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Published:

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- 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))
- with information concerning request for restoration of the right of priority in respect of one or more priority claims (Rules 26bis.3 and 48.2(b)(vii))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(88) Date of publication of the international search report:

27 February 2025 (27.02.2025)

(54) Title: A CHOLECYSTOKININ (CCK) ANTAGONIST FOR USE IN THE PREVENTION AND/OR TREATMENT OF A VESTIBULAR DISEASE OR DISORDER

(57) Abstract: The present invention relates to a cholecystokinin (CCK) antagonist for use in the prevention and/or treatment of a vestibular disease or disorder selected from motion sickness, Meniere's disease, vestibular migraine, disembarkment sickness, labyrinthitis, vestibular neuronitis, benign paroxysmal positional vertigo, and labyrinthine infarction. It also relates to a drug combination comprising a CCK antagonist and a GLP1 receptor agonist, to compositions comprising this combination, and to a CCK antagonist for use in the treatment and/or prevention of adverse side effects associated to a GLP1 receptor agonist, in a subject undergoing therapy with a GLP1 receptor agonist.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2024/072753

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.:

1 - 15

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

International application No
PCT/EP2024/072753

A. CLASSIFICATION OF SUBJECT MATTER					
INV.	A61K31/195	A61K31/404	A61K31/41	A61K31/425	A61K31/496
	A61K31/5513	A61K38/03	A61P1/08	A61P27/00	
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					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category*	Citation of document, with indication, where appropriate, of the relevant passages				Relevant to claim No.
X	WO 2005/011665 A1 (ARAKIS LTD [GB]; BANNISTER ROBIN MARK [GB]; ROTHUL ALAN [GB]) 10 February 2005 (2005-02-10)				1,5 - 15
Y	page 4, first paragraph; Claims 10-15; claims 1,2 page 4, paragraph 2 page 1, line 5 - line 10				2 - 4
Y	US 2004/198723 A1 (GIBSON KAREN [GB]) 7 October 2004 (2004-10-07) paragraphs [0013], [0014], [0018], [0019] page 1, line 8 claim 6 page 4, line 8 page 4, lines 13-17, page 4, line 14 paragraph 3				2,4
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☒ 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			"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		
"E" earlier application or patent but published on or after the international filing date			"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		
"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)			"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		
"O" document referring to an oral disclosure, use, exhibition or other means			"&" document member of the same patent family		
"P" document published prior to the international filing date but later than the priority date claimed					
Date of the actual completion of the international search			Date of mailing of the international search report		
22 November 2024			28/01/2025		
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 Albayrak, Timur		

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2024/072753

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	MACHUCA-MÁRQUEZA PABLO ET AL: "Vestibular CCK signaling drives motion sickness-like behavior in mice", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, 17 October 2023 (2023-10-17), pages 1-11, XP093227181, Retrieved from the Internet: URL:https://batavia.internal.epo.org/citenpl/prod/web/citenpl/citenpl.html?dossierId=2860002&dossierNumber=SA2114141&drawerId=30489150> page 1, paragraphs 2 and 3 -----	1 - 20
T	Anonymous: "HIGHLIGHTS OF PRESCRIBING INFORMATION These highlights do not include all the information needed to use OZEMPIC safely and effectively. See full prescribing information for OZEMPIC. OZEMPIC (semaglutide) injection, for subcutaneous use Initial U.S. Approval: 2017 -----", , 1 December 2017 (2017-12-01), pages 1-44, XP093227219, Retrieved from the Internet: URL:https://www.accessdata.fda.gov/drugsatfda_docs/label/2017/2096371b1.pdf Table 1 on page 7 pages 7,8 Page 25, middle of the page -----	1 - 20
Y	FRANCIS S. WILLARD ET AL: "Small Molecule Drug Discovery at the Glucagon-Like Peptide-1 Receptor", EXPERIMENTAL DIABETES RESEARCH, vol. 89, no. 18, 1 January 2012 (2012-01-01), pages 8641-9, XP055118580, ISSN: 1687-5214, DOI: 10.1155/2012/709893 page 2, section 2.2 -----	3

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2024/072753

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2005011665 A1	10-02-2005	NONE	
US 2004198723 A1	07-10-2004	NONE	

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-15

A cholecystokinin antagonist for use in treating and/or preventing of a vestibular disease or disorder selected from motion sickness, Meniere's disease, vestibular migraine, disembarkment sickness, labyrinthitis, vestibular neuronitis, benign paroxysmal positional vertigo, and labyrinthine infarction

2. claims: 16-20

A combination comprising a cholecystokinin antagonist and a glucagon-like-peptide-1 receptor agonist.
Single pharmaceutical compositions comprising therapeutically effective amounts of a cholecystokinin antagonist and a glucagon-like-peptide-1 receptor agonist.
A kit comprising a first pharmaceutical composition comprising a therapeutically effective amount of a cholecystokinin antagonist together with one or more pharmaceutically acceptable vehicles, adjuvants, diluents or excipients; and
a second pharmaceutical composition comprising a therapeutically effective amount of a glucagon-like-peptide-1 receptor agonist together with one or more pharmaceutically acceptable vehicles, adjuvants, diluents or excipients,
whereby the first and second pharmaceutical compositions are separate compositions.
A cholecystokinin antagonist for use in the treatment and/or prevention of adverse side effects associated to a glucagon-like-peptide-1 receptor agonist, in a subject undergoing therapy with a glucagon-like-peptide-1 receptor agonist.
