

# **Elekta Studio**

Unleash the full potential of interventional radiotherapy

Elekta Studio Unleash the full potential of interventional radiotherapy

## Experience a comprehensive 3D image-guided brachytherapy solution

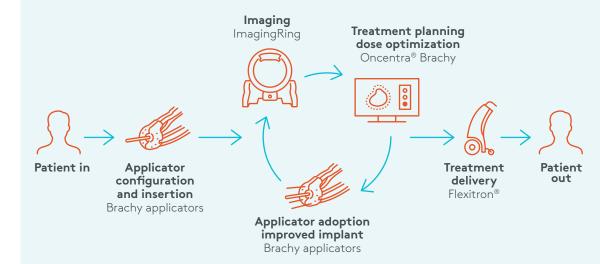
A contemporary mobile imaging solution for all brachytherapy treatments—all in one room

- Precise, image-guided brachytherapy
- Fast, adaptive treatment planning
- Efficient patient and machine QA
- Potential for applications such as source tracking

Elekta Studio is a space in your hospital to unleash the full potential of interventional radiotherapy. It's one space that revolves around your patient, allowing you to image, plan, adapt and treat in a single, dedicated room. Now, with the addition of the mobile ImagingRing, you can obtain all the images you need, right when you need them, for every step of the workflow – from applicator and needle insertion, through initial or adaptive planning, to verification and treatment delivery. With no need to move your patient between rooms you can minimize the risk of applicator displacement and eliminate the wait for equipment to become available, which speeds up the whole process. It can all be performed in Elekta Studio.

### Streamline your workflows

Elekta Studio is a fully connected image-guided brachytherapy suite



- Elekta CT/MR applicators provide artifact-free images in CT and MR—also in case of image fusion. High-definition visibility in CT images of applicators, needles and specialized markers provides swift and accurate reconstruction.
- ImagingRing is a solution to the imageguided brachytherapy workflow in Elekta Studio. Acquire images whenever you need to—for the initial plan, for adaptive planning, or before treatment delivery.
- High-quality DICOM images are sent directly to Oncentra Brachy for treatment planning. Here, the images can be used alone for planning or registered with the CT or MRI images acquired before the treatment or previous fractions in the treatment planning process.
- Once approved, the plan is sent to the Flexitron afterloader for treatment delivery and stored in MOSAIQ.
- ImagingRing provides 2D and 3D imaging capability for afterloader quality assurance and applicator commissioning.



# Expand your clinical capabilities

Imaging is at the heart of precision radiation medicine, confirming the position of the target and organs at risk (OAR) at the time of treatment delivery. Accurate in-room 3D imaging with ImagingRing puts interventional techniques at your fingertips, ensuring you have the information required to treat a wide range of indications.

## High quality 3D imaging empowers fast adaptive planning

The ability to perform rapid in-room imaging at the time of treatment allows brachytherapy plans to be adapted quickly to your patient's current anatomy.

## The wide bore is suitable for interventional procedures

ImagingRing has a large bore diameter (121 cm), making it suitable for imaging gynecological, prostate and breast cancer patients in the treatment position.

## Tilting gantry enhances treatment flexibility

Inclined 2D and 3D imaging provides treatment flexibility for even the most demanding situations.

# Ensure care revolves around your patients

You don't need to leave Elekta Studio for imaging. Bring high quality CT imaging to your patients, allowing:

- A more comfortable and less stressful experience for patients
- Uninterrupted use of anesthesia
- Reduced risk of applicator or needle displacement
- The ability to acquire multiple images during implantation and treatment planning procedures
- Shorter treatment cycles and more efficient patient scheduling
- High quality imaging in the treatment position, fast adaptive treatment planning, and accurate treatment delivery—it can all happen within Elekta Studio.

### ImagingRing Dynamic imaging around your patient

# Versatility to meet your needs

ImagingRing is an advanced, mobile CT scanner designed specifically for use in Elekta Studio, giving you access to high quality, in-room imaging whenever you need it.

#### Flexible imaging

With its unique 121-centimeter wide bore diameter, ImagingRing allows you to obtain images easily with your patient in treatment position. The tilting gantry provides flexibility for inclined 2D and 3D imaging to suit all your clinical workflows. You have unrestricted access to your patient at all times.

## ImagingRing can be equipped with the following imaging capabilities:

- 2D exposures for treatment planning, applicator placement verification or QA purposes
- 2D fluoroscopy for real-time, low-dose guidance of applicator or needle insertion
- 3D imaging for treatment planning purposes
- 3D collimated imaging for low-dose and pediatric applications

#### Simple patient setup

The wide bore and tilting gantry also ensure easy access to patients for quick and simple patient setup procedures.

