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(54) **DOSAGE FORMS FOR THE TREATMENT OF THE CHRONIC GLAUCOMAS**

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(51) **Int. Cl.**⁷ **A61K 9/24**; A61K 9/22

(52) **U.S. Cl.** **424/472**; 424/468

(58) **Field of Search** 424/472, 468, 424/470, 451, 455, 489, 464

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,962,030 * 10/1999 Fine 424/646

* cited by examiner

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(57) **ABSTRACT**

Four interdependent functional groups of biofactors and biomolecules are identified and formulations are defined which are comprised of their members. The active agents are demonstrated to be complementary in their physiological functions especially as these relate to endothelial biochemistry and physiology, hyperinsulinemia and, ultimately, to vascular health. The active components of the invention are selected for inclusion in precise combinations that reduce a variety of risks of vasculopathy in addition to reducing intraocular pressure. Widespread systemic improvement associated with local, optic nerve betterment of vascular health, reduces the risk of optic nerve atrophy with its accompanying visual field loss and potential blindness. The reduction of this maximizes the potential clinical therapeutic success of current medical, IOP-lowering, anti-glaucoma mediations.

56 Claims, No Drawings