

This ESI replaces the version published on 16th May 2022 due to some errors, the scientific content remains unchanged.

Cisplatin and Oleanolic acid Co-loaded pH-Sensitive CaCO₃ Nanoparticles for Synergistic Chemotherapy

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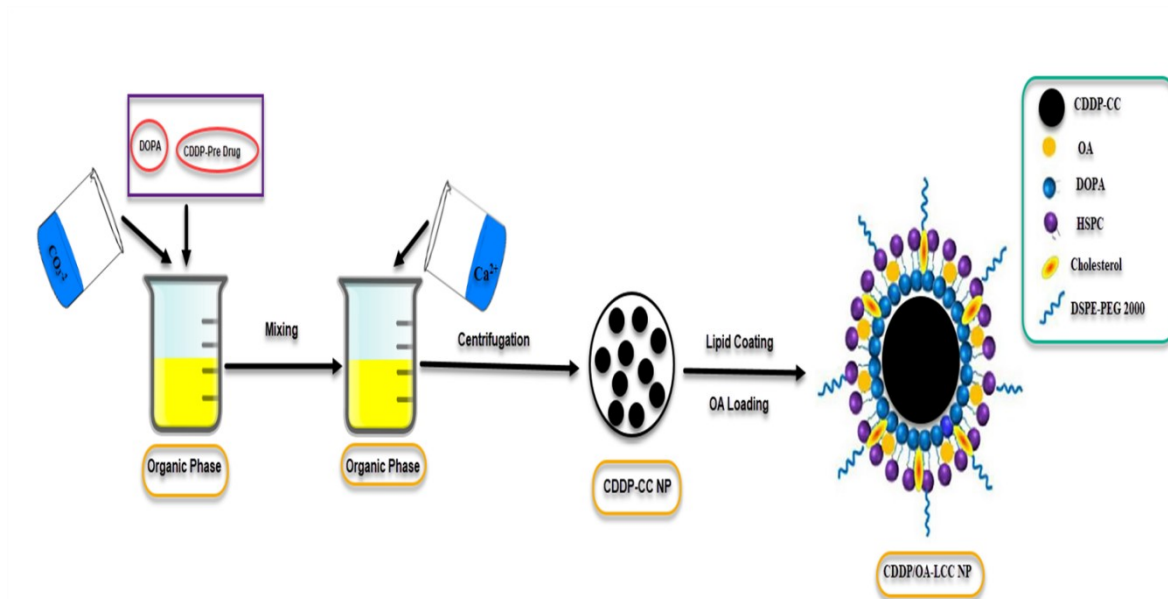
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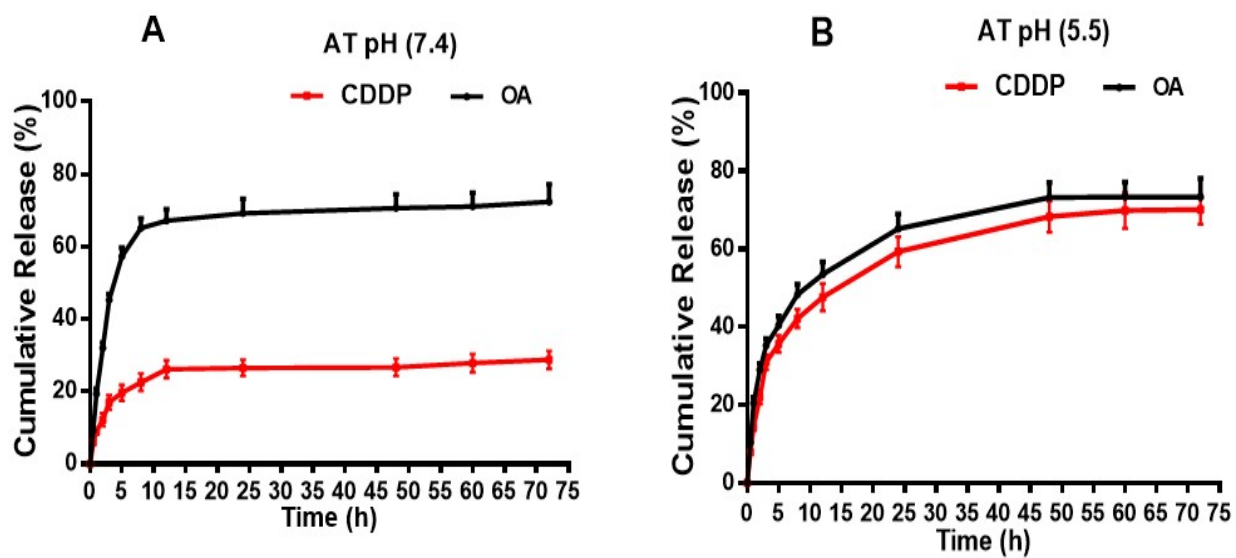
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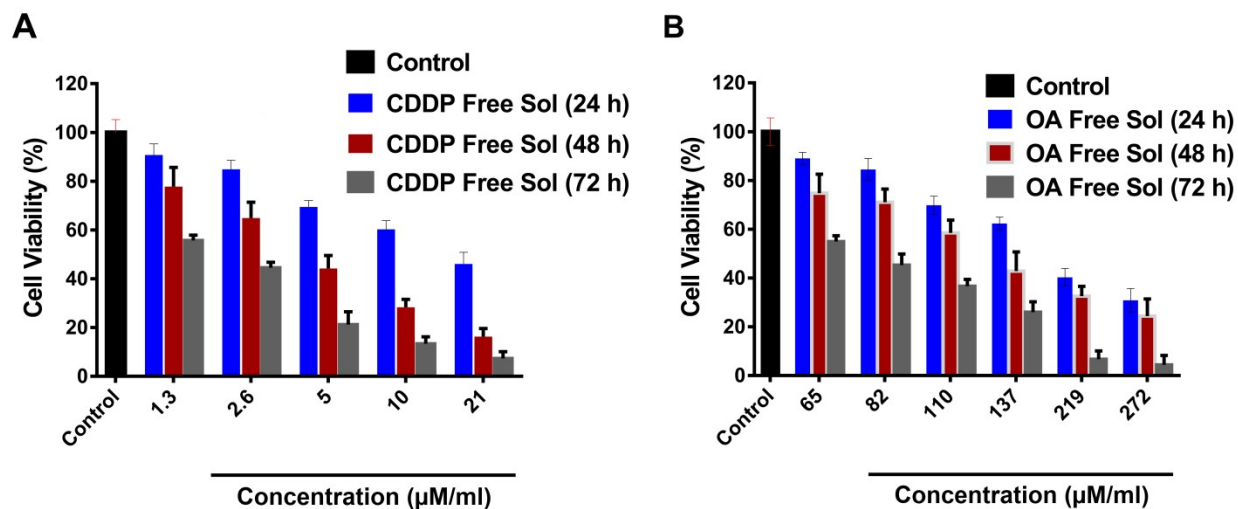
Supplementary Information



