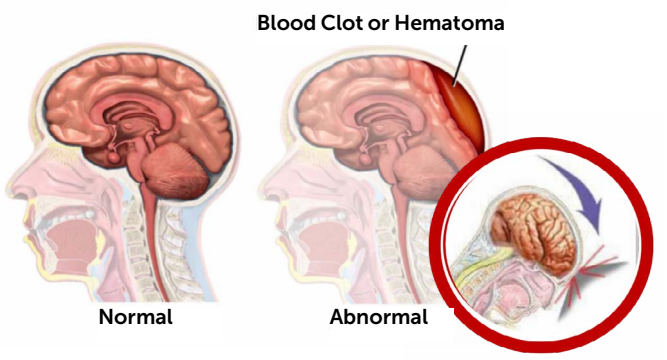
1) American Heart Association Report: Heart Disease and Stroke Statistics—2017 Update.
2) Anticoagulation Society Europe Report, Univ.-Prof. Dr. Johann Willeit, Universitätsklinik für Neurologie, Medizinische Universität Innsbruck, 2015.
3) European Heart Network Report: European Cardiovascular Disease Statistics 2017 edition.
4) SAFE Report: The Burden of Stroke in Europe.
5) American Heart Association Report: Heart Disease and Stroke Statistics—2017 Update.
6) Marc Fisher MD, Bo Norrving MD, PhD, "American Heart Association, 1st Global Conference on Healthy Lifestyles and Noncommunicable Diseases Control Moscow", 28-29 April, 2011 "The International Agenda for Stroke".
7) SAFE Report: The Burden of Stroke in Europe, 2017.
8) American Heart Association Report: Heart Disease and Stroke Statistics—2017 Update.

The World Health Organization (WHO) predicts that disability-adjusted life years (DALYs)[1] lost to hemorrhagic stroke (a measure of the burden of disease) globally will rise from 5.7 million in 1990 to 9.2 million in 2020.[2]

Chronic Subdural hematoma

Subdural hematoma occurs when a vein or other blood vessels rupture between the skull and the outermost membrane layer that covers the brain, resulting in the collection of blood (a hematoma) on the brain's surface which compresses the brain tissue. There are three types of subdural hematoma: Acute, subacute and chronic. IRRA*flow* is currently being marketed to treat chronic subdural hematomas, which comprise approximately 30 percent of all subdural hematomas in the United States. [3] Chronic subdural hematomas are generally caused by moderate head injuries, particularly in individuals who are elderly or on anticoagulant medication. Symptoms gradually appear within several weeks after the first bleeding. The main risk factors for subdural hematoma are aspirin or other anticoagulant medication, older age, high alcohol intake and previous traumatic brain injury.

Each year there are an estimated 80,000 chronic subdural hematoma cases in the European Union and approximately 80,000 cases in the United States. Of the total amount of chronic subdural hematoma cases in the European Union and the United States, more than 95 percent are surgically operated.[4] This implies that approximately 155,000 cases of chronic subdural hematoma in the European Union and the United States are suitable for treatment with IRRA*flow* annually.



- 30 percent of all subdural hematomas are chronic[2]
- Chronic subdural hematoma starts 2–3 weeks after the initial injury[2]
- Mortality in hospitals of 12 percent[2]
- Healthcare costs of USD 1.6 billion in the US[2]

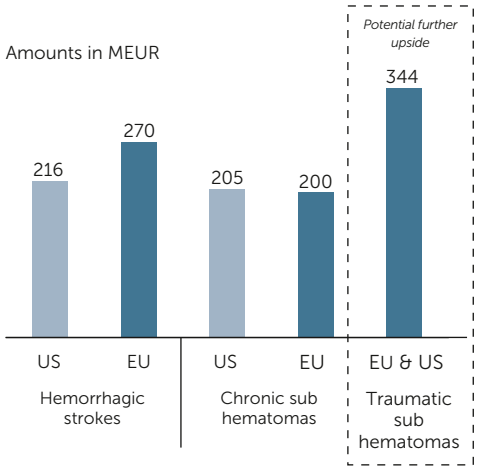
Approximately one-third of all chronic subdural hematoma patients decease and another one-third become permanently disabled.[5] The total estimated direct healthcare cost associated with chronic subdural hematoma in the United Kingdom alone is USD 1.6 billion.[6] Chronic subdural hematoma is projected to become the most common cranial neurosurgical condition by the year 2030 which in turn could mean that chronic subdural hematoma fluid drainage may become the most commonly performed neurosurgical procedure in 2030.[7]

1) A measure of the burden of the disease.
2) WHO report: The Global Burden of Stroke, 2013.
3) Neuroscience Intensive Care Unit, Department of Neurosurgery, Mount Sinai School of Medicine, New York, NY, USA Report: National trend in prevalence, cost, and discharge disposition after subdural hematoma from 1998–2007.
4) Anticoagulation Society Europe Report, Univ.-Prof. Dr. Johann Willeit, Universitätsklinik für Neurologie, Medizinische Universität Innsbruck, 2015.
5) WHO report: The Global Burden of Stroke, 2013.
6) The epidemiology of surgically treated acute subdural and epidural hematomas Can J Surg. 2008 Oct;51(5):339-45. Tallon JM, Ackroyd-Stolarz S, Karim SA, et al.
7) Neuroscience Intensive Care Unit, Department of Neurosurgery, Mount Sinai School of Medicine, New York, NY, USA Report: National trend in prevalence, cost, and discharge disposition after subdural hematoma from 1998–2007.

Market size

The Company estimates that the annual EU and US market opportunity in hemorrhagic stroke and chronic subdural hematoma for the single-use consumable components of IRRA*flow* is approximately EUR 900 million.[1)]

ADRESSABLE MARKETS



An additional market segment in which the Company believes IRRA*flow* can be used, is traumatic subdural hematoma. In the EU and the United States there are approximately 130,000 cases of traumatic subdural hematoma per year which would imply an increase of the total annual market opportunity of EUR 344 million, i.e. more than EUR 1.2 billion per year.[2)]

The Company believes there are substantial addressable markets for IRRA*flow* outside the EU and the United States in countries with well-functioning health insurance backed reimbursement systems.

In addition to the revenue generated from consumables, the Company expects that sales of the control unit, which is the device system that controls irrigation and aspiration, will contribute to its revenues. However such revenues are not expected to be significant compared to the long-term revenues generated by consumables.

SIGNIFICANT UNMET NEED

Increased Intracranial Pressure

The most urgent treatment priority in patients with elevated ICP – even before addressing the underlying brain condition that precipitated the increase in ICP – is to reduce the pressure inside the skull. An increase in ICP can cause deleterious effects on the brain and is the most common cause of death in neurosurgical intracranial pathologies. Left untreated, increased ICP can cause moderate to severe brain injury and death. In developed countries, stroke is the number one cause of disability and the second most common cause of dementia and death.[3)] There are no clinical indicators that can be used at an early stage of rising ICP to forestall a further life-threatening rise. Continuous ICP monitoring is therefore critical to patient outcomes in elevated ICP pathologies. Equally important as the role of ICP monitoring is the availability of treatment options to reduce and regulate ICP. Although significant neurologic impairment can occur in neurosurgical disorders without elevation of pressure (for example, in head injuries), significant elevations of pressure causes brain damage in the vast majority of cases. Primarily due to the aging global population, the amount of neurosurgical conditions that result in ICP is further expected to increase.

Conventional Treatment Options

Historically the standard surgical treatment options for reducing ICP have been drainage catheters (minimally invasive) and craniotomies. A craniotomy is a surgical procedure that entails opening part of the patient's skull to drain the blood to relieve the pressure on the brain. By comparison, drainage catheters are inserted through a small burr hole in the patient's skull which then allows the surgeon to drain pathological fluids. Drainage catheters are employed both standalone (i.e. minimally invasive procedures) and in combination with (or after) craniotomies.

1) Company estimate based on approximate number of surgically operated hemorrhagic stroke cases (190,000) and chronic subdural hematoma cases (155,000) in the European Union and the United States, multiplied by EUR 2,600, which is the average selling price of the single-use consumable components (IRRA*flow* cassette and catheter) of the IRRA*flow* system.
2) Anticoagulation Society Europe Report, Univ.-Prof. Dr. Johann Willeit, Universitätsklinik für Neurologie, Medizinische Universität Innsbruck,2015.
3) Marc Fisher MD, Bo Norrving MD, PhD, "American Heart Association, 1st Global Conference on Healthy Lifestyles and Noncommunicable Diseases Control Moscow", 28–29 April, 2011 "The International Agenda for Stroke".

Conventional external ventricle drainage (EVD) systems utilize mechanical gravity driven drainage. They consist of an intracranial catheter, which evacuates blood and pathological fluid collections to an aspiration bag attached to a bedside pole. The aspiration rate is controlled by changing the height of the aspiration bag relative to the tip of the catheter inside the patient's skull.

The EVD systems on the market today suffer from a significant risk of catheter blockage, associated infection risk and unreliable ICP monitoring. Traditional drainage catheter systems are highly susceptible to blockage caused by coagulated blood residue and build-up of other particles, which is estimated to occur in up to 30 percent of blood drainage procedures using conventional catheter systems, and typically within a few hours after initial catheter insertion.[1)] Catheter blockage exposes the patient to danger and results in premature termination of the treatment and potentially leads to another surgery. When a catheter becomes blocked, attempts to unblock it with manual flushing increase the risk of infection to the patient (estimated to occur in more than 15 percent of the cases).[2)] If flushing does not unblock the catheter a new surgical operation for placement of a new catheter system must take place immediately. Catheter blockage, and the resulting infection risk and interruption of intracranial fluid drainage, therefore greatly increase the risk of surgical complications to the patient that can result in brain damage, death, and increased costs to hospitals and healthcare providers. Furthermore, the intracranial pressure can not be thouroughly supervised by use of the conventional EVD systems.

1) University of Lübeck, Prof. Dr Volker Tronier, Head of Neurosurgery department.
2) D Hoefnagel et al. Acta Neurochir (Wien) 150 (3), 209–214. 19 Feb 2008.

COMPANY SOLUTION

IRRAS is focused on providing innovative solutions, based on its core IRRA*flow* technology, for various brain pathologies with the goal of dramatically improving patient outcomes, reducing patient-time in the intensive care unit, and providing health economic benefits to hospitals and healthcare providers. IRRA*flow* is CE-marked for ICP monitoring and CSF drainage. The system includes: (1) a novel fluid exchange system consisting of an infusing pump and aspirating mechanism programmed to operate through a double lumen catheter, in order to deliver and evacuate fluids to and from an organ or cavity, synchronized to operate in a way which keeps local pressure inside a predetermined range, (2) an ICP monitoring and measurement system using a method that employs a liquid column for accuracy and reliability, further improved by the patented way to keep the catheter free of blockage, (3) safety alarms for ICP outside the limits chosen by the doctor to enable real-time monitoring of ICP and (4) a programmable periodical bolus infusion designed to prevent blockage of the catheter and resulting surgical complications. The control unit is expected to have a total lifespan of three to five years taking into account the normal wear and tear.

The Company believes the IRRA*flow* system addresses a significant unmet medical need for treatment of hemorrhagic stroke and chronic subdural hematoma by providing a minimally invasive solution that successfully overcomes the challenges and limitations associated with conventional catheter drainage systems. The key benefits of IRRA*flow* include:

- **Integrated dynamic fluid management and accurate, real-time ICP monitoring.** The proprietary fluid exchange method employed by IRRA*flow* enables both fluid aspiration and infusion within a closed circuit. ICP is continuously monitored and regulated by synchronized infusion and aspiration. The cyclical function of the system promotes monitoring accuracy and prevents interruption of drainage, thus enabling precise, intracranial fluid management and optimized ICP control.

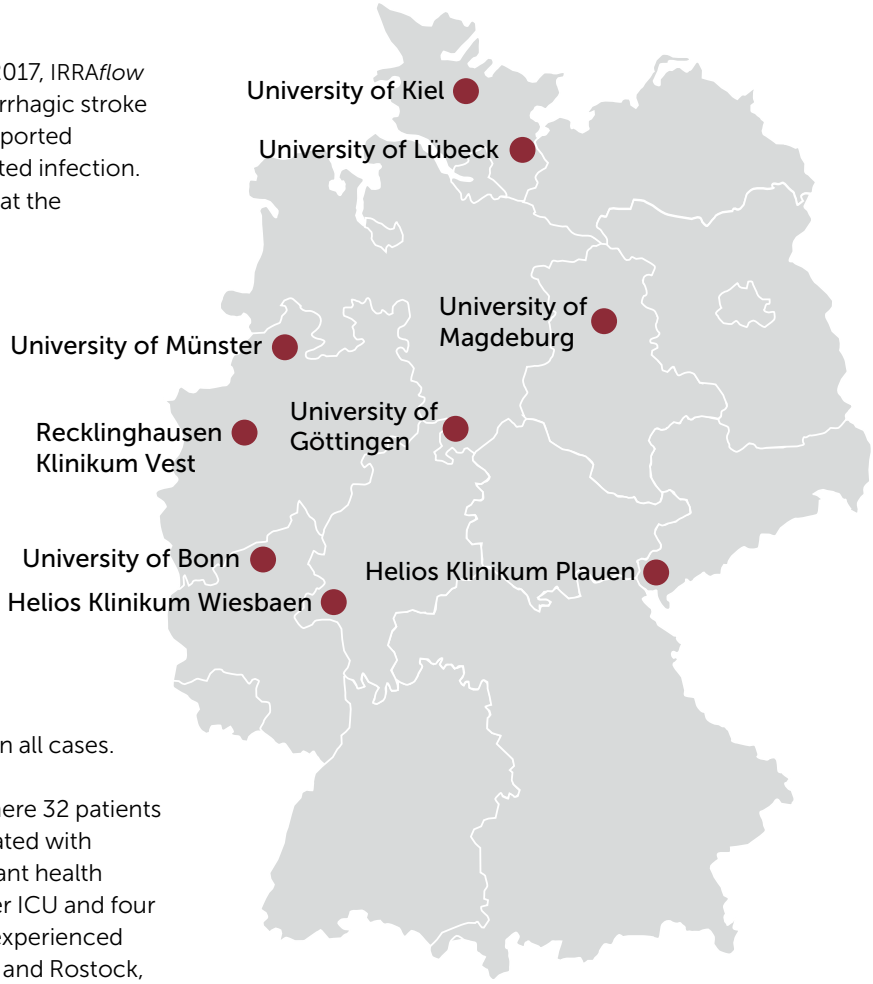
- **Minimized risk of catheter blockage.** The IRRA*flow* catheter contains a propriety occlusion, or blockage, solution. Occlusion, or blockage, in conventional drainage catheters is estimated to occur in 30 percent of cases. In conventional drainage catheters, blockages are removed by opening the drainage line and the infusion fluid towards the CNS. There is a high risk of infection associated with this maneuver. If not successful, as is often the case, a new operation for the insertion of a new catheter must be performed. The IRRA*flow* system addresses this complication through the periodic infusion of fluid into the IRRA*flow* catheter, which keeps the holes of the catheter tip unobstructed. The minimized risk of catheter blockage also ensures accurate ICP monitoring and intracranial fluid management. An additional advantage is that the treatment is not interrupted.
- **Minimized risk of infection.** The IRRA*flow* system actively prevents blockage and the need for catheter removal and reinsertion which carry a high risk of infection. Infection occurs in more than 15 percent of neurosurgical procedures that employ traditional external drainage systems.[1)] As of the date of this Offering Circular, no associated infection has been recorded in the more than 100 patients treated with IRRA*flow*.

1) D Hoefnagel et al. Acta Neurochir (Wien) 150 (3), 209–214. 2008 Feb 19.

IRRAflow in Clinical Practice

Following its commercial launch in May 2017, IRRA*flow* has been used in approximately 70 hemorrhagic stroke and subdural hematoma cases with no reported incidents of catheter blockage or associated infection. Currently, IRRA*flow* is commercially used at the following German hospitals:

- Recklinghausen Klinikum Vest
- University of Münster
- University of Bonn
- University of Göttingen
- University of Kiel
- University of Lübeck
- University of Magdeburg
- Helios Klinikum Plauen
- Helios Klinikum Wiesbaden



Efficacy of treatment was demonstrated in all cases.

Upon analysis of a set of clinical cases where 32 patients from four hospitals in Germany, were treated with IRRA*flow*, IRRA*flow* demonstrated significant health economic benefits with three days shorter ICU and four days shorter ward stay compared to the experienced length stay at Universitätskliniken Lübeck and Rostock, Germany, which typically is five days in the ICU and ten days in the ward for subdural hematoma cases.

During the third quarter of 2017 a catheter manufacturing deficiency was discovered which affected 2–5 percent of a small batch of catheters sold in Germany. This deficiency did not cause any risk to patients or any material disruption of our business. Corrective and preventive actions have been undertaken and improvements to the manufacturing process have been implemented.

Six patient cases are set forth below.

	Case Summary	Results
Patient 1	• Male 80+ years old. • Treated for chronic subdural hematoma of the right hemisphere with minor midline displacement; hemiparesis of the left side. • Treated with IRRAflow during 6.5 hours.	• Complete neurological recovery • Complete clearance of haematoma • No infection • No clotting of the catheter • Ongoing efficient drainage
Patient 2	• Male 60+ years old. • Intraparenchymal abscess communicating with subcutaneous abscess of the left brain hemisphere already operated twice for craniotomy infection. • Patient in coma with high fever. • Treated with IRRAflow during approximately 24 hours.	• Significantly diminished volumes of both intraparenchymal and subcutaneous abscesses • Patient temperature normalized • No infection • No clotting of the catheter • Ongoing efficient drainage
Patient 3	• Teenage male in coma. • Intraparenchymal and intraventricular haemorrhage, hypertensive aetiology (hemorrhagic stroke). • Treated with IRRAflow during approximately 24 hours.	• Ventricles free of blood, patient has been delivered to regular ward and rehab. • No infection. • No clotting of the catheter.
Patient 4	• Male 60+ years old. • Stem ganglia bleeding, expanded into the ventricular system (hemorrhagic stroke). • Treated with IRRAflow during approximately 18 hours.	• Less haematoma in the ventricle. • Ongoing sufficient drainage. • No clotting of the catheter. • Infection but not related to IRRA*flow* treatment.
Patient 5	• Male 80+ years old. • Intraventricular haemorrhage. • Treated with IRRAflow during approximately 24 hours.	• Less hematoma in the ventricle. • Ongoing sufficient drainage. • No clotting of the catheter. • Infection but not related to IRRA*flow* treatment.
Patient 6	• Female 60+ years old. • Abscess, left occipital, dental origin; streptococcus intermedius, Ceftriaxone 4g 1-0-0 iv. • Treated with IRRAflow during three days and spent five days in the ICU.	• No sepsis. • No superinfection.

COMPETITIVE ADVANTAGES

The Company believes the following factors are competitive advantages to the Company:

- **Product/treatment advantages of IRRA*flow*.** The Company believes its IRRA*flow* system offers significant treatment advantages over conventional ICP monitoring and drainage systems that will enable IRRA*flow* to become the market leading medical device for ICP monitoring and intracranial fluid management in intracranial bleeding conditions. IRRA*flow* offers a significantly improved solution for ICP monitoring and intracranial fluid management over conventional EVD systems for intracranial bleedings, with more safety, reliability and efficacy, through the integration of aspiration, targeted infusion and intracranial pressure monitoring in a single robust device. Moreover, as described in more detail above under the heading "*Company Solution*", IRRA*flow*'s proprietary product features enable intelligent intracranial fluid management as well as accurate, real-time monitoring of ICP, with minimized risk of catheter blockage and associated infection risk. Since the Company's commercial launch of IRRA*flow* in May 2017 IRRA*flow* has been used in approximately 70 hemorrhagic stroke/ subdural hematoma cases in Germany and Austria with no reported incidents of catheter blockage or associated infection.
- **Health economic benefits.** IRRA*flow* has demonstrated health economic benefits that the Company believes will bolster adoption and commercial sales. Since its commercial launch in May 2017, IRRA*flow* has been used in patient treatments with positive clinical outcomes which has resulted in shorter treatment timelines than conventional drainage devices, resulting in estimated saved costs of between EUR 4,300 and EUR 7,700 per patient.[1)] Open surgery and inadequate monitoring of the ICP in many cases leads to increased complications for the patient, many of whom are elderly and at increased risk of negative outcomes, resulting in a severe decrease in quality of life and further costs to society as a result of loss of productivity and the additional care required after hospital discharge.
- **Beneficial reimbursement for medical costs.** The possibility for a hospital to receive adequate reimbursement from authorities and insurance companies is an important factor when a hospital chooses treatment option and product. As of November 8, 2017 IRRAflow has a so-called DRG code in a total of 14 EU countries. This means that the auhorities in each country have approved the product and provide a fixed monetary reimbursement for medical costs for each treatment completed with IRRA*flow*.
- **Valuable commercial relationships.** The Company has established commercial arrangements with 12 hospitals in Germany that perform neurosurgical procedures. Further, the Company has entered into a distribution agreement with Helios Group (Helios Kliniken gmbH), the largest private hospital chain in Germany with 27 neurosurgery clinics. Further, the Company has established an arrangement for IRRA*flow* with emergency response centers in Germany, which the Company believes will facilitate emergency delivery of an IRRA*flow* system to most, if not all, hospitals in Germany on approximately a two-hour basis. In addition, the Company has established contractual distribution agreements for the sale of IRRA*flow* in 42 countries, including countries where regulatory approval is pending, such as China. The Company believes that it will enable commercialization also in these countries following regulatory approval.
- **Multiple expansion opportunities for the IRRA*flow* core technology.** The Company believes its IRRA*flow* platform has multiple additional application opportunities. The Company's initial growth strategy is to pursue additional indications for IRRA*flow* within neurosurgery, including a smaller version of the catheter. In addition, the Company intend to use IRRA*flow* for fluid management in treatment of of body conditions (e.g. abdominal abscesses). Further, the Company believes it can utilize the IRRA*flow* technology to develop a novel drug delivery system to the brain. Furthermore, the Company believes IRRA*flow* will be able to locally deliver therapeutics to other parts of the body that have been difficult to treat.

1) Based on 32 procedures performed with IRRA*flow* for the treatment of subdural hematoma following commercial launch in May 2017. The low end of the average savings range, EUR 4,300, is compared with patients treated with a conventional EVD where a catheter exchange was unnecessary; the high end of the average savings range, EUR 7,700, is compared with patients treated with a conventional EVD where a catheter exchange was necessary due to blockage. Length of stay is based on data from Universitätskliniken Lübeck and Rostock, Germany. Treatment costs are based on data from DIMDI.

- **Experienced management team.** IRRAS has an experienced management team with a substantial collective experience developing innovative medical devices and therapeutics, including significant operational, commercial, marketing and financial experience with medical device and emerging biotechnology companies. In addition, the Company's advisors provide significant guidance to its management team in various aspects of the Company's business. The Company's executive officers are:

  - **Kleanthis G. Xanthopoulos**, Ph.D., the Company's President and CEO, is a serial entrepreneur who has been involved in founding and growing several companies in the United States and in the EU. Dr. Xanthopoulos has founded four companies, introduced two life science companies to NASDAQ - Anadys Pharmaceuticals, Inc. (acquired by F. Hoffmann-La Roche Inc. in 2011), which he started as President and Chief Executive Officer, and Regulus Therapeutics Inc. (*NASDAQ: RGLS*) - and has financed and brokered numerous creative strategic alliance and partnership deals with large pharmaceutical partners. In addition to leading IRRAS, Dr. Xanthopoulos is a managing general partner at Cerus Advisors, chairman of the board of directors of Apricus Biosciences (*NASDAQ: APRI*), a director of Zosano Pharma, Inc., (*NASDAQ: ZSAN*) and is the co-founder and a member of the board of directors of privately held Sente Inc. and Aspius Inc.

  - **Fredrik Alpsten**, Deputy CEO and CFO. Previous positions include SVP CFO at Boule Diagnostics, President and CEO at Clinical Diagnostic Solutions Inc. and President and CEO at Doxa. Holds a M.Sc. in Finance at the Stockholm School of Economics.

  - **Sabina Berlin**, Vice President Finance. Previous positions include CEO at Juno Ekonomi and Senior Business Controller at Projectplace International AB. Holds a M.Sc. in Business Administration and Management Accounting from the University of Gothenburg.

  - **Christos Panotopoulos**, M.D., Ph.D., the Company's founder and Chief Scientific Officer, is a neurosurgeon and inventor of several innovative medical devices with extensive clinical and research experience in Greece, France, Sweden and India. Together with his medical team, Dr. Panotopoulos has dedicated the last seventeen years of his career to developing the IRRA*flow* fluid exchange technology to achieve optimized patient outcomes with an effective, simple solution. Dr. Panotopoulos is a senior consultant Neurosurgeon in Mediterraneo Hospital in Athens, Greece, as well as in Sparsh Hospital and BRAINS Advanced Institute of Neurosciences, Bangalore, India.

  - **Karl-Matthias Moehlmann**, M.Sc., M.B.A., M.PH., the Company's Senior Vice President Commercial Operations, General Manager Europe, is an expert in advancing medical devices through commercialization in the neurological, trauma, and orthopedic categories and has managed commercial operations, marketing and Research and development for many leading public and private companies including aap Bioimplants, Benvenue Medical, CRA DePuy Spine, X-Spine, Miedke Hydrocephalus Solutions and Mimedx Biologics. Most notably, Mr. Moehlmann was Director of Marketing at Kyphon B.v.B.a (acquired by Medtronic) and was VP of Business Development at Bonesupport AB.

  - **C. Lance Boling**, B.A., the Company's Vice President of Product Marketing, is a proven leader in the areas of medical device development, manufacturing, operations and strategic management. Mr. Boling was formerly Director of Nano Technology Development at Abbott Laboratories and has driven numerous development efforts from inception through commercialization, including holding key leadership positions in start-up ventures such as Nanostim, Nevro Corporation, NeuroPace Inc., and Autonomic Technology. Mr. Boling holds over 40 pioneering patents and patent applications for medical device technology.

IRRAS's executive team is also supported by its medical advisory board members, who are recognized leaders in the medical device, neuroscience, neurosurgery fields:

- **Prof. Urban Ungerstedt,** M.D.
  - Previous board member of Karolinska Innovations AB
  - Member of the Nobel Price Assembly at Karolinska Institutet for 18 years and chairman 2004
  - Professor emeritus at Karolinska Institute
  - Published more than 400 scientific publication
  - Top cited scientist in Neuroscience worldwide
- **N K Venkataramana,** M.D.
  - Director of the Neurosurgical Department and the BRAINS Neuroscience Institute, BRAINS/SPARSH Hospital
  - President of the Indian Society for Pediatric Neurosurgery
  - Editor-in-chief of the Journal of Cerebrovascular Sciences
  - Chairman and/or founder of ten medical organizations and societies
- **Antonis Vakis,** M.D.
  - Professor of Neurosurgery at the University Hospital of Crete
  - Director at the Neurosurgical Department PAGNI Hospital
  - Director of the Editorial Board of the journal "Hellenic Neurosurgery"
  - Member of the Executive Committee of the Hellenic Neurosurgical Society
- **PD. Maximilian Puchner,** M.D.
  - Head of the Neurosurgical department at KlinikumVest, Recklinghausen
  - Previously leading neurosurgeon at Evangelicals hospital Bethel, Bielefeld
  - Postdoctoral lecture qualifications as a PD

VISION AND STRATEGY

The Company's goal is for IRRA*flow* to become the standard of care for the surveillance and treatment of ICP resulting from intracranial bleeding conditions, such as hemorrhagic stroke and chronic subdural hematoma, and to leverage its IRRA*flow* core technology for additional applications, indications and treatment modalities. The key components of the Company's business strategy are:

Expand sales in key markets.

- **European Union.** The Company plans to drive sales through direct sales in Germany and through distributors in the rest of EU countries. The Company's main focus is to implement IRRA*flow* as the standard of care, show health economic benefits in order to show key selling point versus potential competition and increase awareness via multiple activities as well as extend indications. IRRAS plans to, either directly or through parters, further expand its network to strengthen relationships with key opinion leaders to drive awareness, demonstrate clinical and health economic benefits, work together with leading scientists at major European hospitals to demonstrate the value of IRRA*flow* and to increase the interest in IRRA*flow*.

- **United States.** The commercial infrastructure will be established for the planned US launch following a potential FDA approval in the first quarter of 2018. The Company's initial commercial efforts in the United States will be directed to approximately 150 neurosurgical centers covering more than 80 percent of the markets that IRRAS is currently addressing. IRRAS estimates that it will be able to cover the majority of the US market with a sales force of not more than 50 sales representatives.

- **Other territories.** The Company has established distribution agreements for key markets outside of the European Union and United States, including China, India and Japan as well as a number of countries in Central and South America. By partnering with local distributors, the Company believes it can gain quicker access to additional markets.

Pursue novel applications of platform technology to expand commercial opportunity.

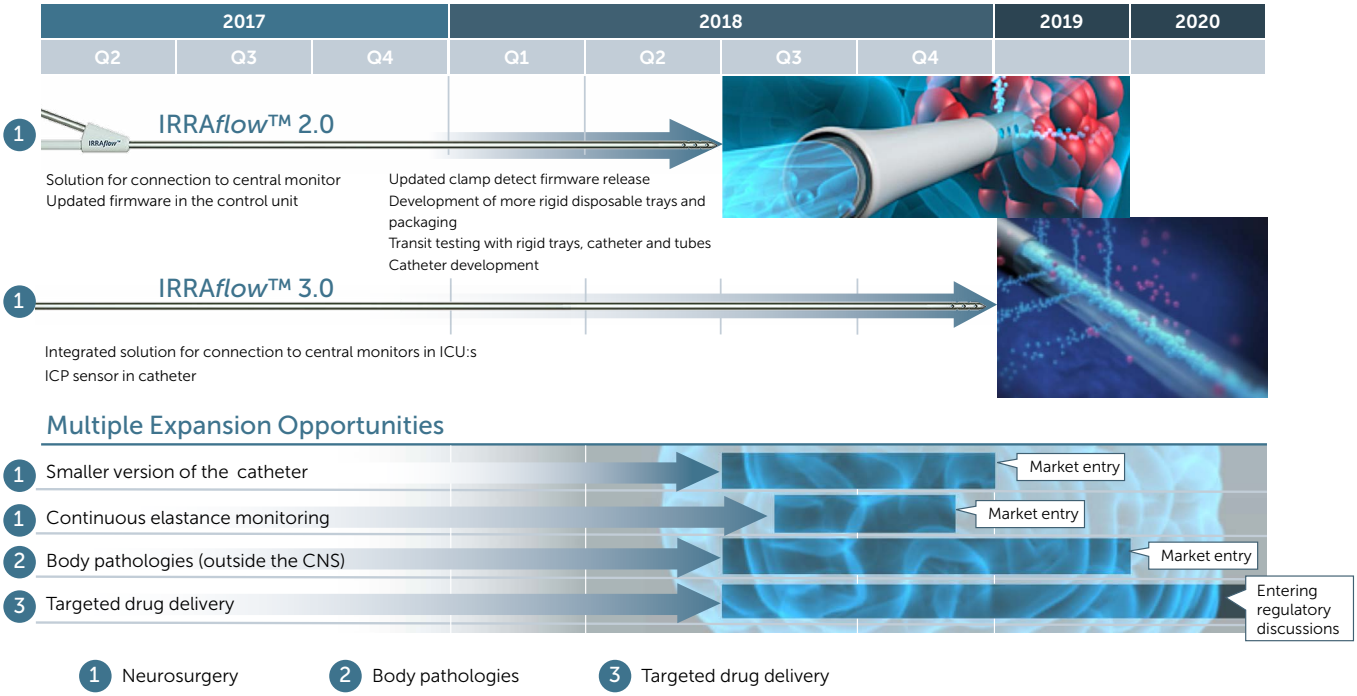
- The Company is developing an add-on feature to the IRRA*flow* system to allow for continuous brain elastance monitoring, which it expects to make available during the second half of 2018. The add-on feature is expected to alert doctors of an anticipated ICP rise before it causes damage. The Company's assessment is that the present regulatory approvals encompasses the brain elastance monitoring.

- The Company plans to build on its commercial launch in hemorrhagic stroke and chronic subdural hematoma by developing a smaller version of the cathter for IRRA*flow* which is expected to be available during the second half of 2018. The Company's assessment is that the present regulatory approvals encompasses the smaller catheter.

- The first indication outside the CNS which IRRA*flow* is intended to address is the need for efficient evacuation of intraperitoneal abscesses – a septic disease with high mortality and which entails prolonged hospital stays for patients. The product expansion to pathologies in other parts of the body than the CNS is expected to take place in the second half of 2019.

- The Company believes it can utilize its core IRRA*flow* technology to develop a novel drug delivery system that would address the historically poor administration of all therapeutics to the brain. Furthermore, the Company believes IRRA*flow* will be able to locally deliver therapeutics to other parts of the body that have been difficult to treat. As per the Company's assessment, no system on the market can deliver more than a few milliliters per day due to the local and general toxicity they create and this is the reason direct drug delivery is not therapeutically efficient for deep seated pathologies either in CNS or the rest of the body. The drug delivery research and development program is expected to start in the second half of 2018.

IRRAS HAS A BROAD PRODUCT PIPELINE



RESEARCH AND DEVELOPMENT AND PRODUCT PIPELINE

The Company believes there are number of functionalities and areas where the current IRRA*flow* system, with certain corrections, can be expanded. These are: a smaller version of the catheter, an add-on feature to the IRRA*flow* for continuous monitoring of brain elastance, a version of IRRA*flow* for body pathologies in other parts of the body than the CNS and a novel drug delivery system.

Continuous brain elastance monitoring

The cranium is a rigid structure. The major intracranial contents are the brain, blood, and CSF. Because the intracranial volume is constant, when an intracranial mass is introduced, compensation must occur through a reciprocal decrease in the volume of blood and CSF. The only exception to this main rule is found in small children.

ICP is the most significant factor determining morbidity and mortality in patients with neurological disorders and there are neither clinical nor monitoring indicators which can predict an ICP rise.

Elastance is the change in pressure observed for a given change in volume and it represents the accommodative potential of the intracranial space, i.e. the ability of the brain to absorb an increase in volume. To date there are no devices for continuous monitoring of brain elastance on the market. Elastance is currently measured by injecting 1 ml of sterile saline through a ventricular catheter in one second and observing the change in pressure, however the high risk of infection associated with this maneuver precludes its performance.

The Company is currently developing an add-on brain elastance monitoring feature to the IRRA*flow* system which it expects to make available in the second half of 2018.

Smaller version

A smaller version of the catheter is currently under development. The smaller version is expected to be available in the second half of 2018.

Body pathologies (outside the CNS)

The Company will develop additional product opportunities of the IRRA*flow* outside the CNS. The Company will initially will address the need for efficient evacuation of intraperitoneal abscesses, a septic disease with high mortality and very prolonged hospital stay for the patients. The evacuation of intraperitoneal abscesses is currently supported manually several times per day due to continuous blockages in the drainage catheter. The Company believes that IRRA*flow* could continuously and automatically evacuate septic fluids efficiently with no blockage. The use of the IRRA*flow* system for body pathologies is expected to improve clinical outcome and reduce hospital stay for these high risk patients (mortality over 50 percent, lengthy intensive care unit stays; sepsis is the first cause of mortality in non cardiological intensive care units worldwide).[1)] IRRA*flow* has already proven its fast and efficient abscess evacuation potential in CNS which is the most clinically demanding setting. The IRRA*flow* systems for body pathologies will demand configurations to the software that is controlling the system and development of a new catheter. IRRAS also believes that its present EU regulatory approval will apply to pathologies outside the CNS. The expansion to body pathologies outside the CNS is expected to take place in the second half of 2019.

