

# Community Stories

## Optellum's AI-Powered Journey with EIT Health

<b>&gt;\$30 million</b>	<b>\$55.6 billion</b>
Equity and innovation grants raised	Market size of lung cancer treatment

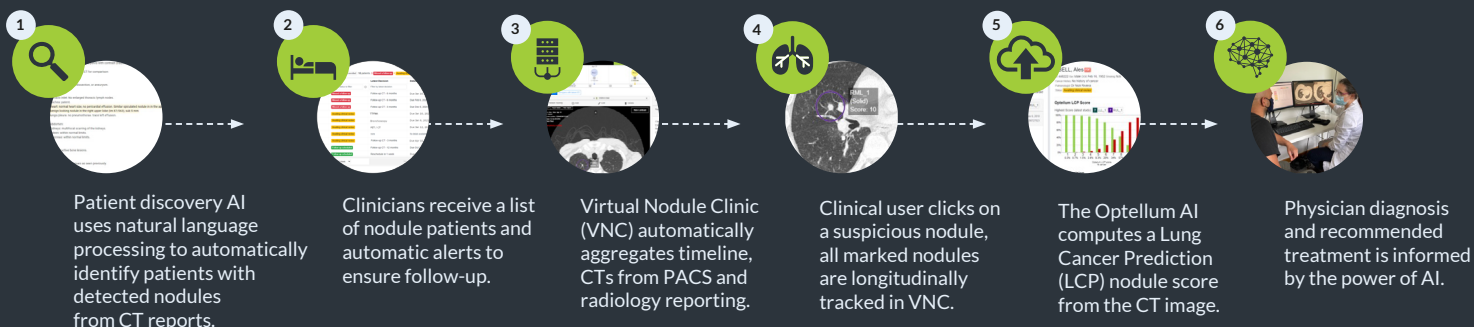
**In Europe, lung cancer stands as the primary cause of cancer-related deaths, accounting for approximately 380,000 fatalities, representing 20% of all cancer deaths.**

Timely diagnosis is crucial, as nearly 90% of individuals diagnosed early can expect to survive the disease for at least five years, in stark contrast to a mere 5% survival rate when diagnosed at the latest stage. The global market size for lung cancer therapeutics is projected to reach \$55.6 billion by 2030\*.

**Optellum**, a pioneering Oxford-based AI-powered lung health technology company supported by EIT Health, is leading the charge in assisting physicians with early diagnosis and optimal treatment for lung disease patients. The company's AI-based lung cancer decision support software, the Virtual Nodule Clinic (VNC), calculates a clinically validated Lung Cancer Prediction (LCP) score based on imaging AI to identify and score the probability of malignancy in identified lung nodules.

Optellum was co-founded in 2016 by Václav Potěšil, Lyndsey Pickup, Timor Kadir, Professor Sir Michael Brady, and Jérôme Declerck who met at the University of Oxford's world-renowned computer vision laboratory.

### How Virtual Nodule Clinic (VNC) works



### From Concept to Success

#### Breakthrough with EIT Health

Optellum's journey with EIT Health, Europe's largest health innovation network, began in 2016 when the company took part in EIT Health's Catapult pitching competition. Now in its seventh year, the competitive programme boosts the development of European health start-ups by exposing them to leading experts and international investors. Optellum was also awarded grant funding through an EIT Health Business Accelerator programme that same year.

#### Achieving FDA Clearance

Supported by EIT Health, in 2021 Optellum became the world's first AI-powered software platform of its kind to receive FDA 510(k) clearance.

#### EIT Health Lucinda

Optellum's technology was developed as part of the EIT Health LUCINDA innovation project. The project brought together a unique team of experts in lung cancer, Machine Learning and medtech product development. The product developed during this project was launched to market in 2021.

#### Obtaining CE Marking

Optellum's Virtual Nodule Clinic achieved another great milestone by attaining CE certification under the European Union's Medical Device Regulation in 2022.

\*[www.precedenceresearch.com](http://www.precedenceresearch.com)

## New Partnerships

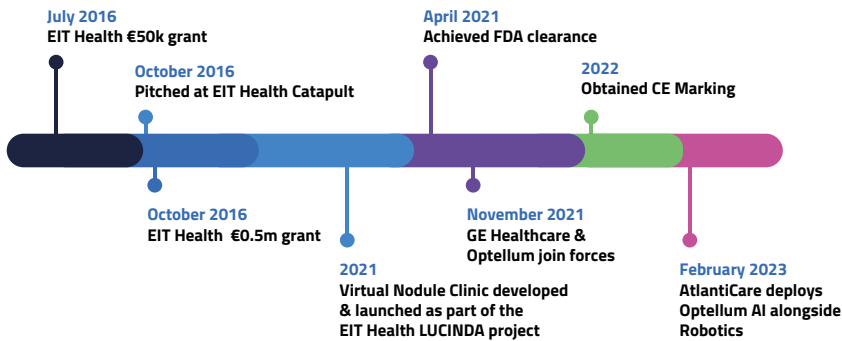
In 2021, Optellum announced collaboration with Johnson & Johnson's Lung Cancer Initiative (LCI) to enhance lung cancer survival rates.

GE Healthcare and Optellum collaborated in 2021 to advance precision diagnosis and lung cancer treatment.

AtlantiCare joined leading healthcare systems worldwide by becoming the first system in the northeastern U.S. to use the Optellum Virtual Nodule Clinic.

## Series A Funding

In September 2022, Optellum successfully raised \$14 million in a Series A funding round, bringing total equity and innovation grant funding raised to approximately \$30 million since its founding in 2016. The round was led by Mercia, Intuitive Ventures, and Black Opal Ventures.



## EIT Health facilitates greater exposure and key introductions

Won 3<sup>rd</sup> prize in the Digital Health category in EIT Health Business Plan Aggregator Awards at the EIT Health Summit in Barcelona in 2016.

Received EIT Health LUCINDA grant (0.5M€) in October 2016 and presented at the EIT Health Summit, showcasing the impressive work Optellum is undertaking and getting in front of top European healthcare experts.

Optellum, as part of an EIT Health-funded consortium, showcased product prototypes at IASLC 18th World Conference on Lung Cancer (the world's premiere medical congress in the field) in Yokohama Japan, and other medical congresses, to secure early feedback.

Optellum's advanced AI technology, developed as part of the EIT Health LUCINDA innovation project, was subsequently launched to market in 2021.



**"From our first proof of concept, before Optellum raised initial funding, to product development and clinical trials, EIT Health support has been essential to see this work realise its potential. Now that support has taken us all the way to becoming the leader in AI-enabled lung cancer care, and having a cleared medical device software, used in hospitals to help patients be diagnosed and treated early, save lives."**

**Dr Václav Potěšil, Founder and Chief Business Officer at Optellum**

## Join Europe's Leading Health Innovation Network

From early grant funding, receiving FDA clearance and attaining CE marking for its groundbreaking Virtual Nodule Clinic to Series A funding, Optellum's journey exemplifies the invaluable benefits derived from its partnership with EIT Health.

The partnership with EIT Health has empowered Optellum to accelerate its research and development efforts, attract

substantial investment, and establish strategic collaborations with industry leaders like the Lung Cancer Initiative at Johnson & Johnson, GE Healthcare and AtlantiCare.

If you are an innovator at a high-potential start-up and would like to find out what business accelerator and innovation opportunities are available, contact the team at EIT Health Ireland-UK today [clc.ireland-uk@eithealth.eu](mailto:clc.ireland-uk@eithealth.eu)