



IROC RI QA Center Questionnaire for Stereotactic Radiosurgery (SRS) with a Gamma Knife

Return the completed form to: IROC Rhode Island QA Center (QARC)
Building B, Suite 201
640 George Washington Highway
Lincoln, RI 02865-4207

This questionnaire, with the requested information, must be submitted to IROC RI QA Center before patients can be placed on a stereotactic protocol. The data will be used by IROC RI QA Center in the review and verification of protocol treatments.

Check the applicable boxes and write in the requested information. Wherever it says "Describe", you may submit a published paper, an internal report, the vendor's descriptive literature, or provide a short description. Use additional pages, if necessary.

Please complete a sample RS-1 patient dosimetry summary form for a non-protocol patient treated in your institution.

If you have questions, please call the IROC RI QA Center Protocol Dosimetrist at 401-753-7600 or fax 401-753-7601 or email Physics@QARC.org.

I. General

Institution _____

Physicist who can answer questions about dosimetry, quality assurance, and dose calculations for stereotactic irradiation:

Name _____ Telephone _____

Address _____ Fax _____

Email _____

Will you treat pediatric patients? Yes No

If yes, will you routinely anesthetize pediatric patients during the radiosurgery procedure?

Yes No

If yes, please include a letter documenting the method of anesthesia that will be employed during the procedure.

How long has your institution been performing SRS? _____

Number of SRS cases treated at your institution in the past six months: _____

II. Equipment

A. Date of Gamma Knife installation: _____
Date of most recent source replacement: _____

B. Head-frame/ Fixation device

Used for: CT MR Treatment

Commercial system, manufacturer, model: _____

System not commercially available. Describe: _____

C. Treatment planning system

Version Number of GammaPlan: _____

Have you performed any in-house modifications? Yes No

Please describe: _____

D. What is the limit, if any, of the number of isocenters? _____

Please describe the guidelines used to select the number of isocenters. _____

Can the system provide isodoses in three orthogonal planes? Yes No

Can the system generate dose-volume histograms for target volume? Yes No
for volumes of interest (normal tissue)? Yes No

Can the system perform image fusion? Yes No

Is image fusion routinely used for your SRS treatments? Yes No

What image set is routinely used for definition of target volumes and normal tissues?
CT MR Fused (i. e. both)

What image set is routinely used for dose calculation? CT MR

III. Dose Calculations

A. Please describe the calibration procedure used for this unit when new sources are installed.

B. What routine calibration checks do you perform? _____

C. How frequently? _____

IV. Quality Assurance

A. Techniques to verify patient position

Describe: _____

B. Techniques to verify source "ON/ OFF" accuracy

Describe: _____

C. Techniques to verify the dose distribution

Frequency: Annually Periodically

Describe: _____

D. When the Co-60 source is changed, what QA procedures do you follow, in addition to the calibration procedure described in IIIA?

Describe: _____

E. How do you verify the dose? _____
