

# GREER® Aller-g-complete® Guide

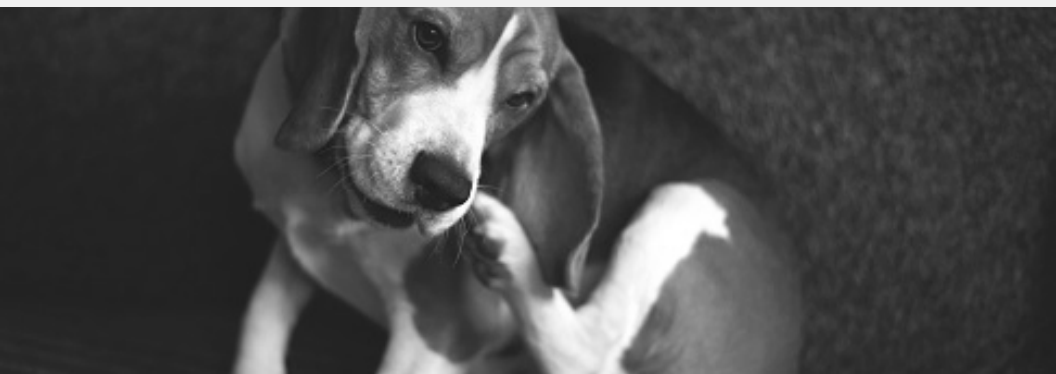


**IDEXX**

STALLERGENES  GREER

# GREER® Aller-g-complete® Guide

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# Why allergen-specific immunotherapy?

**Allergens** are substances that trigger an inappropriate response from your pet's immune system. Your pet can suffer like humans do, but your pet reacts in different ways.

- + Continuous scratching
- + Face rubbing
- + Biting and chewing at the skin
- + Hair loss
- + Ear infections
- + Recurring skin infections

## Immunotherapy is the long-term solution

Immunotherapy builds up your pet's immunity to allergens through injections with increasingly larger doses of a serum specifically formulated to your pet's sensitivities. This treatment is effective for allergies associated with pollen, molds, house dust, and other common airborne substances.

Unlike medications that "cover up" or suppress your pet's abnormal immune system, immunotherapy works to regulate the immune response naturally. Because immunotherapy is believed to change the pet's actual allergic response, it is the only treatment that can prevent a worsening of your pet's allergies.<sup>1</sup> Over time, immunotherapy can lead to a long-term solution for an animal's allergies, requiring longer times between injections. This can be more convenient for you, as compared to multiple daily doses of symptomatic treatments. In addition, immunotherapy has been shown to have no long-term side effects.<sup>1</sup>

- + No suppression of immune system
- + Immunotherapy works to normalize the immune response
- + No long-term side effects

1. Griffin CE, Hillier A. The ACVD task force on canine atopic dermatitis (XXIV): allergen-specific immunotherapy. *Vet Immunol Immunopathol.* 2001;81(3-4):363-383. doi:10.1016/s0165-2427(01)00348-8



## What's inside your GREER® Aller-g-complete® Kit?

Virtually everything you need to administer your pet's immunotherapy is inside this convenient package. Make sure it contains all the items listed below. If you are missing any item, contact your veterinarian.

- + GREER® Aller-g-complete® Guide
- + Your pet's prescription vials
- + Syringes

### Keep the kit cool

**Your pet's prescription must be kept refrigerated.** If you cannot fit the entire kit in your refrigerator, remove the prescription vials and place them in the refrigerator. Store the rest of the kit nearby.

# Dosage schedule

Your veterinarian has identified your pet's offending allergens and formulated a precise treatment and schedule, just for your pet. Your veterinarian will guide you through the process of administering injections, how to track the progress, and how to care for your pet in other ways, with topical treatments, baths, and appropriate diets.

Success depends on finding what dosage works best for your pet. Most pets do not follow the dosage schedule exactly.

This should not be a stressful process for your pet or you. *Remember, your veterinarian is available to help you if you are unable to give the injections yourself.*

## Understanding the dosage schedule

The dosage schedule tells you which vial to use, how much to inject, and when to give the injections. The **Build-Up Phase** increases the dose gradually. After increasing to the maximum tolerated dose, the pet is “maintained” at one dose given every 10–21 days.<sup>1,2</sup> This is the **Maintenance Phase**.

