

# PExA takes the next step — sharpening focus on clinical applications in lung diagnostics

PExA AB, a Swedish life science company and pioneer in non-invasive lung research, today announces a refined strategic direction to translate scientific advances into clinical solutions for early diagnosis and treatment monitoring of lung diseases.

In recent years, PExA has focused on advancing its method and leveraging major developments in biochemical analysis. These advances have significantly increased sensitivity and reduced costs, enabling the identification of biomarkers in collected biological samples. As analyses have become more comprehensive and precise, the ability to detect differences between healthy and diseased individuals, or between patient groups, has improved markedly. This is a critical prerequisite for identifying clinically relevant biomarkers and creating new opportunities for early diagnosis and treatment guidance. Furthermore, with improved analytical performance and lower costs, more researchers and clinicians can now perform analyses and publish data — further driving the field forward and strengthening the scientific foundation.

A key part of PExA's strategy has been to promote broad use of its technology to create conditions for researchers and clinicians to conduct more extensive studies in various areas. By encouraging and enabling this widespread use, PExA has closely followed scientific developments, provided technical support, and identified areas where results now show strong potential for clinical applications.

The step now being taken is based on growing evidence from ongoing studies, where PExA's technology has demonstrated potential to identify specific biomarkers and measure drug effects directly in the lungs — at the site of disease.

Lung diseases are currently the third leading cause of death globally, accounting for over five million deaths annually. The need for cost-effective tools to enable earlier detection, guide treatments and support research has never been greater.

Supported by more than a decade of international research collaborations and user-driven development resulting in over 50 scientific publications, PExA is now focusing on three key areas with clear clinical relevance and significant commercial potential:

- Early diagnosis and risk assessment of airway diseases
- Drug monitoring and lung pharmacokinetics
- Integrated solutions for sampling, analysis and data presentation from sample to solution

These focus areas have emerged from promising early research results and the need to address growing demands in areas such as COPD, pulmonary embolism and lung cancer.



PExA's patented instrument makes it possible, for the first time, to collect biological samples non-invasively from the small airways using a simple breathing maneuver. The technology is already used worldwide by leading research groups and forms the basis for future diagnostic and clinical applications.

"Our technology is increasingly used to identify biomarkers and provide new insights — from occupational health and transplantation to lung diseases such as asthma, COPD and lung cancer," says Tomas Gustafsson, CEO of PExA.

## From sample to solution – moving towards clinical use

As more studies demonstrate the ability to identify biomarkers from the small airways, expectations are rising that non-invasive lung diagnostics will soon become a reality. PExA's long-term goal is to develop clinical applications for respiratory diseases with major global impact.

One example is lung cancer, which causes 1.8 million deaths annually and accounts for 2.5 million new cases each year. Despite medical advances, most cases are still diagnosed late. PExA's technology has the potential to enable earlier detection, screening of high-risk groups and post-treatment follow-up — as a complement to current imaging methods such as low-dose CT.

A recent proof-of-principle study from Fraunhofer ITEM and AstraZeneca also demonstrated that PExA's method can measure drug concentrations directly in the small airways — at the site of action — using a non-invasive approach. This opens new possibilities in pharmacokinetics, particularly for inhalation therapies and the development of new respiratory drugs.

PExA's sharpened strategic focus enables the company to broaden its customer base. While maintaining strong ties with academic researchers, PExA is now expanding and clarifying its offering to make the product easier to adopt for pharmaceutical companies and contract research organisations (CROs) — addressing a rapidly growing global market.

## **Clear strategic direction**

PExA is intensifying its efforts in three priority areas, defined by user needs, research data and strong signals from ongoing collaborations:

- **Diagnostics:** Several ongoing studies are expected to deliver new insights during 2025 related to COPD, embolic disease and lung cancer.
- **Pharmacokinetics:** A non-invasive approach to track drug uptake in the lungs of significant value to pharmaceutical companies and CROs.
- Integrated data and analysis services: Developing comprehensive solutions from sample to interpreted results. PExA has signed its first commercial project in this area and plans further expansion in 2025.



PExA also continues to refine and simplify its technology in close dialogue with users to ensure easy integration in research and clinical environments.

"The broad use of our technology and the growing number of studies provide a solid foundation for our future development," adds Gustafsson. "By combining user-driven innovation with non-invasive technology, PExA aims to help redefine how respiratory diseases are detected, understood and treated."

The company is now actively advancing its strategy with concrete initiatives. With a strengthened international presence, continued product development and promising results from global users, PExA looks to the future with confidence — striving to enable earlier and more accurate diagnoses and improve patient outcomes worldwide.

### For further information, please contact:

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#### About PExA AB:

**PExA** AB PExA AB (556956-9246) has developed the PExA 2.1, a patented research instrument that helps researchers intelligently collect biological samples from the smallest airways through a simple exhalation maneuver. PExA's technology is currently used by prominent research groups in several different countries and research with the instrument has resulted in approximately 50 scientific publications, which serve as reference material for PExA's method. The company's long-term goal is to market and sell diagnostic instruments for popular diseases (e.g. lung cancer and COPD) to be used globally for diagnosis or general screening at facilities where care is offered. The company intends at the time it is relevant to sell to clinics to have developed more patient-friendly, flexible and commercial products, which means that PExA addresses a significantly wider market, which today includes several million patients globally.

PExA's B share is listed on the Spotlight Stock Market.