



# THERAPANACEA

Reinventing cancer care through AI

## Who we are

At **TheraPanacea**, an **award-winning medical technology company** created in 2017, we are reinventing health care by developing cutting-edge, proprietary **AI-based software** to support clinics in the fight against cancer.

## What motivates us

**Our vision** is to exploit data alongside with state-of-the-art research technology **to accelerate** health care's transition towards predictive, evidence-driven, adaptive cancer care offering standardization, automatization and equal access treatment with better outcomes. We work closely with leading international cancer centers and industrial partners to deliver **our mission** of improving patient's quality of life through the design of smarter and more efficient treatment plans.

## What we do

Our first product, **ART-Plan™**, an artificial intelligence powered treatment planning CE-marked (FDA in preparation) software suite delivers high-precision radiotherapy that enables optimization of every step of the treatment process flow: from preparation to follow-up.



### Be faster

As a "Plug and Play" software you can benefit from the speed and efficiency of AI from day one - no data needed! Customization on your practices is feasible.



### Be flexible

Work from anywhere you like with our web-based platform accessible from any computer connected to your clinic's network. Data never leaves your hospital



### Be Better

With ART-Plan you can benefit from the AI-powered collective intelligence of world-wide experts combined with the latest consensus guidelines for automated, efficient and effective radiation therapy planning process.

## ART-Plan™ 's Annotate

is a unique, user friendly and secure contouring solution empowered by AI. Following the latest guidelines of segmentation for radiotherapy, Annotate reproduces best practices in radiotherapy.



Independent of case complexity, with just 1 click and in 2 minutes you obtain full-body delineation on any CT or CBCT image, including more than 80 OARs and lymph nodes the same accuracy as clinical experts. Customers have reported that thanks to Annotate they are able to save up to 90% contouring time that can be used to reduce the overload of clinic staff.



### Be Automated

Automate all the steps of the segmentation process thanks to our Batch mode. Have the automatic contouring done in the background and exported directly from the scanner to the TPS of your choice.



80+

### Be Thorough

Have more than 80 OARs and exclusive models for CTV including lymph nodes automatically delineated at the power of AI. No structures or slices forgotten. All you need to do is review and validate.



### Be Faster

Obtain highly accurate delineation in 2 minutes. With Annotate you can save up to 90% contouring time that can be used to reduce the overload of your clinic staff.

## Discover SmartFuse,

the first AI-powered software for high-precision rigid and elastic fusion, that includes the management of 4D- CT and a real-time deformation of contours for faster replanning. Powered by AI-based initialization and optimization, SmartFuse is one of the best-performing image registration software available on the market\*.



Thanks to its unique multi-metric similarity framework, SmartFuse guarantees high-precision alignment between scans from different imaging modalities regardless of the clinical case complexity. Intuitive and smart validation tools allow you to verify the resulting fusion.

\* As evaluated through a landmarks registration benchmark performed on the POPI reference dataset: <https://www.creatis.insa-lyon.fr/rio/popi-model/>

\*\*Using the POPI reference dataset, SmartFuse achieves TRE under the tolerance value indicated by AAPM guidances for 100% of the cases



### Be Cutting-edge

Plug-and-play accurate rigid and elastic fusion at a click's reach. SmartFuse's unique, AI-fueled multi-metric registration algorithm guarantees high-performance even in the most challenging clinical applications, such as re-irradiation cases.



### Be accurate

Thanks to a coarse-to-fine multi-resolution refinement strategy coupled with state of the art globally optimal discrete optimization methods, SmartFuse delivers deformation models with sub-voxel registration accuracy\*\*



### Be Multi-modal

Reliably and rapidly combine important information derived from multiple imaging modalities (CT, 4D-CT, CBCT, PET-CT, MRI), including real-time deformation of contours for faster re-planning and dose accumulation.



### Be Confident

Powerful evaluation tools, including a checker-board view and an anatomically meaningful deformation field, will enable you to inspect the results and be confident in their use for further treatment planning.

Book a demo

on [www.therapanacea.eu](http://www.therapanacea.eu)  
or contact us at [mail@therapanacea.eu](mailto:mail@therapanacea.eu)



> ART-Plan™ Demo

> [www.therapanacea.eu](http://www.therapanacea.eu)