IRRA*flow* system for drug delivery

IRRA*flow* is by its design the sole existing device which can deliver therapeutic volumes of drug solutions directly into the CNS. Current systems are not able to achieve therapeutic drug concentration for sufficient time inside a deep seated CNS. The drug delivery development efforts are expected to be initiated in the second half of 2018.

1) Angus DC, Linde-ZwirbleWT, LidickerJ, Clermont G, CarcilloJ, Pinsky MR. Epidemiology of severe sepsis in the United States: analysis of incidence, outcome, and associated costs of care. CritCare Med. 2001;29:1303–10.

LONG RANGE PLAN

DISTRIBUTION, SALES AND MARKETING

The Company will drive marketing through its own organization in Germany and through distributors in the rest of the EU countries. In Germany, the Company's main focus is to implement IRRA*flow* as the standard of care, show health economic benefits in order to show key selling point versus potential competition and increase awareness via multiple market activities as well as expand the range of product for additional applications and indications. By the end of 2017, there are three active sales representatives in Germany. In addition, in Germany, another two specialized co-workers will be added in the second quarter of 2018. Out of 166 neurosurgery centers in Germany 125 hospitals have been contacted and expressed interest in using IRRA*flow*. Specifically, nine purchase orders have been signed covering 24 hospitals, 63 letters of intent have also been signed covering an additional 95 hospitals and two valuable contracts with the largest private hospitals are already in place: The Company has signed a distribution agreement with the Helios Group. Helios Group is the largest private hospital chain in Germany with 27 hospitals conducting neurosurgery. The Company has also signed an agreement with the Asklepios Group (Asklepios Kliniken Verwaltungsgesellschaft mbH). Asklepios Group is one of the largest private hospital chains in Germany. IRRAS has also established an agreement for its IRRA*flow* system with emergency response centers in Germany. This arrangement facilitates emergency delivery to any hospital in need of IRRA*flow* on approximately a two-hour basis in collaboration with the ASB Samaritan Ambulance organization. The Company believes this will facilitate awareness and increase penetration rates.

In the rest of the EU, IRRAS will further establish its network of qualified distributors to expand relationships with key opinion leaders to drive awareness, demonstrate clinical and health economic benefits, work together with leading scientists at major European hospitals to prove the value of IRRA*flow* and to increase the interest in IRRA*flow*.

The Company plans to build-up its commercialization infrastructure for a planned launch of IRRA*flow* in the United States ahead of potential FDA approval in the first quarter of 2018. The Company's initial commercial efforts in the United States will be directed to approxi-

mately 150 neurosurgical center covering more than 80 percent of the markets that IRRAS is currently addressing. IRRAS estimates that it will be able to cover the majority of the US markets with an in-house sales force of not more than 50 sales representatives.

The Company has established distribution agreements for key markets outside of the EU and United States, including China, India and Japan as well as a number of countries in Central and South America. The distribution agreements also include countries where regulatory approval have been initiated (see table "*Overview of regulatory status for IRRAflow*" below). In other countries where agreements have been signed with distributors but where the process for regulatory approval has not yet been initiated, each distributor is responsible for the approval process. By partnering with local distributors, the Company believes it can maintain an efficient sales organization while providing the Company with access to key markets.

SUPPLY AND MANUFACTURING

Production of the entire IRRA*flow* system takes place in California, USA. The components are manufactured by three different subcontractors. The catheter is produced by Advanced Catheter Solutions, which sends the finished product to Second Source Medical, the company that produces the cassettes. The consumable part of the IRRA*flow* system (cassette and catheter) is then packaged and shipped by Second Source Medical in Germany. In the other EU countries the consumables package is sent to the distributors. Each of Advanced Catheter Solutions and Second Source Medical has a capacity to produce between 5,000–10,000 units yearly.

The control unit, hardware and software, is entirely produced by Gener8, which is responsible for the delivery to Medddbase, a logistics partner, in Germany and the distributors in the other EU countries. Gener8 has a capacity to produce more than 500 units yearly.

The Company assesses that the production capacity for the IRRAflow components will be sufficient for the Company's expected requirements.

Overview regulatory status IRRA*flow*	
EU/EEA	Renewed CE-mark was granted in 2017 and is valid until 2019.
United states	510(k) application was submitted in June 2017. Initial feedback from the FDA was during the fall 2017. Final decision from the FDA is expected during the first quarter of 2018.
China	Process for regulatory approval has been initiated.
India	Process for regulatory approval has been initiated.
Israel	Process for regulatory approval has been initiated.
Japan	Process for regulatory approval has been initiated.
Turkey	Process for regulatory approval has been initiated.
ROW	Process for regulatory approval has not yet been initiated.

Manufacturing Production of the entire IRRA*flow*™ system takes place in California, US			
Component	Control unit	Catheter	Cassette
Manufacturer	Gener8	Advanced Catheter Solutions	Second Source Medical
Comments	Produces the entire unit, including hardware and software	Produces the catheter and sends the finished product to Secound Source Medical	Produces the cassette and then package and ships the diposables (catheter and cassette)
Current capacity	500+ units yearly	5–10K units yearly	5–10K units yearly

COMPETITION

There are a number of conventional EVDs[1] on the IRRA*flow* markets. However, IRRA*flow* differentiates itself from all competing products since IRRA*flow*, as per the Company's assessment, is the only system that offers aspiration, targeted infusion and intracranial pressure monitoring in a single device. The table below shows a representative set of companies in the market with EVDs.

Manufacturer/ Device	Codman/ ICP Express	Raumedic/ Datalogger	Spiegelberg/ ICP Monitor	Integra/ ICP Monitor	Apollo/ Penumbra	Moeller Medical/ LiquoGuard 7
Drainage	–	+	–	+	+	+
ICP Measurement	+	+	+	+	–	+
Irrigation	–	–	–	–	+	–
Other Options	–	Temperature/ Oxygen Partial Pressure/	–	Temperature/ Touchscreen	Fluid and tissue removal	Touchscreen / compatible to Spiegelberg and Raumedic probes
Notes	ICP measure-ment only/ electronically by gauge at tip of catheter	Pressure Sensor on Tip of the Catheter	Silver coated probes available	Five days data recording/ Pressure Sensor on Tip of the Catheter	OR use only Stiff instrument/ Ventricular use only	Connection to monitor systems possible

Reimbursement for medical costs

Medical devices used by healthcare providers are in most cases financed by insurance companies or government payers through national and regional reimbursement systems. There are various types of reimbursement systems used in the different countries where IRRA*flow* is marketed. IRRA*flow* is reimbursed via the diagnosis-related groups (DRG) system[2]) in the European Union, and will be reimbursed using the DRG system in the United States if FDA clearance is received. The DRG system is increasingly used as the basis for paying for inpatient care. A DRG-system classifies inpatient medical activity into groups based on diagnosis type for classification and payment of the activity. Individual patient's treatments are via DRGs categorized into a number of clinically meaningful and economically homogeneous categories. Under a DRG-based reimbursement system, a hospital is reimbursed a fixed amount for a specific activity within the scope of that DRG group based on resource use, including costs of use of medical devices, such as IRRA*flow*, and duration of stay.

United States

In the United States, providers are paid directly by patients and by a range of public and private third party payers, principally federal Medicare (funded through the Hospital Insurance Trust Fund and the Supplementary Medical Insurance Trust Fund), state Medicaid (a social health care program for families and individuals with limited resources) and private health insurance plans.

However, there is no uniform policy for coverage and reimbursement among third-party payers. As a result, the coverage determination process is often a time-consuming and costly process that will require the Company to provide scientific and clinical support for the use of IRRA*flow* to each payer separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

In addition, alternative third-party payer payment models that are meant to reduce the cost of care by influencing provider utilization patterns, like newly

1) Conventional EVD is an external ventricle drainage system that utilizes mechanical gravity driven drainage. The systems normally consist of an intracranial catheter, which evacuates blood and pathological fluid collections to an aspiration bag attached to a bedside pole. The aspiration rate is controlled by changing the height of the aspiration bag relative to the tip of the catheter inside the patient's skull.
2) The DRG system is a classification of the reimbursement the hospital receives after a completed treatment.

created Accountable Care Organizations, are being adopted in the United States. Accountable Care Organizations are groups of healthcare organizations that come together voluntarily to give coordinated high quality care to patients. The goal of coordinated care is to ensure that patients get the right care at the right time, while avoiding unnecessary duplication of services and preventing medical errors. The Company expects to experience pricing pressures in connection with the sale and reimbursement for use of IRRA*flow* due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, additional legislative changes and downward pressure on healthcare costs in general. Additionally, the control units will fall outside the scope of reimbursement in the United States, and hospitals may be reluctant to make a capital investment in the control unit in order to use IRRA*flow*.

European Union

The IRRA*flow* consumables fit in recurring DRG-codes in 14 EU countries as a result of good clinical data. Every EU country has set reimbursement levels for pathologic procedures. The consumables (cassette and catheter) fall under the single usage material costs of a procedure (consumables), which is always a set percentage of the entire procedure. In Germany for example, the reimbursement by the insurance companies for the entire procedure is EUR 36,700 of which EUR 8,000 is allocated to all single usage consumables for a procedure. The cassette and catheter account for half of that budget, i.e. EUR 4,000, see table below. The cost for the cassette and the catheter is explained as being a therapeutic solution in combination with the IRRA*flow* control unit. The control unit fall outside the scope of reimbursement and are capital investment made by the hospital.

Country	Reimbursement level per pathologic procedure (EUR)	Price of disposables (EUR)	Price of control unit (EUR)
Germany	36,700	4,000	25,000
Distributors (average)	29,900	2,400	20,000

INTELLECTUAL PROPERTY

IRRAS's intellectual property portfolio consists primarily of patents, patent applications, registered trademarks and domain names as well as trade secrets and know-how.

Patents

The IRRAS patent filings are focused on the catheter system for clinical use in the hemorrhagic stroke market. Claims target certain features and functions that the Company believes, from a clinical experience, to be therapeutically effective and advantageous compared to existing technologies, processes that IRRAS believes enable better patient outcomes compared to current practices and features that would likely add value in future product generations. Fortunately, IRRAS has had the opportunity to gather substantial experience with product use and test its functions, thereby enabling focus on value-added aspects of the technology in patent filings.

Based on the Company's clinical market experience, patent filings also include descriptions and claims that provide for broader product applicability in future clinical indications of market value. In addition to the current focus on enabling better patient outcomes in intracranial hemorrhage, potential future areas of use include infection, orthopedics, abdomen, drug delivery and cancer. The patented product and processes for administering therapy have potential to show patient benefits in these markets as well.

To date, filings have been managed with the intent of building value in the current company product platform in regions where market value can be readily realized. Regions targeted for patent applications are those in which traditional marketing models apply, appropriate payer or reimbursement systems exist, and attractive regional revenues can be achieved. These regions include North America, most of the European countries, Japan, Australia and India.

IRRA*flow* is currently patented in 20 countries. The current patent portfolio includes protection in key markets in Europe, the US and the rest of the world. IRRAS's patents can be divided into three patent families.

The first patent family covers the Fluid Exchange Catheter System covering the initial invention and its method of use. The filing describes and claims a multi-lumen

catheter system used for concurrent fluid infusion and aspiration as well as a programmable fluid pressure function allowing evacuation of biological fluids and avoiding blockage. This patent family provides coverage for key design features and functions in the actual device, and can therefore be considered the most important patent family in the portfolio. The patent requirement encompasses aspects of the catheter system which enables evacuation of biological fluids from a body cavity in a manner that existing catheters do not achieve, namely, by providing a means of avoiding catheter blockage, without a moving distal component, and evacuating body fluids in a therapeutic manner.

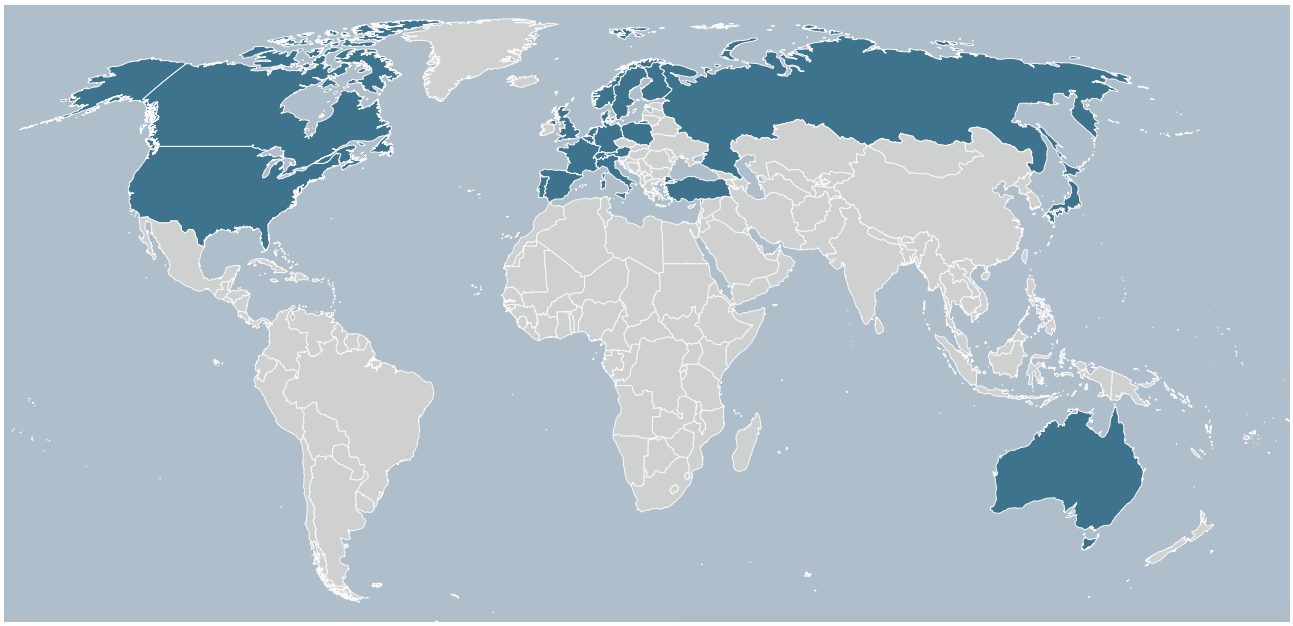
The second patent family covers the Fluid Exchange Catheter System and Process of Unblocking a Fluid Exchange Catheter expanding on claims coverage and key features. This application is added to strengthen device claim coverage by describing and claiming interchangeable use of lumen for infusion and aspiration of substances from a body, configurations and functions of the distal tip to enable the unblocking function of the catheter, expansibility in the distal openings, additional lumen for purposes such as drug delivery, and inclusion of a distal mechanical device to provide the unblocking function. In addition, the addition of sensors and the introduction of endoscopic instruments are described in the filing. A German Utility Model filing has been made from this application in order to cover technical features of IRRA*flow*, as well as provide additional competitive protection for technical features that provide the functional and therapeutic advantages of the product.

An application has been filed for a third patent family to capture additional functional features and key learnings represented in the clinical version 2.0 IRRA*flow* device. This filing describes design features, user interface features, software, and processes providing clinical and market advantages combined in the clinically released product. The filing also describes methods for delivery of improved therapeutic effect and potentially competitive unblocking catheter designs.

PATENT OVERVIEW

Patent Family	Patent	Coverage	Patents granted	Patent pending	Expiration Date
First patent family	Fluid Exchange Catheter System, IRRA*flow* 1.0, filed in 2006 by Christos Panotopoulos and subsequently assigned to IRRAS AB.	Initial invention, its key designs features, its method of use and functions in the device.	2 patents in the US; 15 patents in greater European markets, including Germany and Sweden; 1 in Japan; 1 in Australia; and 1 in Canada.	1 patent application in the US; and 1 in India.	Expires 2025.
Second patent family	Fluid Exchange Catheter System and Process of Unblocking a Fluid Exchange Catheter. Filed by IRRAS AB in 2013.	Additional features and processes enabling the unblocking function and broadening claims for use of the catheter lumen.	17 patents in greater European markets, including Germany and Sweden; 1 in Japan; 1 in Australia; 1 in Canada; and 1 in Russia.	2 patent applications in the US; 1 to the European Patent Office; and 1 in Japan.	Expires 2032.
Third patent family	IRRA*flow* 2.0, filed by IRRAS AB in 2017.	Designs and methods of IRRA*flow* 2.0 and competitive concepts.		2 US provisional applications (due March 2018) which will be converted into an International (PCT) application in March 2018.	Expires 2037.

IRRAS AB GLOBAL ISSUED PATENTS



As per the date of this Offering Circular, there are no known uses of IRRAS's intellectual property rights by third parties, with or without license agreements. There are no pledges or encumbrances of any of IRRAS's intellectual property rights or the intellectual property rights of third parties. There are no known current infringements of the intellectual property rights of IRRAS. Furthermore, the Company has no dependencies or obligations from third-parties, except for "off-the-shelf" software licenses (e.g. Microsoft Office etc.). The IRRA*flow* system includes no licensed software, i.e. all software code is created for and owned by IRRAS. All software included in or used with IRRAS's products is open source, with the exception for drivers for certain components. Moreover, the Company has not issued or transferred rights to third parties for use in the same or other clinical indications or non-clinical applications. IRRAS has performed two freedom to operate analyses. The first one was updated in 2014 and considers delivery, drainage, infusion, lumen and clinical trials documented or patented by other parties. The second analysis was performed in early 2017 with and focused on freedom to operate considerations related to the IRRA*flow* 2.0 version. In both cases, it was concluded that the Company has freedom to operate while also having a domain dominant IP portfolio.

Trademarks
IRRAS has trademark registrations (in the EU and in Sweden) and applications in the US for the word "IRRAS". The Company has also registered the product name "IRRA*flow*" in the European Union and an application is pending in the US.

Trade secrets and know-how
IRRA*flow* is also protected by trade secrets and know-how regarding multiple aspects of the business, product plans, clinical usage, customers and manufacturing etc. Disclosures are managed by non-disclosure agreements and supplier and consultant agreements include both confidentiality clauses and appropriate clauses assigning all invention rights to IRRAS.

REGULATORY
The Company's products, product candidates and operations are subject to extensive regulations concerning development, design, non-clinical and clinical research, manufacturing, safety, efficacy, labeling, packaging, storage, installation, servicing, recordkeeping, market clearance or approval, adverse event reporting, product recall, corrections, and removal from the market, advertising, promotion, marketing and distribution, import and export as well as post marketing surveillance.

IRRAS must obtain authorizations before commencing clinical trials and marketing authorization or approval of its products before the Company can commence commercialize its products in specific countries. The approval process and time varies from country to country.

Europe
Within the European Economic Area (the "**EEA**"), products that are defined in the medical device directive (Directive 93/42/EEC with amendments) as medical devices must be CE marked. The products may be CE-marked if the requirements in the medical device directive are met and an applicable conformity assessment has been made. The conformity assessment procedure varies depending on the classification of the product. The classification is based on rules which consider the user safety of the product, taking into account the potential risks associated with the technical design and manufacture of the device. For Class I devices, the conformity assessment procedure can generally be carried out under the sole responsibility of the manufacturers due to the low level of safety concerns associated with these products. In the procedure for Class IIa devices, the intervention of a notified body is compulsory at the production stage. The notified body is an independent organization whose competence and objectivity is monitored by the authorities in each country. Decisions taken by the notified body are valid for a maximum of five years and may be extended on application for further periods of five years. As part of the conformity assessment process, depending on the type of device, the notified body will review the manufacturer's clinical evaluation process, assess the clinical evaluation data of a representative sample of the device, or assess all the clinical evaluation data. It is sufficient for the manufacturer to obtain a conformity assessment by a notified body on his devices in one EEA country in order to gain access to the entire EEA market. Devices falling within Classes IIb and III constitute a high risk potential and inspection by a notified body is required with regard to the design and manufacture of the devices. Class III contains the most critical devices for which prior authorization with regard to conformity is required for them to be placed on the market.

In the CE marking process, a medical device manufacturer must carry out a clinical evaluation of its medical device to demonstrate conformity with the relevant essential requirements. This clinical evaluation is part of the product's technical file. A clinical evaluation includes an assessment of whether a medical device's performance is in accordance with its intended use, and that the known and foreseeable risks linked to the use of the device under normal conditions are minimized and acceptable when weighed against the benefits of its intended purpose. The clinical evaluation conducted by the manufacturer must also address any clinical claims, adequacy of the device's labelling and information (particularly claims, contraindications, precautions and warnings) and suitability of related instructions for use. This assessment must be based on clinical data, which can be obtained from clinical studies conducted on the device, scientific literature concerning similar devices whose equivalence with the device can be demonstrated, or both clinical studies and scientific literature. With respect to devices classified as Class III in the EEA, the manufacturer must conduct clinical studies to obtain the required clinical data, unless the manufacturer can rely on existing clinical data from similar devices.

A notable aspect is that the European regulatory framework for medical devices is undergoing certain changes. A new EU medical device regulation, directly applicable in all EU member states, was recently published. A transition period of three years will apply. The key changes of the new regulation are product scope expansion, more stringent clinical evidence and increased post market surveillance authority for the notified bodies.

IRRA*flow* catheter is Class III due to the direct contact of the device with the patient's central nervous system. The IRRA*flow* cassette and control unit are Class IIb devices due to the fact that substances are administered and moved to and from the body through the control unit, including the cassette, which is potentially hazardous to the patient. The control unit, including its disposable cassette, is classified as "parent device" and the catheter is classified as "accessory". The CE mark decision is valid until July 2, 2019.

After a medical device has been launched on the market, the manufacturer must fulfil a number of other requirements similar to those presented in the sections "*United States – Post-market regulation*" and "*United States – Healthcare regulation*" below.

United States

Premarketing regulation

In the United States, medical devices are regulated by the FDA. Unless an exemption applies, a new medical device will require either prior 510(k) clearance or approval of a premarket approval application, or PMA, before it can be marketed in the United States. The information that must be submitted to the FDA in order to obtain clearance or approval to market a new medical device varies depending on how the medical device is classified by the FDA. Medical devices are classified into one of three classes on the basis of the controls deemed by the FDA to be necessary to reasonably ensure their safety and effectiveness. Class I devices, which are those that have the lowest level or risk associated with them, are subject to general controls, including labeling, premarket notification and adherence to the quality system regulation, or QSR, which sets forth device-specific good manufacturing practices. Class II devices are subject to general controls and special controls, including performance standards. Class III devices, which have the highest level of risk associated with them, are subject to most of the previously identified requirements as well as to premarket approval. Most Class I devices and some Class II devices are exempt from the 510(k) requirement, although the manufacturers will still be subject to registration, listing, labeling and QSR requirements.

A 510(k) premarket notification must demonstrate that the device in question is substantially equivalent to another legally marketed device, or a so-called predicate device, that did not require premarket approval. In evaluating the 510(k), the FDA will determine whether the device has the same intended use as the predicate device, and (a) has the same technological characteristics as the predicate device, or (b) has different technological characteristics, and (i) the data supporting the substantial equivalence contains information, including appropriate clinical or scientific data, if deemed necessary by the FDA, that demonstrates that the device is as safe and as effective as a legally marketed device, and (ii) does not raise different questions of safety and effectiveness than the predicate device. Most 510(k)s do not require clinical data for clearance, but the FDA may request such data. The FDA's goal is to review and act on each 510(k) within 90 days of submission, but it may take longer based on requests for additional information. In addition, requests for additional data, including clinical data, will increase the time necessary to review the notice. If the FDA does not agree that the new device is substantially equivalent to the predicate device, the new device will be classified in Class III, and the manufacturer must submit a PMA. Since July 2012, however, a so-called de novo pathway is directly available for certain low to moderate risk devices that do not qualify for the 510(k) pathway due to lack of a predicate device. Modifications to a 510(k)-cleared medical device may require the submission of another 510(k) or a PMA if the changes could significantly affect the safety or effectiveness or constitute a major change in the intended use of the device.

The PMA process is more complex, costly and time consuming than the 510(k) clearance procedure. A PMA must be supported by extensive data including, but not limited to, technical, preclinical, clinical, manufacturing, control and labeling information to demonstrate to the FDA's satisfaction the safety and effectiveness of the device for its intended use. After a PMA is submitted, the FDA has 45 days to determine whether it is sufficiently complete to permit a substantive review. If the PMA is complete, the FDA will file the PMA. The FDA is subject to performance goal review times for PMAs and may issue a decision letter as a first action on a PMA within 180 days of filing, but if it has questions, it will likely issue a first major deficiency letter within 150 days of filing. The PMA may also be referred to an FDA advisory committee for additional review in order to execute a preapproval inspection of the manufacturing facility to ensure that the manufacturer are compliance with the QSR, either of which could extend the 180-day response target. While the FDA's ability to meet its performance goals has generally improved during the past few years, it may not meet these goals in the future. A PMA can take several years to complete and there is no assurance that any submitted PMA will ever be approved. Even when approved, the FDA may limit the indication for which the medical device may be marketed or to whom it may be sold. In addition, the FDA may request additional information or request the performance of additional clinical trials before it will reconsider the approval

of the PMA or as a condition of approval, in which case the trials must be completed after the PMA is approved. Changes to the device, including changes to its manufacturing process, may require the approval of a supplemental PMA.

If a medical device is determined to present a "significant risk," the manufacturer may not begin a clinical trial until an investigational device exemption application, or IDE, has been submitted to the FDA and obtained approval of the IDE from the FDA. The IDE must be supported by appropriate data, such as animal and laboratory testing results and include a proposed clinical protocol. These clinical trials are also subject to the review, approval and oversight of an institutional review board, or IRB, at each institution at which the clinical trial will be performed. The clinical trials must be conducted in accordance with applicable regulations, including but not limited to the FDA's IDE regulations and current good clinical practices. A clinical trial may be suspended by the FDA or the sponsor at any time for various reasons, including a belief that the risks to the study participants outweigh the benefits of participation in the trial. Even if a clinical trial is completed, the results may not demonstrate the safety and efficacy of a device, or may be equivocal or otherwise not be sufficient to obtain approval.

Post-market regulation
After a device is placed on the market, numerous regulatory requirements apply. These include:

- compliance with the QSR, which require manufacturers to follow stringent design, testing, control, documentation, record maintenance, including maintenance of complaint and related investigation files, and other quality assurance controls during the manufacturing process;
- labeling regulations, which prohibit the promotion of products for uncleared or unapproved or "off-label" uses and impose other restrictions on labeling; and
- medical device reporting obligations, which require that manufacturers investigate and report to the FDA adverse events, including deaths, or serious injuries that may have been or were caused by a medical device and malfunctions in the device that would likely cause or contribute to a death or serious injury if it were to recur.

Failure to comply with applicable regulatory requirements can result in enforcement action by the FDA, which may include any of the following sanctions: warning letters; fines, injunctions, and civil penalties; recall or seizure of the Company's products; operating restrictions, partial suspension or total shutdown of production; refusal to grant 510(k) clearance or PMA approvals of new products; withdrawal of 510(k) clearance or PMA approvals; and criminal prosecution.

To ensure compliance with regulatory requirements, medical device manufacturers are subject to market surveillance and periodic, pre-scheduled and unannounced inspections by the FDA, and these inspections may include the manufacturing facilities of the Company's subcontractors.

Health care regulation
In addition to FDA restrictions on marketing of pharmaceutical products, other US federal and state healthcare regulatory laws restrict business practices in the medical device industry, which include, but are not limited to: the federal fraud and abuse laws, including the federal anti-kickback and false claims laws; federal data privacy and security laws; and federal transparency laws related to payments and/or other transfers of value made to physicians and other healthcare professionals and teaching hospitals. Many states have differing laws and regulations which may also differ from federal law, thus complicating compliance efforts. For example, states may have anti-kickback and false claims laws that may be broader in scope than analogous federal laws and may apply regardless of payer. In addition, state data privacy laws that protect the security of health information may differ from each other and may not be preempted by federal law. Moreover, several states have enacted legislation requiring device manufacturers to, among other things, establish marketing compliance programs, file periodic reports with the state, and make periodic public disclosures on sales and marketing activities, and prohibiting certain other sales and marketing practices.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exceptions, it is possible that some of the Company's business activities, particularly any sales and marketing activities after marketing clearance for IRRA*flow* in the United States, could be subject to legal challenge and enforcement actions. If the Company's operations are found to be in violation of any of the US federal and state laws described above or any other governmental regulations that apply to the Company, the Company may be subject to significant civil, criminal, and administrative penalties, including, without limitation, damages, fines, imprisonment, exclusion from participation in government healthcare programs, additional reporting obligations and oversight if the Company becomes subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws

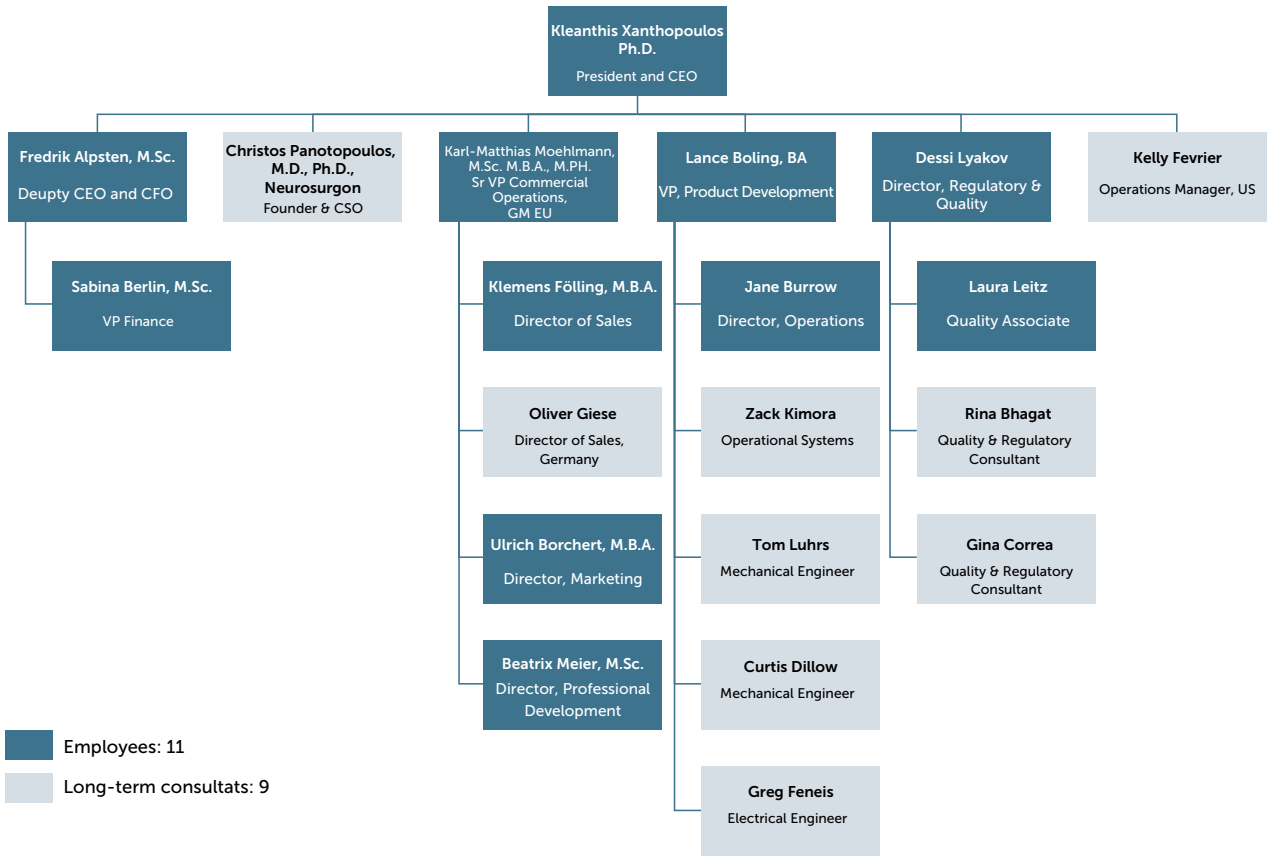
and the curtailment or restructuring of the Company's operations.

Among federal and state policy makers and payers in the United States, there is significant interest in promoting changes in the healthcare system with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the device industry has been significantly affected by major legislative initiatives, including the passage of the Patient Protection and Affordable Care Act (ACA). There have been judicial and US Congressional challenges to ACA and there may be additional challenges and amendments to the ACA in the future, including repeal and replacement of certain provisions of the ACA. It remains to be seen, however, precisely what the new legislation will provide, when it will be enacted and what impact it will have on the availability of healthcare and containing or lowering the cost of healthcare. If IRRA*flow* receives FDA clearance, the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria, and in additional downward pressure on reimbursement for procedures using IRRA*flow* and the price that the Company may receive for the control unit. Moreover, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their commercial products that has resulted in US Congressional inquiries as well as proposed federal and state pricing legislation that may impact the Company's business, financial condition and results of operations.

Corporate information/employees

IRRAS is headquartered in Stockholm, Sweden and also has offices in the La Jolla, California, United States and in Laichingen, Germany. As of the day of the Offering Circular, IRRAS had 11 employees of whom 5 are women and 6 are men. In addition, the Company has utilized several consultants, a number of which are devoting considerable time on IRRAS.

ORGANIZATION CHART



SELECTED HISTORICAL FINANCIAL INFORMATION

The tables in this section contains a summary of IRRAS's historical financial information for each period presented. The financial information should be read in conjunction with the sections "*Operational and financial overview*", "*Capital structure and other financial information*", "*Historical financial information for the period January 1 to September 30, 2017*" and "*Historical financial information for the fiscal years 2016, 2015 and 2014*".

The financial information presented below has been derived from IRRAS's unaudited condensed consolidated interim financial statement for the nine month period ended September 30, 2017, IRRAS's audited consolidated financial statements for the fiscal year that ended December 31, 2016 and IRRAS's (Parent Company's) audited financial statements for the fiscal years ended December 31, 2016, 2015 and 2014. IRRAS's condensed consolidated interim financial statements are presented in accordance with IAS 34 Interim Financial Reporting and the Swedish Annual Accounts Act, and reviewed by IRRAS independent auditor, as set out in their review report included therewith in the section "*Historical financial information*". The consolidated financial statement for the fiscal year 2016 has been prepared in accordance with the International Financial Reporting Standards ("IFRS"), as adopted by the EU and audited by IRRAS's independent auditors, as set out in their auditors' report included therewith in the section "*Historical financial information*". The financial reports for the Parent Company have been prepared in accordance with the Swedish Annual Accounts Act and RFR2 and audited by IRRAS's independent auditors, as set out in their auditing report included in the section "*Historical financial information*". Note that the financial information derived from the Parent Company's audited financial statements for the fiscal years 2016, 2015 and 2014 have been included for the purpose of comparison, as the IRRAS group was formed in 2016 by establishing IRRAS GmbH and IRRAS USA Inc. as two wholly-owned subsidiaries of the Parent Company (together the "Group"). The accounting principles of the Parent Company are consistent in all material respects with the accounting principles of the Group. Figures stated in this section may have been rounded up or down in certain cases, which means that the totals in the tables are not necessarily exact.

