

# Our Offer

The segmentation and registration algorithms are available as libraries (DLLs), allowing for seamless integration into the target system. We provide customized integration models from deploying trained neural networks to developing fully interactive GUI applications.

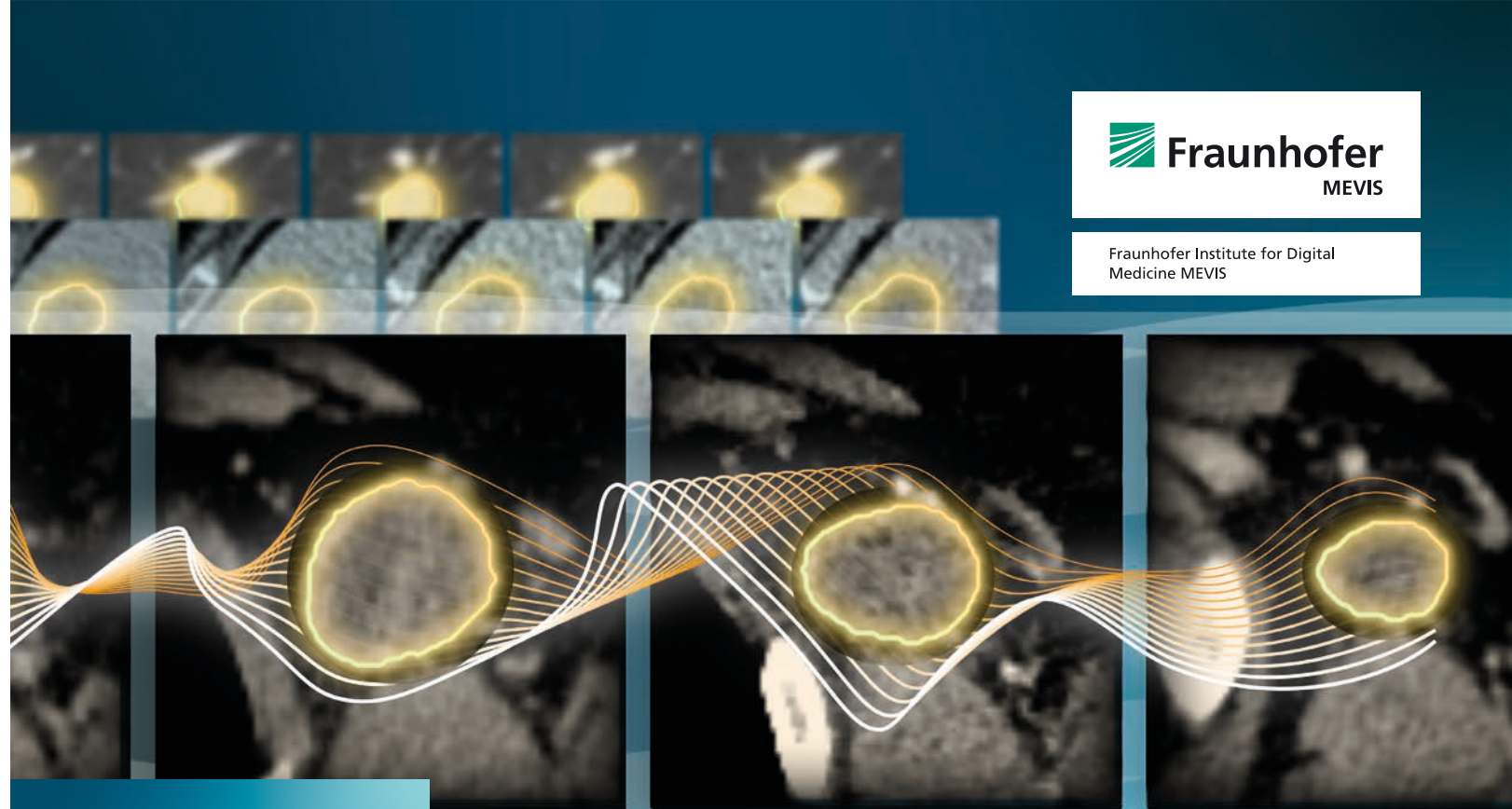
We provide professional support for all aspects of implementation, ensuring smooth integration of our solutions tailored to the specific requirements of our partners.

