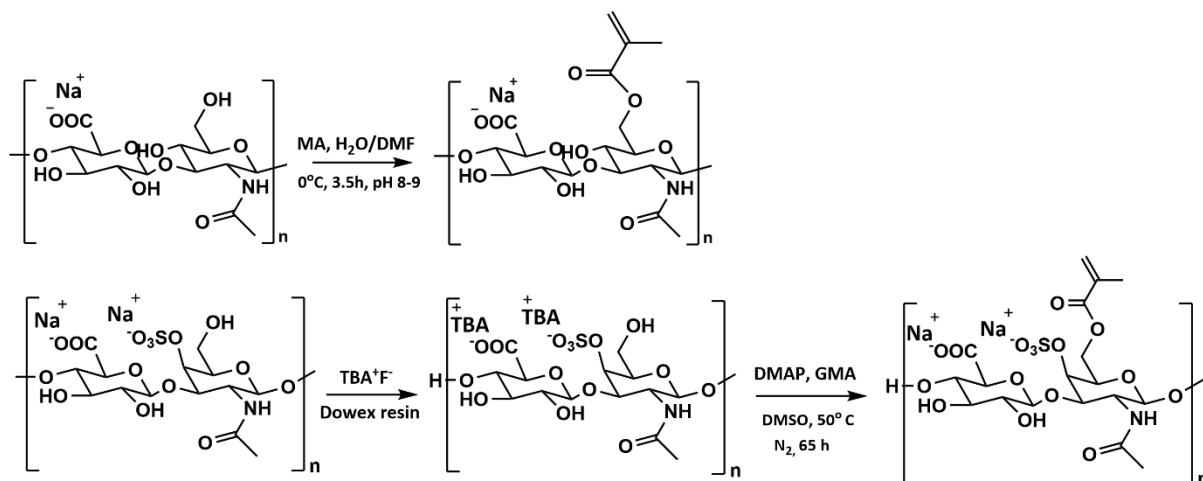


## Supporting information

In order to prepare hydrogels from CS and HA biopolymers, they first have to be functionalized with methacrylate groups. CS was methacrylated following a previously described method where it was first converted to a more lipophilic form (CS-TBA) and subsequently was methacrylated in organic solvent (DMSO), in the presence of DMAP and GMA (Scheme 1 bottom)<sup>1</sup>.

**Scheme S1.** Synthesis route for HAMA (top) and CSMA (bottom) polymers.



- (1) Abbadessa, A.; Blokzijl, M. M.; Mouser, V. H. M.; Marica, P.; Malda, J.; Hennink, W. E.; Vermonden, T. A Thermo-Responsive and Photo-Polymerizable Chondroitin Sulfate-Based Hydrogel for 3D Printing Applications. *Carbohydr. Polym.* **2016**, *149*, 163–174. <https://doi.org/10.1016/j.carbpol.2016.04.080>.