Supplementary Fig. S1. Schematic illustration of the formulation of lipid coated cisplatin/oleanolic acid co-loaded calcium carbonate nanoparticles (CDDP/OA-LCC NPs).¹

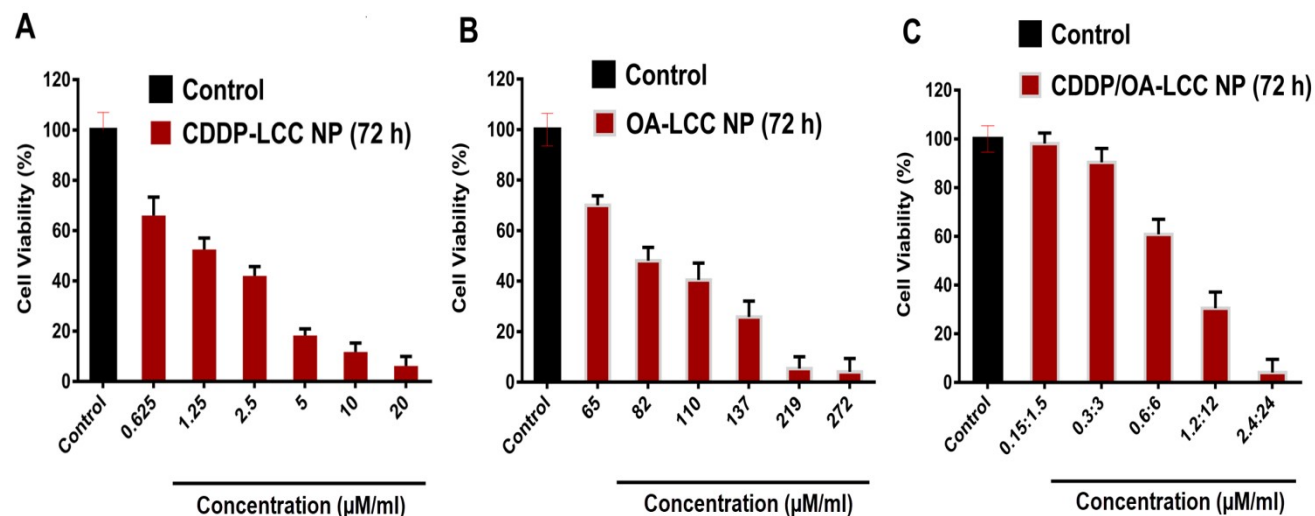


Supplementary Fig. S2. In vitro drug release profiles of CDDP and OA from the CDDP/OA-LCC NPs in PBS (72 h). (A) At pH 5.5; (B) At pH 7.4. ¹



Supplementary Fig. S3. Cytotoxicity assay of free CDDP and free OA against HepG2 cells.

