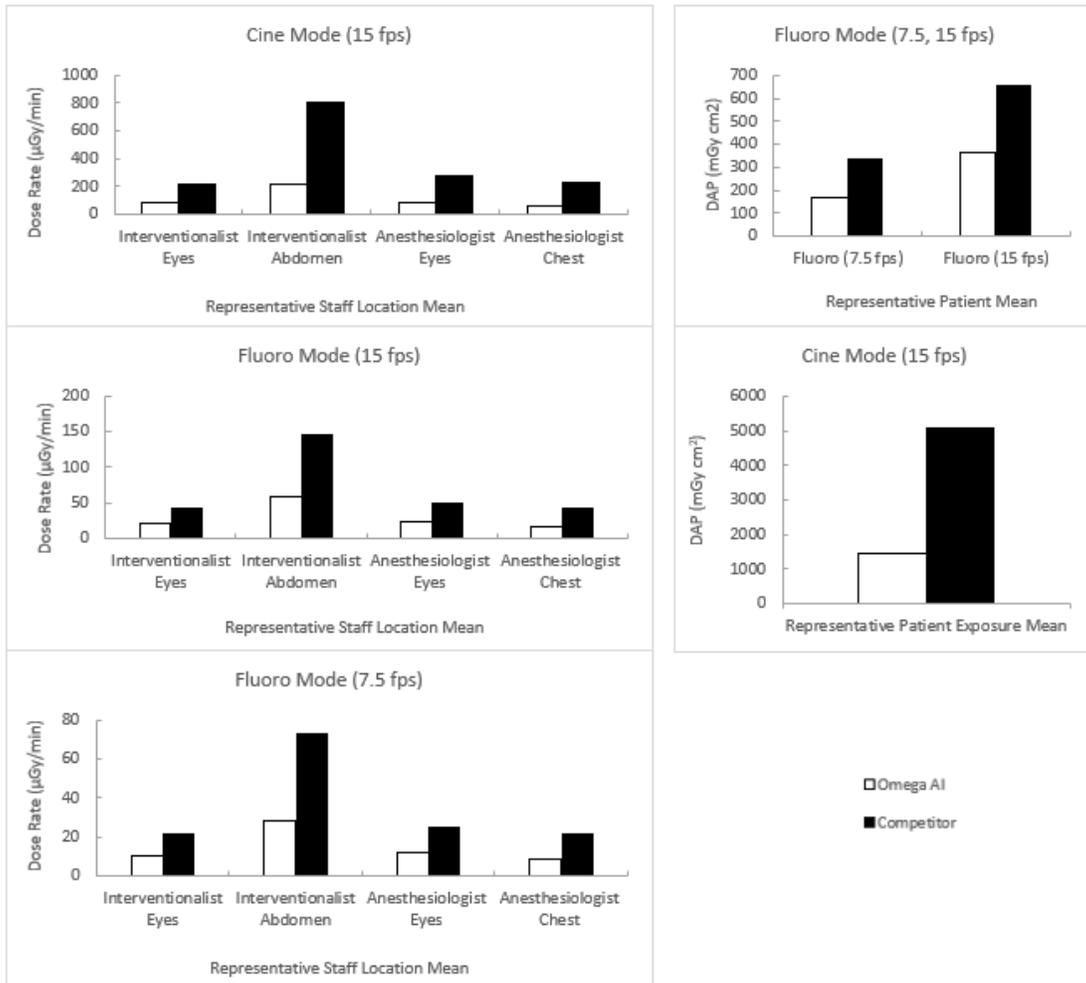


Side-by-Side Radiation Comparison of AI Image-Guided ROI System vs. Non-AI System

December 23, 2021



In a recent internal [comparative study](#), Omega proved a significant dose reduction is achieved when using an AI image-guided ROI system compared to a non-AI system. Radiation is reduced in all modes of acquisition (fluoro and cine) at varying frame rates. The systems used were cardiology labs, but the technology and its results are transferable to other modalities.

The objective of this study was to assess the efficacy of an AI image-guided ROI system versus a conventional, non-AI system in reducing radiation dose. The conclusions were clear – the Omega system significantly reduced radiation when compared to a competitor’s system. Radiation reduction in cine mode was up to ~75% for staff and ~71% for patients. In fluoroscopy mode, radiation reduction was ~61% for staff and ~51% for patients.

It is well established that interventional procedures expose patients and staff to high levels of radiation. The risks of that radiation exposure are [well documented](#). The benefits of using Region of Interest (ROI) to reduce dose have been published for over 20 years and is [proven technology](#). AI image-guided ROI systems from Omega use this technology to dynamically collimate to the ROI to deliver significant radiation exposure reduction to patients and staff. This reduction is achieved automatically – it’s hands-free and requires no manual control or change in established workflow.

Omega systems use an artificial intelligence (AI) driven automatic secondary collimator to generate an ROI without eliminating the full field of view (FOV) critical for orientation. The ROI and FOV images are seamlessly integrated by advanced image processing for superior image quality.

Omega represents a new standard of care as the only [FDA-cleared](#) AI image-guided system proven to reduce radiation exposure by up to 84%. This reduction is in addition to any current [ALARA](#) best practices for radiation exposure and is far better than any conventional non-AI system. Omega’s AI-enabled system goes beyond merely managing radiation to provide actual reduction in dose. The result is a groundbreaking solution that provides safer healthcare for both patients and staff.

Omega is the only company in the world to offer this technology. No other OEM has anything like it – despite any claims or allusions that they do. Omega systems allow physicians and hospitals to provide the best care and radiation safety to their patients.



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