## **Abstract**

The surface of the human body is colonized by a large number of microorganisms whose composition depends not only on external and internal factors, but is also significantly influenced by the topography of human skin. The complex skin microbiota is an essential part of physiological and protective mechanisms of the skin. The change in the dynamics of microbial communities on the skin or in the gastrointestinal tract is currently considered to be part of triggering mechanisms of many skin diseases. Some of the skin inflammatory diseases are directly associated with a shift of skin microbiota composition – for instance atopic dermatitis, acne vulgaris or psoriasis. Gaining and perceiving knowledge about interspecies interactions and their effect on a host could lead to the development of new diagnostic and therapeutic approaches which could make the prevention or treatment of some skin disorders more effective.

Key words: skin, skin diseases, skin microbiota, immunity, psoriasis, atopic dermatitis, vitiligo