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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 November 2008 (27.11.2008)

PCT

(10) International Publication Number
WO 2008/143878 A1

(51) International Patent Classification:
A61K 39/395 (2006.01)

(21) International Application Number:
PCT/US2008/006156

(22) International Filing Date: 14 May 2008 (14.05.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/924,422	14 May 2007 (14.05.2007)	US
60/924,832	1 June 2007 (01.06.2007)	US
60/935,005	20 July 2007 (20.07.2007)	US
61/064,612	14 March 2008 (14.03.2008)	US

(71) Applicants *(for all designated States except US)*: **MEDIMMUNE, LLC** [US/US]; One Medimmune Way, Gaithersburg, MD 20878 (US). **BIOWA, INC.** [US/US]; Princeton Commerce Center, 29 Emmons Drive, Suite C-10, Princeton, NJ 08540 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **KOIKE, Masamichi** [JP/US]; 32 Ginnie Lane, West Windsor, NJ 08550 (US). **SPITALNY, George, L.** [US/US]; 2321 Lake Shore Drive, Yardley, PA 19067 (US). **WHEELER, Alistair** [GB/US]; 268 Whitney Street, Northborough, MA 01532 (US). **WHITE, Barbara** [US/US]; 3031 Drummond Drive, Finksburg, MD 21048 (US).

(74) Agents: **PENN, Michael** et al.; Medimmune, LLC, One Medimmune Way, Gaithersburg, MD 20878 (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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US (patent), UZ, VC, VN, ZA, ZM, ZW.

(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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,

[Continued on next page]

(54) Title: METHODS OF REDUCING EOSINOPHIL LEVELS

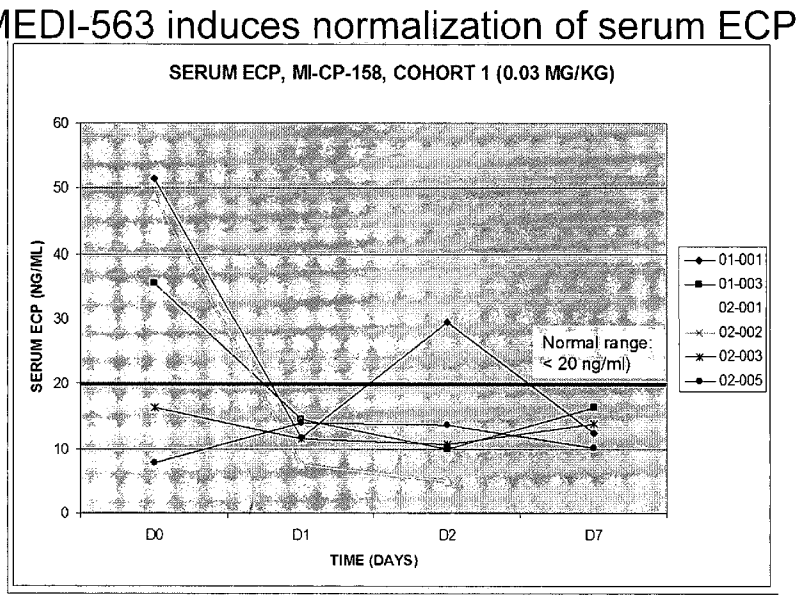


Fig. 1

(57) Abstract: The present invention relates to a method of reducing the numbers of eosinophils in a human subject comprising administration to a subject an IL-5R binding molecule that comprises (a) a region that specifically binds to the IL-5R and (b) an immunoglobulin Fc region. In a specific embodiment, a method of the invention reduces the number of eosinophils in blood, bone marrow, gastrointestinal tract (e g, esophagus, stomach, small intestine and colon), or lung.

WO 2008/143878 A1

NO, 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*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

— *with sequence listing part of description published separately in electronic form and available upon request from the International Bureau*