AlignRT is a really great system. Setup times are quite short, and the continuous motion management provides important reassurance throughout treatment. As former Chief of CNS, SRS and SBRT services at UC San Diego, I was involved in using the system on over 100 patients and examined outcomes in the patients with brain metastases. We found the local control results* for this group of patients to be identical to those achieved with frame-based SRS systems.

Dr Joshua Lawson MD, Lexington Medical Center, West Columbia, SC.

AlignRT® FRAMELESS SRS MODULE: TECHNICAL FEATURES

System Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Included/Additional</th>
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</thead>
<tbody>
<tr>
<td>AlignRT® 3 camera system</td>
<td>Included</td>
</tr>
<tr>
<td>SRS phantom for MLC based treatments only</td>
<td>INCLUDED</td>
</tr>
<tr>
<td>MV, kV, CBCT image analysis software</td>
<td>INCLUDED</td>
</tr>
<tr>
<td>Interface to robotic couch or 3Degree head adjuster to allow pitch, yaw and roll corrections</td>
<td></td>
</tr>
<tr>
<td>Additional special SRS phantom required for cone based treatments</td>
<td>ADDITIONAL</td>
</tr>
<tr>
<td>Beam-hold interface</td>
<td></td>
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</tbody>
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Beam Iso-center Calibration

Precisely machined calibration phantom offers the following capabilities:

- Calibration of AlignRT® to ensure coincidence with MV beam iso-center for both MLC and cone based SRS treatments.
- Optimal contrast, with minimal reconstruction artifacts in CT and CBCT images.
- Automatic software tool to analyze MV and kV data for iso-center calculation and verification.
- Assists with the verification of kV, CBCT, lasers with respect to MV iso-center.

Tracking Accuracy

AlignRT® tracks the position of the patient’s cranium in all six degrees of freedom. Computed corrections may be applied either automatically via robotic couch or manually, using the 3Degree head adjuster which enables the fast and precise application of pitch, yaw and roll rotations.

The 3Degree head adjuster clamps and indexes to the treatment couch and supports a range of commercially available open masks.

Open Mask, Patient Comfort and Safety

AlignRT® utilizes open masks providing markedly improved patient comfort whilst at the same time tracking patient position continuously throughout the course of treatment.

Notes

1. The AlignRT® Frameless SRS module can be purchased as part of a new AlignRT® system, as an add-on to an existing AlignRT® 3 camera system, or as part of an upgrade from a 2 camera to 3 camera system.
2. Full details of supported interfaces are provided in third party interface statement.
3. Manufacturing tolerances of SRS phantom are within ±0.1mm of specified dimensions.
5. Rotational corrections may be applied to within 0.1° increments.