

Address the gap in your radiation therapy.



Introducing custom-fit 3D printed bolus.

A new standard in personalized bolus for external beam radiation therapy

In radiation therapy, air gaps between the bolus and patient skin surface can jeopardize the precision of the delivered dose.

Ricoh 3D for Healthcare (Ricoh)'s FDA 510(k) cleared, patient-specific boluses fill tissue gaps, even in highly contoured areas, to help control dosing accuracy.

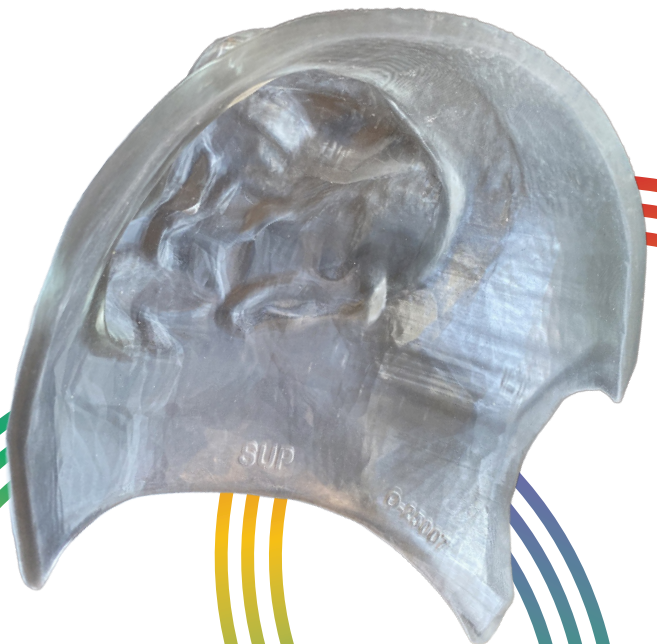
While conventional hand cut and molded bolus are not optimized for patient anatomy or treatment plans, our direct 3D-printing methods eliminate that worry. And because there are no molds or cutting, the process can save steps — and time.

How Ricoh's patient-specific 3D bolus helps ensure accuracy and workflow

Every Ricoh bolus is directly designed from DICOM treatment plan data with radiation therapy (RT) structure files provided by your radiation therapy professional. No molds, no manual fabrication, no additional design work from clinicians. Just streamlined, repeatable precision.

Key benefits include:

- Patient-specific design with accurate anatomical contouring
- Flexible, biocompatible and translucent material for comfort, visibility and easy handling
- Reduced air gaps and reliable dose delivery
- Reusable up to 35 times on the same patient during the treatment cycle when cleaned and maintained according to the instructions for use
- Tissue equivalent electron density
- Verified dosing with thermoluminescent dosimeter (TLD) testing showing dose differences within benchmark targets of 5%
- Available as part of our co-located point-of-care embedded services for even faster turnaround
- Manufactured by medical device manufacturing experts in a quality-controlled environment
- HIPAA compliant portal for secure DICOM and RT structure file submission





The details matter — requirements, compliance and reimbursement

Requirements

- Bolus must be verified and approved by the United States licensed radiation therapy professional prior to use on a patient.
- Input is the treatment plan in form of DICOM containing RT structure file.
- Body contours should not overlap the designed bolus; exported treatment plans must meet DICOM conformance standards.
- Device can only be used on intact skin as verified by ISO 10993 testing.
- Boluses have been evaluated for 6 MV photons and 6 and 9 MeV electrons.

Compliance

- Manufactured and developed by Ricoh 3D for Healthcare, LLC
- FDA 510(k) cleared 3D bolus
- Ricoh 3D for Healthcare manufactures patient-specific medical devices within an ISO 13485 compliant quality system

Reimbursement Code

- CPT code 77334 for complex radiation treatment device

Next steps

For more information or to request a sample, please [contact us](#).



RICOH
imagine. change.

ML-020-EN

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