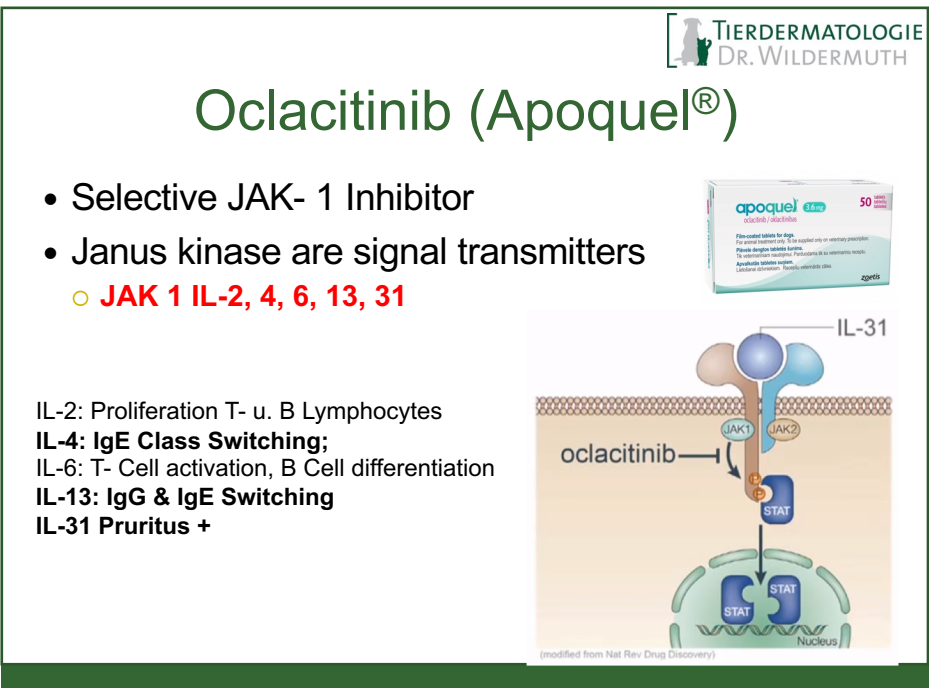


TIERDERMATOLOGIE  
DR. WILDERMUTH

## Use of Oclacitinib for Non-allergic Disease

Brett Wildermuth, DVM  
ACVD, ECVD

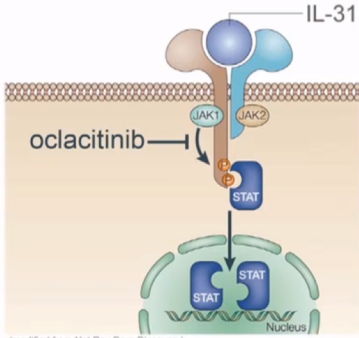


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## Oclacitinib (Apoquel®)

- Selective JAK- 1 Inhibitor
- Janus kinase are signal transmitters
  - JAK 1 IL-2, 4, 6, 13, 31

IL-2: Proliferation T- u. B Lymphocytes  
 IL-4: IgE Class Switching;  
 IL-6: T- Cell activation, B Cell differentiation  
 IL-13: IgG & IgE Switching  
 IL-31 Pruritus +



(modified from Nat Rev Drug Discovery)



## Use of Oclacitinib in treatment of canine idiopathic ear tip vasculitis

Vercelli A, Cornegliani L

Poster Abstract, World Congress of Veterinary Dermatology 8 Bordeaux, France 2016

- n= 4 chronic idiopathic vasculitis, mod. Pruritus
- No response to:
  - Pentoxifylline & steroids
- Oclacitinib 0.4mg/kg 2x daily, then 1x daily
  - Less Pruritus within hours
  - Lesions healed in 1-2 Mo.
- Final study: 22/25 dogs healed in 1-3 months



B. Wildermuth

## A case of presumed autoimmune subepidermal blistering dermatosis treated with oclacitinib

- E. Aymeric, E. Bensignor, Vet Dermatol 2017;28: 512–e123
- Human Medicine: JAK Inhibitor
  - Therapy for rheumatoid arthritis and allergy
  - Anecdotal: Alopecie Areata und SLE

## E. Aymeric, E. Bensignor, Vet Dermatol 2017

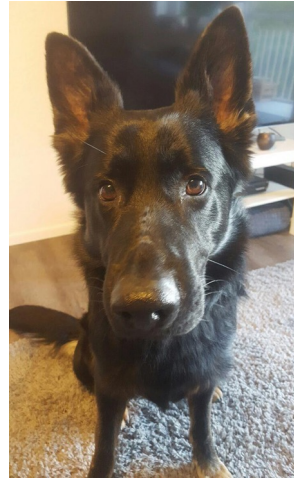
- 5 J MC, DSH-Mix
- 2 Weeks severe ulcerative dermatitis (no pruritus)
- Axillae -> Lips, Planum Nasale, Ears, Flanks, distal limbs and oral cavity
  - Scarred, depigmented
  - Erythematous Macules -> Vesical or Bullae
- DD: bullous pemphigoid, epidermolysis bullosa, other rare epidermal-dermal junctional diseases

## E. Aymeric, E. Bensignor, Vet Dermatol 2017

- Prednisolon 1.2mg/kg 2x daily for 1 Month
  - Skin responded well but lethargy, PU/PD, Anorexia
- Oclacitinib 0.5 mg/kg 2x daily for 2 weeks
  - Complete Remission
  - Reduced to once daily – 2 weeks later new macules
    - Better with twice daily again
- 1 year later remission

## Hunter

- 1y 11Mo. GSD M
- 2 weeks multifocal ulceration
  - Ears, Paws, Bridge of the nose, Scrotum, Tongue, Gums



### Conclusion

Skin biopsies: subepidermal blistering dermatosis, possibly epidermolysis bullosa acquisita although this diagnosis can only reliably be done based on additional techniques (salt split skin and autoantibodies against basement membrane components).

