



CASE STUDY

Expanding Formulation Space to Strengthen Intellectual Property

Broader formulation strategy enabled expanded patent coverage and increased commercial value

The Challenge

A sponsor developing a topical treatment for psoriasis and atopic dermatitis had an existing patent covering an oil-in-water emulsion system. While effective, the IP position was limited to a single formulation type, creating exposure to competitive alternatives and restricting long-term lifecycle and commercial potential.

Approach

MedPharm implemented a structured, science-led formulation strategy to expand the available formulation space while maintaining product performance:

- Evaluated drug solubility and stability across a range of excipients
- Designed and characterized multiple formulation systems (gels, creams, ointments, and foams)
- Assessed hydrous and anhydrous compositions to understand performance differences
- Determined drug loading potential and evaluated chemical and physical stability
- Performed particle size characterization and assessed sensory attributes
- Screened formulations using high-throughput in vitro permeation testing (IVPT)

Outcome

- Expanded patent coverage beyond the original emulsion system
- Enabled broader, more defensible IP claims
- Reduced risk of competitive formulation workarounds
- Maintained consistent product performance across multiple formats
- Increased lifecycle flexibility and commercial potential
- Contributed to significant acquisition value (>\$1B)

Why This Matters

Expanding formulation space is a strategic lever for strengthening IP and maximizing asset value. By combining formulation expertise with performance testing, MedPharm helps reduce risk, extend exclusivity, and unlock long-term commercial potential.