RNS Number : 8739I
Polarean Imaging PLC
15 May 2025

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

Xenon MRI featured prominently at ATS 2025 across broad clinical spectrum
30+ studies across diverse conditions illuminate the unique value of functional lung imaging with Xenon MRI

Polarean Imaging plc (AIM: POLX), a commercial-stage medical imaging technology leader in advanced Magnetic Resonance Imaging ("MRI") of lung function, will be featured at the **American Thoracic Society's (ATS) 2025 Respiratory Innovation Summit (RIS)**, taking place May 16-17 at the Marriott Marquis in San Francisco, California. Polarean will also attend the **ATS 2025 International Conference** from May 18-21, continuing its active engagement with leaders across pulmonary medicine.

Polarean's selection as a featured company at RIS 2025 underscores the growing recognition of the company's Xenon MRI platform as an innovative tool for both clinical imaging and pharmaceutical drug development. RIS brings together key innovators, investors, clinicians, and patient advocacy groups for cross-sector dialogue on the future of respiratory care.

At the ATS 2025 International Conference, Xenon MRI will be featured in over 30 posters and presentations from more than 10 leading clinical sites. This robust presence reinforces the sustained momentum behind Xenon MRI as a powerful and enduring technology in pulmonary medicine. The breadth and depth of research presented this year further demonstrate its expanding role in both clinical care and clinical trials - signaling that Xenon MRI is not just innovative, but a lasting part of the respiratory care landscape.

The presentations listed below will highlight Xenon MRI's versatility across a wide spectrum of respiratory conditions, including asthma, bronchopulmonary dysplasia, COPD, COVID-19, cystic fibrosis, pulmonary arterial hypertension, radiation-induced lung injury, and post-transplant lung monitoring.

Polarean representatives will be on-site throughout RIS and the ATS International Conference to connect with clinicians, researchers, industry partners, and patient advocates. As excitement continues to build around functional lung imaging, Polarean remains at the forefront - visualizing hidden disease, personalizing treatment, and accelerating the future of respiratory medicine.

Christopher von Jako, PhD, CEO of Polarean, said:*"We are honoured to return as a featured company at the Respiratory Innovation Summit. RIS and the ATS International Conference provide vital opportunities to engage with thought leaders, strengthen partnerships, and highlight the growing body of clinical evidence supporting Xenon MRI. With over 30 presentations this year, it's clear that Xenon MRI is not only gaining traction-it's shaping the future of functional lung imaging and respiratory care."*

See the listing below for details on the presentation title, abstract number, session time, and location.

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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

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.

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

ATS Abstract Title	Presentation Time	Format	Session Location	Clinical Focus Are
Distinguishing Dose-dependent Radiation Lung Injury Using Hyperpolarized 129Xe Magnetic Resonance Spectroscopy	May 18, 2025 11:30 AM - 1:15 PM	Poster Board # P893	Area G, Hall F (North Building, Exhibition Level), Moscone Center	Radiation Induce Lung Injury (RILI
129Xe Gas Exchange MRI in Obesity-associated Asthma: Clinical Correlates and Regional Patterns	May 18, 2025 11:30 AM - 1:15 PM	Poster Board # P873	Area G, Hall F (North Building, Exhibition Level), Moscone Center	Asthma
Same-session Repeatability of 129Xe MRI/MRS Measures of Gas Exchange in Idiopathic Pulmonary Fibrosis	May 18, 2025 11:30 AM - 1:15 PM	Poster Board # P885	Area G, Hall F (North Building, Exhibition Level), Moscone Center	Idiopathic Pulmon Fibrosis (IPF)
Assessment of Regional Ventilation by Hyperpolarized 129Xe MRI in Patients With Idiopathic Pulmonary Fibrosis and Asthma	May 18, 2025 11:30 AM - 1:15 PM	Poster Board # P894	Area G, Hall F (North Building, Exhibition Level), Moscone Center	Asthma, Idiopath Pulmonary Fibros (IPF)
Regional Patterns of Obstruction and Air-trapping Before and After Exacerbation in Severe Asthma	May 18, 2025 2:15 PM - 4:15 PM	Poster Board # 503	Room 3010/3012 (West Building, Level 3), Moscone Center	Asthma
Utilizing Hyperpolarized 129Xe MRI as a Biomarker for Asthmatics on Biologic Treatments	May 18, 2025 2:15 PM - 4:15 PM	Poster Board # 506	Room 3010/3012 (West Building, Level 3), Moscone Center	Asthma
Investigating the Effects of Vaping on Lung Structure-Function With 129Xe MRI and CT	May 19, 2025 9:15 AM - 11:15 AM	Poster Board # 924	Room 3009/3011 (West Building, Level 3), Moscone Center	Vaping
Data-Efficient Lung Segmentation Using Foundational Models: Improving Clinical Workflow With Segment Anything Model (SAM) for Hyperpolarized Gas MRI	May 19, 2025 9:15 AM - 11:15 AM	Poster Board # 909	Room 3009/3011 (West Building, Level 3), Moscone Center	Clinical Workflo
Mapping the Chemical Shift of 129Xe in Red Blood Cells as a Biomarker for Pulmonary Hypertension	May 19, 2025 9:15 AM - 11:15 AM	Poster Board # 407	Room 301-302 (South Building, Level 3), Moscone Center	Pulmonary Hypertension (PH
Hyperpolarized 129Xe MRI Captures Elevated Regional Ventilation Heterogeneity in Patients With Bronchiolitis Obliterans Syndrome Following Hematopoietic Stem-cell Transplantation in Children	May 19, 2025 9:15 AM - 4:15 PM	Poster Board # P341	Area C, Hall F (North Building, Exhibition Level), Moscone Center	Hematopoietic Ste Cell Transplantati (HSCT), Bronchioli Obliterans Syndro (BOS)
Xenon Gas Magnetic Resonance Imaging to Characterize Viable Regions of Ventilation and	May 19, 2025	Poster	Area B, Hall F (North	Endobronchial Val

