

Case study: Iridium Kankernetwerk

FIRST CLINICAL EXPERIENCE WITH THE RAYCARE OIS



Iridium Kankernetwerk consists of all seven hospitals in the Antwerp region

Iridium Kankernetwerk consists of all seven hospitals in the Antwerp region, closely collaborating regarding radiation oncology. The network acts as a single radiation therapy department, making it the largest in Belgium with its annual 5,300 patients. Iridium was first to use the RayCare* oncology information system (OIS) clinically, only two months after it was released from RaySearch.



“I think the future of cancer care will be comprehensive. I think we have to break down the walls between radiation oncology, medical oncology, surgery, specially also pathology. These need to be incorporated into a single OIS and that is exactly what RayCare allows you to do.”

Piet Dirix, Radiation Oncologist at Iridium

Iridium became a RaySearch customer in 2015 when choosing RayStation for its treatment planning. Iridium quickly appeared as an obvious choice of clinical partner to develop RayCare, the next-generation OIS, as the department spreads over seven hospitals. This combined with a strong interest for clinical innovation, made the network a very attractive partner to develop aspects of RayCare related to coordinating cancer care efforts between institutions.

Establishing a partnership

It made perfect sense to help RaySearch develop such an OIS, says Piet Dirix, Radiation Oncologist at Iridium.

“For me, the partnership with RaySearch was an absolute no-brainer. We needed to have an OIS that we could trust and that would help us tremendously with our workflow. Hearing that RaySearch was developing such an OIS and that they were actually looking for clinical partners to develop it with them, I became incredibly enthusiastic and we really wanted to participate in that”, he says.



Carole Mercier, Radiation Oncologist at Iridium

Seamless integration with RayStation

Iridium became clinical partner to RaySearch in late 2015 and has since made a strong contribution to develop RayCare, especially with features that will support coordinated activities between different institutions. The first steps of the clinical use were taken with a focus on planning workflow support and image management using RayPACS, a PACS (picture archiving and communication system) that makes it fast and easy to retrieve and share images.

“With RayCare, we can just label an image in RayPACS and then the system handles the import from RayPACS to RayStation. When launching RayStation, the patient information is there, your CT is there, and you can start work directly with your patient. This is a big improvement”, Geert De Kerf, Medical Physics Expert, says.

The tight integration between RayCare and RayStation simplifies the teamwork between clinicians, especially when different clinicians can be working on a single patient at different steps of the treatment process.

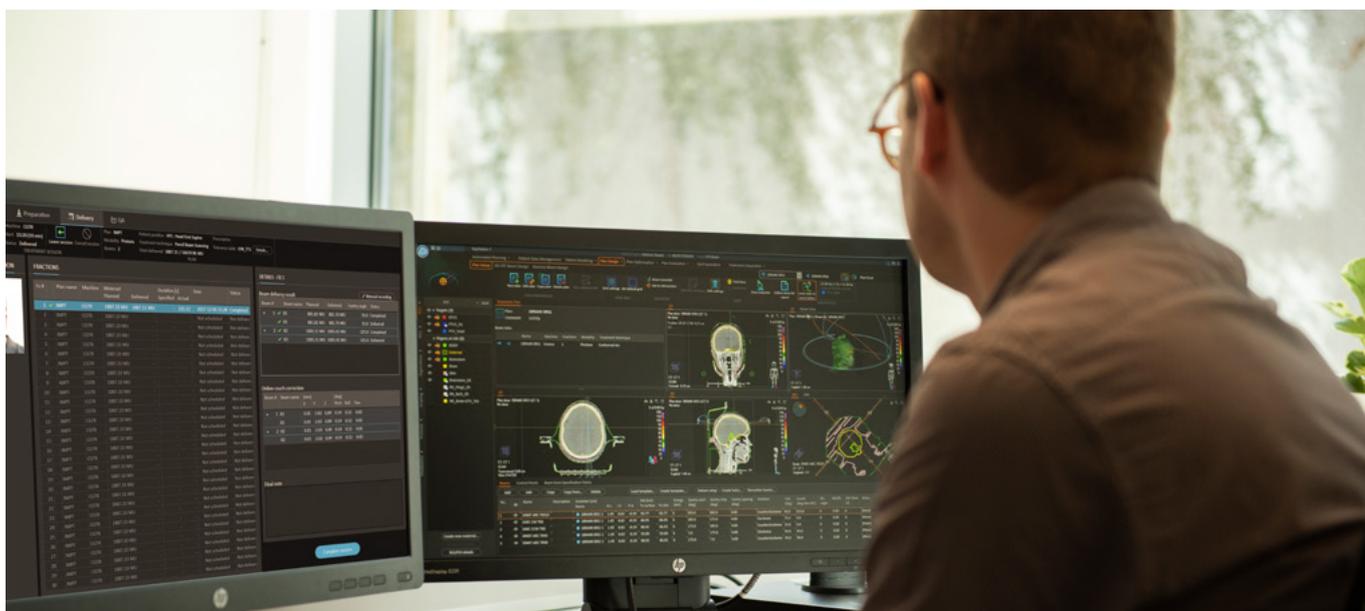
“Here at Iridium we work as a team to treat the patients. So, it is possible that I delineate a CT-scan, that my colleague approves a plan, and another revises the adjustments that are made to the plan. In that way, RayCare is very crucial to the way we work”, Carole Mercier, radiation oncologist.

