NEW MEDICAL TECH BRINGS HOPE IN FIGHT AGAINST ALZHEIMER’S

Advances in medical science have dramatically increased life expectancy and quality. These advances also bring new challenges: living longer means more chronic conditions and especially neurodegenerative diseases like Alzheimer’s. The causes of neurodegenerative diseases are poorly understood, but a Eurostars-funded project can provide a solution.

Today in our western societies, around one person in 20 over the age of 65 suffers from Alzheimer’s disease. It devastates lives, and places an immense burden on patients’ families and carers. As our population continues to age, the cost to healthcare systems will continue to spiral upwards, making Alzheimer’s not only a major societal issue but also a problem for our economies.

There are very few effective ways to prevent Alzheimer’s. Two SMEs, Biomotif of Sweden and MSVision of Denmark, have jointly developed a new analytical tool, called ‘NeedleInTheHaystack’, using a €904,000 grant from the Eurostars Programme. Their new technology can detect whether people will develop Alzheimer’s disease by detecting indicators in blood plasma known as biomarkers.

A promising start
Project leader Thorlief Lavold, CEO of Biomotif, explained how the technology got its name. “Normally, blood plasma has to be separated into various components prior to investigation. Using our technology, we can identify biomarkers with no need for this prior separation - in other words, we can find a needle in a haystack.

This makes it an excellent research tool, and has the potential to become a diagnostic test not only for Alzheimer’s, but also other neurodegenerative diseases.” For researchers looking for treatments this represents an important breakthrough. However, Dr. Lavold feels that this is only the tip of the iceberg. “The results we have already obtained suggest we have only begun to realise the potential of this technology.”

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The commercial prospects are also exciting. “The market for the kind of tech we developed - liquid chromatography mass spectrometry - is currently around US$2.5 billion. We could feasibly capture around 2% of that. If we develop a diagnostic instrument based on the technology, this could be even higher.”

Dr. Lavold indicated that there is already solid interest, with potential customers already in place. “We now seek further funding to develop the working prototype into a commercially viable, profitable product. This in turn will mean that we will need to increase our workforce to meet the demand.”

Steen Pontoppidan, Managing Director of MSVision, which partnered Biomotif in the NeedleInTheHaystack project, is also bullish. “This is highly advanced technology; it will give Europe a real competitive edge in Alzheimer’s research.”

Having collaborated with Biomotif in the development phase, MSVision has struck a distribution deal with its partner-company for a commercialised technology. Once the devices make it into laboratory and hospital settings, Pontoppidan envisages that his company would need to increase its workforce by 50% to offer support to users.

Detecting Alzheimer’s early helps patients deal with the disease and families to prepare for the struggles ahead. But the ‘Needle in the Haystack’ project will also place Europe at the forefront of research in the field and provide investment, jobs and revenue for small businesses.

COUNTRIES INVOLVED
Sweden, Denmark

DURATION
24 months

BUDGET
€ 0.9M

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