1. Griffin CE, Hillier A. The ACVD task force on canine atopic dermatitis (XXIV): allergen-specific immunotherapy. *Vet Immunol Immunopathol.* 2001;81(3–4):363–383. doi:10.1016/s0165-2427(01)00348-8

2. Rosser EJ. Aqueous hyposensitization in the treatment of canine atopic dermatitis: a retrospective study of 100 cases. In: Kwochka KW, Willemse T, von Tscharner C, eds. *Advances in Veterinary Dermatology*. Vol 3. Boston: Butterworth Heinemann; 1998:169–176.





# How to give injections

To help you remember the steps, we've created the 5-step **S.T.A.R.S. System**. There is also a handy Quick Guide in the back of this book that you can place on your refrigerator door, kitchen counter, or other convenient location as a reminder about the process.

## 1. Set up.

- + Take the appropriate prescription vial out of the refrigerator and check the vial strength.
- + Clean the top of the vial with an alcohol wipe.
- + Uncap the needle and draw the proper amount of solution from the vial. Double check that you have the correct amount.

**The difference between 0.1 mL and 1.0 mL is significant.**

- + To make the injection more comfortable for your pet, allow the solution in the syringe to reach room temperature before you administer it.

## 2. Tent the skin.

- + The injections are usually given in the nape of the neck.
- + It may be helpful to move the location each time, so the same spot is not repeatedly used. (Find the center of the neck and vary the injection sites by picturing a clock and giving later injections at the different hours, moving clockwise.)
- + With the hand that will not be holding the syringe, lift up the skin at the back of your pet's neck and into a "tent" shape.

## 3. Administer the injection.

- + With the thumb and middle finger of your other hand, hold the barrel of the syringe like a dart. Do not touch the plunger.
- + Quickly and firmly insert the needle at a 45-degree angle into the tent of skin and underlying tissue, being careful not to penetrate the opposite side of the skin or your fingers.

- + Pull back on the syringe plunger. If there is blood in the syringe, remove the needle and find another spot.
- + Push the plunger with your index finger to inject the solution and withdraw the needle when finished.

#### 4. Record.

- + Properly dispose of the syringe and needle. Use a new syringe for each treatment.
- + Return the prescription vial to the refrigerator.
- + In the diary on pages 10–15, record the date, amount given, and your pet's response.

#### 5. See.

Watch your pet for one hour after each injection. If there are no reactions, continue to follow the dosage schedule. Adverse reactions may occur because the dose is too strong. Do not continue to increase the dose if your pet has any adverse reaction.

## Adverse reactions you should report to your veterinarian

Common adverse reactions include:

- + Inflammation at the site of the injection
- + Increase in itchiness and redness

If your pet has any of these common reactions, the dosage schedule may need to be changed. Your pet may benefit from adjusting the dosage schedule.

**Please consult your veterinarian.**

**Extremely rare adverse reactions. Call your veterinarian immediately if you observe any of these.**

- |                        |                   |            |
|------------------------|-------------------|------------|
| + Collapse             | + Facial swelling | + Weakness |
| + Diarrhea             | + Hives           |            |
| + Difficulty breathing | + Vomiting        |            |

# Modifying your pet's dosage schedule

If the pet reacts to an injection, as discussed on page 7, do not continue to administer immunotherapy as the dosage schedule indicates. Instead, **consult with your veterinarian** to change the dosage schedule and tailor it to your pet's needs. This is called finding the "maximum tolerated dose."

## What is the maximum tolerated dose?

It's simply how much and at what strength you can administer to your pet without causing an adverse reaction. The maximum tolerated dose could be as large as 1.0 mL from the strongest vial, or as small as 0.1 mL from the weaker vials.

## When to modify the pet's dosage schedule

Pets are more likely to have a reaction during the Build-Up Phase of the treatment. As shown on page 7, the most common reactions are an increase in itchiness and redness. However, any unusual reaction is your pet's way of telling you that the dose is too strong. **Do not continue to increase the dose if you see any adverse reaction.** You must modify the dose. Consult with your veterinarian immediately.

