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Polarean Imaging PLC
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Polarean Imaging plc
("Polarean" or the "Company")

Expansion of Xenon MRI imaging platform for pharma-sponsored research
A leading global pharmaceutical collaborator has selected Polarean's Xenon MRI clinical trial support services for a multicenter study

Polarean Imaging plc (AIM: POLX), a commercial-stage medical imaging technology leader in advanced Magnetic Resonance Imaging ("MRI") of lung function, announces the successful expansion of a new imaging service model to enable the use of Xenon MRI in pharma-sponsored research, alongside its partner VIDA Diagnostics ("VIDA"). This coincides with its selection by a leading global pharmaceutical ("pharma") partner to utilise the new Xenon MRI clinical trial support services platform as part of a sub-study within a worldwide multicenter study trial testing an investigational lung therapy.

As the interest in using Xenon MRI as a sensitive marker of pulmonary treatment effects has grown, there remains an unmet need for a Xenon MRI imaging platform to streamline pulmonary drug development. This unmet need includes harmonised image acquisition and processing and ensuring high-quality image controls for pharma trials to run with potentially fewer patients and/or at a faster pace to accelerate new drug time-to-market. Polarean's partnership with VIDA, a leader in lung imaging intelligence, has enabled the establishment of an imaging services platform and catalysed Polarean's capability to expand this new business vertical, underlined by its selection in the multicenter clinical trial.

The double-blind, randomised, placebo-controlled study is designed to evaluate the safety, tolerability, pharmacokinetics, and efficacy of the investigational therapy. The Xenon MRI sub-study will provide valuable additional insights into ventilation, membrane conductance, and red blood cell transfer in the lungs. The trial is expected to initiate in the fourth quarter of 2025 at selected sites in the U.S. and Canada that have a Xenon MRI system. Enrolled patients will undergo scans at baseline and at the study's conclusion to evaluate drug-induced changes on various components of alveolar gas-exchange. Together, Polarean and VIDA will provide site qualification and training, image harmonisation, and Xenon MRI biomarker analysis for the sub-study as part of this pharma partnership.

This new revenue-generating service model builds upon initial experience last year with an industry partner who selected Xenon MRI ventilation defect percentage (VDP) as the primary endpoint in testing different inhaled drug-delivery devices at a single site. Xenon MRI offers a non-invasive, radiation-free imaging approach that enables direct visualisation of lung function through a single breath hold of the inhaled hyperpolarized gas. Compared to traditional pulmonary function tests such as spirometry, Xenon MRI provides a more sensitive and repeatable assessment of lung function, making it an invaluable tool for reducing sample size and/or achieving greater power to detect subtle treatment-induced changes in the evaluation of new therapeutic interventions.

Christopher von Jako, Ph.D., CEO of Polarean, said:*"We previously identified pharma-sponsored trials as a new business vertical for us, and participation in this multi-center clinical trial underscores the growing recognition of Xenon MRI as a powerful tool in advancing the understanding and treatment of lung diseases. Our ongoing collaboration with VIDA has enabled us to launch our imaging services platform, enhancing the value proposition of Xenon MRI for pharma partners and accelerating the expansion of this vertical. By delivering precise and reproducible lung function measurements, our platform can help drive innovation in respiratory medicine and support the development of novel therapies that improve patient outcomes."*

Alex Dusek, Chief Business Officer of Polarean, said:*"Beyond sales of our Xenon MRI system and proprietary gas blend, pharma-sponsored trials using our unique imaging platform represent a key area of strategic growth for Polarean. Being selected for these services by a renowned pharmaceutical company is a key milestone for us. With VIDA as a partner, we have accelerated our ability to establish Xenon MRI as an advanced imaging modality that provides attractive biomarkers for pharmaceutical research. Providing a robust imaging service platform for drug development trials also enhances the value proposition for academic sites to build Xenon MRI programmes and be part of a growing network of expert centres able to provide Xenon MRI and recruit subjects for pulmonary drug trials."*

As previously announced, the Company will hold a Virtual Investor Day on Wednesday, 12 March 2025 at 2:00pm GMT. To register for the webinar, please use this link: Zoom Webinar - Register.

This announcement contains inside information for the purposes of Article 7 of Regulation (EU) 596/2014, as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

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About Polarean
Polarean is a revenue-generating medical imaging technology company revolutionising pulmonary medicine through direct visualisation of lung function by introducing the power and safety of MRI to the respiratory healthcare community. This community is in desperate need of modern solutions to accurately assess lung function. The Company strives to optimise lung health and prevent avoidable loss by illuminating hidden disease, addressing the global unmet medical needs of more

than 500 million patients worldwide suffering from chronic respiratory disease. Polarean is a leader in the field of hyperpolarisation science and has successfully developed the first and only hyperpolarised Xenon MRI inhaled contrast agent, XENOVIEW®, which is now FDA-approved in the United States. Polarean is dedicated to researching, developing, and commercialising innovative imaging solutions with its non-invasive and radiation-free pulmonary functional MRI platform. This comprehensive drug-device platform encompasses the proprietary Xenon gas blend, gas hyperpolarisation system, as well as software and accessories, facilitating fully integrated modern respiratory imaging operations. Founded in 2012, with offices in Durham, NC, and London, United Kingdom, Polarean is committed to increasing global awareness of and broad access to its XENOVIEW MRI technology platform. For the latest news and information about Polarean, please visit www.polarean.com.

About VIDA
VIDA Diagnostics, Inc. (VIDA) is a clinical imaging intelligence company that is accelerating the approval and adoption of life-saving therapies to patients through an AI-powered digital biomarker solution. Learn more at https://vidalung.ai.
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XENOVIEW IMPORTANT SAFETY INFORMATION

Indication
XENOVIEW®, prepared from the Xenon Xe 129 Gas Blend, is a hyperpolarized contrast agent indicated for use with magnetic resonance imaging (MRI) for evaluation of lung ventilation in adults and pediatric patients aged 12 years and older.

Limitations of Use
XENOVIEW has not been evaluated for use with lung perfusion imaging.

CONTRAINDICATIONS
None.

Warnings and Precautions
Risk of Decreased Image Quality from Supplemental Oxygen: Supplemental oxygen administered simultaneously with XENOVIEW inhalation can cause degradation of image quality. For patients on supplemental oxygen, withhold oxygen inhalation for two breaths prior to XENOVIEW inhalation, and resume oxygen inhalation immediately following the imaging breath hold.

Risk of Transient Hypoxia: Inhalation of an anoxic gas such as XENOVIEW may cause transient hypoxemia in susceptible patients. Monitor all patients for oxygen desaturation and symptoms of hypoxemia and treat as clinically indicated.

Adverse Reactions
Adverse Reactions in Adult Patients: The adverse reactions (> one patient) in efficacy trials were oropharyngeal pain, headache, and dizziness. Adverse Reactions in Pediatric and Adolescent Patients: In published literature in pediatric patients aged 6 to 18, transient adverse reactions were reported: blood oxygen desaturation, heart rate elevation, numbness, tingling, dizziness, and euphoria. In at least one published study of pediatric patients aged 6 to 18 years, transient decrease in SpO2% and transient increase in heart rate was reported following hyperpolarized xenon Xe 129 administration. XENOVIEW is not approved for use in pediatric patients less than 12 years of age.

Please see full prescribing information at www.XENOVIEW.net

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