STATEMENT OF LOSS

Amounts in TSEK (unless otherwise stated)	Group[1] 2017-01-01 2017-09-30	Group[1] 2016-01-01 2016-09-30	Group[2] 2016-01-01 2016-12-31	Parent[3] 2016-01-01 2016-12-31	Parent[3] 2015-01-01 2015-12-31	Parent[3] 2014-01-01 2014-12-31
Revenue	11,304	–	–	–	–	–
Cost of sales	–3,616	–	–	–	–	–
Gross profit	**7,688**	**–**	**–**	**–**	**–**	**–**
Other operating income	490	201	239	239	465	934
Sales and marketing expenses	–10,653	–5,730	–9,136	–4,270	–2,040	–555
Administrative expenses	–28,955	–12,628	–17,935	–17,394	–5,054	–5,575
Research and development expenses	–6,327	–2,169	–3,335	–2,722	–4,322	–2,865
Other operating expenses	–	–441	–662	–662	–123	–12
Operating loss	**–37,756**	**–20,767**	**–30,828**	**–24,808**	**–11,074**	**–8,073**
Net financial items	104	–774	–1,070	–783	–1,787	21
Loss before tax	**–37,653**	**–21,541**	**–31,898**	**–25,591**	**–12,861**	**–8,052**
Tax	–	–	–	–	–	–
Loss for the period	**–37,653**	**–21,541**	**–31,898**	**–25,591**	**–12,861**	**–8,052**
Earnings per share for the period before and after dilution (SEK)	–2.19	–1.51	–2.12	–1.70	–1.09	–0.68

1) Derived from IRRAS's unaudited condensed consolidated interim financial statement for the nine month period that ended on 30 September 2017. Please see section "*Historical financial information*".
2) Derived from IRRAS's audited consolidated financial statements for the fiscal year that ended on 31 December 2016. Please see section "*Historical financial information*".
3) Derived from IRRAS's audited financial statements for the fiscal years that ended on 31 December 2016, 31 December 2015 and 31 December 2014. Please see section "*Historical financial information*".

STATEMENT OF COMPREHENSIVE LOSS

Amounts in TSEK	Group[1] 2017-01-01 2017-09-30	Group[1] 2016-01-01 2016-09-30	Group[2] 2016-01-01 2016-12-31	Parent[3] 2016-01-01 2016-12-31	Parent[3] 2015-01-01 2015-12-31	Parent[3] 2014-01-01 2014-12-31
Loss for the period	**–37,653**	**–21,541**	**–31,898**	**–25,591**	**–12,861**	**–8,052**
Other comprehensive income for the period:						
Items that may be subsequently reclassified to profit or loss						
Translation differences	–727	–61	392	–	–	–
Other comprehensive loss/income for the period, net of tax	**–727**	**–61**	**392**	**–**	**–**	**–**
Total comprehensive loss for the period	**–38,379**	**–21,602**	**–31,506**	**–25,591**	**–12,861**	**–8,052**

1) Derived from IRRAS's unaudited condensed consolidated interim financial statement for the nine month period that ended on September 30, 2017. Please see section "*Historical financial information*".
2) Derived from IRRAS's audited consolidated financial statements for the fiscal year that ended on December 31, 2016. Please see section "*Historical financial information*".
3) Derived from IRRAS's audited financial statements for the fiscal years that ended on December 31, 2016, December 31, 2015 and December 31, 2014. Please see section "*Historical financial information*".

STATEMENT OF FINANCIAL POSITION

	Group[1]		Group[2]	Parent[3]		
Amounts in TSEK	2017-09-30	2016-09-30	2016-12-31	2016-12-31	2015-12-31	2014-12-31
ASSETS						
Non-current assets						
Capitalized development costs	32,464	16,906	24,033	24,033	9,016	3,667
Patents	2,611	2,927	2,847	2,847	3,164	3,480
Tangible non-current assets	228	17	16	–	–	–
Investments in subsidiaries	–	–	–	11,193	–	–
Receivables from Group Companies	–	–	–	4,082	–	–
Total non-current assets	**35,304**	**19,850**	**26,897**	**42,156**	**12,180**	**7,147**
Current assets						
Inventories	5,057	–	–	–	–	–
Receivables from Group Companies	–	–	–	563	–	–
Other current receivables	9,725	579	489	454	359	627
Prepaid expenses and accrued income	219	67	60	60	–	–
Cash and cash equivalents	28,516	81,669	70,814	60,460	18,408	6,777
Total current assets	**43,516**	**82,316**	**71,363**	**61,537**	**18,767**	**7,404**
TOTAL ASSETS	**78,820**	**102,166**	**98,260**	**103,693**	**30,947**	**14,550**
EQUITY						
Share capital	517	86	86	86	59	59
Fund for research & development	–	–	–	15,017	–	–
Other paid in capital	175,780	176,211	176,211	–	–	–
Capital surplus	–	–	–	142,635	27,164	27,164
Reserves	–335	–61	392	–	–	–
Retained earnings incl. result for the period	–104,515	–74,755	–81,575	–	–	–
Retained earnings	–	–	–	–31,117	–14,233	–6,181
Loss for the period	–	–	–	–25,591	–12,861	–8,052
Total equity	**71,448**	**101,481**	**95,115**	**101 030**	**129**	**12,990**
LIABILITIES						
Current liabilities						
Accounts payable	3,828	261	2,485	2,206	1,161	1,021
Other liabilities	222	199	191	–	–	–
Accrued expenses and prepaid income	3,322	225	469	457	151	539
Convertible bonds	–	–	–	–	29,505	–
Total current liabilities	**7,372**	**685**	**3,145**	**2,663**	**30,817**	**1,561**
TOTAL EQUITY AND LIABILITIES	**78,820**	**102,166**	**98,260**	**103,693**	**30,947**	**14,550**

1) Derived from IRRAS's unaudited condensed consolidated interim financial statement for the nine month period that ended on September 30, 2017. Please see section "*Historical financial information*".
2) Derived from IRRAS's audited consolidated financial statements for the fiscal year that ended on December 31, 2016. Please see section "*Historical financial information*".
3) Derived from IRRAS's audited financial statements for the fiscal years that ended on December 31, 2016, December 31, 2015 and December 31, 2014. Please see section "*Historical financial information*".

STATEMENT OF CASH FLOWS

Amounts in TSEK	Group[1] 2017-01-01 2017-09-30	Group[1] 2016-01-01 2016-09-30	Group[2] 2016-01-01 2016-12-31	Parent[3] 2016-01-01 2016-12-31	Parent[3] 2015-01-01 2015-12-31	Parent[3] 2014-01-01 2014-12-31
Cash flow from operating activities						
Loss for the period	−37,756	−20,767	−30,828	−24,808	−11,074	−8,073
Adjustments for non-cash items						
– Depreciation and amortization	1,874	238	318	316	316	316
– Incentive schemes, recognized in statement of loss	14,712	7,456	10,993	8,438	–	–
Interest received	–	23	1	1	1	21
Interest paid	−1	19	−4	−4	0	0
Increase/decrease in inventory	−5,057	–	–	–	–	–
Increase/decrease in operating receivables	−9,395	−288	−189	−704	268	−368
Increase/decrease in operating payables	4,334	−711	1,517	1,351	−249	614
Cash flow used in operating activities	**−31,289**	**−14,029**	**−18,192**	**−15,409**	**−10,737**	**−7,490**
Cash flow from investing activities						
Investments in subsidiaries	–	–	–	−8,638	–	–
Investments in capitalized development expenses	−10,062	−7,890	−15,017	−15,017	−5,350	−3,667
Investments in tangible assets	−219	−18	−18	–	–	–
Change in financial non-current assets	–	–	–	−4,082	–	–
Cash flow used in investing activities	**−10,282**	**−7,908**	**−15,035**	**−27,737**	**−5,350**	**−3,667**
Cash flow from financing activities						
Proceeds from issue of share capital	–	85,198	85,198	85,198	–	9,193
Proceeds from issue of convertible bonds	–	–	–	–	27,718	–
Cash flow from financing activities	**–**	**85,198**	**85,198**	**85,198**	**27,718**	**9,193**
Cash flow for the period	**−41,570**	**63,261**	**51,971**	**42,052**	**11,631**	**−1,964**
Cash and cash equivalents at the beginning of the period	70,814	18,408	18,408	18,408	6,777	8,741
Exchange rate differences in cash and cash equivalents	−728	–	435	–	–	–
Cash and cash equivalents at the end of the period	**28,516**	**81,669**	**70,814**	**60,460**	**18,408**	**6,777**

1) Derived from IRRAS's unaudited condensed consolidated interim financial statement for the nine month period that ended on September 30, 2017. Please see section "*Historical financial information*".
2) Derived from IRRAS's audited consolidated financial statements for the fiscal year that ended on December 31, 2016. Please see section "*Historical financial information*".
3) Derived from IRRAS's audited financial statements for the fiscal years that ended on December 31, 2016, December 31, 2015 and December 31, 2014. Please see section "*Historical financial information*".

KEY PERFORMANCE MEASURES

	Group		Group	Parent		
	2017-01-01 2017-09-30	2016-01-01 2016-09-30	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Revenue, SEKm	11.3	–	–	–	–	–
Revenue growth, %[1]	–	–	–	–	–	–
Gross margin, %[1]	68.1	–	–	–	–	–
EBITDA, SEKm[1]	–35.9	–20.5	–30.5	–24.5	–10.8	–7.8
EBITDA margin, %	–	–	–	–	–	–
EBIT (operating loss), SEKm	–37.8	–20.8	–30.8	–24.8	–11.1	–8.1
EBIT margin, %[1]	–	–	–	–	–	–
Equity to assets ratio, %[1]	90.6%	99.3%	96.8%	97.4%	0.4%	89.3%
Number of full time employees[1, 2]	17	14	14	2	8	7

1) Alternative key performance measure, not defined in accordance with IFRS.
2) Calculated according to 2 employees and 19 consultants in Jan–Sep 2017, 2 employees and 14 consultants in 2016 and only consultants in Jan–Sep 2016 and full year 2016, 2015, 2014 in the Parent Company.

DEFINITIONS OF ALTERNATIVE PERFORMANCE MEASURES

Alternative key performance measures	Definition	Reason for usage
Revenue growth, %	The difference in revenue between periods in relation to revenue for the same period last year	Management uses this key performance measure to track its sales performance
Gross margin, %	Revenue for the period minus cost of goods sold for the period in relation to revenue for the period	Management uses this key performance measure to track gross profitability. The gross margin represents the portion of each krona of revenue that the company retains to cover other expenses and gives an indication of the profit margin
EBITDA	Operating loss for the period before interest, taxes, depreciation and amortization	EBITDA shows an alternative performance measure of the results generated in current operations
EBITDA margin, %	Operating loss for the period before interest, taxes, depreciation and amortization in relation to revenue for the period	This key performance measure is used to analyze the value creation from current operations
EBIT margin, %	Operating loss for the period before interest and taxes in relation to revenue for the period	This key performance measure is used to analyze the value creation from the operational activities
Equity to assets ratio	Shareholders' equity in relation to total assets	Management uses this key performance measure as an indication of the financial stability of the Company
Number of full time employees (FTEs)	An FTE is defined as an employee working at least 2,080 hours per year and is calculated on the basis of hours from both consultants and employees	Management uses this key performance measure to track costs in relation to full-time employees

RECONCILIATION OF ALTERNATIVE PERFORMANCE MEASURES

The table set out below contains the derivation of the alternative performance measure EBITDA, showing the different components of the performance measure.

	Group		Group	Parent		
SEKm	2017-01-01 2017-09-30	2016-01-01 2016-09-30	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
EBIT[1]	–37.8	–20.8	–30.8	–24.8	–11.1	–8.1
Depreciation and amortization	1.9	0.3	0.3	0.3	0.3	0.3
EBITDA	**–35.9**	**–20.5**	**–30.5**	**–24.5**	**–10.8**	**–7.8**

1) Operating loss for the period before interest and taxes.

OPERATIONAL AND FINANCIAL OVERVIEW

The information in this section is intended to facilitate the understanding and evaluation of trends and fluctuations in the Company's operating results and financial position and should be read in conjunction with the sections "*Selected historical financial information*", "*Capital structure and other financial information*", "*Historical financial information for the period January 1 to September 30, 2017*" and "*Historical financial information for the fiscal years 2016, 2015 and 2014*". The reader should note that historical results do not necessarily give an indication of future results.

The financial information presented in this section has been derived from IRRAS's unaudited condensed consolidated interim financial statements for the nine month period that ended September 30, 2017, IRRAS's audited consolidated financial statements for the fiscal year that ended December 31, 2016 and the Parent Company's audited financial statements for the fiscal years that ended December 31, 2016, 2015 and 2014. The consolidated financial statement for the fiscal year 2016 has been prepared in accordance with the International Financial Reporting Standards ("IFRS"), as adopted by the EU and audited by IRRAS's independent auditors, as set out in their auditors' report included therewith in the section "*Historical financial information*". The financial reports for the Parent Company have been prepared in accordance with the Swedish Annual Accounts Act and RFR2 and audited by IRRAS's independent auditors, as set out in their auditing report included in the section "*Historical financial information*". Note that the financial information derived from the Parent Company's audited financial statements for the fiscal years 2016, 2015 and 2014 have been included for the purpose of comparison, as the IRRAS group was formed in 2016 by establishing IRRAS GmbH and IRRAS USA Inc. as two wholly-owned subsidiaries of the Parent Company (together the "Group"). The accounting principles of the Parent Company are consistent in all material respects with the accounting principles of the Group.

The information in this section contains certain forward-looking statements. All forward-looking statements are subject to various risks and uncertainties, including but not limited to those described under the section "*Risk factors*". The Company's actual results may differ materially from those indicated in the forward-looking statements due to several factors. For further information on forward-looking statements, please see the section "*Important information – Forward-looking information*" on the inside of this Offering Circular.

INTRODUCTION

IRRAS is a commercial stage medical Technology Company currently focused on the design, development, and commercialization of innovative solutions for various brain pathologies. The primary objectives are to dramatically improve patient outcomes, reduce hospitalization time in both intensive care units and medical wards, and to provide significant health economic benefits for hospitals and healthcare providers. The Company's initial product focuses on an intracranial fluid management solution that utilizes its proprietary platform technology, IRRA*flow*. IRRA*flow* is a CE-marked, fully integrated, closed-circuit medical device system.

IRRA*flow* is marketed and sold in the form of two separate but related products: the control unit, which is a capital investment for the hospitals, and a set of consumables (cassette and catheter) which are used in the performance of a treatment with IRRA*flow*.

IRRA*flow* is used for the treatment of hemorrhagic stroke and chronic subdural hematoma. IRRAS commenced a full commercial launch of IRRA*flow* in Germany in May 2017 by establishing its own sales and marketing organization. IRRAS has since initiated a launch outside of Germany by contracting 21 distributors for 42 countries.

In June 2017, the Company submitted a 510(k) application for IRRA*flow* to the US Food and Drug Administration (FDA) for ICP monitoring and CSF drainage and expects to receive a final decision from the FDA in the first quarter of 2018. Commercial launch of IRRA*flow* in the United States is expected to occur after receipt of FDA approval.

Three different subcontractors in California, USA, manufactures the various parts of the IRRA*flow* system.

FACTORS AFFECTING THE RESULTS OF OPERATIONS

General market conditions

The demand for and pricing of the Company's products are affected by political factors and general economic activity. An economic downturn could affect the markets for IRRA*flow* to the extent that hospitals, authorities and other customers reduce their costs, and thus reduce their expenditures on medical devices in general, including IRRA*flow*. In this regard, the availability of adequate reimbursement programs in countries where IRRA*flow* is marketed is an important factor. There are various types of reimbursement programs in place in the countries where IRRA*flow* is or will be marketed. To improve the alignment of the objectives of hospital managers, patients and taxpayers, policymakers in many countries have introduced reimbursement programs for diagnosis-related groups (DRGs), and as of September 30, 2017, IRRA*flow* has been approved for reimbursement via the DRG system for inpatient services in 14 countries in the European Union. In addition, the Company estimates IRRA*flow* will fit within existing DRG codes in most, if not all, of the remaining EU countries and in the United States, if FDA clearance is received. However, the IRRA*flow* control unit falls outside the scope of these DRG related reimbursement programs and hence is a capital investment for the hospitals. This may result in a more direct exposure to general economic conditions and the willingness of hospital managers to invest in medical equipment. Conversely, an economic downturn resulting in pressure to reduce medical costs may be beneficial to IRRAS, as the Company has demonstrated significant health economic benefits with shorter hospitalization times in intensive care units and wards following treatment with IRRA*flow* compared to other forms of treatment currently available.

Sales volume, mix and pricing

The Company's sales and profitability are dependent on the number of IRRA*flow* control units sold and the number of IRRA*flow* consumables sold. Sales volumes, in particular for the IRRA*flow* control unit, are dependent on the Company's ability to either directly or indirectly through distributors, demonstrate clinical and economic benefits and hence convince hospitals, healthcare providers and decision-makers to make a capital investment in the form of a IRRA*flow* control unit.

Although sales volumes are expected to include replacement orders for the control units, over time a majority of the Company's future sales are expected to be generated from the sale of consumables. Sales volumes of the consumables are driven by the number of treatments performed with the control unit, and hence by the adoption of IRRA*flow* by healthcare providers, physicians and patients.

The price level of the Company's products varies depending on country, sales channel (directly or indirectly through distributors) and the remuneration program available on the specific market. In Germany, for example, the control unit is sold for EUR 25,000 and the consumables are priced at approximately EUR 4,000, while the compensation received for the entire treatment amounts to EUR 36,700 and EUR 8,000, respectively.

In other EU countries where IRRA*flow* is marketed by distributors, the average list price is EUR 20,000 for a control unit and EUR 2,400 for the consumables, while the consideration for the treatment is in average EUR 29,900. The price paid by distributors varies depending on product, market and agreement, from 40 to 80 percent of the price that the Company can charge a customer for a direct sale in Germany.

In view of the above, reported revenue is affected by the geographical spread of sales and the sales mix of control units and consumables. In addition, reported revenue will initially consist primarily of revenue from the sale of control units.

Commercialization activities and geographical expansion

IRRAS is currently conducting direct sales in Germany and plans to use the same strategy when the Company establishes itself on the US market after receiving FDA approval, which is expected to be received in the first quarter of 2018. The US sales organization will be established after the expected approval from the FDA and is planned to consist of between 25–40 FTEs with approximately 20 of these expected to be in place by the end of 2018. The Company's ability to successfully build the US organization and the possible receipt of FDA approval will have a significant impact on the Company's long-term earnings potential. In addition to building the US organization, the Company plans to recruit four additional sales representatives and two people to perform hospital demonstrations and training for the German sales organization before the end of the second quarter of 2018.

The Company plans to hire distributors in most countries other than Germany and the US. At present, the Company has signed commercial agreements for IRRA*flow* in 42 countries, which include countries where regulatory approval is pending, e.g. in China. Established and contracted distributor agreements will allow for a rapid launch of IRRA*flow* after approval by the authorities is received. The commercial success in the markets where distributors are used depends on the distributors' ability to successfully create demand for IRRA*flow*, but also on IRRAS's ability to train, support and manage the efforts of distributors.

Balance between variable and fixed costs

Costs for employees and full-time consultants are fixed, but these contracts can be terminated after a notice period, which varies from two weeks to three months depending on country and type of contract. As of September 30, 2017, the Company employed 9 employees and 11 long-term consultants.

Capitalized development costs are amortized on a straight line basis over a period of five to ten years. Few other costs are fixed and the business is very flexible due to the use of external experts and partners, which are contracted when needed. By working with local distributors, the Company believes that it can maintain an effective sales organization while accessing key markets outside of Germany and the United States. In addition, the Company outsources manufacturing of its products, and the only costs related to manufacturing are variable costs for the purchasing of goods from suppliers. The Company has no commitments regarding minimum production volumes.

Prices of goods and components

The Company outsources the manufacturing of its products. Each order for control units and consumables is for a large quantity and is based on the expected annual demand for the products, ensuring that prices remain low. Currently, the price for each order is negotiated individually and then fixed until all products in the order is shipped. The Company is still exposed to risks in the form of price fluctuations from the time an order is fully received and a new order is placed. The Company has generally been able to negotiate lower prices for larger volumes. When the Company grows and sales volumes increase, the Company expects the per-unit cost of goods sold to decrease due to economies of scale and automation of production. From 2018, the Company expects to enter into long-term contracts with its suppliers, which will include fixed prices and forecasts for the production of goods. The cost of goods sold is calculated as the direct cost of purchasing products from IRRAS production partners plus amortization of capitalized development costs.

Sales and marketing expenses

The main components of the Company's marketing and distribution expenses is personnel costs (4 employees as of September 30, 2017), costs for business development, travel, education and other expenses.

Over the last three years, sales and marketing expense has increased significantly as a share of total operating costs. This is mainly due to the expanded sales and marketing activities during 2016 before the commercial launch of IRRA*flow* and the preparations for the commercialization of IRRA*flow* in 2015.

In the next three years, sales costs are expected to increase significantly as direct sales operations are expanded in Germany and the US. Subsequently, sales costs as a share of total operating costs are expected to remain relatively stable. IRRAS currently estimates that 25–40 FTEs will be enough to cover the US market. In order to strengthen the German organization, the Company expects hire four new sales representatives and two new training staff by the end of the second quarter of 2018.

Administrative expenses

The Company's administrative expenses consist mainly of salaries and other expenses for personnel in executive positions as well as financial and quality control functions. Rental expenses and depreciation of assets other than capitalized research and development expenses are also included in the administrative expenses. The administrative expenses also include the cost of the Company's employee incentive schemes within these functions, in accordance with IFRS.

Administrative expenses have increased in line with the increased activities, related to commercialization of IRRA*flow* and the development of the organization's administrative structure. The continued development of the Company's business is expected to further increase the Company's administrative expenses.

Research and development expenses

The Company's research and development expenses relate to the development of the IRRA*flow* technology and products. This includes compensation paid to consultants who worked on the project. The cost of maintenance and supervision of the Company's patent portfolio, including the cost of legal counsel and associated filings and maintenance fees are included in research and development costs.

The Company expects the total research and development costs to increase in 2018 and increase significantly in 2019 and 2020 as the Company develops new applications of the IRRA*flow* platform. The expected increase in research and development costs will primarily relate to higher personnel costs, regulatory costs and costs related to clinical development programs deemed necessary by various regulatory authorities.

The total expenditure for the completion of the Company's expansion into new applications of the IRRA*flow* platform depends on a number of factors including, but not limited to, the Company's ability to progress the project according to plan and to obtain necessary approvals from relevant regulatory authorities. The estimated expenses for the projects may be unevenly distributed over time, and actual expenses may exceed

estimated expenses. It is not unusual for development projects to be affected by delays and to exceed budgeted costs.

The Company is subject to IFRS rules regarding capitalization of research and development expenses. This means that research and development expenses are capitalized when a project has passed the research phase and entered into the development phase and that the capitalization is ceased when the product is launched.

Incentive schemes

IRRAS has five share-related incentive schemes in place for senior management, board members and key consultants (for further information, please refer to the heading "*Share-related incentive schemes*" in the section "*Share capital and ownership structure*"). These incentive schemes have a direct impact on the operating result of the Company as they are reported as personnel costs in the statement of loss under the function relating to the relevant employee or consultant.

The incentive scheme for the President and CEO is a share award scheme that entitles the President and CEO to receive 1 percent of the Company's shares outstanding at the completion of a successful IPO as well as to receive 2 percent of the Company's shares outstanding at the time of receipt of US FDA 510(k) approval. A completion of the Offering will constitute as a successful IPO. If all the objectives of the President and CEO's share award scheme are reached in the fourth quarter of 2017 and first quarter of 2018 respectively, as expected, the impact on the operational result will be SEK 2.9 million in the fourth quarter of 2017 and SEK 2.4 million in the first quarter of 2018.

Other employees have regular bonus arrangements as part of their employment contracts and these are accrued on a monthly basis and adjusted for in the month of payment if the employee does not reach their full target bonus.

Taxes

IRRAS has been generating operating losses since its formation. These losses have accumulated tax losses which amounted to approximately SEK 78 million as per 31 December 2016. However, it is uncertain when these losses carried forward will be able to be utilized to offset against taxable profits. A deferred tax asset attributable to the loss carried forward is therefore of no value in the consolidated statement of financial position. As stated in the section "Risk Factors", IRRAS's opportunities to utilize losses carried forward is affected by certain applicable limitation rules and any future changes in applicable tax laws.

Currency fluctuations

The Company presents its financial statements in SEK and SEK is the Group's operating currency. However, most of the Company's current and future revenues and expenses are in EUR and USD. Depending on how the relative exchange rates of these currencies, they may have a positive or negative impact on the Company's earnings. In accordance with the Company's policy on financial risk, the Company may choose to hedge for currency risks. The company is currently not hedging for any currency risks.

Operating segments

IRRAS's operations are currently focused on research and development within one product field, IRRA*flow*, and the executive management has therefore decided to manage the operations as one reporting unit. Therefore, the Company so far only has one operating segment which is wholly reflected in the Group's financial statements. The CEO and the board of directors are assessed as the chief operating decision makers.

COMPARISON BETWEEN THE PERIODS JANUARY 1 – SEPTEMBER 30, 2017 (GROUP) AND JANUARY 1 – SEPTEMBER 30, 2016 (GROUP)

Revenue

Revenue increased by SEK 11.3 million, from SEK 0.0 million in the period January to September 2016 to SEK 11.3 million in the same period 2017. The Company's initial sales are attributable to the full-scale commercial launch of IRRA*flow* which commenced in May 2017. Since the launch, a total of 9 hospitals in Germany and one distributor in the Nordics have purchased IRRA*flow*.

Cost of sales

Cost of sales increased by SEK 3.6 million, from SEK 0.0 million during the period January to September 2016 to SEK 3.6 million in the same period 2017. The costs are attributable to manufacturing costs of the products which started to sell in 2017.

Gross profit

Gross profit increased by SEK 7.7 million, from SEK 0.0 million in the period January to September 2016 to SEK 7.7 million during the same period 2017. The increase was primarily attributable to the sales in Germany.

Sales and marketing expenses

Sales and marketing expenses increased by SEK 5.0 million, from SEK 5.7 million during the period January to September 2016 to SEK 10.7 million during the same period 2017. The increase was primarily attributable to the commercial launch in Germany.

Administrative expenses
Administrative expenses increased by SEK 16.4 million, from SEK 12.6 million in the period January to September 2016 to SEK 29.0 million in the same period 2017. The increase was primarily attributable to expansion of administrative and financial functions to support the development and commercialization of IRRA*flow* and to the share award scheme for the President and CEO.

Research and development expenses
Research and development expenses increased by SEK 4.1 million, from SEK 2.2 million during the period January to September 2016 to SEK 6.3 million during the period January to September 2017. Research and development expenditure of SEK 7.9 million was capitalized during the period January to September 2016, compared with SEK 10.0 million during the period January to September 2017.

Other operating income and expenses
Other operating income increased by SEK 0.3 million, from SEK 0.2 million during the period January to September 2016 to SEK 0.5 million during the same period 2017. Other operating expenses decreased by SEK 0.4 million, from SEK −0.4 million during the period January to September 2016 to SEK 0 million during the same period 2017. The changes were primarily attributable to currency exchange effects and periodic adjustments of currency exchange effects.

Operating loss
IRRAS operating loss increased by SEK 17.0 million, from SEK −20.8 million in the period January to September 2016 to SEK −37.8 million in the same period 2017. The increase in operating loss was primarily attributable to the changes described under the headings above.

Net financial items
Net financial items decreased by SEK 0.9 million, from SEK −0.8 million in the period January to September 2016 to SEK 0.1 million in the same period 2017.

Loss for the period
IRRAS loss before tax increased by SEK 16.2 million, from SEK −21.5 million in the period January to September 2016 to SEK −37.7 million in the same period 2017. The increase was primarily attributable to the changes described under "*Operating loss*" and "*Net financial items*". No tax was paid within the Group during the period January to September 2017 or during the period January to September 2016.

Cash flow
The Company's net cash flow used in operating activities decreased by SEK 17.3 million, from SEK −14.0 million in the period January to September 2016 to SEK −31.3 million in the same period 2017. The decrease was primarily attributable to cost of production and development of IRRA*flow* together with personnel costs and professional services.

Capitalized development costs
As of September 30, 2016 the capitalized development costs amounted to SEK 16.9 million, an increase of net SEK 7.9 million during the period January to September 2016. As of September 30, 2017 the capitalized development costs amounted to SEK 32.5 million, a net increase of SEK 8.5 million during the period January to September 2017. The increases were attributed to the development of IRRA*flow*.

Liquidity and financial position
As of September 30, 2017, shareholders' equity amounted to SEK 71.4 million, compared to SEK 101.5 million as of September 30, 2016. The decrease of SEK 30.1 million was primarily attributable to the loss for the period.

As of September 30, 2017, IRRAS's cash and cash equivalents totaled SEK 28.5 million, compared to SEK 81.7 million as of September 30, 2016.

COMPARISON BETWEEN THE PERIODS JANUARY 1 – DECEMBER 31, 2016 (GROUP) AND JANUARY 1 – DECEMBER 31, 2015 (PARENT)
As the US and German subsidiaries were established in July 2016, consolidated financial information has been presented for 2016. The amounts for 2015 are based on the parent company only and are used as the comparative figures in the following section. The accounting principles of the Parent Company are consistent in all material respects with the accounting principles of the Group.

Revenue
IRRAS had no revenue in 2016 or 2015.

Sales and marketing expenses
Sales and marketing expenses increased by SEK 7.1 million, from SEK 2.0 million in 2015 to SEK 9.1 million in 2016. The increase was primarily attributable to the initial work in 2016 focusing on establishing a presence in markets where IRRA*flow* was planned to be marketed and establishing relationships with key opinion leaders. This was achieved with assistance from consultants and the first IRRAS representative in

Germany. In 2016, the first two employees were hired in the sales organization. Sales expenses increased significantly, enabling rapid sales growth in 2017.

Administrative expenses
Administrative expenses increased by SEK 12.9 million, from SEK 5.1 million in 2015 to SEK 17.9 million in 2016. The increase was primarily attributable to an increase in administrative and finance personnel to support the completion of version 2.0 of IRRA*flow* and the commercial launch of the product and the share award scheme for the President and CEO. Personnel expenses in 2016 included the costs of the Company's incentive scheme for the employees in accordance with IFRS.

Research and development expenses
Research and development expenses decreased by SEK 1.0 million, from SEK 4.3 million in 2015 to SEK 3.3 million in 2016. Research and development expenditure of an additional SEK 15.0 million was capitalized in 2016, compared with SEK 5.3 million in 2015. In 2016, the research and development team took IRRA*flow* from version 1.5 to 2.0, a product conversion that made IRRA*flow* ready for large-scale commercialization.

The development of version 2.0 of the control unit and catheter began in 2016. The control unit in previous versions was made by HotSwap and very prototypical. The design of version 2.0 aimed to increase the ease of manufacture and cost effectiveness of the original system developed by HotSwap. The enhancements included a new flexible graphical user interface that replaced the mechanical alert system with a more robust system, as well as software updates to allow future improvements.

Other operating income and expenses
Other operating income decreased by SEK 0.2 million, from SEK 0.5 million in 2015 to SEK 0.2 million in 2016, primarily attributable to that the Company's EU funding ended, which was however in part compensated by an increase in exchange rate gains. Other operating expenses increased by SEK 0.5 million from SEK –0.1 million in 2015 to SEK –0.7 million in 2016 mainly due to exchange rate losses.

Operating loss
Operating loss increased by SEK 19.8 million, from SEK –11.1 million in 2015 to SEK –30.8 million in 2016. The increase in operating loss was primarily attributable to the changes described under the headings above.

Net financial items
Net financial items increased by SEK 0.7 million, from SEK –1.8 million in 2015 to SEK –1.1 million in 2016.

Loss for the period
Loss before tax increased by SEK 19.0 million from SEK –12.9 million in 2015 to SEK –31.9 million in 2016. The increase was primarily attributable to the changes described under "*Operating loss*" and "*Net financial items*". No tax was paid within the Group in 2016 or 2015.

Cash flow
The Company's net cash flow used in operating activities decreased by SEK 7.5 million, from SEK –10.7 million in 2015 to SEK –18.2 million in 2016.

Cash flow for the period increased by SEK 40.3 million, from SEK 11.6 million in 2015 to SEK 52.0 million in 2016. The main reason for this increase was proceeds of SEK 85.2 million received from the share issue that was executed in 2016.

Capitalized development costs
As of December 31, 2015 the capitalized development costs amounted to SEK 9.0 million, an increase of net SEK 5.3 million during 2015. As of December 31, 2016 the capitalized development costs amounted to SEK 24.0 million, a net increase of SEK 15.0 million during 2016. The increases were attributed to the development of IRRAflow.

Liquidity and financial position
As of December 31, 2016, shareholders' equity amounted to SEK 95.1 million, compared to SEK 0.1 million as of December 31, 2015. The increase of SEK 95.0 million was mainly due to the share issue of SEK 85.2 million and the conversion of the convertible bonds of SEK 30.3 million in 2016. As of December 31, 2016, IRRAS's cash and cash equivalents totaled SEK 70.8 million, compared to SEK 18.4 million as of December 31, 2015. The increase of SEK 52.4 million was primarily attributable to the share issue mentioned above.

COMPARISON BETWEEN THE PERIODS JANUARY 1 – DECEMBER 31, 2015 (PARENT) AND JANUARY 1 – DECEMBER 31, 2014 (PARENT)
2014 and 2015 refer to the Parent Company as there were no subsidiaries during these years. The group was formed in July 2016 upon the establishment of subsidiaries.

Revenue
IRRAS had no revenue in 2015 or 2014.

Sales and marketing expenses
During 2014 and 2015, the cost of commercialization preparations has increased steadily, initially to have the product approved for sale and establishing a presence in

the markets, and thereafter to establish relationships with future potential buyers of the product. Sales and marketing expenses increased by SEK 1.5 million, from SEK 0.6 million in 2014 to SEK 2.0 million in 2015. In 2014, expenses were mainly attributable to regulatory approval in the EU. In 2015, the increase was primarily attributable to costs for participation in conventions and expanded public relations efforts.

Administrative expenses

Administrative expenses decreased by SEK 0.5 million, from SEK 5.6 million in 2014 to SEK 5.1 million in 2015. The decrease was primarily attributable to changes in management.

Research and development expenses

Research and development expenses increased by SEK 1.5 million, from SEK 2.9 million in 2014 to SEK 4.3 million in 2015. Research and development activities in 2014 and 2015 developed the IRRA*flow* product such that it underwent testing and subsequently obtained regulatory approval in the EU. The research and development activities in 2014 and 2015 developed IRRA*flow* to version 1.5, which was ready for actual use in hospitals.

During 2014, the initial conceptual work on the IRRAS system (control unit, cassette and catheter) began. The work was aimed primarily at defining product requirements, making basic system designs such as electronic architecture, electronic and mechanical hardware, components and the theoretical manufacturing process.

The work that began in 2014 continued in 2015 and included the production of (approximately 12) hand-made control units and a few hundred catheters of version 1.0. These were used for authentication and validation work done by HotSwap and for small-scale clinical validations conducted by the Company. Research and development expenses in 2015 were primarily attributable to the production of prototypes, testing and compilation of a technical file submitted to the notified body.

Development of IRRAS product candidates is associated with significant risks and it is possible that they may never achieve commercialization. Research and development expenses are capitalized when the product has received regulatory approval from the authorities and in circumstances where there is appropriate likelihood that the expenditures will provide significant economic benefits to the Company. Expenditures that do not meet these criteria are expensed in the income statement. In connection with the initiated sales of IRRAflow, the amortization of capitalized research and development expenses initiated in the third quarter of 2017 is made over a period of five years.

Other operating income and expenses

Other operating income, mainly consisting of exchange rate gains and IRRAS receiving EU support, decreased by SEK 0.5 million in 2015, from SEK 0.9 million in 2014 to SEK 0.5 million in 2015. Other operating expenses increased by SEK 0.1 million, from SEK 0.0 million in 2014 to SEK 0.1 million in 2015.

Operating loss

IRRAS operating loss increased by SEK 3.0 million from SEK –8.1 million in 2014 to SEK –11.1 million in 2015. The increase in operating loss was primarily attributable to the changes described under the headings above.

Net financial items

Net financial items decreased by SEK 1.8 million, from SEK 0.0 million in 2014 to SEK –1.8 million in 2015.

