



(51) International Patent Classification:
A61K 39/015 (2006.01)

(21) International Application Number:
PCT/US2015/028890

(22) International Filing Date:
1 May 2015 (01.05.2015)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/987,834 2 May 2014 (02.05.2014) US
62/016,981 25 June 2014 (25.06.2014) US

(71) Applicant: SANARIA INC. [US/US]; 9800 Medical Center Drive, Rockville, Maryland 20850-6395 (US).

(72) Inventors: EAPPEN, Abraham G.; c/o Sanaria Inc., 336 Bon Air Center, Suite 113, Greenbrae, California 94904 (US). HOFFMAN, Stephen L.; 336 Bon Air Center, Suite 113, Greenbrae, California 94904 (US).

(74) Agents: ELLISON, Eldora L. et al.; Sterne, Kessler, Goldstein & Fox P.L.L.C., 1100 New York Avenue, N.W., Washington, District of Columbia 20005 (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, 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, ST, 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))

(54) Title: INFECTIOUS PLASMODIUM SPOROZOITES GROWN IN VITRO

(57) Abstract: The application is directed to in vitro-reared Plasmodium sporozoites of human host range wherein sporogony from gametocyte stage to sporozoite stage is external to mosquitoes, and methods of producing the same. Provided herein are in vitro-reared infectious Plasmodium sporozoites (SPZ) of human host range, particularly *P. falciparum*, *P. vivax*, *P. ovale*, *P. malariae*, and *P. knowlesi*, wherein sporogony from gametocyte stage to sporozoite stage is external to mosquitoes, and methods of producing the same.



WO 2015/168620 A1