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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
17 November 2011 (17.11.2011)

PCT

(10) International Publication Number
WO 2011/143415 A1

(51) International Patent Classification:
A61K 35/12 (2006.01)

(21) International Application Number:
PCT/US2011/036235

(22) International Filing Date:
12 May 2011 (12.05.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/334,001 12 May 2010 (12.05.2010) US
61/440,617 8 February 2011 (08.02.2011) US

(71) Applicant *(for all designated States except US)*: **ABT HOLDING COMPANY** [US/US]; 3201 Carnegie Avenue, Cleveland, OH 44115 (US).

(72) Inventor; and
(75) Inventor/Applicant *(for US only)*: **MAYS, Robert, W.** [US/US]; 3256 Chalfant Road, Shaker Heights, OH 44120 (US).

(74) Agent: **BROWN, Anne**; Tarolli, Sundheim, Covell & Tummino, LLP, 1300 East Ninth Street, Suite 1700, Cleveland, OH 44114 (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, 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, IS, JP, KE, KG, KM, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

WO 2011/143415 A1

(54) **Title**: MODULATION OF SPLENOCYTES IN CELL THERAPY

(57) **Abstract**: The invention provides methods for treating pathological conditions associated with an undesirable inflammatory component. The invention is generally directed to reducing inflammation by administering cells that have one or more of the following effects in an injured subject: interact with splenocytes, preserve splenic mass, increase proliferation of CD^{4+} and CD^{8+} T-cells, increase IL-4 and IL-10, decrease IL-6 and IL-1β, and increase M2:M1 macrophage ratio at the site of injury. The invention is also directed to drug discovery methods to screen for agents that modulate the ability of the cells to have these effects. The invention is also directed to cell banks that can be used to provide cells for administration to a subject, the banks comprising cells having desired potency for achieving these effects.