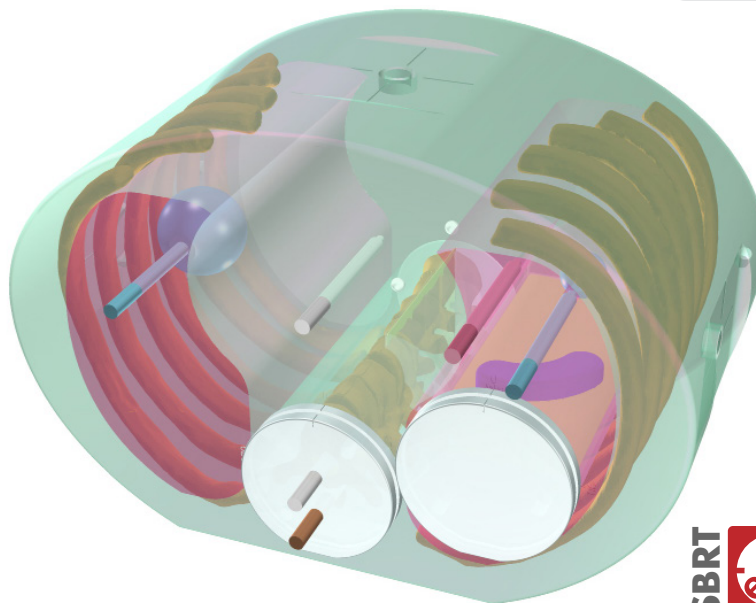


# E2E<sup>®</sup> SBRT Phantom with Removable Spine

Model 036S-CVXX-xx



## "END-TO-END" SBRT TESTING SOLUTION

The high dose per fraction associated with SBRT necessitates a high degree of accuracy in target localization and dose delivery. Small errors can result in significant under treatment of portions of the tumor volume and over dosage of nearby normal tissues. The E2E<sup>®</sup> SBRT Phantom with Removable Spine provides a means to check the entire treatment chain during commissioning and routine QA.

Our Model 036S-CVXX-xx\* is an anthropomorphic thorax body containing articulated spine, ribs, and lungs. All materials are suitable for use in kV and MV energies. The thorax section contains two lung tumor volumes with ionization chamber cavities in the center of each target\*. The phantom also includes a lung insert with an irregular-shaped lung target. The proximity of the lung target to the vertebral body allows clinicians to measure high-resolution dose distribution to the target and dose to the spinal cord in a single delivery. The surface of the thorax body is machined with concentric circle targets and alignment marks for daily system checks.

Our Model 036S has more options for dose verification in the spine as an organ at risk, including a removable split spine. The removable spine facilitates the use of radiochromic film in the sagittal orientation in the inferior half of the spine rod. Ion chambers cavities are located in the spinal cord and the vertebrae in the superior half of the removable spine rod. Alignment marks at 0, 90, 180 & 270 degrees

allow for consistent re-positioning. Precision-cut films with integral registration holes are available for both the lung insert and spine insert.

An optional abdominal section (Model 036-01) with 3D spine anatomy for film and nanoDot<sup>™</sup> dosimetry is available separately. It can also accommodate the CBCT Image Quality phantom (Model 062QA-35). The Model 036-01 provides extra bolus to allow dose assessments with the abdomen due to non-coplanar beams.

### Features

- Thorax with articulated spine, ribs and lungs
- Optional Abdomen with film insert
- High Resolution Anthropomorphic Characteristics
- Center point fiducial and offset target for daily system checks
- Ideal for commissioning an SBRT program
- Excellent test environment for Monte Carlo dose calculation verification
- Supports use and testing of Image Guidance capabilities

\* Customer must specify chamber at time of purchase. Refer to CIRS cavity codes at [www.cirsinc.com/support](http://www.cirsinc.com/support) for corresponding CV number.

