

THIS DOCUMENT AND THE ENCLOSED FORM OF PROXY ARE IMPORTANT AND REQUIRE YOUR IMMEDIATE ATTENTION. If you are in any doubt about the contents of this document, or the action you should take, you are recommended to seek your own personal financial advice immediately from your stockbroker, bank manager, solicitor, accountant or other independent financial adviser authorised under the Financial Services and Markets Act 2000 (as amended) ('FSMA') if you are resident in the United Kingdom or, if not, from another appropriately authorised independent financial adviser.

If you have sold or transferred all of your Ordinary Shares, please send this document and the accompanying Form of Proxy, as soon as possible to the purchaser or transferee or to the stockbroker, bank or other agent through whom the sale or transfer was effected for onward transmission to the purchaser or transferee.

This document does not constitute an offer to buy, acquire or subscribe for (or the solicitation of an offer to buy, acquire or subscribe for), Ordinary Shares or an offer to buy, acquire or subscribe for (or the solicitation of an offer to buy, acquire or subscribe for), the Fundraise Shares. This document does not contain an offer of transferable securities within the meaning of section 102B of FSMA and does not constitute a prospectus within the meaning of section 85 of FSMA. Neither does it constitute an admission document drawn up in accordance with the AIM Rules for Companies. This document has not been examined or approved by the Financial Conduct Authority or the London Stock Exchange or any other regulatory authority.

Application will be made to the London Stock Exchange for the Fundraise Shares to be admitted to trading on AIM. It is expected that Admission of the Fundraise Shares will become effective and that dealings will commence on 31 December 2018 following the General Meeting. The Fundraise Shares will, when issued, rank in full for all dividends and other distributions declared, made or paid on the Ordinary Shares and otherwise rank *pari passu* in all respects with the Existing Ordinary Shares.

Your attention is drawn to the Letter from the Chairman of the Company which is set out on pages 9 to 14 (inclusive) of this document and which recommends that you vote in favour of the Resolutions to be proposed at the General Meeting.

The Notice of General Meeting to be held at the offices of Reed Smith LLP at The Broadgate Tower, 20 Primrose Street, London, EC2A 2RS at 2.00 p.m. on 28 December 2018, is set out at the end of this document. The accompanying Form of Proxy for use in connection with the General Meeting should be completed by Shareholders and returned as soon as possible but, in any event, so as to be received by the Registrars at The Courtyard, 17 West Street, Farnham, Surrey GU9 7DR, United Kingdom by no later than 2.00 p.m. on 24 December 2018 (or, in the case of an adjournment of the General Meeting, not later than 48 hours before the time fixed for the holding of the adjourned meeting). The completion and return of a Form of Proxy will not preclude Shareholders from attending and voting at the General Meeting should they so wish.

Polarean Imaging plc

(Incorporated and registered in England and Wales with registered No. 10442853)

Conditional Fundraise of 22,321,429 Fundraise Shares at 14 pence per Fundraise Share

and

Notice of General Meeting

Nominated Adviser and Broker
Northland Capital Partners Limited



Share capital immediately following Admission

Ordinary Shares of £0.00037 each in
the capital of the Company

Nominal value
£37,270.43

Number
100,730,893

Northland Capital Partners Limited, which is authorised and regulated in the United Kingdom by the Financial Conduct Authority, is acting as nominated adviser in connection with the proposed Fundraise and broker to the Company in connection with the proposed Placing. Persons receiving this document should note that Northland Capital Partners Limited is not acting for anyone other than the Company (including a recipient of this document) and will not be responsible to anyone other than the Company for providing the protections afforded to clients of Northland Capital Partners Limited or for advising any other person in respect of the proposed Fundraise or any transaction, matter or arrangement referred to in this document. Northland Capital Partners Limited has not authorised the contents of, or any part of, this document and no liability whatsoever is accepted by Northland Capital Partners Limited, for the accuracy of any information or opinions contained in this document or for the omission of any information. Northland Capital Partners Limited, as nominated adviser and broker to the Company, owes certain responsibilities to the London Stock Exchange which are not owed to the Company or the Directors.

The Fundraise Shares have not been, and will not be, registered under the United States Securities Act of 1933 (as amended) (the 'Securities Act') or under the securities laws of any state of the United States and will not qualify for distribution under any of the relevant securities laws of Australia, Canada, Japan, the Republic of Ireland or the Republic of South Africa. Accordingly, subject to certain exceptions, the Fundraise Shares may not be, directly or indirectly, offered, sold, taken up, delivered or transferred in or into the Australia, Canada, Japan, the Republic of Ireland, the Republic of South Africa or the United States, or for the account or benefit of, US persons (as such term is defined in Regulation S under the Securities Act) or to any national, resident or citizen of Australia, Canada, Japan, the Republic of Ireland or the Republic of South Africa. The distribution of this document in other jurisdictions may be restricted by law and, therefore, persons into whose possession this document comes should inform themselves about and observe such restrictions. Any failure to comply with these restrictions may constitute a violation of the securities laws of any such jurisdiction. Shareholders who are residents or citizens of any country other than the United Kingdom and any person (including, without limitation, custodians nominees and trustees) who have a contractual or other legal obligation to forward this document to a jurisdiction outside the United Kingdom should seek appropriate advice before taking any action.

