Table S4. (a) Results for the controlled homopolymerization of OEOMA300 by RAFT (molar ratios: $[M]_0/[CTA]_0/[AIBN]_0$ (M:S, v:v) = 125:1:0.2 (1:1.6)). (b) MW results for the controlled chain extension of OEOMA300 from PGMA by RAFT (molar ratios: $[OEOMA300]_0/[AIBN]_0/[PGMA\ macro\text{-}CTA]_0$) = 100:0.2:1). (c) MW results for the chain extension of GMA from $POEO_5MA$ by RAFT (molar ratios: $[GMA]_0/[AIBN]_0/[POEO_5MA\ macro\text{-}CTA]_0$) = 100:0.2:1).

		t (hr)	M_n (g/mol)	PDI
a	$P((OEO_5MA)_{25}$	3	7950	1.31
	$P((OEO_5MA)_{32}$	4	9860	1.34
	$P((OEO_5MA)_{44}$	4.5	13700	1.33
	$P((OEO_5MA)_{91}$	20	27400	1.43
b	$P(GMA_{39}\text{-}b\text{-}(OEO_5MA)_6)$	1.0	8060	1.30
	$P(GMA_{39}\text{-}b\text{-}(OEO_5MA)_{22})$	1.5	12760	1.27
	$P(GMA_{39}\text{-}b\text{-}(OEO_5MA)_{35})$	2.0	16640	1.26
	$P(GMA_{39}\text{-}b\text{-}(OEO_5MA)_{41})$	2.5	18390	1.29
	$P(GMA_{39}\text{-}b\text{-}(OEO_5MA)_{50})$	3.5	21290	1.30
c	$P((OEO_5MA)_{25}\text{-}b\text{-}GMA_3)$	0.25	8810	1.38
	$P((OEO_5MA)_{25}\text{-}b\text{-}GMA_6)$	0.5	9130	1.36
	$P((OEO_5MA)_{25}\text{-}b\text{-}GMA_{18})$	0.63	10840	1.33
	$P((OEO_5MA)_{25}\text{-}b\text{-}GMA_{31})$	0.66	12680	1.70
	$P((OEO_5MA)_{32}\text{-}b\text{-}GMA_{161})$	2.5	33120	1.67
	$P((OEO_5MA)_{44}\text{-}b\text{-}GMA_{21})$	0.66	17000	1.36
	$P((OEO_5MA)_{44}\text{-}b\text{-}GMA_{87})$	1.0	26410	1.41
	$P((OEO_5MA)_{91}\text{-}b\text{-}GMA_4)$	1.0	28230	1.43
	$P((OEO_5MA)_{91}\text{-}b\text{-}GMA_{114})$	4.0	43930	1.98