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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number
WO 2004/112696 A2

(51) International Patent Classification[7]: A61K

(21) International Application Number:
PCT/US2004/016117

(22) International Filing Date: 20 May 2004 (20.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

| | | |
|---|---|---|
| 60/472,299 | 20 May 2003 (20.05.2003) | US |
| 60/472,008 | 20 May 2003 (20.05.2003) | US |
| 60/472,188 | 20 May 2003 (20.05.2003) | US |
| 60/472,144 | 20 May 2003 (20.05.2003) | US |
| 60/472,282 | 20 May 2003 (20.05.2003) | US |

(71) Applicant *(for all designated States except US)*: **Erimos Pharmaceutical LLP** [US/US]; 9600 Bellaire Boulevard, Suite 228, Houston, Texas 77036 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **HELLER, Jonathan** [US/US]; 1406 Duplin Road, Raleigh, North Carolina 27607 (US). **FRAZER, Neil** [GB/US]; 109 Greyfriars Lane, Cary, North Carolina 27511 (US). **COLLINS, Amy L. Tsui** [US/US]; 5955 Girvin Drive, Oakland, California 94611 (US).

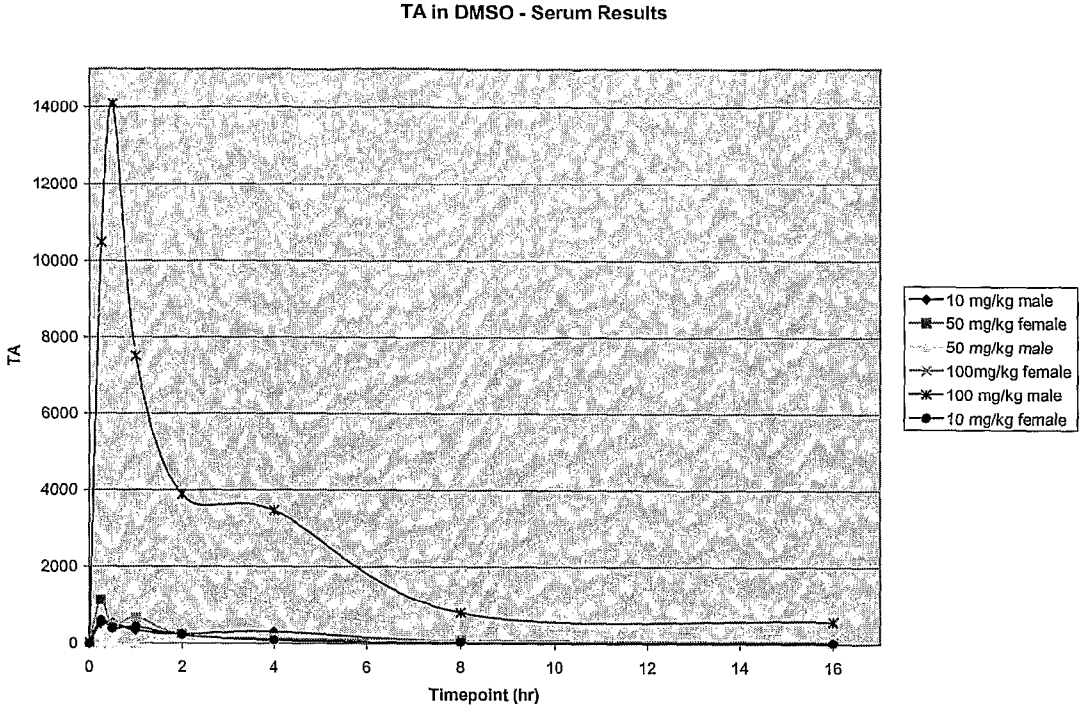
(74) Agents: **ROBINS, Roberta** et al.; ROBINS & PASTERNAK LLP, 1731 Embarcadero Road, Suite 230, Palo Alto, California 94303 (US).

(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, 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, 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,

*[Continued on next page]*

(54) Title: METHODS AND COMPOSITIONS FOR DELIVERY OF CATECHOLIC BUTANES FOR TREATMENT OF DISEASES




(57) Abstract: The present invention provides kits, methods and compositions for the treatment of diseases, such as, for example, non-cancer proliferative diseases, neurodegenerative diseases, diabetes and hypertension. The compositions herein contain a substantially pure preparation of at least one catecholic butane, including, for example, NDGA compounds in a pharmaceutically acceptable carrier or excipient by various routes of administration.

WO 2004/112696 A2

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, IT, 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:**

— *without international search report and to be republished upon receipt of that report*

*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.*