Press release PExA AB
Gothenburg October 22, 2025

PExA files patent application for biomarkers enabling early detection of lung cancer

PExA AB (Spotlight: PEXA) announces that the company has filed a patent application covering protein patterns for the early detection of lung cancer, based on its proprietary non-invasive airway sampling technology. Lung cancer remains the leading cause of cancer-related death worldwide, largely because the disease is typically diagnosed too late. Earlier detection could dramatically increase the chances of survival.

The patent application represents an important milestone in PExA's strategic repositioning – from a supplier of research instruments to a company that also identifies, protects and develops biomarkers with diagnostic potential.

It is PExA's first biomarker-focused patent application and a clear step toward future diagnostic applications.

The application is supported by results from a clinical study conducted by Professor Sandra Lindstedt's research group at Lund University, in which airway samples collected using the PExA technology underwent advanced biochemical analysis by mass spectrometry combined with AI-based pattern recognition.

The patent seeks to protect a distinct protein signature that clearly separates patients with non-small cell lung cancer (NSCLC), the most common form of lung cancer, from healthy controls, demonstrating very high diagnostic precision (AUC = 1.0; empirical p = 0.04).

Unlike blood samples, which reflect the body's overall biochemistry, PExA's method collects material directly and non-invasively from the small airways – the site where many lung diseases originate. This provides a more local and specific view of the disease process, potentially enabling earlier and more accurate diagnosis.

Lung cancer accounts for more deaths than any other cancer type globally. The five-year survival rate at late-stage diagnosis is below 10 %, whereas early detection and treatment can lead to survival rates exceeding 80 %.

Against this background, early detection can fundamentally change the prospects for effective treatment.

- *Filing our first biomarker patent application clearly demonstrates how the PExA technology can be transformed into clinically relevant insights. The identified protein patterns show distinct differences between diseased and healthy individuals, reinforcing our belief that the small airways hold the key to the future of respiratory diagnostics,* says Tomas Gustafsson, CEO of PExA AB.

The patent application covers both the identified biomarkers and their use for diagnosis, prognosis and treatment monitoring.

Earlier this year, PExA also filed a patent application within RNA fragmentomics – a novel analytical approach that may enable the identification of additional biomarkers in PEx samples.

Together, these two applications constitute an important part of PExA's ongoing strategic repositioning and the long-term focus areas previously communicated by the company.

- *We see very strong reasons to advance this work. Lung cancer is a disease where early detection makes all the difference, and with our technology we can now begin exploring how biomarkers from the small airways may contribute to earlier and more personalized diagnostics,* Gustafsson adds.

PExA is now evaluating, together with external experts, how these discoveries can best be developed toward future diagnostic applications and clinical benefit.

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.