



US005700830A

# United States Patent [19]

[11] Patent Number: **5,700,830**

**Korthuis et al.**

[45] Date of Patent: **Dec. 23, 1997**

[54] **USE OF NITRIC OXIDE-RELEASING AGENTS FOR REDUCING METASTASIS RISK**

[75] Inventors: **Ronald J. Korthuis; Lipu Kong**, both of Shreveport, La.; **Larry K. Keefer**, Bethesda, Md.

[73] Assignee: **The United States of America as represented by the Department of Health and Human Services**, Washington, D.C.

[21] Appl. No.: **344,341**

[22] Filed: **Nov. 22, 1994**

[51] Int. Cl.<sup>6</sup> ..... **A61K 31/40; A61K 31/535; A61K 31/445; A61K 31/495; A61K 31/13**

[52] U.S. Cl. .... **514/426; 514/231.2; 514/315; 514/255; 514/611**

[58] Field of Search ..... **514/426, 231.2, 514/315, 255, 611**

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

5,212,204 5/1993 Keefer et al. .... 514/647  
5,250,550 10/1993 Keefer et al. .... 514/357

**FOREIGN PATENT DOCUMENTS**

WO 93/07114 4/1993 WIPO .  
WO 93/20806 10/1993 WIPO .

*Primary Examiner*—Jerome D. Goldberg  
*Attorney, Agent, or Firm*—Leydig, Voit, & Mayer, Ltd.

[57] **ABSTRACT**

A method for inhibiting the adherence between cancerous cells and noncancerous structures in a mammal, comprising the administration to the mammal of a nitric oxide-releasing compound containing a nitric oxide-releasing N<sub>2</sub>O<sub>2</sub><sup>-</sup> functional group. The compound is capable of releasing an adherence-inhibiting effective amount of nitric oxide to the mammal.

**4 Claims, 1 Drawing Sheet**

