VERSATILE, EFFICIENT AND EFFECTIVE FOR THE RANGE OF RADIATION ONCOLOGY PATIENTS

TomoTherapy®

RADIATION THERAPY

The TomoTherapy® TomoHDA™ System is **versatile** and **efficient**, enabling delivery of highly **effective** treatments for a wide range of patients and disease types.

The premier offering of the TomoTherapy® H™ Series, the TomoHDA™ System:

- Enables helical delivery of radiation with dose tightly conformed to the target, precisely avoiding healthy tissue and critical structures.
- Facilitates an efficient, interactive approach to treatment planning, so clinicians can quickly develop the best plan possible to meet each patient's needs.
- Gives therapists a clear image of patient anatomy before every treatment, every day.
- Provides physicists with comprehensive, automated support for machine and patient-specific quality assurance.
- Guarantees 98 percent uptime and a built-in path to upgrades, optimizing system performance day-to-day and for the long run.

"Our TomoTherapy Systems allow us to treat any patients that come to our department with better results and fewer side effects."

Pei-Wei Shueng, M.D.
Far Eastern Memorial Hospital, Taiwan

TomoTherapy®
ACCURAY®

Spare more normal tissue for more cases, efficiently

The TomoHDA™ System's CT-based platform enables continuous delivery from 360 degrees around the patient using TomoHelical™ Mode. A clinician also can choose to deliver from specific angles via TomoDirect™ Mode.

Regardless of delivery style, the TomoHDA treatment table moves the patient through the center of the device. This fluid, precise motion makes it easy to treat multiple, and long, targets with a single set-up and one seamless pass.

Highly sculpted dose distributions are possible for every case treated with TomoTherapy® technology. The keys to optimal plan quality are:

- Modulation of the beam by the system's binary multi-leaf collimator.
- Shaping of radiation by the TomoEDGE™ Dynamic Jaws.
- Delivery of dose with thousands of individually optimized beamlets.

