

Figure S1 Representative ¹H-NMR spectrum of CMC modified with methacrylate groups on the polymer backbone. R1 and R2 indicate the methylene and methyl protons of the methacrylate group, respectively.

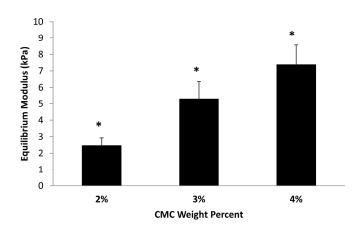


Figure S2 Equilibrium modulus of crosslinked hydrogels with increasing macromer concentration. *- Significantly different from other groups.

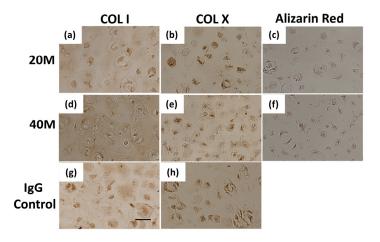


Figure S3 Staining of fibroblastic (COL I), hypertrophic (COL X) and mineralization (Alizarin Red) tissue markers in 20M and 40M constructs. Scale bar = $50 \mu m$

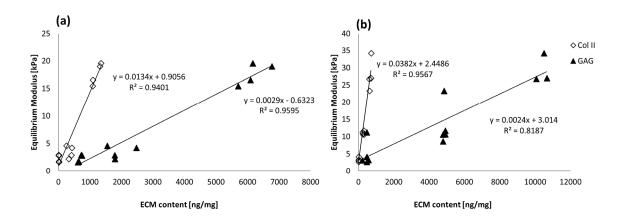


Figure S4 Scatter plots displaying the correlation between ECM content and the equilibrium modulus of 20M and 40M hydrogels. (a) COL II and GAG content versus E_y of 20M hydrogels, (b) COL II and GAG content versus E_y of 40M hydrogels. Line represents the single variable regression line.