



(11) **EP 1 821 104 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
14.11.2007 Bulletin 2007/46

(51) Int Cl.:
G01N 33/68 (2006.01)

(43) Date of publication A2:
22.08.2007 Bulletin 2007/34

(21) Application number: **07007737.5**

(22) Date of filing: **08.02.2001**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **08.02.2000 US 181008 P**
04.05.2000 US 201868 P

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
01912066.6 / 1 254 374

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(54) **Method for diagnosing efficacy of xenotypic antibody therapy**

(57) The invention provides methods for diagnosing the efficacy of a patient to xenotypic antibody therapy which include (1) measuring the level of an antibody produced by a patient that specifically binds to a xenotypic antibody after administration of the xenotypic antibody to the patient; (2) measuring the level of an anti-idiotypic antibody produced by a patient that specifically binds to a xenotypic antibody after administration of the xenotypic antibody to the patient; (3) measuring the level of an antibody produced by a patient that specifically binds to a target antigen of a xenotypic antibody after administration

of a xenotypic antibody to the patient; and (4) measuring the level of a T cell response produced by a patient to a target antigen of the xenotypic antibody after administration of a xenotypic antibody to the patient. In the methods of the invention, an increase in the level of antibody or T cell response produced by the patient after the administration of the xenotypic antibody relative to the level antibody or T cell response produced by the patient prior to the administration of the xenotypic antibody is indicative of a favorable diagnosis of efficacy.

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	SCHULTES BIRGIT C ET AL: "Anti-idiotypic induction therapy: Anti-CA125 antibodies (AB3) mediated tumor killing in patients treated with Ovarex mAb B43.13 (Ab1)." CANCER IMMUNOLOGY IMMUNOTHERAPY, vol. 46, no. 4, June 1998 (1998-06), pages 201-212, XP000857366 ISSN: 0340-7004 * the whole document * -----	1-9	INV. G01N33/68
X	MADIYALAKAN R ET AL: "Antiidiotype Induction Therapy: Evidence for the Induction of Immune Response through the Idiotypic Network in Patients with Ovarian Cancer after Administration of Anti-CA125 Murine Monoclonal Antibody B43.13." HYBRIDOMA, vol. 14, no. 2, 1995, pages 199-203, XP001064580 ISSN: 0272-457X * the whole document * -----	1-9	TECHNICAL FIELDS SEARCHED (IPC)
X	QI W ET AL: "Induction of idiotype network to anti-MUC-1 antibody in breast cancer." PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH ANNUAL, vol. 39, March 1998 (1998-03), page 367, XP002194279 89th Annual Meeting of the American Association for Cancer Research; New Orleans, Louisiana, USA; March 28-April 1, 1998, March, 1998 ISSN: 0197-016X * abstract * ----- -/--	1-9	G01N
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 10 October 2007	Examiner Pellegrini, Paolo
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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EPO FORM 1503 03.82 (P04C01)



DOCUMENTS CONSIDERED TO BE RELEVANT				
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
X	<p>REINARTZ S ET AL: "Evaluation of immunological responses in patients with ovarian cancer treated with the anti-idiotypic vaccine ACA125 by determination of intracellular cytokines-A preliminary report." HYBRIDOMA, vol. 18, no. 1, February 1999 (1999-02), pages 41-45, XP000892531 ISSN: 0272-457X * the whole document *</p> <p>-----</p>	1-9		
X	<p>SCHLEBUSCH HARALD ET AL: "A Monoclonal Antiidiotypic Antibody ACA 125 Mimicking the Tumor-Associated Antigen CA 125 for Immunotherapy of Ovarian Cancer." HYBRIDOMA, vol. 14, no. 2, 1995, pages 167-174, XP001064579 ISSN: 0272-457X * the whole document *</p> <p>-----</p>	1-9		TECHNICAL FIELDS SEARCHED (IPC)
X	<p>KOEHLER S ET AL: "Immunotherapy of ovarian carcinoma with the monoclonal anti-idiotypic antibody ACA125: Results of the phase Ib study." GEBURTSCHILFE UND FRAUENHEILKUNDE, vol. 58, no. 4, April 1998 (1998-04), pages 180-186, XP000892407 ISSN: 0016-5751 * the whole document *</p> <p>-----</p> <p style="text-align: center;">-/--</p>	1-9		
The present search report has been drawn up for all claims				
Place of search Munich		Date of completion of the search 10 October 2007	Examiner Pellegrini, Paolo	
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p>		<p>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</p>		