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[WWW.CIRSINC.COM](http://WWW.CIRSINC.COM)

# CIRS

Tissue Simulation & Phantom Technology

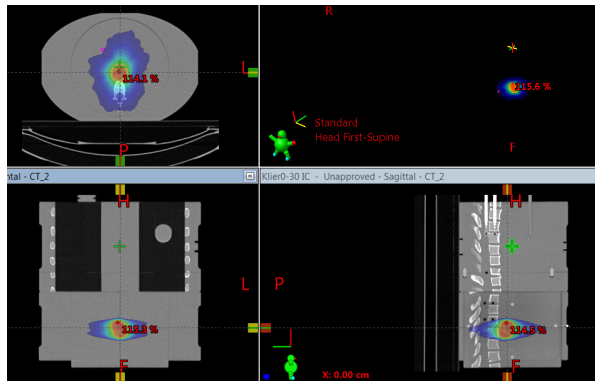


Image 01 <sup>(1)</sup>

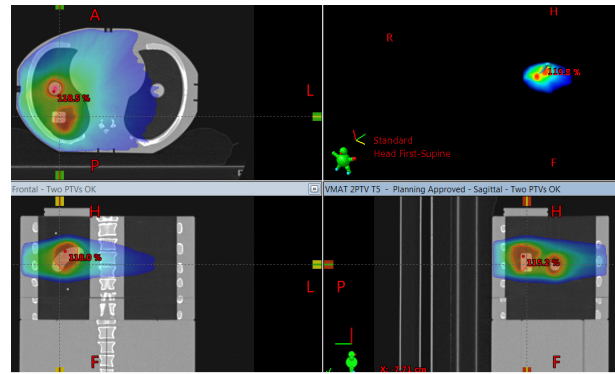


Image 02 <sup>(1)</sup>

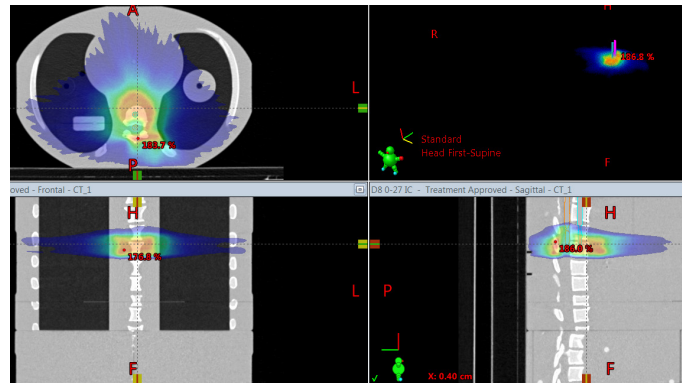
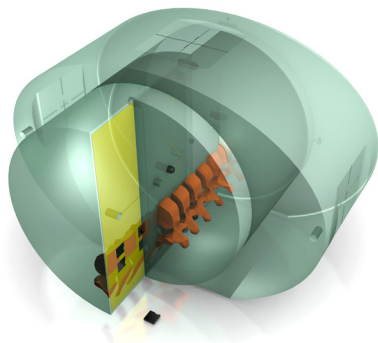


Image 03 <sup>(1)</sup>

(1) Images provided by UZ Leuven, "Evaluating a versatile new-generation anthropomorphic phantom for Stereotactic Body Radiation Therapy", E35-2122

**SPECIFICATIONS**

<b>DIMENSIONS:</b>	16.5 cm x 30 cm x 20 cm 6.5" x 11.8" x 7.9"
<b>PHANTOM WEIGHT:</b>	~7 kg (15 lb)
<b>MATERIALS:</b>	Proprietary Epoxy Resins



Model 036-01 SBRT Abdomen Phantom with 3D spine for film and nanoDot™ Dosimetry (cutaway to show internal structure)

**MODEL 036S-CVXX-xx INCLUDES**

QTY	COMPONENT DESCRIPTION
1	E2E® SBRT Thorax Phantom drilled for customer specified chamber* with Removable Spine
1	User Guide
1	Foam-Lined Carry Case
-	48-Month Warranty

\* Customer must specify chamber at time of purchase. Refer to CIRS cavity codes at [www.cirsinc.com/support](http://www.cirsinc.com/support) for corresponding CV number.

**OPTIONAL ACCESSORIES**

PART NO.	COMPONENT DESCRIPTION
036-01	SBRT Abdomen Phantom with 3D spine for film and nanoDot™ Dosimetry (includes foam-lined carry case)
062QA-35	CBCT Image Quality Phantom
158200-02	Precision Cut EBT3 Film Kit for Model 036-01 (Set of 4 inserts plus 6 calibration strips)
158200-25	Precision Cut EBT3 Film Kit for Model 036S (Set of 18 spine inserts and 12 lung inserts plus 6 calibration strips)