#### Fully mobile scanning

ImagingRing is lightweight, compact and fully mobile. Its slimline design makes it convenient to store, while its battery-powered motor enables you to move the device easily around the treatment room and between rooms, if required. It even fits in a standard hospital elevator.







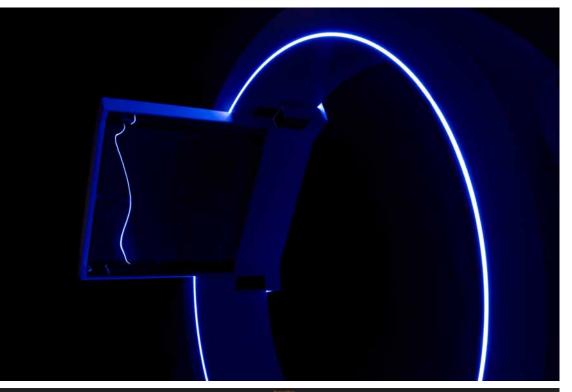


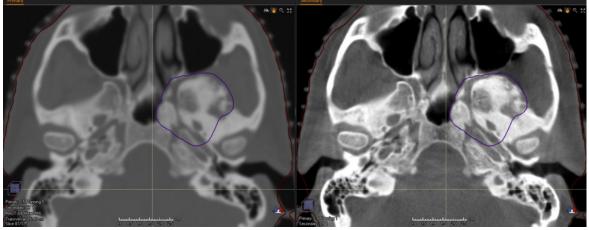
### Uncompromised image quality

#### Quality at every step

With its large flat panel detector (43 x 43 cm), ImagingRing provides the high-quality images required for advanced image-guided adaptive brachytherapy techniques. With ImagingRing, you can obtain detailed, artifact-free 2D or 3D images for every step of your workflow, including applicator and needle navigation, treatment planning, verification, and treatment delivery. ImagingRing can be equipped with advanced imaging capability, such as:

- Dual energy 2D acquisitions, to enhance soft tissue image quality and soft tissue/bone separation
- Metal artifact reduction, to minimize the image quality impact of metal implants
- Increased maximum energy, for higher tissue penetration (e.g., for obese patients)
- Optimized bow-tie filter improves contrast and reduces scatter artifacts





#### Fluoroscopic option

ImagingRing includes comprehensive fluoroscopic capabilities for real-time image guidance during needle insertion.

# Ensuring patient comfort

### Fully mobile and with a compact, open design, ImagingRing ensures the best possible patient experience.

#### Bring imaging to your patient

ImagingRing means that you no longer need to move patients on and off the treatment table or from room to room. Fast in-room imaging allows you to streamline treatment procedures in one place—ensuring shorter treatment cycles, reduced risk of applicator or needle displacement, and a better overall experience for your patients.

#### Patient-friendly design

The spacious ImagingRing design minimizes patient anxiety and is suitable for all treatment positions. You have complete access to patients



during treatment, and the flexible tilting gantry allows them to be scanned easily in the correct position.

#### Wireless RingPad

The wireless RingPad (HMI) brings control closer to your patients, so you can reassure them as you guide ImagingRing smoothly into position. The RingPad is used to control the ImagingRing, as well as review and export images. An external medicalgrade image review monitor and workstation are also available.



### For almost five decades, Elekta has been a leader in precision radiation medicine.

Our more than 4,000 employees worldwide are committed to ensuring everyone in the world with cancer has access to—and benefits from—more precise, personalized radiotherapy treatments.

Elekta is the authorized Exclusive Distributor of medPhoton in Brachytherapy. ImagingRing is a product manufactured by medPhoton GmbH.

Elekta Studio is comprised of multiple medical devices, some of which may not yet be available in all markets. Confirm availability with your local Elekta representative.



#### Elekta AB

Box 7593 SE-103 93 Stockholm, Sweden

T +46 8 587 254 00 F +46 8 587 255 00

**Europe** T +46 8 587 254 00 F +46 8 587 255 00



/elekta

elekta.com

**Turkey, India, Middle East & Africa** T +90 216 474 3500 F +90 216 474 3406

#### **North & Central America including the Caribbean** T +1 770 300 9725 F +1 770 448 6338

#### South America & Cuba

T +55 11 5054 4550 F +55 11 5054 4568

#### Asia Pacific

T +852 2891 2208 F +852 2575 7133

#### Japan

T +81 3 6722 3800 F +81 3 6436 4231

#### China

T +86 10 5669 2800 F +86 10 5669 2900

LPCBX201105 © 2020 Elekta Group. All rights reserved.