Supplementary Data

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Effect of PEGylation on assembly morphology and cellular uptake of poly ethyleneimine-cholesterol conjugates for delivery of sorafenib tosylate in hepatocellular carcinoma

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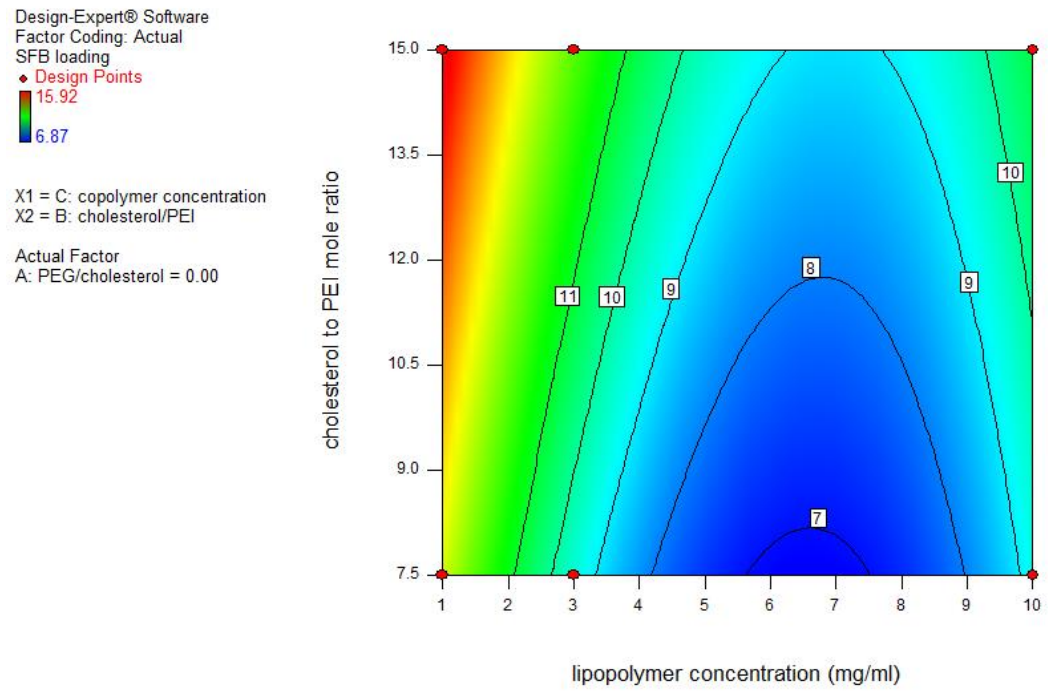
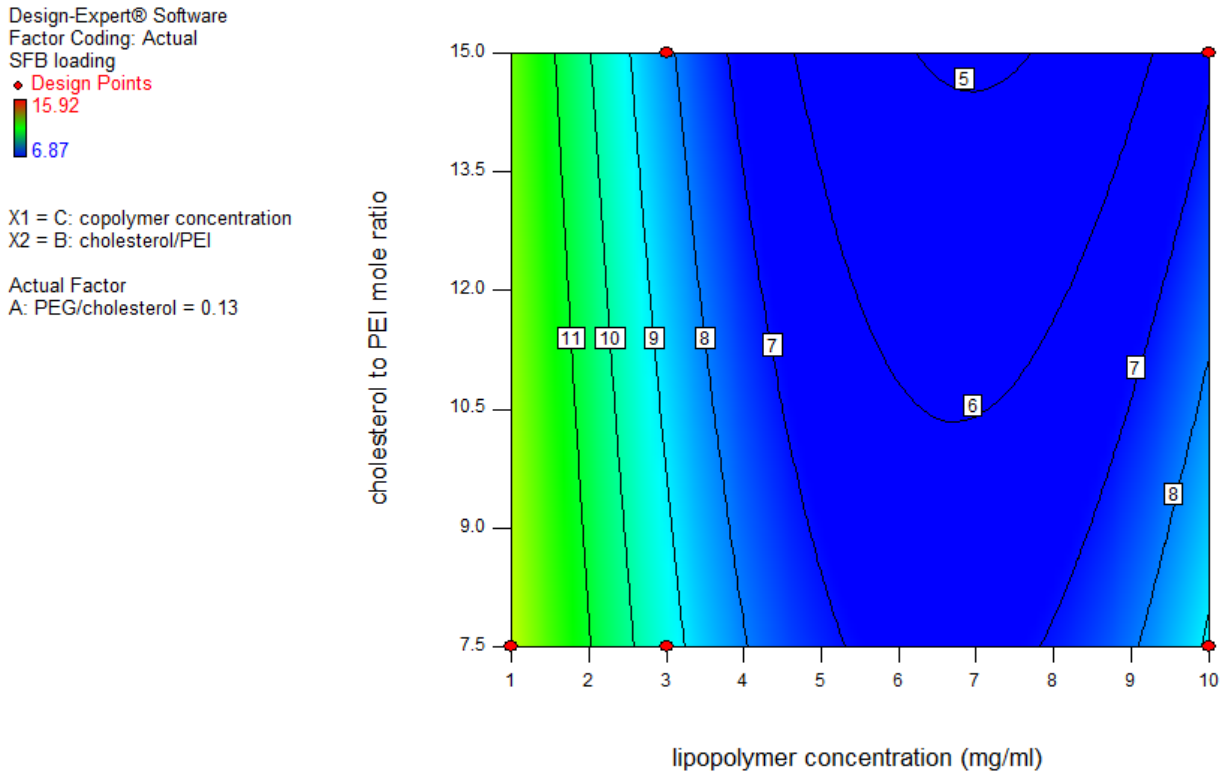
A



