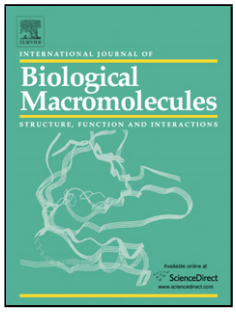

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Enzyme-mediated tissue adhesive hydrogels for meniscus repair

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Abstract

Meniscus tissues have limited regenerative capacity once damaged. The treatment options for the meniscus tissue regeneration have been limited to arthroscopic meniscectomy or surgical interventions. The injectable hydrogels based system would provide an alternative to the conventional meniscus therapy by providing a minimally invasive treatment alternative. Here we utilized enzyme-based approaches to fabricate tissue adhesive hydrogels for meniscus repair. Tyramine (TA) conjugated hyaluronic acid (TA-HA) and gelatin are susceptible to tyrosinase (TYR)-mediated crosslinking *in vitro* and *in vivo*. Importantly,