

# *Intraplan Radiance*<sup>®</sup>



HEALTHCARE

## Radiation treatment simulation platform for IORT devices

*Intraplan Radiance*<sup>®</sup>, pioneer and unique software system for treatment planning and analysis of radiation therapy administered with any device for intraoperative radiotherapy (IORT).

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CE  
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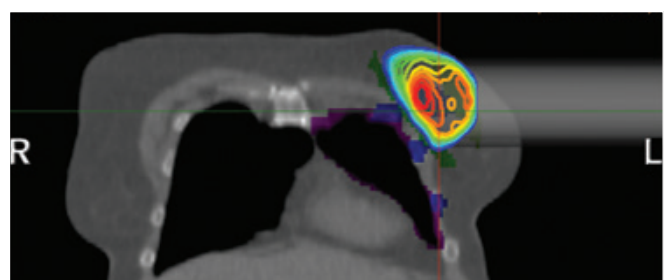
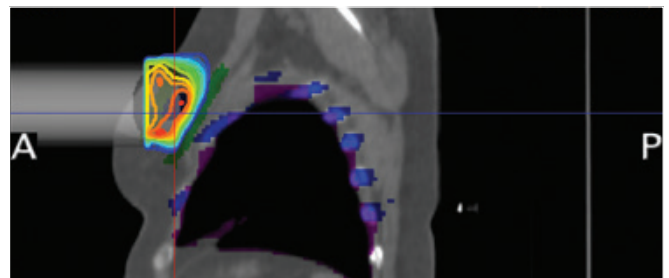
## THE IORT PLANNING TOOL

- Covers all planning needs of an IORT procedure:
  - **pre:** the treatment situation is simulated and the treatment parameters are defined.
  - **intra:** the process is assisted by the previous planning. Modifications over the plan are registered.
  - **post:** the simulation is redone based on the real treatment for post-verification.
- Powerful and fast visualization and measurement tool introducing the 3D planning and dosimetry and high precision on geometrical distances (such as the treatment volume).
- Simulation of all important parameters in the process (surgical frame, applicator, LINAC, etc.).
- Dosimetry which considers different tissue densities and assistant materials (bolus and protections).
- Quantification on the received dose on all involved tissues (areas to be treated and areas sensitive to the radiation) by means of a DVH.
- Comprehensive reporting tool for a better post-analysis of the process.
- Validated by reputed specialists with many years of experience in IORT.
- Support all requirements from AAPM TF48 & TG72 IORT studies.

## IORT DEVICES

**Intraplan Radiance®** works with the top leaders IORT systems:

- **INTRABEAM® System.** Miniaturized linear accelerator that produces low-energy X-ray photons which are emitted isotropically (equally distributed).
- **Mobetron®.** The only self-shielded, portable LINAC capable of providing electron IORT in a standard operating room.



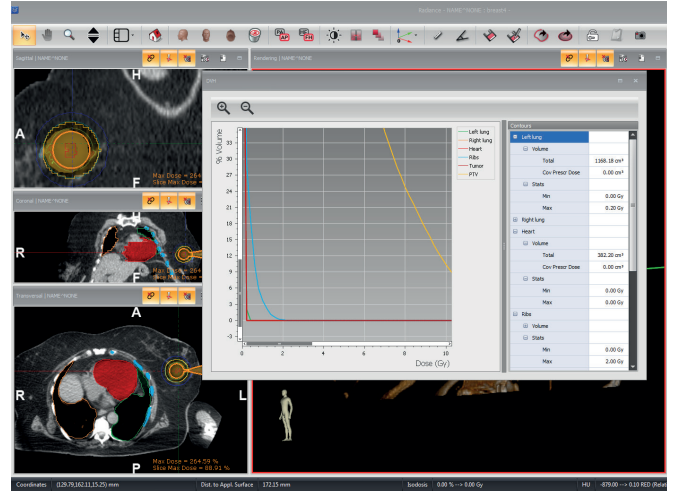


## DICOM, DIMCOM.RT COMPLIANCY

**Intriplan Radiance**® interfaces with the PACS to query & retrieve DICOM RT Structures and DICOM 3D images. These images can also be sent to **Intriplan Radiance**® from any other DICOM node, such as an external radiotherapy planning system.

**Intriplan Radiance**® can export RT Structures and RT Dose files so that it can be fused with external beam radiation therapy plans in software applications which support registration and fusion of images and dose.