Better conformality of dose to the target means greater normal tissue sparing and reduced treatment toxicities. This combination makes a TomoTherapy treatment the gold standard in IMRT.
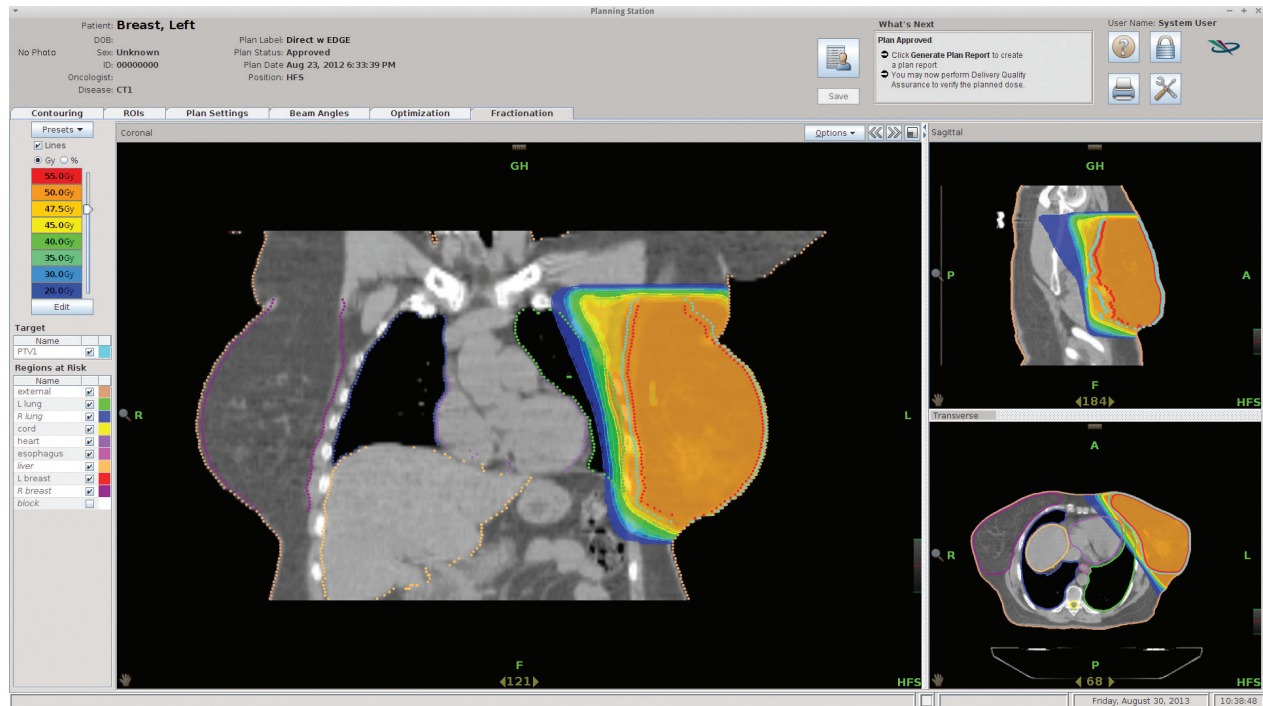
"There's virtually nothing that you cannot treat with Tomo. It has really taken over the part of the workhorse in our department."
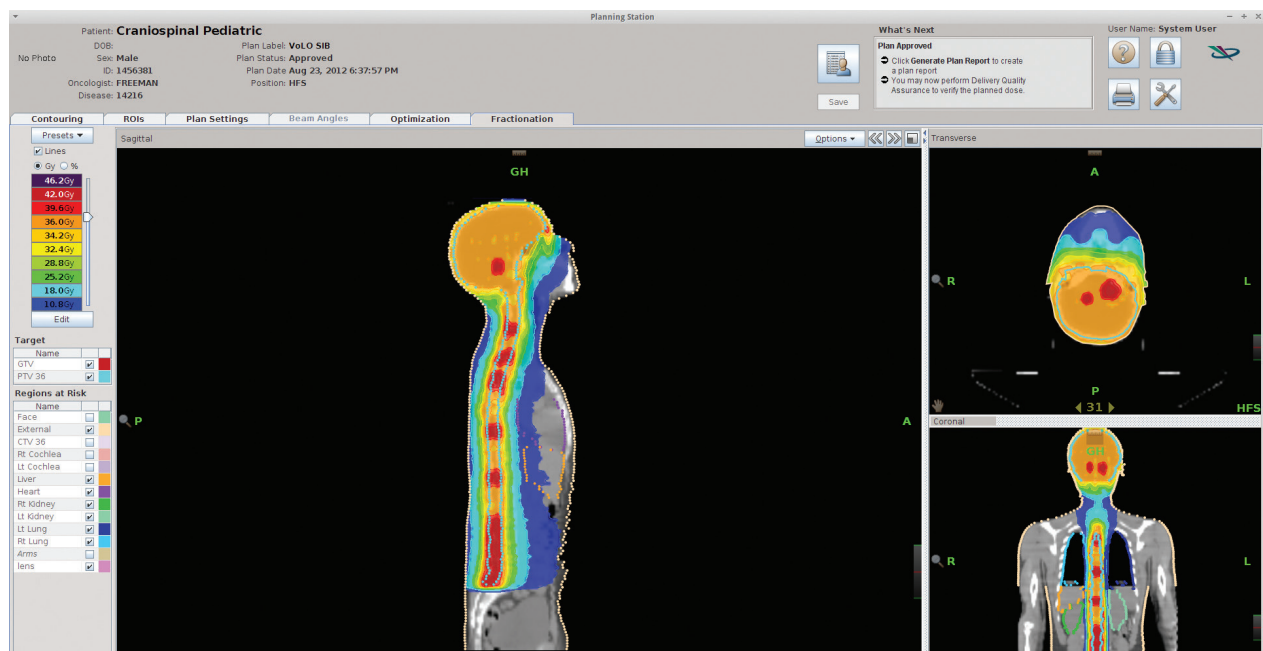
Florian Sterzing, M.D.
Heidelberg University Medical Center, Heidelberg, Germany