Copies of this document will be available free of charge to the public during normal business hours on any day (Saturdays, Sundays and public holidays excepted) at the offices of Polarean Imaging plc at 27-28 Eastcastle Street, London, W1W 8DH from the date of this document to the date of the General Meeting and also from the Company's website www.polarean.com.

FORWARD LOOKING STATEMENTS

This document includes 'forward-looking statements' which include all statements other than statements of historical facts, including, without limitation, those regarding the Group's financial position, business strategy, plans and objectives of management for future operations, or any statements preceded by, followed by or that include the words 'targets', 'believes', 'expects', 'aims', 'intends', 'will', 'may', 'anticipates', 'would', 'could' or 'similar' expressions or negatives thereof. Such forward-looking statements involve known and unknown risks, uncertainties and other important factors beyond the Company's control that could cause the actual results, performance or achievements of Group to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. Such forward-looking statements are based on numerous assumptions regarding the Group's present and future business strategies and the environment in which the Group will operate in the future. These forward looking statements speak only as at the date of this document. The Company expressly disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statements contained herein to reflect any change in the Company's expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based unless required to do so by applicable law or the AIM Rules.

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DEFINITIONS

The following words and expressions shall have the following meanings in this document unless the context otherwise requires:

'Admission'	the admission to trading on AIM of the Fundraise Shares becoming effective in accordance with Rule 6 of the AIM Rules;
'AIM'	the AIM market operated by the London Stock Exchange;
'AIM Rules'	the rules for AIM companies as published by the London Stock Exchange from time to time;
'Articles'	the articles of association of the Company;
'Board' or 'Directors'	the directors of the Company;
'Business Day'	any day which is not a Saturday, Sunday or public holiday on which banks are open for business in the City of London;
'certificated' or 'in certificated form'	a share or other security which is not in uncertificated form (that is, not in CREST);
'Circular' or 'this document'	this circular prepared in relation to the Fundraise;
'Company' or 'Polarean'	Polarean Imaging plc, a company incorporated in England and Wales with company number 10442853 and having its registered office at 27-28 Eastcastle Street, London, W1W 8DH;
'CREST'	the computerised settlement system to facilitate transfer of title to or interests in securities in uncertificated form operated by Euroclear UK & Ireland Limited;
'Enlarged Share Capital'	the entire issued ordinary share capital of the Company immediately following Admission;
'Existing Ordinary Shares'	the 78,409,464 Ordinary Shares currently in issue at the date of this document;
'Form of Proxy'	the form of proxy for use at the General Meeting which accompanies this document;
'FSMA'	the UK Financial Services and Markets Act 2000, as amended;
'Fundraise'	the Placing and the Subscription;
'Fundraise Price'	14 pence per Fundraise Share;
'Fundraise Shares'	the Placing Shares and the Subscription Shares;
'General Meeting'	the general meeting of the Company, notice of which is set out at the end of this document;
'Group'	the Company and its subsidiary undertakings;
'London Stock Exchange'	London Stock Exchange plc;
'Long Stop Date'	18 January 2019;

'Northland' or 'Nominated Adviser' or 'Nomad' or 'Broker'	Northland Capital Partners Limited, a company incorporated in England with company number 02617599 and having its registered office at 40 Gracechurch Street, 2nd Floor, London, United Kingdom, EC3V 0BT, and who at the date of this document is appointed as nomad and broker to the Company;
'Notice of General Meeting'	the notice of the General Meeting, which is set out at the end of this document;
'Ordinary Shares'	ordinary shares of £0.00037 each in the share capital of the Company;
'Placing'	the conditional placing of the Placing Shares by Northland pursuant to the Placing Agreement;
'Placing Agreement'	the conditional placing agreement entered into between the Company and Northland on 11 December 2018;
'Placing Shares'	the up to 17,686,435 new Ordinary Shares to be issued by the Company pursuant to the Placing;
'Registrars'	Share Registrars Limited of The Courtyard, 17 West Street, Farnham, Surrey GU9 7DR, United Kingdom;
'Related Parties'	Richard Morgan, Richard Hullihen, Kenneth West, Bastiaan Driehuys, Amphion Innovations plc and Nukem Isotopes GmbH;
'Resolutions'	the resolutions to be proposed at the General Meeting, as set out in the Notice of General Meeting;
'Securities Act'	the United States Securities Act of 1933 (as amended);
'Shareholder(s)'	holder(s) of Ordinary Shares;
'Subscribers'	persons who agree, by entering into a Subscription Agreement, to subscribe for Subscription Shares at the Fundraise Price;
'Subscription'	the conditional subscription for the Subscription Shares, to be issued at the Fundraise Price, in accordance with the Subscription Agreements;
'Subscription Agreement'	the agreements dated 7 December 2018 between the Company and each of the Subscribers relating to the Subscription;
'Subscription Shares'	the up to 4,634,994 new Ordinary Shares to be issued pursuant to the Subscription;
'subsidiary undertakings'	has the meaning as set out in section 1162 of the Companies Act 2006;
'UK' or 'United Kingdom'	the United Kingdom of Great Britain and Northern Ireland;
'uncertificated' or 'in uncertificated form'	a share or security recorded in the Company's register of members as being held in uncertificated form, title to which may be transferred by means of CREST; and
'US' or 'United States'	the United States of America.

