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(54) **Methods of treating inflammatory and autoimmune diseases with natalizumab**

(57) Natalizumab is a safe and efficacious treatment for inflammatory and autoimmune diseases, such as multiple sclerosis, Crohn's Disease, and rheumatoid arthritis. Rare occurrences of progressive multifocal leukoencephalopathy during treatment suggest the possibility that it may be related to natalizumab treatment. Monitor-

ing for JCV and informing caregivers and patients about the manifestations of progressive multifocal leukoencephalopathy can improve the safety of natalizumab therapy.

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EUROPEAN SEARCH REPORT

Application Number
EP 13 17 5987

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	STEINMAN LAWRENCE: "Blocking adhesion molecules as therapy for multiple sclerosis: natalizumab", NATURE REVIEWS. DRUG DISCOVERY, NATURE PUBLISHING GROUP, GB, vol. 4, no. 6, 1 June 2005 (2005-06-01), pages 510-518, XP009123807, ISSN: 1474-1776 * e.g. page 517; the whole document *	1-18	INV. C07K16/28 A61K39/395 G01N33/53 G01N33/68 A61K39/00
Y	LANGER-GOULD ANNETTE ET AL: "Brief report - Progressive multifocal leukoencephalopathy in a patient treated with natalizumab", NEW ENGLAND JOURNAL OF MEDICINE, THE, MASSACHUSETTS MEDICAL SOCIETY, WALTHAM, MA, US, vol. 353, no. 4, 28 July 2005 (2005-07-28), pages 375-381, XP009123696, ISSN: 0028-4793 * e.g. abstract; page 379, right-hand column, last paragraph; page 379, right-hand column, last paragraph; sentence bridging page 379 and 380; page 380, left-hand column, paragraph 3; page 380, right-hand column, paragraph 2; the whole document *	1-18	TECHNICAL FIELDS SEARCHED (IPC) C07K A61K G01N
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 21 January 2014	Examiner Gruber, Andreas
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	VAN ASSCHE GERT ET AL: "Progressive multifocal leukoencephalopathy after natalizumab therapy for Crohn's disease", NEW ENGLAND JOURNAL OF MEDICINE, MASSACHUSETTS MEDICAL SOCIETY, BOSTON, MA, US, vol. 353, no. 4, 28 July 2005 (2005-07-28), pages 362-368, XP009123817, ISSN: 1533-4406 * e.g. abstract; page 365, right-hand column, last paragraph; page 366, left-hand column, paragraph 1; page 365, right-hand column, paragraph 2; fig. 1; page 367, left-hand column, last paragraph; the whole document *	1-18	
Y	Anonymous: "BIOGEN IDEC AND ELAN ANNOUNCE VOLUNTARY SUSPENSION OF TYSABRI", 28 February 2005 (2005-02-28), XP055033918, Retrieved from the Internet: URL: http://www.biogenidec.com/PRESS_RELEASE_DETAILS.aspx?ID=5981&ReqId=1324695 [retrieved on 2012-07-26] * the whole document *	1-18	TECHNICAL FIELDS SEARCHED (IPC)
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EPO FORM 1503 03.82 (P04C01)

专利名称(译)	用那他珠单抗治疗炎症和自身免疫疾病的方法		
公开(公告)号	EP2676967A3	公开(公告)日	2014-03-05
申请号	EP2013175987	申请日	2007-02-28
申请(专利权)人(译)	Biogen Idec公司MA INC.		
当前申请(专利权)人(译)	Biogen Idec公司MA INC.		
[标]发明人	LIEBERBURG IVAN		
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CPC分类号	A61K38/03 A61K38/215 A61K2039/505 A61P1/04 A61P19/02 A61P25/00 A61P25/28 A61P29/00 A61P37/00 A61P37/06 C07K16/2839 C07K16/2842 C07K2317/24 G01N33/6896 G01N2333/025 G01N2800/285 Y02A50/467 A61K39/39541 A61K39/3955 A61K45/06 A61K49/0004 A61K2039/54 A61K2039/545 G01N33/6893 G01N2800/065 G01N2800/7095		
审查员(译)	格鲁伯ANDREAS		
优先权	60/776931 2006-02-28 US PCT/US2007/004943 2007-02-28 WO		
其他公开文献	EP2676967A2 EP2676967B1		
外部链接	Espacenet		

摘要(译)

那他珠单抗是治疗炎症和自身免疫疾病的安全有效的治疗方法，例如多发性硬化症，克罗恩病和类风湿性关节炎。治疗期间罕见的进行性多灶性白质脑病表明它可能与那他珠单抗治疗有关。监测JCV并告知护理人员

和患者进行性多灶性白质脑病的表现可以提高那他珠单抗治疗的安全性。

DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	STEINMAN LAWRENCE: "Blocking adhesion molecules as therapy for multiple sclerosis: natalizumab"; NATURE REVIEWS. DRUG DISCOVERY, NATURE PUBLISHING GROUP, GB, vol. 4, no. 6, 1 June 2005 (2005-06-01), pages 510-518, XP009123807, ISSN: 1474-1776; e.g., page 517; the whole document	1-18	INV. C07K16/28 A61K39/395 G01N33/53 G01N33/68 A61K39/00
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The present search report has been drawn up for all claims

Place of search: **The Hague** Date of completion of the search: **21 January 2014** Examiner: **Gruber, Andreas**

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 d. I have not searched the document
 e. I have not searched the document
 f. I have not searched the document