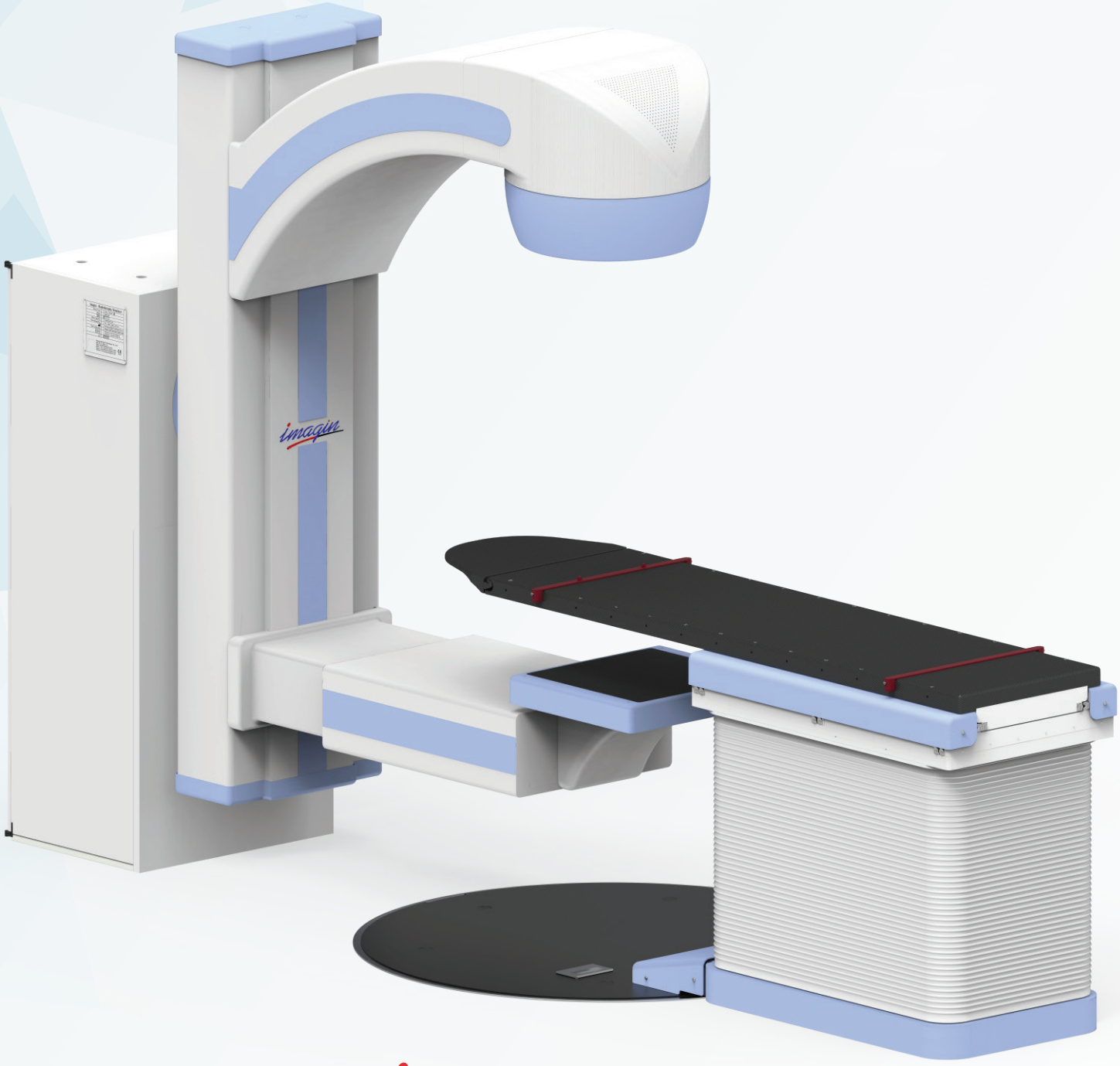
PANACEA
Engineering Medicine



imagin

Advanced Digital Radiotherapy Simulator

"Healthcare has evolved with time with advancements and breakthroughs in technology. With increasing number of cancer cases across the world, there are major initiatives taken by healthcare professionals to eradicate cancer. Radiation therapy has played a key role in treatment of cancer. Technology has improved, and the delivery of radiation has become more precise, and radiation oncologist are now able to deliver required doses of radiation more safely. This has given radiation an even bigger role in cancer care"



A new era of Simulation begins- Imagin Everyday

Effective simulation and verification are of primary importance before treatment delivery to ensure safe radiation therapy. At Panacea, we believe in working together to break down boundaries and provide a seamless approach to cancer care. With our expertise we have developed an advanced radiotherapy simulator to simplify treatment planning and ease the challenging radiotherapy workflow. Precise simulation requires safe and streamlined workflow. IMAGIN, an advanced flat panel radiotherapy simulator delivers the most efficacious simulation by optimized target delineation, target margins and target contouring to simplify the "starting point" of treatment planning.

