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(71) Applicant *(for all designated States except US)*: **SIRION THERAPEUTICS, INC.** [US/US]; 11408 Sorrento Valley Road, San Diego, CA 92121 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **MATA, Nathan, L.** [US/US]; 7708 Marker Road, San Diego, CA 92130 (US). **PHAN, Kim, B.** [US/US]; 17009 New Rochelle Way, San Diego, CA 92127 (US). **BUI, Tam, V.** [US/US]; 31232 Flying Cloud Drive, Laguna Niguel, CA 92677 (US). **HADDACH, Mustapha** [US/US]; 14744 Via Mantova, San Diego, CA 92127 (US).

(74) Agents: **HOSTETLER. Michael, J.** et al.; Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, CA 94304-1050 (US).

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14 May 2009

(54) Title: METHODS AND COMPOUNDS FOR TREATING RETINOL-RELATED DISEASES

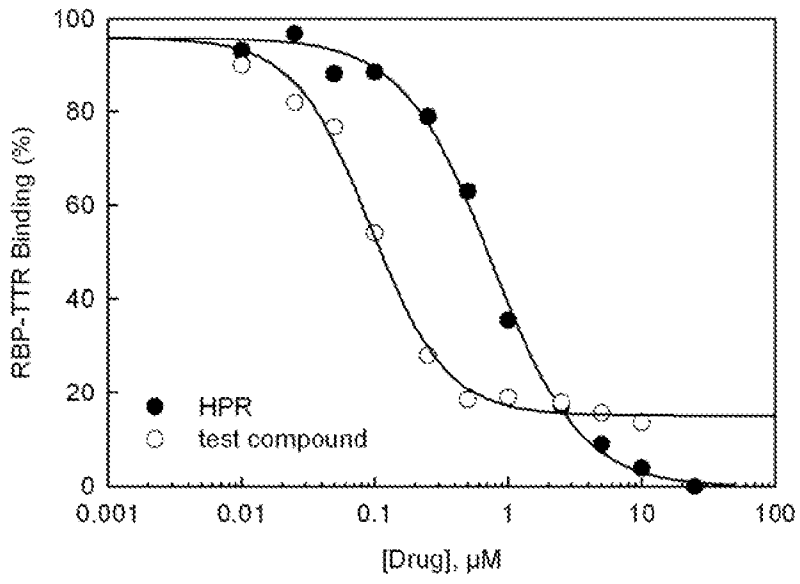


FIG. 1

(57) Abstract: Compounds that reduce serum retinol levels are used to treat ophthalmic conditions associated with the overproduction of waste products that accumulate during the course of the visual cycle. We describe methods, compounds, and compositions to treat, for example, the macular degenerations and dystrophies or to alleviate symptoms associated with such ophthalmic conditions.

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

A61K 31/167(2006.01)i, A61K 31/21(2006.01)i, A61K 31/203(2006.01)i, A61P 27/02(2006.01)i

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)

IPC as above

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)

eKIPASS(KIPO internal), STN(CA plus)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2005-116010 A1 (MERCK FROSST CANADA LTD.) 08 Dec 2005 See the table 1,4 and page 64-65	1-18,56-61,63-74
A	JP 57-007480 A (SANKYO CO LTD) 14 Jan 1982 See the page 620	1-18,56-61,63-74
A	SWAPNIL S. MOHILE et al., "Ionic liquids: efficient additives for Candida rugosa lipase-catalysed enantioselective hydrolysis of butyl 2-(4-chlorophenoxy)propionate", Journal of Molecular Catalysis B: Enzymatic, 1 September 2004, Vol. 30, Issues 5-6, Pages 185-188 See the scheme 1	1-18,56-61,63-74
A	US 20060140953 A1 (NEWELL et al.) 20060629 See the page 16	1-18,56-61,63-74

☐ 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 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	Date of mailing of the international search report
24 MARCH 2009 (24.03.2009)	**24 MARCH 2009 (24.03.2009)**

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea

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Authorized officer

YEO, Kyeong Sook

Telephone No. 82-42-481-5612

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/076499

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.: 19-55,62
because they relate to subject matter not required to be searched by this Authority, namely:
Claims 19-55,62 pertain to methods for treatment (or screening) of the human or animal body by therapy/diagnostic methods, and thus relate to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulation under the PCT, to search.

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:

1. ☐ As all required addtional 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 fee, this Authority did not invite payment of any additional fee.

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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2008/076499

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2005-116010 A1	08.12.2005	None	
JP 57-007480 A	14.01.1982	None	
US 2006-140953 A1	29.06.2006	None	