Effect of solvents, stabilizers and concentration of stabilizers on the physical properties of Poly (D, L-lactide-co-glycolide) nanoparticles: Encapsulation, *in vitro* release of Indomethacin and cytotoxicity against HepG2-cell

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Figure S1. Different kinetic model plots for PLGA-NPs-1 (prepared with 1%, w/v PVA as stabilizer and $CHCl_3$ as organic solvent) (A) and PLGA-NPs-2 (prepared with 3%, w/v PVA as stabilizer and $CHCl_3$ as organic solvent (B)

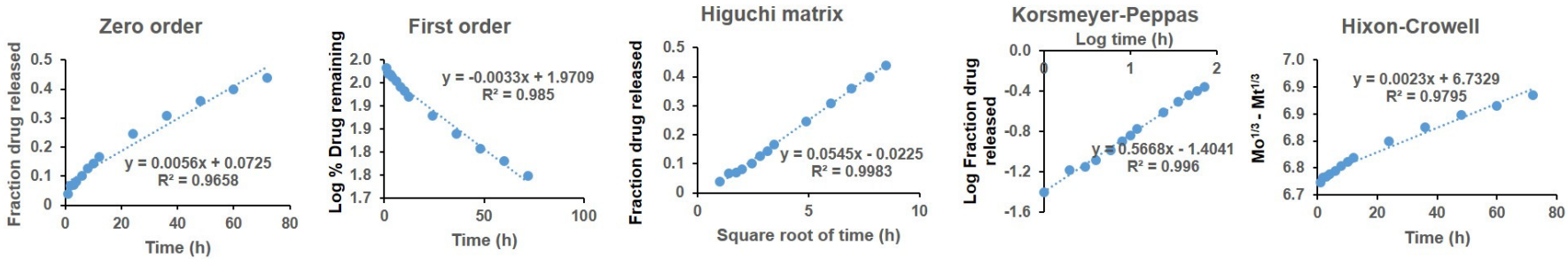
Figure S2. Different kinetic model plots for PLGA-NPs-5 (prepared with 1%, w/v PVA as stabilizer and DCM as organic solvent) (A) and PLGA-NPs-6 (prepared with 3%, w/v PVA as stabilizer and DCM as organic solvent (B)

Figure S3. Different kinetic model plots for PLGA-NPs-9 (prepared with 1%, w/v PVP as stabilizer and $CHCl_3$ as organic solvent) (A) and PLGA-NPs-10 (prepared with 3%, w/v PVP as stabilizer and $CHCl_3$ as organic solvent (B)

Figure S4. Different kinetic model plots for PLGA-NPs-13 (prepared with 1%, w/v PVP as stabilizer and DCM as organic solvent) (A) and PLGA-NPs-14 (prepared with 3%, w/v PVP as stabilizer and DCM as organic solvent (B)