GLOSSARY OF TECHNICAL TERMS

'Clinical Trials'	the Group's Phase III clinical trials being conducted in the US;
'COPD'	chronic obstructive pulmonary disease;
'FDA'	the US Food and Drug Administration;
'hyperpolarisation'	aligning the nuclear magnetic moments of atoms in order to greatly enhance their MRI signal;
'MRI' or 'MRI scan'	magnetic resonance imaging is a type of scan that uses strong magnetic fields and radio waves to produce detailed images of the inside of the body;
'MRI signal'	generally the signal created by protons (hydrogen atoms) in tissues containing water molecules that is processed to form an image of the body resulting from an MRI scan. When the Group conducts MRI scans with hyperpolarised ¹²⁹ Xe, it is the ¹²⁹ Xe that produces the MRI signal;
'NDA'	New Drug Application;
'Pilot Study'	the study of 10 COPD patients commissioned by the Company to validate the trial design and the proposed analysis methods of its Clinical Trial;
'polariser' or 'hyperpolariser'	the device that the Group designs manufactures and distributes and which produces hyperpolarised xenon, i.e. a hyperpolariser;
'pulmonary hypertension'	high blood pressure in the vasculature supplying the lungs;
'pulmonary vasculature'	the blood vessels which run between the lung and heart;
'PVD'	pulmonary vascular disease;
'SBIR'	Small Business Innovation Research;
'spirometry'	a pulmonary function tests which measures lung function and specifically the amount (volume) and/or speed (flow) of air that can be inhaled and exhaled;
'Xe' or 'Xenon'	Xenon, a chemical element with symbol Xe and atomic number 54, which is a colourless, dense, odourless noble gas found in the Earth's atmosphere in trace amounts; and
'¹²⁹Xe'	a stable isotope of xenon detectable by MRI.

DIRECTORS, SECRETARY AND ADVISERS

Directors	Richard Morgan Richard Hullihen Kenneth (“ <u>Ken</u> ”) West Bastiaan Driehuys Jonathan Allis Robert (“ <u>Bob</u> ”) Bertoldi Juergen Laucht	Non-Executive Chairman Chief Executive Officer Chief Operating Officer Chief Technology Officer Non-executive Director Non-executive Director Non-executive Director
Registered Office	27-28 Eastcastle Street London, W1W 8DH	
Head Office, business address of the Directors and principal trading address	2500 Meridian Parkway Suite 175 Durham, NC 27713 United States	
Company website	www.polarean.com	
Company Secretary	Stephen Austin	
Nominated Adviser and Broker	Northland Capital Partners Limited 40 Gracechurch Street, 2nd Floor London, EC3V 0BT	
Solicitors to the Company	Reed Smith LLP The Broadgate Tower 20 Primrose Street London, EC2A 2RS	
Solicitors to the Nominated Adviser and Joint Brokers	Marriott Harrison LLP 11 Staple Inn London, WC1V 7QH	
Auditor	Crowe UK LLP St Bride’s House 10 Salisbury Square London, EC4Y 8EH	
Registrars	Share Registrars Limited The Courtyard 17 West Street Farnham Surrey, GU9 7DR	

FUNDRAISE STATISTICS

Fundraise Price	14 pence
Total Number of Subscription Shares	4,634,994
Total Number of Placing Shares	17,686,435
Total Number of Fundraise Shares	22,321,429
Number of Existing Ordinary Shares ⁽¹⁾	78,409,464
Enlarged Share Capital	100,730,893
Percentage of the Enlarged Share Capital represented by the Fundraise Shares	22.1 per cent.
Gross Proceeds of the Fundraise	Approximately US\$4,000,000 (£3,125,000)
Estimated net proceeds of the Fundraise	Approximately US\$3,752,570 (£2,931,893)

EXPECTED TIMETABLE OF PRINCIPAL EVENTS

This document posted to Shareholders (by first class post)	11 December 2018
Latest time and date for receipt of Form of Proxy	2.00 p.m. on 24 December 2018
General Meeting	2.00 p.m. on 28 December 2018
Admission and dealings in Fundraise Shares expected to commence on AIM:	8.00 a.m. on 31 December 2018
Despatch of definitive share certificates in respect of the Fundraise Shares in be held in certificated form	Within 14 days of Admission

EXCHANGE RATES

The exchange rate used throughout this document, unless otherwise stated, is £1.00 = US\$1.28.

Notes:

1. As at 10 December 2018, the last Business Day prior to publication of this document.
2. Each of the times and dates above are indicative only and if any of the details contained in the timetable above should change, the revised times and dates will be notified to Shareholders by means of an announcement through a Regulatory Information Service.
3. All of the above times refer to London time unless otherwise stated.
4. All events listed in the above timetable following the General Meeting are conditional on the passing at the General Meeting of the Resolutions.

