

The Iba logo is located in the top left corner, featuring the letters 'Iba' in a white, cursive font on a green square background.

Iba

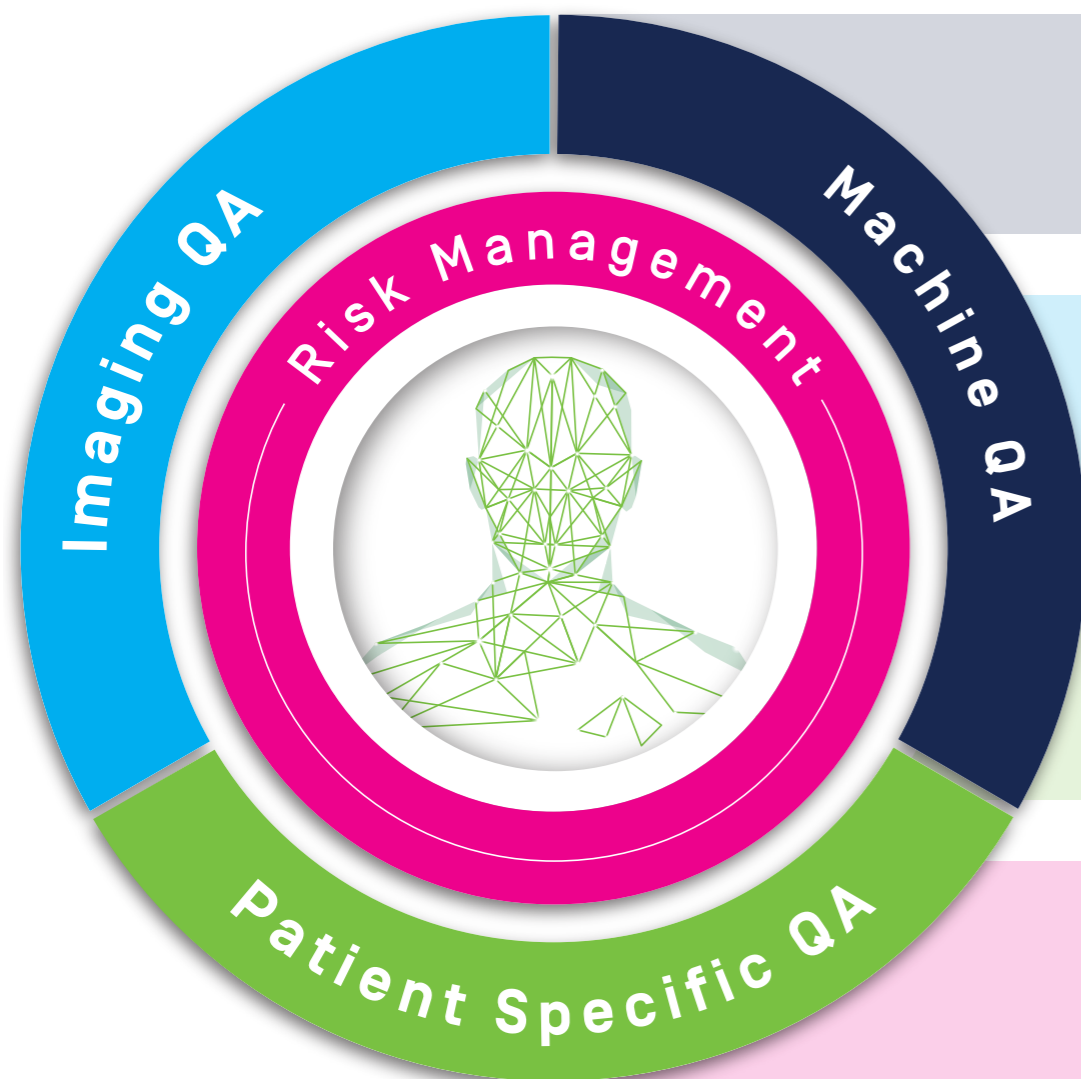
The background of the page is a dark blue field filled with a complex network of white dots and lines, resembling a molecular or data network. Three specific shapes are highlighted: a green triangle, a pink triangle, and a blue quadrilateral. The text 'RADIATION THERAPY QA SOLUTIONS' is positioned at the bottom right in a white, bold, sans-serif font.

