Electronic Supplementary Material (ESI) for Materials Chemistry Frontiers.

Supplementary Information for:

G-quadruplex based Antiviral Hydrogels by Direct Gelation of Clinical Drugs

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This supplement includes:

Supplementary Figures

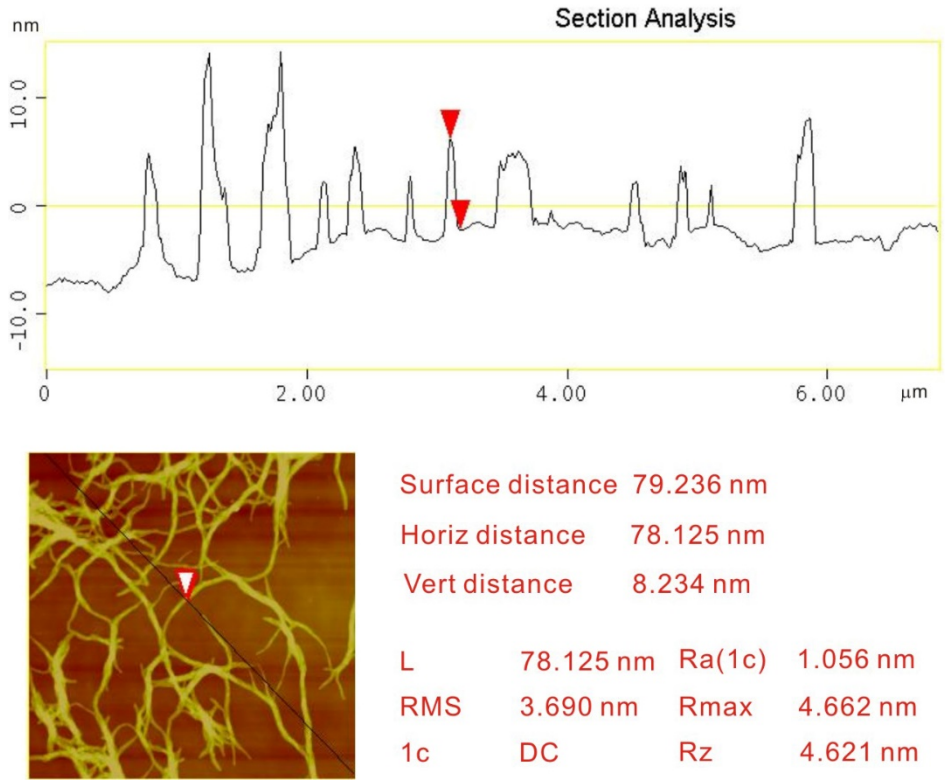

Figure S1. Section analysis of the entecavir fiber by AFM image.