LETTER FROM THE CHAIRMAN OF POLAREAN IMAGING PLC

(Incorporated in England and Wales under the Companies Act 2006 with registered no. 10442853)

Directors:

Richard Morgan	Non-Executive Chairman
Richard Hulihan	Chief Executive Officer
Kenneth (“Ken”) West	Chief Operating Officer
Bastiaan Driehuys	Chief Technology Officer
Jonathan Allis	Non-executive Director
Robert (“Bob”) Bertoldi	Non-executive Director
Juergen Laucht	Non-executive Director

Registered office:

27-28 Eastcastle Street
London
W1W 8DH

11 December 2018

To Shareholders and, for information only, to the holders of options and warrants over Ordinary Shares

Dear Shareholder

Fundraise of 22,321,429 Fundraise Shares at 14 pence per Fundraise Share and Notice of General Meeting

1. INTRODUCTION

The Company and its wholly owned subsidiary, Polarean, Inc., are revenue generating, medical drug-device combination companies operating in the high resolution functional magnetic resonance imaging market.

The Group develops equipment that enables existing MRI systems to achieve an improved level of pulmonary function imaging and specialises in the use of hyperpolarised xenon gas (^{129}Xe) as an imaging agent to visualise ventilation and gas exchange regionally in the smallest airways of the lungs, the tissue barrier between the lung and the bloodstream and in the pulmonary vasculature. Xenon gas exhibits solubility and signal properties that enable it to be imaged within other tissues and organs.

The Group operates in an area of significant unmet medical need and the Group’s technology provides a novel diagnostic approach, offering a non-invasive and radiation-free functional imaging platform which is more accurate and less harmful to the patient than current methods. The annual burden of pulmonary disease in the US is estimated to be over US\$150 billion.

The Company has today announced that it has conditionally raised a total of US\$4 million (£3.125 million) (before expenses) by means of the conditional Fundraise and the issue of, in aggregate 22,321,429 Fundraise Shares. This Circular sets out details of the conditional Fundraise, explains why the Directors consider the Fundraise to be in the best interests of the Company and its Shareholders and why the Directors unanimously recommend that you vote in favour of the Resolutions to be proposed at the General Meeting, as they intend to do in respect of their own beneficial interests. A notice for the General Meeting, which includes details of the Resolutions is set out at the end of this document.

2. DEVELOPMENTS SINCE ADMISSION

The Group raised £3 million (before expenses) when its Ordinary Shares were admitted to trading on AIM on 29 March 2018. Since listing the Group has made considerable progress in moving forward with its Clinical Trials.

Pilot Study

As part of the preparation for the Clinical Trials, Polarean commissioned the Pilot Study, comprised of ten COPD patients, at one of its trial sites to validate the trial design and the proposed analysis methods of the Clinical Trials. The Pilot Study gave the Company confidence in the design of its Clinical Trials, confirming that the chosen methodology is appropriate and providing the basis for initiating the full Clinical Trials.

Notice of allowance on patent application

On 27 July 2018 the Company announced that it had received notice of allowance on one of its patents on polarisation. This patent, together with the Group's existing know-how, has led to increasing levels of polarisation for its gas-hyperpolarisation platform for MRI. This is key to advancing image quality, exploring new applications and increasing the overall efficiency of the Group's polarisers.

Clinical Trial

The Clinical Trials are head-to-head, non-inferiority trials which compare Polarean's technology with a 40 year old nuclear medicine technique using radioactive ^{133}Xe and gamma cameras. The Clinical Trials, which are being conducted at two of the Group's closest collaborative sites: the University of Virginia and Duke University, commenced in August 2018 and will involve a total of 80 patients.

The Clinical Trials characterise ventilation in two sets of patients being evaluated for surgical procedures: (i) those who are being evaluated for lung lobar resection surgery; and (ii) those being evaluated for lung transplant. In each case the patient's pre-operative expired vital capacity is measured through scintigraphy as well as by using the Group's technology to assess the remaining post-operative vital capacities. The focus of the Clinical Trials are entirely on the pre-operative assessment of the patient and it makes no difference whether the patient is chosen for surgery or not. The Clinical Trials allow for an equivalence margin in order to be non-inferior.

So far the candidate patient flows for the Clinical Trials are as expected for transplant and resection patients, screening methods are functioning as designed, enrolment is happening in both clinical indication pathways and data collection has commenced. As set out in the plan for the Clinical Trials, data analysis will begin after a sufficient percentage of patients in both pathways have been accumulated.

Delivery of Polarisers

Following Admission the Group has continued to build relationships with research institutions and certain key clinical collaborators. As such, the Group has delivered the latest model of its xenon polariser to a number of sites including The Center for Pulmonary Imaging Research at the Cincinnati Children's Hospital Medical Center as part of its SBIR grant with the institution, Duke University and the University of Virginia as part of the Clinical Trials and to the Department of Radiology at University of Missouri Health Care which recently launched a programme in pulmonary imaging and will use Polarean's hyperpolarised xenon technology as part of this programme.

July Fundraise

Following some strong institutional demand from institutional and EIS/VCT investors, the Group raised US\$1.064 million (£800,000) (before expenses) through a placing in July 2018. A total of 5,000,000 new Ordinary Shares were placed with new and existing investors at a price of 16 pence per Ordinary Share. The net proceeds from this fundraise have provided further support to the Clinical Trials and have enabled the Group to make certain technical improvements to its polarisers.

3. BACKGROUND TO AND REASONS FOR THE FUNDRAISE

The Group is undertaking the Fundraise at this time in order to strengthen its balance sheet and provide the Directors with additional comfort over the funding of the Clinical Trials, financing the supply of polarisers and other general working capital needs during the course of 2019.