Delivery options that make a difference

TomoDirect™ Mode; Left breast treatment, using 5 cm TomoEDGE™ Dynamic Jaws; Four beam angles; Beam-on time: 3.4 minutes
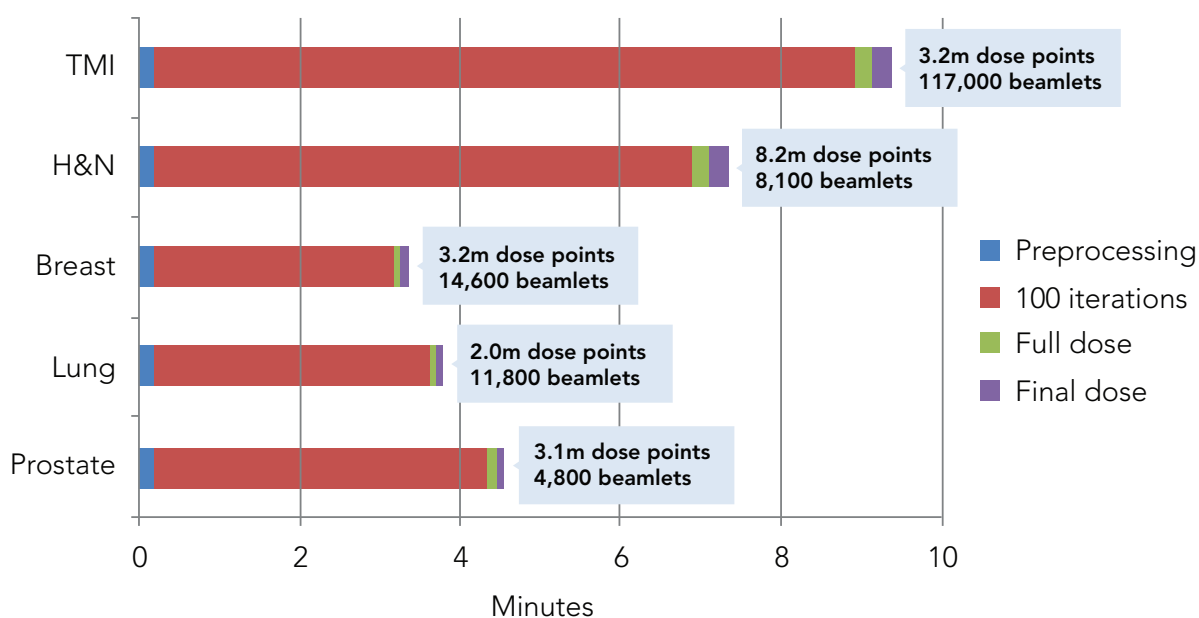

TomoHelical™ Mode; Pediatric craniospinal treatment, using 5 cm TomoEDGE Dynamic Jaws; Target length: 69 cm; Beam-on time: 11.4 minutes

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Develop better plans
for more patients, faster

A superior patient treatment begins with an excellent treatment plan. The TomoHDA™ System is designed to assist clinicians in creating the best plan possible to meet each of their patient's needs.

VoLO™ Planning software enables optimization to begin as soon as contouring is completed and essential machine parameters are defined. Extra flexibility allows additional parameters to be explored and reviewed interactively, in real time, to further improve plan quality without slowing down the process.

Even the most sophisticated plans are now significantly easier and faster to achieve.

Chart data:

- **TMI** — 3.2m dose points, 117,000 beamlets
- **H&N** — 8.2m dose points, 8,100 beamlets
- **Breast** — 3.2m dose points, 14,600 beamlets
- **Lung** — 2.0m dose points, 11,800 beamlets
- **Prostate** — 3.1m dose points, 4,800 beamlets

X-axis: Minutes (0, 2, 4, 6, 8, 10)

Legend:
- Preprocessing
- 100 iterations
- Full dose
- Final dose

"What once took three hours to plan now takes only 10 to 15 minutes with VoLO."

Patrick Guo, Ph.D.
Sharp Grossmont Hospital, La Mesa, California, U.S.

# Apply image guidance
for every patient, every day

The TomoHDA™ System easily integrates imaging into the treatment process to assure proper patient positioning and dose targeting. Daily CT imaging provides the confidence to reduce margins and spare more normal structures, helping to further minimize toxicities.

