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# United States Patent [19]

Vance et al.

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[54] **METHOD FOR INCREASING THE HEMATOCRIT OF A NORMAL MAMMAL**

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[21] Appl. No.: **409,223**

[22] Filed: **Sep. 19, 1989**

### Related U.S. Application Data

[63] Continuation-in-part of Ser. No. 36,646, Apr. 10, 1987, abandoned.

[51] Int. Cl.<sup>6</sup> ..... **A61K 38/16**; A61K 35/14; A01N 37/18; C07K 1/00

[52] U.S. Cl. .... **514/8**; 514/2; 514/21; 530/380; 530/397

[58] Field of Search ..... 514/8, 2, 21; 530/397, 530/380

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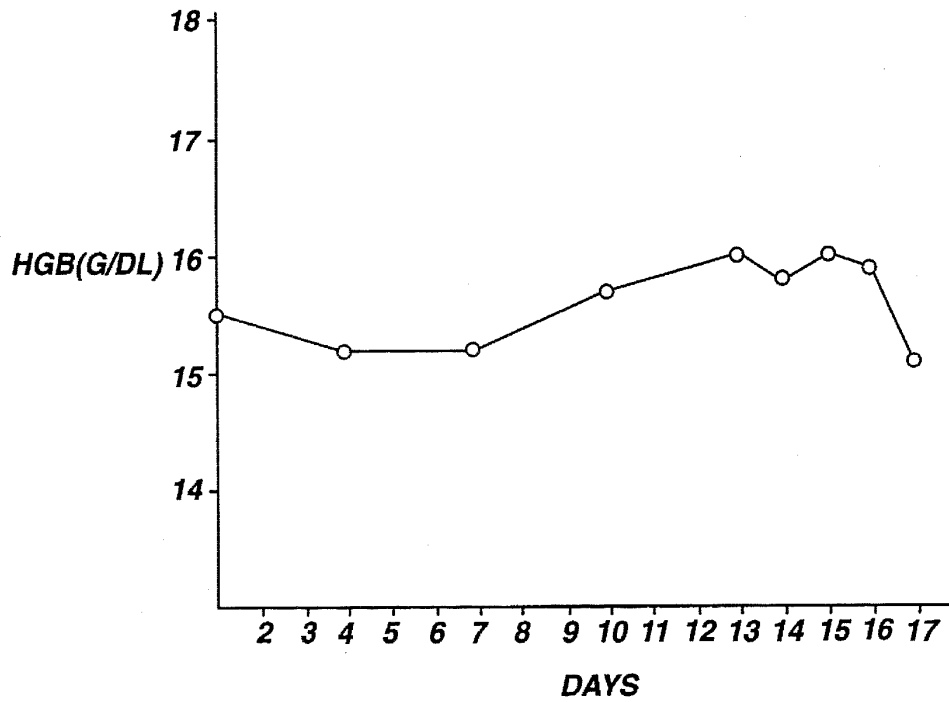
### [57] ABSTRACT

A method for increasing the hematocrit of a normal mammal using erythropoietin (EPO) is provided. The method comprises the steps of administering to the mammal a hematocrit increasing effective amount of EPO, in a pharmaceutically acceptable form. Additionally administered is an effective amount of iron, in a pharmaceutically acceptable form, sufficient to increase the serum iron content of the mammal to an erythropoiesis supportable level. The method is useful for increasing the amount of blood that can be donated for transfusion purposes, in particular autologous transfusion.

