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(54) Title: BIOCOMPATIBLE HYDROGEL COMPOSITIONS AND USES THEREOF

(57) Abstract: Provided herein are biocompatible and/or biodegradable hydrogel compositions comprising native collagen and chondroitin sulfate, the collagen and chondroitin sulfate being chemically cross-linked thereby forming a matrix. The native collagen may comprise recombinant human collagen type I (rHCl), recombinant human collagen type III (rHClIII), or a combination thereof, for example. Methods and uses thereof for regeneration or repair of tissue, improvement of tissue function, mechanical stabilization of tissue, prevention of tissue damage, or prevention of tissue loss of function are described, particularly with respect to cardiac tissue and myocardial infarction events.