Dermal Delivery: Overcoming the stratum corneum

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Background

Our research has led to a number of technologies which were licensed-out and widely explored in the field of dermatology, obtaining promising results in several non-clinical studies and clinical trials (successful Phase I/II with a cyclosporine nanoformulation for the treatment of psoriasis). This previous experience represents for us an unique background for the design of new nanocarriers with a high potential in the effective dermal delivery of different actives.

Self-Assembled Polymeric Delivery Platform

**PHARMACEUTICAL PROFILE**
- Small size (50-200 nm)
- Very easy to scale-up
- Eco-friendly & cost-effective manufacturing process (no solvents neither high energy sources)
- Smooth regulatory pathway (well known raw materials)
- Stability under storage
- Applicable to different lipophilic & hydrophilic actives, oils and combinations
- High reproducibility

**FUNCTIONALITY**
- Easy spreading
  - Non-greasy & fast absorption (suitable for different body areas, i.e. scalp)
- Transparent bioadhesive layer
  - High time of contact-reservoir effect
- Actives penetration enhancement
- Long-lasting effect

**DEVELOPMENT STATUS**
- Formulation feasibility for several active molecules of different nature
- Preclinical POC in 3 different pain models in mice:
  - Acute, Chronic and Neuropathic Pain (active molecule undisclosed)
- Additional POC under planning
- IP rights until 2031 (possibility of filling additional case-specific patents)

Marked long-lasting analgesic effect (from minutes to hours)