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# Cargo-free particles of ammonio methacrylate copolymers: from pharmaceutical inactive ingredients to effective anticancer immunotherapeutics

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**Running headline:** Potential role of ammonio methacrylate copolymer nanoparticles as cancer immunotherapeutics

## Abstract

Nanoparticles create exciting platforms for anticancer immunotherapy and vaccination, though their inherent immunomodulatory properties have remained underexploited. Ammonio methacrylate copolymers (AMC) are well-established excipients in pharmaceutical industry and components of controlled-release oral formulations. Here, we demonstrate that nanoscaling of type A and B AMC (Eudragit<sup>®</sup> RL and RS) endows these inactive ingredients immunostimulatory properties exploitable for cancer therapy. The particles induce the secretion of various pro-inflammatory cytokines and chemokines from the cells of innate immunity. Though the underlying mechanisms are not fully uncovered, the current work established the partial

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