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Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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3 December 2009

(54) Title: STEM CELL COMPOSITION FOR INDUCING TRANSPLANT TOLERANCE

(57) Abstract: The present invention provides a simple, economical yet efficient method of creating transplant tolerance in organ transplant patients without the continuous need for costly immunosuppressive drugs with serious adverse effects. The invention essentially deals with the administration of a novel composition to the patient which consists of adipose tissue derived Mesenchymal Stem Cells (MSC) combined with bone marrow derived Haematopoietic Stem Cells(HSC) and MSC and peripheral blood stem cells (PBSC). This helps in creating transplant tolerance ie. Stable adequate allograft function with minimum /no rejection using very low dose of immunosuppressive medication. The invention also deals with a simple method of isolating Mesenchymal Stem cells from human adipose tissue without using any xenogenic material.



WO 2009/116088 A3

INTERNATIONAL SEARCH REPORT

International application No

PCT/IN2009/000175

A. CLASSIFICATION OF SUBJECT MATTER		
INV. A61K35/14	A61K35/28 A61K35/55 C12N5/06 A61P37/06	
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 C12N A61P		
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, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2007/065927 A (CT INVESTIG ENERGETICAS CIEMAT [ES]; CELLERIX S L [ES]; GONZALEZ DE LA) 14 June 2007 (2007-06-14) page 2, line 24 - page 3, line 10	1-8
Y	TRIVEDI ET AL: "In Pursuit of the Ultimate: The Initial Ahmedabad Journey Toward Transplantation Tolerance" TRANSPLANTATION PROCEEDINGS, ORLANDO, FL, US, vol. 39, no. 3, 17 April 2007 (2007-04-17), pages 653-657, XP022033293 ISSN: 0041-1345 page 653, column 1, line 1 - line 16 page 654, column 2, line 1 - page 655, column 1, line 9	1-8
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<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		*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
E earlier document but published on or after the international filing date		*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
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O document referring to an oral disclosure, use, exhibition or other means		*&* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search	Date of mailing of the international search report	
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040. Fax: (+31-70) 340-3016	Authorized officer Schönwasser, D	

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International application No

PCT/IN2009/000175

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>PUISSANT B ET AL: "Immunomodulatory effect of human adipose tissue-derived adult stem cells: comparison with bone marrow mesenchymal stem cells" BRITISH JOURNAL OF HAEMATOLOGY, WILEY-BLACKWELL PUBLISHING LTD, GB, vol. 129, no. 1, 1 April 2005 (2005-04-01), pages 118-129, XP002377924 ISSN: 0007-1048 the whole document</p>	1-8
A	<p>RINGDEN OLLE ET AL: "Allogeneic hematopoietic stem cell transplantation: state of the art and new perspectives" APMIS, vol. 113, no. 11-12, November 2005 (2005-11), pages 813-830, XP002547825 ISSN: 0903-4641 the whole document</p>	1-8
A	<p>GIMBLE J M: "ADIPOSE TISSUE-DERIVED THERAPEUTICS" EXPERT OPINION ON BIOLOGICAL THERAPY, ASHLEY, LONDON, GB, vol. 3, no. 5, 1 August 2003 (2003-08-01), pages 705-713, XP009044158 ISSN: 1471-2598 the whole document</p>	1-8

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IN2009/000175

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:
Rule 39.1(iv) PCT: Claims 1,5 and 8 relate at least partially to a method for treatment of the human or animal body by surgery
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:

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.:

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.

Information on patent family members

International application No
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2007065927 A	14-06-2007	EP 1795588 A1	13-06-2007
		EP 1974019 A1	01-10-2008
		US 2009148419 A1	11-06-2009
