Image-Guided Radiation Therapy for Cancer

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Message from the Guest Editors

Nowadays, image-guided radiation therapy (IGRT) uses a wide range of imaging technology to improve the precision of RT delivery. IGRT reduces set-up errors, enabling a decrease in clinical target volume (CTV) to planning target volume (PTV) margins utilized in treatment planning, leading to better sparing for the organs at risk. Moreover, IGRT assists in offline or online adaptive treatment planning by monitoring anatomical changes over RT sessions. This Special Issue welcomes the submission of original and review articles dealing with cutting-edge IGRT technology, their clinical perspectives, and subsequent challenges. Topics for this Special Issue include, but are not limited to, the following:

- Surface-guided radiation therapy (SGRT), optical tracking;
- Real-time adaptive RT;
- Motion management in RT (4DCT, gating, tracking);
- Image guidance in SBRT and SRS;
- Magnetic resonance imaging (MRI)-guided RT;
- Image guided proton therapy (IGPT);
- Artificial intelligence (AI)-based IGRT.

Special Issue

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Message from the Editor-in-Chief

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