

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 01-3363-WO-1	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2020/062526	International filing date (<i>day/month/year</i>) 6 May 2020 (06-05-2020)	(Earliest) Priority Date (<i>day/month/year</i>) 10 May 2019 (10-05-2019)
Applicant BOEHRINGER INGELHEIM VETMEDICA GMBH		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 5 sheets.

☒

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of:

☒

the international application in the language in which it was filed

☐

a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐

This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6**bis**(a)).

c. ☒

With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐

Certain claims were found unsearchable (See Box No. II)

3. ☐

Unity of invention is lacking (see Box No III)

4. With regard to the **title**,

☒

the text is approved as submitted by the applicant

☐

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒

the text is approved as submitted by the applicant

☐

the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐

as suggested by the applicant

☐

as selected by this Authority, because the applicant failed to suggest a figure

☐

as selected by this Authority, because this figure better characterizes the invention

b. ☒

none of the figures is to be published with the abstract

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International application No.

PCT/EP2020/062526

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.c of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of a sequence listing:
- a. ☒ forming part of the international application as filed:
- ☒ in the form of an Annex C/ST.25 text file.
- ☐ on paper or in the form of an image file.
- b. ☐ furnished together with the international application under PCT Rule 13~~ter~~.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
- c. ☐ furnished subsequent to the international filing date for the purposes of international search only:
- ☐ in the form of an Annex C/ST.25 text file (Rule 13~~ter~~.1(a)).
- ☐ on paper or in the form of an image file (Rule 13~~ter~~.1(b) and Administrative Instructions, Section 713).
2. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

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International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. A61K39/12 C07K14/005
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 C07K

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, 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	US 2019/046634 A1 (VAN SANTEN VICKY L [US] ET AL) 14 February 2019 (2019-02-14) claims 1-21; sequences 1, 5, 6, 41, 57 -----	1-22, 24-28 23
X	US 8 828 407 B2 (BRITTON PAUL [GB]; BICKERTON ERICA [GB] ET AL.) 9 September 2014 (2014-09-09) claims 1-21; sequence 1 -----	1-28
X	WO 2014/177873 A1 (PIRBRIGHT INST [GB]) 6 November 2014 (2014-11-06) claims 1-18; sequence 1 -----	1-28
X A	WO 2004/092360 A2 (CHIRON CORP [US]; RAPPUOLI RINO [IT] ET AL.) 28 October 2004 (2004-10-28) claims 1-120 ----- -/-	1-22 23-28



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

16 June 2020

Date of mailing of the international search report

24/06/2020

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International application No

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 86/05806 A1 (NAT RES DEV [GB])	1-22
A	9 October 1986 (1986-10-09) claims 1-18 -----	23-28

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2020/062526

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2019046634	A1	14-02-2019	NONE
US 8828407	B2	09-09-2014	BR 112012000281 A2 09-08-2016 CN 102574897 A 11-07-2012 EP 2451827 A1 16-05-2012 ES 2589057 T3 08-11-2016 HU E029073 T2 28-02-2017 PL 2451827 T3 30-12-2016 US 2012177675 A1 12-07-2012 WO 2011004146 A1 13-01-2011 ZA 201200200 B 27-03-2013
WO 2014177873	A1	06-11-2014	EP 2992005 A1 09-03-2016 ES 2714689 T3 29-05-2019 PL 2992005 T3 31-07-2019 TR 201902131 T4 21-03-2019 US 2016060303 A1 03-03-2016 WO 2014177873 A1 06-11-2014
WO 2004092360	A2	28-10-2004	AU 2004230485 A1 28-10-2004 AU 2009201478 A1 14-05-2009 CA 2522379 A1 28-10-2004 EP 1618127 A2 25-01-2006 ES 2529736 T3 25-02-2015 HK 1084132 A1 23-10-2015 NZ 543467 A 31-07-2008 US 2006257852 A1 16-11-2006 WO 2004092360 A2 28-10-2004
WO 8605806	A1	09-10-1986	DE 3650289 D1 11-05-1995 DE 3650289 T2 10-08-1995 EP 0218625 A1 22-04-1987 US 5032520 A 16-07-1991 WO 8605806 A1 09-10-1986