In case intraoperative imaging is available, **Intriplan Radiance**® is fully compatible with it, providing a complete and precise dosimetry study of the patient.



## DOSE CALCULATION ALGORITHMS

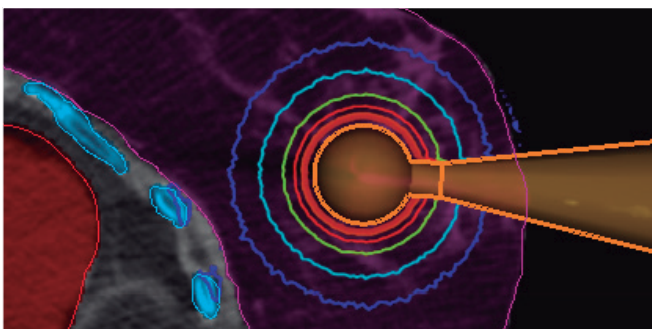
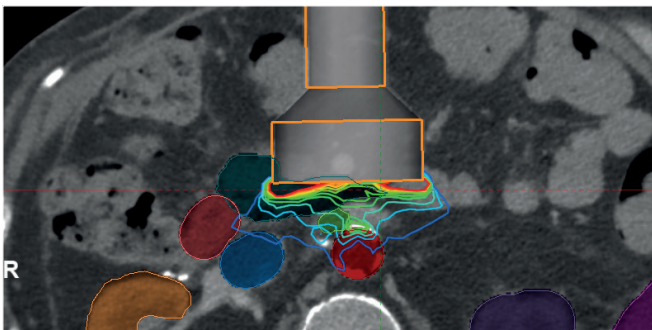
**Intriplan Radiance**® offers different algorithms for a fast and accurate dose calculation.

For INTRABEAM®:

- Dose Painting interpolates the PDD around the volume to generate a fast (<4 secs) first approach.
- Hybrid Monte Carlo adjusts a predefined phase space with the PDD of the applicator providing a fast (1-10 mins approx) and accurate dose calculations with heterogeneity corrections.

For IntraOp® Mobetron® :

- Pencil Beam is a very good agreement between speed (<30 secs approx) and accuracy in heterogeneous media (providing the limitations of the algorithm).
- Monte Carlo adjust a predefined phase space with some PDDs and cross profiles providing fast (1-10 mins approx) and accurate dose calculations in heterogeneous media.



*Product specifications are subject to change in design and scope of delivery as a result of ongoing technical development.*

**Intriplan Radiance**® is medical device certified as class IIb CE mark and class II FDA 510(k).

**Intriplan Radiance**® is not approved or offered in every market and approved labeling and instructions may vary from one country to another one. For country-specific product information, please contact the local dealer.


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INTRABEAM® is a trade mark of Carl Zeiss Meditec

IntraOp® Mobetron® is a trade mark of IntraOp Medical Corporation.


## A global technology group

Multinational technology group



Headquarters in Spain (Madrid)

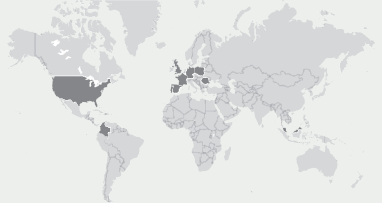
Over **2.500** employees




Aeronautics, Automotive, Banking & finances, Cybersecurity, Defense & Security, Health, Intelligent Systems of Transport, Public administrations, Space, Telecommunications and ICT for company

Private capital

International presence



Roots tied to the Space and Defence industry



Engineering, development and integration of systems, software, hardware, specialized products and services

Founded in **1984**

## International technology leadership



**#1 Worldwide** Satellite Control Center provider to commercial telecom operators (+300 Satellite missions worldwide)



**First ever worldwide** intraoperative radiotherapy planning system



**Responsible of safety critical systems** of European GNSS systems (EGNOS and Galileo)



**Leader of Intelligent Transportation Systems for the public transport sector** (+100 cities in Europe, Asia and America)



**GMV's checker ATM security** is the worldwide leader as multivendor cyber security protection for ATMs

## An outstanding team



## GMV in the world

- Spain
- Germany
- Belgium
- Colombia
- USA
- France
- Malaysia
- The Netherlands
- Poland
- Portugal
- United Kingdom
- Romania



■ BRANCHES AND OFFICES  
 ■■■ PROJECTS