

How to Choose Between Apoquel® and Cytopoint®

Nicole A. Heinrich DVM, DACVD

McKeever Dermatology Clinics

www.mckeevvetderm.com 952-946-0035

The last 5 years have heralded fantastic advancements in the field of veterinary dermatology. The advent of Apoquel® and Cytopoint® have given veterinarians more options for treating itching in dogs. However, it can be challenging to know how to use these new therapies. When determining which to use, one of the first things to consider is the possible side effects of these therapies.

Apoquel® Reported Side Effects

Overall, side effects with Apoquel® occur with low frequency, and most dogs do not experience side effects. Side effects reported include:

- Serious infections (pneumonia and generalized demodicosis) may develop if Apoquel® is used in dogs that are younger than 1 year of age.
- Not for use in pregnant or lactating bitches.
- Safety of long term administration of Apoquel® with steroids and/or Atopica® has not been established, and these drug combinations should be avoided except in the most unusual of circumstances.
- Gastrointestinal upset in a small percentage of dogs.
- Adult onset demodicosis in a small percentage of dogs.
- Adult onset, chronic papillomavirus in a small percentage of dogs
- Elevated liver enzymes (author's observation) after 1 month of treatment in a small percentage of dogs
- Possible increased risk of histiocytoma development
- Development of leukopenia and possibly other hematologic abnormalities very rarely

Cytopoint® Reported Side Effects

Overall, side effects with Cytopoint® occur with an even lower frequency than Apoquel®, and most dogs do not experience side effects. Side effects reported include:

- Allergic reaction very rarely
- Gastrointestinal upset very rarely

The first step in deciding if a dog should receive either of the above therapies is to determine if either therapy is contraindicated. For example, a dog younger than 1 year of age should not receive Apoquel®, and a dog receiving glucocorticoids® or Atopica® should also not use Apoquel® as a first choice.

The next step is to consider the benefits of each therapy and determine if the benefits of a therapy would be especially suitable for the patient.

Benefits of Apoquel®

- Works quickly
- Broader spectrum anti-inflammatory activity than Cytopoint®, so might be more effective than Cytopoint® for patients struggling with skin and ear infections
- May be effective when Cytopoint® is not

Benefits of Cytopoint®

- Works quickly
- Does not suppress any pathway in the immune system, only neutralizes one type of molecule (IL-31)
- Can be administered to dogs of any age
- Can be combined with any medication; although it may be prudent to avoid combining Cytopoint® with other injections – particularly when administering this therapy for the first time
- May be effective when Apoquel® is not
- No reported side effects to body organs
- Injectable

When considering the benefits of these therapies, Cytopoint® would be particularly beneficial for patients that are younger than 1 year of age, patients that are receiving other medications, and patients that have difficulty with oral medications.

The final consideration when selecting a therapy is to consider the non-medical logistics.

Logistics of Apoquel®

- Ideally, establish a CBC/chemistry baseline and then repeat a CBC/chemistry one month later. Bloodwork should also be checked after 6 months of therapy and then at least annually.
- Easy to administer tablet
- Cost

Logistics of Cytopoint®

- Injection is administered in the clinic
- Cost

In this final consideration, Cytopoint® would not be the best choice for an owner who has a hard time bringing their dog to the veterinary clinic, but it would be an excellent choice for an owner who has a hard time administering a pill to their dog.

In general, Cytopoint® has fewer potential for side effects than Apoquel®, and that is often a reason to select it as a first choice therapy. However, neither Cytopoint® nor Apoquel® are effective in every dog. Some dogs do not respond to either therapy, or respond initially and then stop responding eventually. Both therapies take effect within a day or two, so if symptoms persist after that time, continued treatment with Cytopoint® or Apoquel® will not be useful. Many allergic dogs require regular ear cleaning and bathing in addition to Cytopoint® or Apoquel®.

These therapies are not appropriate substitutions for a hydrolyzed or novel protein diet in patients with food allergies. However, Apoquel® or Cytopoint® can be used to keep the patient comfortable while waiting to see if a diet change will be effective.

Allergies require life-long therapy for most patients. It is a good rule of thumb to try to avoid drugs as a long term therapy if possible. Non-drug therapies for allergies include: hydrolyzed and novel protein diets, vitamin A, essential fatty acids and zinc supplements, topical therapy, Cytopoint®, staphage lysate and allergen specific immunotherapy. Fortunately, even if drugs are required to control allergies, Apoquel®, Atopica® and steroids are all excellent tools that we can use to improve quality of life.