## Hunter

- Prednisolon
  - Extreme Lethargy
- Ciclosporin 5mg/kg  
once daily: much better
- Apoquel 0,5mg/kg 2x  
daily: no change

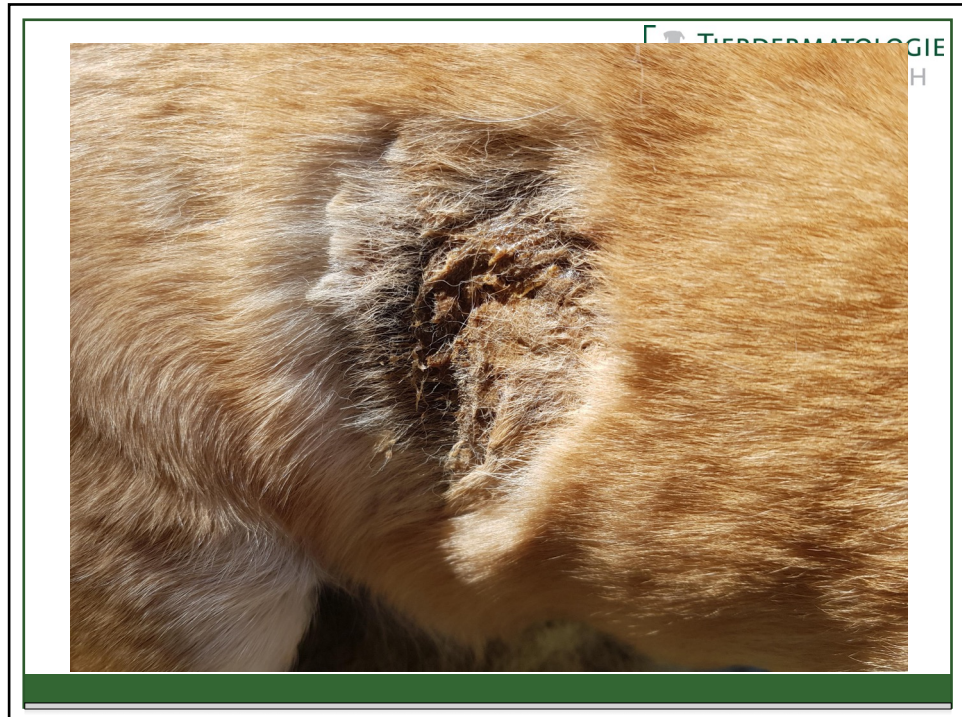



## Lumpy

- MC Labrador-Spitz Mix  
Sterile Pustules
- Deep painful  
ulceration  
flanks
- Prednisone  
worked
  - Lethargy
  - Polyuria










## Lumpy

- Responded to Ciclosporin 5mg/kg once daily remission
- Relapse a year later, did not tolerate CSA
  - Lethargy, Diarrhea
- Apoquel 0.5mg/kg 2x daily: remission



## Keesha

- 10 Y F American Bulldog
- Generalised 1-3cm Crusts
  - 7 months
- Biopsy: Erythema multiforme
  - Amoxiclav 25mg/kg 2x tgl.
  - Prednisolon 0,25mg/kg





## Keesha

- Plan

- CSA 5mg/kg: Diarrhea
  - 3,6mg/kg was ok
  - Ca. 80% better
- Methylprednisolon 0.2mg/kg once daily
  - PU/PD
- Apoquel 0,58mg/kg 2x daily for 2 weeks, then once daily





## Keesha Weiterer Verlauf

- Heilung stagniert
  - CSA auf 4,1mg/kg erhöht
  - Methylprednisolon 0,2mg/kg tgl. für 1 Wo.
- Telefonat nach 1 Woche:
  - PU/PD Methylprednisolon abgesetzt: „Blasenentzündung“
  - CSA abgesetzt: Durchfall
- 2 Mo. später:
  - Überlegt Euthanasie
  - Apoquel 0,58mg/kg 2x tgl. für 2 Wo. Dann 1x tgl. weiter





*Vet Dermatol* 2019; **30**: 201–e63

DOI: 10.1111/vde.12743

## The role of oclacitinib in the management of ischaemic dermatopathy in four dogs

Britt J. Levy\* , Keith E. Linder†‡  and Thierry Olivry\*‡ 

- 4 Mixed breed dogs: 9 Mo. alt, & 6 Mo.
  - Generalised multifocal scarred alopecia and ulceration
  - Patient 1: prednisolone 2.4 mg/kg once daily & CSA 5mg/kg = Remission but prednisolone daily
    - Oclacitinib 0.6mg/kg 2x daily -> 1x daily
    - Prednisolone could be stopped

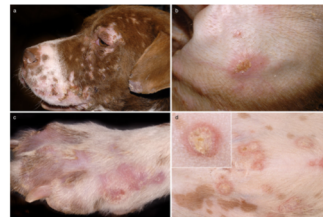


Figure 1. Skin lesions characteristic of generalized vaccine-induced ischaemic dermatopathy at initial presentation, mixed breed dog, Case 1 (PT).

## Summary

- Oclacitinib – more & more to treat autoimmune disease
- Less side effects than steroids, CSA, Azathioprine  
Nebenwirkungen als klassische Medikamenten
  - Weaker than the other drugs
- Feline Pemphigus foliaceus; Canine Sarcoptes
- Need more studies and case reports/series
  - Pemphigus foliaceus?
  - SLO
  - Perianal Fistula?
  - Epitheliotrophic Lymphoma?

