

Pharmaceutical Breakthroughs and Clinical Trials Update

Presented by Dr. Leon Kircik, MD

Histologically, compounding cantharidin poses a variety of limitations, such as inconsistent purity and concentration. Fortunately, a new drug-device combination allows cantharidin to be administered through a single use precision applicator. Most importantly, providers can visualize which lesions have been treated via special agents.

Dr. Kircik also discussed some of the new chemical entities for dermatologic treatment:

- Tirbanibulin, an oral tubulin polymerization and Src inhibitor, serves as an effective and safe treatment for actinic keratosis (AK).
- Tapinarof activates the aryl hydrocarbon receptor (AHR) transcriptional factors, aiming to decrease Th2 and Th17 cytokines expression, and reduce oxidative stress. Tapinarof 1% cream for once-daily use was effective in managing plaque psoriasis and atopic dermatitis. The most common treatment-related adverse events included folliculitis, contact dermatitis, headache, pruritus and dermatitis.
- Roflumilast, a phosphodiesterase type 4 (PDE4) inhibitor 25 to 300 times more potent than other PDE4 inhibitors in the market, was proven to be a promising treatment for atopic dermatitis and psoriasis.
- Polyaphron dispersion technology is a unique technology to make molecules stable characterized by less surfactant.
- Research has shown that Wyzora™ cream (calcipotriene and betamethasone dipropionate using PAD™ technology) is superior to Taclonex® Topical Suspension (calcipotriene and betamethasone dipropionate) in managing plaque psoriasis.