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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 June 2009 (11.06.2009)

PCT

(10) International Publication Number
WO 2009/073533 A3

(51) International Patent Classification:
A61K 47/48 (2006.01) *A61P 35/00* (2006.01)

(21) International Application Number:
PCT/US2008/084923

(22) International Filing Date:
26 November 2008 (26.11.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/991,693 30 November 2007 (30.11.2007) US

(71) Applicant *(for all designated States except US)*: **MEDAREX, INC.** [US/US]; 707 State Road, Princeton, NJ 08540-1437 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **TERRETT, Jonathan, A.** [GB/US]; 521 Cottonwood Drive, Milpitas, CA 95035 (US). **CARDARELLI, Josephine, M.** [US/US]; 521 Cottonwood Drive, Milpitas, CA 95035 (US). **RAO-NAIK, Chetana** [US/US]; 521 Cottonwood Drive, Milpitas, CA 95035 (US). **CHEN, Bingliang** [US/US]; 521 Cottonwood Drive, Milpitas, CA 95035 (US). **KING, David, J.** [GB/US]; 8875 Costa Verde Blvd. # 412, San Diego, CA 92122 (US).

(74) Agents: **MURPHY, Anina, D.** et al.; Medarex, Inc., 521 Cottonwood Drive, Milpitas, CA 95035 (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, ST, SV, SY, 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, 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, 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 (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))*

— *with sequence listing part of description (Rule 5.2(a))*

[Continued on next page]

(54) Title: ANTI-B7H4 MONOCLONAL ANTIBODY-DRUG CONJUGATE AND METHODS OF USE

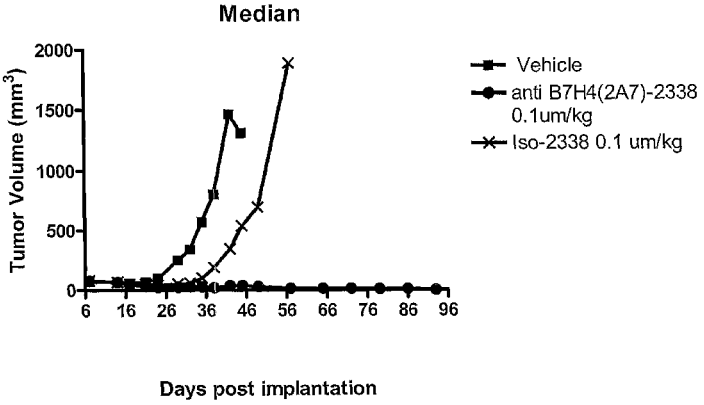

Figure 21

(57) Abstract: The present disclosure provides isolated monoclonal antibodies, particularly human monoclonal antibodies that specifically bind to B7H4 with high affinity. Nucleic acid molecules encoding the antibodies of this disclosure, expression vectors, host cells and methods for expressing the antibodies of this disclosure are also provided, hnmunoconjugates, including antibody-drug conjugates, bispecific molecules and pharmaceutical compositions comprising the antibodies of this disclosure are also provided. This disclosure also provides methods for treating cancer.

WO 2009/073533 A3

WO 2009/073533 A3

(88) Date of publication of the international search report:
26 November 2009