



(43) International Publication Date
13 December 2012 (13.12.2012)

(10) International Publication Number
WO 2012/169892 A3

- (51) **International Patent Classification:**
A61K 38/46 (2006.01) *A61P 13/12* (2006.01)
- (21) **International Application Number:**
PCT/NL2012/050400
- (22) **International Filing Date:**
8 June 2012 (08.06.2012)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
11169143.2 8 June 2011 (08.06.2011) EP
- (71) **Applicant** (for all designated States except US): **AM-PHARMA B.V.** [NL/NL]; Rumpsterweg 6, NL-3981 AK Bunnik (NL).
- (72) **Inventors; and**
- (75) **Inventors/Applicants** (for US only): **AREND, Jacques Salomon Robert** [NL/NL]; Kort Galgewater 12-a, NL-2312 BR Leiden (NL). **VAN DEN BERG, Erik Jan** [NL/NL]; Molhuysensingel 35, NL-5262 CD Vught (NL). **RAABEN, Willem** [NL/NL]; Kaasjeskruid 2, NL-3824 NW Amersfoort (NL).
- (74) **Agent:** **JANSEN, C., M.**; Johan de Wittlaan 7, NL-2517 JR Den Haag (NL).
- (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, CL, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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.

- (84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (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), 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))

- (88) **Date of publication of the international search report:**
14 March 2013

(54) **Title:** THE USE OF ALKALINE PHOSPHATASE FOR PRESERVING RENAL FUNCTION

(57) **Abstract:** The invention relates to the field of medicine and in particular to means and methods for preserving renal function after a treatment with a risk of reducing renal function. The present invention also relates to means and methods for shortening the duration of renal replacement therapy, increasing the creatinine clearance and decreasing the adverse effects of medicaments.



WO 2012/169892 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/NL2012/050400

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61K38/46 A61P13/12
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP 1 985 697 A1 (AM PHARMA B V [NL]) 29 October 2008 (2008-10-29) page 2, line 44 - line 56 page 9, line 22 - line 36 -----	1,3 2,4-23, 29
X	EP 1 952 823 A1 (AM PHARMA B V [NL]) 6 August 2008 (2008-08-06) page 4, line 22 - page 6, line 50; claims 1-11 page 7, line 33 - line 49 page 8, line 55 page 9, line 29 - line 41 -----	1-29
X A	US 2008/044397 A1 (KISS ZOTAN [US] KISS ZOLTAN [US]) 21 February 2008 (2008-02-21) paragraph [0006] - paragraph [0010]; examples 5,7 ----- -/-	24,25 26,27,29



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

20 December 2012

Date of mailing of the international search report

15/01/2013

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Markopoulos, Etyxia

INTERNATIONAL SEARCH REPORT

International application No

PCT/NL2012/050400

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JACOB SONY ET AL: "Pharmacotherapy of atrial fibrillation: a pathophysiological perspective and review.", AMERICAN JOURNAL OF THERAPEUTICS MAY 2011, vol. 18, no. 3, May 2011 (2011-05), pages 241-260, XP009165824, ISSN: 1536-3686 the whole document -----	28

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NL2012/050400

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-23(completely); 29(partially)

use of alkaline phosphatase for preserving renal function
after a treatment with a risk of reducing renal function

2. claims: 24-27(completely); 29(partially)

use of alkaline phosphatase for decreasing the amount of
(co)medication or adverse effects of (co)medication

3. claim: 28

use of alkaline phosphatase for preventing and/or treating
atrial fibrillation

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/NL2012/050400

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1985697	A1	29-10-2008	AU 2008244716 A1 06-11-2008
			CA 2685405 A1 06-11-2008
			CN 101688193 A 31-03-2010
			EP 1985697 A1 29-10-2008
			EP 2155866 A2 24-02-2010
			JP 2010524496 A 22-07-2010
			US 2010143323 A1 10-06-2010
			WO 2008133511 A2 06-11-2008

EP 1952823	A1	06-08-2008	AU 2008211829 A1 07-08-2008
			CA 2676968 A1 07-08-2008
			CN 101678085 A 24-03-2010
			EP 1952823 A1 06-08-2008
			EP 2114441 A1 11-11-2009
			JP 2010516808 A 20-05-2010
			US 2010111923 A1 06-05-2010
			WO 2008094037 A1 07-08-2008

US 2008044397	A1	21-02-2008	NONE