**22 Claims, 4 Drawing Sheets**

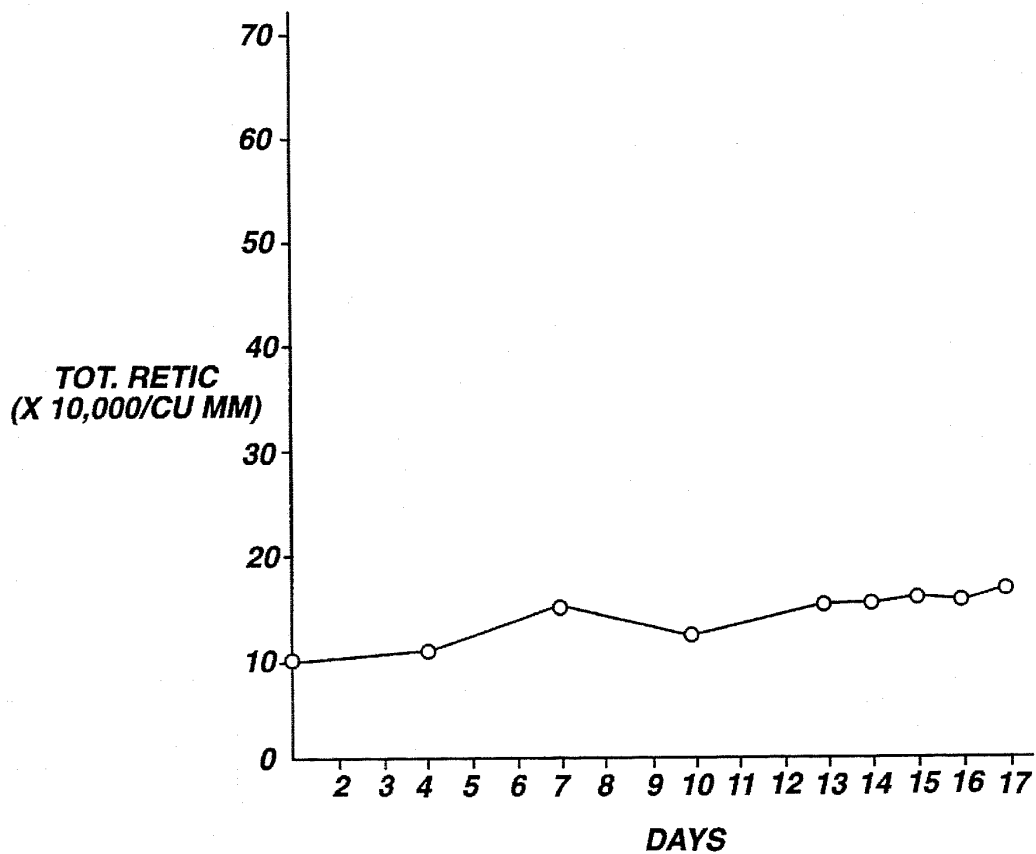
**FIG. 1A**

**HEMATOLOGIC PARAMETERS IN  
ERYTHROPOIETIN TREATED SUBJECTS  
PRIOR TO IRON LOADING**



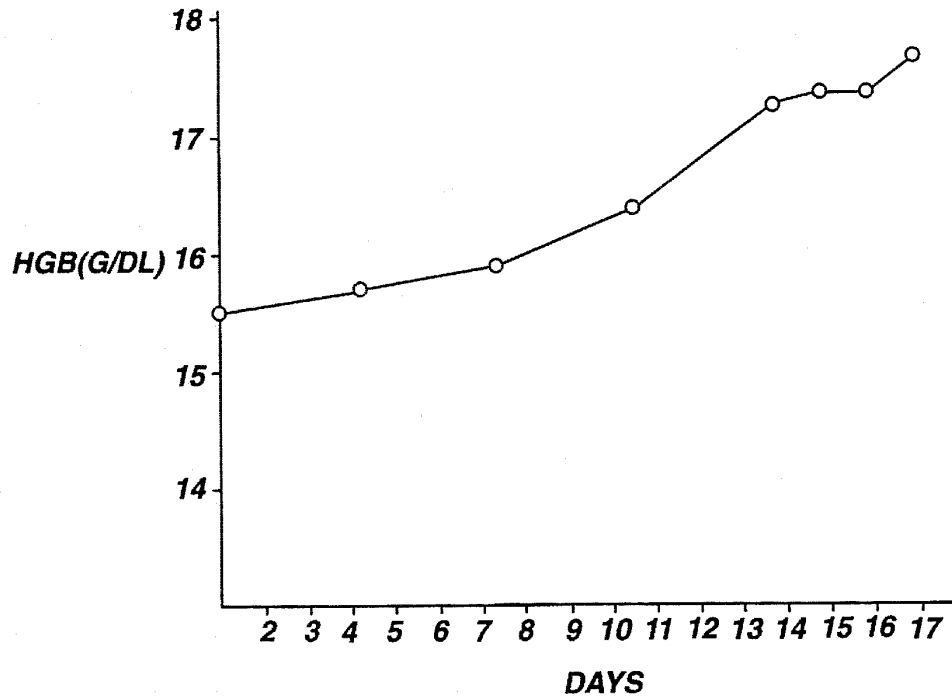
**FIG. 1B**

**HEMATOLOGIC PARAMETERS IN  
ERYTHROPOIETIN TREATED SUBJECTS  
