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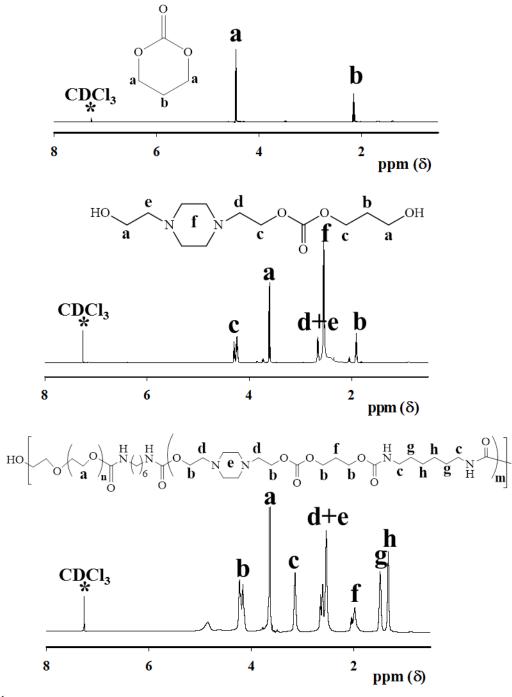
\*Corresponding author:

Doo Sung Lee, Ph.D.

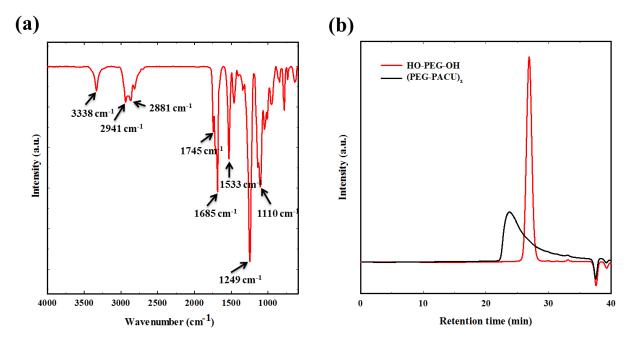
## Poly(amino carbonate urethane)-based biodegradable, temperature and pH-sensitive injectable hydrogels for sustained human growth hormone delivery

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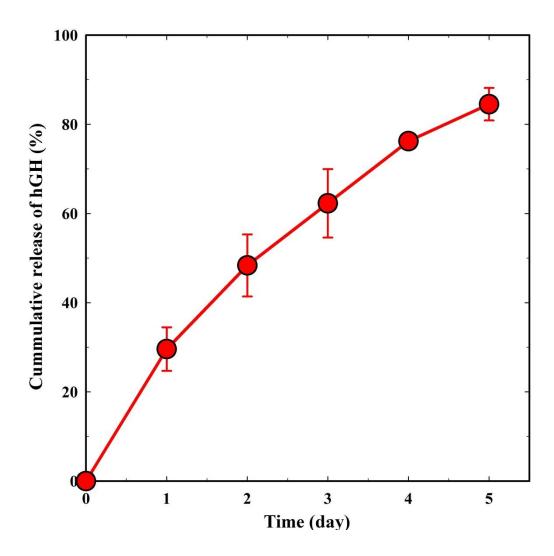
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**Fig. S1.** <sup>1</sup>H NMR spectra of TMC and HEP-TMC monomers and PEG-PACU copolymers. Asterisks (\*) indicates the residual solvent peak CDCl<sub>3</sub>.



**Fig. S2.** (a) FT-IR spectra of PEG-PACU copolymers. (b) GPC trace of PEG-PACU copolymers. PEG was used as a standard.



**Fig. S3.** In vitro release of hGH from PEG-PACU hydrogels (20 wt%) at a hGH concentration of 1 mg/ml. The error bars in the graph represent standard deviations (n=3).

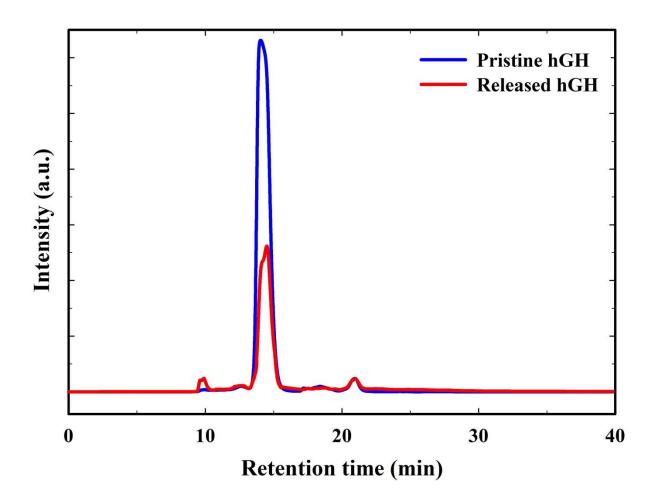


Fig. S4. HPLC chromatogram of pristine hGH and released hGH.

Table S1. Pharmacokinetic characteristics of hGH solution and hGH-loaded injectable hydrogels.

Formulation	T <sub>max</sub> (h)	C <sub>max</sub> (ng/mL)	AUC (ng.h/mL)
hGH solution	8	70.4	412
hGH-loaded PEG-PACU hydrogels	12	32.5	908