

Title (en)
GENE THERAPY USING TGF-BETA

Title (de)
GENTHERAPIE UNTER BENUTZUNG VON TGF-BETA

Title (fr)
THERAPIE GENIQUE REPOSANT SUR L'UTILISATION DU TGF-BETA

Publication
EP 1175228 A4 20030226 (EN)

Application
EP 00925522 A 20000503

Priority

- IB 0000653 W 20000503
- KR 19990015854 A 19990503
- US 34541599 A 19990630

Abstract (en)
[origin: WO0066177A1] The subject invention is related to a cell-mediated gene therapy treatment for orthopedic disease using a member belonging to the transforming growth factor- beta (TGF- beta) superfamily. TGF- beta gene therapy as a new treatment method for degenerative arthritis is demonstrated. After transfection of TGF- beta cDNA expression vectors into fibroblasts (NIH 3T3-TGF- beta 1), the cells were injected into rabbit achilles tendon and knee joints with artificially-made cartilage defects. Intratendinous injections were performed to determine the optimal concentration for in vivo expression. Partially defected cartilage model was made to simulate degenerative arthritis of the knee joint. The partial cartilage defect treated with the cell-mediated gene therapy procedure was covered by newly formed hyaline cartilage which indicates that the cells survived and stimulated matrix formation in this area. Completely denuded cartilage areas were covered by fibrous collagen.

IPC 1-7
A61K 48/00; **C07K 14/495**; **A61K 38/18**

IPC 8 full level
A61K 35/12 (2006.01); **A61K 35/32** (2006.01); **A61K 35/76** (2006.01); **A61K 38/18** (2006.01); **A61K 38/22** (2006.01); **A61K 48/00** (2006.01); **A61P 19/02** (2006.01); **C07K 14/495** (2006.01); **C12N 5/10** (2006.01); **C12N 15/09** (2006.01)

CPC (source: EP KR)
A61K 38/18 (2013.01 - KR); **A61K 38/1841** (2013.01 - EP); **A61P 19/02** (2017.12 - EP); **A61P 19/08** (2017.12 - EP); **C07K 14/495** (2013.01 - EP); **A61K 35/12** (2013.01 - EP); **A61K 48/00** (2013.01 - EP)

Citation (search report)

- [X] US 5858355 A 19990112 - GLORIOSO JOSEPH C [US], et al
- [T] US 6315992 B1 20011113 - NOH MOON JONG [KR], et al
- See references of WO 0066177A1

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CN110947002A

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0066177 A1 20001109; AU 4424200 A 20001117; AU 778047 B2 20041111; CA 2373045 A1 20001109; CA 2373045 C 20160726; CN 101972275 A 20110216; CN 1371289 A 20020925; CN 1371289 B 20130320; EP 1175228 A1 20020130; EP 1175228 A4 20030226; JP 2002542801 A 20021217; JP 2007008950 A 20070118; JP 2009019039 A 20090129; JP 4188986 B2 20081203; JP 4547446 B2 20100922; JP 4592186 B2 20101201; KR 100702725 B1 20070403; KR 20020036943 A 20020517

DOCDB simple family (application)
IB 0000653 W 20000503; AU 4424200 A 20000503; CA 2373045 A 20000503; CN 00807074 A 20000503; CN 201010528075 A 20000503; EP 00925522 A 20000503; JP 2000615060 A 20000503; JP 2006195771 A 20060718; JP 2008176059 A 20080704; KR 20017013987 A 20011102