PRIOR TO IRON LOADING**



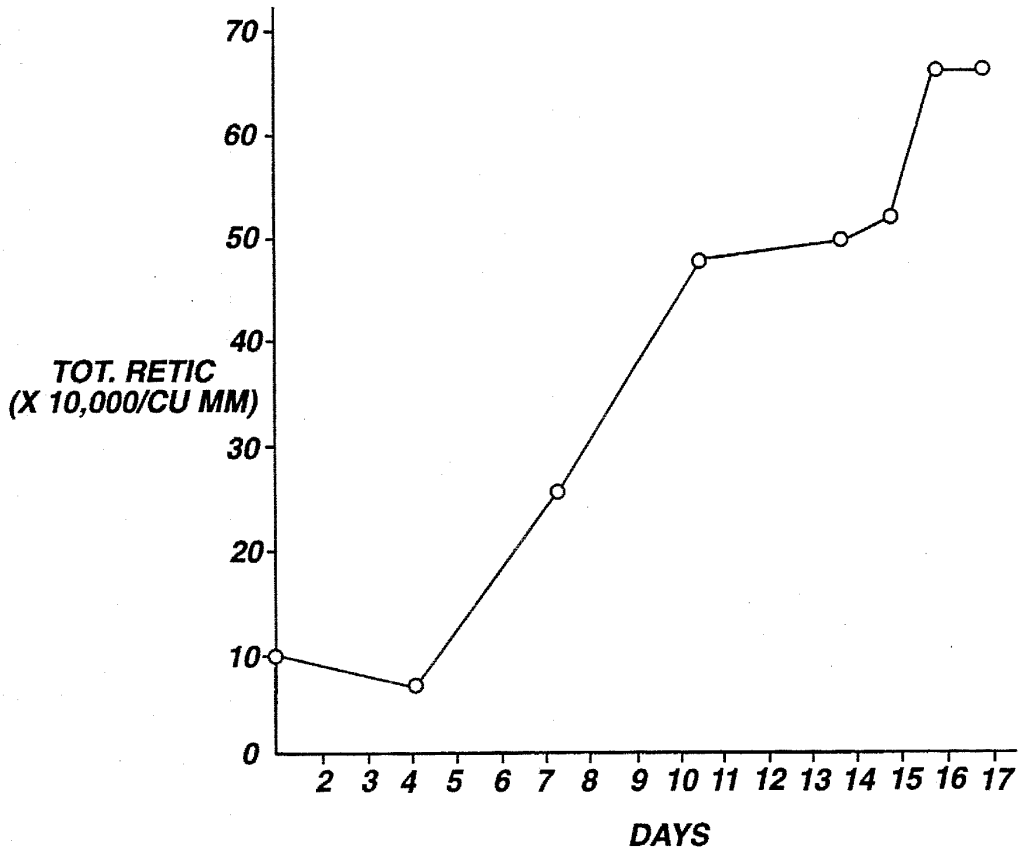
**FIG. 2A**

**HEMATOLOGIC PARAMETERS IN  
ERYTHROPOIETIN TREATED SUBJECTS  
AFTER IRON LOADING**



**FIG. 2B**

**HEMATOLOGIC PARAMETERS IN  
ERYTHROPOIETIN TREATED SUBJECTS  
AFTER IRON LOADING**



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