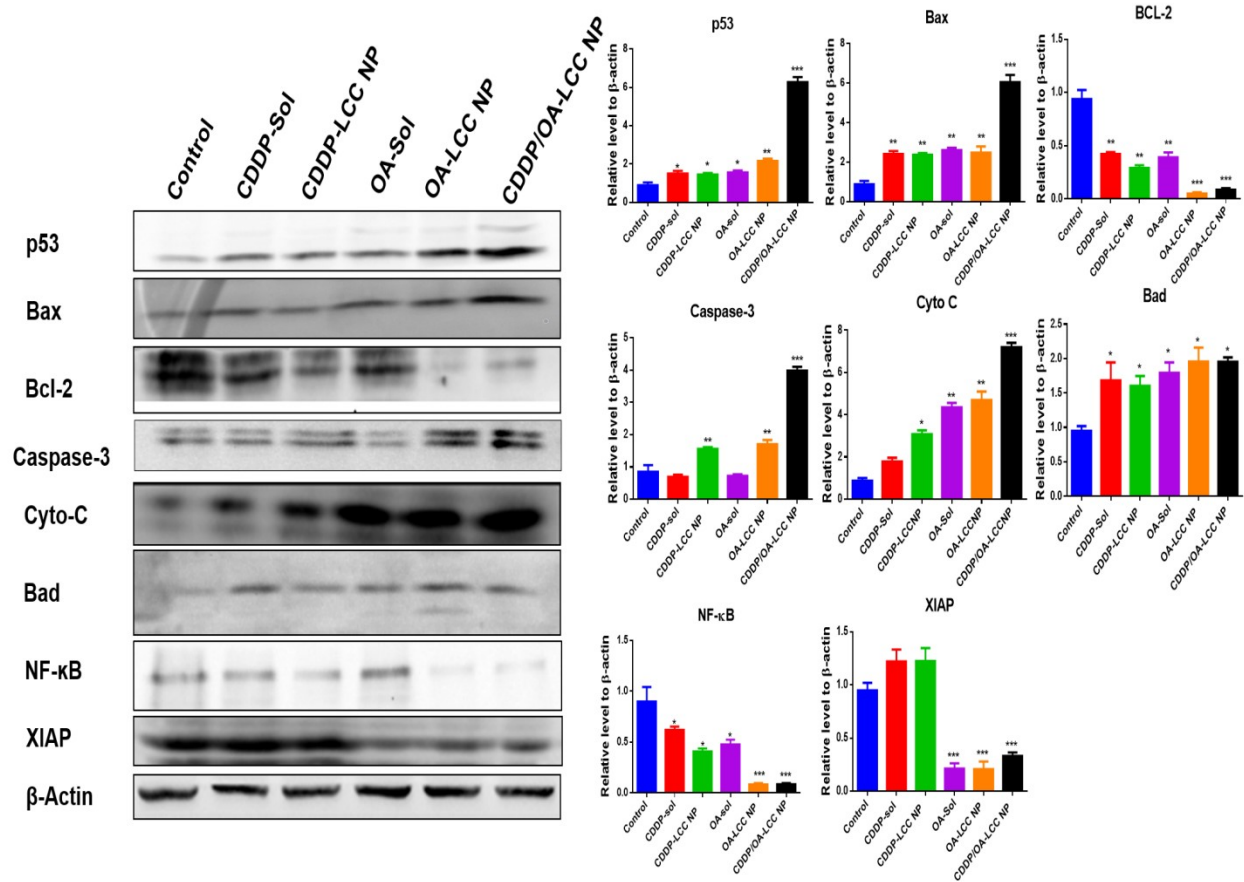
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Supplementary Fig. S4. Cytotoxicity assay of the nanoparticles against HepG2 cells (72 h).

(A) CDDP-LCC NPs MTT assay; (B) OA-LCC NPs MTT assay; (C) CDDP/OA-LCC NPs MTT

assay with fixed ratios. Data presented as mean \pm SD, n=5. ¹



Supplementary Fig. S5. Western blot analysis of protein levels (p53, Bax, Bad, Cyto-C, caspase-3, NF-κB, Bcl-2 and XIAP) after treating HepG2 cells with CDDP-Sol, CDDP-LCC NP,

OA-Sol, OA-LCC NP, CDDP/OA-LCC NP *in vitro*. β -actin was used as a loading control.

Quantification of protein level using Image J. Data presented as mean \pm S.D. (n=3). ¹

Reference

1. M. W. Khan , P. Zhao , A. Khan , F. Raza , S. M. Raza , M. Sarfraz , Y. Chen , M. Li , T. Yang and X. Ma , *Int. J. Nanomed.*, 2019, **14** , 3753-3771