P328/PW13: The transcription factor CEBPB is a novel hub gene and multi-functional disease driver in Psoriatic skin inflammation


Introduction

Transcription factors represent key nodes that integrate signaling pathways to drive a plethora of downstream cellular responses. In chronic inflammatory skin diseases (CISD), different transcription factors have emerged as crucial players in the pathogenesis. The CCAAT/enhancer-binding protein beta (CEBPB) is a well-known transcription factor sensitive to various immunogenic stimuli. In this study, we investigate CEBPB in Keratinocytes and aim at dissecting its functional role in skin inflammation.

Background and Aim

CEBPB identification via a computational approach linking gene expression to clinical phenotypes

Functional characterization of CEBPB in skin inflammation

In conclusion, CEBPB:
- is upregulated in inflammatory skin conditions, highest in Psoriasis
- associated with various pathogenic hallmarks of Psoriatic skin inflammation
- novel target gene signature in skin
- is a control point for the pathogenic epithelial response

Conclusion and Outlook

CEBPB is a novel master transcription factor in Keratinocytes, a key regulator of Psoriasis disease pathology and a potentially promising therapeutic target.