



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/US99/19773</p> <p>(22) International Filing Date: 27 August 1999 (27.08.99)</p> <p>(30) Priority Data: 09/145,387 1 September 1998 (01.09.98) US</p> <p>(71) Applicant (for all designated States except US): DESMOS, INC. [US/US]; 3550 General Atomics Court, San Diego, CA 92121 (US).</p> <p>(72) Inventor; and (75) Inventor/Applicant (for US only): TUCKER, Bryan, J. [US/US]; 12743 War Horse Street, San Diego, CA 92129 (US).</p> <p>(74) Agent: ALTMAN, Daniel, E.; Knobbe, Martens, Olson and Bear, LLP, 16th floor, 620 Newport Center Drive, Newport Beach, CA 92660 (US).</p>	<p>(81) Designated States: AU, CA, JP, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</p> <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 25 May 2000 (25.05.00)</p>	
<p>(54) Title: LAMININ 5 FOR TREATMENT OF BONE DEFECTS</p>		
<p>(57) Abstract</p> <p>A method of treating a bone defect by administering to the bone defect a laminin 5 composition. Laminin 5 promotes bone growth and regeneration. The composition may also include one or more osteogenic and/or angiogenic factors. The growth and differentiation of bone marrow cells is also induced by laminin 5.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/19773

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K38/39 A61P19/00 A61P1/02 //(A61K38/39,38:18)

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)

IPC 7 A61K C12N

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 97 36621 A (DESMOS INC) 9 October 1997 (1997-10-09) the whole document ---	1-44
A	WO 95 06660 A (HUTCHINSON FRED CANCER RES ;CARTER WILLIAM G (US); GIL SUSANA G (U) 9 March 1995 (1995-03-09) page 10, line 33 -page 11, line 35; examples 8,9,13 ---	29,42-44
A	WO 98 31798 A (MERREGAERT JOSEPH ;SMITS PATRICK (BE); UNIV ANTWERP (BE); HUMAN GE) 23 July 1998 (1998-07-23) page 2, line 29 - line 8 page 13, line 18 -page 14, line 22 --- -/--	1-44

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

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| <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> | <p>"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</p> <p>"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</p> <p>"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.</p> <p>"&" document member of the same patent family</p> |
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Date of the actual completion of the international search

27 March 2000

Date of mailing of the international search report

07/04/2000

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/19773

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>WO 90 13302 A (BRIGHAM & WOMENS HOSPITAL) 15 November 1990 (1990-11-15) the whole document</p> <p style="text-align: center;">---</p>	1-44
A	<p>SWEENEY THOMAS M ET AL: "Repair of critical size rat calvarial defects using extracellular matrix protein gels." JOURNAL OF NEUROSURGERY 1995, vol. 83, no. 4, 1995, pages 710-715, XP000891383 ISSN: 0022-3085 the whole document</p> <p style="text-align: center;">---</p>	1-44
A	<p>VUKICEVIC S ET AL: "Differentiation of canalicular cell processes in bone cells by basement membrane matrix components: regulation by discrete domains of laminin" CELL, vol. 63, 1990, pages 437-445, XP002134083 the whole document</p> <p style="text-align: center;">-----</p>	1-44

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 99/ 19773

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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:
Remark: Although claims 1-29 and 42-44 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
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 II Observations where unity of invention is lacking (Continuation of item 2 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 all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
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.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/19773

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9736621 A	09-10-1997	AU 2427997 A	22-10-1997
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WO 9506660 A	09-03-1995	AU 7872894 A	22-03-1995
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WO 9013302 A	15-11-1990	AU 5654990 A	29-11-1990