Comparative characteristics of antibacterial properties of synthetic peptides of the GM-CSF active site and factors of the supernatants of CD34+45dim cells precursors of hemopoiesis

V.A. Zurochka¹, A.V. Zurochka¹, E.G. Kostolomova¹, M.A. Dobrynina¹, Yu.G. Sukhovey², V.A. Gritsenko³, A.A. Kolobov¹, A.S. Simbirtsev³

¹Institute of Immunology and Physiology, Ural Branch of the Russian Academy of Sciences, Ekaterinburg; ²Tyumen branch of Institute of Clinical Immunology, RAMS, Tyumen; ³Institute of Cellular and Intracellular Symbiosis, Ural Branch of the Russian Academy of Sciences, Orenburg; ⁴State Research Institute of Highly Pure Biopreparations, St. Petersburg

Antibacterial activity of the GM-CSF active site synthetic peptides and supernatants of CD34+45dim hematopoietic progenitor cells were studied. It was found that GM-CSF peptides and cell supernatants have strong antibacterial activity, and the combination of these substances has a higher activity than the individual substances. Possible mechanisms of the effects of synthetic peptides and factors of CD34+45dim supernatants are discussed (Cytokines and Inflammation. 2012. 2012. Vol. 11. № 2. P. 96–99.)

Key words: GM-CSF peptides, CD34(+)45(dim), antibacterial activity.