

ON THE HORIZON

**NEW TREATMENTS  
FOR GIST**





# MITIGATE

## **THE MITIGATE PROJECT**

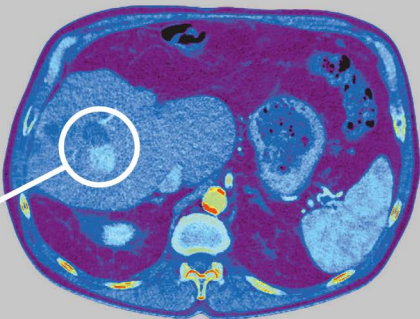
The **MITIGATE** project will have a major, positive impact on the health of GIST patients and improve the available standard of care. Scientists and physicians from many fields are working together to improve the way GIST patients are treated.

## **OBJECTIVE**

The overall goal is to develop an integrated, personalised treatment concept for metastatic GIST patients resistant to tyrosine kinase inhibitors. Our concept combines innovative methods for biopsy, tumour imaging and analysis, new radioactive drugs and minimally-invasive surgery.

PET-CT scan  
of GIST liver  
metastases

GIST liver  
metastasis



In MITIGATE a number of minimally invasive treatment options will be developed for patients who display metastatic GIST disease. Compared to open surgery, these will reduce the pain and discomfort for patients and allow for faster recovery.

## **MINIMALLY INVASIVE THERAPIES**

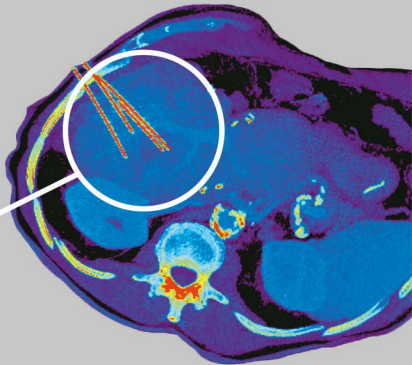
MITIGATE will apply Selective Internal Radiation Therapy (SIRT), and two methods of percutaneous ablation of GIST liver metastases.

## PERCUTANEOUS ABLATION

For percutaneous ablation, needles placed in or near the tumour emit microwaves which kill the tumour tissue. An alternative to using microwaves is Irreversible Electroporation (IRE). Here, needles surround the tumour and apply electric fields, causing cell death of the tumour. One major advantage of IRE is that the method can be used in tumours next to critical structures like blood vessels.

PET-CT scan  
of GIST liver  
metastases

Irreversible  
Electroporation



## **SIRT**

For SIRT, a catheter is placed in the blood vessel that supports the tumour tissue, releasing microspheres (small particles) loaded with a radioactive substance. This treats the tumour with radiation from within, with minimal effects to surrounding tissue.

## **OUTLOOK**

To improve safety and precision of the needle placement, a robotic navigation system specially developed for these complex interventions will be developed in the next years. This system allows physicians to perform safe and fast interventions with only minimal damage to neighbouring structures.



# MITIGATE

visit [www.mitigate-project.eu](http://www.mitigate-project.eu) for more information

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