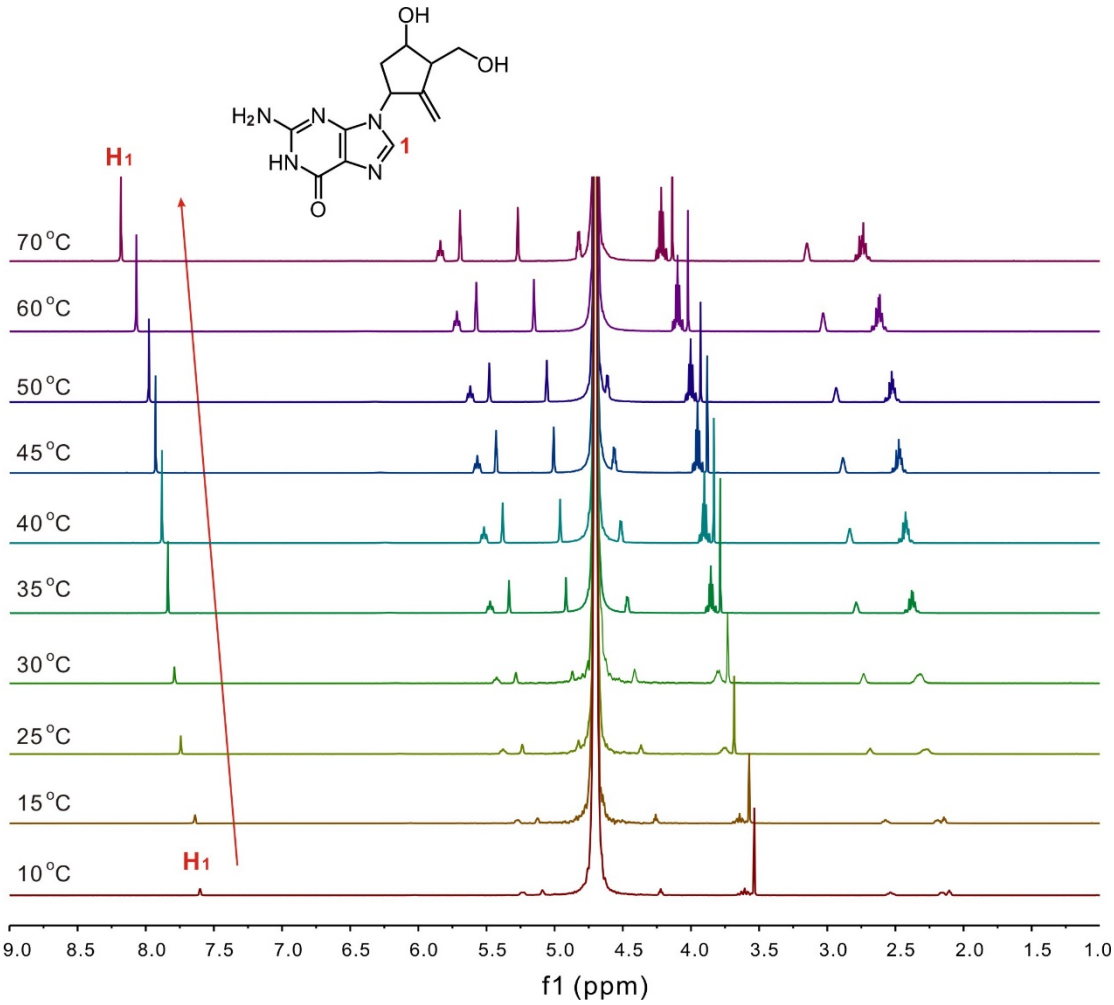

Figure S2. ^{1}H NMR spectra of the entecavir gel (40 mM entecavir, 80 mM K^{+}) performed at 10 ºC, 15 ºC, 25 ºC, 30 ºC, 35 ºC, 45 ºC, 50 ºC, 60 ºC, and 70 ºC, respectively. The down-field shift of H_1 was observed when increasing the temperature.

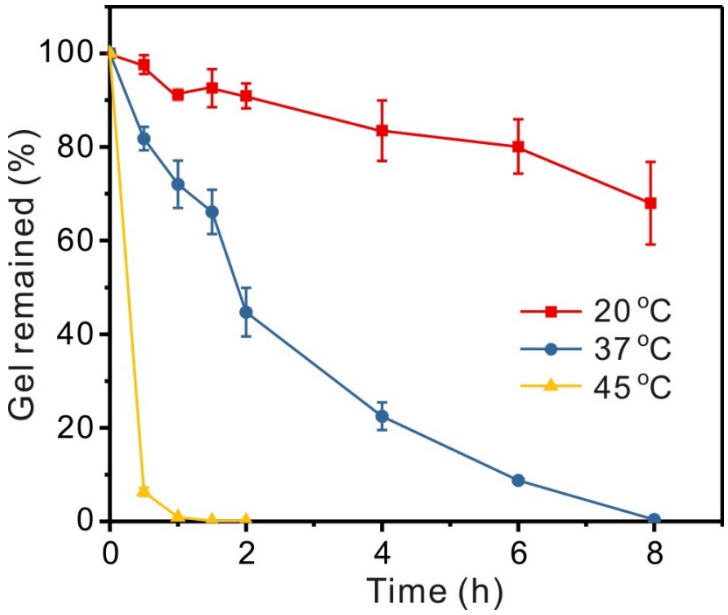

Figure S3. Gel degradation behaviors of the entecavir gel (40 mM entecavir, 80 mM K^+) at 20 °C, 37 °C, and 45 °C, respectively.

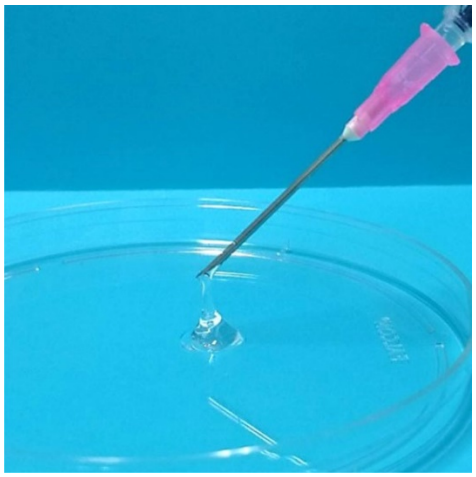

Figure S4. Injection image of entecavir hydrogel (40 mM entecavir, 80 mM K^+) from a syringe (1.2×30 mm, the outer diameter is 1.2 mm and the length of the needle is 30 mm).

