Title: USE OF FOLLICULAR GONADOTROPIN RELEASING PEPTIDE AS A THERAPEUTIC AGENT IN THE TREATMENT OF STREPTOCOCCUS PNEUMONIAE INFECTION

Abstract: The present invention is directed to the use of the peptide compound Thr-Asp-Thr-Ser-Asp-Ala-Thr-Asp-Asn-OH as a therapeutic agent for the prophylaxis and/or treatment of cancer, autoimmune diseases, fibrotic diseases, inflammatory diseases, neurodegenerative diseases, infectious diseases, lung diseases, heart and vascular diseases and metabolic diseases. Moreover the present invention relates to pharmaceutical compositions preferably in form of a lyophilisate or liquid buffer solution or artificial mother milk formulation or mother milk substitute containing the peptide Thr-Asp-Thr-Ser-His-Asp-Gln-Asp-His-Pro-Thr-Phe-Asn-OH optionally together with at least one pharmaceutically acceptable carrier, cryoprotectant, lyoprotectant, excipient and/or diluent.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

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<th>INV.</th>
<th>A61K38/10</th>
<th>A61P31/04</th>
<th>A61P3/00</th>
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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 practical search terms used)

- EPO-Internal
- BIOSIS
- WPI Data
- EMBASE
- CHEM ABS Data
- Sequence Search

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
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<tr>
<th>Category</th>
<th>Citation of document with indication where appropriate of the relevant passages</th>
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<td>X</td>
<td>LI C H ET AL: &quot;GONADOTROPIN-RELEASING PEPTIDE FROM HUMAN FOLLICULAR FLUID ISOLATION CHARACTERIZATION AND CHEMICAL SYNTHESIS&quot; PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol. 84, no. 4, 1987, pages 959-962, XP002534811 ISSN: 0027-8424 abstract ----- -/-</td>
<td>1,4-10</td>
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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
  - "E" earlier document 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)
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- "Y" document of particular relevance to 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
- "Q" document member of the same patent family

**Date of the actual completion of the international search**

1 July 2009

**Date of mailing of the international search report**

15/07/2009

Name and mailing address of the ISA/

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

Authorized officer

Vandenbogaerde, Ann
<table>
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<td>RAMASHARMA K ET AL: &quot;HUMAN FOLLICULAR GONADOTROPIN RELEASING PEPTIDE ANALOGS EVALUATION OF BIOLOGICAL IN-VITRO AND IMMUNOLOGICAL ACTIVITY&quot; INTERNATIONAL JOURNAL OF PEPTIDE AND PROTEIN RESEARCH, vol. 32, no. 6, 1988, pages 419-424, XP009119044 ISSN: 0367-8377 abstract</td>
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<td>WO 03/087147 A (IMP COLLEGE INNOVATIONS LTD [GB]; BROWN JEREMY STUART [GB]) 23 October 2003 (2003-10-23) claims 4,22</td>
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