RADIATION THERAPY QA  
SOLUTIONS

# Supporting Safe, Accurate Radiotherapy

## From commissioning to treatment delivery

Radiotherapy is evolving rapidly. Advanced treatment and imaging techniques, tighter margins, and increasing patient throughput place growing demands on clinical teams — while expectations for accuracy, safety, and efficiency continue to rise.



At IBA Dosimetry, our mission is to support radiotherapy professionals in delivering treatments with confidence and treat more patients safely. We focus on what matters most in daily clinical practice: reliable measurements, efficient workflows, and clear insight into treatment quality — across the entire radiotherapy QA workflow.

With decades of experience in radiotherapy quality assurance, IBA Dosimetry partners with clinics worldwide to address real clinical challenges — from commissioning and machine QA, through imaging and patient-specific QA, to risk management and process optimization. Our solutions are designed to integrate seamlessly into clinical workflows, helping teams reduce uncertainty, save time, and focus their expertise where it has the greatest impact: patient care.



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# Commissioning & Machine QA

## Building a stable foundation for safe treatments

Commissioning and machine QA form the basis of every radiotherapy program. However, clinics often face tight timelines, limited resources, and increasing system complexity — making efficiency and repeatability essential.



- **Time efficiency:** Commissioning can take weeks; clinics need faster, more streamlined workflows to go live on time.
- **Repeatability:** Setups must deliver consistent results — independent of operator, day, or experience level.
- **Consistency over time:** Machine performance must be monitored and maintained throughout its clinical lifetime.



### How we support clinics

IBA Dosimetry supports commissioning and machine QA with solutions that emphasize:

- Standardized, repeatable measurement setups to minimize operator-dependent variability
- Efficient workflows that reduce setup and measurement time without compromising confidence
- Clear trend visibility to support long-term performance monitoring and informed QA decisions

Machine QA with myQA StarTrack<sup>3</sup>



Commissioning with myQA Blue Phantom<sup>3</sup>



*"I have been working with water phantom systems from all major manufacturers for 30 years. But I have never come across a system as fast and accurate as the BP<sup>3</sup> (IBA). The most time-consuming task of adjusting the phantom is extremely quick with the BP<sup>3</sup>'s auto-leveling feature. Align the water tank with the laser, press the button, and after 1 minute, the system will be fully automatically aligned according to the water.*

*With a level of accuracy that cannot be bettered by the naked eye. After that, all you have to do is set the zero point and water surface and you're done. No need to set limits. The scanning speed is outstandingly fast and the positioning accuracy extremely precise, characteristics that IBA water phantoms have long been known for. Thanks to the new CCU-X, the overall measurement accuracy is virtually at reference level.*

*This makes measuring with the water phantom fun and allows you to concentrate on the actual measurements. Even when you need a result "quickly."*

- Dr. Erich Gebhardt, Franken MPE



Clinics benefit from shorter commissioning phases, reliable baselines, and confidence in machine performance — enabling a smooth transition from installation to routine clinical operation.

Discover more solutions for your commissioning and machine QA:



Machine QA



# Imaging QA

## Ensuring geometric confidence in treatment decisions

Advanced imaging plays a critical role in modern radiotherapy, particularly in MR-guided and adaptive workflows. While image quality continues to improve, geometric accuracy and stability over time have become key clinical concerns.



- **Geometric accuracy:** MR-guided radiotherapy introduces risks related to image distortion of up to 2 mm and spatial inaccuracies.
- **Clinical relevance:** Imaging QA must go beyond diagnostic image quality and focus on parameters that directly affect treatment planning and delivery.



### How we support clinics

IBA Dosimetry helps clinics implement imaging QA concepts that focus on:

- Detection of geometric distortions in 2D and 3D
- Verification of spatial accuracy and stability over time
- Clinically relevant QA workflows, aligned with radiotherapy needs rather than diagnostic imaging alone

Discover more solutions for your Imaging QA:



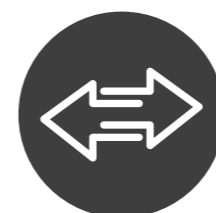
Imaging QA



Evaluate geometric distortions with QUASAR® GRID<sup>3D</sup> Advantage



Imaging QA with Radcal® Accu-Gold T3



Clinics gain confidence in image-based decisions, supporting accurate contouring, treatment planning, and image guidance — particularly in high-precision and adaptive radiotherapy environments.

