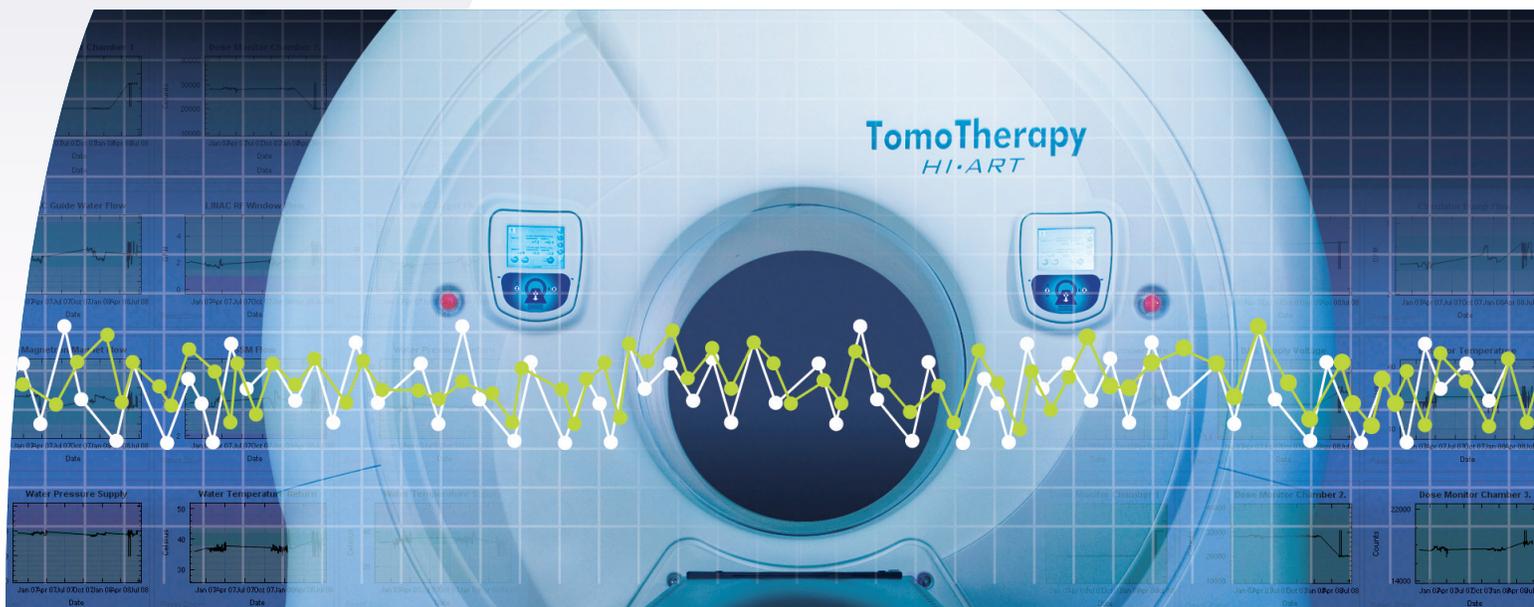


# Tomo Quality Assurance™

The integrated solution for Hi·Art® machine QA



## Know your system from the inside out.

*Tomo Quality Assurance*, or TQA™, puts internally-generated *Hi·Art* system data in the hands of your medical physics staff. This easy-to-use application automates the collection—and simplifies the analysis—of key metrics for machine QA. The result is a significantly more efficient, more informed approach to daily, monthly, annual and as-needed testing.

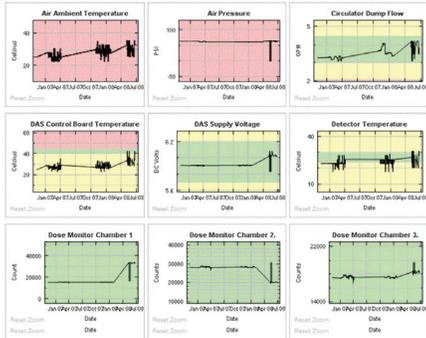
Designed and validated in conjunction with numerous expert users, *TQA* takes full advantage of the integrated nature of the *Hi·Art* treatment system. Data is gathered from the on-board detector and other sub-systems that are monitoring the *Hi·Art* system continuously during delivery. With this offering from *TomoTherapy*, you gain a powerful set of physics tools that enhance workflow and provide a complete, comparative record of your *Hi·Art* system's health and performance.