ATS Abstract Title	Presentation Time	Format	Session Location	Clinical Focus Area
Perfusion Prior to Removal of Endobronchial Valves	9:15 AM - 4:15 PM	Board #P141	Building, Exhibition Level), Moscone Center	(EBV)
Xe MRI Imaging Findings in the TRANSPIRE Cohort	May 19, 2025 12:48 PM - 1:00 PM	Mid-day Symposium	Room 3000/3002/3004 (West Building, Level 3), Moscone Center	Hematopoietic Ste Cell Transplantati (HSCT)
Exploring the Impact of Inflammation on Gas Exchange Efficiency in Cannabis-smoking Individuals Using 129XeMRI	May 19, 2025 4:03 PM - 4:15 PM	Mini Symposium	Room 2005/2007 (West Building, Level 2), Moscone Center	Cannabis Smokir
Characterization of Pulmonary Dysfunction in Children With Systemic Juvenile Idiopathic Arthritis Using Xe MRI	May 20, 2025 9:15 AM - 11:15 AM	Poster Board #901	Room 3009/3011 (West Building, Level 3), Moscone Center	Systemic Juvenil Idiopathic Arthrit (sJIA)
Single-breath Fractional Ventilation Derived From 129Xe MRI: Repeatability in Idiopathic Pulmonary Fibrosis	May 20, 2025 9:15 AM - 11:15 AM	Poster Board #920	Room 3009/3011 (West Building, Level 3), Moscone Center	Idiopathic Pulmon Fibrosis (IPF)
Hyperpolarized129Xe MRI Membrane Uptake Associates With 12-month Changes in Lung Function in Patients With Idiopathic Pulmonary Fibrosis Initiating Therapy	May 20, 2025 9:15 AM - 11:15 AM	Poster Board #616	Room 2002/2004 (West Building, Level 2), Moscone Center	Idiopathic Pulmon Fibrosis (IPF)
Lung Volume Correction Increases Repeatability of 129Xe Gas Exchange MRI in IPF	May 20, 2025 9:15 AM - 11:15 AM	Poster Board #919	Room 3009/3011 (West Building, Level 3), Moscone Center	Idiopathic Pulmon Fibrosis (IPF)
Dynamic Imaging of Physiological Dead Space and Effective Alveolar Ventilation in Patients Undergoing Endobronchial Valve Therapy Using Hyperpolarized Xenon	May 20, 2025 11:30 AM - 1:15 PM	Poster Board #P357	Area C, Hall F (North Building, Exhibition Level), Moscone Center	Endobronchial Val (EBV)
Image-guided Bronchoscopy in Severe Asthma Reveals Inflammatory and Epithelial Remodeling in Post-exacerbation Ventilation Defects	May 20, 2025 2:15 PM - 4:15 PM	Poster Board #301	Room 213-214 (South Building, Level 2), Moscone Center	Asthma
Pulmonary 129Xe Ventilation MRI Predicts Severe Exacerbations in People With CF	May 20, 2025 2:39 PM - 2:51 PM	Mini Symposium	Room 211-212 (South Building, Level 2), Moscone Center	Cystic Fibrosis (C
MRI-based Ventilation-perfusion (V/Q) Matching Using Hyperpolarized Xenon and Dynamic Contrast-enhanced MRI in Long COVID Patients	May 21, 2025 8:15 AM - 10:15 AM	Poster Board #609	Room 2002/2004 (West Building, Level 2), Moscone Center	Long-COVID
