

Pharmaceutical composition with protective and regenerative properties and its application

About the invention

The invention concerns a pharmaceutical composition with protective and pro regenerative properties intended for topical use on skin damaged by radio and chemotherapy, burns or other irritating factors. The formulation addresses the needs of oncology patients and individuals with compromised skin barrier function.

The composition comprises two bioactive peptides IM2, an analog of imunofan, and NE1, an analog of the GHK peptide, combined with pharmaceutically acceptable excipients. It is characterized by high biocompatibility and bioactivity and may be formulated as an emulsion, aqueous solution or aerosol enabling painless and uniform application.

In vitro studies and volunteer testing confirmed soothing, moisturizing and skin regeneration supporting effects, with no observed cytotoxic or allergenic activity.

IP protection

The invention is protected by a patent application in the Polish Patent Office under the number: **P.449964**.

Technology readiness level

TRL 4 - Technology validated in laboratory conditions



Authors

University of Gdańsk

Prof. Sylwia Rodziewicz-Motowidło
PhD Justyna Sawicka
PhD Maria Dzierżyńska

Medical University of Gdańsk

Prof. Michał Pikuła
PhD Milena Deptuła
PhD Aneta Skoniecka
MSc Małgorzata Zawrzykraj
Prof. Jacek Zieliński

Applications

- Skin care and protection for patients after radio and chemotherapy,
- Support of skin regeneration after burns and medical procedures,
- Dermatological or dermocosmetic product for sensitive skin.

Possible cooperation

- Licensing of the technology and formulation,
- Joint development and clinical validation,
- Product development as a pharmaceutical, medical device or dermocosmetic.