The decrease was primarily attributable to the interest carried on the convertible bonds outstanding in 2015.

Loss for the period

Loss before tax increased by SEK 4.8 million, from SEK –8.1 million in 2014 to SEK –12.9 million in 2015. The increase was primarily attributable to the changes described under "*Operating loss*" and "*Net financial items*" below. No tax was paid within the Group in 2015 or 2014.

Cash flow

The Company's net cash flow used in operating activities decreased by SEK 3.2 million, from SEK –7.5 million in 2014 to SEK –10.7 million in 2015.

Cash flow for the period increased by SEK 13.6 million, from SEK –2.0 million in 2014 to SEK 11.6 million in 2015. The increase was primarily attributable to the issue of a convertible bond of SEK 27.7 million in 2015.

Capitalized development costs

As of December 31, 2014 the capitalized development costs amounted to SEK 3.7 million. As of December 31, 2015 the capitalized development costs amounted to SEK 9.0 million, a net increase of SEK 5.3 million in 2015.

The increases were attributable to the development of IRRA*flow*.

Liquidity and financial position

As of December 31, 2015, shareholders' equity amounted to SEK 0.1 million, compared to SEK 13.0 million as of December 31, 2014. The decrease of SEK 12.9 million was primarily attributable to losses in 2015. As of December 31, 2015, IRRAS's cash and cash equivalents amounted to SEK 18.4 million compared with SEK 6.8 million as of December 31, 2014. The increase of SEK 11.6 million was primarily attributable to the convertible debt note mentioned above.

CAPITAL STRUCTURE AND OTHER FINANCIAL INFORMATION

The tables in this section presents IRRAS's capitalization and indebtedness at Group level as of September 30, 2017. For further information regarding the Company's share capital and shares, please see section "*Share capital and ownership structure*". The tables in this section should be read in conjunction with the sections "*Operational and financial overview*", "*Historical financial information for the period January 1 to September 30, 2017*" and "*Historical financial information for the fiscal years 2016, 2015 and 2014*". Other than what is described in the section "*Capital structure and other financial information – Material events after September 30, 2017*", there has been no material change in the capitalization or indebtedness of IRRAS since September 30, 2017.

CAPITALIZATION

TSEK	2017-09-30
Current liabilities:	
Guaranteed	–
Secured	–
Not secured or guaranteed	7,372
Total current liabilities	**7,372**
Non-current liabilities:	
Guaranteed	–
Secured	–
Not secured or guaranteed	–
Total non-current liabilities	**–**
Total liabilities	**7,372**
Equity:	
Share capital	517
Other paid in capital	175,780
Reserves	–335
Retained earnings incl. result for the period	–104,515
Total equity	**71,448**
Total capitalization	**78,820**

NET DEBT

	TSEK	2017-09-30
(A)	Cash on hand	–
(B)	Cash and cash equivalents	28,516
(C)	Other short term investments	–
(D)	**Total cash and cash equivalents (A)+(B)+(C)**	**28,516**
(E)	**Current financial receivables**	**–**
(F)	Short-term bank loans	–
(G)	Current portion of long-term liabilities	–
(H)	Other current liabilities (non-interest bearing)	7,372
(I)	**Total current liabilities (F)+(G)+(H)**	**7,372**
(J)	**Net current financial indebtedness (I)–(E)–(D)**	**–21,144**
(K)	Long-term bank loans	–
(L)	Bonds issued	–
(M)	Other long-term liabilities	–
(N)	**Non-current financial indebtedness (K)+(L)+(M)**	**–**
(O)	**Financial net indebtedness (J)+(N)**	**–21,144**

Working capital statement

IRRAS estimates that the current working capital is insufficient to meet the Company's needs over the next twelve months. IRRAS's need for working capital over the next twelve months is mainly assignable to the planned entry into the US market, the strengthening and building of the organization, particularly within marketing and sales, and the further development of IRRA*flow*.

The execution of IRRAS's strategy for accelerated growth and development of the product portfolio requires significant investments. Based on the accelerated growth and development plans, the Company estimates that there is a deficit of approximately SEK 260 million for the period up until the operations become self-sufficient, whereof approximately SEK 50 million is attributable to the next twelve months depending on how the Company's development projects are prioritized and executed but that the current working capital will at least be sufficient until the beginning of the third quarter 2018. In addition, the Company assess that a financial buffer of approximately SEK 55 million is needed for potential unforeseen costs and delays in the implementation of the commercial strategy and the Company's research and development activities. The Company's intention is to secure the financing needed in order to implement the Company's growth strategy, develop the product portfolio and cover the working capital deficiency until the operations are self-sufficient with funds from the Offering.

If the Offering is completed and fully subscribed, the Company will receive SEK 316 million after deduction of costs attributable to the Offering. Should the Offering not be completed and the Company, as a consequence thereof, would not be provided with any funds from the Offering – and the Company would not be able to finance its operations through, e.g., the raising of credit and/or new issues of financial instruments – IRRAS will postpone the recruitment of the personnel needed to

expand into the US market and also postpone one or several of the development projects that aims to expand the product portfolio. IRRAS has assessed that such a revised strategy would result in significantly lower levels of spending and that its working capital, following the aforementioned revisions, would cover the Company's working capital needs for the next twelve months.

NON-CURRENT ASSETS

IRRAS tangible non-current assets amounted to SEK 0.2 million as of September 30, 2017, consisting mainly of laboratory equipment and computers. The Company's intangible non-current assets amounted to SEK 35.1 million as of September 30, 2017, of which SEK 32.5 million relates to capitalized development costs and SEK 2.6 million is attributable to the Company's first patent family acquired in 2012 from Christos Panotopoulos (Chief Scientific Officer and Founder of the Company).

Although IRRAS has a product that is in the commercial phase, the Company is primarily focused on research and development. In order for IRRAS to continue to be successful, innovation and development will continue to be prioritized. Development of IRRAS product candidates is associated with significant risks and it is possible that they may never achieve commercialization. Research and development expenses are capitalized when the product has received regulatory approval from the authorities and in circumstances where there is appropriate likelihood that the expenditures will provide significant economic benefits to the Company. Expenditures that do not meet these criteria are expensed in the income statement as incurred. In connection with the initiated sales of IRRA*flow*, the amortization of capitalized research and development expenses initiated in the third quarter of 2017 is made over a period of five years.

	Group		Group	Parent		
TSEK	2017-09-30	2016-09-30	2016-12-31	2016-12-31	2015-12-31	2014-12-31
Tangible non-current assets	228	17	16	–	–	–
Intangible non-current assets	35,075	19,833	26,880	26,880	12,180	7,147
Total	**35,304**	**19,850**	**26,897**	**26,880**	**12,180**	**7,147**

HISTORICAL INVESTMENTS

The table below summarizes IRRAS's total investments in the fiscal years 2014–2016, as well as for the period January to September 2016 and 2017. Investments in property, plant and equipment consist primarily of computers and equipment used for development. Investments in intangible non-current assets consists mainly of capitalized research and development expenses.

	Group		Group	Parent		
TSEK	2017-01-01 2017-09-30	2016-01-01 2016-09-30	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Investments in tangible non-current assets	189	17	18	–	–	–
Investments in intangible non-current assets	10,062	7,890	15,017	15,017	5,350	3,667
Total	**10,251**	**7,907**	**15,035**	**15,017**	**5,350**	**3,667**

For further information regarding capitalized research and development costs, see heading "*Capitalized development costs*" under each period in the section "*Operational and financial overview*".

ONGOING AND PLANNED INVESTMENTS

During the period between September 30, 2017 and the publication date of this Offering Circular, the Company has made no significant investments. As part of its strategic, plan the Company makes continuous investments in the development of its products. The intention is to use a significant proportion of the funds raised from this Offering for selected development projects (see the heading "*Operating Capital Statement*" above). The Company has not entered into any commitments regarding any future investments in tangible or intangible non-current assets.

TAX SITUATION

As of December 31, 2016, IRRAS's carried forward tax loss amounted to SEK 77.5 million. However, it is uncertain when these accumulated losses can be offset against taxable income. A deferred tax asset attributable to accumulated operating losses is therefore not recognized on the balance sheet. As stated in the "*Risk factors*" section, IRRAS ability to exploit accumulated losses are limited by certain applicable rules and future changes in current tax laws.

RESTRICTIONS ON THE USE OF CAPITAL

The Company has no restrictions on its use of capital.

SIGNIFICANT EVENTS AFTER SEPTEMBER 30, 2017

After September 30, 2017, as part of the adaptation to the regulations applied on Nasdaq First North Premier, effective as of November 1, 2017, the Company has employed the Company's CEO, who was previously employed within the framework of a consultancy agreement. Furthermore, Sabina Berlin, VP Finance, former consultant, has been employed.

In addition to the above, no significant events affecting the Company's financial position or market position has occurred since September 30, 2017.

TRENDS AND PROSPECTS

As described in the section "*Comparison between the periods January 1 – September 30, 2017 and January 1– September 30, 2016*", the initial sale of the IRRA*flow* control unit and consumables have exceeded the Company's own aim for the launch in May 2017 (which then was to reach sales of EUR 3 million during 2017) Although this is an important aspect of the commercialization of IRRA*flow*, the ultimate evidence of the technology's viability and the Company's business model (as a significant portion of the revenue is expected to come from the sale of the consumable catheter set) is the number of treatments completed. Since the commercial launch in May 2017, IRRA*flow* has been used in approximately 70 treatments for hemorrhagic stroke and subdural hematoma.

A positive trend is also seen in sales to distributors covering other EU countries, although IRRAS only has limited insight to the sales to end customers. There is thus a risk of stock accumulation at the distributors and risks associated with the actual performance of the distributors. IRRAS closely monitors the performance of distributor's and strive to establish close relationships including feedback and reporting procedures for greater visibility. As of the date of this Offeing Circular, IRRAS has positive relationships with all its distributors and has no reason to expect underperformance by distributors in the future.

Considering the initial success of the IRRA*flow* product in the EU, IRRAS anticipate great potential in other markets as well, in particular in the United States where the commercialization infrastructure to some extent will be set up prior expected FDA approval in the first quarter of 2018. Further IRRAS sees great potential in certain other key markets outside of the European Union and the United States for which IRRAS has already established distribution agreements to enable a swift commercial launch in these countries following regulatory approval.

In terms of manufacturing and capacity to deliver, IRRAS uses three subcontractors to manufacture the different parts of the IRRA*flow* system (for more information, see section "*Description of operations – Manufacturing and distribution*"). IRRAS expects current planning and capacity to be sufficient to meet the requirements for existing growth plans. Currently, manufacturing commences upon receipt of biding orders, and shipment is made directly via IRRAS to the customer without keeping any products in stock. Going forward, IRRAS will strive to keep a certain minimum level in stock in order to accommodate timely deliveries. Furthermore, IRRAS expects the unit cost of manufacturing the products to fall as the Company grows and volumes increase. This is expected to have a positive effect on the reported gross margin. In addition, IRRAS expects a positive impact on the gross margin from the long-term shift in product mix towards a higher percentage of sales stemming from consumables.

As stated above, IRRAS considers the Company to have taken important steps towards achieving the objective of making IRRA*flow* a standard of treatment for intracranial pressure in conjunction with intracranial hemorrhagic diseases such as hemorrhagic stroke and subdural hematoma, thereby establishing IRRAS as a profitable and leading provider of medical devices products.

SHARE CAPITAL AND OWNERSHIP STRUCTURE

SHARE INFORMATION

IRRAS AB was founded in 2011 in accordance with Swedish law. The Company's shares are denominated in SEK and have been issued in accordance with the Swedish Companies Act.

The Company's articles of association stipulate that the share capital shall be no less than SEK 502,500 and no more than SEK 2,010,000, and that the number of shares shall be no less than 16,750,000 and not more than 67,000,000 shares. The registered share capital of the Company as per the date of this Offering Circular is SEK 516,522.57 divided between 17,217,419 shares, each with a quota value of SEK 0.03.

The new share issue in connection with the Offering entails, at full subscription and assuming a price in the Offering corresponding to the midpoint of the price range (i.e. SEK 47.50), that the number of shares in IRRAS will increase by 7,368,421 shares from 17,217,419 to 24,585,840, which corresponds to a dilution of 30.0 percent of the total number of shares in the Company after the new share issue. Registration of the new shares with the Swedish Companies Registration Office is expected to occur on or about November 22, 2017.

IRRAS has five ongoing share-related incentive schemes which are presented under the headline "*Share-related incentive schemes*" in this section.

Shares in the Offering are not subject to any offer made to mandatory bid, redemption rights or redemption obligation. There have been no public takeover bids for the Company's shares.

Central securities depository

The Company's articles of association contain a so called CSD provision for electronic registration and the Company's shares are connected to the electronic securities system with Euroclear Sweden AB ("Euroclear"), Box 191, SE-101 23 Stockholm, as central securities depository. The shares are registered in the name of the shareholder. No share certificates have been issued for the shares or will be issued for the new shares. The ISIN code for IRRAS's shares is SE0008321202.

SPECIFIC RIGHTS LINKED TO THE SHARES

Right to participate at General Meetings

To participate at the general meeting, shareholders must be registered in the Company's share register five business days prior to the meeting and also register their participation to the Company no later than the date specified in the notice.

Voting rights at general meetings

Each share entitles the holder to one vote at general meetings and every shareholder is entitled to vote with the full number of shares owned and represented by him or her.

Preferential rights in connection with new share issues etc.

If the Company decides to issue new shares, warrants or convertible bonds by means of a cash issue or offset issue, the shareholders will, as a general rule, have preferential subscription rights in proportion to the number of shares they already own. In accordance with the provisions of the Swedish Companies Act, it is possible to deviate from shareholders' preferential rights.

Right to dividends and surplus upon liquidation

All the ordinary shares provide equal rights to the Company's profits and to any surplus in the event of liquidation and to participation in new issues of shares or other securities. Changes of the rights connected to shares issued by the Company can only be executed in accordance with the procedure laid down by the Swedish Companies Act.

Decisions to pay dividends are made by the general meeting and payment is arranged by Euroclear Sweden AB. Dividends may, under the Swedish Companies Act, only be paid with such an amount that there is full coverage for the Company's restricted equity after the dividend, and only if the dividend is justifiable in view of (i) the requirements which the nature, scope and risks impose on the equity and (ii) the Company's consolidation requirements, liquidity and financial position in general. As a general rule, the shareholders may not decide on dividends exceeding what the board of directors has proposed or approved.

The right to receive dividend payment belongs to the person who is registered as a holder of shares in the share register kept by Euroclear Sweden AB on the dividend record day as determined by the general meeting. If a shareholder cannot be reached through Euroclear Sweden AB, the shareholder's claim on the Company for the dividend amount will remain in force and will only be limited in time by a ten-year statute of limitations. In the event of statutory limitation, the dividend amount will revert to the Company. Neither the Swedish Companies Act nor the articles of association contain any restrictions on the right to receive dividends for shareholders outside Sweden. In addition to any limitations imposed by bank or clearing systems in the relevant jurisdictions, payment to such shareholders shall be made in the same manner as for shareholders resident in Sweden. However, shareholders who have limited tax liability in Sweden will normally be subject to withholding tax; see section "*Specific tax considerations in Sweden*".

SHARE CAPITAL DEVELOPMENT

As of November 21, 2011, the Company's share capital amounted to SEK 50,000 divided between 50 shares, each with a quota value of SEK 100. Thereafter, the share capital has changed according to the table below:

Year	Transaction	Increase in the share capital	Increase in the number of shares	Share capital total	Number of shares	Quota value
2011	Foundation	50,000	10,000	50,000	10,000	5
2013	New share issue[1)]	9,180	1,836	59,180	11,836	5
2016	Share split	–	11,824,164	59,180	11,836,000	0.005
2016	New share issue[2)]	18,250	3,650,000	77,430	15,486,000	0.005
2016	Exchange of convertibles[3)]	8,657.095	1,731,419	86,087.095	17,217,419	0.005
2017	Bonus share issuance	430,435.475	–	516,522.570	17,217,419	0.03
2017	New share issue in the Offering[4)]	233,333.310	7,777,777	749,855.880	24,995,196	0.03

1) The subscription price in the issuance was SEK 13,600 per share, corresponding to SEK 13.60 adjusted for the share split carried out during 2016.
2) The subscription price in the issuance was SEK 25 per share
3) The conversion rate in connection with the exchange of the convertible debt was SEK 17.50.
4) The board of directors will, by use of the authorization given at the extraordinary general meeting in the Company held on September 1, 2017, decide on a new share issue of a maximum of 7,777,777 shares in connection with the Offering according to this Offering Circular. The change of the share capital has been stated in as if all these shares will be issued and the Over-allotment Option is not utilized. The shares will, for reasons related to the issue procedure, be subscribed for by the Sole Global Coordinator on behalf of those entitled to subscribe for shares in accordance with the Offering Circular. The shares in the Offering will thus be issued at an issue price of SEK 0.03 per share whereby the Sole Global Coordinator will, on behalf of those entitled to subscribe for shares, provide a capital contribution to the Company of an amount corresponding to the difference between the Offering Price and the issue price of SEK 0.03 per share.

OWNERSHIP STRUCTURE

As per September 30, 2017 there were approx. 200 shareholders in IRRAS. In the table below IRRAS's ten largest shareholders are presented. The ownership structure as per September 30, 2017 is shown in column 1 and columns 2 and 3 respectively show the ownership structure immediately after completion of the Offering, in terms of whether the Over-allotment Option is exercised or not. The calculations regarding the ownership structure after the completion of the Offering is based on the assumption that the share price is set at the midpoint of the price range, i.e. SEK 47.50, and that the Investing Shareholders do not receive any allocation in the Offering.

	Ownership as per September 30, 2017		Ownership after the Offering if the Over-allotment option is not exercised		Ownership after the Offering if the Over-allotment Option is exercised in full	
Shareholder	Number	Percent	Number	Percent	Number	Percent
Vandel Medical Equipment (CY) Limited	3,259,000	18.93%	3,259,000	13.26%	3,259,000	12.69%
Serendipity Ixora AB (publ)	3,188,107	18.52%	3,188,107	12.97%	3,188,107	12.41%
F.EX Endotherapy Limited	3,030,800	17.60%	3,030,800	12.33%	3,030,800	11.80%
Bacara Holdings Limited	956,107	5.55%	956,107	3.89%	956,107	3.72%
Timoben Medical Holding	652,000	3.79%	652,000	2.65%	652,000	2.54%
Stella Corrente AB	277,143	1.61%	277,143	1.13%	277,143	1.08%
Förvaltnings AB Vretensborg	140,000	0.81%	140,000	0.57%	140,000	0.54%
Mathias Malmgren	137,142	0.80%	137,142	0.56%	137,142	0.53%
Strategic Wisdom Nordic AB	128,571	0.75%	128,571	0.52%	128,571	0.50%
Acto AS	127,142	0.74%	127,142	0.52%	127,142	0.49%
Other present shareholders	5,321,407	30.91%	5,321,407	21.64%	5,321,407	20.71%
New shareholders	–	–	7,368,421	29.97%	7,626,316	29.68%
Total	**17,217,419**	**100.00%**	**24,585,840**	**100.00%**	**25,691,103**	**100.00%**

DILUTION

With full subscription in the Offering and assuming a price in the Offering that corresponds to the midpoint of the price range (i.e. SEK 47.50 per share), the number of shares in IRRAS will increase by 7,368,421 shares, from 17,217,419 to 24,585,840, which corresponds to a dilution of approximately 30.0 percent of the total number of shares in the Company after the Offering. If the Offering is fully subscribed, the Over-allotment Option is fully utilized and the price in the Offering is determined at the midpoint of the price range (i.e. SEK 47.50 per share), the Offering will comprise 8,473,684 shares in IRRAS, corresponding to approximately 33.0 percent of the total number of shares in the Company after the Offering.

APPLICATION FOR LISTING

IRRAS's board of directors has applied for listing of the Company's shares on Nasdaq First North Premier. Provided that the customary conditions are fulfilled, the IRRAS share will start trading on November 22, 2017.

Further, it is the objective of IRRAS's board of directors to, subject to, inter alia, prevailing market conditions, list the Company on Nasdaq Stockholm's main market within twelve months from the completion of the listing on Nasdaq First North Premier.

SHAREHOLDER AGREEMENTS

To the Company's knowledge, there are no agreements in existence among shareholders with a view to control or coordinate the governance of IRRAS.

UNDERTAKINGS NOT TO SELL SHARES (LOCK-UP)

Through the Placing Agreement the Main Shareholders, the shareholding board members and the Company's senior management will undertake, under certain conditions, not to sell their respective shareholdings for a certain period of time after the trade on Nasdaq First North Premier has commenced (the "Lock-up period"). The Lock-up period for the Main Shareholders will be 365 days. Lock-up for Main Shareholders does not include Shares acquired in the Offering. For shareholding board members and the Company's senior management, as well as all participants in the Company's share-related incentive schemes, the Lock-up period will be 365 days. Serendipity Ixora AB (publ), which is one of the Main Shareholders, has advised that it intends to distribute its shares in IRRAS after the completion of the Offering. For more information, see *"Legal considerations and supplementary information" – "Placing agreement"*.

DIVIDEND POLICY

IRRAS will continue to focus on further developing and expanding the Company's operations and sales. Available financial resources and the reported results shall therefore be reinvested in the business to finance the Company's long-term strategy. The board's intention is not to propose a dividend to shareholders before the Company is able to generate long-term sustainable profitability. Any future dividends and the size thereof will be determined on the basis of the Company's long-term growth, earnings trend and capital requirements, taking into account the current objectives and strategies adopted. Dividends shall, in so far as dividends are proposed, be well-balanced with respect to the Company's targets, scope and risk.

SHARE-RELATED INCENTIVE SCHEMES

Overview of share-related incentive schemes

The Company has five ongoing incentive schemes. Below is a table showing an overview of the schemes, including the total number of warrants and options issued to participants or to IRRAS GmbH in order to secure delivery of shares to participants in the incentive schemes.

Incentive scheme	Subscription price per share (SEK)	Maximum number of warrants that can be exercised to secure delivery of shares to participants	Maximum number of shares that can be acquired	Maximum dilution[1)]
2016/2020 warrant schemes	13.60	1,900,000	1,900,000	7.2%
2017/2021 incentive scheme for non-Swedish co-workers	35.00	650,000	650,000	2.6%
2017/2020 warrant schemes for Swedish co-workers	50.00	400,000	400,000	1.6%
2017/2020 warrant schemes for the chairman of the board of directors	50.00	100,000	100,000	0.4%
Share award schemes for the President and CEO	0.00	1,000,000[2)]	740 033[2)]	1.5%[2)]
Total		**4,050,000**	**3 790 033**	**13.3%**

1) Based on the number of shares in the Company after the Offering based on the Offering being fully subscribed, that the price in the Offering is set at the midpoint of the price range, i.e. SEK 47.50, and that the Over-allotment Option is not utilized.
2) The Main Shareholders have, pro rata internally, undertaken contractually with the Company and the President and CEO to procure delivery of one share for each share delivered by the Company under the share award scheme for the President and CEO. Therefore 50 percent of the delivery of shares under the share award scheme for the President and CEO will be delivered by the Main Shareholders (and hence that delivery will be non-dilutive to the Company's owners) with the remaining 50 percent being delivered by using the warrants held by IRRAS GmbH. Warrants which are not used to procure delivery under the share award scheme for the President and CEO will be cancelled. The number of shares that the CEO and President is entitled to under the Share award scheme for the President and CEO is based on the assumption that the price in the Offering is determined at the midpoint of the interval, i.e. SEK 47.50, the Over-allotment Option is not exercised, and that the shares in respect of the FDA approval are vested after completion of the Offering and that the Over-allotment Option is not exercized. The dilution calculation is based on the fact that the Principal Owners undertake to deliver 50 percent of the shares.

Detailed description of share-related incentive schemes

All five share-related incentive schemes have a direct impact on the operating result of the Company as they are reported as personnel costs in the statement of loss under the function relating to the relevant employee. There is no dilutive effect in presented equity per share as there is an operating loss in all years.

2016/2020 warrant scheme

At the annual general meeting held in April 2016, it was resolved to establish a warrant scheme for senior management and key consultants. The participants in the scheme comprise non-Swedish coworkers. The scheme is for a total of 1,900,000 warrants which vest over a four year period. Vested warrants entitle the participants to subscribe for shares in IRRAS with a strike price of SEK 13.60 per share. Any warrants which are vested will be subject to a lock up-undertaking in accordance with what is stated in section *"Legal considerations and supplementary information" – "Placing agreement"*.

In the event the participant ceases to be an employee/consultant or terminates his employment/consultancy relationship with the Company, unvested warrants may be re-acquired by the Company at a price of SEK 0 per warrant. In respect of vested warrants, the employee/consultant may elect to exercise such warrants during a 90 day period. If the warrants are not exercised during said period, the warrants may be re-acquired by the Company at a price of SEK 0 per warrant.

Should all the warrants be exercised, the Company's share capital will increase by SEK 57,000 through the issue of 1,900,000 ordinary shares, corresponding to a dilution of 7.2 percent based on the number of shares in the Company after the Offering[1)].

2017/2021 incentive scheme for non-Swedish co-workers

At the extraordinary general meeting held on September 1, 2017, it was resolved to establish an option scheme for non-Swedish co-workers. The scheme is for a total of 650,000 options which vest over a three year period. 350,000 options have been allocated to non-Swedish co-workers as at the date of this Offering Circular. 300,000 options remain in a pool of options to be used for future allocations.

Vested options entitle the participants to subscribe for shares in IRRAS with a strike price of SEK 35 per share. Any options which are vested will be subject to a lock up-undertaking in accordance with what is stated in section *"Legal considerations and supplementary information" – "Placing agreement"*. In the event the participant ceases to be an employee/consultant or terminates his employment/consultancy relationship with the Company, unvested options will lapse.

Delivery of shares under the 2017/2021 incentive scheme for non-Swedish co-workers has been secured by way of an issuance of 650,000 warrants to the Company's wholly owned subsidiary IRRAS GmbH.

Should all the options be exercised, the Company's share capital will increase by SEK 19,500 through the issue of 650,000 ordinary shares, corresponding to a dilution of 2.6 percent based on the number of shares in the Company after the Offering[1)].

2017/2020 warrant scheme for Swedish co-workers

At the extraordinary general meeting held on September 1, 2017, it was resolved to establish a warrant scheme for Swedish co-workers. The scheme is for a total of 400,000 warrants. 200,000 warrants have been acquired by the Company's Deputy CEO and CFO, Fredrik Alpsten and 60,000 warrants have been acquired by the Company's VP Finance, Sabina Berlin, in both cases against payment of the assessed market value of the warrants. 140,000 warrants have been issued to the Company's wholly owned subsidiary IRRAS GmbH for future transfers to Swedish co-workers. In connection with such future transfers, new participants will be required to pay the market value of the warrants.

The warrants will be subject to a lock up-undertaking in accordance with what is stated in section *"Legal considerations and supplementary information" – "Placing agreement"*. The warrants entitle the participants to subscribe for shares in IRRAS with a strike price of SEK 50 per share.

Should all the warrants be exercised, the Company's share capital will increase by SEK 12,000 through the issue of 400,000 ordinary shares, corresponding to a dilution of 1.6 percent based on the number of shares in the Company after the Offering[1)].

1) The calculation is based on the Offering being fully subscribed, that the price in the Offering is set at the midpoint of the price range, i.e. SEK 47.50, and that the Over-allotment Option is not utilized.

2017/2020 warrant scheme for the chairman of the board of directors

At the extraordinary general meeting held on September 1, 2017, it was resolved to establish a warrant scheme for chairman of the board of directors. The scheme is for a total of 100,000 warrants which have been acquired by the chairman against payment of the assessed market value of the warrants.

The warrants will be subject to a lock up-undertaking in accordance with what is stated in section "*Legal considerations and supplementary information" – "Placing agreement*". The warrants entitle the chairman to subscribe for shares in IRRAS with a strike price of SEK 50 per share.

Should all the warrants be exercised, the Company's share capital will increase by SEK 3,000 through the issue of 100,000 ordinary shares, corresponding to a dilution of 0.4 percent based on the number of shares in the Company after the Offering[1)].

Share award scheme for the CEO

The Company's CEO has been awarded share awards, entitling him to receive 2 percent of the Company's shares outstanding at the time of receipt of the US FDA 510(k) approval as well as to receive 1 percent of the Company's shares outstanding at the completion of a successful IPO. A completion of the Offering will constitute a successful IPO. Any shares which are awarded under the scheme will be subject to a lock up-undertaking in accordance with what is stated in section "*Legal considerations and supplementary information" – "Placing agreement*".

Delivery of shares under the Share award scheme for the President and CEO has been secured by way of an issuance of 1,000,000 warrants to the Company's wholly owned subsidiary IRRAS GmbH. Further, for each share delivered by the Company to the President and CEO under the Share award, the Main Shareholders (pro rata internally) have undertaken contractually with the Company and the President and CEO to procure delivery of one share, meaning that 50 percent of the delivery of shares under the Share award scheme for the President and CEO will be delivered by the Main Shareholders (and hence that delivery will be non-dilutive to the Company's owners) with the remaining 50 percent being delivered by using the warrants held by IRRAS GmbH. Warrants which are not used to procure delivery under the Share award scheme for the President and CEO will be voided.

Subject to that the US FDA 510(k) approval occurs after the completion of the Offering, the share awards will entitle the Company's President and CEO to receive 740,033 shares in total, whereof 245 858 in connection with the completion of the Offering, and 494,175 in connection with receipt of the US FDA 510(k) approval, corresponding to a dilution of 1.5 percent based on the number of shares in the Company after the Offering[2)].

AUTHORIZATION

The extraordinary general meeting on September 1, 2017 decided to authorize the board of directors to, on one or more occasions up until the end of the next annual general meeting, decide upon the issue of new shares with or without deviation from the shareholders preferential rights and with or without conditions for payment in kind, set-off or other conditions.

The reason for the deviation from the shareholders' preferential rights is to allow the Company to raise capital and/or to settle debts.

1) The calculation is based on the Offering being fully subscribed, that the price in the Offering is set at the midpoint of the price range, i.e. SEK 47.50, and that the Over-allotment Option is not utilized.
2) The number of shares that the CEO and President is entitled to under the Share award scheme for the President and CEO is based on the assumption that the price in the Offering is determined at the midpoint of the interval, i.e. SEK 47.50, the Over-allotment Option is not exercised, and that the shares in respect of the FDA approval are vested after completion of the Offering and that the Over-allotment Option is not exercized. The Main Shareholders have, pro rata internally, undertaken contractually with the Company and the President and CEO to procure delivery of one share for each share delivered by the Company under the share award scheme for the President and CEO. Therefore 50 percent of the delivery of shares under the share award scheme for the President and CEO will be delivered by the Main Shareholders (and hence that delivery will be non-dilutive to the Company's owners) with the remaining 50 percent being delivered by using the warrants held by IRRAS GmbH. Warrants which are not used to procure delivery under the share award scheme for the President and CEO will be cancelled. The dilution calculation is based on the fact that the Principal Owners undertake to deliver 50 percent of the shares.

BOARD OF DIRECTORS, SENIOR MANAGEMENT AND AUDITORS

BOARD OF DIRECTORS

The board of directors has its registered office in Stockholm. According to IRRAS's articles of association, the board of directors shall consist of no less than three (3) and no more than seven (7) members without deputies. The board of directors currently consists of five members, out of which four were elected by the annual general meeting held on June 13, 2017. One board member, Anita Tollstadius, was elected at the extraordinary general meeting held on September 1, 2017. All board members are elected for the period until end of the annual general meeting of 2018.

			Independent in relation to		Holdings in IRRAS	
Name	Position	Board member since	The Company and its management	Major shareholders	Shares	Warrants
Anders P. Wiklund	Chairman	2016	Yes	Yes	0	100,000
Kleanthis G. Xanthopoulos	Board member	2015	No	No	0	1,275,000
Marios Fotiadis	Board member	2012	Yes	No	4,215,107 *	0
Saeid Esmaeilzadeh	Board member	2013	Yes	No	3,188,107 **	0
Anita Tollstadius	Board member	2017	Yes	Yes	0	0

* Includes holdings with closely related parties.
** Indirectly via partial ownership through Serendipity Ixora AB (publ).

Below follows further information on the board members' age, position, education and relevant experience, other current assignments, prior assignments during the past five years, ownership of shares and share related instruments in IRRAS and independence.

ANDERS P. WIKLUND

(chairman of the board of directors)
Born in 1940. Board member since 2016 and chairman of the board of directors since 2017. Member of the audit committee and the remuneration committee.

Education and relevant experience: Pharmacist (MSc Pharm) from Farmaceutiska Institutet. Has also studied Business at Stockholm University. Anders P. Wiklund has more than 40 years of global experience in leading positions in pharmaceutical and biotechnology companies, inter alia as co-founder of Esperion and former President and CEO of KabiVitrum Inc and KabiPharmacia Inc.

Other current assignments: Board member of EfRx Pharmaceuticals SA, Life Medical Sweden AB, Wiklund International AB, Orinda Invest AB and Bostadsrättsföreningen Brandmästaren 17. Member of the advisory board of Inspirion Drug Technologies LLC.

Prior assignments (past five years): Chairman of the board of Clavis Pharma ASA. Chairman of the board and ordinary board member of Pharmalink AB. Board member of PEPTONIC medical AB, MedPre AB and Quatrx Inc.

Holdings in IRRAS: 100,000 warrants under the 2017/2020 warrant scheme for the chairman of the board of directors.

Independent in relation to the Company and its management and in relation to major shareholders.

KLEANTHIS G. XANTHOPOULOS

(board member, President and CEO)
Born in 1958. Board member since 2015.

Education and relevant experience: Kleanthis G. Xanthopoulos holds an M.Sc. and a Ph.D. in Molecular Biology from Stockholm University and was an Associate Professor at Karolinska Institutet in Stockholm, Sweden. Kleanthis G. Xanthopoulos has more than 25 years' experience from operational positions in the life science sector. Kleanthis G. Xanthopoulos also has extensive experience as an investor in life science companies in the United States and the European Union and has founded three life science companies, two of which have been listed at NASDAQ (Anadys Pharmaceuticals, Inc. which was acquired by F. Hoffmann-La Roche Inc. for USD 230 million in 2011, and Regulus Therapeutics Inc). Kleanthis G. Xanthopoulos has also financed and brokered numerous creative strategic alliance and partnership deals with large pharmaceutical partners.

Other current assignments: Chairman of the board of Apricus Biosciences Inc., board member of Zosano Pharma Inc., and Sente Inc. Management member in Cerus Advisors DMCC and President of Helios Inc.

Prior assignments (past five years): Board member of Biocom – Life Sciences Association of California, the Biotechnology Innovation Organization, Bioniz Inc. and Laboratori Derivati Organici SpA. CEO of Regulus Therapeutics Inc.

Holdings in IRRAS: 1,275,000 warrants under the 2016/2020 warrant scheme. Also participant in the share award scheme for the President and CEO described in the section *"Share capital and ownership structure"*.

Not independent in relation to the Company, its management or in relation to major shareholders.

MARIOS FOTIADIS

(board member)
Born in 1973. Board member since 2012. Chairman of the audit committee.

Education and relevant experience: Marios Fotiadis holds an MBA from Columbia University, New York. Marios Fotiadis has more than 15 years of experience from positions within venture capital in the life science sector, inter alia as former Partner of Advent International and Enterprice Partners Venture Capital. Marios Fotiadis currently holds the position as CEO of Vandel Group, an international group of pharmaceutical companies and as Managing Director at TVM Capital Private Equity.

Other current assignments: Chairman and CEO of Cerus Advisors DMCC and board member of Mediolanum Farmaceutici SpA, Klaris SA, Sente Inc., Plastics Unbound Ltd. and Rossart Ltd.

