

CLAIMS

1. Use of a composition comprising chondrocyte-like cells for the manufacture of an implant for repairing a chondral defect, wherein the chondrocyte-like cells, being glycosaminoglycan-secreting, are obtained by cultivating mesenchymal stem cells (MSCs) for 7 to 20 days in a collagen-containing medium supplemented with transforming growth factor beta one (TGF- β 1) under conditions allowing differentiation of the MSCs to the chondrocyte-like cells, wherein the collagen is contained in the medium at a concentration of about 1% to about 10% w/v.

2. The use of claim 1, wherein the implant is free of lacunae.

3. The use of claim 1, wherein the MSCs are isolated from bone marrow, adipose tissue, muscle tissue, dental pulp of deciduous baby teeth, umbilical cord blood, Wharton's jelly, placenta, or cord lining membrane.

~~4. The use of claim 1, wherein the collagen is contained in the medium at a concentration of about 1% to about 10% w/v.~~

~~54.~~ The use of claim ~~41~~, wherein the collagen is contained in the medium at a concentration of about 3% w/v.

~~65.~~ The use of claim 1, wherein the collagen matrix contains type-I or type-II collagen.

~~76.~~ The use of claim 1, wherein the implant may be delivered to the chondral defect site by a syringe-like piston.

~~87.~~ The use of claim 1, wherein the implant may be loaded in a capsule and delivered to the chondral defect site by squeezing the implant out of the capsule and applying it to the chondral defect site.

~~98.~~ The use of claim 1, wherein the MSCs are cultivated in the collagen-containing medium in a capsule for differentiation into chondrocyte-like cells and formation of the implant.