Figure S1

(A) 1%, w/v PVA as stabilizer and $CHCl_3$ as organic solvent



(B) 3%, w/v PVA as stabilizer and $CHCl_3$ as organic solvent

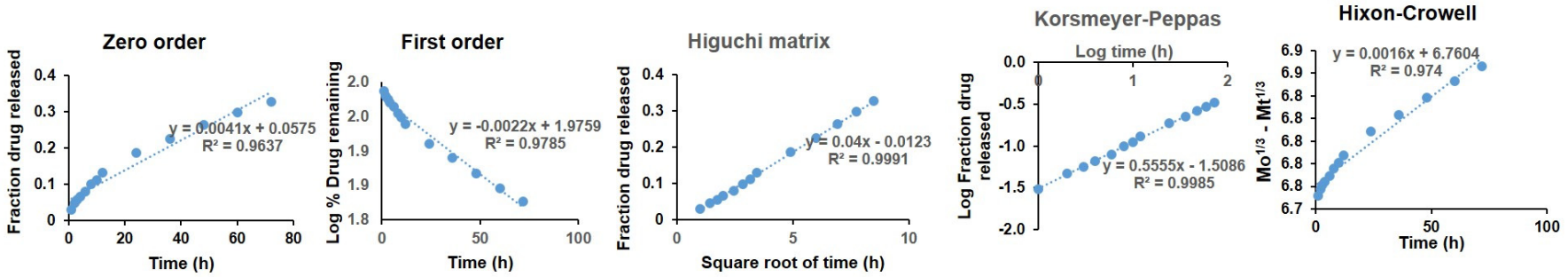


Figure S2

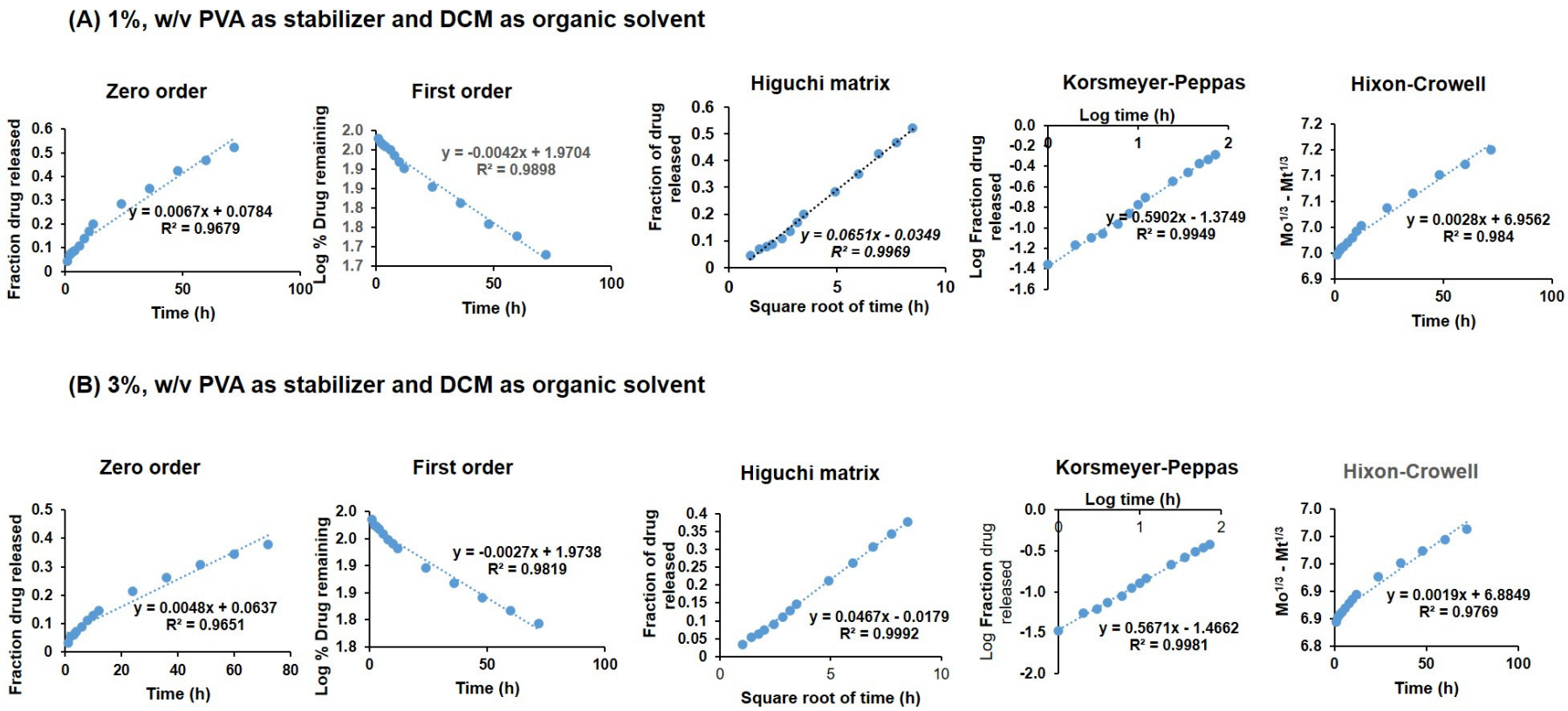
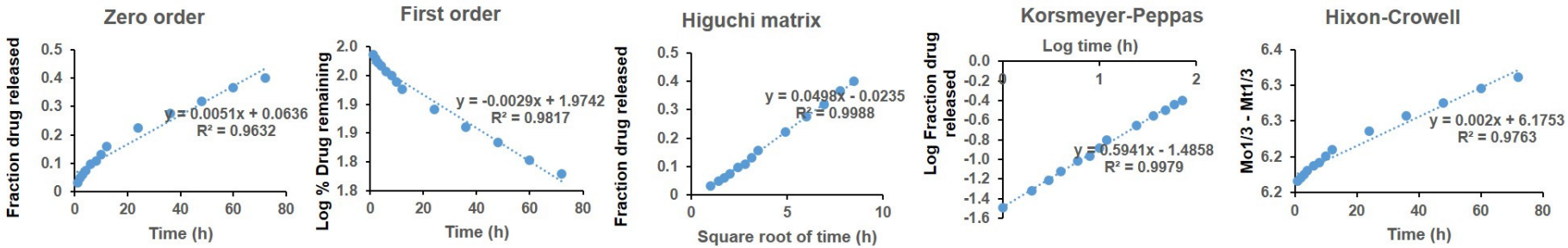