Prior assignments (past five years): Board member and CEO of Vandel Group DMCC and board member of Biomar SA.

Holdings in IRRAS: 4,215,107 shares via Vandel Medical Equipment (CY) Limited and Bacara Holdings Limited.

Independent in relation to the Company and its management, but not in relation to major shareholders.

SAEID ESMAEILZADEH

(board member)
Born in 1974. Board member since 2013. Chairman of the remuneration committee and member of the audit committee.

Education and relevant experience: Saeid Esmaeilzadeh holds a Ph.D. in Chemistry from the Stockholm University. Saeid Esmaeilzadeh has been rewarded several awards for research and entrepreneurial accomplishments. Saeid is the founder of several innovative companies within MedTech, Industrials and CleanTech. Saeid Esmaeilzadeh is the chairman of one of IRRAS's major shareholders, Serendipity Ixora AB (publ).

Other current assignments: Chairman of the board of Xbrane Biopharma AB, Serendipity Ixora AB (publ), Premuna AB (publ) and S. Professionals AB. Board member in Diamorph AB (publ), Sdiptech AB (publ), Episurf Medical AB, Serendipity Group AB, Swecure AB (publ), Nextseal AB, Build-r AB, Nextmune MC AB, Nextmune HoldCo AB and Nextmune AB. Deputy board member of Serendip Invest AB, VZL Vilande AB, Auremune AB, Leonova CONSULTING AB, Premune IPR AB, Swecure Europe AB, Intelligent Art AB, Swecure IPR AB, Serendipity Innovations AB, DynaSeal LCT AB and Serendipity Ventures AB.

Prior assignments (past five years): Chairman of the board in Diamorph Bearings AB, Episurf Medical AB, Diamorph Ceramic AB, Swecure AB (publ) and Abera Bioscience AB. Board member and CEO of Sdiptech AB (publ). Board member of Slutplattan QRZOLF 94373 AB, Swedish Pharma Aktiebolag, Vascuring AB, VZL Vilande AB, Slutplattan DOLIA 97844 AB, Juno Ekonomi AB and Abera Bioscience AB. Deputy board member of Organo-Click AB, S. Professionals AB, Serendipity ATS AB, Voff Science AB, Nextseal AB, Build-r AB and Sdip Stucco AB. CEO of Serendipity Ixora AB (publ).

Holdings in IRRAS: 3,188,107 shares via Serendipity Ixora AB (publ), a company which is indirectly owned by Saeid Esmaeilzadeh by 56 percent together with Ashkan Pouya (co-founder of the Serendipity group).

Independent in relation to the Company and its management, but not in relation to major shareholders.

ANITA TOLLSTADIUS

(board member)
Born in 1955. Board member since 2017. Member of the remuneration committee.

Education and relevant experience: Anita Tollstadius holds an MSc in Pharmacy from Uppsala University and an MBA from the Stockholm School of Economics. Anita Tollstadius has more than 30 years of experience from management and organizational development positions within the life sciences sector both in Sweden and abroad. Apart from Anita Tollstadius' long-term engagement with ContextVision AB where she is currently CEO, Anita Tollstadius has counseled a number of global MedTech companies within the areas of product research and development, commercials and communication.

Other current assignments: CEO of ContextVision AB and board member of Tollstadius & Co AB.

Prior assignments (past five years): Board member of Inhalation Scinces Sweden AB and OssDsign AB.

Holdings in IRRAS: None.

Independent in relation to the Company and its management and in relation to major shareholders.

SENIOR MANAGEMENT

The senior management currently consists of Kleanthis G. Xanthopoulos (President and CEO), Fredrik Alpsten (Deputy CEO and CFO), Sabina Berlin (Vice President Finance), Christos Panotopoulos (Chief Scientific Officer and Founder), Karl-Matthias Moehlmann (Senior Vice President Commercial Operations, General Manager Europe) and C. Lance Boling (Vice President of Product Development).

			Holdings in IRRAS	
Name	Position	Member of senior management since	Shares	Warrants and/or Options*
Kleanthis G. Xanthopoulos	President and CEO	2015	0	1,275,000
Fredrik Alpsten	Deputy CEO and CFO	2017	0	200,000
Sabina Berlin	VP Finance	2017	1,200	60,000
Christos Panotopoulos	Chief Scientific Officer and Founder	2012	3,030,800 (via F.EX. Endotherapy Limited)	150,000
Karl-Matthias Moehlmann	(Senior Vice President Commercial Operations, General Manager Europe)	2016	0	214,286
C. Lance Boling	(Vice President of Product Development)	2016	0	241,429

* Please see the description for each person for details on holdings of warrants and/or options.

Below follows further information on the Company's senior managements' age, position, education and relevant experience, other current assignments, prior assignments during the past five years and ownership of shares and share related instruments in IRRAS.

KLEANTHIS G. XANTHOPOULOS

Please refer to description under the section "*Board of directors*" above.

FREDRIK ALPSTEN

(Deputy CEO and CFO)
Born in 1966. Joined IRRAS in 2017.

Education and relevant experience: Fredrik Alpsten holds a M.Sc. in Finance from the Stockholm School of Economics. During the last 6 years Fredrik Alpsten has been Senior Vice President and CFO at Boule Diagnostics AB listed on Nasdaq Stockholm (Main market).

Other current assignments: Board member and chairman of the Audit Committee in Oniva Online Group Europe AB. Chairman of the board in Personlig Almanacka Nordic AB.

Prior assignments (past five years): Board member in Boule Medical AB, Boule Nordic AB, Boule Medical Beijing Pte Ltd. and Clinical Diagnostic Solutions Inc. and authorized signatory in Boule Diagnostics AB.

Holdings in IRRAS: 200,000 warrants under the 2017/2020 incentive scheme for Swedish co-workers.

SABINA BERLIN

(Vice President Finance)
Born in 1983. Joined IRRAS in 2017.

Education and relevant experience: Sabina Berlin has a master's degree in auditing and financial control from the school of business, economics and law at the University of Gothenburg. Sabina Berlin has extensive experience within the areas of business control, accounting and business analysis. Since during 2014 – June 2017, Sabina Berlin held the position as CEO of Juno Ekonomi, a company providing accounting and payroll services to a number of companies within the Serendipity group.

Other current assignments: Board member and major shareholder of Zymology Consulting AB.

Prior assignments (past five years): CEO and deputy board member of Juno Ekonomi AB. Interim CFO in IRRAS from August – October 2017.

Holdings in IRRAS: 1,200 shares and 60,000 warrants under the 2017/2020 incentive scheme for Swedish co-workers.

CHRISTOS PANOTOPOULOS

(Chief Scientific Officer and Founder)
Born in 1962. Founded IRRAS in 2011.

Education and relevant experience: M.D. and Ph.D. from the Medical Faculty of Athens University and a Title of Specialty within Neurosurgery, Prefecture of Athens and Diplôme d'Université de Microchirurgie, Faculté de Médecine Paris-Sud, Université Paris XI. Christos Panotopoulos is a world-renowned neurosurgeon and inventor of several innovative medical devices with extensive clinical and research experience in Greece, France, Sweden and India. Christos Panotopoulos has dedicated the last seventeen years of his career to developing IRRA*flow*.

Other current assignments: Administrator at Microdialysis Ltd, F.EX. Endotherapy Ltd and Jaymore Ltd. Senior consultant and neurosurgeon in Mediterraneo Hospital (Athens, Greece), as well as Sparsh Hospitalv and at BRAINS Advanced Neuroscience Institute (Bangalore, India).

Prior assignments (past five years): Senior consultant and neurosurgeon in Mediterraneo Hospital (Athens, Greece) and BGS Neuroscience Institute (Bangalore, India).

Holdings in IRRAS: 3,030,800 shares through F.EX. Endotherapy Limited and 150,000 warrants under the 2016/2020 warrant scheme.

KARL-MATTHIAS MOEHLMANN

(Senior Vice President Commercial Operations, General Manager Europe)
Born in 1975. Joined IRRAS in 2016.

Education and relevant experience: Holds a M.Sc. in Bio-chemistry and a MBA in Economics from the University of Hannover and a MPH (Public Health) from the University of Graz. Karl-Matthias Moehlmann is an expert regarding the launching of medical devices through commersialisation within the categories of neurology, trauma and orthopedics and has administrated commercial businesses, marketing and research and development for several leading public and private companies such as aap Bioimplants, Benvenue Medical, CRA DePuy Spine, X-Spine, Miedke Hydrocephalus Solutions and Mimedx Biologics. Furthermore, Karl-Matthias Moehlmann was the marketing manager of Kyphon B.v.B.a (acquiered by Medtronic) and VP of business development of Bonesupport AB.

Other current assignments: –

Prior assignments (past five years): –

Holdings in IRRAS: 164,286 warrants under the 2016/2020 warrant scheme, 50,000 options under the 2017/2021 incentive scheme for non-Swedish co-workers.

C. LANCE BOLING

(Vice President of Product Development)
Born in 1959. Joined IRRAS in 2016.

Education and relevant experience: BA Business Management, University of Phoenix.C. Lance Boling is a proven leader in the areas of medical device development, manufacturing, operations and strategic management. Mr. Boling was formerly Director of Nano Technology Development at Abbott Laboratories and has driven numerous development efforts from inception through commercialization, including holding key leadership positions in start-up ventures such as Nanostim, Nevro Corporation, NeuroPace Inc. and Autonomic Technology.

Other current assignments: –

Prior assignments (past five years): Owner and director of Black River Concepts, Inc. Director of Nano-Tech development, Abbot Laboratories. Director of development and operations, Autonomic Technologies.

Holdings in IRRAS: 96,429 warrants under the 2016/2020 warrant scheme, 145,000 options under the 2017/2021 incentive scheme for non-Swedish co-workers.

OTHER INFORMATION CONCERNING THE BOARD OF DIRECTORS AND SENIOR MANAGEMENT

There are no family ties between any board members or members of the senior management. None of the Company's board members or members of senior management have any private interests that could be in conflict with the Company's interests. However, as stated above, several board members and members of senior management have financial interests in the Company through holdings of shares and/or warrants. None of the board members or members of senior management have been elected or appointed as a result of any agreement with major shareholders, customers, suppliers or other parties.

None of the board members or members of senior management has entered into agreements that entitle them to benefits upon termination of their assignment, except for regular severance pay for the senior management as described under the heading "*Remuneration to senior management*" in the "*Corporate governance*" section. IRRAS has no set aside or accrued amounts for pensions or similar benefits for board members or members of senior management upon termination of assignment or employment.

Saeid Esmaeilzadeh was a board member of Vascuring AB in July 2013 when the company was put into liquidation. Vascuring AB was thereafter declared bankrupt and the bankruptcy procedure was concluded in October 2015. In March 2017, Saeid Esmaeilzadeh was also fined by the Swedish Financial Supervisory Authority (Sw. *Finansinspektionen*) due to a breach of the obligation to report Serendipity Ixora AB's (over which Saeid Esmaeilzadeh has a controlling influence) change in shareholding in Episurf Medical AB.

Except for what is stated in relation to Saeid Esmaeilzadeh above, none of the members of the Company's board of directors or senior management have during the past five years (i) been a representative of a company which has been declared bankrupt, put into liquidation or undergone corporate restructuring, (ii) been subject to accusations or convicted in fraud-related offences, (iii) been subject to accusations or sanctions by statutory or regulatory authorities (including recognized professional bodies) or (iv) been disqualified by a court from acting as a member of a company's administrative, managing or supervisory body or from holding any senior or overarching position in a company.

All board members and members of senior management can be reached via the Company's address, Vasagatan 16, SE-111 20 Stockholm, Sweden.

AUDITORS

KPMG AB has been the Company's auditor since June 2015 with Duane Swanson as the auditor in charge. Duane Swanson is an authorized public accountant and member of FAR, the institute for the accounting profession in Sweden. The auditor can be accessed via KPMG, Box 382, SE-101 27 Stockholm, Sweden.

CORPORATE GOVERNANCE

CORPORATE GOVERNANCE WITHIN IRRAS

IRRAS's corporate governance has, prior to the listing on Nasdaq First North Premier, been governed by the Swedish Companies Act (Sw. *aktiebolagslagen (2005:551)*), the Swedish Annual Accounts Act (Sw. *årsredovisningslagen (1995:1554)*) and other applicable laws and regulations, the Company's articles of association and internal policy documents. The internal policy documents include first and foremost the rules of procedure for the board of directors, instructions for the CEO and instructions for financial reporting. Furthermore, IRRAS has a number of policy documents and manuals containing rules and recommendations providing guidance in the Company's business operations and for its employees.

Following the listing on Nasdaq First North Premier, corporate governance will also be based on Nasdaq First North Premier's Rule Book , the Swedish Corporate Governance Code (the "**Code**"), good practices in the stock market and other applicable rules and recommendations. Companies obliged to apply the Code are not required to comply with every rule in the Code at all times. If the Company finds that a certain rule is inappropriate with respect to the Company's specific circumstances, the Company may choose an alternative solution, provided that the Company clearly describes the deviation and the alternative solution as well as provides the reasons for the choice of the alternative solution (all in accordance with the principle of "comply or explain"). IRRAS intends to apply the Code without any deviation from the date on which the Company's shares are listed on Nasdaq Stockholm.

GENERAL MEETING

The shareholders' right to decide on the Company's affairs is exercised through the highest decision-making body – the general meeting (annual general meeting or extraordinary general meeting). The general meeting resolves, for example, on changes to the articles of association, the election of the board of directors and auditors, adoption of the income statement and balance sheet, the appropriation of profit or loss, discharge from liability for the board of directors and the CEOs, the principles for the appointment of the nomination committee and on guidelines for remuneration of senior management.

Shareholders have the right to have a specified matter brought before the general meeting. Shareholders who wish to exercise this right must submit a written request to the Company's board of directors. Such a submission must normally have been received by the board of directors no later than seven weeks before the general meeting.

General meetings shall be held in Stockholm. Notice convening annual general meetings and extraordinary general meetings where amendments to the articles of association are to be addressed, shall be issued no earlier than six weeks and no later than four weeks prior to the meeting. Notice convening other extraordinary general meetings shall be issued no earlier than six weeks and no later than three weeks prior to the meeting. Notice shall be published in the Swedish National Gazette (Sw. *Post- och Inrikes Tidningar*) and by making the notice available on the Company's website (www.IRRAS.se). Furthermore, information regarding the notice shall be advertised in Dagens industri.

To attend and vote at the general meeting, either in person or through a proxy, shareholders must be registered in the share register kept by Euroclear no later than five (5) business days prior to the meeting (i.e. on the record date) and also notify the Company of their participation no later than on the date specified in the notice convening the meeting. This date cannot be a Sunday, other public holiday, Saturday, Midsummer Eve, Christmas Eve or New Year's Eve and not fall earlier than the fifth business day prior to the meeting. Shareholders may be accompanied by assistants at general meetings upon notification. Every shareholder in the Company submitting a matter with sufficient foresight has the right to have the matter brought before the general meeting.

To be able to determine who is entitled to attend and vote at general meetings, Euroclear shall, upon the Company's request, supply the Company with a list of all holders of shares per the record date in connection with each general meeting. Shareholders who have their shares nominee-registered need to instruct the nominee to register the shares temporarily in the name of the shareholder in order to be entitled to attend and vote for their shares at general meetings (voting rights registration). Such registration must be completed no later than on the applicable record date and ceases to be in force once after the record date. Shareholders who have their shares directly registered on an account in the Euroclear system will automatically be included in the list of shareholders.

NOMINATION COMMITTEE

According to the Code, the Company shall have a nomination committee which duties shall include the preparation and drafting of proposals regarding the election of members of the board of directors, the chairman of the board of directors, the chairman of the general meeting and auditors. The nomination committee shall also propose fees for the board members and the auditors. At the shareholders' meeting held on September 1, 2017, it was resolved to establish a nomination committee and to adopt principles for the nomination committee according to which the nomination committee for

the annual general meeting 2018 shall comprise of four members representing the three largest shareholders after the end of the third quarter of 2017, together with the chairman of the board of directors. The largest shareholders refers to the registered shareholders or otherwise known shareholders after the end of the third quarter. Before accepting an invitation to join the nomination committee, a member must carefully consider whether there is a conflict of interest.

The composition of the nomination committee shall be publicly announced on the Company's website no later than six months prior to the annual general meeting. Should a representative resign or leave before the assignment is completed, the shareholder that appointed the departing member shall appoint a new member. Should a shareholder that has appointed a member of the nominating committee substantially decrease its ownership in the Company, the next shareholder in size order shall, if the nominating committee so resolves, be offered to appoint a member of the nominating committee. When such a representative has been appointed, he or she shall be a member to the nomination committee and replace the former committee member who no longer represents one of the three largest shareholders.

The nomination committee shall fulfil the composition requirements set out in the Code. If the major shareholders who have the right to appoint members to the nomination committee wish to appoint persons that would entail that the composition requirements, as set out in the Code, are not met, a larger shareholder shall have priority for their first choice of member over of a smaller shareholder. When appointing a new member as a result of significant changes in ownership, the shareholder who shall appoint a new member shall, when appointing a new member, consider the existing composition of the nomination committee.

The nominating committee shall appoint a chairman among its members. The chairman of the board of directors or other board member shall not be the chairman of the nomination committee. The mandate period of the appointed nomination applies until the appointment of a new nomination committee.

Fees may be paid to the members of the nomination committee after a resolution by the general meeting.

The nomination committee before the annual general meeting to be held in 2018 will be formed after the completion of the Offering.

BOARD OF DIRECTORS

Role of the board of directors

After the general meeting, the board of directors is the Company's highest decision-making body. The board of directors shall be responsible for the organization and management of the Company's affairs, for example by establishing targets and strategies, securing procedures and systems for monitoring of set targets, continuously assess the Company's financial position and evaluate the operational management. Furthermore, the board of directors is responsible for ensuring that correct information is given to the Company's stakeholders, that the Company complies with laws and regulations and that the Company prepares and implements internal policies and ethical guidelines. The board of directors also appoints the Company's CEO and determines his or her salary and other remuneration on the basis of the guidelines adopted by the general meeting.

Composition of the board of directors

Board members elected by the general meeting are elected annually at the annual general meeting for the period until the end of the next annual general meeting. According to the Company's articles of association, the board of directors shall consist of no less than three (3) and no more than seven (7) members without any deputy members.

According to the Code, the majority of the board members elected by the general meeting shall be independent of the Company and its management. In determining whether or not a board member is independent, an overall assessment shall be made of all the circumstances that could call into question the independence of the board member in relation to the Company or its management. Furthermore, according to the Code, at least two of the board members who are independent in relation to the Company and its management shall also be independent in relation to major shareholders. Major shareholders refer to shareholders who directly or indirectly control ten percent or more of all shares and votes in the Company. To determine a board member's independence, the extent of the member's direct and indirect relationships with the major shareholder must be considered. A board member who is an employee or a board member of a company that is a major shareholder is not considered to be independent.

The board members and the board of directors' assessment of the board members' independence in relation to the Company and its management and in relation to major shareholders are presented in the section "*Board of directors, senior management and auditors*". As indicated, it is the board of directors' assessment that the Company fulfils the Code's requirement with regard to independence.

Chairman of the board of directors

The role of the chairman is to lead the board of directors' work and to ensure that the work is carried out efficiently, and that the board fulfils its obligations. The chairman shall, through contact with the CEO, monitor the development of the Company and ensure that board members regularly receive, from the CEO, the information needed to be able to monitor the Company's financial position, financial planning and development. The chairman shall also consult with the CEO on strategic matters and verify that the board' resolutions are implemented in an effective manner.

The chairman is responsible for contacts with the shareholders in respect of ownership matters and to communicate the point of view of the owners to the board. The chairman does not participate in the operative work within the Company and is not part of the senior management.

Work of the board of directors

The board of directors adheres to written rules of procedure which are revised annually and adopted at the inaugural board meeting. The rules of procedure govern, among other things, the practice of the board of directors, tasks, decision-making within the Company, the board's meeting agenda, the chairman's duties and allocation of responsibilities between the board of directors and the CEO. Instructions for financial reporting and instructions for the CEO are also determined in connection with the inaugural board meeting.

The board of directors' work is also carried out based on an annual briefing plan which fulfils the board's need for information. In addition to board meetings, the chairman and the CEO maintain an ongoing dialogue regarding the management of the Company.

The board of directors meets according to a pre-determined annual schedule and at least five ordinary board meetings shall be held between each annual general meeting. In addition to these meetings, extra meetings can be arranged for processing matters which cannot be referred to any of the ordinary meetings.

Committees of the board of directors

The board of directors has set up two committees; the audit committee and the remuneration committee. The board of directors has adopted rules of procedure for both committees.

Audit committee

The audit committee's role is primarily to monitor the Company's financial position, to monitor the effectiveness of the Company's internal control, internal audit and risk management, to be informed about the audit of the annual report and consolidated financial statements, and to review and monitor the auditor's impartiality and independence. The audit committee shall also assist the nomination committee in proposals for resolutions on the election and remuneration of the auditor. The audit committee is comprised of Marios Fotiadis (chairman), Saeid Esmaeilzadeh and Anders P. Wiklund.

Remuneration committee

The remuneration committee's role is primarily to prepare matters regarding remuneration and other terms of employment for the CEO and other members of senior management. The remuneration committee shall also monitor and evaluate ongoing and completed programs for variable remuneration to the Company's management and monitor and evaluate the implementation of the guidelines for remuneration to senior management adopted by the annual general meeting. The remuneration committee is comprised Saeid Esmaeilzadeh (chairman), Anders P. Wiklund and Anita Tollstadius.

Remuneration to the board of directors

Fees to board members elected by the general meeting are approved by the annual general meeting.

At the shareholders' meeting held on September 1, 2017, it was resolved that the chairman shall receive an annual fee of SEK 500,000 for his services, and that each ordinary director shall receive SEK 200,000 for his or her services.

For the fiscal year 2016, the members of the board of directors received remuneration as set out in the table below. All amounts in TSEK unless otherwise indicated.

Name	Position	Fee	Other remuneration	Total
Kleanthis G. Xanthopoulos	Executive Chairman	–	5,222	5,222
Anders P. Wiklund	Board member	–	299	299
Marios Fotiadis	Board member	–	–	–
Saied Esmaeilzadeh	Board member	–	–	–
Christos Panotopoulos	Board member	–	1,417	1,417
Total:		**–**	**6,938**	**6,938**

CEO AND OTHER MEMBERS OF SENIOR MANAGEMENT

The role of the CEO is subordinate to the board of directors and the CEOs' main task is to carry out the Company's ongoing management and the daily activities of the Company. The rules of procedure of the board of directors and the instructions for the CEO stipulate which matters the board shall resolve upon, and which matters fall within the CEOs' area of responsibility. Furthermore, the CEO is responsible for preparing reports and necessary information for decision-making prior to board meetings and presents the material at board meetings.

IRRAS's senior management consists of Kleanthis G. Xanthopoulos (President and CEO), Fredrik Alpsten (Deputy CEO and CFO), Sabina Berlin (Vice President Finance), Christos Panotopoulos (Chief Scientific Officer and Founder), Karl-Matthias Moehlmann (Senior Vice President Commercial Operations, General Manager Europe) and C. Lance Boling (Vice President of Product Development).

Remuneration to senior management

Remuneration to senior management consists of fixed salary, variable remuneration, pension benefits, share-related incentive schemes and other benefits and terms upon severance. For the fiscal year 2016, the Executive Chairman at the time (Kleanthis G. Xanthopoulos) and other members of senior management received salary and other remuneration as set out in the table below. All amounts in TSEK.

	Invocied consultancy costs	Invoiced fees	Bonus	Pension expenses	Total
Executive Chairman (Kleanthis G. Xanthopoulos)	5,222	–	–	–	5,222
Other senior executives	4,091	–	–	–	4,091
Total	**9,313**	**–**	**–**	**–**	**9,313**

Senior management is in general subject to bonus, corresponding to no more than 45 per cent of the annual base salary, if fulfilling set objectives. The Executive Chairman has under certain circumstances right to reimbursement corresponding to two annual salaries in the event of termination of his engagement following a change of control or transfer of the Company's business.

Guidelines for remuneration to members of senior management

The Company's starting point is that salary and other terms and conditions shall enable the group to attract and retain qualified management persons at a reasonable cost for the Company. The remuneration for management persons shall be decided in accordance with IRRAS remuneration policy. The remuneration for management persons consist of fixed salary, variable remuneration, pension and other benefits. In order to avoid that the management persons take unnecessary risks there shall be a fundamental balance between fixed and variable remuneration. Furthermore, the annual general meeting in IRRAS may, if so is ordered, offer long-term incentive schemes such as share or share price related incentive schemes.

Each management person shall be offered a market level fixed salary based on the degree of difficulty, responsibilities, experience and performance. In addition, each management person may from time to time, be offered a variable remuneration (bonus) to be paid in cash. The variable remuneration shall be based on clear predetermined and measurable performance criteria and economic results, as well as predetermined individual objectives and business objectives, and shall also be designed to promote IRRAS long-term value creation. Variable remuneration may not exceed twelve months' fixed salary.

Management persons shall be offered pension terms that are in accordance with market practice in the country where the management persons habitually resides. Non-monetary benefits shall facilitate the work of the management persons and shall correspond to what is considered reasonable in relation to market practice. The fixed salary during the notice period shall, together with severance pay, not exceed 24 months' fixed salary.

The board of directors shall be entitled to deviate from the guidelines in individual cases should there be special reasons for doing so.

The board of directors shall, before every annual general meeting, consider whether or not additional share or share price-related incentive schemes shall be proposed to the general meeting. It is the general meeting that resolves upon such incentive schemes. Incentive schemes shall promote long-term value growth. New share issues and transfers of securities resolved upon by the general meeting in accordance with the rules of Chapter 16 of the Swedish Companies Act are not covered by the guidelines to the extent the annual general meeting has taken, or will take, such decisions.

EXTERNAL AUDIT

The Company's auditor is appointed by the annual general meeting for the period until the end of the next annual general meeting. The auditor examines the annual report and accounts as well as the management performed by the board of directors and the CEO. Following each fiscal year, the auditor shall submit an audit report to the general meeting. The Company's auditor annually reports his observations from the audit.

At the annual general meeting held on June 13, 2017, KPMG AB was re-elected as the Company's auditor with authorized public accountant Duane Swanson as auditor in charge. At the general meeting, it was also resolved that the fees for the auditor shall be paid in accordance to current account. The auditor's fee for the fiscal year 2016 amounted to a total of SEK 92,000.

Additional information regarding the auditor can be found in the section "*Board of directors, senior management and auditors*".

INTERNAL CONTROL

The board of director's responsibility for the internal control is governed by the Swedish Companies Act, the Swedish Annual Reports Act – which requires that information about the main features of IRRAS's system for internal control and risk management related to financial reporting each year must be included in the corporate governance report – and the Code. The board shall, among other things, see to that IRRAS has sufficient internal control and formalized routines to ensure that established principles for financial reporting and internal control are adhered to and that there are effective systems to monitor and control the Company's operations and the risks associated with the Company and its operations.

The overall purpose of the internal control is to, to a reasonable degree, ensure that the Company's operating strategies and targets are monitored and that the owners' investments are protected. Furthermore, the internal control shall ensure that the external financial reporting, with reasonable certainty, is reliable and prepared in accordance with IFRS and Swedish Accounting Standards, that applicable laws and regulations are followed, and that the requirements imposed on listed companies are complied with. The internal control primarily consists of the following five components.

Control environment

The board of directors has the overall responsibility for the internal control in relation to financial reporting. In order to create and maintain a functioning control environment, the board has adopted a number of policies and regulatory documents governing financial reporting. These documents primarily comprise the rules of procedure for the board of directors, instructions for the CEO and instructions for financial reporting. The board has also adopted special authorization procedures and a finance policy. The Company also has a financial manual which contains principles, guidelines and process descriptions for accounting and financial reporting. Furthermore, the board of directors has established an audit committee whose main task is to monitor the Company's financial position, to monitor the effectiveness of the Company's internal control, internal audit and risk management, to be informed about the audit of the annual report and consolidated financial statements, and to review and monitor the auditor's impartiality and independence. The responsibility for the ongoing work of the internal control over financial reporting has been delegated to the Company's CEO. The CEO regularly reports to the board of directors in accordance with the established instructions for the CEO and the instructions for financial reporting. The board also receives reports from the Company's auditor.

The responsibility for the internal, business specific control in the daily operations lies with the person responsible for quality at the Company.

Risk assessment
Risk assessment includes identifying risks that may arise if the basic requirements for the financial reporting of the Company are not met. IRRAS's management team has, in a specific risk assessment document, identified and evaluated the risks that arise in the Company's operations, and has assessed how these risks can be managed. Within the board of directors, the audit committee is primarily responsible for continuously assessing the Company's risk situation, after which the board also conducts an annual review of the risk situation.

Control activities
Control activities limit the identified risks and ensure accurate and reliable financial reporting. The board of directors is responsible for the internal control and monitoring of the Company's management. This is done through both internal and external control activities, and through examination and monitoring of the Company's steering documents related to risk management.

The effectiveness of the control activities are assessed annually and the results from these assessments are reported to the board of directors and the audit committee.

In agreements with sub-suppliers the Company is secured the right to audit each respective sub-suppliers' fulfilment of relevant services, including quality aspects.

Information and communication
The Company has information and communication channels to promote the accuracy of the financial reporting and to facilitate reporting and feedback from operations to the board and senior management, for example by making corporate governance documents such as internal policies, guidelines and instructions regarding the financial reporting available and known to the employees concerned. The board of directors has also adopted an information policy governing the Company's disclosing of information.

Monitoring
The compliance and effectiveness of the internal controls are constantly monitored. The CEO ensures that the board of directors continuously receives reports on the development of the Company's activities, including the development of the Company's results and financial position, as well as information on important events, such as research results and important contracts. The CEO also reports on these matters at each board meeting.

The Company's compliance with relevant policies and guidelines is assessed annually. The results from these assessments are compiled by the CFO in the Company and then reported to the board of directors and the audit committee.

ARTICLES OF ASSOCIATION

The articles of association were adopted on the extraordinary general meeting held on September 1, 2017.

Articles of association of IRRAS AB reg. no 556872-7134

§ 1 Name of the company
The name of the company is IRRAS AB. The company is public (publ).

§ 2 Registered office of the company
The registered office of the company shall be situated in Stockholm municipality.

§ 3 Objects of the company
The objects of the company are to develop, market and sell medical devices, directly or indirectly own and manage real or movable property and to carry out any business activities consistent therewith.

§ 4 Share capital
The share capital of the company shall amount to not less than SEK 502,500 and not more than SEK 2,010,000.

§ 5 Number of shares
The number of shares in the company shall be not less than 16,750,000 and not more than 67,000,000 shares.

§ 6 Board of directors
The board of directors of the company shall consist of not less than three and not more than seven board members.

§ 7 Auditors
For the audit of the company's annual report and accounts as well as the management by the board and the managing director, the company shall have not less than one and not more than two auditors with or without deputy auditors.

§ 8 Convening general meeting
Notice of a general meeting shall be made by announcement in the Swedish Official Gazette (Sw. *Post- och Inrikes Tidningar*) and by making the notice available on the company's website. It shall further be announced in Dagens industri that a notice has been made.

Shareholders wishing to participate in general meetings must be listed as shareholder in a printout or other presentation of the entire share register reflecting the circumstances five weekdays before the general meeting and notify the company no later than the date specified in the notice of the general meeting. The last mentioned date may not be a Sunday, other public holiday, Saturday, Midsummer's Eve, Christmas Eve or New Year's Eve and may not occur earlier than the fifth weekday before the general meeting. A shareholder may be accompanied by advisors at a general meeting only if he or she notifies the company of the number of advisors in accordance with the procedure prescribed for in respect of notice of attendance to be made by a shareholder.

§ 9 Annual general meeting
The following matters shall be addressed at the annual general meeting:

1. Election of a chairman of the meeting.
2. Preparation and approval of the voting register.
3. Election of one or more members to attest the minutes
4. Determination as to whether the meeting has been duly convened.
5. Approval of the proposed agenda
6. Presentation of the annual report and the auditor's report and, if applicable, the consolidated annual report and the auditor's report on the consolidated annual report.
7. Resolution

(a) in respect of the adoption of the profit and loss statement and the balance sheet and, if applicable, the consolidated profit and loss statement and the consolidated balance sheet;

(b) in respect of the allocation of the company's profits or losses as set forth in the adopted balance sheet, and, if applicable, the consolidated balance sheet and

(c) in respect of discharge from liability of the board members and the managing director.

8. Determination of fees for the board of directors and the auditors.
9. Election of board members and auditors
10. Any other matter which rests with the general meeting in accordance with the Swedish Companies Act (2005:551) or the company's articles of association.

§ 10 Fiscal year
The fiscal year of the company shall be the calendar year.

§ 11 CSD registration provision
The company's shares shall be recorded in a CSD register in accordance with the Financial Instruments Accounts Act (1998:1479).

LEGAL CONSIDERATIONS AND SUPPLEMENTARY INFORMATION

GENERAL COMPANY INFORMATION

The name of the Company and its trading name is IRRAS AB. The Company's Swedish corporate identity no. is 556872-7134 and its registered office is in the Municipality of Stockholm, Sweden.

The Company was established on November 21, 2011 and was registered by the Swedish Companies Registration Office the same date. IRRAS is a public limited company and its legal form of business entity is governed by the Swedish Companies Act (2005:551). The object of the Company's operations is to develop, market and sell medical devices, directly or indirectly own and manage real or movable property and to carry out any business activities consistent therewith. Please refer to the section "*Articles of association*" for more information.

COMPANY GROUP

IRRAS AB is parent company of a group comprising one German subsidiary, IRRAS GmbH, and one US subsidiary, IRRAS USA Inc., a Delaware corporation. Both entities are wholly-owned by IRRAS AB.

SIGNIFICANT AGREEMENTS

As at the date of this Offering Circular, IRRAS does not have any significant agreements outside the ordinary course of business. Agreements within the ordinary course of business include primarily manufacturing agreements with the companies that produce the various components of the IRRA*flow* system and agreements with distributors. Both the manufacturing agreements and the distribution agreements are entered under conditions that are customary for the Company's industry.

INSURANCE

The board assesses that the Company's current insurance coverage is satisfactory with regard to the nature and scope of its operations.

DISPUTES AND LEGAL PROCEEDINGS

IRRAS is not and has not been a party in any legal proceedings or arbitration proceedings (including matters not yet decided or such that the Company is aware may arise) during the past twelve months, which have recently had or could have had a significant impact on IRRAS's financial position or profitability.

PLACING AGREEMENT

Pursuant to the terms of an agreement on the placing of shares which is intended to be entered into on or about November 21, 2017 between the Company, the Main Shareholders and the Sole Global Coordinator (the "**Placing Agreement**"), the Company undertakes to issue no more than approximately 34.2 percent of the Shares in the Company after the Offering to the buyers designated by the Sole Global Coordinator.

The Offering is conditional upon the interest in the Offering, according to the assessment of the Sole Global Coordinator, being sufficient for appropriate trading in the Company's share, the Placing Agreement being entered into, certain terms in the agreement being fulfilled and the Placing Agreement not being canceled. The Placing Agreement prescribes that the Sole Global Coordinator's undertaking to arrange for buyers or, in the event the Sole Global Coordinator fails to do so, to purchase the Shares subject to the Offering itself, are conditional, among other things, upon no events occurring with a material adverse effect on the Company as well as certain other customary conditions. The Sole Global Coordinator may terminate the Placing Agreement up until the settlement date should any material adverse events occur, if the guarantees that the Company has provided to the Sole Global Coordinator are breached or if any of the other terms of the Placing Agreement are not met. If the above conditions are not met or the Sole Global Coordinator terminate the Placing Agreement and the Offering may be discontinued. In such case, no Shares will be delivered in connection with the Offering, nor will any payment for Shares be accepted.