Live Webinar  
**MR QA from radiotherapy perspective**  
 Join the audience for a live webinar  
 2 p.m. BST/3 p.m. CEST on 27 May 2025  
 Want to take part in this webinar? [Register now](#)

Unity

Akos Gulyban

QUASAR

Watch and learn the key steps of integrating an MRI scanner and MRI Linac into a radiotherapy workflow:



# Patient Specific QA

## Verification where precision matters most

Increasing plan complexity — including IMRT, VMAT, SRS, SBRT, and particle therapy — demands highly accurate patient-specific QA. At the same time, clinics face limited linac availability and growing pressure to maintain throughput.



- **Geometrical accuracy:** Delivering dose to the target while minimizing dose to surrounding organs at risk (OARs), especially with hypofractionation.
- **Limited linac time:** Performing thorough patient QA without impacting clinical schedules.
- **Clinical relevance:** Moving beyond pass/fail metrics toward meaningful QA insight.



### How we support clinics

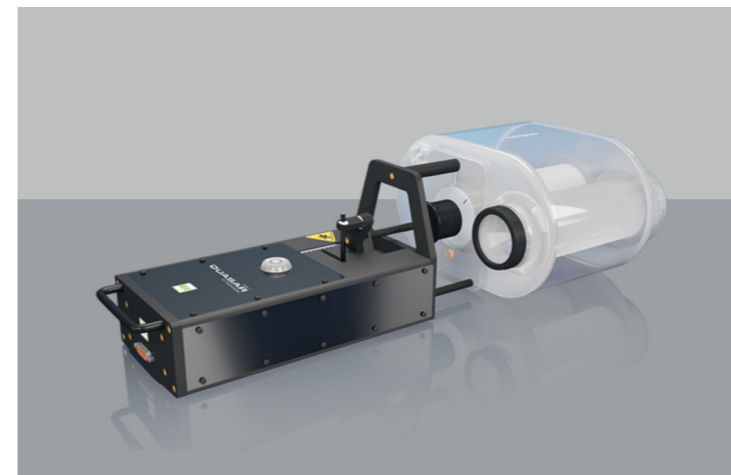
IBA Dosimetry supports patient-specific QA with approaches that emphasize:

- High spatial accuracy for complex treatment techniques
- Efficient verification workflows that reduce linac occupancy
- Clinically meaningful evaluation, supporting informed decisions rather than purely numerical results

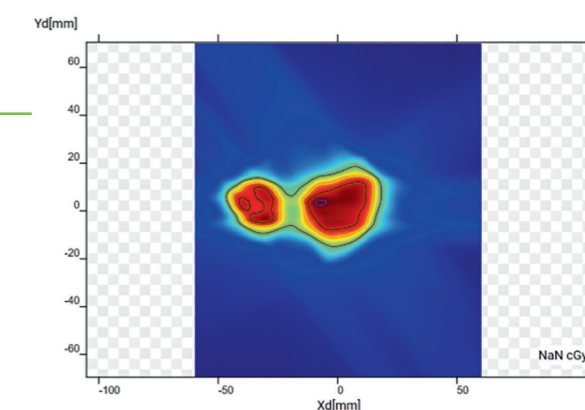
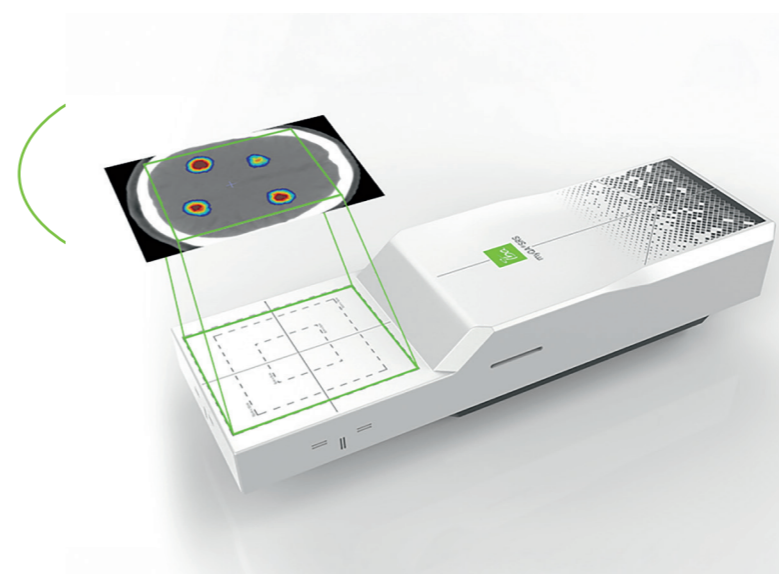
#### Experience with myQA SRS in the UK

