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- (71) Applicants (for all designated States except US): **NEW YORK UNIVERSITY** [US/US]; 70 Washington Square, New York, NY 10012 (US). **ALBERT EINSTEIN SCHOOL OF MEDICINE OF YESHIVA UNIVERSITY** [US/US]; 1300 Morris Park Avenue, Bronx, NY 10461 (US).
- (72) Inventors: **GURTNER, Geoffrey, C.**; 11 Fifth Avenue, Apt. #8A, New York, NY 10003 (US). **BROWNLEE, Michael, A.**; 300 East 71st Street, Apt. 10-O, New York, NY 10021 (US).
- (74) Agents: **GOLDMAN, Michael, L.** et al.; Nixon Peabody LLP, Clinton Square, P.O. Box 31051, Rochester, NY 14603-1051 (US).
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(54) Title: METHOD OF TREATING OR PREVENTING PATHOLOGIC EFFECTS OF ACUTE INCREASES IN HYPERGLYCEMIA AND/OR ACUTE INCREASES OF FREE FATTY ACID FLUX

(57) Abstract: One aspect of the present invention relates to a method of treating or preventing pathologic sequelae of acute hyperglycemia and/or increased fatty acid flux in a subject. This method involves administering an ROS inhibitor to the subject. In addition, methods of promoting neovascularization, inhibiting oxidation or excessive release of free fatty acids, and identifying compounds suitable for treatment or prevention of ROS-mediated injury are also disclosed.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/18069

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 31/19, 31/407, 31/40

US CL : 514/557, 514/414, 514/596

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)

U.S. : 514/557, 514/414, 514/596

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 practicable, search terms used)

US PAT-FULL, Medline

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,047,427 A (WILLIAMSON) 10 September 1991 (10.09.1991) Abstract, Col 4 lines 53-66.	54,56,59,61
X	US 6,576,653 B2 (DU BOIS) 10 June 2003 (10.06.2003), col 23 lines 39-40, see especially the Abstract.	56
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Y		55,60
Y	US 6,337,350 B1 (RAHBAR et al.) 10 January 2002 (10.01.2002), col 1, lines 59-63, col 4, lines 21-24,34, claim 17, Abstract.	1-30, 31-33
Y	US 5,677,330 A (ABRAHAM et al.) 14 October 1997 (14.10.1997), Abstract, col 28 lines 12-20, col 33, lines 43-47.	1-2,24-30,32-33



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"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

12 October 2005 (12.10.2005)

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Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Michel Graffeo

Telephone No. 571-272-8505

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/18069

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:
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:
See ISA Form 206 mailed 06 September 2005.

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 additional fees, this Authority did not invite payment of any 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.: 1-61

- 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.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/18069

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	The PDR Electronic Library Online: copyright 2002-205. Thomson PDR	1-22,24-30,32-33
Y	US 6,579,544 B1 (ROSENBERG et al.) 17 June 2003 (17.06.2003), col 21 lines 44-45.	23
Y	CHATTERJEE et al. Inhibitors of poly (ADP-ribose) synthetase protect rat proximal tubular cells against oxidant stress. Kidney International. 1999, Vol 56, pages 973-984. See entire document and especiall the Method section.	31