

Electronic Supplementary Information (ESI) for Biomaterials Science.

Supplementary Information

**Dual-loaded, Long-term Sustained Drug Releasing and
Thixotropic Hydrogel for Localized Chemotherapy of Cancer**

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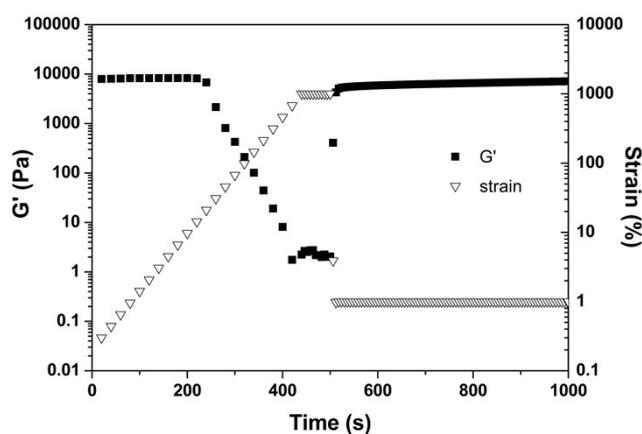


Figure S1. G' and G'' of RSF/HPC hydrogel on strain sweep (0.3-1000%) and subsequent step strain (1000% and 1%) measurements.

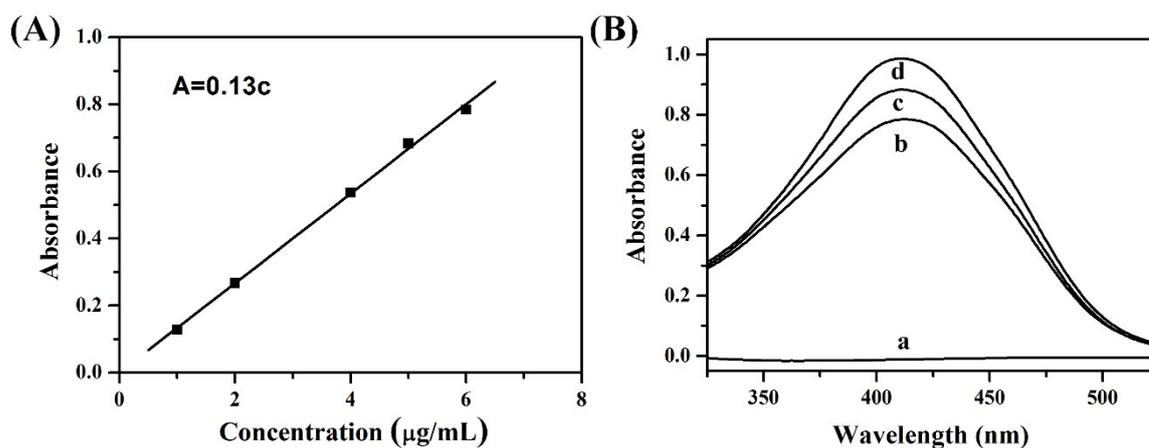


Figure S2. (A) Standard curve of Cur in Cur-RSF. (B) UV-Vis absorbance curves of 10% RSF solution (a), saturated solution of Cur in 5% RSF solution (b), 8% RSF solution (c) and 10% RSF solution (d). All samples were 250-fold diluted by DI water before testing.

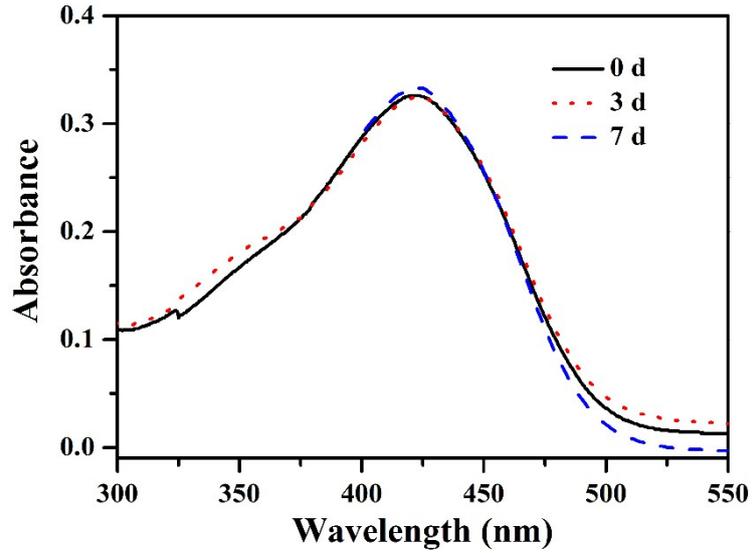


Figure S3. UV-Vis spectra of 1.5 mg/mL Cur in 5% RSF solution over time. Samples were 250-fold diluted by DI water before testing.

