

September 09, 2011

Comment [Editor1]: Please enter the date of submission here.

Dear Editor,

Comment [Editor2]: Please enter the name of the editor-in-chief of your target journal here.

Please find enclosed our manuscript titled “Application of polysaccharide biomaterials in tissue engineering: a review” as a Review Article for publication in *Biomaterials*.

Once damaged, the articular cartilage tissue has little capacity for spontaneous healing because of its avascular nature. Although many repair techniques have been proposed in the last two decades, no technique has successfully regenerated long-lasting hyaline cartilage tissue to replace the damaged cartilage. Tissue engineering methods, such as transplantation of isolated chondrocytes, have demonstrated significant clinical potential for regeneration of hyaline-like cartilage tissue and treatment of chondral lesions. However, the success of chondrocyte transplantation and the quality of neocartilage formation strongly depend on the specific cell-carrier components. The present study reviews the biomaterials that have been reported to promote chondrogenesis and to have potential as candidates for tissue engineering of damaged articular cartilage. A new biomaterial, a chitosan-based polysaccharide hydrogel, is also introduced and discussed in terms of biocompatibility with chondrocytes.

We believe these findings are of particular interest to the readers of *Biomaterials* because they present different options and new avenues in the highly dynamic field of tissue engineering.

This manuscript has not been published and is not under consideration for publication elsewhere. All authors have read the manuscript and have approved this submission. The authors report no conflicts of interest. The manuscript has been carefully reviewed by an experienced editor whose first language is English and who specializes in editing papers written by scientists whose native language is not English.

We appreciate your review of this manuscript for publication in *Biomaterials*.

Sincerely,

Noshi Manaka

E-mail: nm@gmail.com

Comment [Editor3]: Please enter all details of the corresponding author here, including telephone and fax numbers.

All material in this document is the intellectual property of Crimson Interactive Pvt. Ltd. The use of information and content in this document in whole or in part is forbidden unless express permission has been given in writing by Crimson Interactive Pvt. Ltd.

www.enago.com | www.enago.de | www.enago.com.tr | www.enago.com.br | www.enago.jp