Initial Efficacy and Safety of Topical INCB018424 Cream, a Selective Janus Kinase 1 and 2 (JAK1&2) Inhibitor in Psoriasis

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Abstract

Purpose: To evaluate the efficacy and safety of topical INCB018424 cream applied at 1% and 1.5% against psoriasis in a Phase II study.

Background

Topical INCB018424 effectively inhibits the two key pathways that drive psoriasis (Th17 and Th1).

Method:

- INCB018424 is a selective inhibitor of JAK1 and 2.
- It binds to JAK1/2 with an IC50 of 282 nM.
- Efficacy was demonstrated at a 1.5% cream applied to 2-7% BSA.

Efficacy:

- Significant improvement in lesional and non-lesional skin was observed with the 1.5% cream.
- The mean total lesion score decreased by 53% and 54%, respectively, compared with vehicle treatment on Day 28 (p < 0.0001).
- A 32% and 27% reduction with vehicle treatment on Day 28.
- There were no significant AEs, laboratory or ECG abnormalities seen

Conclusions:

- INCB018424 is effective in reducing total lesion score.
- INCB018424 appears to have similar efficacy as active comparators Diprolene® AF and Dovonex® in patients with limited plaque psoriasis.
- Topical INCB018424 is well tolerated at all doses.

Results

- Mean total lesion scores decreased by 53% and 54%, respectively, compared with vehicle treatment on Day 28 (p < 0.0001).
- A 32% and 27% reduction with vehicle treatment on Day 28.
- There were no significant AEs, laboratory or ECG abnormalities seen.

Safety

- No significant AEs, laboratory or ECG abnormalities were seen.

References

- Punwani N, et al. (2021). \( \text{INCB018424-202 Cohort A: An open label 28 day sub-total inunction study of INCB018424} \)