IMAGIN is designed and developed with clinical and technical expertise from Bhabha Atomic Research Center, India. IMAGIN is a dedicated radiotherapy simulator where precise treatment planning meets simplified workflow.

BROADEN YOUR APPLICATIONS

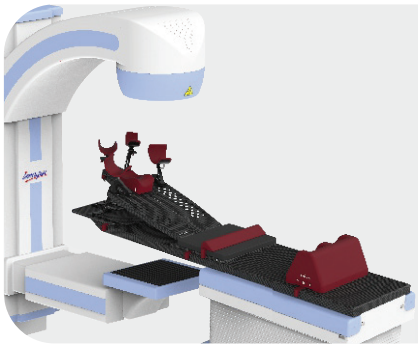
Now, simulate for all your treatment units

With increasing number of treatment units in a Radiation Oncology department, it becomes essential for a radiotherapy simulator to be integrated with all the treatment units to increase throughput.

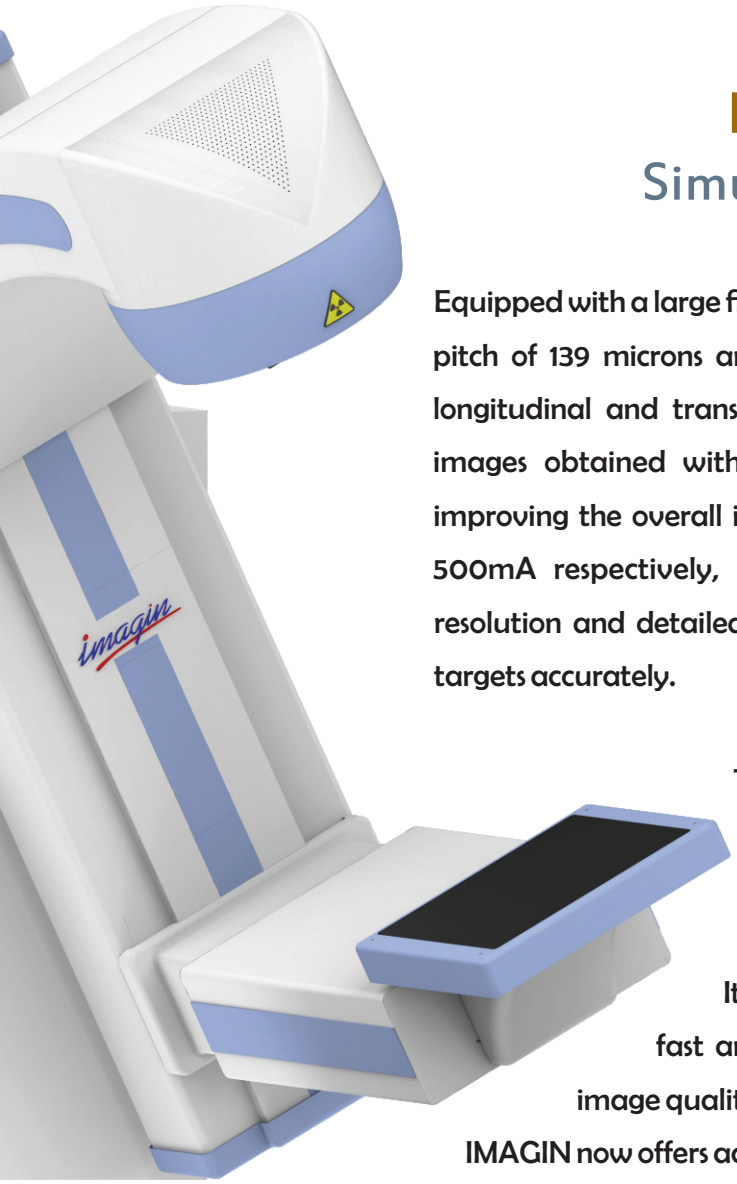
IMAGIN can shake hands with any treatment machine, be it a cobalt platform or a linear accelerator. With a variable FAD and a state-of-the-art indexed treatment planning couch, IMAGIN simulates and verifies with sub millimetre accuracy for every treatment machine. IMAGIN's wide application allows Brachytherapy planning to be performed before the treatment delivery.