Making innovative use of imaging, Planned Adaptive™ software enables review of daily CT images and dose to check that the delivery is consistent with the prescription. It also allows monitoring of the impact of anatomical changes to facilitate plan modification, if necessary.

There is an added benefit for patients with dental fillings or metal prostheses: MVCT images have fewer artifacts than kVCT, allowing better visualization of soft tissues. TomoHDA images can even be used for treatment planning in these cases.
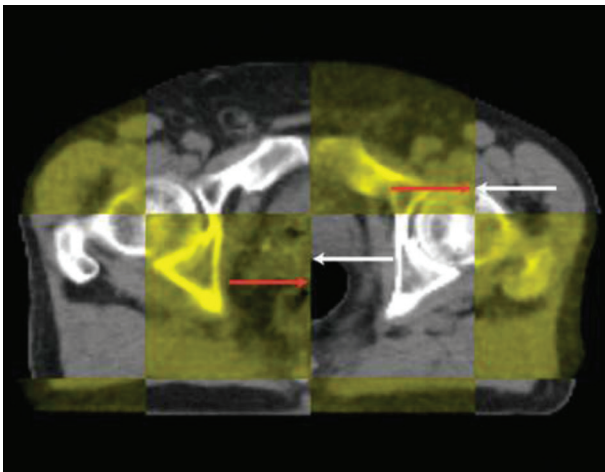
Bone-based localization: prostate-rectum boundary is misaligned
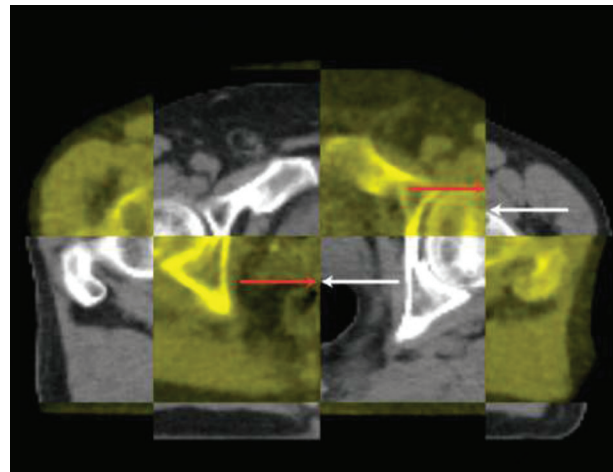
Soft tissue-based localization: prostate-rectum boundary is correctly aligned

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# Make quality assurance easy with integrated, automated tools

The combination of TomoTherapy® Quality Assurance (TQA™) and Delivery Analysis™ gives physicists a wealth of information about machine performance and patient delivery.

TQA provides automated analyses of routinely scheduled quality assurance tests, to save clinicians time and effort. Typically, therapists can run QA modules that check and analyze key machine performance characteristics in less than 10 minutes, with no additional equipment needed. Other modules can be run weekly or monthly to perform a variety of comprehensive tests, typically in 10–30 minutes. Performing similar tests using conventional quality assurance tools would take hours.

Delivery Analysis software is a new addition to the available quality assurance tool set for the TomoTherapy System. It harnesses MVCT exit detector data and offers powerful visualization tools to verify consistency in treatment delivery, fraction by fraction. The result is increased confidence among clinicians that the right treatment is being delivered to the patient every day.

TQA software offers a calendar-based interface and a user-customizable alert system
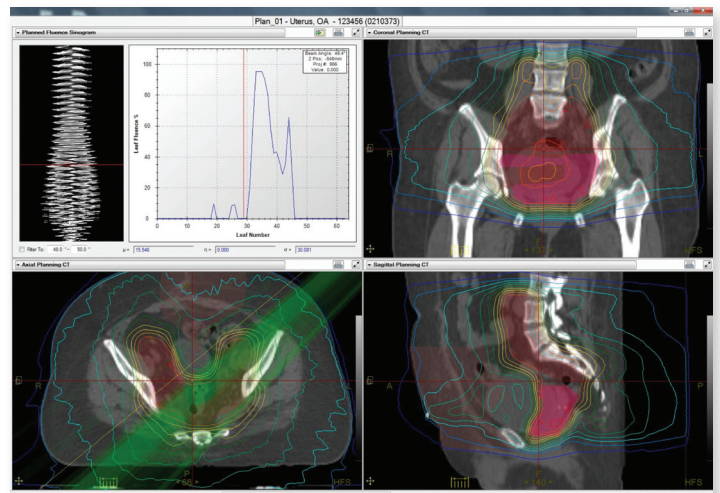
Delivery Analysis software provides powerful visualization tools previously not available

Keep the system performing optimally, always

The Accuray team is committed to supporting delivery of world-class care. To this end, customers can expect to have their TomoHDA™ System kept at optimal performance levels, day-to-day and over time.

