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(54) Title: NITRIC OXIDE ENHANCING PROSTAGLANDIN COMPOUNDS, COMPOSITIONS AND METHODS OF USE

(57) Abstract: The invention provides compositions and kits comprising at least one nitric oxide enhancing prostaglandin compound or a pharmaceutically acceptable salt thereof, and, optionally, at least one nitric oxide enhancing compound and/or at least one therapeutic agent. The invention also provides methods for (a) treating ophthalmic disorders; (b) treating cerebrovascular disorders; (c) treating cardiovascular disorders; (d) treating benign prostatic hyperplasia (BPH); (e) treating peptic ulcers; (e) treating sexual dysfunctions and (f) inducing abortions. The nitric oxide enhancing prostaglandin compounds comprise at least one heterocyclic nitric oxide donor group and/or at least one nitroxide group.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/06749

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8): C07C 59/147, C07C 59/00 (2007.1)

USPC: 554/117, 554/214

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)

USPC: 554/117, 214

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 554/118; 514/211.02, 573; 549/422; 560/121 (text search)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST(USPT,PGPB,EPAB,JPAB); DialogPRO(Engineering); Google Scholar

Search Terms Used: nitric oxide, prostaglandin, heterocyclic donor group, furoxan, sydnonimine, oxatriazole-5-one, oxatriazole-5-imine, nitroxide, S-nitrosothiol, nitrite, nitrate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y -----	US 2005/0272743 A1 (ONGINI et al.) 08 December 2005 (08.12.2005); see entire document, especially para [0017]-[0047], [0081], [0111]-[0115].	1-18 -----
Y	Article entitled "Nitric Oxide Donors: Chemical activities and biological applications" by WANG et al., Chem. Rev., 26 February 2002 (26.02.2002), vol 102, pg 1091-1134; see especially Table 1; pg 1121-1124.	1-18
Y	US 2004/0171681 A1 (ORIHASHI et al.) 02 September 2004 (02.09.2004); see entire document, especially para [0009]-[0011], [0014]-[0015], [0018], [0021]-[0024].	9-18

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"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"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

"&" document member of the same patent family

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