*"The high resolution of myQA SRS detector gives us high confidence in our stereotactic treatments, including SBRT spine, prostates and liver. We have achieved excellent Gamma Analysis QA results at 2% and 2mm. The detector matched the performance of our ionisation chambers and compared excellently to film. The detector, phantom and software package is easy to use and integrates seamlessly into our myQA Platform. Obtaining instant high-resolution results without the need for lengthy film measurements is a big advantage."*

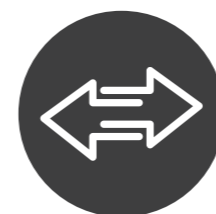
- Sally Fletcher, Head of Radiotherapy Physics Bristol Haematology and Oncology Centre University Hospitals Bristol and Weston NHS Foundation, UK



Validating 4D treatment delivery protocols on MR-Sim and MR-Linac with QUASAR™ MRI<sup>4D</sup> Motion Phantom



SRS and SBRT QA with myQA SRS



Clinics can verify complex treatment plans with confidence and efficiency, ensuring patient safety while preserving valuable clinical time.

Discover more solutions for your patient-specific QA:



# Risk Management

## From reactive QA to proactive safety

As radiotherapy processes become more complex, managing risk requires more than individual QA tests. Clinics need a systematic view of their processes, supported by data, transparency, and continuous improvement.



- **Error prevention:** Detecting deviations early — before they impact patients.
- **Process optimization:** Focusing time, effort, and resources where they have the greatest effect on patient safety and outcomes.
- **Data management:** Moving beyond manual documentation toward scalable QA processes.



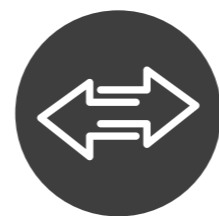
### How we support clinics

IBA Dosimetry supports risk management by enabling:

- Proactive identification of deviations and trends
- Structured QA processes aligned with modern risk-based approaches (e.g. TG-100 principles)
- Data-driven insight to validate assumptions and continuously improve clinical workflows

*“myQA PROactive is an innovative tool for prospective risk analysis tailored to the needs of radiation oncology. It offers a formalized approach to risk assessment following best practice methodology. The software includes flowcharts and FMEA, and the integrated fault tree analysis identifies measures to block multiple error pathways, further increasing patient safety.”*

- Prof. Dr. rer. nat. Christoph Bert Head of Medical Physics, Erlangen University Hospital



Clinics gain greater control over QA processes, improved transparency, and the ability to prioritize safety measures where they matter most — supporting long-term quality and patient safety.



Learn more about myQA PROactive for your Risk Management:



Discover your Risk Management solution:



Risk Management



Discover more solutions



### SSDL Secondary Standard Dosimetry Laboratory

Benefit from IBA's Secondary Standard Dosimetry Laboratory's wide range of calibration services for equipment in radiation therapy & diagnostic radiology.

Learn more:



### ICC International Competence Center

At IBA ICC, we aim to support medical physicists around the world by providing expert training and hands-on experience. Through practical learning and knowledge sharing, we help build a community of professionals dedicated to improving cancer care. Our goal is to promote precision, safety, and excellence in radiotherapy, while encouraging global collaboration and continuous learning.

Join our next trainings:



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Certified



Corporation

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