

# (12) International Application Status Report

**Received at International Bureau:** 03 September 2018 (03.09.2018)

**Information valid as of:** 07 December 2018 (07.12.2018)

**Report generated on:** 22 August 2019 (22.08.2019)

**(10) Publication number:**

WO2019/045649

**(43) Publication date:**

07 March 2019 (07.03.2019)

**(26) Publication language:**

English (EN)

**(21) Application Number:**

PCT/SG2018/050438

**(22) Filing Date:**

29 August 2018 (29.08.2018)

**(25) Filing language:**

English (EN)

**(31) Priority number(s):**

10201707052R (SG)

**(31) Priority date(s):**

29 August 2017 (29.08.2017)

**(31) Priority status:**

Priority document received (in compliance with PCT Rule 17.1)

**(51) International Patent Classification:**

C12N 5/0775 (2010.01)

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**(54) Title (EN):** METHODS FOR ENRICHING MESENCHYMAL STEM CELLS

**(54) Title (FR):** MÉTHODES POUR ENRICHIR DES CELLULES SOUCHES MÉSENCHYMATEUSES

**(57) Abstract:**

**(EN):** Methods of enriching non-senescent mesenchymal stem cells (MSCs) and methods of performing quality control for non-senescent MSCs are disclosed. The methods comprise contacting a sample comprising MSCs with a probe (specifically peanut agglutinin, PNA) that binds to a glycan (specifically glycan T-antigen) expressed on the surface of MSCs, with the separation or determination of non-senescent MSCs from senescent MSCs based on a difference in expression of the glycan at the cell surface, i.e. the non-senescent MSCs express more of the glycan than senescent MSCs. A high amount of non-senescent MSCs is indicative of a sample of acceptable quality.

**(FR):** L'invention concerne des méthodes pour enrichir des cellules souches mésenchymateuses (MSC) non sénescents, ainsi que des méthodes permettant de réaliser un contrôle qualité portant sur les MSC non sénescents. Les méthodes comprennent la mise en contact d'un échantillon comprenant des MSC avec une sonde (spécifiquement l'agglutinine d'arachide, PNA) qui se lie à un glycan (spécifiquement le glycan antigène T) exprimé en surface des MSC, la séparation ou la détermination des MSC non sénescents des MSC sénescents se fondant sur la différence d'expression du glycan au niveau de la surface cellulaire, les MSC non sénescents exprimant une plus grande quantité du glycan que les MSC sénescents. Une quantité élevée de MSC non sénescents indique un échantillon de qualité acceptable.

**International search report:**

Received at International Bureau: 05 November 2018 (05.11.2018) [SG]

**International Report on Patentability (IPRP) Chapter II of the PCT:**

Not available

**(81) Designated States:**

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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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

European Patent Office (EPO) : 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

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Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

**Declarations:**

Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America