Supporting Information
For
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Soft Biodegradable Polymersomes from Caprolactone-Derived Polymers

Figure S1. NMR spectra of the four polymers synthesized. Peak assignments are shown in lowercase letters and colorcoded by part of the polymer. Black is the CL monomer units, red is the TOSUO units, and blue is the PEG block. Degree of polymerization was calculated by integration of peaks b (constant), g, and l.
**Figure S2.** Two examples of irregular morphologies observed in giant polymersome samples. The left image is a sample of CT31 containing PZn_2_. The right image is a sample of CT21 without PZn_2_. Both scale bars = 10 μm.

**Figure S3.** CryoTEM evidence for cylindrical micelles in PTS vesicle samples. 2 cylindrical micelles are indicated by the arrows.
**Figure S4.** Images of a CT21 vesicle immediately before and ~5 sec after release from a micropipette. This shape was maintained for the duration of the vesicle’s observation, ~1 min.