4. USE OF PROCEEDS

The net proceeds of the Fundraise, which are estimated to be US\$3,752,570 (£2,931,893), will be used as follows:

- to provide additional support for the Clinical Trials, ensuring the timely completion of recruitment, scanning and readout;
- to support the preparation and submission of the NDA following readout;

- to provide additional working capital to build new polarisers for impending orders; and
- to support the initial preparation for market launch following the submission of the NDA.

The Company will require further capital in order to execute its longer term strategy which includes exploring additional applications for the Group's technology such as moving beyond assessment of ventilation into gas exchange and the newly discovered pulmonary vascular disease ('PVD') applications. The Board will therefore continue to explore additional funding options, including strategic partnerships, non-dilutive government funding from grants and further issues of Ordinary Shares, subject to the Directors being satisfied with the issue price of these shares at the time.

5. CURRENT PROSPECTS AND OUTLOOK

The most important near-term milestone for the Group will be the completion of the Clinical Trials for the Group's technology. The trial commenced in August 2018 and patient enrolment is expected to complete during the second quarter of 2019, after which the Group will prepare the NDA. Upon completion of the Clinical Trials and filing of the NDA, the Directors anticipate receiving a broad indication for use from the FDA following the FDA's review period.

In addition, the Directors believe that the Group's ongoing collaboration with Duke University regarding the use of hyperpolarised gas imaging in the field of PVD, offers Polarean the potential to address an additional unmet medical need in diagnosis and monitoring of cardiopulmonary conditions.

6. DETAILS OF THE FUNDRAISE

The Company has conditionally raised US\$4 million (£3.125 million), before expenses, by way of a conditional Placing to new and existing institutional investors of 17,686,435 Placing Shares and a conditional Subscription to existing investors of 4,634,994 Subscription Shares, each at the Fundraise Price. The Fundraise Price represents a discount of 15.2 per cent. to the Company's closing price on 10 December 2018 being the latest practical date prior to the date of this document. Assuming the issue of all of the Fundraise Shares, the Fundraise Shares will represent approximately 28.5 per cent. of the Existing Ordinary Shares and will, when issued, represent approximately 22.1 per cent. of the Enlarged Share Capital.

The Fundraise Shares will, following Admission, rank in full for all dividends and distributions declared, made or paid in respect of the issued Ordinary Share capital of the Company and otherwise rank *pari passu* in all other respects with the Existing Ordinary Shares.

The Fundraise Shares are not being made available to the public and none of the Fundraise Shares are being offered or sold in any jurisdiction where it would be unlawful to do so, including Australia, Canada, Japan, the Republic of Ireland, the Republic of South Africa or the United States. As noted above, the Fundraise Shares have not been, and will not be, registered under the Securities Act or under the securities laws of any state of the United States or qualify for distribution under any of the relevant securities laws of Australia, Canada, Japan, the Republic of Ireland or the Republic of South Africa.

The Placing and the Placing Agreement

In connection with the Placing, on 11 December 2018 the Company entered into the Placing Agreement pursuant to which Northland have agreed to act as agents for the Company and use their reasonable endeavours to place the Placing Shares with certain new and existing institutional investors. The Placing is conditional, among other things, upon: (i) the passing of the Resolutions; and (ii) Admission occurring as soon as practicable following the General Meeting or by such later time and/or date as Northland and the Company may agree but not later than 8.00 am on the Long Stop Date.

The Placing Agreement contains customary warranties from the Company in favour of Northland in relation to (amongst other things) the accuracy of the information in this document and other matters relating to the Company and its business. In addition, the Company has agreed to indemnify Northland in relation to certain liabilities they may incur in undertaking the Placing. Northland have the right to terminate the Placing Agreement in certain circumstances prior to Admission. In particular, Northland may terminate in the event that there has been a breach of any of the warranties, the conditions of the agreement have become incapable of fulfilment or for force majeure. The Placing will not be underwritten.

The Placing Shares will represent approximately 17.6 per cent. of the Enlarged Issued Share Capital.

The Subscription

The Subscription Shares will be issued to the Subscribers, at the Fundraising Price, by the Company pursuant to the Subscription Agreements. The Subscription is conditional, amongst other things, upon shareholder approval to issue the Subscription Shares being granted at the General Meeting and Admission occurring as soon as practicable following the General Meeting but not later than 8.00 a.m. on the Long Stop Date.

The Subscription Shares will represent approximately 4.6 per cent. of the Enlarged Issued Share Capital.

7. DIRECTORS' AND OTHER INTERESTS

As at the date of this document and immediately following Admission, the interests (all of which are beneficial unless otherwise stated), whether direct or indirect, of the Directors and their families (within the meaning set out in the AIM Rules) in the issued share capital of the Company and the existence of which is known to or could, with reasonable diligence, be ascertained by that Director, are as follows:

Name	<i>Before Admission</i>		<i>Following Admission</i>	
	<i>Percentage</i>		<i>Percentage</i>	
	<i>No of issued Ordinary Shares</i>	<i>of issued Ordinary Shares</i>	<i>No of issued Ordinary Shares</i>	<i>of issued Ordinary Shares</i>
Richard Morgan†	140,000	0.2	419,018	0.4
Richard Hullihen	1,780,211	2.3	2,137,354	2.1
Kenneth West	336,085	0.4	475,594	0.5
Bastiaan Driehuys	12,127,994	15.5	12,267,503	12.2
Jonathan Allis	–	–	–	–
Robert Bertoldi	93,333	0.1	93,333	0.1
Juergen Laucht	–	–	–	–

