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(54) Title: MATERIALS AND METHODS FOR PREVENTING AND TREATING MICROBE-MEDIATED EPITHELIAL DISORDERS

(57) Abstract: The present invention provides pharmaceutical compositions in the form of relatively high molecular weight biocompatible polymers such as polyethylene glycol, optionally supplemented with a protective polymer such as dextran and/or essential pathogen nutrients such as L-glutamine. Also provided are methods for preventing or treating gut-derived sepsis attributable to intestinal pathogens such as *Pseudomonas aeruginosa* by administering high molecular weight polyethylene glycol as well as methods for monitoring the administration of high molecular weight polyethylene glycol, such as in methods of preventing, ameliorating or treating microbe-induced epithelial disorders, as exemplified by gut-derived sepsis. Frequently, gut-derived sepsis arises as a complication in mammals recovering from surgical intervention or suffering from a disease or disorder, providing indications of suitable animals to receive preventative treatment. Finally, the invention provides a composition comprising infant formula and polyethylene glycol and methods for using that composition.



WO 2004/047778 A1