Annual Refresher Course for Family Physicians December 2020

#### New drugs for the treatment of Psoriasis and Eczema

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- MUHC

#### Disclosure

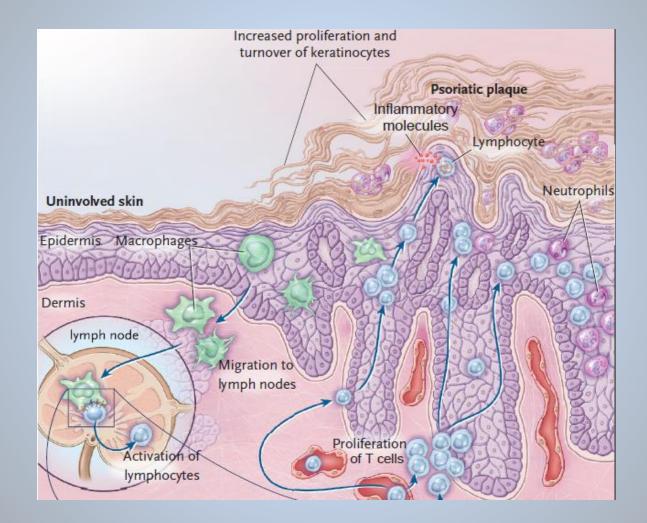
 I have been involved in clinical trials and participated in Advisory Boards for many of the drugs presented in this talk

### Learning objectives

- As a result of attending this session, participants will be able to :
- Learn how to use new drugs for the treatment of psoriasis and eczema
- Obtain new insights in the pathophysiology of these diseases

### Psoriasis

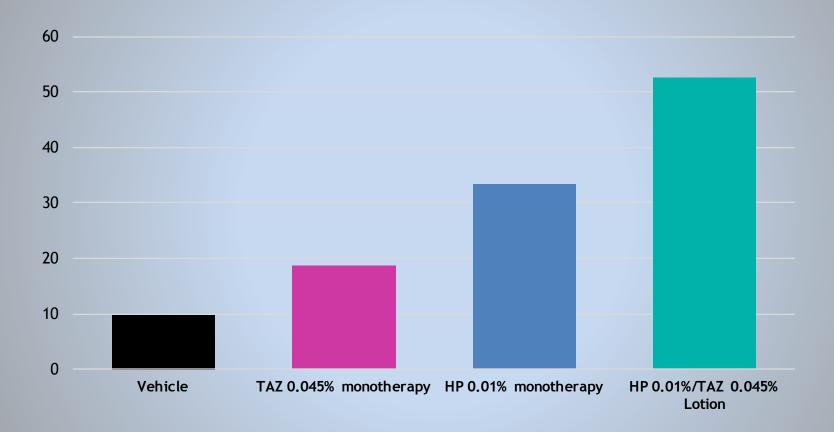




### **New Lotion**

- Halobetasol 0.01 + Tazarotene 0.045
- Vehicle has physical properties using polymer technology
  - Improve skin barrier function and skin moisture<sup>3,4</sup>
  - May improve patient satisfaction and promote adherence
- Halobetasol propionate 0.05
- Superpotent topical steroid recently recalled
- Tazarotene cream 0.05 to 0.1
- Retinoid used to treat acne and wrinkles
- Also has effect on cell differentiation

#### Halobetasol Tazarotene



### New formulation

- Calcipotriol-Betamethasone foam
- Highly effective
- Patient acceptability
- Can be used on the scalp

# Pills for psoriasis

- Apremelast is an oral PDE4 Inhibitor
- Mediates inflammation in PSO and PSA
- Decreases TNF-alpha, IL-23 and NOS
- 30 mg BID will give a 60% decrease in psoriasis plaques at week 24
- Well tolerated
- Mild diarrhea in first week
- Does not require blood monitoring

### **Tyrosine Kinase 2 inhibition**

- BMS-986165
- 3 mg pill daily
- Phase 3 trials
- 75-90 % reduction in Psoriasis
- Week 12

# Injections

- Guselkumab
- Blocks IL-23
- SubQ injection every 2 months
- 82% clear at 1 and 5 years
- Safe and well tolerated

# Injections

- Brodalumab
- Blocks the IL-17 receptor
- Wk 12 results 60% patients clear
- Transient neutropenia and candidiasis
- 210 mg SubQ every 2 weeks
- Do not use in Crohn's disease

#### Eczema

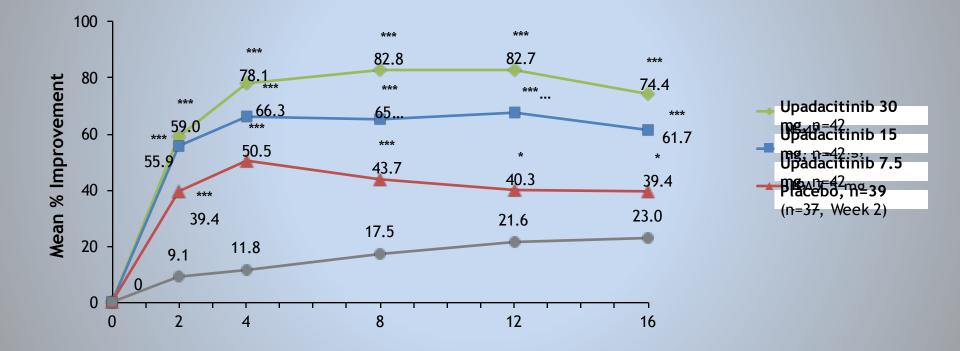
- Crisarobole 2% ung
- Steroid free
- Eczema in adults and children
- Mild to moderate
- Topical PDE4 inhibitor
- 30% clear or almost clear at 3 months
- Useful on hands and in children

## Upadacitinib

- UPA or ABT454
- JAK 1 selective inhibitor
- Used in resistant Rheumatoid Arthritis
- Under investigation for the treatment of severe atopic dermatitis
- Blocks inflammation in skin and joints
- Patients should be closely monitored for infection and thrombosis

Primary endpoint: all UPA doses showed significantly higher mean percentage improvement from baseline at Week 16 in EASI versus placebo

#### Mean percent improvement in EASI from baseline to Week 16



ITT study population; last observation carried forward; \*p<0.05, \*\*\*p≤0.001 compared to PBO EASI, Eczema Activity and Severity Index; ITT, intention to treat; PBO, placebo; UPA, upadacitinib Guttman-Yassky E, et al. J Allergy Clin Immunol 2020;145:877-84

#### Eczema injections

- Dupilumab
- Monoclonal antibody inhibits IL/4
- 300mg Every other week
- 50 to 70 % decrease in the eczema score
- 40% decrease in pruritus
- Decrease in cytokines and chemokines as well as IGE

#### Tralokinumab

- Similar to Dupilumab
- Human monoclonal antibody
- Different producer
- Targets IL/13
- 300 mg Every other week
- Can be used with topical steroids
- Results to week 52

#### Lebrikizumab

- High affinity IL/13 inhibitor
- Moderate to severe atopic dermatitis
- Also in trials for asthma
- Presently being tested in our clinical trial unit