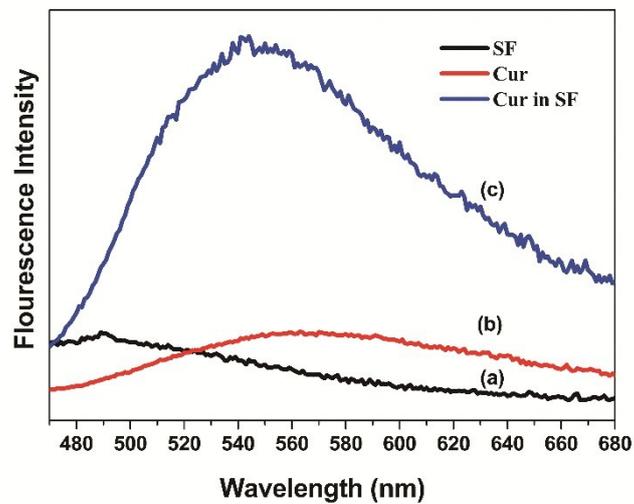


Figure S4. Fluorescence spectra of (a) 5% RSF solution, (b) Cur aqueous solution and (c) 5% RSF solution containing 1.5 mg/mL Cur.

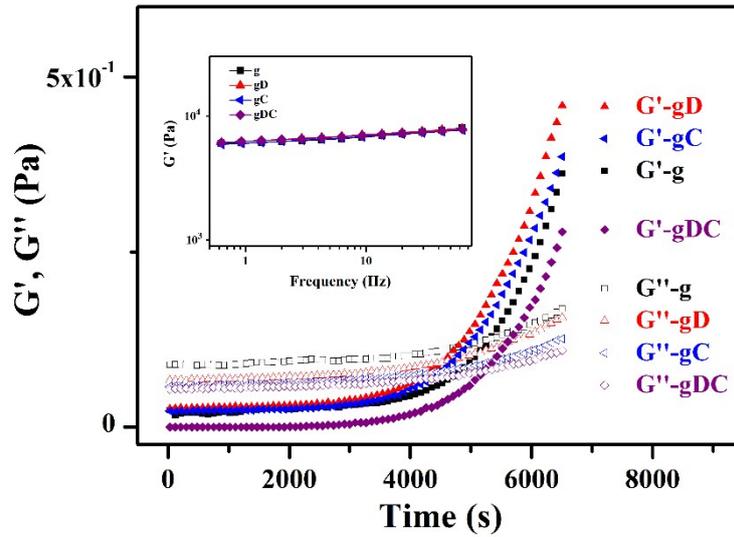


Figure S5. Storage modulus (G' , filled symbols) and loss modulus (G'' , open symbols) versus time for g, gD, gC and gDC. Inset: Storage modulus (G') versus frequency for g, gD, gC and gDC.

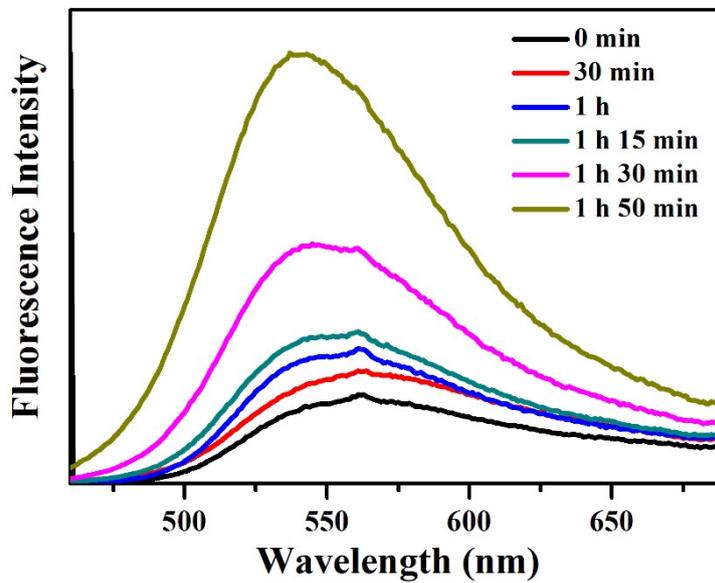


Figure S6. Fluorescence spectra of the mixture of curcumin and RSF/HPC solution with solid content of 5% and incubated at 37 °C with different time.

