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(54) Title: COMPOSITIONS AND METHODS FOR ENHANCING THE EFFICACY OF IL-2 MEDIATED IMMUNE RESPONSES

(57) Abstract: Compositions and methods directed to enhancing the effectiveness of IL-2 in stimulating the immune system is disclosed. According to one method, an antagonist directed against the CD25 subunit of the high-affinity IL-2 receptor complex is administered in conjunction with IL-2. The CD25 antagonist may be an anti-CD25 antibody. According to another method, an anti-IL-2 antibody is administered in conjunction with IL-2. In another method, a mutant IL-2 with diminished ability to bind the CD25 subunit of the high-affinity IL-2 receptor complex is administered. In another method, an CD4 antagonist is administered in conjunction with IL-2 in order to stimulate the immune system.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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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 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, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/166163 A1 (GILLIES STEPHEN D [US] GILLIES STEPHEN D [US] ET AL) 4 September 2003 (2003-09-04) page 3 - page 7 claims 1,2,13; figure 1; examples 1,9,11	1-32
X	KAMIMURA DAISUKE ET AL: "IL-2 in vivo activities and antitumor efficacy enhanced by an anti-IL-2 mAb" JOURNAL OF IMMUNOLOGY, vol. 177, no. 1, 1 July 2006 (2006-07-01), pages 306-314, XP002457761 ISSN: 0022-1767 abstract page 306, right-hand column - page 307, left-hand column page 310, left-hand column, last paragraph - page 313	1-32

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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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.
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A	DUMONT F J: "Interleukin-2 family cytokines: Potential for therapeutic immunoregulation" EXPERT OPINION ON THERAPEUTIC PATENTS 2005 UNITED KINGDOM, vol. 15, no. 5, 2005, pages 521-554, XP002457763 ISSN: 1354-3776 pages 529-530 -----	1-32
A	GILLIES S D: "DESIGNING IMMUNOCYTOKINES: GENETICALLY ENGINEERED FUSION PROTEINS FOR TARGETED IMMUNE THERAPY" RECOMBINANT PROTEIN DRUGS, BIRKHAUSER VERLAG, BASEL, CH, 2001, pages 129-147, XP001207632 the whole document ----- -/--	1-32

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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KO YOO-JOUNG ET AL: "Safety, pharmacokinetics, and biological pharmacodynamics of the immunocytokine EMD 273066 (huKS-IL2): results of a phase I trial in patients with prostate cancer." JOURNAL OF IMMUNOTHERAPY (HAGERSTOWN, MD. : 1997) 2004 MAY-JUN, vol. 27, no. 3, May 2004 (2004-05), pages 232-239, XP009091728 ISSN: 1524-9557 the whole document	1-32
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P,X	BOYMAN ONUR ET AL: "Potential use of IL-2/anti-IL-2 antibody immune complexes for the treatment of cancer and autoimmune disease." EXPERT OPINION ON BIOLOGICAL THERAPY DEC 2006, vol. 6, no. 12, December 2006 (2006-12), pages 1323-1331, XP009091775 ISSN: 1744-7682 the whole document -----	1-32

INTERNATIONAL SEARCH REPORT

Information on patent family members

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