



Advanced Systems in Targeted Alpha Particle Therapy

Guest Editor:

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Message from the Guest Editor

It has now been almost 30 years of research and development efforts in the rediscovered field of targeted alpha particle therapy. Many novel isotope production methods, new targeting molecules, and nanocarriers together with preclinical or clinical trials and first-in-patient studies have moved this field forward by leaps and bounds. This successful progress has resulted in the global acceptance of alpha emitters, like the $^{223}\text{RaCl}_2$ or ^{225}Ac -PSMA-617, powerful tools in clinical praxis, and experimental cancer treatment. Targeted alpha particle therapy (TAT) has become a regular therapeutic modality in the treatment of cancer.

This Special Issue focuses on the latest innovations and studies in the field of TAT, including the preparation and testing of novel carriers, targeting systems, and medical devices, particularly those exploiting or suppressing the nuclear recoil effect in so-called in vivo radionuclide generators. In vitro stability and in vivo biodistribution studies, dosimetric studies, therapeutic efficacy determinations in various models, clinical trials, and other related research are welcome as full papers, communications, or reviews.





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Message from the Editor-in-Chief

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