Tap into *TQA*, and maximize treatment capacity on the most advanced platform for image-guided, intensity-modulated radiation therapy.

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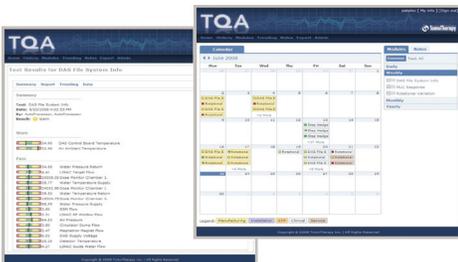
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## Gain confidence with expanded data access.



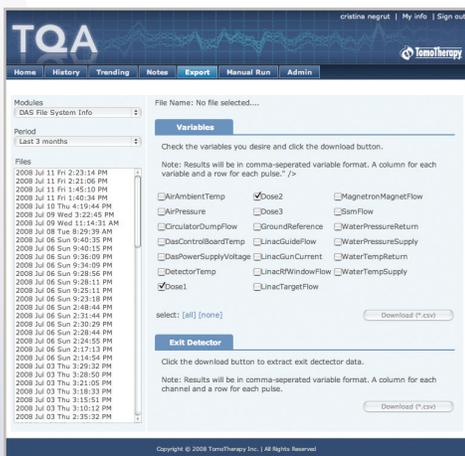
Data from on-board subsystems monitor parameters in real-time

## Save time with convenient tools for testing and review.



Calendar-based application runs from Operator Station

## Take control with TQA.



All TQA data can be exported for your analysis and third-party validation

TQA provides a comprehensive data dashboard that can drive more informed decision-making.

With TQA, medical staff can access the same *Hi·Art* system data as your TomoTherapy Field Service Engineer. Because the unprocessed data is readily available, there's greater insight into issues that could affect performance—and more opportunity for proactive system support.

With TQA, testing can be quickly initiated and reviewed right from the Operator Station.

TQA's calendar-based interface allows staff to easily identify a parameter's status, without having to sort through piles of data. A scalable system of plug-ins allow for analysis, reporting and trending to be customized according to your department's needs.

TQA offers a wealth of information for your staff to use in implementing workflows.

TomoTherapy developed the TQA application in close partnership with medical physicists who use the *Hi·Art* treatment system on a daily basis. They let us know what data would help them enhance their QA programs, and enable easier third-party validation. Our integrated platform allows for the data to be gathered efficiently, and presented clearly.

## Innovative QA for an advanced platform

Below are the available packages and associated modules for the TQA application.

The **TQA Base Package** consists of the TQA framework and the following modules:

- **Basic Dosimetry Module** - Uses an open field procedure to provide a rapid assessment of output, energy, and transverse field shape.
- **System Monitor Module** - Provides subsystem performance checks on *Hi·Art* system.

The following options support additional analysis, reports and trending.

### Enhanced Dosimetry Package:

- **Static Step Wedge Module** - Assesses *Hi·Art* system dosimetry trending using a static-gantry delivery. Measured parameters include output, energy, couch speed, profiles, field width and laser offsets.
- **Helical Step Wedge Module** - Assesses *Hi·Art* system dosimetry trending using a helical delivery. Parameters include rotational variation of output, energy and synchrony between the couch, gantry and leaves.

The **Step Wedge Phantom** is designed to test and monitor the output of the *Hi·Art* treatment system. The phantom is required for the optional Enhanced Dosimetry Package of the TQA application, and allows for simultaneous third-party output constancy checks.

### Longitudinal Beam Profile Package:

- **Field Width Module** - Allows the physicist to measure the longitudinal field shape. Parameters include field shape compared to reference data, and FWHM field width.

### Linac Alignment Package:

- **Transverse Alignment Module** - Uses the MLC tongue and groove tests which allows physicists to measure and trend x-alignment of the linac.
- **Longitudinal Alignment Module** - Uses the Jaw shift test to allow physicists to measure and trend y-alignment of the linac.

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