US005246970A

United States Patent [19]

Williamson et al.

[11] Patent Number: 5,246,970

[45] Date of Patent: Sep. 21, 1993

[54] METHOD OF INHIBITING NITRIC OXIDE FORMATION

[75] Inventors: **Joseph R. Williamson**, Town and Country; **John A. Corbett**, St. Louis; **Michael L. McDaniel**, Glendale; **Ronald G. Tilton**, St. Louis, all of Mo.

[73] Assignee: **Washington University**, St. Louis, Mo.

[21] Appl. No.: **906,632**

[22] Filed: **Jun. 30, 1992**

Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 807,912, Dec. 16, 1991, abandoned.

[51] **Int. Cl.**[5] **A61K 31/155**

[52] **U.S. Cl.** **514/632**; 514/903

[58] **Field of Search** 514/632, 903

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,758,583 7/1988 Cerami et al. 514/399
4,983,604 1/1991 Ulrich et al. 514/238.5
5,128,360 7/1992 Cerami et al. 514/634

FOREIGN PATENT DOCUMENTS

450598 10/1991 European Pat. Off. .

OTHER PUBLICATIONS

Bredt et al., Nature 351, 714-718 (1991).
Moncada et al., Pharmacol. Rev. 43, 109-142 (1991).
Brownlee et al., Science 232, 1629-1632 (1986).
Bucala et al., J. Clin. Invest. 87, 432-438 (1991).
Tilton et al., Invest. Ophthalmol. Vis. Sci. 31, 342 (1990).
Williamson et al., Diabetes & Metabolisme 16, 369-370 (1990).
Chang et al., Diabetes 40 (Supp. 1) 210A (1991).
Corbett et al., J. Biol. Chem. 266, 21351-21354 (1991).
Chem. Absts. 115:248104, Griffith WO 91 04,023 (1991).

Primary Examiner—Frederick E. Waddell
Assistant Examiner—Raymond J. Henley, III
Attorney, Agent, or Firm—Scott J. Meyer

[57] **ABSTRACT**

A method is disclosed for inhibiting nitric oxide formation in a warm blooded mammal which comprises administering to said mammal an effective nitric oxide inhibitory amount of aminoguanidine.

5 Claims, 6 Drawing Sheets