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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 November 2005 (24.11.2005)

PCT

(10) International Publication Number
WO 2005/111077 A3

(51) International Patent Classification[7]: C07K 16/22, A61K 39/395

(21) International Application Number:
PCT/US2005/011786

(22) International Filing Date: 7 April 2005 (07.04.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/560,781	7 April 2004 (07.04.2004)	US
60/620,654	19 October 2004 (19.10.2004)	US

(71) Applicants *(for all designated States except US)*: **RINAT NEUROSCIENCE CORP.** [US/US]; 230 E. Grand Ave., South San francisco, CA 94080 (US). **REGENTS OF THE UNIVERSITY OF MINNESOTA** [US/US]; 450 McNamara Alumni Center, 200 Oak Street-SE, Minneapolis, MN 55455-2070 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **SHELTON, David, L.** [US/US]; 5845 Clover Drive, Oakland, CA 94618 (US). **MANTYH, Patrick, William** [US/US]; 6413 Interlachen Boulevard, Edina, MN 55436 (US).

(74) Agents: **ZHOU, Jie** et al.; Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA 94304-1018 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IS, IT, LT, LU, MC, NL, 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*

(88) Date of publication of the international search report:
20 April 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS FOR TREATING BONE CANCER PAIN BY ADMINISTERING A NERVE GROWTH FACTOR ANTAGONIST

(57) Abstract: The invention features methods and compositions for preventing or treating bone cancer pain including cancer pain associated with bone metastasis by administering an antagonist of nerve growth factor (NGF). The NGF antagonist may be an anti-NGF (such as anti-hNGF) antibody that is capable of binding hNGF.

WO 2005/111077 A3