Be confident with Patient Positioning



IMAGIN's treatment planning couch aids in improved patient positioning with fixtures. The indexing on the treatment planning couch makes it easier to reproduce the same on the couch of any treatment machine.



REDEFINING IMAGE CLARITY

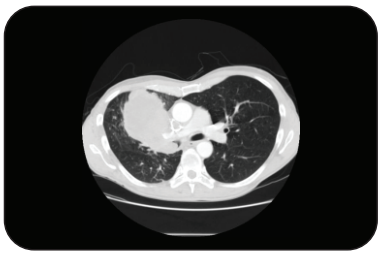
Simulate with clarity and confidence

Equipped with a large flat panel detector, IMAGIN is capable of imaging with pixel pitch of 139 microns and a resolution of 3K x 3K. With Movement in vertical, longitudinal and transverse direction, the detector is at your command. The images obtained with IMAGIN are free from artefacts and noise, thereby improving the overall image quality. With kV and mA range up to 150kV and 500mA respectively, IMAGIN helps in capturing images with high spatial resolution and detailed volume images that enables the clinicians to delineate targets accurately.

The APR on IMAGIN optimizes the dose required for anatomical region and delivers precise dose without giving any additional dose to the neighbouring tissues.

It is clinically important for radiotherapy simulator to have fast and efficient routine workflows without compromising on image quality or dose. Combined with advanced imaging technologies, IMAGIN now offers accuracy with low dose.





Push boundaries in Simulation

With an easy-to-use interface, digital radiography can be performed to produce superior quality images for accurate treatment planning. The wider field of view of IMAGIN and large detector area empowers clinicians to capture the whole anatomical region with one exposure.

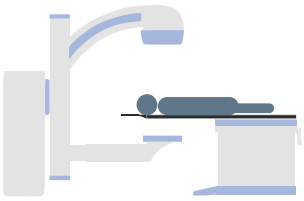
Reduce unwanted dose to OAR

For moving tumours or tumours close to moving organs, fluoroscopy mode in IMAGIN can detect the extent of the movement and aid in limiting exposure to healthy tissues. Fluoroscopic images can be acquired at 9 and 13 frames per second to obtain clear images of moving organs with substantial dose.

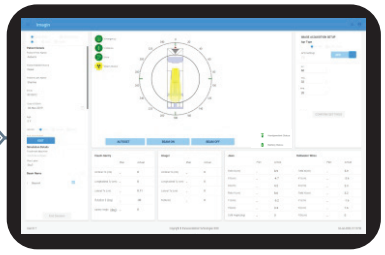
STREAMLINING YOUR WORKFLOW

Improve your workflow with "KRYSTAL"

SIMULATION



Patient Set-Up



Beam ON

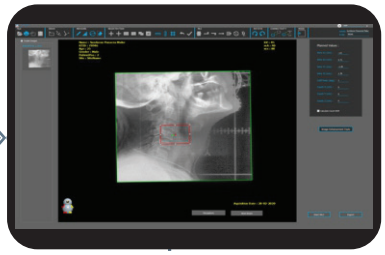
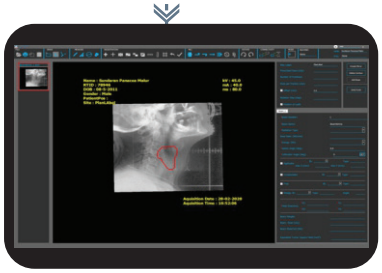
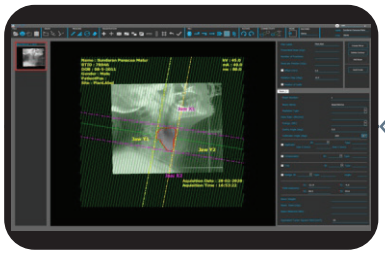


