



Showcasing research from Professor Wei Rao, Tian Zhou and Kaiwen Hu's laboratory at Technical Institute of Physics and Chemistry, CAS and Beijing University of Chinese Medicine.

Autologous-cancer-cryoablation-mediated nanovaccine augments systematic immunotherapy

Tumor nanovaccines are normally used in combination with ablative therapies, which have difficulty in preserving the structure and bio-information of tumor antigens and offer poor antigen-specific immune response. We report the combination of tumor nanovaccines with cryoablation: cryoablation preserves autologous tumor antigens more completely and cancer cryo-nanovaccines capture frozen tumor antigens with a gripper function and mediate lymph node targeted tumor antigen and immune adjuvant delivery. This combination therapy can activate systemic tumor antigen-specific immunity and inhibit distal tumor growth.

As featured in:



See Tian Zhou, Wei Rao,
Kaiwen Hu *et al.*,
Mater. Horiz., 2023, **10**, 1661.