Furthermore, the Company intends to provide an Over-allotment Option that the Sole Global Coordinator can exercise for 30 days from the first day of trading in the Company's Shares, which means that the Company undertakes, upon request of the Sole Global Coordinator, to expand the Offering by issuing additional shares corresponding to approximately 15 percent of the number of Shares included in the Offering at the same price as in the Offering. This option may only be exercised to cover any over-allotments in connection with the Offering.

Through the Placing Agreement the Main Shareholders, the shareholding board members and the Company's senior management will undertake, under certain conditions, not to sell their respective shareholdings for a certain period of time after the trade on Nasdaq First North Premier has commenced (the "**Lock-up period**"). The Lock-up period for the Main Shareholders will be 365 days. For shareholding board members and the Company's senior management, as well as all participants in the Company's share-related incentive schemes, the Lock-up period will be 365 days. The lock up-undertaking does not comprise shares acquired in the Offering. Serendipity Ixora AB (publ), which is one of the Main Shareholders, has advised that it intends to

distribute its shares in IRRAS after the completion of the Offering.

Serendipity Group AB, a company ultimately owned by the Serendipity Group's founders, Saeid Esmaeilzadeh and Ashkan Pouya, owns approximately 56 percent of Serendipity Ixora AB (publ) as at the date of this Offering Circular. The remaining 44 percent is owned by approximately 300 Swedish private individuals. The shares distributed to Serendipity Group AB will be covered by the abovementioned 365 day Lock-up period. The shares distributed to the remaining owners of Serendipity Ixora AB (publ) will subject to a reduced 180 day Lock-up period, and will further be placed on an escrow account to ensure the efficiency of the escrow mechanics.

After the end of each Lock-up period the shares may come to be offered for sale, which could affect the market price of the share. The Sole Global Coordinator may grant exemptions from the relevant commitments. In the Placing Agreement, the Company will, among other things, undertake towards the Sole Global Coordinator, with certain exceptions, for a period of 180 days from the first day of trading in the Company's shares on Nasdaq First North Premier, not to decide, or propose that the general meeting decides, to increase the share capital through an issue
of Shares or other financial instruments, without the written consent from the Sole Global Coordinator.

United States

The Shares have not been, and will not be, registered under the Securities Act, and may not be offered or sold within the United States, except in a transaction not subject to, or pursuant to an exemption from, the registration requirements of the Securities Act.

The Shares are being offered and sold by the Sole Global Coordinator in the United States only to QIBs in reliance on Rule 144A and outside the United States in offshore transactions in reliance on Regulation S.

In addition, until 40 days after the commencement of the Offering, an offer or sale of the shares into or within the United States by a dealer (whether or not such dealer is participating in the Offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in reliance on Rule 144A or another available exemption from registration under the Securities Act.

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "**Relevant Member State"**), no shares have been offered or will be offered pursuant to the Offering to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that offers of the shares may be made to the public in that Relevant Member State at any time under the following exemptions under the Prospectus Directive in that Relevant Member State:

(a) to a legal entity which is a qualified investor as defined in the Prospectus Directive; or

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the Sole Global Coordinator; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares shall require the Company or the Sole Global Coordinator to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression "an offer to the public" in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in the Relevant Member State.

In the case of any shares being offered to a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, such financial intermediary will be deemed to have represented, acknowledged and agreed

that the shares acquired by it in the Offering have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public, other than their offer or resale in a Relevant Member State to qualified investors as so defined or in circumstances in which the prior consent of the Managers has been obtained to each such proposed offer or resale. The Company, the Sole Global Coordinator and their affiliates and others will rely upon the truth and accuracy of the foregoing representation, acknowledgement and agreement. Notwithstanding the above, a person who is not a qualified investor, and who has notified the Sole Global Coordinator of such fact in writing, may, with the prior consent of the Sole Global Coordinator, be permitted to subscribe for or purchase Shares in the Offering.

United Kingdom

The Sole Global Coordinator has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the UK Financial Services and Markets Act 2000 (the "**FSMA**")) received by it in connection with the issue or sale of any Shares in circumstances in which Section 21(1) of the FSMA does not apply to the Company; and

(b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any shares in, from or otherwise involving the United Kingdom.

STABILIZATION

In connection with the Offering, the Sole Global Coordinator may carry out transactions in order to provide support for the shares' market price at a level higher than that which might otherwise prevail on the market. Such stabilization transactions may be carried out on Nasdaq First North Premier, the OTC market or otherwise, and may be carried out at any time during the period beginning on the first day when the shares are traded on Nasdaq First North Premier and ending no later than 30 calendar days thereafter. However, the Sole Global Coordinator is under no obligation to carry out stabilization of any kind, nor is there any guarantee that stabilization will be carried out. Moreover, where undertaken, stabilization may be discontinued at any time without prior notice. No transactions will be carried out under any circumstances in order to provide support for the shares' market price at a level higher than the price set in the Offering. Within a week of the expiry of the stabilization period, the Sole Global Coordinator, through the Company, will publish information on whether or not any stabilization has been carried out, the date when stabilization was undertaken, the last date when stabilization was carried out, as well as the price range within which stabilization was undertaken for all of the dates when stabilization transactions were carried out.

ADVISORS' INTERESTS

ABGSC is Sole Global Coordinator and Vator Securities is Financial Adviser in the Offering. ABGSC and Vator Securities provide financial advice and other services to the Company in connection with the Offering. ABGSC and Vator Securities do not own shares in the Company, and they will not receive any financial interests in IRRAS other than previously agreed fees for their services.

SUBSCRIPTION UNDERTAKINGS

The existing shareholders Serendipity Ixora AB[1] (publ) and Vandel Medical Equipment Ltd.[2] (together the "**Investing Shareholders**") have agreed to subscribe for shares in the Offering corresponding to a total of SEK 35 million, which corresponds to 10 percent of the Offering (excluding the Over-allotment Option). The Investing Shareholders are entitled to determine the final allocation of the shares covered by the above commitment, which means that each of the Investing Shareholders has formally undertaken to subscribe for all the shares covered by the commitment.

The Investing Shareholders will not receive any compensation for their undertakings and the are not guaranteed allocation in the Offering. The Investing Shareholders' commitments are not covered by any bank guarantee, blocked funds or pledging or similar arrangement, wherefore there is a risk that these undertakings will not be fulfilled. In the event that the Investing Shareholders do not fulfil their undertakings, such event could have an adverse effect on the execution of the Offering.

1) With address Stureplan 15, SE-111 45 Stockholm, Sweden.
2) With address Prodromou 75, One World Parkview House, 4th floor, Nicosia 2063, Cyprus.

TRANSACTIONS WITH CLOSELY-RELATED PARTIES

The Company's transactions with closely related parties are closely described in note 3 (Related-party transactions) regarding the periods January 1 to September 30, 2017 and January 1 to September 30, 2016 as well as in note 9 (Related-party transactions) regarding the fiscal years 2016, 2015 and 2014 which are included on pages F-6 and F-23 in the section "*Historical Financial Information*". The Company's assessment is that all of the related-party transactions have been conducted in accordance with market conditions.

EMPLOYMENT AND CONSULTANCY AGREEMENTS

As per the day of the Offering Circular the Group has 11 employees, whereof 2 are employed in Sweden, 4 in Germany and 5 in the US, all of which are permanently employed. In addition, the Group have entered into consultancy agreements with 9 long-term consultants. The consultancy agreements pertain inter alia to one person in the Company's senior management, namely the Company's Chief Scientific Officer. Employment and consultancy agreements are entered into on market terms.

PATENTS, TRADEMARKS AND INTELLECTUAL PROPERTY RIGHTS

The Company's intellectual property rights are protected mainly through granted patents and patent applications. A filed patent application provides protection corresponding to patent protection, provided that the patent is granted in the future. The research and development that the Company conducts provides new patent opportunities in ongoing projects, but also in new projects, which are continually evaluated by the Company and patent lawyers hired by the Company.

Whether patents should be applied for or not varies from case to case. For more information, please refer to the headline "*Intellectual property – Patents*" in the section "*Description of the business*".

IRRAS has trademark registrations (in the European Union and in Sweden) and applications in the US for the word "IRRAS". The Company has also registered the product name "IRRA*flow*" in the European Union and an application is pending in the US.

PROCEEDS AND COSTS RELATED TO THE OFFERING

Based on the assumption that the Offering will be fully subscribed, IRRAS's proceeds from the Offering are estimated to be approximately SEK 350 million before costs related to the Offering. IRRAS's costs attributable to the Offering, including compensation to issuing agents and other advisors, and other estimated transaction costs, are estimated to amount to no more than SEK 34 million.

DOCUMENTS AVAILABLE FOR INSPECTION

Copies of the following documents are available on at IRRAS's head office at Vasagatan 16, 111 20 Stockholm, Sweden, during the period of validity of the Offering Circular (regular business hours on weekdays):

- The Offering Circular;
- IRRAS's articles of association;
- Annual reports for the 2015–2016 fiscal years (including auditor's reports) for IRRAS and its subsidiaries; and
- IRRAS's interim report for the period January 1 – September 30, 2017.

TAX CONSIDERATIONS IN SWEDEN

Below is a summary of specific tax rules for individuals and limited liability companies with unlimited tax liability in Sweden, unless otherwise stated. The summary is based on current legislation and is intended only as general information. The summary does not include securities which are held by partnerships or as inventory assets in business operations. Nor does it include any details about special rules pertaining to tax-free capital gains (including prohibition of deduction for capital losses) or corporate dividends which may become applicable should shareholders hold shares which may be considered business-related. Neither are the special rules that may apply to holdings in companies that are or have been so-called closely held companies or to shares purchased on the basis of so-called qualified shares in closely held companies. The summary also does not cover shares held in an investment savings account (ISK) and which are subject to special rules on standardized-rate taxation. Special tax rules apply to certain types of taxpayers, for example investment companies and insurance companies. Each individual shareholder's tax liability will depend on their particular situation. Each holder of shares should consult a tax advisor for information on the special implications that may arise in the individual situation, including the applicability and effect of foreign rules and tax treaties.

UNLIMITED LIABILITY TO PAY TAX IN SWEDEN

Natural persons

Capital gains taxation

When listed shares are sold or otherwise disposed of, a taxable capital gain or deductible capital loss may occur. Capital gains are taxed as income from capital at a rate of 30 per cent. Capital gain or loss is typically determined as the difference between the sales proceeds, after deduction for sales costs, and the acquisition cost. The acquisition cost for all shares of the same type and class is calculated as an aggregate using the averaging method. When selling listed shares, the acquisition cost may be alternatively calculated according to the standardized method at 20 per cent of the sales proceeds after deduction of sales costs.

Capital losses on listed shares are fully deductible against taxable capital gains incurred that arise during the same tax year on shares and other listed securities except shares of mutual funds or special funds containing only Swedish rights to recover debts, so-called bond funds. Capital losses on shares or other ownership interests that cannot be offset in this way may be deducted for up to 70 per cent of value against other capital income.

In the event of a loss in capital income, a tax deduction is granted against municipal and national income tax, as well as against municipal property tax and national property tax. A tax reduction is allowed for 30 per cent of that part of the loss that does not exceed SEK 100,000, and 21 per cent of the remainder. Such a loss cannot be carried forward into a future tax year.

Tax on dividends

For natural persons, dividends on listed shares are taxed in the capital income category at a rate of 30 per cent. For natural persons who are resident in Sweden, a preliminary tax of 30 per cent is normally withheld from dividends. The preliminary tax is withheld by Euroclear Sweden or, for nominee-registered shares, by the nominee.

Limited companies

Tax on capital gains and dividends

For a limited company, all income, including taxable capital gains and dividends, business income is taxed as a rate of 22 per cent. Capital gains and losses are calculated in the same manner as described above in respect to natural persons.

Deductible capital losses on shares or other ownership interests can only be deducted against taxable capital gains on shares or other ownership interests. If certain conditions are met, such a capital loss may also be offset against capital gains on shares or other ownership interests in companies within the same group, provided that a right to make group contributions between companies exists. Any capital loss that cannot be utilized in a given year may be carried forward and offset against taxable capital gains on shares and other ownership interests in future years, without limitation in time.

SHAREHOLDERS WHO HAVE LIMITED TAX LIABILITY IN SWEDEN

Withholding tax

Shareholders who have limited tax liability in Sweden and who receive dividends on shares in a Swedish limited liability company are subject to normal withholding tax. The tax rate is 30 per cent, which however is generally reduced through tax treaties that Sweden has entered into with certain other countries in order to avoid double taxation. Most of Sweden's tax treaties enable a reduction of the Swedish tax to the treaty rate directly at the time of dividend payment if the necessary information about the dividend recipient is provided. In Sweden, the deduction of withholding tax is normally made by Euroclear Sweden or, for nominee-registered shares, by the nominee.

If a 30 per cent withholding tax is withheld from a dividend payment to a person who has the right to be taxed at a lower rate, or if too much withholding tax has otherwise been withheld, repayment can be requested from the Swedish National Tax Agency before the end of the fifth calendar year after the dividend payment.

Capital gains taxation

Shareholders who have limited tax liability in Sweden and whose holdings are not attributable to a permanent establishment in Sweden, are not normally taxed in Sweden for capital gains in connection with the sale of shares. Shareholders may, however, be subject to tax in their country of residence. According to a special tax rule, however, natural persons with limited tax liability in Sweden may be subject to Swedish capital gains tax on the sale of shares if at any time during the year of disposal or the ten calendar years, have been resident or lived permanently in Sweden. The applicability of this rule may however be limited by tax treaties between Sweden and other countries.

CERTAIN US FEDERAL TAX CONSIDERATIONS

Investors are hereby notified that (a) any information in the Offering Circular concerning US federal tax issues is not intended or written to be relied upon, and cannot be relied upon, by holders for the purpose of avoiding penalties that may be imposed on holders under the US Internal Revenue Code of 1986, as amended ("**Code**"); (b) such information is included by the Company in connection with its promotion or marketing of the Offering or matters addressed herein; and (c) investors should seek advice based on their particular circumstances from an independent tax advisor.

INTRODUCTION

The following is a general description of certain US federal income tax consequences that may be relevant with respect to the acquisition, ownership and disposition of shares by a US Holder (as defined below). This summary deals only with initial purchasers of shares in the Offering who use USD as their functional currency and will hold the shares as capital assets (within the meaning of Section 1221 of the Code).

This description does not purport to address all material US tax consequences of the acquisition, ownership and disposition of shares and it does not address aspects of US federal income taxation that may be applicable to investors that are subject to special tax rules, including without limitation:

- certain financial institutions;
- dealers or certain traders in securities;
- real estate investment trusts, regulated investment entities or grantor trusts;
- persons holding shares as part of a straddle, wash sale, conversion transaction or integrated transaction, or persons entering into a constructive sale with respect to the shares;
- persons not using USD as their functional currency for US federal income tax purposes;
- persons who receive shares as compensation for the performance of services;
- persons who are resident in or have a permanent establishment in Sweden;
- tax-exempt entities;
- certain US expatriates;
- "dual resident" corporations;
- persons that own or are deemed to own 10 percent or more of the Company's voting stock; or
- persons holding shares in connection with a trade or business outside the Unites States.

Further, this description does not address state, local, non-US or other tax laws, the US alternative minimum tax, the 3.8 percent US federal Medicare tax on net investment income, or the US federal gift and estate tax consequences of the acquisition, ownership and disposition of shares.

This description is based on the Code, its legislative history, existing and proposed regulations promulgated thereunder, published rulings and court decisions, as well as on the Income Tax Convention between the Unites States and Sweden for avoidance of double taxation (the "**Treaty**"), in each case as in effect on the date of this Offering Circular, all of which are subject to change (or to changes in interpretation), possibly with retroactive effect. The Company has not requested, and does not intend to request, a ruling from the US Internal Revenue Service (the "**IRS**") with respect to matters addressed herein.

US HOLDERS

You are a "US Holder" for purposes of this discussion if for US federal income tax purposes you are a beneficial owner of the Company's shares and are:

- a citizen or individual resident of the United States;
- a corporation created or organized in or under the laws of the United States, any state therein or the District of Columbia;
- an estate the income of which is subject to US federal income taxation regardless of its source; or
- a trust if (i) a court within the United States is able to exercise primary supervision over its administration and one or more US persons have the authority to control all of the substantial decisions of such a trust, or (ii) the trust has a valid election in effect to be treated as a US person for US federal income tax purposes.

If a partnership (or any other entity treated as a partnership for US federal income tax purposes) holds shares, the tax treatment of the partnership and its partners will

generally be dependent on the status of the partner and the activities of the partnership. Such a partner or partnership should consult its advisor as to the US federal tax consequences of acquiring, owning or disposing of the shares.

THE FOLLOWING SUMMARY OF US FEDERAL INCOME TAX CONSEQUENCES IS FOR GENERAL INFORMATION ONLY. ALL POTENTIAL BUYERS ARE RECOMMENDED TO CONSULT THEIR TAX ADVISORS AS TO THE PARTICULAR TAX CONSEQUENCES APPLICABLE WHEN THEY HOLD THE SHARES, INCLUDING THE APPLICABILITY AND EFFECT OF STATE, LOCAL, NON-US AND OTHER TAX LAWS AND POSSIBLE CHANGES IN TAX LAWS.

THE COMPANY BELIEVES THAT IT WAS NOT A "PASSIVE FOREIGN INVESTMENT COMPANY" OR "PFIC" IN 2016. HOWEVER, AS THE DETERMINATION OF PFIC STATUS MUST BE MADE ANNUALLY AT THE END OF EACH TAXABLE YEAR, THERE CAN BE NO ASSURANCE THAT THE COMPANY WILL NOT BE CONSIDERED A PFIC FOR ITS CURRENT TAXABLE YEAR OR ANY FUTURE TAXABLE YEAR. POTENTIAL US INVESTORS SHOULD REVIEW THE INFORMATION UNDER "PASSIVE FOREIGN INVESTMENT COMPANY" BELOW.

TAXATION OF DISTRIBUTIONS

Subject to the PFIC rules discussed below, distributions paid on the shares (including the amount of any Swedish tax withheld) other than certain pro rata distributions of shares to all shareholders, will be treated as dividends to the extent they are paid out of the Company's current or accumulated earnings and profits, as determined under US federal income tax principles. As the Company does not maintain calculations of its earnings and profits under US federal income tax principles, it is expected that distributions generally will be reported to you as dividends.

Subject to applicable limitations, if you are a non-corporate US Holder, dividends paid to you may be eligible for taxation as "qualified dividend income" and therefore may be taxable at favorable rates. Dividends will be treated as qualified dividends (a) if certain holding period requirements are satisfied, (b) if the Company is eligible for benefits according to a Treaty that the IRS has approved for purposes of the qualified dividend rules, and (c) provided that the Company was not a PFIC in the year prior to the year in which the dividend was paid, and is not a PFIC in the year in which the dividend is paid. The Treaty has been approved for the purposes of the qualified dividend rules. Whether we are eligible for benefits under the Treaty may depend upon whether there is substantial and regular trading in our stock on a recognized stock exchange. Thus, each potential non-corporate investor should consult with its tax advisor regarding whether the Company will be eligible for benefits under the Treaty for purposes of the qualified dividend rules. In addition, as discussed below under "Passive Foreign Investment Company", the Company does not believe that it was a PFIC in 2016. However, as the determination of PFIC status must be made annually at the end of each taxable year, there can be no assurance that the Company will not be considered a PFIC for its 2017 taxable year or any future taxable year. See the information below under "Passive foreign investment companies". Accordingly, the Company strongly urges potential non-corporate US investors to consult with their tax advisors regarding the availability of the reduced tax rate on qualified dividends.

Dividends will generally be included in your income on the date of receipt. Dividends will not be eligible for the dividends-received deductions generally available to US corporations under the Code. The amount of any dividend income paid in SEK will be the USD amount calculated by reference to the spot rate in effect on the date of receipt, regardless of whether the payment is in fact converted into USD. If the dividend is converted into USD on the date of receipt, you should not be required to recognize foreign currency gain or loss in respect to the amount received. You may have foreign currency gain or loss if the dividend is converted into USD after the date of receipt, and any such gain or loss will be US-source ordinary income or loss.

Dividends will be treated as foreign-source dividend income for foreign tax credit purposes. Subject to applicable limitations, some of which may vary depending on your circumstances, Swedish income taxes withheld from dividend payments on shares at a rate not exceeding the applicable Treaty rate will be creditable against your US federal income tax liability. Swedish income taxes withheld in excess of the applicable Treaty rate will not ordinarily be eligible for credit against your US federal income tax liability. The rules governing foreign tax credits are complex and you should consult your tax advisor regarding the creditability of foreign taxes in your particular circumstances. Instead of claiming a foreign tax credit you may, subject to applicable restrictions, elect to deduct foreign taxes, including any Swedish taxes, when computing your taxable income. An election to deduct foreign taxes instead of claiming foreign tax credits applies to all foreign taxes paid or accrued in the relevant taxable year.

SALE OR OTHER TAXABLE DISPOSITION OF SHARES

Subject to the PFIC rules discussed below, you generally will recognize taxable gain or loss on a sale or other taxable disposition of the shares equal to the difference between the amount realized on the sale or disposition and your tax basis in the shares, each as determined in USD. This gain or loss will generally be capital gain or loss, and will be long-term capital gain or loss if at the time of the sale or disposition the shares have been held for more than one year. Any gain or loss will generally be US-source for foreign tax credit purposes. The deductibility of capital losses is subject to limitations.

If you receive SEK (or a currency other than USD) upon a sale, exchange or other taxable disposition of the shares, the amount realized generally will be the USD value of the payment received, determined on (a) the date of receipt of payment in the case of a cash basis US Holder and (b) the date of disposition in the case of an accrual basis US Holder. If the shares are traded on an "established securities market", a cash basis taxpayer, or if it so elects, an accrual basis taxpayer, will determine the USD value of the amount realized by translating the amount received at the spot rate of exchange on the settlement date of the sale. A US Holder will have a tax basis in the foreign currency received equal to the USD amount realized. Any foreign currency exchange gain or loss realized on a subsequent conversion of the foreign currency into USD for a different amount will generally be treated as ordinary income or loss from sources within the United States. However, if such foreign currency is converted into USD on the date received by the US Holder, a cash basis or electing accrual basis US Holder should not recognize any foreign currency gain or loss on such conversion.

PASSIVE FOREIGN INVESTMENT COMPANY

A non-US corporation will be classified as a "passive foreign investment company" or PFIC, for US federal income tax purposes in any taxable year in which, after applying certain look-through rules, either:

- at least 75.0 percent or more of its gross income is "passive income"; or
- at least 50 percent or more of the quarterly average value of its gross assets is attributable to assets that produce "passive income" or are held for the production of passive income.

Passive income for this purpose generally includes, among other things, dividends, interest, royalties, rents and gains from commodities and securities transactions and from the sale or exchange of property that gives rise to passive income. However, royalties and gains derived in the active conduct of a trade or business in certain circumstances are considered active income. In determining whether a non-US corporation is a PFIC a proportional share of the income and assets of each corporation in which it owns, directly or indirectly, at least 25.0 percent (by value) is taken into account. Based upon the Company's financial statements and its existing operations and assets, the Company believes that it was not a PFIC for the tax year ended December 31, 2016. Since PFIC status depends upon the composition of the Company's income and assets and the market value of the Company's assets from time to time (which will be measured by the Company's stock price) and as the determination of PFIC status must be made annually at the close of each taxable year, there can be no assurance as to the Company's status in this respect for 2017 or any future taxable year. The Company's PFIC status may be affected by changes in the nature of the Company's income or assets, the rate at which the Company utilizes the proceeds of the Offering, or a decrease in the trading price of the Company's shares. If the Company were a PFIC in any year during a US investor's holding period for the shares, the Company would ordinarily continue to be treated as a PFIC for each subsequent year during which the US investor owns the shares, and similar rules could apply to the Company's subsidiaries that are or become PFICs.

If the Company is a PFIC for any taxable year, a direct (and in some cases indirect), a US Holder generally would be subject to special rules with respect to (i) any gains realized on the sale or other disposition of the shares, and (ii) any "excess distribution" received from the Company in respect of the shares (generally any distributions to the holder in respect of the shares during a single taxable year that total more than 125 percent of the average annual distributions received by the US Holder in respect of the shares during the three preceding taxable years (or, if shorter, the US Holder's holding period for the shares). Under these rules, (a) the gain or excess distribution is allocated ratably over the US Holder's holding period for the shares, (b) the amount allocated to the taxable year in which the gain or excess distribution is realized or to any year before the Company became a PFIC would be taxable as ordinary income during the current fiscal year, (c) the amount

allocated to each other taxable year would be subject to tax at the highest rate in effect for ordinary income for that year, and (d) an interest charge, at the rate generally applicable to an underpayment of tax, would be imposed in respect of the tax attributable to each prior year described in (c). These rules effectively prevent a US Holder from treating gain on the shares as capital gain. For these purposes, gifts, exchanges pursuant to a corporate reorganization and use of the shares as security for a loan may be treated as dispositions.

The above adverse US tax results may be minimized if a US Holder in a PFIC is eligible for and timely makes a valid qualified electing fund ("**QEF**") election. If a QEF election is made, such a US Holder generally will be required to include in income on a current basis its pro rata share of the Company's ordinary income and net capital gains. In order for a US Holder to be able to make a QEF election the Company is required to provide the US Holder with certain information. As the Company does not expect to provide US Holders with the required information, prospective investors should assume that a QEF election will not be available.

Another way a US Holder may minimize adverse PFIC tax consequences is by making a "mark-to-market" election. A mark-to-market election is available to a US Holder only if the shares are considered "marketable stock". Generally, stock will be considered marketable stock if it is "regularly traded" on a "qualified exchange" within the meaning of applicable US Treasury regulations. A class of stock is regularly traded during any calendar year during which such class of stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter. A qualified exchange includes a non-US securities exchange that is regulated or supervised by a governmental authority of the country in which the securities exchange is located and meets certain trading, listing, financial disclosure and other requirements set forth in US Treasury regulations. It is unclear whether Nasdaq First North Premier would be treated as a "qualified exchange" for these purposes. If the Company's stock qualifies as "marketable stock" a US Holder who makes the mark-to-market election, for each year in which the Company is a PFIC, will generally include as ordinary income the excess, if any, of the fair market value of the shares at the end of the taxable year over their adjusted tax basis, and will be permitted an ordinary loss in respect of the excess, if any, of the adjusted tax basis of the shares, over their fair market value at the end of the taxable year (but only to the extent of the net amount of previously included income as a result of the mark-to-market election). If a US Holder makes the election, the holder's tax basis in the shares will be adjusted to reflect the amount of any such income or loss. Any gain or loss recognized on the sale or other disposition of shares in a year in which the Company is a PFIC will be treated as ordinary income or ordinary loss. The mark-to-market election, however, is inapplicable to any subsidiaries of the Company that are PFICs since their shares are not "marketable stock". Any excess distribution from a subsidiary of the Company or gain or loss on a disposition of stock in such a subsidiary will be subject to the adverse US tax rules initially discussed above. US Holders should consult their tax advisors regarding the availability or advisability of the mark-to-market election.

If the Company were regarded as a PFIC, a US Holder of the shares generally would be required to file an information return on IRS Form 8621 for any year in which it receives a direct or indirect distribution with respect to the shares, recognizes gain on direct or indirect disposition of the shares, or makes an election with respect to the shares, reporting distributions received and gains realized with respect to the shares. In addition, if the Company were regarded as a PFIC, a US Holder of the shares would be required to file an annual information return (also on IRS Form 8621) relating to the holder's ownership of the shares. This requirement would be in addition to other reporting requirements applicable to ownership in a PFIC.

US Holders should consult their tax advisors concerning the US federal income tax consequences of holding the shares if the Company were considered to be a PFIC.

BACKUP WITHHOLDING AND INFORMATION REPORTING

Payments of dividends and sales proceeds that are made within the United States or through US or certain US-related financial intermediaries will generally be subject to information reporting and backup withholding, unless (i) you are an exempt recipient or (ii) in the case of backup withholding, you provide a correct taxpayer identification number and certify that you are not subject to backup withholding. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your US federal income tax liability, provided that the required information is timely furnished to the IRS.

Certain individual US Holders (and certain entities) may be required to report to the IRS information with respect to their investment in the shares not held through an account with a US financial institution. US Holders who fail to report required information could become subject to substantial penalties. US Holders are encouraged to consult with their own tax advisors regarding foreign financial asset reporting requirements with respect to their investment in the shares.

US Holders who acquire any of the shares for cash may be required to file an IRS Form 926 (Return by a US Transferor of Property to a Foreign Corporation) with the IRS and to supply certain additional information to the IRS if (i) immediately after the transfer, the US Holder owns directly or indirectly (or by attribution) at least 10 percent of the Company's total voting power or value, or (ii) the amount of cash transferred to the Company in exchange for the shares when aggregated with all related transfers under applicable regulations exceeds 100,000 USD. Substantial penalties may be imposed on a US Holder who fails to comply with this reporting requirement. Each US Holder is urged to consult with its own tax advisor regarding these reporting obligations.

TRANSFER RESTRICTIONS

The Shares in the Offering have not been, and will not be, registered under the Securities Act, or with any securities regulatory authority of any state of the United States, and may not be offered or sold, except in a transaction not subject to, or pursuant to an exemption from, the registration requirements of the Securities Act. In addition, until the end of the 40th calendar day after the closing of the Offering, an offer or sale of Shares within the United States by a dealer (whether or not participating in the Offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A under the Securities Act.

RULE 144A SHARES

Each purchaser of Shares in the Offering within the United States purchasing pursuant to Rule 144A under the Securities Act or another exemption from, or in a transaction not subject to, the registration requirements of the Securities Act will be deemed to have represented, agreed and acknowledged that:

- it has received a copy of the Offering Circular in English and such information as it deems necessary to make an informed investment decision;
- the Shares in the Offering have not been, and will not be, registered under the Securities Act or with any securities regulatory authority of any state of the United States, and may not be offered or sold, except in a transaction not subject to, or pursuant to an exemption from, the registration requirements of the Securities Act and are subject to significant restrictions on transfer;
- it (a) is a QIB as that term is defined in Rule 144A under the Securities Act, (b) is aware that, and each beneficial owner of such Shares has been advised that, the sale to it is being made in reliance on Rule 144A under the Securities Act or pursuant to another exemption from, or in a transaction not subject to, the registration requirements of the Securities Act, (c) is acquiring such Shares in the Offering for its own account or for the account of a QIB and (d) if it is acquiring such Shares for the account of one or more QIBs, has sole investment discretion with respect to each such account and has full power to make the representations, agreements and acknowledgements herein on behalf of each such account;
- the Shares in the Offering are being offered in the United States in a transaction not involving any public offering in the United States within the meaning of the Securities Act;
- if, in the future, it decides to offer, resell, pledge or otherwise transfer Shares sold in the Offering, such Shares may be offered, sold, pledged or otherwise transferred only (a) to a person whom the beneficial owner or any other person acting on its behalf reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, (b) in an offshore transaction in accordance with Rule 903 or Rule 904 of Regulation S under the Securities Act, or (c) in accordance with Rule 144 under the Securities Act (if available), in each case in accordance with any applicable securities laws of any state of the United States or any other jurisdiction;
- the Shares in the Offering are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act and no representation is made as to the availability of the exemption provided by Rule 144 for the resale of any Shares;
- it will not deposit or cause to be deposited the Shares in the Offering into any depositary receipt facility established or maintained by a depositary bank other than a Rule 144A restricted depositary receipt facility, for so long as such Shares are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act;
- The Company and the Sole Global Coordinator and their respective affiliates and others will rely upon the truth and accuracy of the foregoing representations, agreements and acknowledgements; and
- The Company shall not recognize any offer, sale, pledge or other transfer of the Shares made otherwise than in compliance with the above stated restrictions.

PROSPECTIVE PURCHASERS ARE HEREBY NOTIFIED THAT SELLERS OF SHARES MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A.

REGULATION S SHARES

Each purchaser of Shares in the Offering purchasing in compliance with Regulation S will be deemed to have represented, agreed and acknowledged that (terms used in this paragraph that are defined in Regulation S are used herein as defined therein):

- it has received a copy of the Offering Circular and such other information as it deems necessary to make an informed investment decision:
- the Shares in the Offering have not been, and will not be, registered under the Securities Act, or with any securities regulatory authority of any state of the United States;
- it and the person, if any, for whose account or benefit it is acquiring the Shares in the Offering was located outside the United States at the time that the buy order for the Shares was originated for the purposes of Rule 903 of Regulation S under the Securities Act and continues to be located outside the United States and has not purchased the Shares for the account or benefit of any person in the United States or entered into any arrangement for the transfer of the Shares or any economic interest therein to any person in the United States;
- the purchaser is not an affiliate of the Company or a person acting on behalf of such affiliate;
- the Shares have not been offered to it by means of any "directed selling efforts" as defined in Regulation S;
- if it is acquiring Shares as a fiduciary or agent for one or more investor accounts, it has sole investment discretion with respect to each such account and it has full power to make the representations, agreements and acknowledgements herein on behalf of each such account;
- the Shares in the Offering are being offered outside the United States pursuant to Regulation S and, subject to certain exceptions, such Shares may not be offered or sold within the United States;
- it is aware of the restrictions on the offer and sale of the Shares in the Offering pursuant to Regulation S described in this Offering Circular.
- the Company, the Sole Global Coordinator and their respective affiliates and others will rely upon the truth and accuracy of the foregoing representations, agreements and acknowledgements; and
- the Company shall not recognize any offer, sale, pledge or other transfer of the Shares made otherwise than in compliance with the above stated restrictions.

HISTORICAL FINANCIAL INFORMATION

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CONDENSED FINANCIAL INFORMATION FOR THE PERIOD JANUARY 1 TO SEPTEMBER 30, 2017 AND JANUARY 1 TO SEPTEMBER 30, 2016

CONDENSED CONSOLIDATED STATEMENT OF LOSS

All amounts in TSEK (unless otherwise stated)	2017-01-01 2017-09-30	2016-01-01 2016-09-30
Revenue	11,304	–
Cost of sales	–3,616	–
Gross profit	**7,688**	**–**
Other operating income	490	201
Sales and marketing expenses	–10,653	–5,730
Administrative expenses	–28,955	–12,628
Research and development expenses	–6,327	–2,169
Other operating expenses	–	–441
Operating loss	**–37,756**	**–20,767**
Finance income	135	1
Finance costs	–31	–775
Net financial items	**104**	**–774**
Loss before tax	**–37,653**	**–21,541**
Tax	–	–
Loss for the period	**–37,653**	**–21,541**
Earnings per share for the period before and after dilution (SEK)	–2.19	–1.51

CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE LOSS

All amounts in TSEK	2017-01-01 2017-09-30	2016-01-01 2016-09-30
Loss for the period	**–37,653**	**–21,541**
Other comprehensive loss for the period		
Items that may be subsequently reclassified to profit or loss		
Translation differences	–727	–61
Other comprehensive income for the period, net of tax	**–727**	**–61**
Total comprehensive loss for the period	**–38,379**	**–21,602**

The notes on pages F-6–F-7 are an integral part of the above interim financial statements.

CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION

Amounts in TSEK	2017-09-30	2016-09-30
ASSETS		
Non-current assets		
Capitalized development costs	32,464	16,906
Patents	2,611	2,927
Tangible non-current assets	228	17
Total non-current assets	**35,304**	**19,850**
Current assets		
Inventories	5,057	–
Other current receivables	9,725	579
Prepaid expenses and accrued income	219	67
Cash and cash equivalents	28,516	81,669
Total current assets	**43,516**	**82,316**
TOTAL ASSETS	**78,820**	**102,166**
EQUITY		
Share capital	517	86
Other paid in capital	175,780	176,211
Reserves	–335	–61
Retained earnings including result for the period	–104,515	–74,755
Total equity	**71,448**	**101,481**
LIABILITIES		
Current liabilities		
Accounts payable	3,828	261
Other liabilities	222	199
Accrued expenses and prepaid income	3,322	225
Total current liabilities	**7,372**	**685**
TOTAL EQUITY AND LIABILITIES	**78,820**	**102,166**

The notes on pages F-6–F-7 are an integral part of the above interim financial statements.