Image Acquired



Delineating Target



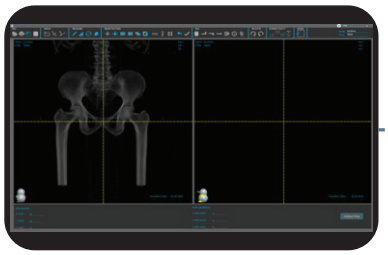
Autofix MLC - Planning



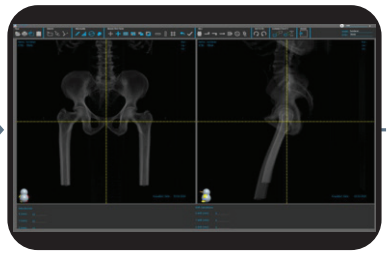
DICOM Server

Beam ON

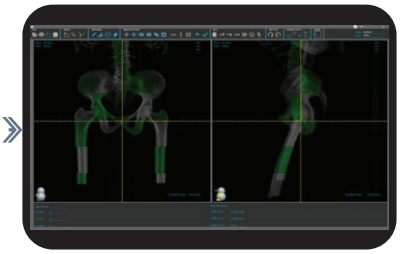
VERIFICATION



Acquire AP Image



Acquire LAT Image



Manual Registration

Couch Shift Corrections



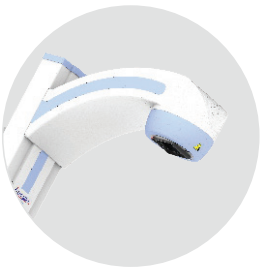
"No Compromise on Patient Care"

The images obtained on IMAGIN assists the clinicians in isolating and segmenting the tumor. It also gives clinicians the sense of confidence in planning and verifying the treatment plan.

The system comes with a high storage capacity and is DICOM compatible.

Expand your clinical capabilities with CBCT

CBCT on IMAGIN can be performed for better spatial resolution, low contrast imaging and visualizing soft tissues with a thinner slice thickness of 0.5mm. The ±185° degree rotation on IMAGIN aids to capture images at required angles and reconstruct the images with a optical field size up to 50 X 50cm² at FAD 100 cm. to clearly visualize the deep seated tumours. With faster acquisition and reconstruction within 60 seconds, IMAGIN improves the overall patient throughput and clinical efficiency

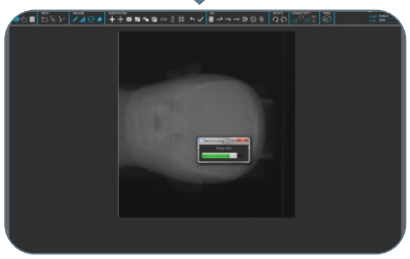




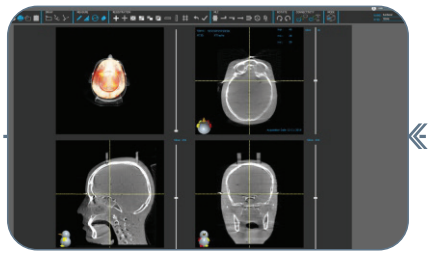
Patient Set-Up



CBCT In Progress



Reconstructing CBCT



CBCT Volume

VERIFICATION

Assuring Safety at every step

As radiation oncology treatment techniques are advancing, it is essential to reconsider safety at every step along with a focus to maintain precision and accuracy. To address this need, IMAGIN is optimally balanced for delivering low dose to the patient while providing excellent image quality.

Service that you deserve

At Panacea, we are committed to help you drive performance, improve throughput and usability by training and keeping you updated with latest technology. To deliver the highest quality care, Panacea works closely with the customers. Contact us for any technical support, on-site support and remote assistance directly from experts.

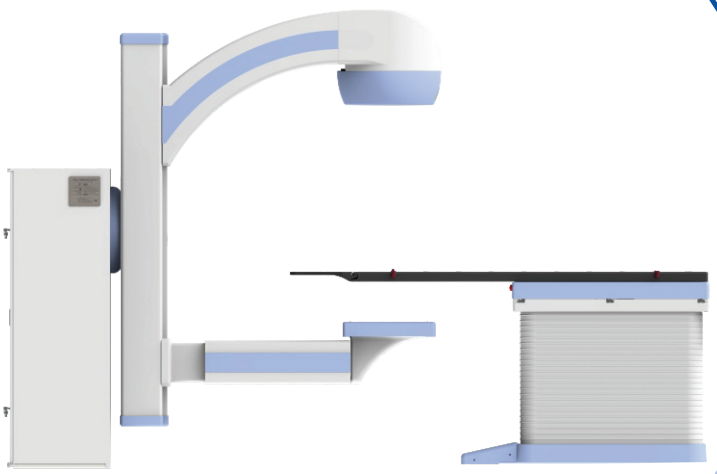
IMAGIN AT A GLANCE

Simulation and Verification made easy

80cm
100cm

Simulation and verification for any treatment unit with variable FAD

Higher reproducibility with indexed treatment planning couch



DICOM

Store, retrieve, view and exhange images anywhere with DICOM

APR

Precise dose delivery for the anatomical region of interest

LOW DOSE

Low dose CBCT for a larger field size providing Volumteric data to improve set up accuracy

Advanced Imaging Technology to perform Radiography and Fluoroscopy with confidence

Noise-free high resolution images with large Flat Panel Detector

PANACEA

Engineering Medicine

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Specifications are subject to change without any prior notifications, Version 5