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(54) Title: COMBINATION THERAPY FOR HUMAN IMMUNODEFICIENCY VIRUS INFECTION

(57) Abstract: The present invention is directed to combination therapies for treatment of Human Immunodeficiency Virus (HIV) infection comprising administration of a CCR5 antagonist in combination with other therapeutic agents.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. A61K31/496 A61K31/505 A61K31/513 A61K31/536 A61K31/675 A61P31/18		
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		
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, WPI Data, EMBASE, BIOSIS, CHEM ABS Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 635 646 B1 (LAUGHLIN MARK A [US]) 21 October 2003 (2003-10-21) cited in the application	24-45
Y	table II claims 1,13	1-23
Y	SUSMAN E: "HIV PATHOGENESIS AND TREATMENT" IDRUGS, CURRENT DRUGS LTD, GB, vol. 8, no. 10, 1 July 2002 (2002-07-01), pages 813-815, XP008064972 ISSN: 1369-7056 page 814, column 2, paragraph 3 ----- -/--	1-23
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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. *&* document member of the same patent family
Date of the actual completion of the international search 16 June 2008		Date of mailing of the international search report 29/08/2008
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Hedegaard, Anette

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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.
Y	<p>"Atripla Fact Sheet" 12 July 2006 (2006-07-12), pages 1-2" INTERNET CITATION, [Online] 12 July 2006 (2006-07-12), XP002417854 Retrieved from the Internet: URL: http://www.fda.gov/cder/drug/infopage/atripla/factsheet.htm [retrieved on 2007-01-31] page 1, paragraph 1</p>	1-23
A	<p>US 2006/105964 A1 (RAMANATHAN RAGULAN [US] ET AL) 18 May 2006 (2006-05-18) cited in the application claims 1,8-11</p>	1-45
A	<p>US 2006/052595 A1 (AQUINO CHRISTOPHER J [US] ET AL) 9 March 2006 (2006-03-09) cited in the application paragraphs [0002] - [0004], [0051] claim 1</p>	1-45
A	<p>US 2005/261310 A1 (XUE CHU-BIAO [US] ET AL) 24 November 2005 (2005-11-24) cited in the application the whole document</p>	1-45

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6635646	B1	21-10-2003	US 2004076609 A1	22-04-2004
US 2006105964	A1	18-05-2006	NONE	
US 2006052595	A1	09-03-2006	NONE	
US 2005261310	A1	24-11-2005	NONE	