CONDENSED CONSOLIDATED STATEMENT OF CHANGES OF EQUITY

Amounts in TSEK	Share capital	Other paid in capital	Reserves	Retained earnings incl. result for period	Total equity capital
Opening balance as of 2016-01-01	**59**	**60,740**	**–**	**–60,670**	**129**
Comprehensive income					
Loss for the period	–	–	–	–21,541	–21,541
Other comprehensive loss for the period	–	–	–61	–	–61
Total comprehensive loss for the period	**–**	**–**	**–61**	**–21,541**	**–21,602**
Transactions with shareholders					
Incentive schemes	–	–	–	7,456	7,456
New share issue	–	91,232	–	–	91,250
Issuing charges	–	–6,052	–	–	–6,051
Redemption of convertible bonds	–	30,291	–	–	30,300
Equity as of 2016-09-30	**86**	**176,211**	**–61**	**–74,755**	**101,481**
Opening balance as at 2017-01-01	**86**	**176,211**	**392**	**–81,574**	**95,115**
Comprehensive income					
Loss for the period	–	–	–	–37,653	–37,653
Other comprehensive loss for the period	–	–	–727	–	–727
Total comprehensive loss for the period	**–**	**–**	**–727**	**–37,653**	**–38,380**
Transactions with shareholders					
Bonus share issue	431	–431	–	–	–
Incentive schemes	–	–	–	14,712	14,712
Equity as of 2017-09-30	**517**	**175,780**	**–335**	**–104,515**	**71,448**

The notes on pages F-6–F-7 are an integral part of the above interim financial statements.

CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

Amounts in TSEK	2017-01-01 2017-09-30	2016-01-01 2016-09-30
Cash flow from operating activities		
Loss for the period	–37,756	–20,767
Adjustments for non-cash items		
– Depreciation and amortization	1,874	238
– Incentive schemes, recognized in statement of loss	14,712	7,456
Interest received	–	23
Interest paid	–1	19
Increase in inventory	–5,057	–
Increase in operating receivables	–9,395	–288
Increase/decrease in operating payables	4,334	–711
Cash flow used in operating activities	**–31,289**	**–14,029**
Cash flow from investing activities		
Investments in tangible assets	–219	–18
Investments in capitalized development expenses	–10,062	–7,890
Cash flow used in investing activities	**–10,282**	**–7,908**
Cash flow from financing activities		
Proceeds from issue of share capital	–	85,198
Cash flow from financing activities	**–**	**85,198**
Cash flow for the period	**–41,570**	**63,261**
Cash and cash equivalents at the beginning of the period	70,814	18,408
Exchange rate differences in cash and cash equivalents	–728	0
Cash and cash equivalents at the end of the period	**28,516**	**81,669**

The notes on pages F-6–F-7 are an integral part of the above interim financial statements.

NOTES

NOTE 1 ACCOUNTING PRINCIPLES

This interim report was prepared in accordance with IAS 34 Interim Financial Reporting and the Swedish Annual Accounts Act. Accounting principles have been applied as reported in the section "*Historical financial information for the fiscal years 2016, 2015 and 2014*".

New or amended standards or interpretation of standards effective as of 1 January 2017 have not had any significant impact on IRRAS´s financial statements. The Company is performing ongoing analyses of the potential effects of implementation of IFRS 15 Revenue from contracts with customers, which comes into effect 1 January 2018, and has not yet determined the potential impact of implementing the standard.

NOTE 2 SIGNIFICANT RISKS AND UNCERTAINTIES

The Group's operations are subject to a number of risks and uncertainties. There is always a risk of competitors offering more efficient and better products than IRRAS and that the customer base will shrink as a result. Faulty and delayed deliveries or non-deliveries from the company's suppliers could in turn result in delayed, defective or faulty deliveries by the company. There is no guarantee that the company's operations will not be subjected to restrictions by government agencies or that that they will obtain the regulatory approval they need in the future. There is also the risk that the company could lose its ability to develop products, that its products cannot be launched on schedule or that market reception is poorer than expected. These risks could result in lower sales, which would then have a negative impact on the company's earnings. The company is also exposed to risks from customers who are unable to pay and the possibility of the company being unable to finance its operations.

Going concern basis of accounting

The consolidated interim financial statements have been prepared on a going concern basis. The Group has historically incurred losses due to the development of IRRAflow and more recently due to the commercialization launch in 2017. In preparing the financial statements, management has based their assumptions based on existing cash balances and future cash flows from sales of products. In estimating future cash expenditures, management has considered those which are at management discretion and can be eliminated or postponed. The majority of the Group's expenditures are discretionary. The current commercialization and product development strategy may not be attainable if additional financing is not obtained which would result in the elimination of certain activities such as further development of products and expansion into certain markets and substantially reducing cash outflows.

Management acknowledges that there are uncertainties in the estimation of these future cash flows but based on a revised strategy, if additional financing was not achieved, management believes there is a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. If for any reason the Group is unable to continue as a going concern, this could have an impact on the Group's ability to realize assets at their recorded values, in particular capitalized development costs and to extinguish liabilities in the normal course of business at the amounts stated in the consolidated financial statements.

NOTE 3 TRANSACTIONS WITH RELATED PARTIES

Related parties are defined as management, the Board of Directors of the Parent Company and the Group, subsidiaries and owners of the Group. Shares in subsidiaries, as well as transactions between Group companies, are eliminated in the consolidated accounts, therefore detailed breakdowns of the amounts and types of these transactions are not provided.

The following transactions have taken place with related parties during the period:

TSEK, expensed during the period	2017-01-01 2017-09-30	2016-01-01 2016-09-30	Comment
Chairman of the board Anders P. Wiklund	233	192	Costs for invoiced consultancy services
President and CEO Kleanthis G. Xanthopoulos	4,889	4,123	Costs for invoiced consultancy services
Christos Panotopoulos	1,173	1,020	Costs for invoiced consultancy services
Juno Ekonomi AB[1)]	301	341	Costs for accounting services

1 Juno Ekonomi AB is a company in the Serendipity Group.

The Group rented office space from a related party of the Chairman of the Board during the period. The expense for January to September 2017 amounts to TSEK 86 (31).

Kleanthis G. Xanthopoulos, via his company Helios Capital, signed an agreement with IRRAS in 2015 which was subsequently updated in 2016 and 2017, in which he will provide services to the company relating to business management (corresponding to a position as CEO of the Company). The agreement also entitles Kleanthis G. Xanthopoulos to invoice IRRAS for other costs incurred in his work, such as travel costs.

Christos Panotopoulos, through his company F.EX.Endotherapy Ltd., provides consulting services relating to medical expertise and holds the title of Chief Scientific Officer. The agreement also entitles Christos Panotopoulos to invoice IRRAS for other costs incurred in his work, such as travel costs.

Anders P. Wiklund was contracted on March 10, 2016, via his company Wiklund International, to provide strategic advice to the company and at the same time was elected to the company's Board of Directors. The agreement relates to operational work in addition to the work of the Board. The agreement also entitles Mr. Wiklund to invoice IRRAS for other costs incurred in his work, such as travel costs. The agreement term was associated with Mr. Wiklund's term as a member of the Board of Directors. The agreement was terminated on August 31, 2017.

Under all agreements, the services must be performed at a fixed price per year where all consulting services are billed on a monthly basis, with the exception of Anders P. Wiklund, who billed on an annual basis.

NOTE 4 NUMBER OF SHARES

As of September 30, 2017 the number of shares and votes in IRRAS AB amounted to 17,217,419 (14,309,816 as of September 30, 2016). In addition, the company has five ongoing incentive programs (see note 6 below for a description).

NOTE 5 PLEDGED SECURITIES AND CONTINGENT LIABILITIES

There were no pledged securities and contingent liabilities at 30 September 2017.

NOTE 6 INCENTIVE SCHEMES

The company has five outstanding incentives schemes. The expense for the employee incentive schemes during the nine month period that ended September 30, 2017 amounted to SEK 14.7 million (7.5).

2016/2020 warrant scheme

In 2016 a total of 1,900,000 warrants were issued without charge to management and key individuals in the Group. The President and CEO has 1,275,000 warrants and three senior executives has between 96,429 to 164,286 warrants each. There was no change in the number of issued warrants during the nine month period.

Each warrant entitles the holder to subscribe for one new share in the Company until April 30, 2020 at a subscription price of SEK 13.60 per share.

2017/2021 incentive scheme for non-Swedish co-workers

During the nine months ended September 30, 2017 a total of 350,000 warrants have been issued without charge to management and key individuals in the Group. Two senior executives have 50,000 and 145,000 warrants respectively.

Each warrant entitles the holder to subscribe for one new share in the Company until October 31, 2021 at a subscription price of SEK 35.00 per share.

2017/2020 warrant scheme for Swedish co-workers

In October 2017, after the end of the period, 200,000 warrants have been issued to the management and key individuals in the Group. The warrants have been issued against payment of market value.

Each warrant entitles the holder to subscribe for one new share in the Company until October 31, 2020 at a subscription price of SEK 50.00 per share.

2017/2020 warrant scheme for the chairman of the board of directors

In October 2017, after the end of the period, 100,000 warrants have been issued to the Chairman of the board of directors. The warrants have been issued against payment of market value.

Each warrant entitles the holder to subscribe for one new share in the Company until October 31, 2020 at a subscription price of SEK 50.00 per share.

Share award program for the President and CEO

In September 2015 IRRAS and the President CEO agreed on a share-based payment arrangement whereby the President CEO will receive a number of shares corresponding to 1.0 percent of the number of shares outstanding if and when a "Qualified financing" transaction (e.g. IPO) takes place, and 0.5 percent of the number of shares outstanding if and when a 510(k) FDA approval is received.

In March 2017, it was agreed that the President and CEO will receive an additional 1.5 percent of the number of shares outstanding if and when a 510(k) FDA approval is received. During the third quarter 2017 it was resolved that for each share delivered by the Company to the President and CEO under the Share award scheme, the Main Shareholders *pro rata* based on existing proportion of shares have undertaken contractually with the Company and the CEO to procure delivery of one share, meaning that 50 percent of the delivery of shares under the Share award scheme for the CEO will be delivered by the Main Shareholders (and hence that delivery will be nondilutive to the Company's shareholders). However, from an IFRS perspective, 100 percent of the shares are expensed from the date of the agreement until the exercise date.

NOTE 7 SIGNIFICANT EVENTS AFTER THE END OF THE PERIOD

No significant events have taken place after September 30, 2017, up to and including the date of this report.

AUDITOR'S REVIEW REPORT

To the board of directors of IRRAS AB

Company reg. no 556872-7134

Introduction

We have reviewed the accompanying condensed consolidated interim financial information (Interim Report) on pages F-2, - F-7 for IRRAS AB, comprising the condensed consolidated interim statement of financial position at September 30, 2017 and the condensed consolidated interim statements of loss, comprehensive loss, changes in equity and cash *flow*s for the nine months then ended. The board of directors and the CEO are responsible for the preparation and presentation of this condensed consolidated interim report in accordance with IAS 34 "Interim Financial Reporting". Our responsibility is to express a conclusion on this condensed consolidated interim report based on our review.

Scope of the review

We conducted our review in accordance with International Standard on Review Engagements 2410, Review of Interim Financial Information Performed by the Independent Auditor of the Entity. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying condensed consolidated interim report as at September 30, 2017 was not prepared, in all material respects, in accordance with IAS 34 "Interim Financial Reporting".

Stockholm, November 13, 2017

KPMG AB

Duane J. Swanson
Authorised Public Accountant

FINANCIAL INFORMATION FOR THE FISCAL YEARS 2016, 2015 AND 2014

STATEMENT OF LOSS

All amounts in TSEK (unless otherwise stated)	Notes	Group[1] 2016-01-01 2016-12-31	Parent Company 2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Revenue		–	–	–	–
Cost of sales		–	–	–	–
Gross profit		**–**	**–**	**–**	**–**
Other operating income	6	239	239	465	934
Sales and marketing expenses	5,8	–9,136	–4,270	–2,040	–555
Administrative expenses	5,7,8	–17,935	–17,394	–5,054	–5,575
Research and development expenses	5,8	–3,335	–2,722	–4,322	–2,865
Other operating expenses	6	–662	–662	–123	–12
Operating loss		**–30,828**	**–24,808**	**–11,074**	**–8,073**
Finance income		1	15	1	21
Finance costs	6	–1,071	–798	–1,788	0
Net financial items		**–1,070**	**–783**	**–1,787**	**21**
Loss before tax		**–31,898**	**–25,591**	**–12,861**	**–8,052**
Tax	10	–	–	–	–
Loss for the period		**–31,898**	**–25,591**	**–12,861**	**–8,052**
Earnings per share for the period before and after dilution (SEK)		–2.12	–1.70	–1.09	–0.68

1 Group was formed in July 2016 upon registration of the subsidiaries. The consolidated statement of loss includes the parent company income and expenses for the full year 2016.

STATEMENT OF COMPREHENSIVE LOSS

All amounts in TSEK	Group[1] 2016-01-01 2016-12-31	Parent Company 2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Loss for the period	**–31,898**	**–25,591**	**–12,861**	**–8,052**
Other comprehensive income for the period				
Items that may be subsequently reclassified to profit or loss				
Translation differences	392	–	–	–
Other comprehensive income for the period, net of tax	**392**	**–**	**–**	**–**
Total comprehensive loss for the period	**–31,506**	**–25,591**	**–12,861**	**–8,052**

1 The Group was formed in July 2016 upon registration of the subsidiaries. The consolidated statement of profit or loss includes the parent company income and expenses for the full year 2016. .

The notes on pages F-14–F-26 are an integral part of the above financial statements.

STATEMENT OF FINANCIAL POSITION

		Group[1)]	Parent Company		
Amounts in TSEK	Notes	2016-12-31	2016-12-31	2015-12-31	2014-12-31
ASSETS					
Non-current assets					
Capitalized development costs	11	24,033	24,033	9,016	3,667
Patents	11	2 847	2,847	3,164	3,480
Tangible non-current assets	12	16	–	–	–
Investments in subsidiaries	21	–	11,193	–	–
Receivables from Group Companies		–	4,082	–	–
Total non-current assets		**26,897**	**42,156**	**12,180**	**7,147**
Current assets					
Receivables from Group Companies		–	563	–	–
Other current receivables	13	489	454	359	627
Prepaid expenses and accrued income	14	60	60	–	–
Cash and cash equivalents		70,814	60,460	18,408	6,777
Total current assets		**71,363**	**61,537**	**18,767**	**7,404**
TOTAL ASSETS		**98,260**	**103,693**	**30,947**	**14,550**
EQUITY					
Share capital	15	86	86	59	59
Fund for research & development		–	15,017	–	–
Other paid in capital		176,211	–	–	–
Capital surplus		–	142,635	27,164	27,164
Reserves		392	–	–	–
Accumulated deficit including result for the period		–81,575	–	–	–
Retained earnings		–	–31,117	–14,233	–6,181
Loss for the period		–	–25,591	–12,861	–8,052
Total equity		**95,115**	**101,030**	**129**	**12,990**
LIABILITIES					
Current liabilities					
Accounts payable		2,485	2,206	1,161	1,021
Other liabilities		191	–	–	–
Accrued expenses and prepaid income	16	469	457	151	539
Convertible bonds	19	–	–	29,505	–
Total current liabilities		**3,145**	**2,663**	**30,817**	**1 ,561**
TOTAL EQUITY AND LIABILITIES		**98,260**	**103,693**	**30,947**	**14,550**

1 The Group was formed in July 2016 upon registration of the subsidiaries. The consolidated statement of profit or loss includes the parent company income and expenses for the full year 2016.

The notes on pages F-14–F-26 are an integral part of the above financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Amounts in TSEK	Notes	Share capital	Other paid in capital	Reserves	Retained earnings incl. result for the period	Total equity
Opening balance as at 2016-01-01		**–**	**–**	**–**	**–**	**–**
Registration of subsidiary[1)]		59	60,740	–	–60,670	129
Comprehensive income						
Loss for the period		–	–	–	–31,898	–31,898
Other comprehensive income for the period						
Translation differences		–	–	392	–	392
Total comprehensive loss for the period		**–**	**–**	**392**	**–31,898**	**–31,506**
Transactions with shareholders						
Incentive schemes	8	–	–	–	10,993	10,993
New share issue		18	91,232	–	–	91,250
Issuing charges			–6,052	–	–	–6,052
Redemption of convertible bonds		9	30,291	–	–	30,300
Total transactions with shareholders		**27**	**115,471**	**–**	**10,993**	**126,493**
Equity as at 2016-12-31		**86**	**176,211**	**392**	**–81,575**	**95,115**

1 The Group was formed in July 2016 upon registration of the subsidiaries. The consolidated statement of profit or loss includes the parent company income and expenses for the full year 2016.

The notes on pages F-14–F-26 are an integral part of the above financial statements.

STATEMENT OF CHANGES IN EQUITY, PARENT COMPANY

	Restricted equity		Non-restricted equity			
Amounts in TSEK	Share capital	Fund for research and development[1)]	Other paid in capital	Retained earnings	Loss for the period	Total equity
Opening balance as at 2014-01-01	**59**	**–**	**27,164**	**3,217**	**–18,591**	**11,849**
Comprehensive income						
Loss allocation as decided at annual general meeting	_	_	_	–18,591	18,591	–
Loss for the period	_	_	–		–8,052	–8,052
Total comprehensive loss for the period	**–**	**–**	**–**	**–18,591**	**10,538**	**–8,052**
Transactions with shareholders						
Conditional shareholders contribution	–	–	–	9,193	–	9,193
Total transactions with shareholders	**–**	**–**	**–**	**9,193**	**–**	**9,193**
Equity as at 2014-12-31	**59**	**–**	**27,164**	**–6,181**	**–8,052**	**12,990**
Opening balance as at 2015-01-01	**59**	**–**	**27,164**	**–6,181**	**–8,052**	**12,990**
Comprehensive income						
Loss allocation as decided at annual general meeting	–	–	–	–8,052	–8,052	–
Loss for the period	–	–	–	–	–12,861	–12,861
Total comprehensive loss for the period	**–**	**–**	**–**	**–8,052**	**–4,808**	**–12,861**
Equity as at 2015-12-31	**59**	**–**	**27,164**	**–14,233**	**–12,861**	**129**
Opening balance as at 2016-01-01	**59**	**–**	**27,164**	**–14,233**	**–12,861**	**129**
Comprehensive income						
Loss allocation as decided at annual general meeting	–	–	–	–12,861	12,861	–
Loss for the period	–	–	–		–25,591	–25,591
Total comprehensive loss for the period	**–**	**–**	**–**	**–12,861**	**–12,730**	**–25,591**
Transactions with shareholders						
Incentive schemes	–	–	–	10,993	–	10,993
New share issue	18	_	91,232	_	_	91,250
New share issuance costs		_	–6,052	_	_	–6,052
Redemption of convertible bonds	9	_	30,291	_	_	30,300
Total transactions with shareholders	**27**	**–**	**115,471**	**10,993**	**–**	**126,491**
Allocation to fund for research and development	_	15,017	_	–15,017	_	–
Equity as at 2016-12-31	**86**	**15,017**	**142,635**	**–31,117**	**–25,591**	**101,030**

1 This is restricted equity under the Swedish Annual Accounts Act and is included in Other paid in capital in the consolidated equity.

The notes on pages F-14–F-26 are an integral part of the above financial statements.

STATEMENT OF CASH FLOWS

All amounts in TSEK	Notes	Group[1)] 2016-01-01 2016-12-31	Parent Company 2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Cash flows from operating activities					
Loss for the period		−30,828	−24,808	−11,074	−8,073
Adjustment for non-cash items					
– Depreciation and amortization		318	316	316	316
– Incentive schemes, recognized in statement of loss	8	10,993	8,438	–	–
Interest received		1	1	1	21
Interest paid		−4	−4	0	0
Increase/decrease in operating receivables		−189	−704	268	−368
Increase/decrease in operating payables		1,517	1,351	−249	614
Cash flow used in operating activities		**−18,192**	**−15,409**	**−10,737**	**−7,490**
Cash flows from investing activities					
Investments in subsidiaries		–	−8 638	–	–
Investments in capitalized development costs		−15,017	−15,017	−5,350	−3,667
Investments in tangible assets		−18	–	–	–
Change in financial non-current assets		–	−4,082	–	–
Cash flow used in investing activities		**−15,035**	**−27,737**	**−5,350**	**−3,667**
Cash flows from financing activities					
Proceeds from issue of share capital		85,198	85,198	–	9,193
Proceeds from issue of convertible bonds		–	–	27,718	–
Cash flow from financing activities		**85,198**	**85,198**	**27,718**	**9,193**
Cash flow for the period		**51,971**	**42,052**	**11,631**	**−1,964**
Cash and cash equivalents at the beginning of the period		18,408	18,408	6,777	8,741
Exchange rate differences in cash and cash equivalents		435	–	–	–
Cash and cash equivalents at end of the period		**70,814**	**60,460**	**18,408**	**6,777**

1 The Group was formed in July 2016 upon registration of the subsidiaries. The consolidated statement of profit or loss includes the parent company income and expenses for the full year 2016.

The notes on pages F-14–F-26 are an integral part of the above financial statements.

NOTES

NOTE 1 GENERAL INFORMATION

IRRAS AB develops and sells cutting-edge medical equipment intended for the treatment of a broad range of brain pathologies, including a device for drainage and monitoring of intracranial pressure (ICP). During the year ended 31 December 2016, two subsidiaries were established, in Germany and the United States. IRRAS AB is registered in Sweden and has its registered office in Stockholm. The visiting address of the head office is Vasagatan 16, SE-111 20 Stockholm, Sweden.

All amounts are reported in thousands of Swedish krona (TSEK) unless otherwise stated. Figures in parentheses refer to the previous year.

A company group was estabilised in July 2016 through the establishment of subsidiaries and consolidated financial statements have therefore been prepared. The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS). The consolidated financial statements for 2016 have not previously been published in accordance with Chapter 7, Section 3 of the Swedish Annual Accounts Act.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING

2.1 BASIS OF PREPARATION

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU as well as RFR 1, *Supplementary Accounting Rules for Groups*.

Assets and liabilities are reported at their historical cost, unless otherwise detailed in the below notes.

The key accounting policies applied in these consolidated accounts are presented below.

The preparation of financial statements in accordance with IFRS requires the use of critical accounting estimates. Management has made judgments, estimates, and assumptions that affect the application of the Group's accounting policies and the reported amounts of assets, liabilities, income and expenses. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are of significance to the consolidated accounts, are stated in Note 4.

The Parent Company financial statements are prepared in accordance with RFR 2, *Accounting for Legal Entities*, and the Annual Accounts Act. Where the Parent Company applies accounting policies which differ from the Group, this is detailed in section 2.21 below.

Standards, amendments and interpretations to existing standards that become effective in 2018 or later and that may have an impact on the financial statements

During preparation of the consolidated financial statements as of December 31, 2016, a number of standards and interpretations have been published that become effective in 2017 or later. Below is a summary of the most significant new standards or amendments to existing standards that are deemed to be applicable for the Group in future financial statements.

The Group has not adopted the new or amended standards in advance of the effective date in preparing these consolidated financial statements.

IFRS 9 Financial Instruments

IFRS 9 *Financial instruments* addresses classification, valuation and accounting of financial assets and liabilities. IFRS 9 replaces the parts of IAS 39 which handles classification and valuation of financial instruments. IFRS 9 retains a mixed valuation standard but the standard is simplified in certain respects.

The standard must be applied for fiscal periods beginning on or after January 1, 2018, with earlier application permitted.

The Group has is still evaluating the effect of the introduction of this standard, but does not anticipate that the impact on the consolidated financial statements will be significant.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 *Revenue from Contracts with Customers* establishes a comprehensive framework for determining how revenue shall be recognized. The extended disclosure requirements mean that information must be submitted about the revenue type, timing of settlement, uncertainties related to revenue reporting as well as cash flow attributable to equity holders of the company's client contracts. According to IFRS 15, revenue should be reported when the customer obtains control of the sold product or service and has the ability to use and obtain benefits from the product or service.

IFRS 15 replaces IAS 18 Revenue and IAS 11 Construction Contracts as well as SIC and IFRIC which are related thereto. IFRS 15 is effective as of January 1, 2018. Early application is permitted.

The Group is still evaluating the effect of the introduction of this standard, and has not yet determined the impact on the consolidated financial statements.

IFRS 16 Leases

IFRS 16 *Leases* requires that assets and liabilities attributable to all leasing agreements are recognized in the financial statements, with exception for agreements for periods shorter than twelve months and/or which represent low amounts. IFRS 16 replaces IAS 17 *Leases*, with additional interpretations. This entails that the distinction between an operating lease and a finance lease is erased and replaced with the concept of right-of-use and an obligation to settle continous payments as lessee.

The standard is expected to not have a significant impact on the Group's financial statements since its lease contracts are currently limited and consist only of rent for premises, for which the cost is not considered a significant sum.

The standard is to be applied starting in 2019 but is not yet approved by the EU.

2.2 CONSOLIDATED FINANCIAL STATEMENTS

Subsidiaries

Subsidiaries are all companies over which the Group has control. The Group controls a company when it has exposure or rights to variable returns from its stake in the company and has the ability to affect the amount of the returns through its power over the entity. Subsidiaries are included in the consolidated financial statements as of the date on which the controlling influence is transferred to the Group. They are excluded from the consolidated financial statements as of the date on which the controlling influence ceases.

The acquisition method is used for recognition of the Group's acquisitions. The consideration paid in connection withthe acquisition of a subsidiary is recognized at the fair value of the transferred assets, liabilities and the shares issued by the Group. The purchase consideration also includes the fair value of all assets or liabilities arising from a contingent consideration agreement.

Costs related to acquisitions are expensed as incurred.

Identifiable assets acquired and liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. For each acquisition, the Group determines whether any non-controlling interest in the acquired company is reported either at fair value or at its proportionate share of the acquired company's net assets.

Any excess is recognized as goodwill and consists of the difference between the purchase consideration, any non-controlling interest and the fair value on the date of acquisition of previous shareholdings and the fair value of the Group's share of the identifiable net assets acquired. If the amount is less than the fair value of the acquired subsidiary's assets, in the event of a so-called bargain purchase, then the difference is recognized immediately in the income statement as other operating income.

2.3 SEGMENT REPORTING AND EARNINGS PER SHARE

IRRAS's operations are currently focused on research and development within one product field, IRRA*flow*, and the executive management has therefore decided to monitor the operations as one reporting unit. Therefore, the Company so far only has one operating segment which is wholly reflected in the Group's financial statements. The CEO and the board of directors are assessed as the chief operating decision makers.

Earnings per share has been calculated as net income divided by the number of weighted-average shares outstanding throughout the period, including the effects of share splits. When the earnings are positive in the future, the options may give rise to dilution.

2.4 FOREIGN CURRENCY TRANSLATION

Functional currency and presentation currency

Items included in the financial statements for the Group are measured using the currency of the primary economic environment in which the entity operates (the functional currency). In the consolidated financial statements Swedish krona (SEK) is used as the presentation currency, which is also the Parent Company's functional currency and presentation currency.

Transactions and balance sheet items

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing on the transaction date. Exchange gains and losses arising from the payment of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at closing day exchange rates are recognized in the income statement. Exchange differences on lending and borrowing are reported in net financial items, while other exchange differences are included in the operating profit.

Group companies

The earnings and financial position of all Group entities that have a functional currency other than the presentation currency are translated to the Group's presentation currency as follows:

(a) Assets and liabilities for each balance sheet are translated at the closing day rate;
(b) Income and expenses for each income statement are translated at average exchange rates
(c) All exchange differences arising from the above are recognized as a separate component of other comprehensive income.

Upon consolidation, exchange differences are posted that arise from the translation of the net investment in foreign operations and from borrowings to equity. When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal.

Goodwill and fair value adjustments arising upon the acquisition of a foreign operation are treated as assets and liabilities of that operation and are translated at the closing rate.

2.5 INTANGIBLE ASSETS

Capitalized expenditures for development and similar items

Development costs that are directly attributable to the development and testing of identifiable and unique products controlled by the Group are recognized as intangible assets when the following criteria are met:

i. it is technically feasible to finalize the product so that it can be used;
ii. the company's intention is to finalize the product and to use or sell it;
iii. there are opportunities to use or sell the product;
iv. it can be shown how the product will generate probable future economic benefits;
v. adequate technical, financial and other resources to complete the development and to use or sell the product are available; and
vi. the expenditure relating to the product during its development can be measured reliably.

Directly attributable expenditure carried forward as part of the asset includes expenses for staff, materials and a development-attributable share of indirect costs. Upon capitalization, the portion of expenses recognized as income against received/expected contributions is taken into account. Capitalized development costs are recognized as intangible assets and are amortized starting from the date when the asset is ready for use. So far, no amortization has been recognized.

Patents

Patents acquired separately are recognized at cost. Patents acquired through a business combination are recognized at fair value on the acquisition date. Patents have a finite useful life and are recognized at cost less accumulated amortization and any impairment losses. Costs for discontinued patents are recognized as an intangible asset at the time the patent was granted.

Amortization period for intangible assets

Patent	14 years
Capitalized expenditures for development and similar items	5–10 years

2.6 PROPERTY, PLANT AND EQUIPMENT

All property, plant and equipment (PP&E) is recognized at cost less depreciation. The cost includes expenditure that is directly attributable to the acquisition of the asset.

In the Group, PP&E consists of equipment.

Subsequent expenditure is added to the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that the future economic benefits associated with the asset will flow to the Group and the asset's acquisition value can be measured reliably. The carrying amount of the replaced part is derecognized. All other forms of repair and maintenance are recognized as expenses in the income statement during the period in which they arise.

Depreciation of tangible assets, to distribute their cost down to the estimated residual value over the estimated useful life, is calculated on a straight-line basis as follows:

Depreciation period for property, plant and equipment

Equipment	10 years

Gains and losses on disposals are determined by comparing the sales proceeds and the carrying amount and are recognized in other operating income and other operating expenses in the income statement.

See also the following section regarding the description of impairment of non-financial assets.

2.7 IMPAIRMENT OF NON-FINANCIAL ASSETS

PP&E and intangible assets that are depreciated or amortized are assessed with respect to impairment whenever events or changes in circumstances indicate that the carrying amount might not be recoverable. An impairment loss is recorded for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of the asset's fair value less selling costs and its value in use. When assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units).

An impairment loss is reversed if there is any indication that the impairment ceases to exist and there has been a change in the assumptions underlying the calculation of the recoverable amount. A reversal is only recognized to the extent that the carrying amount of the asset after the reversal does not exceed the carrying amount that would have been recognized, less any depreciation where applicable, if no impairment loss had been recognized.

Impairment of property, plant and equipment

The assets' useful lives are reviewed at each balance sheet date and adjusted if necessary. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Impairment of intangible assets

Intangible assets on which amortization has not yet been recognized are tested for impairment on at least an annual basis.

2.8 FINANCIAL INSTRUMENTS

General principles

Purchases and sales of financial assets and liabilities are recognized on the trade date – the date that the Group commits itself to purchase or sell the asset or liability. Financial assets and liabilities are initially recognized at fair value plus transaction costs if not recognized at fair value through profit or loss. Financial assets and liabilities measured at fair value through profit or loss are initially recognized at fair value, while attributable transaction costs are recognized in the income statement. Financial assets are derecognized when the rights to receive cash flows from the instrument have expired or have been transferred, and the Group has transferred virtually all risks and benefits associated with ownership. Financial liabilities are derecognized when the contractual obligations have been fulfilled or otherwise terminated.

The Group classifies its financial assets in the following categories: loans and receivables, and other financial liabilities. The classification depends on the purpose for which the financial asset or liability was acquired.

Loans and receivables

Loans and receivables are non-derivative financial assets that have fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for items with a maturity date more than twelve months after the balance sheet date, which are classified as non-current assets. Loans and receivables are reported as receivables, other receivables, accrued income and financial assets in the balance sheet. Cash and cash equivalents are also included in this category. An impairment of trade receivables is recognized in the income statement as other external costs.

Other financial liabilities

The Group's borrowings (includes the items for borrowing from credit institutions, borrowing from related parties and other non-current liabilities) are classified as other financial liabilities; see the description of the accounting policies in Section 2.14 below.

Loan receivables, trade receivables, trade payables and other financial liabilities are reported after the acquisition date at amortized cost using the effective interest method.

The fair value of borrowings is calculated, for purposes of disclosure, by discounting the future contractual cash flows at the current market interest rate available to the Group for similar financial liabilities.

Impairment of financial assets

The Group assesses at the end of each reporting period whether there is objective evidence of impairment for a financial asset or a group of financial assets. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a "loss event") and that the loss event has an impact on the estimated future cash flows of the financial asset or group of financial assets that can be reliably estimated.

2.9 INVENTORIES

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is determined using the first-in, first-out principle and consists of the cost of goods purchased.

Borrowing costs are not included in the cost of inventories. Inventories consist mostly of finished goods. Net realizable value is the estimated selling price in the ordinary course of business.

2.10 TRADE RECEIVABLES

Trade receivables are initially recognized at fair value and subsequently measured at amortized cost using the effective interest method, less any provision for impairment. A provision for impairment of trade receivables is established when there is objective evidence that the Group will not be able to recover any amounts that are past due according to the original terms of the receivables. Significant financial difficulties of the debtor, probability that the debtor will go bankrupt or undergo financial restructuring and missed or late payments (more than 30–60 days past due dependent on the customer's geographical location) are regarded as indicators that an impairment loss of a receivable can be present. The size of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the original effective interest rate. Losses in respect of trade receivables as well as reversals of previously impaired receivables are recognized in the statement of loss in the selling costs.

The carrying amount of trade receivables, after any impairment, is assumed to be equal to its fair value due to the short term nature of this item.

2.11 CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash, bank balances and other short-term investments with a maturity of three months or less from the acquisition date. Overdrafts are reported as borrowings in short-term liabilities.

2.12 EQUITY

Ordinary shares are classified as equity. Transaction costs directly attributable to the issue of new shares are reported, net of tax, in other paid-in capital as a deduction from the proceeds.

2.13 TRADE PAYABLES

Trade payables are initially recognized at fair value and subsequently at amortized cost using the effective interest method. The carrying amount of trade payables is assumed to correspond to its fair value, due to the short term nature of this item.

2.14 BORROWINGS

Borrowings (including from credit institutions, from related parties and other long-term borrowings) are initially recognized at fair value, net of transaction costs. Borrowings are subsequently recognized at amortized cost, and any difference between the amount received (net of transaction costs) and the repayment amount is recognized in the income statement over the term of the loan, with the application of the effective interest method.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer payment of the liability for at least twelve months after the balance sheet date.

Borrowing costs (interest expenses and transaction costs) are recognized in the income statement in the period in which they are incurred. Accrued interest not paid is reported within borrowings on the balance sheet. As at 31 December 2016, neither the Group nor the Parent Company had outstanding loans payable.

2.15 CURRENT AND DEFERRED TAX

The current tax expense is calculated on the basis of the tax rules that, at the statement of financial position date, are enacted or substantively enacted in the countries in which the company's subsidiaries operate and generate taxable income. Management regularly evaluates the claims made in tax returns with respect to situations in which applicable tax rules are subject to interpretation and, when deemed appropriate, it makes provisions for amounts that are likely to be paid to the tax authorities.