Since 2005, our institute has operated under a certified quality management system in compliance with EN ISO 13485, enabling us to deliver medical device components to our partners with comprehensive documentation and support.

For a personal demonstration, technical or licensing inquiries, please contact our experts. We are here to provide customized solutions tailored to your needs.

## Our Mission

Our mission is to further improve cancer care by enabling new standards for routine oncological follow-up, and by further automating and simplifying oncology reading workflows. We seek partnerships with industry to collaboratively drive these initiatives. Together, we can improve patient care and accelerate innovation in oncology by ensuring that cutting-edge solutions are integrated into daily clinical practice.



## Contact

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Efficient and Reliable  
Tumor Follow-up with AI

# OncoChange

## Solution

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OncoChange is an AI-driven software solution that enables radiologists to perform CT-based tumor follow-up assessments in clinical practice more efficiently and reliably.

OncoChange streamlines radiologists' workflows by automating lesion measurement and detecting relevant changes. By eliminating the time-consuming steps of re-localizing and measuring target lesions in follow-up scans, OncoChange enables compliance with standards such as RECIST, all without increasing workload. It integrates seamlessly with existing image viewing and reporting software.

With cancer cases rising globally, OncoChange addresses the critical challenges posed by the radiologist shortage by significantly enhancing workflow efficiency. In cancer care, early detection of tumor changes in CT images is vital for guiding treatment decisions. We at Fraunhofer MEVIS are dedicated to improving radiology efficiency, paving the way toward a more sustainable future for the field.



*Color-coded visualization of lesion change computed with OncoChange algorithms.*



OncoChange addresses the urgent need for AI-based support for reading and reporting oncologic exams.«

**Mathias Prokop,**

Incoming President of European Society of Radiology  
Radboud University Medical Center

## Benefits

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OncoChange is a powerful solution to add value to PACS viewers and reporting software, providing an efficient and reliable workflow for interpreting tumor follow-up CTs. Automating tedious tasks enables radiologists to work faster, with reduced stress and increased confidence.

Automatic lesion tracking makes generating RECIST-compliant reports much more efficient. Radiologists only need to verify automatically generated lesion measurements. They can also use novel measures to help referring physicians assess changes more accurately. This supports earlier detection of disease progression, enabling timely treatment adjustments. Such proactive measures can significantly improve patient outcomes, including extended survival rates and minimized side effects.

## Key Features

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### One-Click Lesion Segmentation

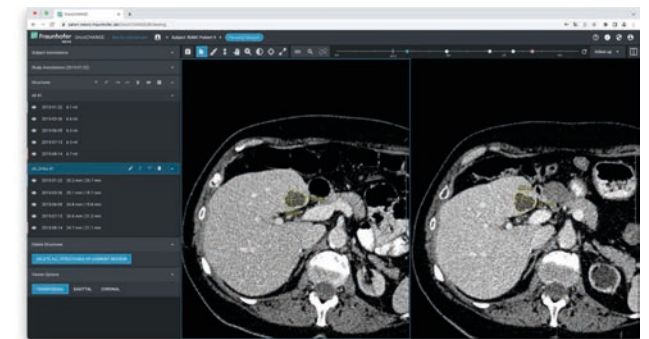
The lesion segmentation feature enables rapid and precise measurement of lesion diameter and volume across all body regions on CT images. Computations are completed under one second on a CPU, and even faster on a GPU. Our robust solution is powered by neural networks trained on a dataset of over 16,000 lesions from CT scans sourced from more than 20 clinics in Europe and North America.

### Deformable Whole-Body Registration

Our advanced registration technology enables precise synchronized alignment of slices and cursors across image pairs from the same patient. This allows for effortless and efficient visual comparison between images such as baseline and follow-up scans.

### Automated Lesion Follow-up Assessment

OncoChange integrates segmentation and registration to provide fully automated lesion tracking and measurement. Pre-computed results are immediately accessible, reducing radiologists' work to quickly verifying them.



*OncoChange software demonstrator showing the automated lesion follow-up.*