

United States Patent [19]

Michaeli

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[54] **COMPOSITIONS AND METHOD FOR IMPROVING WOUND HEALING**

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[*] Notice: The portion of the term of this patent subsequent to May 17, 2005 has been disclaimed.

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Related U.S. Application Data

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[51] Int. Cl.⁴ **A61K 37/00; A61K 31/725**

[52] U.S. Cl. **514/2; 514/54; 514/56; 514/822**

[58] Field of Search **514/2, 54, 56, 822**

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[57]

ABSTRACT

The healing of wounds is promoted by contacting the wound surfaces with a suspension of collagen and a glycosaminoglycan that is chemotactic for fibroblasts and/or endothelial cells. Typical glycosaminoglycans that exhibit the desired chemotaxis are heparin, heparan sulfate, and alginate. Two or more glycosaminoglycans can be present in the suspensions. Collagen is present in the suspension in the order of 7-10 mg/ml; while the glycosaminoglycan is present in such lower concentrations, e.g. 250-350 μ /ml. Application of the collagen/glycosaminoglycan suspension to open wounds greatly increases the rate of healing.

24 Claims, No Drawings