Deferred tax is recognized in its entirety, according to the liability method, for all temporary differences arising between the tax base of assets and liabilities and their carrying amounts in the consolidated financial statements. The deferred tax is not recognized, however, if it occurs as a result of a transaction that constitutes the initial recognition of an asset or liability in a transaction other than a business combination and that, at the time of the transaction, affects neither reported or taxable profit. Deferred income tax is determined using tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date and are expected to apply when the deferred tax asset is realized or the deferred tax liability is regulated.

Deferred tax assets are recognized only to the extent that it is probable that future taxable profit will be available, against which the temporary differences can be utilized.

2.16 INCENTIVE SCHEMES

Share award program

In September 2015 IRRAS and the President and CEO agreed on a share-based payment arrangement whereby the President and CEO will receive a number of shares corresponding to 1 percent of the number of shares outstanding if and when a "qualified financing" transaction (e.g. an IPO) takes place, and 0.5 % of the number of shares outstanding if and when a 510 K FDA approval is received. In March 2017, after the end of the reporting period, it was agreed that the President and CEO will receive an additional 1.5 % of the number of shares outstanding if and when a 510(k) FDA approval is received.

The share award program cost is calculated from estimates on the number of shares to be awarded at each award event, together with the share price on contract signing date. Share-based payment expense is recognized from the grant date over a period to expected vesting dates that are updated at the end of each reporting period.

Warrant scheme

On May 1 2016, 1,900,000 options were granted free of charge. The options will be settled using only shares, making the plan a share-based payment arrangement. The fair value of options as at the start of the plan is recognized as a personnel cost with a corresponding increase in equity.

The options mature on March 30, 2020 and one fourth of the options vest on each of May 1 2017, 2018 and 2019 and March 30 2020. One fourth of the cost of the plan is allocated to each of these vesting periods, such that the cost is recognized over the term from the start to the end of the vesting periods ('graded vesting'). A consequence of this treatment is that a large proportion of the cost is expensed during the first twelve months, after which the cost recognized over the following years until the final vesting date continues to decrease.

At the end of each reporting period, the number of share options expected to vest is reassessed based on the conditions of employment. Any reassessments will affect the total accrued cost to be recognized, and hence the current period's cost.

2.17 CONVERTIBLE LOANS

A convertible loan issued by IRRAS can, when certain events occur related to the ownership of IRRAS, be convertible into IRRAS AB shares. If such an event occurs, the conversion rate is determined with reference to the price of the ownership transaction. If none of the events occurs before the end of the convertible period, it is converted to shares at a fixed conversion rate. Because the convertible loan gives the right to convert into a number of shares that is not fixed, but varies depending on the price of possible ownership transactions or on whether any such transaction takes place, the convertible is classified in accordance with IAS 32 as a liability. Upon conversion to shares, the liability is transferred to equity.

A convertible bond was issued in 2015 by IRRAS AB. Please see Note 4 for further information.

2.18 PROVISIONS

Provisions are recognized when the Group has a legal or constructive obligation as a result of a past event, and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. No provisions are recognized for future operating losses.

Provisions are measured at the present value of the amount expected to be required to settle the obligation. In that regard, a pre-tax discount rate is used that reflects a current market assessment of the time value of money and the specific risks associated with the provision. The unwinding of the discount is recognized as a finance cost.

2.19 REVENUE RECOGNITION

Revenue comprises the fair value of consideration received or receivable for goods sold and services rendered within the Group. The Group recognizes revenue when the amount can be measured reliably, and it is probable that future economic benefits will flow to the Group.

Sales of goods

The Group's revenue is generated in part from the sale of products developed by the Group.

Revenues from the sale of goods is recognized when the risks and rewards of ownership are transferred from the Group to the customer, when the group no longer exerts any real control over the goods sold, revenues and related expenses can be estimated reliably, and it is probable that the economic benefits associated with the sale of goods will flow to the Group.

Government grants

Government grants, including non-monetary grants at fair value, are recognized as income in the statement of loss. The Group does not recognize revenue until there is reasonable assurance that the conditions associated with the grants have been met and it is decided that the grants will be received. The grants are recognized as income at the time the grant is received when obtained funds do not imply a future repayment obligation or other obligation, except that future payments can be stopped.

Interest income

Interest income is recognized over the term to maturity using the effective interest method.

2.20 LEASES

Leases in which a significant portion of the risks and benefits of ownership are retained by the lessor are classified as operating leases. Payments made during the lease term (net of any incentives from the lessor) are recognized in the income statement on a straight-line basis over the lease term.

The Group currently has no leases that are classified as finance leases. The Group's operating lease consists entirely of rent for premises.

2.21 ACCOUNTING POLICIES IN THE PARENT COMPANY

The accounting policiesin the Parent Company are consistent in all material respects with the consolidated financial statements. The Parent Company's financial statements are prepared in accordance with RFR 2, *Accounting for Legal Entities*, and the Swedish Annual Accounts Act. RFR 2 specifies exemptions from and amendments to the standards released by IASB as well as interpretations issued by IFRIC. Exceptions and amendments shall apply from the date on which the legal entity applies the specified standard or interpretation within its consolidated financial statements.

The Parent Company uses the formats set out in the Annual Accounts Act, of which the primary difference is a presentation of equity.

Shares in subsidiaries are reported at amortized cost less any impairment losses. When there is an indication that stocks and shares in subsidiaries have decreased in value, an estimate is made of the recoverable amount. If this is lower than the carrying amount, an impairment loss is taken. Impairment losses would be recognised in the statement of loss. The carrying value of subsidiaries includes transaction costs. Transaction costs are expensed in the consolidated financial statements in the period in which they arise.

The incentive scheme plan described in Section 2.16 means that for the Parent Company the issue of equity instruments is deemed to be a shareholder contribution in the subsidiaries from the Parent Company, which is therefore accounted for as investment in the subsidiaries and not against the income statement as personnel expenses. The investment is assessed as with other contributions, for impairment. If impairment is required for shares in subsidiaries, the effect is that a financial cost is recognized in the Parent Company income statement.

NOTE 3 FINANCIAL RISK MANAGEMENT

In the course of its operations, the Group is exposed to various types of financial risks including currency risk, credit risk, and liquidity and financing risks. The Group's overall risk management policy focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on earnings and liquidity due to financial risks. As of December 31, 2016 the financial risks are limited, as the business is still in a relatively early stage.

The CEO and Board of Directors of each company are responsible for risk management, in accordance with guidelines established by the Board. The risk function includes identifying and evaluating financial risks. The Group does not apply hedge accounting under IAS 39.

CURRENCY RISK

IRRAS is a Group with operations in several geographic markets and thus carries out transactions in foreign currencies. The reporting currency is the Swedish krona. This means that the Group is exposed to currency risk as changes in exchange rates can affect earnings and shareholder equity.

Exposure to changes in currency rates is typically divided into two main categories: *translation exposure* and *transaction exposure*.

Translation exposure

The foreign subsidiaries' assets less liabilities represent a net investment in a foreign currency, which upon consolidation creates a currency translation difference. Such currency translation differences are posted immediately to equity and are recognized under the separate category of equity called Reserves. The Group's guidelines stipulate that net investments in foreign currency should not be secured with financial derivatives, in part to avoid any unwanted liquidity effects when the derivative is extended. However, it is permissible to secure the net investment by taking out a loan in the current currency. The Group currently has no loans in foreign currencies. A related form of translation exposure is the earnings accumulated during the year in the foreign subsidiaries which form a component of foreign equity.

Intra-group receivables and liabilities are translated at the current closing day rate of the entity with the claim or debt denominated in currencies other than the functional currency of the respective entity. Net intra-group loans have no impact on equity, however they affect the income statement for the Group.

Transaction exposure

Transaction exposure usually means both exposure arising from commercial cash flows (i.e., cross-border sales and purchases) and exposure from financial flows. As of December 31, 2016 there are two foreign subsidiaries, but both with limited operations. Transaction exposure arises mainly from remuneration to employees abroad, as well as consulting fees.

CREDIT RISK

Credit risk, or counterparty risk, is the risk that the counterparty to a financial transaction defaults on the due date. Credit risk is managed at the Group level and arises from trade receivables and cash on deposit at banks and financial institutions. As of December 31, 2016 outstanding claims against third parties are minimal.

LIQUIDITY RISK AND FINANCING RISK

As of December 31, 2016, the Group had available liquidity of TSEK 70,814. Liquidity consists of cash and cash equivalents . As of the same date, there were no external borrowings in the Group. The objective regarding capital is to safeguard the Group's ability to continue its operations in order to provide returns for shareholders and benefits for other stakeholders, and to maintain an optimal capital structure to minimize the cost of capital.

	Group	Parent Company		
Capital structure (TSEK)	2016-12-31	2016-12-31	2015-12-31	2014-12-31
Convertible bonds (Note 19)	–	–	29,505	–
Less: cash and cash equivalents	–70,814	–60,460	–18,408	–6,777
Net debt	**–70,814**	**–60,460**	**11,098**	**–6,777**
Total equity	**95,115**	**101,030**	**129**	**12,990**

NOTE 4 CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS IN APPLYING THE GROUP'S ACCOUNTING POLICIES

The preparation of financial statements requires management to make estimates and assumptions that affect the amounts reported in the financial statements. Estimates and assumptions are reviewed on an ongoing basis and are based on historical experience and other factors, including expectations of future events that are considered reasonable under the circumstances.

SIGNIFICANT ESTIMATES AND ASSUMPTIONS FOR ACCOUNTING PURPOSES

The Group makes estimates and assumptions concerning the future. The accounting estimates resulting from these will, by definition, seldom correspond to the actual outcome. The estimates and assumptions that could cause a risk of material adjustment to the carrying amounts of assets and liabilities within the next fiscal year are summarized below.

Convertible bonds

In the first quarter of 2015, IRRAS acquired additional financing of SEK 30.3 million through the issue of convertible bonds to commence full-scale commercialization in Europe. See Section 2.17 for convertible bonds accounting policies.

These convertibles were converted into shares in 2016, according to a decision of the general meeting of shareholders in connection with the new issue of shares as decided at the AGM on April 18, 2016.

The terms and conditions of the convertibles were as follows:

- The convertible bonds will be converted into shares. The holders will not receive cash or any other financial instruments.
- In the event of winding up or bankruptcy, the convertible bonds are subordinated receivables.

The conversion price used will depend on which of the following events occurs:

a) In the event that an IPO takes place, the conversion price shall be 80% of the price paid for shares in the IPO.
b) In the event of an acquisition, the conversion price shall be 80% of the price paid for the share in the acquisition.
c) In the event of a qualifying issue (not a rights issue), the conversion price shall be 70% of the price paid for the shares issued in the qualifying issue.
d) In the event that none of the above occurs up until December 31, 2017, the conversion price shall be 17,000.

Incentive scheme

During 2016, 1,900,000 options were granted to a number of key individuals in IRRAS's foreign subsidiaries. The vesting and exercise periods of the option span several fiscal years, and assumptions and estimates have therefore been made regarding the probable exercise date. Furthermore, additional assumptions and estimates were made concerning the inputs to the valuation of the options. In September 2015 IRRAS and the CEO agreed on a share-based payment arrangement whereby the President and CEO will receive a number of shares corresponding to a total of 1.5 percent of the number of shares outstanding if and when the agreement criteria are met. This agreement was amended in 2017 after the end of the reporting period, to include a total of 3 percent of the number of shares outstanding. The assumption on whether or not the criteria are met, the number of shares outstanding and the share price has been made at the end of each reporting period.

For additional information regarding assumptions in the valuation of the options and conditions, see Note 8 Employee benefit expenses.

Capitalized development costs

IRRAS performs regular assessments of the value of capitalized development costs. The most critical assumption, which has been the subject of evaluation by management, is whether capitalized expenditure will generate future economic benefits that at a minimum correspond to the values capitalized. As at the statement of financial position date, management's assessment is that future cash flows will be sufficient to cover capitalized costs, and therefore no impairment has been recognized.

Going concern basis of accounting

The financial statements, the consolidated and the parent, have been prepared on a going concern basis. The Group and parent has historically incurred losses due to the development of IRRAflow and more recently due to the commercialization launch in 2017. In preparing the financial statements, management has based their assumptions based on existing cash balances and future cash flows from sales of products. In estimating future cash expenditures, management has considered those which are at management discretion and can be eliminated or postponed. The majority of the Group's expenditures are discretionary. The current commercialization and product development strategy may not be attainable if additional financing is not obtained which would result in the elimination of certain activities such as further development of products and expansion into certain markets and substantially reducing cash outflows.

Management acknowledges that there are uncertainties in the estimation of these future cash flows but based on a revised strategy, if additional financing was not achieved, management believes there is a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. If for any reason the Group is unable to continue as a going concern, this could have an impact on the Group's ability to realize assets at their recorded values, in particular capitalized development costs and to extinguish liabilities in the normal course of business at the amounts stated in the consolidated financial statements.

NOTE 5 BREAKDOWN OF EXPENSES BY NATURE

	Group[1)]	Parent Company		
Operating expenses by nature	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Other operating income	239	239	465	934
Raw materials and consumables used	–15	–	–1,433	–3,864
Consultants and similar expenses	–16,716	–15,631	–9,665	–4,799
Employee benefits	–13,356	–8,438	–2	–16
Depreciation and amortization	–318	–316	–316	–316
Other operating expenses	–662	–662	–123	–12
Operating result	**–30,828**	**–24,808**	**–11,074**	**–8,073**

1 The group was formed July 18, 2016 following registration of subsidiaries. The Parent Company is included for the full year 2016.

NOTE 6 OTHER OPERATING INCOME, OTHER OPERATING EXPENSES, FINANCE COSTS

	Group	Parent Company		
Other operating income	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Foreign exchange gains	239	239	–	–
Government grants	–	–	425	868
Other	–	–	40	67
Total other operating income	**239**	**239**	**465**	**934**
Other operating expenses				
Foreign exchange losses	662	662	123	12
Total other operating expenses	**662**	**662**	**123**	**12**
Finance costs				
Foreign exchange losses	273	–	–	–
Interest expense	4	4	–	–
Borrowing costs	795	795	1,788	–
Total finance costs	**1,071**	**798**	**1,788**	**–**

NOTE 7 AUDIT FEES

Auditing services include audits of the annual accounts and accounting records, as well as the administration by the Board and CEO. They also include other duties that are incumbent upon the company's auditors as well as advisory services or other assistance resulting from observations made during such a review or the completion of other such duties.

	Group	Parent Company		
	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
KPMG				
Audit	92	92	25	20
Total	**92**	**92**	**25**	**20**

NOTE 8 EMPLOYEE BENEFIT EXPENSES

Employee benefit expenses	Group 2016-01-01 2016-12-31	Parent Company 2016-01-01 2016-12-31
Wages and salaries	2,205	–
Social security costs	158	–
Warrants granted to key employees	10,993	8,438
Total	**13,356**	**8,438**

No salaries or compensation have been paid by the Parent Company since there were no employees during the fiscal year or the comparison years 2014–2015. No compensation has been issued to board members in either the Parent Company or the Group. However, several of the board members have charged the Company for consultancy services and received warrants. Please see the below table.

Salaries and other remuneration and social security costs	Group 2016-01-01–2016-12-31 Salaries and other remuneration	Pension	Incentive schemes	Parent Company 2016-01-01–2016-12-31 Salaries and other remuneration	Pension	Incentive schemes
Group						
Board members, executive directors and other senior executives	–	–	9,460	–	–	8,438
Other employees	–	–	1,533	–	–	–
Total	**–**	**–**	**10,993**	**–**	**–**	**8,438**
consisting of:						
President and CEO, Kleanthis G. Xanthopoulos	–	–	8,438			8,438
Board member Christos Panotopoulos	–	–	613			–
Board member Konstantinos Alataris	–	–	409		–	–
Other	2,363	–	1,533	–	–	–
Total	**2,363**	**–**	**10,993**	**–**	**–**	**8,438**

Incentive scheme expense recorded for the group "Other" relates to options/warrants granted to five persons.

AVERAGE NUMBER OF EMPLOYEES

The average number of employees in the Group was 2 (0) during the fiscal year.

SHARE AWARD SCHEME FOR THE PRESIDENT AND CEO

In September 2015 IRRAS and the President and CEO agreed on a share-based payment arrangement whereby the President and CEO will receive a number of shares corresponding to 1 % of the number of shares outstanding if and when a 'qualified financing' transaction (e.g. an IPO) takes place, and 0.5 % of the number of shares outstanding if and when a 510 K FDA approval is received. In March 2017, after the end of the reporting period, it was agreed that the President and CEO will receive an additional 1.5 % of the number of shares outstanding if and when a 510 K FDA approval is received.

The grant date fair value per share was estimated at SEK 13.5 in September 2015. Share-based payment expense has been recognized for the 2015 scheme since the grant date over a period to expected vesting dates that are updated at the end of each reporting period. The number of shares estimated for the recognition of share-based payment expense for 2016 was 375,449 for the 2015 scheme.

The 2016 (2015) expense amounts to TSEK 3,226 (0). No expense was recognized in 2015 since the occurrence of a qualified financing or FDA approval was not considered more likely than not. This changed in 2016.

SHARE-BASED INCENTIVE SCHEME 2016

On May 1, 2016 key individuals were granted 1,900,000 options, one fourth of the options vest on each of May 1 2017, 2018 and 2019 and March 30 2020. One fourth of the cost of the plan is allocated to each of these vesting periods, such that the cost is recognized over the term from the start to the end of the vesting periods ('graded vesting'). A consequence of this treatment is that a large proportion of the cost is expensed during the first twelve months, after which the cost recognized over the following years until the final vesting date continues to decrease.

At the end of each reporting period, the number of share options expected to vest is reassessed based on the expected outcome of the vesting conditions, which are continued service until the four respective vesting dates. Any reassessments affects the total accrued cost, and hence the current period's cost recognized. The fair value of the options, calculated using the Black-Scholes model, was estimated to be SEK 11.5–12.2 for different maturities with the following inputs on May 1, 2016:

Share price on the valuation date:	SEK 25
Exercise price:	SEK 13.6
Estimated volatility:	30%
Term, options with 1 year vesting:	2 years
Term, options with 2 year vesting:	3 years
Term, options with 3 year vesting:	4 years
Term, options with 4 year vesting:	4 years
Risk-free interest:	neg 0.7 – neg 0.5 %

The deadline to exercise the vested options is March 30, 2020.

All options granted (1,900,000) are outstanding as of Dec 31, 2016, with no options vested. Recognized cost for the period May 1, 2016 through December 31, 2016 totals TSEK 7,766 and are classified primarily as selling and administrative expenses.

NOTE 9 RELATED-PARTY TRANSACTIONS

Related parties are defined as management, the Board of Directors of the Parent Company and the Group, subsidiaries and owners of the Group. Shares in subsidiaries, as well as transactions between Group companies, are eliminated in the consolidated accounts, therefore detailed breakdowns of the amounts and types of these transactions are not provided.

The following transactions have taken place with related parties during the fiscal year and comparison years:

Group/Parent Company (TSEK)	Board remuneration	Variable compensation	Pensions	Consultancy fees, invoiced	Total
2016-12-31					
Chairman of the board Kleanthis G. Xanthopoulos	–	–	–	5,222	5,222
Board member Christos Panotopoulos	–	–	–	1,417	1,417
Board member Anders P. Wiklund	–	–	–	299	299
Total	**–**	**–**	**–**	**6,939**	**6,939**

Parent Company (TSEK)					
2015-12-31					
Chairman of the board Kleanthis G. Xanthopoulos	–	–	–	4,202	4,202
Board member Christos Panotopoulos	–	–	–	1,107	1,107
Board member Kontantinos Alataris	–	–	–	405	405
Board member Marios Fotiadis	–	–	–	55	55
Total	**–**	**–**	**–**	**5,769**	**5,769**

Parent Company (TSEK)					
2014-12-31					
Chairman of the board Kontantinos Alataris	–	–	–	1,299	1,299
Board member Christos Panotopoulos	–	–	–	3,513	3,513
Total	**–**	**–**	**–**	**4,812**	**4,812**

The Group rented office space from a related party of the Chairman of the Board during the year 2016. The 2016 (2015) cost amounts to TSEK 49 (0).

The following amounts have been invoiced IRRAS from related companies, which are all parts of the Serendipity Group:

(TSEK)	Group/Parent Company 2016-01-01 2016-12-31	Parent Company 2015-01-01 2015-12-31	Parent Company 2014-01-01 2014-12-31
Juno Ekonomi AB	490	217	259
Forward Techonologies AB	–	14	36
Sdiptech AB	–	–	95
S. Professionals AB	–	149	–
Serendipity Communications AB	–	5	–
Total	**490**	**385**	**389**

Kleanthis G. Xanthopoulos, via his company Helios Capital, signed an agreement with IRRAS in 2015 which was subsequently updated in 2016 and 2017, in which he will provide services to the company relating to business management (corresponding to a position as CEO of the company). The agreement also entitles Kleanthis G. Xanthopoulos to invoice IRRAS for other costs incurred in his work, such as travel costs.

Christos Panotopoulos, through his company F.EX.Endotherapy Ltd., provides consulting services relating to medical expertise and holds the title of Chief Scientific Officer. The agreement also entitles Christos Panotopoulos to invoice IRRAS for other costs incurred in his work, such as travel costs.

Konstantinos Alataris provided services relating to business management (corresponding to a position as CEO of the company). The agreement also entitled Mr. Alataris to invoice IRRAS for other costs incurred in his work, such as travel costs. The agreement was terminated in July 2015.

Marios Fotiadis has billed the company for costs incurred in Board activities, such as travel costs.

Anders P. Wiklund was contracted on March 10, 2016, via his company Wiklund International, to provide strategic advice to the company and at the same time was elected to the company's Board of Directors. The agreement relates to operational work in addition to the work of the Board. The agreement also entitles Mr. Wiklund to invoice IRRAS for other costs incurred in his work, such as travel costs. The agreement term was associated with Mr. Wiklund's term as a member of the Board of Directors. The agreement was terminated on August 31, 2017.

Under all agreements, the services must be performed at a fixed price per year where all consulting services are billed on a monthly basis, with the exception of Anders P. Wiklund, who billed on an annual basis.

NOTE 10 INCOME TAX EXPENSE

	Group	Parent Company		
	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Current tax on profit/loss for the period	–	–	–	–
Tax	**–**	**–**	**–**	**–**

The following illustrates the differences between the estimated tax benefit based on accounting loss and the actual tax benefit:

	Group	Parent Company		
	2016-01-01 2016-12-31	2016-01-01 2016-12-31	2015-01-01 2015-12-31	2014-01-01 2014-12-31
Loss before tax	–31,898	–25,591	–12,861	–8,052
Income tax calculated in accordance with the statutory tax rate (22%)	7,018	5,630	2,829	1,772
Non-deductible expenses	–2,800	–2,116	–416	–7
Tax losses for which no deferred income tax asset was recognized	–4,491	–3,514	–2,413	–1,765
Effects of foreign tax rates	273	–	–	–
Tax	**–**	**–**	**–**	**–**
Carried forward tax loss (not recognized on balance sheet)	77,549	74,646	58,690	47,719

NOTE 11 INTANGIBLE ASSETS

A summary of the intangible assets (in TSEK) and its changes during presented periods is as follows:

Capitalized expenditure for research and development	Group	Parent Company		
	2016-12-31	2016-12-31	2015-12-31	2014-12-31
Opening acquisition cost	9,016	9,016	3,667	–
Capitalized during the period	15,017	15,017	5,350	3,667
Closing accumulated acquisition cost	**24,033**	**24,033**	**9,016**	**3,667**
Closing net book amount	**24,033**	**24,033**	**9,016**	**3,667**

Patents				
Opening acquisition cost	4,429	4,429	4,429	4,429
Closing accumulated acquisition cost	**4,429**	**4,429**	**4,429**	**4,429**
Opening amortization	–1,266	–1,266	–949	–633
Amortization charge	–316	–316	–316	–316
Closing accumulated amortization	**–1,582**	**–1,582**	**–1,266**	**–949**
Closing net book amount	**2,847**	**2,847**	**3,164**	**3,480**

NOTE 12 PROPERTY, PLANT AND EQUIPMENT

Machiney and Equipment	Group	Parent Company		
	2016-12-31	2016-12-31	2015-12-31	2014-12-31
Opening acquisition cost	–	–	–	–
Additions	18	–	–	–
Closing accumulated acquisition cost	**18**	**–**	**–**	**–**
Opening depreciation	–	–	–	–
Depreciation charge	–2	–	–	–
Closing accumulated depreciation	**–2**	**–**	**–**	**–**
Closing net book amount	**16**	**–**	**–**	**–**

NOTE 13 OTHER CURRENT RECEIVABLES

	Group	Parent Company		
	2016-12-31	2016-12-31	2015-12-31	2014-12-31
Tax account	31	31	30	627
VAT receivables	157	157	329	–
Other	301	267	–	–
Total	**489**	**454**	**359**	**627**

NOTE 14 PREPAID EXPENSES AND ACCRUED INCOME

	Group	Parent Company		
	2016-12-31	2016-12-31	2015-12-31	2014-12-31
Prepaid rent	25	25	–	–
Prepaid insurance	21	21	–	–
Prepaid interest	–	14	–	–
Other	14	–	–	–
Total	**60**	**60**	**–**	**–**

NOTE 15 SHARE CAPITAL

Parent Company	Number of shares	Share capital (SEK)
At January 1, 2014	**11,836**	**59,180**
At December 31, 2014	11,836	59,180
At December 31, 2015	11,836	59,180
Split 1/1000	11,824,164	–
Convertible bonds – equity component	1,731,419	8,657
New share issue	3,650,000	18,250
At 31 December 2016	**17,217,419**	**86,087**

The number of shares shown in the above table is the number that is recorded in the Parent Company share register. The changes in equity per the above table are for the Parent Company, and further details are set out in the statement of changes in equity, which follows the statement of financial position.

The shares have a par value of SEK 0.005 per share. All registered shares at the statement of financial position date are fully paid.

NOTE 16 ACCRUED EXPENSES AND PREPAID INCOME

	Group	Parent Company		
	2016-12-31	2016-12-31	2015-12-31	2014-12-31
Consultancy fees	417	417	130	518
Audit fees	40	40	21	21
Other	12	–	–	–
Total	**469**	**457**	**151**	**539**

NOTE 17 COLLATERAL

	Group	Parent Company		
	2016-12-31	2016-12-31	2015-12-31	2014-12-31
Bank guarantee	50	50	–	–
	50	**50**	**–**	**–**

NOTE 18 COMMITMENTS

COMMITMENTS IN RESPECT OF OPERATIONAL LEASING

The Group's operating leases consist of rent for premises. The Group's costs for operating leases in 2016 totals TSEK 49. Future liabilities (within one year) amount to a total of TSEK 97. The parent company's costs for operating leases in 2016 total TSEK 49 (0). Future liabilities (within one year) total TSEK 0 (0).

NOTE 19 CONVERTIBLE BONDS

	Group	Parent Company		
Convertible bonds	2016-12-31	2016-12-31	2015-12-31	2014-12-31
Opening balance	**–**	**29,505**	**–**	**–**
Issue of convertible bonds		–	29,505	–
Redemption of convertible bonds	–	–29,505	–	–
Closing balance	**–**	**–**	**29,505**	**–**

For further information, see the accounting policies, Note 4, and the Parent Company statement of changes in equity.

NOTE 20 SIGNIFICANT EVENTS AFTER THE END OF THE FISCAL YEAR

In August 2017, Fredrik Alpsten was recruited as CFO to the Group and he commenced this position in October.

At the general meeting on September 1, 2017 the shareholders voted to make IRRAS AB a public company. At the same meeting, it was decided to introduce three incentive schemes: one for non-Swedish employees, one for Swedish employees, and one targeted to the Chairman of the Board. Furthermore, the general meeting approved an issue of options to the subsidiary IRRAS GmbH to secure delivery of shares under the established plan and to secure the delivery of shares under the share award scheme for the President and CEO.

NOTE 21 INVESTMENTS IN SUBSIDIARIES

Parent Company	2016-12-31	2015-12-31	2014-12-31
Opening acquisition cost	–	–	–
Investment	8,638	–	–
Capital contribution	2,555	–	–
Net book amount	**11,193**	**–**	**–**

The Parent Company holds the shares of the following subsidiaries.

Name of Subsidiary	Corporate reg. no.	Domicile	Capital share	Voting share	No. of shares	Book value 2016-12-31
IRRAS GmbH	DE308005079	Laichingen	100%	100%	1	1,260
IRRAS USA Inc	611800152	La Jolla	100%	100%	10,000,000	9,933
						11,193

NOTE 22 EFFECTS OF TRANSITION TO RFR 2 – PARENT COMPANY

In the context of the transition to IFRS accounting standards in the consolidated financial statements, the Parent Company has transitioned to the application of RFR 2, Accounting for Legal Entities.

The 2015 report was prepared in accordance with Swedish Accounting Standards Board BFNAR 2012:1, Annual Reporting and Consolidated Financial Statements (K3). The Parent Company's equity has been influenced by convertible loans classified as equity under previous accounting policies but according to RFR 2 are classified as long-term debt. Capital acquisition costs related to the convertible loan are accrued over the term. Furthermore, the cost of incentive schemes relating to 2016 have reduced the accumulated loss within equity through TSEK 2,555 (0) being recorded as contribution to subsidiaries and TSEK 8,437 (0) being recorded as employee benefit expenses.

The Parent Company income statement has been affected by additional costs of TSEK 795 (TSEK 1,788) due to the accrual of capital acquisition costs of convertible loans. Equity decreased by TSEK 0 (TSEK 29,505) as a result of the reclassification of the convertible loan.

The accounting treatment of incentive schemes has led to an increase in the Parent Company's equity by TSEK 10,993 (TSEK 0) as a result of the transition to applying RFR 2. See also Section 2.21 for the accounting policies related to these.

The accounts for 2014 have not been affected by the transition.

AUDITOR'S REPORT ON THE HISTORICAL FINANCIAL INFORMATION

To the board of directors of IRRAS AB, corporate reg. no 556872-7134

We have audited the financial statements of IRRAS AB on pages F9 – F26, comprising the consolidated statement of financial position at December 31, 2016 and the consolidated statements of profit or loss and comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended and the Parent Company statements of financial position at December 31, 2016, 2015 and 2014 and the Parent Company statements of profit or loss and comprehensive income, Parent Company statements of changes in equity and Parent Company statements of cash flows for the years then ended as well as the notes to the consolidated and Parent Company financial statements, comprising a summary of significant accounting policies and other explanatory information.

The board of directors' and the CEO's responsibility for the financial statements

The board of directors and the CEO are responsible for the preparation and fair presentation of the financial statements to provide a true and fair view of the financial position, financial performance, changes in equity and cash flows in accordance with International Financial Reporting Standards as adopted by the EU, the Annual Accounts Act and related accounting standards. This responsibility includes designing, implementing and maintaining internal control relevant to preparing and appropriately presenting financial statements that are free from material misstatement, whether due to fraud or error. The board of directors is also responsible for the preparation and fair presentation in accordance with the requirements in the Commission Regulation (EC) No 809/2004.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We have conducted our audit in accordance with the Swedish Institute of Authorized Public Accountants, FAR, recommendation RevR 5, Examination of financial information in prospectuses. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. The firm applies ISQC 1 (International Standard on Quality Control) and thereby maintains a comprehensive system for quality control which includes documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

We are independent of IRRAS AB in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

An audit in accordance with FAR's recommendation RevR 5 Examination of financial information in prospectuses involves performing procedures to obtain audit evidence corroborating the amounts and disclosures in the financial statements. The audit procedures selected depend on our assessment of the risks of material misstatements in the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the company's preparation and fair presentation of the financial statements as a basis for designing audit procedures that are applicable under those circumstances but not for the purpose of expressing an opinion on the effectiveness of the company's internal control. An audit also involves evaluating the accounting policies applied and the reasonableness of the significant accounting estimates made by the board of directors and the CEO and evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements give a true and fair view in accordance with International Financial Reporting Standards as adopted by the EU and the Annual Accounts Act of the consolidated financial position of IRRAS AB as at December 31, 2016 and its consolidated financial performance, consolidated changes in equity and consolidated cash flows for the year then ended. In our opinion, the Parent Company financial statements give a true and fair view in accordance with the Annual Accounts Act and related accounting standards of the financial position of IRRAS AB as at December 31, 2016, 2015 and 2014, and its financial performance, changes in equity and cash flows for the years then ended.

Stockholm, November 13, 2017
KPMG AB

Duane J. Swanson
Authorized public accountant

GLOSSARY

Abdominal abscess	A pocket of infected fluid inside the abdominal cavity
Anticoagulants	Medication which prevents or reduces the coagulation of the blood
Biological fluids	Fluids from the body
Bolus infusion	A larger dose of fluids or medical substances given intravenously at one time (normally between 1–30 minutes)
Cassette	A part of a portable infusion device where the fluids are stored
Catheter	A medical device that is inserted to the body to evacuate fluids, administrate fluids into the body or to insert other medical devices
Catheter blockings	Blockings in the catheter which prevents the flow
Ceftriaxone	An antibiotic
Central nervous system (CNS)	The central nervous system consisting of the brain and the spinal cord
Cerebral amyloid angiopathy	A group of conditions which is characterized by brain ischemia, brain infarction and cerebral hemorrhage
Cerebrospinal fluid (CSF)	Fluids found in the brain and the spinal cord
Clinical studies	Studies performed on humans to study the effect of medications or medical product
Contamination	Disease
Diagnosis related groups (DRG)	A system to classify patient groups and to determine cost reimbursement within healthcare
Distal	Indication of a direction towards the extremities of the body
Elastance	Change of pressure observed at a given change of volume
Endoscopic instruments	Instruments used for examination or surgery with an endoscope (a camera which is transferred into the part of the body which shall be examined)
Epidural hematoma	A bleeding caused by an injury between the outer brain membrane and the scull
EVD – External ventricular drain	Drainage of the cavities in the brain which contain cerebrospinal fluids
Hemiparesis	Mild weakness or inability to move one side of the body
Hemorrhagic stroke	A stroke caused by a weakened blood vessel that breaks and bleeds into or around the brain
Infusion	Supplying of fluids or medical substances intravenously to a patient
Intracranial pressure (ICP)	The pressure inside the scull
Intraparenchymal	Within a specific tissue inside inner organs
Intraparenchymal hemorrhage	A form of cerebral hemorrhage within the parenchyma in e.g. the brain
Intraperitoneal	Within the membrane surrounding the abdominal cavity
Lumen	A cavity or channel within an organ
Managed care (organizations)	A health care delivery system where contacts between care givers and caretakers are managed to attain healthcare at a reduced cost, usually through a medical insurance program
Neurosurgery	The specialty within medicine concerned with the treatment of injuries and disorders in the brain and spinal cord
The occipital	The part of the brain where the visual cortex is located

Occlusion	Blockage
Pathological fluids	From disease altered fluids
Predicate device	A term used to describe an already approved device which can be used as a basis for demonstration of a new device which seeks approval from the FDA in a Premarket Notification submission, so called 510(k)
Preclinical	Pertaining to studies performed on prospective pharmaceuticals before it is tested on humans
Sponsor	A person, company, institution or organization who is responsible for initiating, organizing and/or financing of a clinical study
Stem ganglia bleeding	Bleeding from the ganglia which is a group of nuclei inside the brain
Streptococcus intermedius	Bacteria that forms chains within the thigh muscle
Subcutaneus	A term to describe something located right under the skin
Subdural hematoma	Subdural hematoma occurs when a vein or other blood vessels breaks between the scull and the outer membrane covering the brain, resulting in a collection of blood (a hematoma) on the surface of the brain
TSEK	Refers to one thousand SEK
Ventricle	A cavity in the brain which contains cerebrospinal fluids
US Food and Drug Administration (FDA)	The American federal agency on health and human services

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