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Tannic acid-inspired paclitaxel nanoparticles for enhanced anticancer effects in breast cancer cells

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## ACCEPTED MANUSCRIPT

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#### **Abstract:**

Paclitaxel (PTX) is a gold standard chemotherapeutic agent for breast, ovarian, pancreatic and non-small cell lung carcinoma. However, in clinical use PTX can have adverse side effects or inadequate pharmacodynamic parameters, limiting its use. Nanotechnology is often employed to reduce the therapeutic dosage required for effective therapy, while also minimizing the systemic side effects of chemotherapy drugs. However, there is no nanoformulation of paclitaxel with chemosensitization motifs built in. With this objective, we screened eleven pharmaceutical excipients to develop an alternative paclitaxel nanoformulation using a self-assembly method.

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