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ACCEPTED MANUSCRIPT

Design and biological response of doxycycline loaded chitosan microparticles for periodontal disease treatment

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Highlights

- EC coated CS/TPP MPs showed controlled release of doxycycline hyclate
- Mixed polymer surface of EC coated CS/TPP MPs exhibited high muco/bioadhesion
- MPs didn't affect the viability of the tested epithelial cell line
- MPs induced slow and graduate apoptosis during 24h in RAW264.7 cell line
- CS/TPP & EC coated CS/TPP MPs potentiate the anti-inflammatory effect of doxycycline

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