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(54) Title: HYDROGEL SCAFFOLDS AND USES THEREOF

(57) Abstract: The present invention relates to hydrogel scaffold and the uses thereof. In a specific embodiment, the hydrogel scaffold comprises gelatin methacryloyl (GelMA), alginate and pectin, and one or more cell types. In another embodiment, the one or more cell types comprise stem cells and/or progenitor cells. The stem cells are adipose-derived stem cells (ADSCs) or mesenchymal stem cells. The present invention further relates to the method of fabricating the hydrogel scaffold as well as a method of myogenic differentiation with the hydrogel scaffold.

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