



(43) International Publication Date
18 September 2014 (18.09.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/143870 A1

(51) International Patent Classification:

C12N 5/077 (2010.01) C12N 5/0775 (2010.01)
A61K 35/32 (2006.01)

(21) International Application Number:

PCT/US2014/028026

(22) International Filing Date:

14 March 2014 (14.03.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/794,691 15 March 2013 (15.03.2013) US

(71) Applicant: DISCGENICS, INC. [US/US]; 675 Arapeen Drive, Suite 304, Salt Lake City, UT 84108 (US).

(72) Inventors: SILVERMAN, Lara, Ionescu; 793 South 300 West, Apt. 412, Salt Lake City, UT 84101 (US). FOLEY, Kevin, T.; 9460 Inglewood Cove, Germantown, TN 38139 (US).

(74) Agents: JONSEN, Matthew, B. et al.; Dorsey & Whitney LLP, 50 South Sixth Street, Suite 1500, Minneapolis, MN 55402 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: ISOLATED DISCOGENIC CELLS, METHODS OF USING, AND METHODS OF PREPARING SAME FROM MAMMALIAN TISSUE

(57) Abstract: The present disclosure relates to discogenic cell populations, methods of deriving, and methods of using them. The presently described discogenic cell populations may be used to restore or regenerate damaged, diseased, or missing intervertebral discs of a subject. The presently described discogenic cell populations can be derived from and administered or implanted into a subject, or may be derived from an unrelated donor.



WO 2014/143870 A1