* The percentages shown are based on the most recent share register analysis or latest date of notification

† Includes Ordinary Shares held by Anna Morgan

8. SIGNIFICANT SHAREHOLDERS

As at 31 December 2018 and immediately following Admission, the Directors are aware of the following persons who, directly or indirectly, are interested in three per cent. or more of the Company's existing Ordinary Share Capital before Admission and their resultant holdings after Admission:

Name	<i>Before Admission</i>		<i>Following Admission</i>	
	<i>Percentage</i>		<i>Percentage</i>	
	<i>No of issued Ordinary Shares</i>	<i>of issued Ordinary Shares</i>	<i>No of issued Ordinary Shares</i>	<i>of issued Ordinary Shares</i>
Amphion Innovations plc	17,034,853	21.7	18,372,524	18.2
Bastiaan Driehuys	12,127,994	15.5	12,267,503	12.2
NUKEM Isotopes Imaging GmbH	9,839,118	12.5	11,234,208	11.2
John Sudol	6,206,121	7.9	6,206,121	6.2
W.B. Nominees Limited	7,522,411	9.6	8,736,697	8.7
Cleveland Capital	2,625,000	3.3	2,625,000	2.6
Amati Global Investors	–	–	8,571,429	8.5

* The percentages shown are based on the most recent share register analysis or latest date of notification

9. RELATED PARTY TRANSACTION

Richard Morgan, Richard Hullahen, Kenneth West, Bastiaan Driehuys, Amphion Innovations plc and Nukem Isotopes GmbH are, respectively, Directors of and substantial shareholders in the Company and their participation in the Fundraise constitutes a related party transaction in accordance with AIM Rule 13. Jonathan Allis who is not subscribing for Fundraise Shares and is therefore considered to be an independent Director for these purposes, having consulted with Northland, considers the terms of the Related Parties' participation in the Fundraise to be fair and reasonable insofar as the Shareholders are concerned.

10. GENERAL MEETING

The Directors do not currently have the authority to issue all of the Fundraise Shares without applying statutory pre-emption rights so the Fundraise will be subject to Polarean's shareholders approving resolutions to increase the Directors' authority to allot the Fundraise Shares, and to disapply statutory pre-emption rights, at the General Meeting. Application will be made for the Fundraise Shares to be admitted to trading on AIM as soon as practicable following the General Meeting.

A notice is set out at the end of this document convening the General Meeting to be held at the offices of Reed Smith LLP at The Broadgate Tower, 20 Primrose Street, London, EC2A 2RS on 28 December 2018 at 2.00 p.m. at which the following Resolutions will be proposed:

- (A) Resolution 1, which will be proposed as an ordinary resolution, is to authorise the Directors to allot up to: (i) 22,321,429 Ordinary Shares (being an aggregate nominal value of £8,258.93) in connection with the Fundraise; and (ii) 15,109,634 Ordinary Shares (being an aggregate nominal value of £5,590.56 and 15 per cent. of the Enlarged Share Capital) otherwise than in connection with the Fundraise; and
- (B) Resolution 2, which will be proposed as a special resolution and which is subject to the passing of Resolution 1, is to disapply statutory pre-emption rights, provided that such authority shall be limited to: (i) 22,321,429 Ordinary Shares (being an aggregate nominal value of £8,258.93) in connection with the Fundraise; and (ii) 15,109,634 Ordinary Shares (being an aggregate nominal value of £5,590.56 and 15 per cent. of the Enlarged Share Capital) otherwise than in connection with the Fundraise.

Resolution 1 authorises the allotment of Ordinary Shares for the Fundraise, as well as providing the Directors with a standing authority to allot up to 15,109,634 Ordinary Shares (being an aggregate nominal value of £5,590.56 and 15 per cent. of the Enlarged Share Capital) outside the Fundraise.

Similarly, Resolution 2 authorises the disapplication of statutory pre-emption rights in respect of the allotment and issue of the Fundraise Shares as well as providing the Directors with a standing authority to allot up to a total of 15 per cent. of the Ordinary Shares in issue following Admission without being required to apply statutory pre-emption rights.

11. ACTION TO BE TAKEN

Please check that you have received the following with this document:

- a Form of Proxy for use in relation to the General Meeting; and
- a reply-paid envelope for use in connection with the return of the Form of Proxy (in the UK only).

Whether or not you intend to be present in person at the General Meeting, you are strongly encouraged to complete, sign and return your Form of Proxy in accordance with the instructions printed thereon so as to be received by post or, during normal business hours only, by hand, at Share Registrars Limited of The Courtyard, 17 West Street, Farnham, Surrey GU9 7DR, United Kingdom, as soon as possible but in any event so as to arrive by not later than 2.00 p.m. on 24 December 2018 (or, in the case of an adjournment of the General Meeting, not later than 48 hours before the time fixed for the holding of the adjourned meeting (excluding any part of a day that is not a Business Day)).

Appointing a proxy in accordance with the instructions set out above will enable your vote to be counted at the General Meeting in the event of your absence. The completion and return of a Form of Proxy will not

preclude you from attending and voting in person at the General Meeting, or any adjournment thereof, should you wish to do so.

