Introduction of Image Guided Radiotherapy into Clinical Practice

provides guidelines and highlights the milestones to be achieved by radiotherapy departments in the safe and effective introduction of image guided radiotherapy. Recent advances in external beam radiotherapy include the technology to image the patient in the treatment position and in the treatment room at the time of treatment. Since this technology and associated image techniques — termed image guided radiotherapy — are perceived as the cutting-edge of development in the field of radiotherapy, this publication addresses the concerns of personnel in radiotherapy departments as to the preparatory conditions and resources involved in implementation. Information is also presented on the current status of the evidence supporting the use of image guided radiotherapy in terms of patient outcomes.

IAEA Human Health Reports No. 16; ISBN: 978-92-0-103218-8; English Edition; 31.00 euro; 2019
www.iaea.org/publications/12264/image-guided-radiotherapy

Dosimetry of Small Static Fields Used in External Beam Radiotherapy

provides consistent reference dosimetry, traceable to metrological primary standards, and enables common procedures within a country to be followed. The publication presents an overview of the physics, followed by a general formalism for reference dosimetry in small fields. Guidelines for its practical implementation using suitable detectors and methods for the determination of field output factors are given for specific clinical machines that use small static fields. The development of this code of practice has been done through an international working group, established jointly with the American Association of Physicists in Medicine. Internationally harmonized guidelines in this field will ensure worldwide consistency in dose delivery to radiotherapy patients and will contribute to dose standardization in international clinical trial studies, comparing outcomes of various radiotherapy treatment modalities using small fields.

www.iaea.org/publications/11075/dosimetry-of-small-static-fields

Accuracy Requirements and Uncertainties in Radiotherapy

is an international consensus document on accuracy requirements and uncertainties in radiotherapy in order to promote safer and more effective treatments on patient. This publication addresses accuracy and uncertainty issues related to the vast majority of radiotherapy departments, including both external beam radiotherapy and brachytherapy. It covers clinical, radiobiological, dosimetric, technical and physical aspects.

IAEA Human Health Series No. 31; ISBN: 978-92-0-100815-2; English Edition; 76.00 euro; 2016
www.iaea.org/publications/10668/accuracy-requirements-and-uncertainties-in-radiotherapy

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