REPLACE BASIC MU VERIFICATION SOFTWARE WITH SMART QA THAT IS...

More Comprehensive

3D calculations increase patient safety and plan quality by verifying more elements than single point MU verification software.

More Efficient

Our automated verification process saves time with simple pass/warn/alert indicators that are also accessible from laptops, tablets and phones.

More Accurate

Mobius3D’s collapsed-cone convolution-superposition (CCCS) algorithm provides TPS quality accuracy for dose verification vs. the Clarkson calculations used in basic MU software.

What’s wrong with basic MU software?

“Over the last 30 years, radiation treatment plans have become increasingly complex, to include IMRT, VMAT, SRS/SBRT, FFF, and TomoTherapy®. These modern methods deliver highly conformal dose, but they also are more sensitive to small errors.

Unfortunately, MU software for QA of these plans has not evolved with the same complexity. Modern plans demand a more comprehensive, accurate, and efficient tool to ensure safe and effective treatment for your patients.”

Basic MU software includes:  » RadCalc  » MUChek  » IMSure  » Diamond
COMPARE THE DIFFERENCE

Basic MU Software
- Verifies dose at single points
- Treats patient like a box
- Assumes patient is water-equivalent
- IMRT/VMAT require manual corrections
- Does not check plan effectiveness

Mobius3D Software
- Verifies dose throughout treatment volume
- Treats patient as a human
- Uses patient’s planning CT for calculations
- Validates IMRT/VMAT plans with accuracy
- Checks DVH objectives and plan deliverability

“With regard to robustness, Mobius3D provides substantially more data to the clinician than other second check software.”

James P. Nunn, MS, CHP, DABR
LewisGale Hospital. Pulaski, VA
MORE COMPREHENSIVE VERIFICATIONS

Point Dose and MU
Mobius3D verifies your TPS calculation of monitor units at a reference point for each beam, like conventional MU software. However, by using the patient’s CT and a modern dose algorithm, Mobius3D is fundamentally more accurate.

Target Coverage
Since a tumor’s volume is too large to be well-represented by a single point, Mobius3D verifies the proper calculation of both mean dose and a user set % DVH dose within all target structures.

Target Contouring Errors
Mobius3D automatically detects subtle errors in planning, such as stray voxel regions in target structures. These subtle errors can negatively impact inversely-developed plans.

3D Gamma
Mobius3D automatically checks a 3D gamma passing rate. Mobius3D will provide an alert if there are any general inaccuracies in the TPS computed dose for a patient. In addition to comparing dose profiles, the 3D gamma distribution can be analyzed on individual CT slices in transverse, coronal and sagittal planes.

ROI Settings
Customize a naming scheme to automatically identify structures.

Plan Check Settings
Customize tolerances levels for warnings and alerts.

Manage Users
Approvals by therapists, dosimetrists, physicists, and physicians.

Manage Machines
Use reference beam models for your linacs or customize.
DVH Objectives & Graphs

Fully customizable to your needs, Mobius3D contains hundreds of built-in DVH objectives from RTOG protocols and AAPM TG-101. It automatically checks whether DVH objectives are met for critical structures using both the TPS and Mobius3D dose.

Linac Deliverability

Before you treat, Mobius3D checks:
- MLC motion capability
- Potential for gantry/patient collisions
- Time needed to deliver all plan segments

“Mobius3D brings a new level of comprehensiveness to our independent dose checks. The dose algorithm is robust, and the application is quick.”

Mark W. Geurts, MS, DABR, CQE
University of Wisconsin-Madison
MORE EFFICIENT WORKFLOW

Fast & Easy Setup
Mobius3D includes a multi-function server, preconfigured to model your linacs. Once connected to your clinic's network, you can immediately begin verifying treatment plans.

Intuitive Browser Interface
With Mobius3D's browser interface design, you are able to review plan checks and complete approvals from any computer or tablet connected to your clinic's local network (or VPN) on your normal web browser.

MORE ACCURATE CALCULATIONS

TPS-Quality Dose Algorithm
Mobius3D uses an independently developed collapsed-cone convolution-superposition (CCCS) algorithm to calculate dose with the same accuracy as today's treatment planning systems.

Unprecedented Accuracy For IMRT & VMAT
Treatment plans with complex MLC and gantry motion are efficiently handled by Mobius3D. There is no need to manipulate the calculation point or manually correct for the patient's surface shape or anatomy.

TPS Commissioning Verification
Because commissioning a beam model is a complicated task where small errors can have large impacts, Mobius3D includes reference beam data for common linacs. This provides added confidence that your TPS calculations are acceptable.
Specifications

Treatment Machines & Linear Accelerators
- Varian
- Elekta
- Siemens
- TomoTherapy

Treatment Modes
- Photons
- All Energies
- IMRT
- Electrons*
- Wedges (Physical, Dynamic, Universal)

*Single-point electron calculations are performed using the pencil beam redefinition algorithm (PBRA).

Treatment Planning Systems (TPS)
- Any TPS capable of DICOM-RT export including:
  - Pinnacle
  - Eclipse
  - XiO
  - iPlan
  - RayStation

Multi-leaf Collimators (MLC)
- Millennium Series
- BrainLab m3
- Beam Modulator
- Siemens 160 MLC
  ...and more
- HD120
- Agility
- MLCi2
- Optifocus

Mobius3D’s reports verify more aspects of your treatment plans.

ADD-ONS

Mobius3D for IMRT QA (see separate brochure)
+ Brachytherapy
+ SRS cones (coming soon)
Mobius Medical Systems, LP provides the radiation oncology community with innovative software to streamline quality assurance processes and increase positive patient outcomes.