

## Supplementary material

### POSS-enhanced thermosensitive hybrid hydrogels for cell adhesion and detachment

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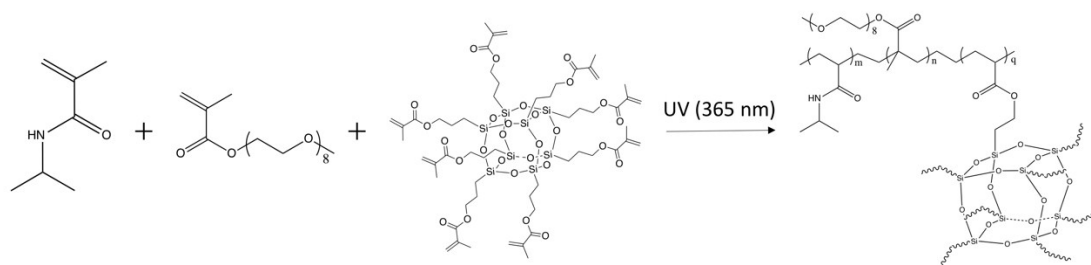


Fig. S1 Synthesis of the POSS-PNIPAM hydrogel.

Table S1. The feed ratio of NIPAM, OEGMA, OMAPOSS, MBA, photo-initiator (Irgacure 2959) and solvent.

Code	P10N	P20N	P30N	MN
NIPAM (mg)	135	135	135	135
OEGMA (mg)	18	18	18	18
Irgacure 2959 (mg)	4	4	4	4
OMAPOSS (mg)	10	20	30	N/A
MBA (mg)	N/A	N/A	N/A	12.9
1, 4-dioxane (mL)	1	1	1	1

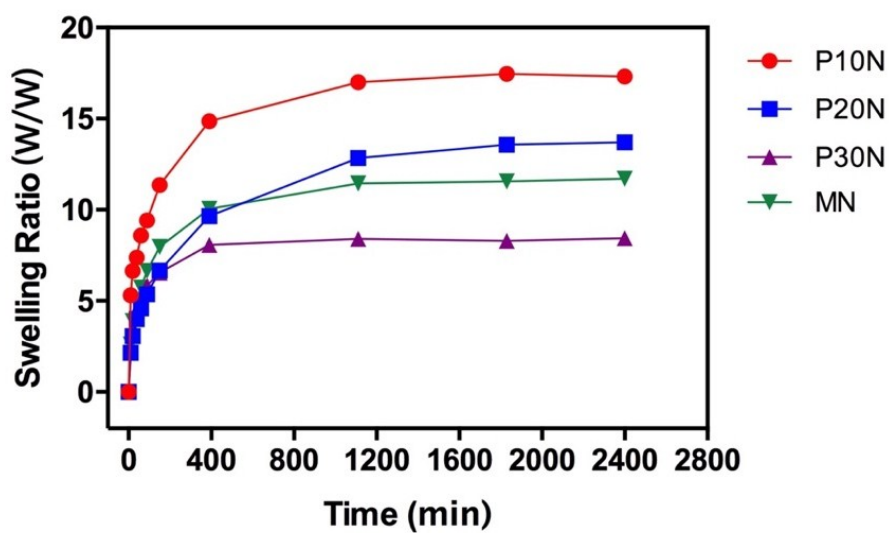


Fig. S2 Swelling kinetics of PNIPAM based hydrogels (4 °C).

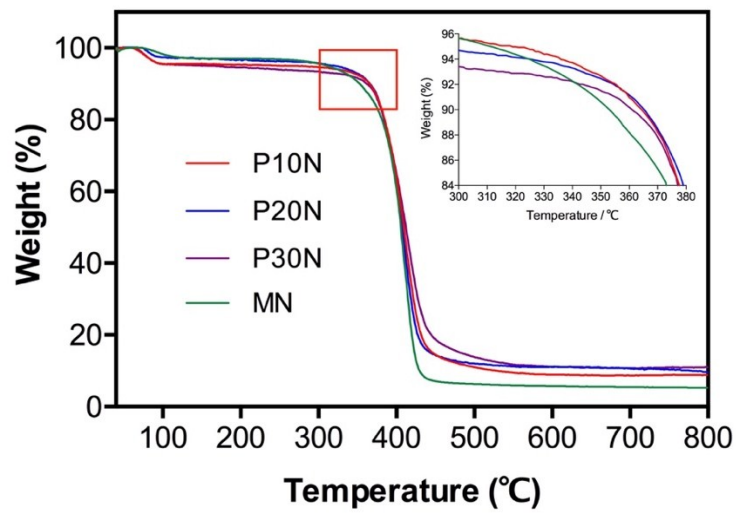


Fig. S3 TGA curves of POSS-PNIPAM and MBA-PNIPAM (MN) hydrogels.

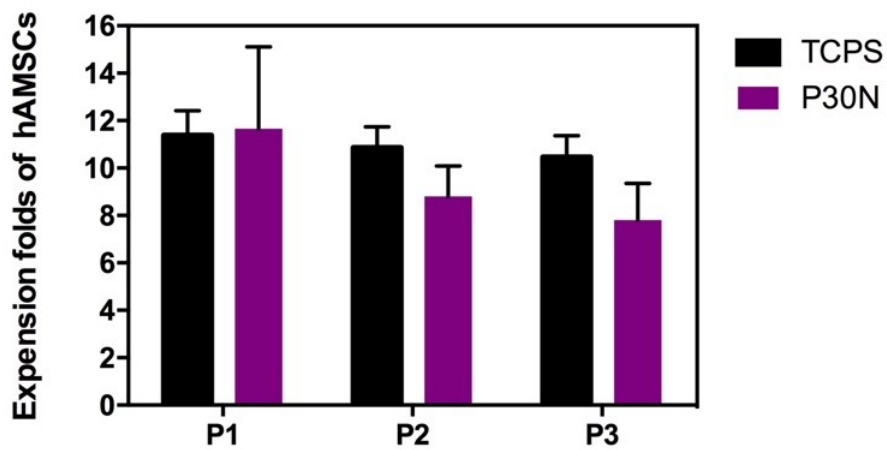


Fig. S4 Re-proliferation of hAMSCs on TCPS and the P30N hydrogel. Results were mean  $\pm$  SD, n = 3.