



## Ultrasound Assisted in Tumor Immunotherapy

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### Message from the Guest Editors

Dear Colleagues,

Tumor immunotherapy hottest issue in modern cancer research. Systemic anti-tumor immunomodulation has been developed by various strategies to improve the treatment outcomes in metastatic or drug/radiation-resistant tumors. Ultrasound provides not only real-time diagnosis but also local therapy which has been widely applied in cancer therapeutic applications. The acoustic thermal or cavitation effect (with ultrasound-responsive particles) promotes antigen production and immune cell activation, in addition to activating immune cell infiltration with the aim of accomplishing anti-tumor immunotherapy. Moreover, the application of ultrasound technology combined with immune-activated drugs/genes/gases has been proposed as possibility regulating the tumor microenvironment from a state of immunosuppression into immunoactivation. Thus, we consider that ultrasound-induced thermal or cavitation effect provided a potential way to promote anti-tumor immune responses via tumor microenvironment modulation.

We look forward to receiving your contributions.





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