



## Intellilung

### *IntelliLung*

***Intelligent Lung Support for  
Mechanically Ventilated Patients  
in the Intensive Care Unit***



Start date:	1-9-2022
Runtime:	60 months
End date:	31-8-2027
EC Funding:	Horizon-RIA
Coordinator:	TU Dresden
Demcon:	Demcon Macawi Respiratory Systems BV

#### General information:

Optimizing mechanical ventilation of intensive care patients with Artificial Intelligence started as an innovation project at the EKFZ for Digital Health, the IntelliLung project for the first clinical trial, coordinated by TU Dresden, will be follow-on funded by the European Union (EU HORIZON-HLTH-2021) from September 2022 after the successful completion of the EKFZ project. Scientists from the Medical Faculty of Dresden, together with 13 international partners, are testing a decision support system for mechanical ventilation of intensive care patients. The five-year research project is funded with a total of 5.98 million euros, of which 1.8 million euros will go to Dresden.

The decision support system will be extended with Demcon Macawi's novel sEMG technology that can measure respiratory muscle activity continuously and non-invasively. The European Union has recently approved €6 million of funding for the IntelliLung project, coordinated by Professor Thea Koch and Dr. Jakob Wittenstein from the Dresden Technical University (EU HORIZON-HLTH-2021).

#### Vision and impact:

The planned start of the project is September 2022, and the scientists, who are spread across 14 different national and international hospitals, research institutes and companies, have five years to optimize a procedure based on artificial intelligence. "In the end, the goal is to minimize ventilation time, thereby shortening the length of stay in the intensive care unit and also reducing lethality,"

#### Project Website:

<https://digitalhealth.tu-dresden.de/optimizing-mechanical-ventilation-of-intensive-care-patients-with-artificial-intelligence/>



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