“Before the implementation of RayCare we had some problems with commenting on when a plan was rejected. Now, thanks to RayCare and the feedback loops, this is simplified”, Geert De Kerf says.

The seamless integration between the systems is great, Piet Dirix says.

“What I am most satisfied with is actually the close interaction with RayStation. When I push on a certain task in RayCare, RayStation immediately opens at the right patient, in the right time of his or her workflow. This really saves a tremendous amount of time”, he says.

After a few months of using the RayCare OIS they can already note some efficiency improvements. RayCare and RayStation are used together on one linac at Iridium, which is actually the linac with the shortest waiting time within the network, according to Piet Dirix.



Geert De Kerf, Medical Physics Expert at Iridium

Simplified workflow

On top of the close interaction with RayStation, RayCare provides other valuable advantages. It has simplified the patient intake consultation process and reduced issues from 25 to 5 percent. RayCare's schedule automation feature made it much simpler to find the optimal treatment date, eliminating the delays that could result from the complexity of the manual scheduling.

RayCare has been developed by RaySearch to meet the needs of diverse cancer centers to enable them to give the best possible care to their patients. Therefore, digital workflows tailored to the clinic's need can be created. The workflows are designed to be highly configurable, and tasks for specific staff members can be created automatically, triggered by defined events.

The workflows used at Iridium are custom made and set up in collaboration between Iridium and RaySearch. With a focus on automation and optimization.

"On the stereotactic treatments we treat five different tumor groups and for these patients six workflows were created. They were all made to our specific needs, for example we needed an anchor date for an MRI. RayCare now has an anchor date for the MRI", says Carole Mercier.

Comprehensive cancer care is the future

Centers today often use multiple software systems, including systems for radiation oncology, medical oncology and surgical oncology. The aim with RayCare is to combine these into a single, harmonized system to manage the patient's entire oncology treatment – from scheduling through treatment delivery and follow-up.

Iridium shares that same ultimate vision of a borderless oncology environment and the future results of the partnerships look very promising.

"I think the future of cancer care will be comprehensive. I think we have to break down the walls between radiation oncology, medical oncology, surgery, specially also pathology. These need to be incorporated into a single OIS and that is exactly what RayCare allows you to do, says Piet Dirix.

“There are now around three-days wait at the machine where we have RayCare and RayStation, compared to around 21 days at the other linacs. This shows you how powerful the combination is and how it can really improve your clinical flow from the outset.”

Piet Dirix, Radiation Oncologist at Iridium

ADVANCING CANCER TREATMENT

RaySearch is a committed pioneer of oncology software. Since 2000, we have worked in close cooperation with leading centers to improve life and outcomes for patients. We develop all our products from the ground up and continuously revise every aspect, from algorithms to user interface designs. Medical science never stands still, and neither does RaySearch—our relentless drive to do things better leads us to ever-higher performance, accuracy, safety and usability. And this is just the beginning.

We believe software is the driving force for innovation in oncology today. Our systems use groundbreaking automation and machine learning to create new possibilities. RayCare[®], the next-generation oncology information system, will enable one workflow for all the oncology disciplines, ensuring fluid coordination of tasks and optimal use of resources. RayStation harmonizes treatment planning, providing one point of control for all planning needs—any equipment, any scale.

*Subject to regulatory clearance in some markets.

For more information on RayStation
or to see a demo please contact
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