With the new Diamond Choice Service Agreement, customers can seamlessly ensure that their system is state-of-the-art with future upgrades included in the agreement.

With an uptime guarantee, Accuray service is aimed at providing peace of mind for customers. The Accuray approach to service and support has consistently resulted in the highest composite rating for customer satisfaction among radiation oncology vendors.*

md buyline

* MD Buyline Market Intelligence Briefing, Q3 2013 - Q2 2015

"Accuray has done an excellent job of developing the next generation TomoTherapy System. They have worked with the TomoTherapy team to prioritize the issues or the features that the users really want, specifically reliability, and flexibility with treatment planning and delivery."

Daniel Low, Ph.D.
UCLA Radiation Oncology, Los Angeles, California, U.S.

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# TOMOTHERAPY® H™ SERIES:
VERSATILE, EFFICIENT AND EFFECTIVE
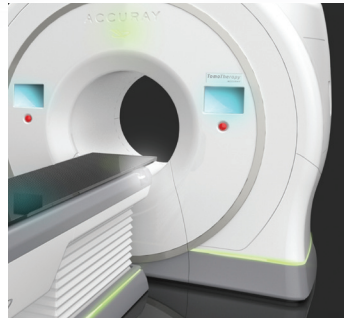
TomoHDA™ System

The ultimate versatility in treatment delivery with highly effective and efficient patient treatments, and fast concurrent treatment planning.

Versatile, efficient and effective for the range of radiation oncology patients

- TomoHelical™ Mode
- TomoDirect™ Mode
- 1, 2.5 and 5 cm jaw sizes
- High Performance VoLO™ Planning
- Integrated MVCT imaging
- OIS interface (to Aria or MOSAIQ)
- Remote Software Solutions
- Planned Adaptive™ software
- TomoEDGE™ Dynamic Jaws
- TomoTherapy® Quality Assurance (TQA™) Total Package
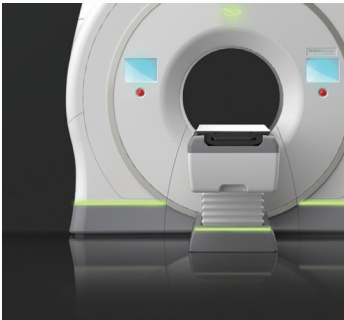
TomoHD™ System

The full spectrum solution for any radiation oncology center, providing high quality treatments to every patient for any clinical indication requiring radiation therapy.

- TomoHelical™ Mode
- TomoDirect™ Mode
- 1, 2.5 and 5 cm jaw sizes
- Standard VoLO™ Planning
- Integrated MVCT imaging
- OIS Interface
  (to Aria or MOSAIQ)
- Remote Software Solutions
- TomoTherapy® Quality Assurance
  (TQA™) Essentials Package
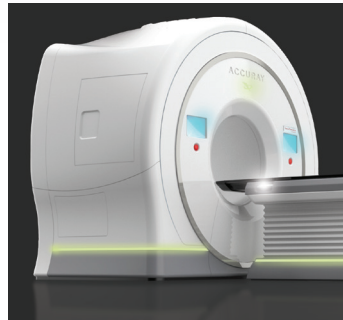
TomoH™ System

The gold standard for rotational IMRT treatment delivery, providing streamlined daily image guidance and ultrafast binary MLC modulation to deliver excellent target homogeneity and normal tissue sparing.

- TomoHelical Mode
- 1, 2.5 and 5 cm jaw sizes
- CPU optimizer
- Integrated MVCT imaging
- TomoTherapy Quality Assurance
  (TQA) Essentials Package

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#PRECISION MATTERS