(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 February 2005 (10.02.2005)

(10) International Publication Number
WO 2005/012513 A1

15/64, C12R 1/91, A61K 48/00, A61P 25/00

(21) International Application Number:
PCT/GB2004/003149

(22) International Filing Date:

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0316882.0 18 July 2003 (18.07.2003) GB


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(54) Title: REVERSIBLY IMMORTALISED OLFATORY ENSHEATHING GLIA AND THEIR USE TO PROMOTE NEUROAL REGENERATION

(57) Abstract: The present invention is based on the capacity of the Olfactory Ensheathing Glia (OEG) to foster axonal regeneration in the adult mammalian central nervous system (CNS). This specific capacity is probably due to a combination of several factors, such as the molecular composition of cellular membrane and/or the capacity to secrete some molecules; combined with the capacity to reduce glial scar and accompany new growing axon in the damaged CNS. We have developed immortalised cell lines from primary human OEGs. The cells were cultured from post-mortem human tissue from donors and immortalised using a reversible system. Some of these OEG human clonal cell lines were selected by their ability to promote axonal regeneration from adult rat retinal ganglion neurons in a similar fashion to primary OEGs. These cell lines, alone or in pharmaceutical compositions comprising these cells, may be used to repair neuronal damage in the CNS.
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(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

(48) Date of publication of this corrected version:
2 March 2006

(15) Information about Correction:
see PCT Gazette No. 09/2006 of 2 March 2006, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.


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