

### Electronic supporting information

Hydrogel	KGM (%)	Ce(IV) (%)	PNVP (%)	PEGDA wt 2% HMPP (%)	Metabolic activity of cells with hydrogel	
					Fibroblasts (% of control)	Keratinocytes (% of control)
Control	-	-	-	-	100±17.1	100±7.3
KGM	10 mg mL <sup>-1</sup>	-	-	-	100±12.8	97.3±7.5
Crosslinked KGM	1	0.001	-	-	101.2±22.0	111.7±9.5
	1	0.0015	-	-	79.2±16.7	102.4±29.5
	1	0.003	-	-	101.1±9	78.1±17.7
	1	0.006	-	-	98.9±3.5	85.5±17.8
Control	-	-	-	-	100±17.1	100±7.2
KGM	10 mg mL <sup>-1</sup>	-	-	-	89.5±11.4	97.2±7.5
Crosslinked KGM	0.5	0.001	-	-	107.1±27.5	98.9±9.9
	1	0.001	-	-	107.5±17.7	103.3±11.1
	1.25	0.001	-	-	89.9±9.8	97.3±9.04
	1.5	0.001	-	-	105.1±22.6	101.0±8.06
Control	-	-	-	-	100±8.4	-
KGM	10 mg mL <sup>-1</sup>	-	-	-	111.5±3.7	-
P(NVP-co-PEGDA)	-	-	40	8	82.7±1.6	-
SemilipN	14	-	40	8	118±1.9	-
	24	-	40	8	94.6±2.7	-
	35	-	40	8	89.6±4.3	-
Graft conetwork	14	0.5	40	8	105.7±4.9	-
	14	1	40	8	90.01±0.9	-
	24	0.5	40	8	94.9±3.2	-
	24	1	40	8	106.7±6.6	-

ESI Table 1. The effect of placing the hydrogels in indirect contact with fibroblasts and keratinocytes for 3 days. Cell metabolic activity was measured using MTT assay. Results shown are means ± SD (n=3).