12. RECOMMENDATION AND IRREVOCABLE UNDERTAKINGS

The Directors consider the Fundraise to be in the best interests of the Company and its Shareholders as a whole and accordingly unanimously recommend that Shareholders vote in favour of the Resolutions to be proposed at the General Meeting as they intend to do in respect of their own beneficial holdings amounting, in aggregate, to 14,477,623 Existing Ordinary Shares, representing approximately 18.5 per cent. of the Existing Ordinary Shares.

In addition to the Directors, certain other shareholders, have irrevocably undertaken to vote in favour of the Resolutions in respect of the Existing Ordinary Share in which they are interested, amounting in aggregate to 41,351,594 Existing Ordinary Shares, representing 52.7 per cent of the Existing Ordinary Shares.

Yours faithfully

Richard Morgan
Chairman

NOTICE OF GENERAL MEETING

POLAREAN IMAGING PLC

(Incorporated in England and Wales under the Companies Act 2006 with registered no. 104442853)

NOTICE IS HEREBY GIVEN that a General Meeting of Polarean Imaging plc (the '**Company**') will be held at the offices of Reed Smith LLP at The Broadgate Tower, 20 Primrose Street, London, EC2A 2RS at 2.00 p.m. on 28 December 2018 for the purpose of considering and, if thought fit, passing the following Resolutions, which will be proposed in the case of Resolution 1 as an ordinary resolution and in the case of Resolution 2 as a special resolution.

For the purposes of these Resolutions capitalised terms shall (unless the context requires otherwise) have the meaning ascribed to them in a circular from the Company to its Shareholders dated 11 December 2018 (the '**Circular**').

ORDINARY RESOLUTION

- 1 That the Directors be and they are hereby generally and unconditionally authorised for the purposes of section 551 of the Companies Act 2006 (the '**2006 Act**') to exercise all the powers of the Company to allot shares and grant rights to subscribe for, or convert any security into, shares:
 - (a) up to an aggregate of 22,321,429 Ordinary Shares (being an aggregate nominal value of £8,258.93) in connection with the Fundraise; and
 - (b) otherwise than in connection with the Fundraise, up to an aggregate of 15,109,634 Ordinary Shares (being an aggregate nominal value of £5,590.56 and 15 per cent. of the Enlarged Share Capital).

These authorities shall be in substitution for and shall replace any existing authorities to the extent not utilised at the date this resolution is passed and shall expire at the conclusion of the next AGM save that the Company may before such expiry make offers or agreements which would or might require shares to be allotted or rights to be granted after such expiry and the Directors may allot shares, or grant rights to subscribe for or convert any security into shares, in pursuance of any such offer or agreement as if the authorities conferred hereby had not expired.

SPECIAL RESOLUTION

- 2 That, subject to the passing of resolution 1, the Directors be and they are hereby empowered pursuant to section 570 of the 2006 Act to allot equity securities (as defined in section 560 of the 2006 Act) of the Company for cash pursuant to the authorities conferred by resolution 1 as if section 561 of the 2006 Act did not apply to any such allotment, provided that this power shall be limited to:
 - (a) the allotment of equity securities for cash in connection with or pursuant to an offer or invitation in favour of holders of Ordinary Shares in proportion (as nearly as practicable) to the respective number of Ordinary Shares held by them on the record date for such allotment (and holders of any other class of equity securities entitled to participate therein or, if the Directors consider it necessary, as permitted by the rights of those securities) but subject to such exclusions or other arrangements as the Directors may deem necessary or appropriate to deal with fractional entitlements, treasury shares, record dates, or legal, regulatory or practical difficulties which may arise under the laws of, or the requirements of, any regulatory body or stock exchange in any territory or any other matter whatsoever;
 - (b) the allotment of equity securities for cash in the case of the authority granted under resolution 1(a) above in connection with the Fundraise of up to an aggregate of 22,321,429 Ordinary Shares (being an aggregate nominal value of £8,258.93); and
 - (c) the allotment of equity securities for cash in the case of the authority granted under resolution 1(b) above, and otherwise than pursuant to paragraph (a) or (b) of this resolution, up to an aggregate of 15,109,634 Ordinary Shares (being an aggregate nominal value of £5,590.56 and 15 per cent. of the Enlarged Share Capital).

This power shall expire at the conclusion of the next AGM save that the Company may before such expiry make offers or agreements which would or might require equity securities to be allotted after such expiry and the directors may allot the relevant securities in pursuance of such offer or agreement as if the authority conferred hereby had not expired.