Analyzing the Impact of Fitted Transit Time on Simulated Alveolar Septal Wall Thickness Measurements With Hyperpolarized Xenon-129 MRI	May 21, 2025 8:15 AM - 10:15 AM	Poster Board #621	Room 2002/2004 (West Building, Level 2), Moscone Center	Cellular Mechanis
Assessment of Dyspnea of Unknown Origin With Hyperpolarized Xenon-129 Gas MRI: A Case Series	May 21, 2025 8:15 AM - 10:15 AM	Poster Board #202	Room 207-208 (South Building, Level 2), Moscone Center	Unexplained Dyspı
Pulmonary Regional Differences Highlight Profibrotic Airway Epithelial Cell Signaling in Obese Asthma	May 21, 2025 9:15 AM - 9:27 AM	Mini Symposium	Room 3014/3016/3018 (West Building, Level 3), Moscone Center	Asthma
Continued Lung Ventilation Improvement in People With Cystic Fibrosis Receiving Highly Effective Modulator Therapy	May 21, 2025 9:39 AM - 9:51 AM	Mini Symposium	Room 3006/3008 (West Building, Level 3), Moscone Center	Cystic Fibrosis (C
Precision Imaging Meets Lung Transplantation: Hyperpolarized Gas Magnetic Resonance Imaging and Transcriptomic Signatures Transform Rejection Detection	May 21, 2025 11:00 AM - 1:00 PM	Poster Board #1018	Room 3022/3024 (West Building, Level 3), Moscone Center	Lung Transplantat
Assessing Post-Transplant Lung Function Alterations Using Free-Breathing Hyperpolarized Xenon MRI	May 21, 2025 11:00 AM - 1:00 PM	Poster Board #401	Room 301-302 (South Building, Level 3), Moscone Center	Lung Transplantat
Comparison of Healthy Reference Models for 129Xe Pulmonary Gas Exchange	May 21, 2025 11:00 AM - 1:00 PM	Poster Board #403	Room 301-302 (South Building, Level 3), Moscone Center	Healthy Lung
XeLHC: Initial Impressions From Hyperpolarized 129Xe MRI Measurements of Regional Lung Health in Participants From the Lung Health Cohort	May 21, 2025 11:00 AM - 1:00 PM	Poster Board #408	Room 301-302 (South Building, Level 3), Moscone Center	Healthy Lung
Multi-site Analysis of Functional Gas Exchange Measures on 129Xe MRI Among Healthy Volunteers	May 21, 2025 11:00 AM - 1:00 PM	Poster Board #411	Room 301-302 (South Building, Level 3), Moscone Center	Healthy Lung
The Age-dependent Upper Limit of Normal for Hyperpolarized 129Xe MRI Ventilation Defect Percent in Healthy Individuals Using a Multi-center Database	May 21, 2025 11:00 AM - 1:00 PM	Poster Board #421	Room 301-302 (South Building, Level 3), Moscone Center	Healthy Lung
Multifunctional Xe MRI to Assess Alveolar Microstructure and Gas exchange in Women With	May 21, 2025	Mini	Room 3006/3008 (West Building, Level 3)	Lymphangioleio

ATS Abstract Title	Presentation Time	Format	Session Location	Clinical Focus Are
Microstructure and Gas-exchange in Women With Lymphangioleiomyomatosis	11:48 AM - 12:00 PM	Symposium	Building, Level 3), Moscone Center	Pneumatosis (AN

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