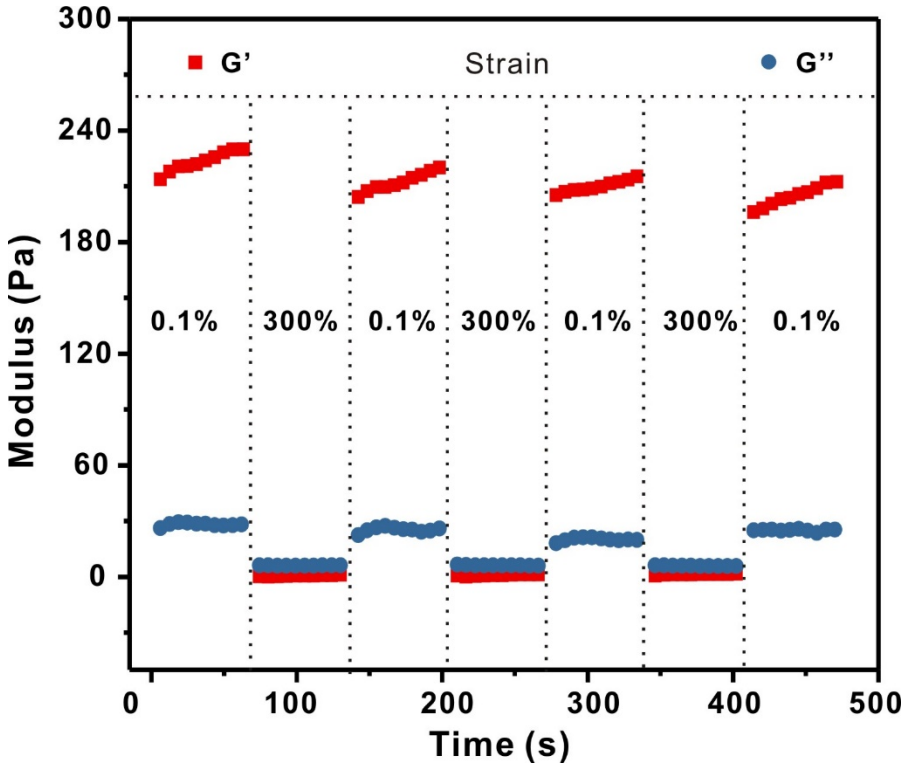

Figure S5. Thixotropic property of the entecavir gel (40 mM entecavir, 80 mM K^+) determined by breaking and recovery of the gel using an alternative strain of 0.1% and 300%, and the process was repeated for three cycles.

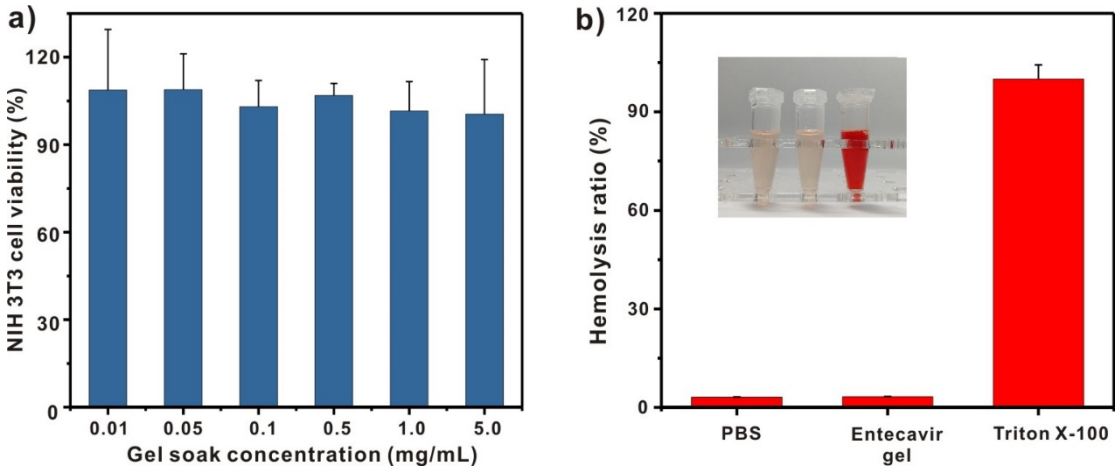

Figure S6. (a) Cytotoxicity of the entecavir gel extract on NIH 3T3 cells at different concentrations. (b) Hemolysis of the entecavir gel. PBS and Triton X-100 were tested as negative and positive controls, respectively. The insert is the photograph of the blood cell suspensions treated by PBS, hydrogel, and Triton X-100, respectively. The concentrations of entecavir and K^+ in the hydrogels were 40 mM and 80 mM, respectively.