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EPC FORM 1503 03/82 (P04/C01)



DOCUMENTS CONSIDERED TO BE RELEVANT			
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A	LEVEUGLE B ET AL: "PSA-directed immunotherapy of prostate cancer." PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH ANNUAL, vol. 39, March 1998 (1998-03), page 355, XP002194280 89th Annual Meeting of the American Association for Cancer Research; New Orleans, Louisiana, USA; March 28-April 1, 1998, March, 1998 ISSN: 0197-016X * abstract *	1-9	
A	WAGNER U A ET AL: "IMMUNOTHERAPY OF ADVANCED OVARIAN CARCINOMAS BY ACTIVATION OF THE IDIOTYPIC NETWORK" BIOTECHNOLOGY THERAPEUTICS, vol. 3, no. 1-2, 1992, pages 81-89, XP001053690 ISSN: 0898-2848 * the whole document *	1-9	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
Place of search Munich		Date of completion of the search 10 October 2007	Examiner Pellegrini, Paolo
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EPC FORM 1503 03.02 (P04C01)

专利名称(译)	诊断异种抗体疗法功效的方法		
公开(公告)号	EP1821104A3	公开(公告)日	2007-11-14
申请号	EP2007007737	申请日	2001-02-08
[标]申请(专利权)人(译)	ALTAREX医疗		
申请(专利权)人(译)	ALTAREX医疗法人		
当前申请(专利权)人(译)	ALTAREX医疗法人		
[标]发明人	NOUJAIM ANTOINE		
发明人	NOUJAIM, ANTOINE		
IPC分类号	G01N33/68 G01N33/53 A61K49/00 G01N33/569 G01N33/574		
CPC分类号	G01N33/569 G01N33/574 G01N2333/96455		
优先权	60/201868 2000-05-04 US 60/181008 2000-02-08 US		
其他公开文献	EP1821104A2		
外部链接	Espacenet		

摘要(译)

本发明提供了用于诊断患者对异种抗体疗法的功效的方法，其包括(1)测量在向患者施用异种抗体后特异性结合异种抗体的患者产生的抗体水平；(2)测量给患者施用异种抗体后特异性结合异种抗体的患者产生的抗独特型抗体的水平；(3)测量患者产生的抗体水平，所述抗体在给予患者异种抗体后特异性结合异种抗体的靶抗原；(4)在向患者施用异种抗体后，测量患者对异种抗体的靶抗原产生的T细胞应答水平。在本发明的方法中，相对于在施用异种抗体之前由患者产生的水平抗体或T细胞应答，在施用异种抗体之后患者产生的抗体或T细胞应答水平的增加。表明有效的疗效诊断。

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X	SCHULTES BIRGIT C ET AL: "Anti-idiotype induction therapy: Anti-CA125 antibodies (AB3) mediated tumor killing in patients treated with Ovarix mAb B43.13 (AB1)." CANCER IMMUNOLOGY IMMUNOTHERAPY, vol. 46, fig. 6, June 1998 (1998-06), pages 201-212, XP000657366 ISSN: 0340-7004 * the whole document *	1-9	INV. G01N33/68
X	MADIYALAKAN R ET AL: "Anti-idiotype Induction Therapy: Evidence for the Idiotype Network in Patients with Ovarian Cancer after Administration of Anti-CA125 Murine Monoclonal Antibody B43.13." HYBRIDOMA, vol. 14, fig. 2, 1995, pages 199-203, ISSN: 0272-457X * the whole document *	1-9	TECHNICAL FIELD(S) SEARCHED (IPC) G01N
X	QI W ET AL: "Induction of idiotype network to anti-MUC-1 antibody in breast cancer." PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH ANNUAL MEETING, vol. 39, March 1998 (1998-03), page 367, XP062194279 * the whole document *	1-9	
	99th Annual Meeting of the American Association for Cancer Research, New Orleans, Louisiana, USA; March 28-April 1, 1998; March 1998 ISSN: 0197-016X * abstract *		
The present search report has been drawn up for all claims			
Munich		10 October 2007	Pellegrini, Paolo
CATEGORY OF CITED DOCUMENTS 1. prior art document 2. document cited in the application 3. document cited in the application 4. document cited for other reasons 5. non-written disclosure 6. non-patent literature 7. member of the same patent family, corresponding document			