# Supplementary Materials: Bioanalytical Method Development Using Liquid Chromatography with Amperometric Detection for the Pharmacokinetic Evaluation of Forsythiaside in Rats

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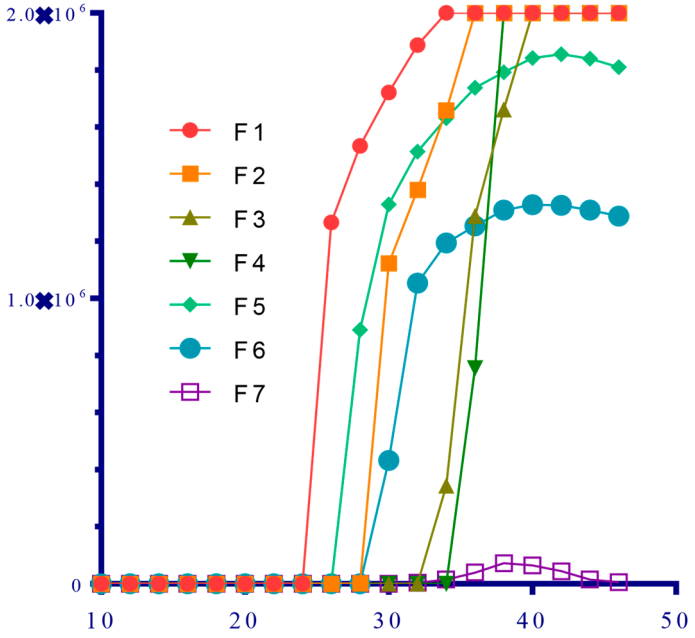


**Figure S1.** Figure S1. The temperature-viscosity profile of formulations 1–7.

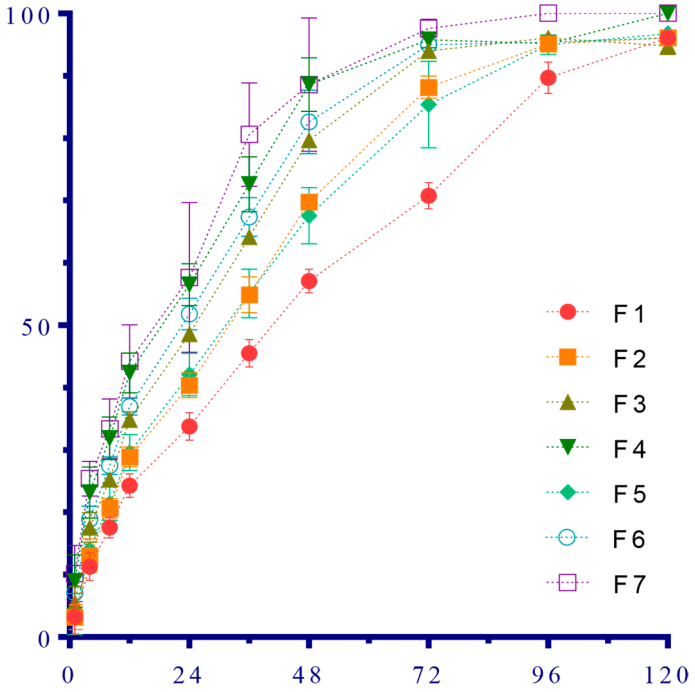


**Figure S2.** Gel dissolution of formulations 1–7.

**Table S1.** Scoring criteria for hydrogel formulations.

| Property | Range | Score |
|---|---|---|
| Tsol-gel (°C) | 32–34 | 6 |
| | 28~30 | 4 |
| | <28 or >34 | 0 |
| Gelation time (sec) | <120 | 4 |
| | 120~150 | 2 |
| | >150 | 0 |
| Maximum viscosity (cps) | $>1.5 \times 10^6$ | 4 |
| | $>1 \times 10^6$ | 2 |
| | $<1.0 \times 10^6$ | 0 |
| Complete dissolution time (h) | 96 | 3 |
| | 72 | 2 |
| | 48 | 1 |

**Table S2.** Release model fitting of FTS-loaded hydrogel formulations.

| Model | *r* of Formulations | | |
|---|---|---|---|
| | F2 | F3 | F5 |
| Zero-order kinetic | 0.727 | 0.7153 | 0.7351 |
| First-order kinetic | 0.4237 | 0.4066 | 0.4422 |
| Higuchi | 0.9179 | 0.9114 | 0.9223 |