B


Design-Expert® Software
Factor Coding: Actual
SFB loading
Design Points
15.92
6.87
X1 = C: copolymer concentration
X2 = B: cholesterol/PEI
Actual Factor
A: PEG/cholesterol = 0.13
cholesterol to PEI mole ratio
lipopolymer concentration (mg/ml)
15.0
13.5
12.0
10.5
9.0
7.5
1
2
3
4
5
6
7
8
9
10
11
10
9
8
7
5
6
7
8

C

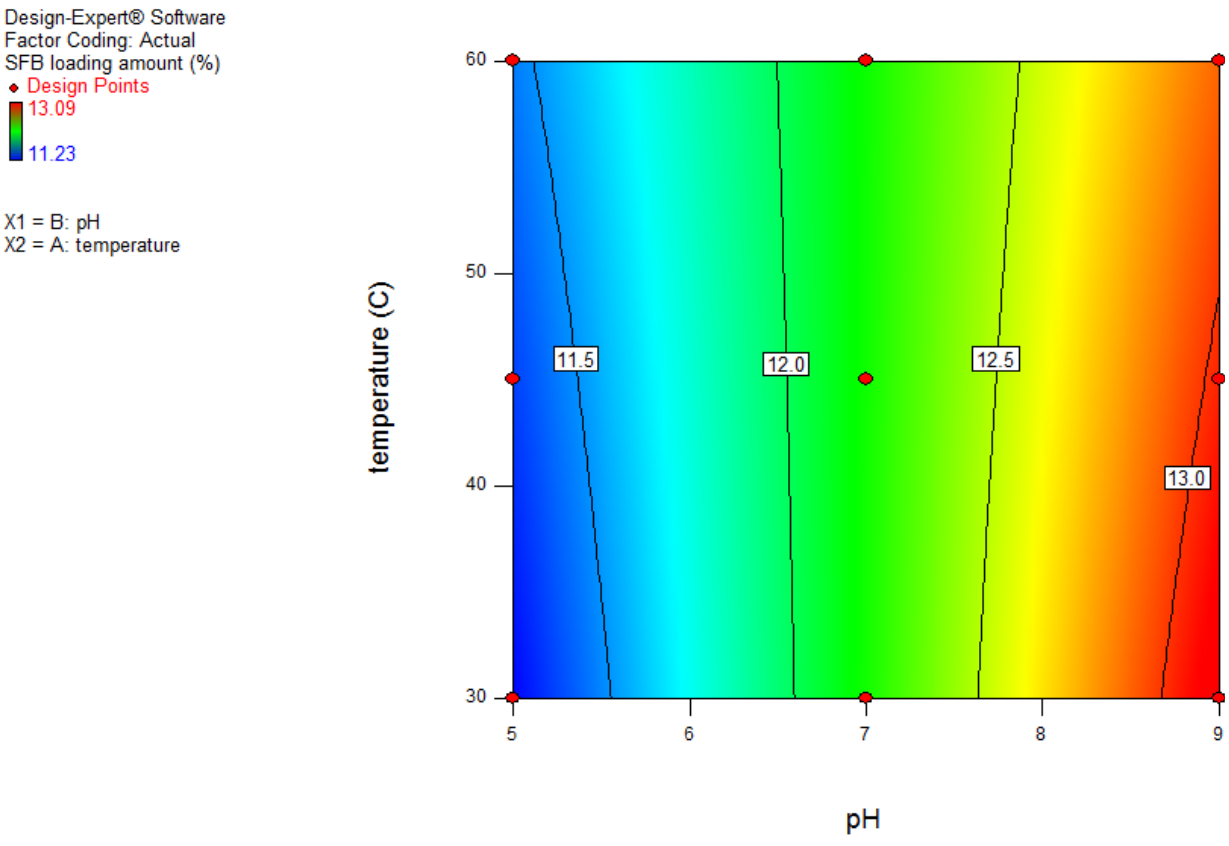

Design-Expert® Software
Factor Coding: Actual
SFB loading amount (%)
Design Points
13.09
11.23
X1 = B: pH
X2 = A: temperature
temperature (C)
pH
60
50
40
30
5
6
7
8
9
11.5
12.0
12.5
13.0

Figure S1. Sorafenib tosylate loading as a function of lipopolymer concentration and cholesterol to PEI mole ratio; A: non-PEGylated, B: PEGylated at a constant ratio of PEG/cholesterol (0.13: 1); C: the drug loading as a function of pH and temperature.