# *Article*

Nanostructured Lipid Carriers Loaded with Dexamethasone Prevent Inflammatory Responses in Primary Non-Parenchymal Liver Cells

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Supplementary Material

Table S1. DXM release kinetics of the different formulations were fitted with different models used for the description of drug release mechanisms (First Order, Higuchi, Korsmeyer-Peppas, and Hixon and Crowell). The release model that best fitted to the experimental data was selected according to the calculations of the coefficient of determination (R^2).

Model Name	Equation	F1	F2	F3	F4
First Order model	$\log Q_t = \log Q_0 + \dfrac{k_i t}{2.303}$	0.85	0.75	0.37	0.14
Higuchi model	$Q_t = K_H \sqrt{t}$	0.88	0.90	0.58	0.76
Korsmeyer-Peppas	$\dfrac{Q_t}{Q_0} = K_k t^n$	0.93	0.95	0.82	0.90
Hixon and Crowell	$\sqrt[3]{Q_0} - \sqrt[3]{Q_t} = K_s t$	0.79	0.61	0.22	0.08
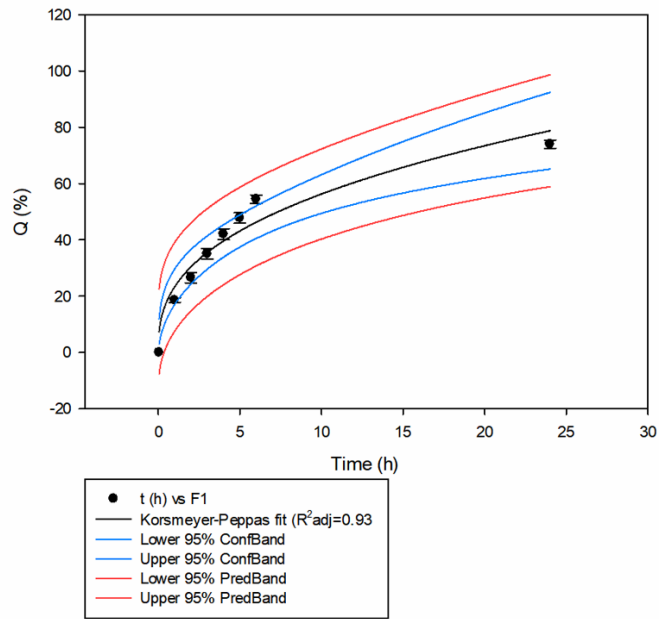
Figure S1. DXM release profile from F1. Continuous black line represents Korsmeyer-Peppas model fit. Blue lines correspond to upper and lower 95% confidence intervals and red lines upper and lower 95% prediction intervals.
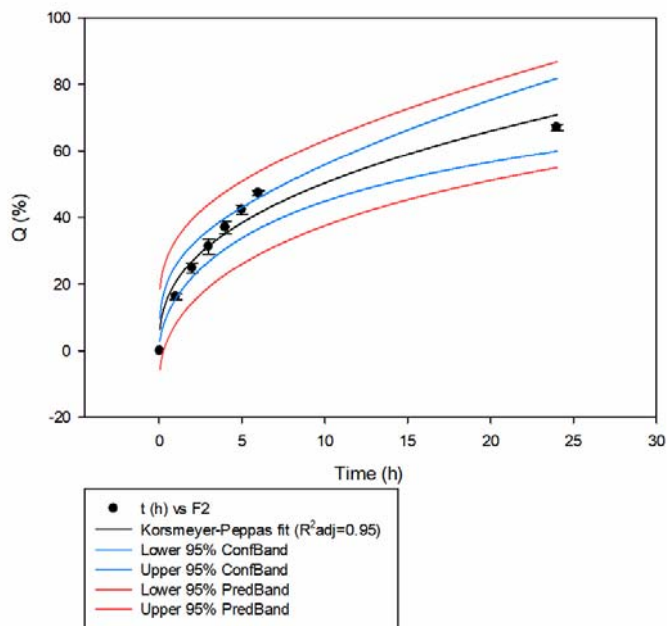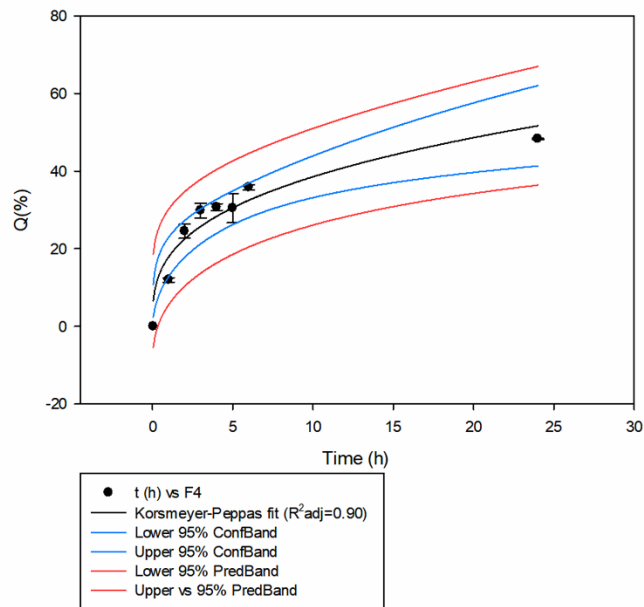

Figure S2. DXM release profile from F2. Continuous black line represents Korsmeyer-Peppas model fit. Blue lines correspond to upper and lower 95% confidence intervals and red lines upper and lower 95% prediction intervals.
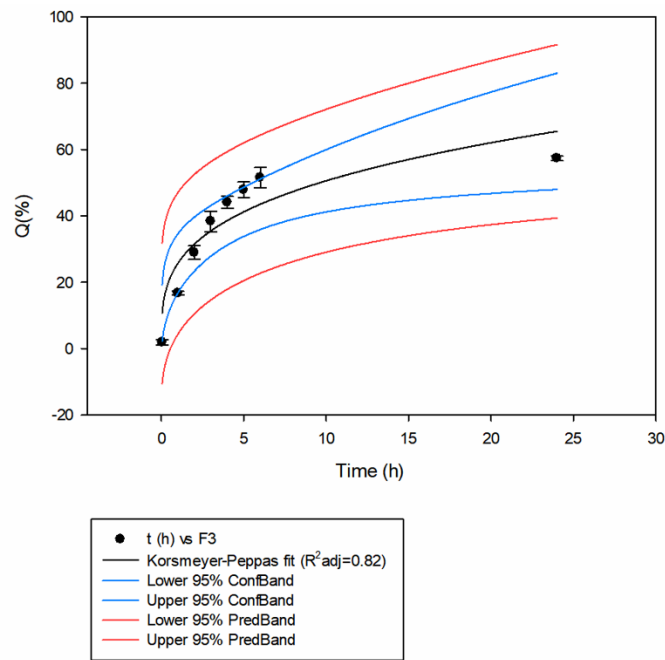
Figure S3. DXM release profile from F3. Continuous black line represents Korsmeyer-Peppas model fit. Blue lines correspond to upper and lower 95% confidence intervals and red lines upper and lower 95% prediction intervals.

Figure S4. DXM release profile from F4. Continuous black line represents Korsmeyer-Peppas model fit. Blue lines correspond to upper and lower 95% confidence intervals and red lines upper and lower 95% prediction intervals.