

**MS34-1-1 Preparation and characterization of apremilast multicomponent solid forms
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Abstract

Apremilast is indicated for the treatment of psoriatic arthritis, atopic dermatitis and rheumatoid arthritis. The Apremilast is a Biopharmaceutical Classification System class IV drug, which has low permeability and low solubility. It is known that Apremist cocrystals and solvates with aromatic compounds increase the solubility. The components are held preferably by aromatic-aromatic interactions over hydrogen bond formations. The object of this research is to study the types of interactions in Apremilast multicomponent systems with amino acids and different acids. This includes preparation of the Apremilast multicomponent systems with a slow evaporation method, a physical-chemical properties evaluation and determination of structure by single-crystal X-ray diffraction.

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