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(54) Title: SHORT FATTY ACID TAIL POLYMYXIN DERIVATIVES AND USES THEREOF

(57) Abstract: The present invention relates to a polymyxin derivative wherein the derivative has a total of three positive charges at physiological pH and wherein the terminal moiety (D) of the derivative comprises a total of 1 to 5 carbon atoms; and to a combination product comprising at least two such derivatives. The invention further relates to a method for sensitizing Gram-negative bacteria to an antibacterial agent by administering, simultaneously or sequentially in any order a therapeutically effective amount of said antibacterial agent and a derivative according to the present invention to said subject; to methods for developing novel antibiotics; and for sensitizing clinically important bacteria to a host defense mechanism complement present in serum. The invention also relates to a method of treating a subject for a gram-negative bacterial infection by administering a polymyxin derivative of the invention in combination with a second antibacterial agent. Finally, the invention relates to a process for preparing such polymyxin derivatives.



WO 2009/098357 A1