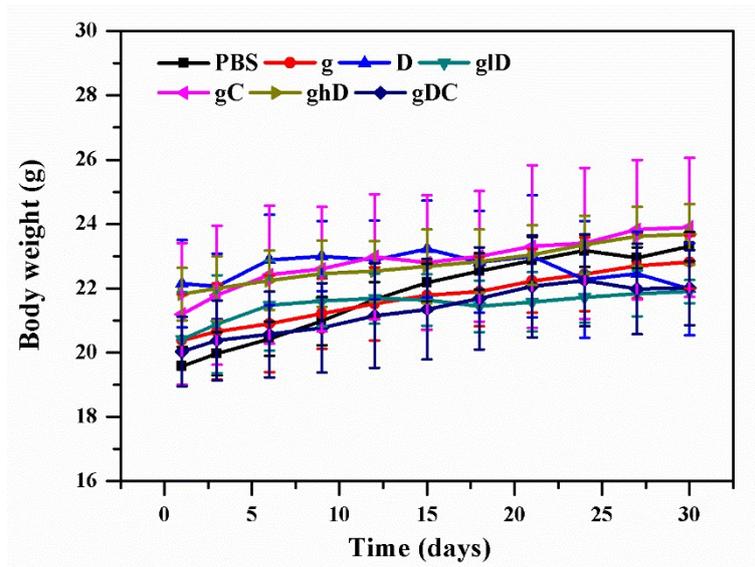
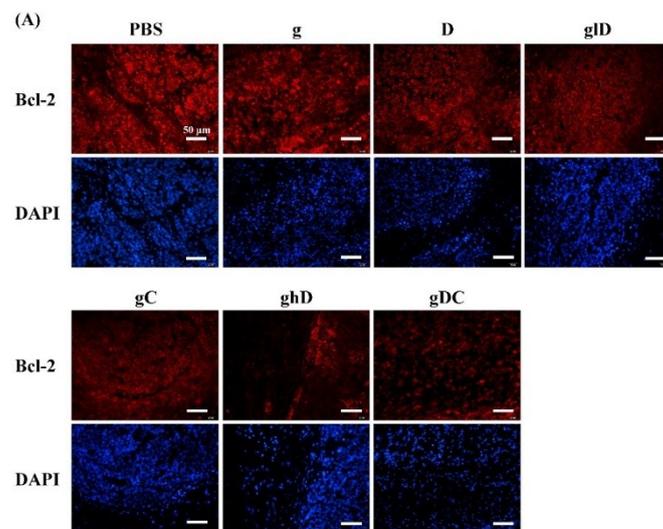


Figure S7. Changes in body weight of HepG2 tumor-bearing mice after intratumoral injection.



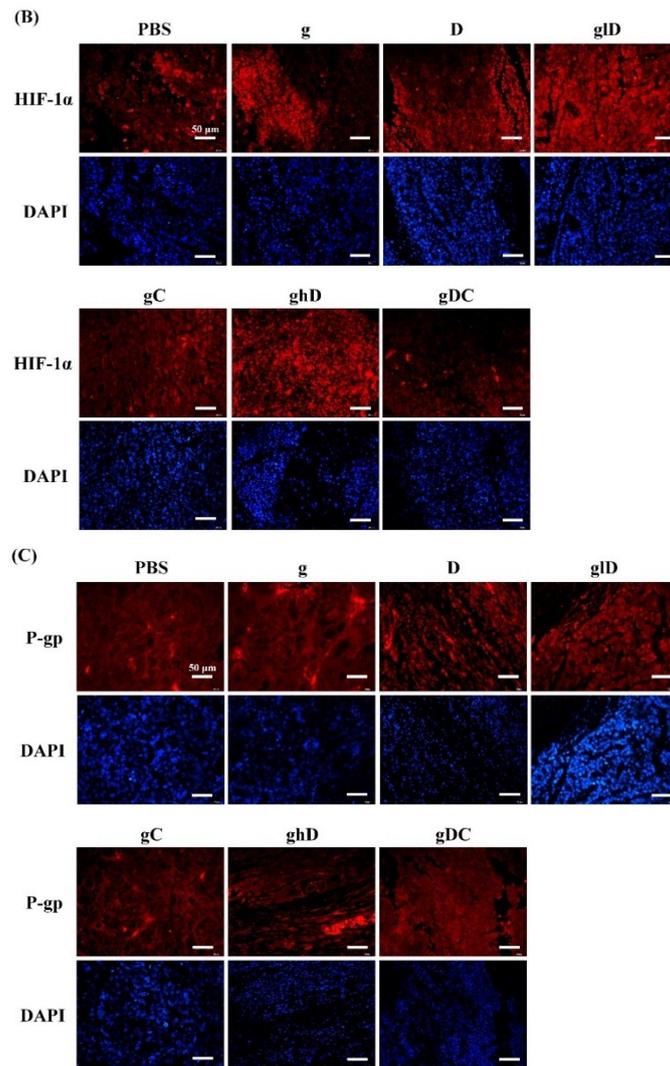


Figure S8. Expression of (A) Bcl-2, (B) HIF-1 α and (C) P-gp by immunohistochemistry (red fluorescence). Cell nuclei are stained by DAPI (blue fluorescence). Scale bar: 50 μ m.