Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B. This journal is © The Royal Society of Chemistry 2017

Electronic Supporting Information

Thermoresponsive star-like γ-substituted poly(caprolactone)s for micellar drug delivery

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Figure S1. ¹H NMR spectrum of 4-arm star-like poly(γ -ethoxy- ϵ -caprolactone)-*b*-poly{ γ -2-[2-(2-methoxyethoxy)ethoxy]ethoxy- ϵ -caprolactone}.



Figure S2. ¹H NMR spectrum of 6-arm star-like $poly(\gamma-ethoxy-\epsilon-caprolactone)-b-poly{\gamma-2-[2-(2-methoxy)ethoxy]ethoxy-\epsilon-caprolactone}.$



Figure S3. SEC trace of 4-arm star-like $poly(\gamma-ethoxy-\epsilon-caprolactone)-b-poly{\gamma-2-[2-(2-methoxy)ethoxy]ethoxy-\epsilon-caprolactone}.$



Figure S4. SEC trace of 6-arm star-like $poly(\gamma-ethoxy-\epsilon-caprolactone)-b-poly{\gamma-2-[2-(2-methoxy)ethoxy]ethoxy-\epsilon-caprolactone}.$

 Table 1. Polymer Properties determined from SEC

	R _h ^a	IV ^a
4A	2.762	0.0706
6A	3.720	0.0956

^aDetermined by SEC equipped with triple detectors with THF as eluent



Figure S5. Absorbance of DOX loaded star polymers



Figure S6. Height TMAFM images of DOX loaded polymeric micelles: (A) 4A and (B) 6A.



Figure S7. Degradation measurements of polymer **6A** under physiological conditions (37 °C, pH = 7.4), the % change in molecular weight (M_n) is plotted versus time.