Special Issue

Novel Imaging Techniques in Radiotherapy

Message from the Guest Editors

Radiotherapy (RT) remains a cornerstone of clinical cancer treatment, with its efficacy hinging on precise tumor localization, meticulous dosimetry planning and monitoring, and accurate response assessment. Advanced imaging techniques significantly enhance RT outcomes by minimizing radiation exposure to healthy tissues and reducing treatment-related toxicity. However, many radiobiological mechanisms critical to novel RT paradigms are not yet fully understood. In response, researchers in radiobiology have developed a variety of small animal tumor models and image-guided RT techniques for preclinical research. These state-of-the-art clinical and preclinical imaging modalities provide high-resolution, functional, and molecular imaging capabilities, enabling highly specific and sensitive tumor identification to support precise RT. This Special Issue invites contributions that focus on innovative imaging approaches for advanced RT, encompassing both clinical and preclinical studies. We welcome original research articles and technical advancements in this dynamic field.

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Editor-in-Chief

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