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(21) International Application Number: PCT/US99/19218 (22) International Filing Date: 24 August 1999 (24.08.99) (30) Priority Data: 60/097,579 24 August 1998 (24.08.98) US (71) Applicant: GLOBAL VASCULAR CONCEPTS, INC. [US/US]; 4615 Brookhollow Road, Atlanta, GA 30327 (US). (72) Inventors: BROWN, Charles, L., III; 4615 Brookhollow Road, Atlanta, GA 30327 (US). GORLIN, Steve; 150 Gulf Shore Drive, Destin, FL 32541 (US). (74) Agents: WARREN, William, L. et al.; Jones & Askew, LLP, 2400 Monarch Tower, 3424 Peachtree Road, Atlanta, GA 30326 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 23 November 2000 (23.11.00)
(54) Title: USE OF ANTI-ANGIOGENIC AGENTS FOR INHIBITING VESSEL WALL INJURY (57) Abstract Use of anti-angiogenic agents to inhibit an undesirable response to vessel wall injury, including stent neointima, dialysis graft neointima, vascular graft induced neointima, and the treatment of benign hypertrophic scar formation as well as the treatment and passivation of unstable atherosclerotic plaques are provided. The invention provides for the use of catheter-based devices for enhancing the local delivery of anti-angiogenic agents into the endothelial tissues of blood vessels of the living body.		

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 99/19218

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K31/00 A61K47/48 A61K31/336

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

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, PAJ, BIOSIS, CHEM ABS Data, MEDLINE, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 03036 A (ANGIOGENESIS TECH INC ; ARSENAULT A LARRY (CA); BURT HELEN M (CA);) 2 February 1995 (1995-02-02) abstract page 1, line 5-10 page 4, line 17-34 page 5, line 4 -page 6, line 15 page 9, line 30 -page 13, line 36 page 21 -page 22 page 26, line 3-21 page 28, line 22 -page 31, line 10 examples 1-19 page 81, line 17 -page 82; claims 1-39 --- -/--	1-18

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

28 August 2000

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01/09/2000

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INTERNATIONAL SEARCH REPORT

International Application No
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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.
X	WO 97 16197 A (AETERNA INC LAB) 9 May 1997 (1997-05-09) abstract page 72, paragraph 2 -page 77, paragraph 1 page 86, paragraph 2 ---	1-18
X	US 5 286 254 A (SHIMADA JIN ET AL) 15 February 1994 (1994-02-15) the whole document ---	1-18
X	WO 92 15286 A (SHIKANI ALAIN ;NOVA PHARM CORP (US)) 17 September 1992 (1992-09-17) abstract page 1, paragraphs 1,2 page 5, paragraph 5 -page 7, paragraph 1 page 10, paragraph 5 -page 11, paragraph 3; claims 1-5,9-14,19; example 4 ---	1-18
X	WO 94 26888 A (UNIV LELAND STANFORD JUNIOR) 24 November 1994 (1994-11-24) abstract ---	1,2
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X	WO 98 30255 A (LOCALMED INC) 16 July 1998 (1998-07-16) abstract; claims 1-4 ---	1,2
X	US 5 788 979 A (ALT ECKHARD ET AL) 4 August 1998 (1998-08-04) abstract; claims 1-34 ---	1,2
P,X	WO 99 09982 A (BREM HAROLD ;EHRlich JASON (US); FOLKMAN JUDAH (US)) 4 March 1999 (1999-03-04) abstract page 7, paragraph 2 -page 8, paragraph 2 page 9, paragraph 4 -page 11, paragraph 2 ---	1-18
X	US 5 096 892 A (FOLKMAN MOSES J ET AL) 17 March 1992 (1992-03-17) abstract column 3, line 33 -column 4, line 2 ---	1-18
X	WO 91 19731 A (UPJOHN CO) 26 December 1991 (1991-12-26) abstract; claims 14-21 -----	1-18

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Present claims 1-18 relate to an extremely large number of possible compounds/products/uses. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds/products/methods claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. As a consequence, the search would normally have been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the compounds/products/uses for which pharmacological data are provided. However, the present application does not provide any pharmacological data. The present application provides a.o. for the specific localized use of anti-angiogenic agents to prevent and inhibit undesirable response to vessel wall injury, including stent neointima, via local drug delivery devices/catheters or via stents and stent coatings.

Therefor the search has been directed to the specific localized use of anti-angiogenic agents to prevent and inhibit undesirable response to vessel wall injury, including stent neointima, via local drug delivery devices/catheters or via stents and stent coatings. However, the initial phase of the search revealed a very large number of documents relevant to the issue of novelty. So many documents were retrieved that it is impossible to determine which parts of the claim(s) may be said to define subject-matter for which protection might legitimately be sought (Article 6 PCT). For these reasons, a meaningful search over the whole breadth of the claim(s) is impossible. Consequently, the search has been restricted to the use of the first compound mentioned in claim 4 (AGM-1470, TNP-470) to prevent and inhibit undesirable response to vessel wall injury, including stent neointima, via local drug delivery devices/catheters or via stents and stent coatings.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

information on patent family members

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