Abstract

The International League of Dermatological Societies (ILDS) has identified the consequences of skin ageing as one of the most important challenges in global skin health. As we get older, the skin undergoes indeed significant changes – many of which may be attributed to systemic, metabolic, hormonal and neuronal changes. As any other organ of the body, the skin is constituted of cells and systems that are, under physiological conditions, controlled by signals arising from the central, peripheral and autonomous nervous systems. Thus, several central nervous system (CNS) and non-CNS-mediated diseases and dysfunctions may lead secondarily to skin problems. The next-generation drugs and therapeutics for skin diseases will probably be increasingly acting upon central and peripheral mechanisms for superior efficacy which, in turn, shall force regulatory authorities to impose stricter regulations prior to approval of dermatological products.
cold air), lifestyle (low physical activity level), epigenetics, drug abuse, obesity, type II diabetes, pharmaceutical drugs, depression, paralysis, etc [6–13]. Regarding prevalence, according to data from NIAMS (National Institute of Arthritis and Musculoskeletal and Skin Disease), more than 5.5 million people in the U.S. suffer of psoriasis, 17 million live with acne and 5 million with vitiligo whereas, according to the British Skin Foundation, 8 million people in the U.K. are currently living with one of the skin diseases associated or not with ageing.

Unfortunately, most related mechanisms are, as of now, only considered as future cellular targets for next-generation CNS or non-CNS products against specific skin disease or dry skin problems. It will be pivotal for scientists to rapidly identify and develop potent therapies adapted to each condition for ensuring that skin and dry skin problems could, one day, be efficiently and safely treated.

References