

Topical Collection

Particle Therapy: State-of-the-Art and Future Prospects

Message from the Collection Editors

Although particle therapy is perceived as a not sufficiently utilized, it is believed that its impact will be more substantial when the technology and clinical practices are optimized. Exciting technical advances have been reported, including ultra-high dose rates, biological optimizations, proton arcs, multi-ion therapy, superconducting gantry, improvements in beam-delivery efficiency, uncertainty reduction, and MR-guided proton therapy. On the other hand, the medical community eagerly awaits the data that demonstrate the clinical benefits of using particle therapy. This Topical Collection is devoted to the efforts in developing, improving, and using the most complex radiotherapy modality. We invite submissions on the following topics:

- Technical advances in proton and ion therapies;
- Clinical evidence in particle therapy;
- Clinical indications of particle therapy;
- Controversies in particle therapy;
- Novel applications of particle therapy to treat cancer and noncancerous tumors;
- Predictive outcome modeling for patients receiving particle therapy;
- Imaging for particle therapy—image guidance, uncertainty reduction, adaptive therapy, treatment effects.

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About the Journal

Message from the Editor-in-Chief

Cancers is an international online journal addressing both clinical and basic science issues related to cancer research. The journal is publishing in Open Access format, which will certainly evolve to ensure that the journal takes full advantage of the rapidly changing world of information and knowledge dissemination. It publishes high-quality clinical, translational, and basic science research on cancer prevention, initiation, progression, and treatment, as well as other related topics, particularly to capture the most seminal studies in the rapidly growing area of immunology, immunotherapy, and tumor microenvironment.

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