

(12) International Application Status Report

Received at International Bureau: 15 August 2017 (15.08.2017)

Information valid as of: 20 November 2018 (20.11.2018)

Report generated on: 16 July 2019 (16.07.2019)

(10) Publication number:

WO2019/007447

(43) Publication date:

10 January 2019 (10.01.2019)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/CY2017/000002

(22) Filing Date:

05 July 2017 (05.07.2017)

(25) Filing language:

English (EN)

(51) International Patent Classification:

A61K 47/54 (2017.01); C07D 311/76 (2006.01)

(71) Applicant(s):

E.P.O.S IASIS RESEARCH AND DEVELOPMENT LIMITED [CY/CY]; 5 Karyatidon Street Suite 202, Nicosia 2028 (CY) (*for all designated states*)

(72) Inventor(s):

ODYSSEOS, Andreani; 3, Saint Theophanous Street Archangelos Nicosia 2055 (CY)

EVDOKIOU, Andreas; Discipline of Surgery, Faculty of Health Sciences, School of Medicine, The University of Adelaide North Terrace Adelaide, South Australia 5005 (AU)

KERAMIDAS, Anastasios; Department of Chemistry University of Cyprus 1, Panepistimiou Avenue Nicosia 2109 (CY)

(54) Title (EN): MULTIFUNCTIONAL CONJUGATES

(54) Title (FR): CONJUGUÉS MULTIFONCTIONNELS

(57) Abstract:

(EN): The present invention provides compounds suitable for use in the treatment of conditions where it is beneficial to halt bone loss and kill cancer cells, particularly in metastases to and primary tumours in the bone and surrounding tissues. Consequently the present invention provides compounds comprising a bisphosphonate moiety linked to a phytochemical, pharmaceutical compositions thereof and methods of treatment of bone diseases and/or proliferative disorders.

(FR): La présente invention concerne des composés appropriés pour être utilisés dans le traitement d'affections où il est avantageux d'arrêter la perte osseuse et de tuer des cellules cancéreuses, en particulier en cas de métastases et de tumeurs primaires affectant l'os et les tissus environnants. Par conséquent, la présente invention concerne des composés comprenant une fraction bisphosphonate liée à un agent phytochimique, des compositions pharmaceutiques à base de ceux-ci et des méthodes de traitement de maladies osseuses et/ou d'affections prolifératives.

International search report:

Received at International Bureau: 26 March 2018 (26.03.2018) [EP]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate

Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America