

## PDGF peptide-based regenerative hydrogel for wound treatment

### About the invention

The invention concerns a regenerative hydrogel composition intended for wound treatment and skin repair. The formulation combines a thermoresponsive Poloxamer 407 hydrogel with a bioactive PDGF2 peptide derived from platelet-derived growth factor.

After topical application, the hydrogel forms a protective layer enabling controlled local release of the peptide. PDGF2 exhibits pro-regenerative and immunomodulatory activity, supporting skin cell proliferation and migration and accelerating wound healing.

The composition is biocompatible and safe, and may be used for acute and chronic wounds, including post-radiotherapy skin damage, as a medicinal product, medical device or dermocosmetic formulation.

### IP protection

The invention is protected by a patent application filed with the Polish Patent Office under number **P.452111** and with the European Patent Office under number **EP24177184.9**.

### Technology readiness level

TRL 4 - Technology validated in laboratory conditions



TRL 4

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### Applications

- Treatment of acute and chronic wounds,
- Post-radiotherapy skin regeneration,
- Dermatological and dermocosmetic products.

### Possible cooperation

- Technology licensing,
- Joint R&D and formulation development,
- Preclinical studies and implementation.