By order of the Board

Stephen Austin
Company Secretary

Registered office:

27-28 Eastcastle Street
London
W1W 8DH

Date: 11 December 2018

Notes

- (1) Members are entitled to appoint a proxy to exercise all or any of their rights to attend and to speak and vote on their behalf at the General Meeting. A proxy need not be a member of the Company.
- (2) A Form of Proxy is enclosed for your use if desired. Please carefully read the instructions on how to complete the Form of Proxy. For a proxy to be effective, the instrument appointing a proxy together with the power of attorney or such other authority (if any) under which it is signed or a notarially certified copy of such power of attorney or other authority must reach the Company's Registrars, Share Registrars Limited, The Courtyard, 17 West Street, Farnham, Surrey GU9 7DR, United Kingdom or by scan and email to voting@shareregistrars.uk.com not less than 48 hours before the time of holding of the General Meeting (excluding any part of a day that is not a Business Day). The Forms of Proxy should therefore be completed and deposited with the Company's Registrars by 2.00 p.m. on 24 December 2018. Completion of a proxy does not preclude a member from subsequently attending and voting at the General Meeting in person if he or she so wishes. If a member has appointed a proxy and attends the General Meeting in person, such proxy appointment will automatically be terminated.
- (3) Pursuant to Regulation 41 of Uncertificated Securities Regulations 2001, the Company specifies that only those Shareholders on the register of members 48 hours before the time of the General Meeting or adjourned General Meeting (excluding any part of a day that is not a Business Day), shall be entitled to attend or vote at the General Meeting in respect of the number of Existing Ordinary Shares registered in their name at the time. Changes to the register of members after that time will be disregarded in determining the rights of any person to attend or vote at the General Meeting.
- (4) Any member may insert the full name of a proxy or the full names of two alternative proxies of the member's choice in the space provided with or without deleting 'the Chairman of the meeting.' A proxy need not be a member of the Company, but must attend the meeting to represent the relevant member. The person whose name appears first on the Form of Proxy and has not been deleted will be entitled to act as proxy to the exclusion of those whose names follow. If this proxy form is signed and returned with no name inserted in the space provided for that purpose, the Chairman of the meeting will be deemed to be the appointed proxy. Where a member appoints as his/her proxy someone other than the Chairman, the relevant member is responsible for ensuring that the proxy attends the meeting and is aware of the member's voting intentions. Any alteration, deletion or correction made in the Form of Proxy must be initialled by the signatory/ies.
- (5) You may appoint more than one proxy provided each proxy is appointed to exercise rights attached to different Existing Ordinary Shares. You may not appoint more than one proxy to exercise rights attached to any one Existing Ordinary Share. If you wish to appoint more than one proxy, please contact the Company's Registrars, Share Registrars Limited on 01252 821390 or +44 1252 821390 from outside the UK. Lines are open from 9.00 a.m. to 5.30 p.m. Monday to Friday, excluding public holidays. Alternatively you may write to Share Registrars Limited, The Courtyard, 17 West Street, Farnham, Surrey GU9 7DR, United Kingdom for additional proxy forms and for assistance.
- (6) Any corporation which is a member of the Company can appoint one or more corporate representatives who may exercise on its behalf all of its powers as a member provided that they do not do so in relation to the same Existing Ordinary Share.
- (7) As at the date of this document, the Company's issued share capital comprised 78,409,464 ordinary shares of one penny each. Each Ordinary Share carries the right to vote at a General Meeting and, therefore, the total number of voting rights in the Company as at the date of this document is 78,409,464.
- (8) A member's instructions to the proxy must be indicated in the appropriate space provided. To abstain from voting on a resolution, select the relevant 'Vote withheld' box. A vote withheld is not a vote in law, which means that the vote will not be counted in the calculation of votes for or against the resolution. If no voting indication is given, your proxy will vote or abstain from voting at his or her decision. Your proxy will vote (or abstain from voting) as he or she thinks fit in relation to any other matter which is put before the meeting.
- (9) This Form of Proxy must be signed by the appointor or his attorney duly authorised in writing. The power of attorney or other authority (if any) under which the Form of Proxy is signed, or a notarially certified copy of the power or authority, must be received by the Company's registrar with the Form of Proxy. If the appointor is a corporation, the Form of Proxy should be signed on its behalf by an attorney or duly authorised officer or executed as a deed or executed under common seal. In the case of joint holders, the signature of any one of them will suffice, but the names of all joint holders should be stated.
- (10) CREST members who wish to appoint a proxy or proxies through the CREST Electronic Proxy Appointment Service may do so for the General Meeting to be held on 28 December 2018 and any adjournment(s) thereof by following the procedures described in the CREST manual. All messages relating to the appointment of a proxy or an instruction to a previously-appointed proxy, which are to be transmitted through CREST, must be received by Share Registrars Limited (ID 7RA36) no later than 2.00 p.m. on 24 December 2018, or, if the meeting is adjourned, 48 hours before the time fixed for the adjourned meeting (excluding any part of a day that is not a Business Day).
- (11) In order to revoke a proxy instruction you will need to inform the Company by sending a signed hard copy notice clearly stating your intention to revoke your proxy appointment to the Registrars, in the case of a member which is a company, the revocation notice must be executed in accordance with note 12 below. Any power of attorney or any other authority under which the revocation notice is signed (or a duly certified copy of such power or authority) must be included with the revocation notice must be received by the Registrars not less than 48 hours (excluding any part of a day that is not a Business Day) before the time fixed for the holding of the Meeting or any adjourned Meeting (or in the case of a poll before the time appointed for taking the poll) at which the proxy is to attend, speak and to vote. If you attempt to revoke your proxy appointment but the revocation is received after the time specified then, subject to the paragraph directly below, your proxy appointment will remain valid.
- (12) A corporation's form of proxy must be executed pursuant to the terms of section 44 of the Companies Act 2006 or under the hand of a duly authorised officer or attorney.
- (13) Any power of attorney or any other authority under which the proxy form is signed (or duly certified copy of such power of authority) must be included with the proxy form.

