

# FACT SHEET

## Background and problem

More than 46 million people worldwide suffer from dementia. This makes it the second most feared disease after cancer. But other neurodegenerative diseases, such as Parkinson's disease or multiple sclerosis are also widespread globally.

Until now, these diseases have mainly been diagnosed visually – which means that the diagnosis can often only be made at a stage where positive interventions on the course of the disease are hardly possible.

## The solution: AIRAscore structure



**AI-based software for early detection, better diagnosis & treatment of neurodegenerative diseases**

**AIRAmEd software solutions extend the previous radiological diagnosis by a decisive factor: objective and comparable measured values.**

The neural network-based software solution AIRAscore structure

- ➔ detects even very small changes in the brain at an early stage
- ➔ enables better differential diagnosis
- ➔ supports prompt assessment of therapeutic success and, if necessary, prompt initiation of alternative therapeutic options.

## Company data

- ➔ AIRAmEd company foundation: March 2019
- ➔ Medical device according to ISO 13485
- ➔ 16 full-time employees, as of June 2021

### Management Team

- Dr. Tobias Lindig, Managing Director, Specialist in neurology and radiology
- PD Dr. Benjamin Bender, Head of Product Management and Specialist in neuroradiology
- Christiane Lindig, Graduate in business administration, Head of Corporate Development

### Contact AIRAmEd

Konrad-Adenauer-Str. 13 | 72072 Tübingen  
Tel. +49 7071-5393 340  
info@airamed.de | www.airamed.de

## Diseases in figures

**46.8 million**

dementia cases worldwide, of which 1.6 million in Germany (2018)



**1/100 of a second**

Every 100 seconds, another person in Germany develops dementia



**7,7 million/year**

Worldwide, 7.7 million people newly develop dementia each year

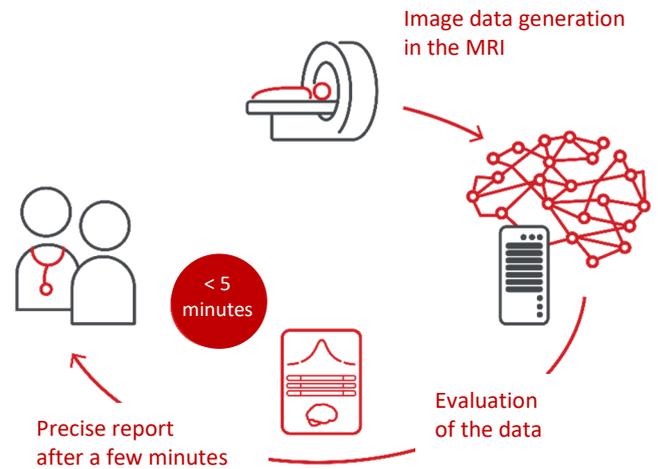


## How the AIRAmEd software solutions work

The **image data** is sent directly from the MRI scanner in the radiology clinic or practice to the AIRAmEd servers, where it is analysed using AI methods.

The result is returned to the doctor within a few minutes in the form of an evaluation report. The doctor can immediately discuss the findings with his patients on site and initiate important therapies without delay.

The transmission of patient data is pseudonymized and complies with the GDPR at all times.



## State-of-the-art technology



AI software based on neural networks allows precise measurement of brain volume

- ➔ AIRAscore structure measures brain volume and its changes based on MRI image data of the head
- ➔ Changes in brain volume can be a consequence of the normal ageing process, but they can also be the first signs of the presence of a serious disease.
- ➔ During the evaluation, the patient's individual measurements are determined and compared with a large reference population.
- ➔ This makes it possible to check whether individual measured values are normal or deviate from the norm for the respective age and gender, objectively and individually.
- ➔ Any AI software is only as good as the data that was used during training. That is why AIRAmEd attaches great importance to the quality of the training data when developing the software – for the best possible results.



The evaluation report contains precise measurements of many brain structures that are important for diagnostics.

## AIRAmEd is an expert

**AIRAmEd GmbH** is a spin-off of the University Hospital of Tübingen and is one of the pioneers of quantitative evaluation of neuroradiological MRI image data.

Since 2019, the founders of AIRAmEd have been using their findings from cutting-edge university research to develop innovative AI software. The software solutions make MRI image data of the brain precisely measurable, according to the motto:

**exact measurement results and excellent findings for better medicine in the future!**