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Development of Novel Iron (III) Crosslinked Bioinks Comprising Carboxymethyl Cellulose, Xanthan Gum, and Hyaluronic Acid for Soft Tissue Engineering Applications

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Supplementary Information

S1. Rheological measurements



Figure S1. Determination of linear viscoelastic region of CMC/XG/HA bioink using oscillatory strain sweep over the range of 0.01% - 1000% strain.



S2. Quantifications of cell numbers from Live/Dead images

Figure S2. Cell proliferation shown as cell numbers counted from Live/Dead images of HaCaT (a) and HFF (B) at different days. The quantitative data was represented as mean \pm SD (n=3). One-way ANOVA with Holm-Sidak post hoc test, * p < 0.05 and ** p < 0.01 compared to bulk hydrogels at day 1. There was an increasing trend in the numbers of HaCaT in both bulk hydrogels and bioprinted constructs from day 1 to day 7, but the differences were not significant. For HFF, significant cell proliferation from day 1 to day 3 was observed in bulk hydrogels, but the difference between 3 and 7 d was not significant.