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(54) Title: ATTENUATION OF ISCHEMIA/REPERFUSION INJURY

(57) Abstract: This current invention includes compositions and methods of nitric oxide synthase inhibitors to treat or reduce ischemia/reperfusion injury in a patient. More specifically, the invention relates to a combinational therapy of 5-Aminoimidazole-4-carboxamide-1-β-D-ribofuranoside (AICAR) and N-acetyl cysteine, (NAC) to attenuate ischemia/reperfusion injury to a transplanted organ.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US20/040133

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : A61K 31/7056, 31/198; A01N 1/00, 1/02 US CL : 514/43, 562; 435/1.1 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 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) Please See Continuation Sheet		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y ↓	US 5,118,601 A (GRUBER H.E.) 02 May 2003 (02.05.2003), see entire documents, especially column 5, lines 47-48; column 6-lines 6-30; column 11, lines 20-23 and 59-68.	1-19
Y	FUKUZAWA et al. N-Acetylcysteine Ameliorates Reperfusion Injury After Warm Hepatic Ischemia. Transplantation, January 1995, Vol. 59, No. 1, 6-9.	1-19
Y	GALINANES et al. Sustained Protection by Acadesine Against Ischemia and Reperfusion Induced Injury-Studies in the Transplanted Rat Heart. Circulation, 1992, 86, pp. 589-611.	1-19
Y	CUZZOCREBA et al. Beneficial Effects of N-Acetylcystein on Ischemic Brain Injury. British Journal of Pharmacology, 1990, 130, pp.1219-1226.	1-19
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Brian Kwon <i>[Signature]</i> Telephone No. 703-308-1735

INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

STN ONLINE

search terms: 5-aminoimidazole-4-carboxamide-1-β-D-ribofuranoside, AICAR, N-acetyl cysteine, NAC, ischemia, reperfusion injury