***Supplementary:***



Scheme S1: Schematic presentation of the stages of synthesis of Fe3O4@OA/oseltamivir MNPs



Figure S1: The magnetization curves and saturation magnetizations of Fe3O4@OA (black curve, MS =49 emu /g ) and Fe3O4@OA/oseltamivir MNPs (brown curve, MS =35 emu/g ). Inset: the photographs of watery suspension of: (a)Fe3O4@OA MNPs in absence of magnet outer (b)Fe3O4@OA MNPs in presence of magnet outer; (c) Fe3O4@OA/oseltamivir MNPs in absence of magnet outer (d) Fe3O4@OA/oseltamivir MNPs in presence of magnet outer



Figure S2: The effects of;(A) time on the stability of Fe3O4@OA/oseltamivir MNPs (0 min, 10 min, 25 min, 40 min, 1hour, 2 hour, 5 hour, 22 hour, 38 hour, 81 hour, 40 days) (B) salt concentrations on the stability of Fe3O4@OA oseltamivir MNPs in 0.1 M, 0.15 M, 0.2M, 0.3 M, 0.4 M, 0.5M, 0.6 M, 0.7 M, 0.8 M, 0.9 M, 1M of NaCl (C) pHs on the stability of Fe3O4@OA/oseltamivir MNPs (D) release profile of oseltamivir from Fe3O4@OA/oseltamivir MNPs in acetate buffer (pH = 5)