



Total Body Irradiation treatment verification



Get the accuracy you need in a most efficient way

Total Body Irradiation can be a complex treatment and may take up to an hour. Patient movements or positioning difficulties can double the time required. That is why the Theraview Image Guided RadioTherapy (IGRT) Solution can help you significantly improve Total Body Irradiation (TBI) treatment setup procedures and outcomes. This mobile stand-alone imager is part of the integrated Theraview imaging product suite and the only commercially available TBI product of its kind today. Instead of simply producing a single image, the solution relies on Intrafraction Monitoring in the form of live video capture to provide high-quality megavoltage (MV) images. Video captures can be stopped and restarted to accommodate for changes in the patient's position - so there's no risk of needing to repeat the entire patient setup procedure. This will deliver significantly greater efficiency, faster results and improved treatment quality.

Focus on accuracy, efficiency and safety

During treatment, you need to ensure your patient is positioned correctly and that the dose given is in line with the treatment plan. Theraview setup verification software helps to automatically set up and correct the positioning of a patient or compensator/ blocker. Matching tools constantly monitor patient anatomy for movement readouts with sub-millimeter precision.

Throughout the entire treatment process, Intrafraction Monitoring is active and a live video feed is provided. Images are acquired every second during treatment to verify patient position and compensator/blocker position. A color-coded image shows differences between the patient's current position and the position at the outset. This comparison is supported by a clinical audio alarm, audible whenever the difference exceeds a predefined threshold. Treatment can be manually stopped and continued, based on real-time (software) feedback.

Benefits

- ✓ Improved patient setup
- Real-time (intrafraction) monitoring during entire treatment
- Verification with sub-millimeter precision
- Reduce overall treatment times
- Mobile unit can be easily used in different treatment rooms





Specifications & Features

TBI IMAGER SPECIFICATIONS & FEATURES

Dimensions 37x129x87 cm

Ethernet cabling

Snapshots at adjustable interval (shortest interval: 1x per sec)

FDA certification and CE approved

Mobile Imager can be moved between linear accelerators

Height of the TBI imager can be easily adjusted (also remote)

Compensator/blocker check and MLC check support

Clinical audio alarm warning in addition to live video comparison

STORAGE

Central snapshot storage on TICS during Treatment

Dicom RT Plan and RT Image import (DRR, Field/MLC information, compensator/blocker)

Dicom RT Structure set import (anatomic structures)

Dicom export to PACS (e.g. ARIA or MOSAIQ) for further comparison & archiving (RT Image)

IMAGING TOOLS

Image difference tools (color)

Multiple image filters

Auto window level/ width

Brightness, contrast &

gamma adjustment

Histogram equalization

Image grey level analysis

Multiple distance measurements tool

Image zooming & panning

Advanced processing

Analysis tools

VIDEO SPECIFICATIONS

1280x1024 pixel resolution

Cooled charge coupled device (CCD) camera (C3D)-25°C

12-bit depth

Large imaging area measuring 70x46 cm

