

PExA's transformation journey toward future diagnostics highlighted by MedTech Magazine

MedTech Magazine, Sweden's only media outlet fully dedicated to medical technology, has recently published an in-depth feature on PExA. Under the headline "*PExA on a transformation journey – aiming to bring lung cancer instrumentation to primary care*", the article highlights the company's exhalation-based technology, which holds potential for future diagnostic applications in respiratory disease.

The article is the result of a visit to PExA's headquarters in Gothenburg by one of MedTech Magazine's reporters shortly before Christmas.

"Our groundbreaking, non-invasive technology for sampling via exhaled air is receiving increasing attention, which is of course very positive and encouraging – not least considering its long-term potential for simple and early diagnostics," says Tomas Gustafsson, CEO of PExA.

The article emphasizes that many lung diseases originate in the very deepest parts of the lungs, among the approximately 300 million air sacs known as alveoli. These regions are currently difficult to access using existing methods for early detection of lung disease. As a result, diseases are often discovered only once significant damage has already occurred and the condition has progressed.

Using a simple exhalation maneuver, PExA's analytical instrument can collect a cloud of particles from the lung fluid in the alveoli. Within the instrument, particle size and concentration are measured using laser-based technology, after which the sample material is collected for further biochemical analysis.

Through advanced analytical techniques such as proteomics, lipidomics, and analysis of miRNA and RNA fragments, researchers can then identify patterns that provide deeper insight into disease processes occurring in the deepest regions of the lung.

"The effect of performing this exhalation maneuver is roughly comparable to reaching down with a cotton swab and sampling the innermost parts of the lung," Tomas Gustafsson explains in the article.

Targeting future lung cancer analysis in primary care

To date, PExA's instrument has primarily been used in research settings, where the technology is employed by authorities, contract research organizations (CROs), academic research groups, and pharmaceutical companies worldwide. Applications range from biomarker research to pharmacokinetics and pharmacodynamics, including studies of drugs and vaccines.

As the technology is increasingly adopted, a growing body of data and results is being generated, providing a stronger knowledge base for further development. Against this backdrop, PExA is now working step by step to evolve its instrument toward future diagnostic applications, with the long-term ambition of integration into existing healthcare workflows.

According to Tomas Gustafsson, it is fully realistic that the company's technology could eventually be used in primary care settings. To enable this, PEXA has initiated efforts to optimize the instrument in terms of size, manufacturing, and ease of use, adapting it for healthcare environments.

One example of results now attracting particular interest is lung cancer research conducted in Lund, where a research team led by Professor Sandra Lindstedt has, using PEXA's technology, identified clear differences in exhaled samples between healthy individuals and patients with lung cancer. These findings are regarded as an important step toward future diagnostic applications.

👉 **Read the full feature in MedTech Magazine:**

https://www.medtechmagazine.se/article/view/1205576/pexa_i_forvandlingsresa_vill_ta_lung_cancerinstrument_till_vardcentral

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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.