(A) 1%, w/v PVA as stabilizer and DCM as organic solvent
Zero order
Fraction drug released
y = 0.0067x + 0.0784
R² = 0.9679
Time (h)
First order
Log % Drug remaining
y = -0.0042x + 1.9704
R² = 0.9898
Time (h)
Higuchi matrix
Fraction of drug released
y = 0.0651x - 0.0349
R² = 0.9969
Square root of time (h)
Korsmeyer-Peppas
Log time (h)
Log Fraction drug released
y = 0.5902x - 1.3749
R² = 0.9949
Hixon-Crowell
Mo1/3 - Mt1/3
y = 0.0028x + 6.9562
R² = 0.984
Time (h)
(B) 3%, w/v PVA as stabilizer and DCM as organic solvent
Zero order
Fraction drug released
y = 0.0048x + 0.0637
R² = 0.9651
Time (h)
First order
Log % Drug remaining
y = -0.0027x + 1.9738
R² = 0.9819
Time (h)
Higuchi matrix
Fraction of drug released
y = 0.0467x - 0.0179
R² = 0.9992
Square root of time (h)
Korsmeyer-Peppas
Log time (h)
Log Fraction drug released
y = 0.5671x - 1.4662
R² = 0.9981
Hixon-Crowell
Mo1/3 - Mt1/3
y = 0.0019x + 6.8849
R² = 0.9769
Time (h)

Figure S3

(A) 1%, w/v PVP as stabilizer and $CHCl_3$ as organic solvent



(B) 3%, w/v PVP as stabilizer and $CHCl_3$ as organic solvent

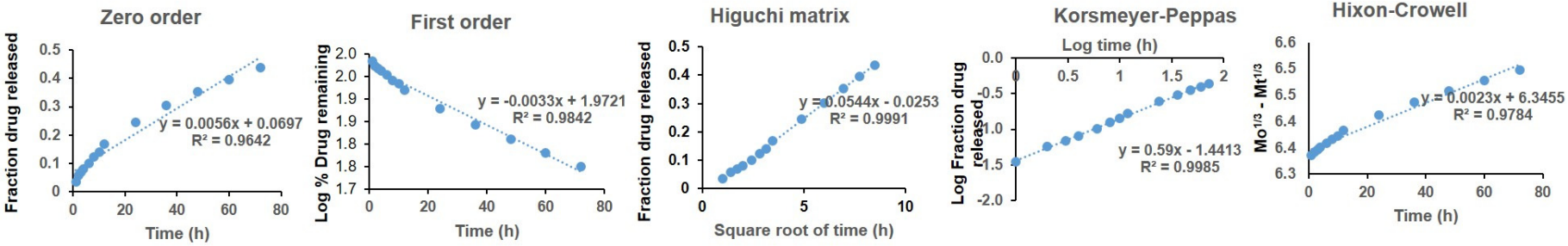
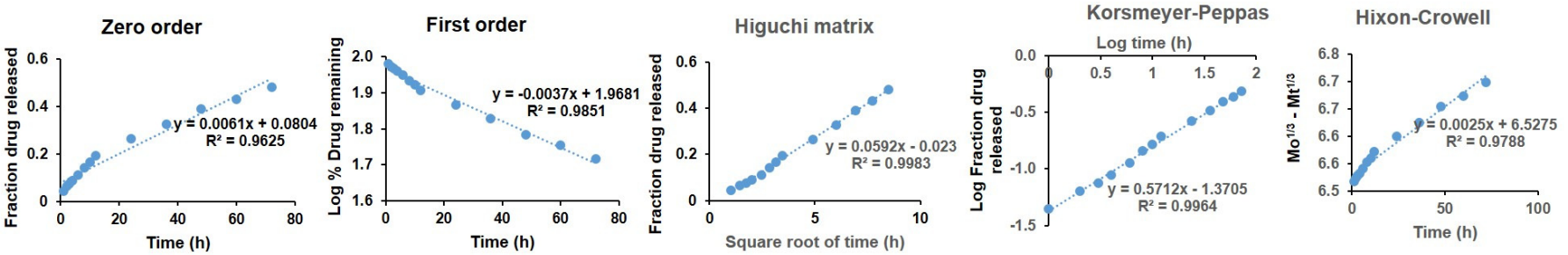


Figure S4

(A) 1%, w/v PVP as stabilizer and DCM as organic solvent



(B) 3%, w/v PVP as stabilizer and DCM as organic solvent