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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
2 April 2009 (02.04.2009)

PCT

(10) International Publication Number
WO 2009/042962 A9

(51) International Patent Classification:
C12N 9/64 (2006.01) *A61P 7/04* (2006.01)

(21) International Application Number:
PCT/US2008/078014

(22) International Filing Date:
26 September 2008 (26.09.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/976,343 28 September 2007 (28.09.2007) US
61/090,574 20 August 2008 (20.08.2008) US

(71) Applicant *(for all designated States except US)*: **PORTOLA PHARMACEUTICALS, INC.** [US/US]; 270 E. Grand Avenue, Suite 22, South San Francisco, California 94080 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **LU, Genmin** [CN/US]; 1439 El Camino Real, Apt. #9, Burlingame, California 94010 (US). **PHILLIPS, David R.** [US/US]; 520 Harvard Road, San Mateo, California 94402 (US). **ANDRE, Patrick** [FR/US]; 950 N. Humboldt Street, San Mateo, California 94401 (US). **SINHA, Uma** [US/US]; 808 Junipero Serra Boulevard, San Francisco, California 94127 (US).

(74) Agents: **TANNER, Lorna L.** et al.; Swiss Tanner, P.C., Four Main Street, Suite 100, P.O. Box 1749, Los Altos, California 94022 (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))*
— *with sequence listing part of description (Rule 5.2(a))*

(88) Date of publication of the international search report:
4 June 2009

(48) Date of publication of this corrected version:
11 September 2009

(15) Information about Correction:
see Notice of 11 September 2009

(54) Title: ANTIDOTES FOR FACTOR XA INHIBITORS AND METHODS OF USING THE SAME

(57) Abstract: The present invention relates antidotes to anticoagulants targeting factor Xa. The antidotes are factor Xa protein derivatives that bind to the factor Xa inhibitors thereby substantially neutralizing them but do not assemble into the prothrombinase complex. The derivatives describe herein lack or have reduced intrinsic coagulant activity. Disclosed herein are methods of stopping or preventing bleeding in a patient that is currently undergoing anticoagulant therapy with a factor Xa inhibitor.

WO 2009/042962 A9