

Apoquel vs Atopica vs Steroids vs CADI

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- Overview of each drug
 - MOA
 - Dosing
 - Indications
 - Side Effects
 - Personal Clinical Experience

Atopic Dermatitis

- Multifactorial, incompletely understood pathogenesis.
 - Inside-Outside Theory
 - *Genetic alterations of immune system*
 - Outside-Inside-Outside Theory
 - *TEWL, Ceramides and lipids, Filaggrin*
 - Infection
 - *Skin microbiota, Staph inflammation, AMP's*

Apoquel

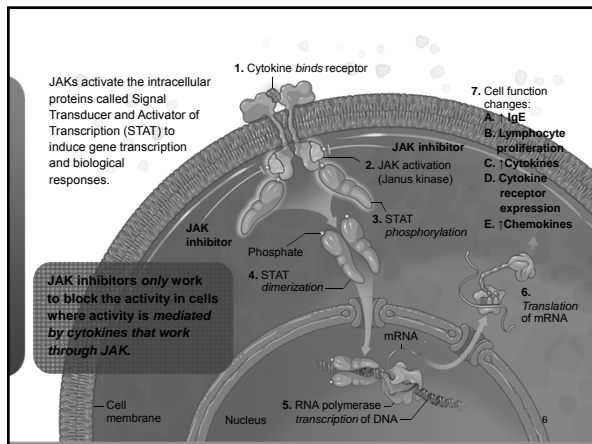
- Availability

- Compot



Apoquel

- Selective for JAK1 inhibitor
- Inhibition of cytokines
 - IL-2
 - IL-4
 - IL-6
 - IL-13
 - IL-31
- Dose dependent inhibition
 - JAK2



**Apoquel Long Term (mean of 401 days) -
Neoplasia**

- Confirmed or suspected malignant neoplasia (euthanized) – 4.0%
- Known or suspected neoplasia – 2.4%
- New dermal, epidermal or subcutaneous masses (unsampled)– 19.0%

**Apoquel Long Term (mean of 401 days) –
Hematological Side Effects**

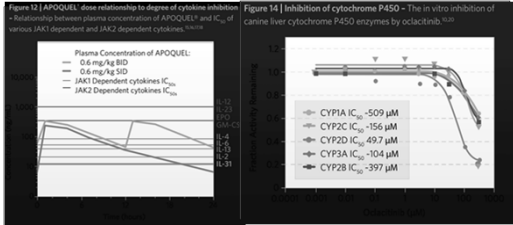
- Transient decreases in WBC
 - Neutrophils, Eosinophils, Monocytes
- Transient decreases in platelets
- Transient increase in cholesterol
- Transient increase in total protein
- Dogs with abnormal BUN, Creatinine, and ALP at enrollment were unaffected
 - Two dogs (1 with ALT and 1 with ALP) were withdrawn

Apoquel

- Atopic dermatitis
- Adverse food reaction
- Flea allergy dermatitis
- Sarcoptes scabiei
- Feline idiopathic ulcerative dermatitis
- Feline cutaneous mastocytosis
- Sterile eosinophilic

Apoquel

• Side Notes



Apoquel – Personal Clinical Experience

- Otitis
- Immune mediated/granulomatous diseases
- Flare up when decreased to SID
- Erythematous dogs
- Cats
- Other side effects

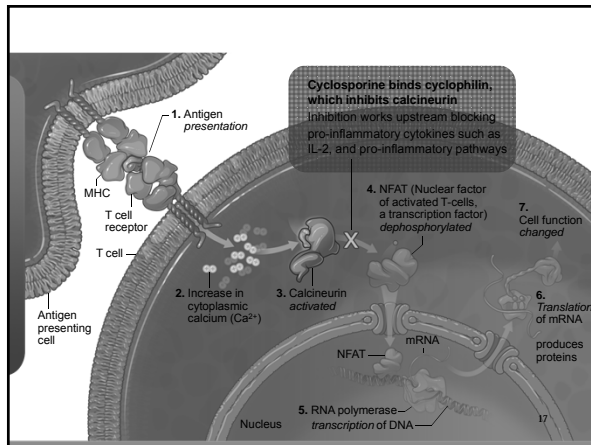
Atopica

- Capsules
- Liquid

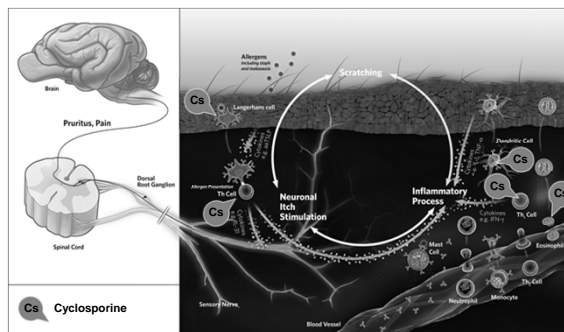


Cyclosporine

- Human version
 - Sandimmune
 - Neoral
- Compounded



Cyclosporine



Atopica

- Dogs – 5 mg/kg PO SID either 2 hours after a meal or 1 hour prior to a meal
- Cats – 7 mg/kg PO SID either 2 hours after a meal or 1 hour prior to a meal
- Up to 6-8 weeks for clinical improvement

Atopica

- Vomiting
- Diarrhea
- Anorexia
- Hypertrichosis
- Gingival hyperplasia
- Papillomas

Atopica

- Atopic dermatitis
- Numerous dermatologic immune mediated diseases
 - 7-10 mg/kg q24h
- Numerous systemic immune mediated diseases
 - 10-20 mg/kg q12-24hr

Atopica Drug Interactions

- Cytochrome P-450
- Inhibitors
 - Ketoconazole, Fluconazole, Itraconazole, Grapefruit Juice
- Inducers
 - Rifampin, Phenobarbital, St. John's Wart

Atopica – Personal Clinical Experience

- Drug administration
- Erythematous dogs
- Atopica for cats

Steroids

- Availability
 - You name it!

Steroids

- Anti-inflammatory – Dog - 0.5-1 mg/kg q24h
- Cat - 1-2 mg/kg q24h
- Immunosuppressive – Dog - 2-4 mg/kg q24h
- Cat – 4-8 mg/kg q24h

Steroid

- Dosing
 - Caution when using different forms of corticosteroids

Steroids

- Personal Clinical Experience
 - Short courses
 - Last options
 - Owner resistance

**Canine Atopic Dermatitis
Immunotherapeutic (CADI) - Zoetis**

- FDA Conditional License – Full license expected late 2016
- Lokivetmab – IL-31 monoclonal antibody
- Approximately once monthly subcutaneous injection
 - 19-105 day range

**Canine Atopic Dermatitis
Immunotherapeutic (CADI) - Zoetis**

- MOA
- <https://www.zoetisus.com/products/dogs/il-31/moa.aspx>

**Canine Atopic Dermatitis
Immunotherapeutic (CADI) - Zoetis**

- Quick onset of action
- Rare side effects

**Canine Atopic Dermatitis
Immunotherapeutic (CADI) - Zoetis**

- Clinical experience

Summary

- Which treatment is best for your AD patients?
