The present invention relates generally to the field of prophylaxis and therapy of metastatic cancer. In particular there is provided a protein; Ras Homology gene family, member C (RhoC) or peptide fragments thereof that are capable of eliciting anti-cancer immune responses. Specifically, the invention relates to use of RhoC or peptides derived thereof or RhoC specific T-cells for treatment of metastatic cancer. Hence, the invention in one aspect relates to RhoC specific T-cells adoptively transferred or induced in vivo by vaccination as a treatment of cancer. Also the use of RhoC and immunogenic peptide fragments hereof in cancer treatment, diagnosis and prognosis is provided.
## INTERNATIONAL SEARCH REPORT

**A. CLASSIFICATION OF SUBJECT MATTER**

**INV.** A61K39/00 C07K7/00 A61K38/00

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 practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, Sequence Search

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
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<th>Category</th>
<th>Citation of document, with indication, where appropriate of the relevant passages</th>
<th>Relevant to claim</th>
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<td>X</td>
<td>WO 99/62932 A (UNIV VANDERBILT [US]) 9 December 1999 (1999-12-09) see the whole document</td>
<td>1-3</td>
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| X        | Further documents are listed in the continuation of Box C | X | 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)
- "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
- "M" document member of the same patent family

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

4 March 2009

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

29/06/2009

**Name and mailing address of the ISA/Authorized officer**

European Patent Office P B 5818 Patentlaan 2 NL - 2280 HV RIJSWIJK Tel (+31-70) 340-2030 Fax (+31-70) 340-3016

Grosskopf, Ruediger

Form POT/ISA/210 (second sheet) (April 2005)
<table>
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<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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</table>
### 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:

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see additional sheet
```

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable 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.:

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see additional sheet(s)
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**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.
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-3, 22-49
   A vaccine composition comprising RhoC or a functional homologue or an immunologically active peptide and an adjuvant for use as a medicament

2. claims: 4-21, 50-59, 73
   An isolated immunogenically active fragment of 18 to 25 consecutive amino acids from RhoC of SEQ ID NO: 1

3. claims: 60-63
   A method for treating a metastatic disease

4. claims: 64-68
   Use of a peptide fragment of RhoC for the treatment of a cancer disease

5. claims: 69-70
   A method of monitoring immunisation

6. claims: 71-72
   RhoC or a functional homologue or an immunologically active peptide thereof for use in prevention of metastatic cancer

7. claims: 74-83
   Isolated T-cells wherein said T-cells are capable of specifically interacting with RhoC or a functional homologue or an immunologically active peptide
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<td>WO 9962932 A</td>
<td>09-12-1999</td>
<td>AU 4415099 A</td>
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<td>CA 2336612 A</td>
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