

# **Stereotactic QA Solutions**

Meet the stringent demands of stereotactic treatments, with our suite of SRS/SBRT solutions.

Learn more: sunnuclear.com/srsqa

### Proven, Film-less SRS and SBRT QA

SRS MapCHECK® removes film — and subjectivity — from SRS/SBRT QA, and offers streamlined, digital testing for improved Patient Safety. More than 650 clinical users worldwide have adopted SRS MapCHECK for fast and accurate film-less QA.



# Commissioning & End-to-End Stereotactic QA

StereoPHAN $^{\text{M}}$  streamlines end-to-end stereotactic testing and QA. It's easy and efficient to use — no tools required for setup across tests — and it works with a variety of detectors (ion chambers, film, and SRS MapCHECK).

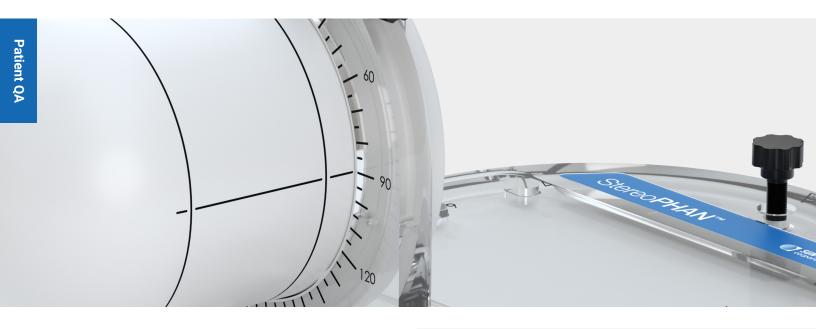


# Dosimetry Data Collection for SRS/SBRT Commissioning

SunSCAN™ 3D makes commissioning and annuals easier and more efficient than ever before — with SRS-class scanning accuracy and compatibility with nearly every machine and user.



#### sunnuclear.com





### **SRS MapCHECK®**

### SRS & SBRT QA, No Film

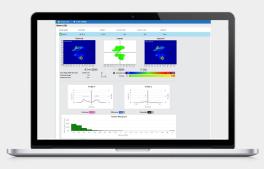
- · Film equivalent SRS/SBRT Patient QA
- Streamline your workflow from ~300 minutes to ~10 minutes
- Comprehensive CyberKnife® System Patient and Machine QA

### **Irradiate From Any Angle**

- Accounts and corrects for angular dependence, field size, and pulse rate
- Ensures accurate dose measurement from any angle, including vertex fields

### **Unmatched Detector Resolution**

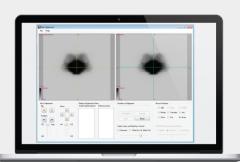
- Detector spacing and resolution specifically designed for SRS/SBRT
- Measures field sizes down to 5 mm (5 diodes in 5 mm cone)



### SunCHECK® Patient

SunCHECK® Patient offers Plan Checks, Secondary Calculations, Pre-Treatment QA and In-Vivo Monitoring all in a single workflow, on the same platform as Machine QA.

### SRS Film QA





### **StereoPHAN™**

### Comprehensive End-to-End Stereotactic QA

- Test all aspects of stereotactic planning and delivery
- MRI/CT image fusion, CT to linac patient alignment, and treatment planning QA
- Rotate phantom up to 360° and combine with inserts for sagittal, coronal and transverse plane measurements within 0.1 mm accuracy

#### Versatile End-to-End Stereotactic QA

- Use with SRS MapCHECK® array for film-less, patientspecific QA for challenging small field and MLC-based SRS cases
- Use with MultiMet-WL Cube for multi-met single isocenter off-axis verification



### **STEEV Phantom**

# Stereotactic End-to-End Verification (STEEV) Anthropomorphic Phantom

Check all steps of a treatment planning system — from diagnostic imaging with CT, MR and PET, to treatment plan verification — for SRS/SBRT procedures.



## **MR Distortion Phantom**

### MR Distortion & Image Fusion Head Phantom

Assess MR distortion and image fusion during SRS with a tissue equivalent, anthropomorphic phantom.



### MultiMet-WL Cube

Identifies off-axis and rotational sources of error — Gantry, Couch or Collimator — in 6 degrees of freedom

### StereoPHAN Inserts



Film



Ion chamber



CT/MRI



MRI Signal Generator



Universal Spacer



Multi-Film

# CyberKnife® Inserts



Film



СТ



Ion Chamber

### **SRS Headframes**





Applications
Brainlab®
Fraxion®
Gamma Knife®
CyberKnife®

### SunSCAN™ 3D

### **User-Centered Design**

- Faster, easier commissioning and beam scanning, with
   0.1 mm accuracy throughout the tank
- Unique cylindrical shape removes need for tank shifts
- Single Setup 65 cm scan range allows 40 x 40 cm field scans, even at 100 cm SSD and 40 cm depth
- Consistent Detector Orientation
  - Smallest part of the detector always measures the beam edge, minimizing stem and cable effects and water movement

### 7-Minute AutoSetup™

- Automatic setup in a third of the time of other tanks
- Tank is leveled and aligned, with detector positioned at water surface, in minutes
- True, physical leveling enables the most accurate scans and is achieved through a proven guided workflow





### **SunSCAN TPR**

Less than 5-minute installation with no additional tools supports Varian Medical Systems®, Elekta, Siemens and CyberKnife® delivery systems

# **Edge Detector**™

For small field beam modeling and QA, characterize penumbra more precisely and with less averaging than ion chambers.





### **Reference Detector**

U.S. Patent No. 9,050,460 B2

This patented, out-of-field detector uses linac head leakage to obtain a reference signal during water tank scanning of photon energies.

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Learn more: sunnuclear.com/solutions/srsqa