## How to modify during the Build-Up Phase

1. Treat any adverse symptoms if necessary. **Discuss with your veterinarian before you do.**
2. Wait an extra day to give the next injection. (If the pet's reaction occurred on Day 10, and you are supposed to give another injection on Day 12, wait until Day 13.)
3. Look back in the Diary to find the dose the pet tolerated right before the reaction dose. Administer that dose. (If the pet reacted to 0.4 mL, but not to 0.2 mL, administer 0.2 mL.)
4. Three days later, increase the amount again for the next injection, but by increments of 0.1 mL. (If you "dropped back" to 0.2 mL last time, administer 0.3 mL this time.)



If your pet reacts again to the dose that bothered him previously, retreat once more to the last dose that did not cause a reaction. **This lower dose may be the pet's maximum tolerated dose.**

If the pet does not react to the dose that bothered him previously, continue with the dosage schedule, again watching for reactions and looking for the maximum tolerated dose.

## How to modify dose frequency during the Maintenance Phase

You will begin to extend the length of time between each injection. Your pet may experience a reaction as the length of time between injections increases.

For example, if you are trying to extend from every 3 days to every 10 days, your pet may become itchy at day 7. In this case the injections can be given every 7 days. Some pets may extend beyond 10 days to every 21 days. And some pets may benefit from receiving  $\frac{1}{2}$  the maximum tolerated dose every 7 days instead of the full dose every 10+ days. That's because each pet differs and you will determine the maintenance schedule based upon their individual reaction.

**Do not make any changes to your pet's treatment without consulting with your veterinarian first.**



## Turn the treatment into a treat

Your pet's allergy treatment will go more smoothly if you train it to associate the injection with a reward. Start a few days before real treatments begin. First, set up for the injection without actually giving it. Take the allergen solution out of the refrigerator and pick up a new syringe with the needle covered. Make the skin "tent" on your pet, touch the fold with a covered needle, and then give a reward. For some pets, it is best to only give treats or rewards after the pet sits still for a practice injection once or even several times a day.

Once you start the actual treatment schedule, always give a treat to your pet after the injection. For particularly sensitive pets, go through a dry run on days when your pet is not scheduled to receive an injection. Call your pet, tent the skin, maybe add a little pinch, and then reward the pet with a treat. If you do this daily, many pets will gladly look forward to their injections and not hide whenever the refrigerator door is opened.

# Your pet’s schedule and diary

	STRENGTH	DAY	DATE	SCHEDULED DOSE	ACTUAL DOSE
Build-up	<b>Blue Top</b> 100 or 200 PNU/mL or 1:20,000 w/v, mite only (Weakest)	1		0.1 mL	
		4		0.2 mL	
		7		0.4 mL	
		10		0.8 mL	
		13		1.0 mL	
	<b>Yellow Top</b> 1000 or 2000 PNU/mL or 1:2,000 w/v, mite only (Moderate)	16		0.1 mL	
		19		0.2 mL	
		22		0.4 mL	
		25		0.8 mL	
		28		1.0 mL	



\_\_\_\_\_ 's dosage schedule

REACTIONS	CURRENT ITCHINESS LEVEL (Scale: 10 = high, 1 = none)

	STRENGTH	DAY	DATE	SCHEDULED DOSE	ACTUAL DOSE
Maintenance	<b>Red Top</b> 10000 or 20000 PNU/mL or 1:200 w/v, mite only (Strongest)  Continue with 1.0 mL every 10 days.	31		0.1 mL	
		34		0.2 mL	
		37		0.4 mL	
		40		0.8 mL	
		43		1.0 mL	
		53		1.0 mL	
		63		1.0 mL	
		73			
	<p><b>Please consult your veterinarian before making any dosage changes.</b></p> <p>In some cases, the interval between injections may be gradually extended to 21 days.</p> <p>Some pets benefit from receiving <math>\frac{1}{2}</math> the maximum tolerated dose at more frequent intervals. Your veterinarian may choose 0.5 mL every 7 days.</p>				

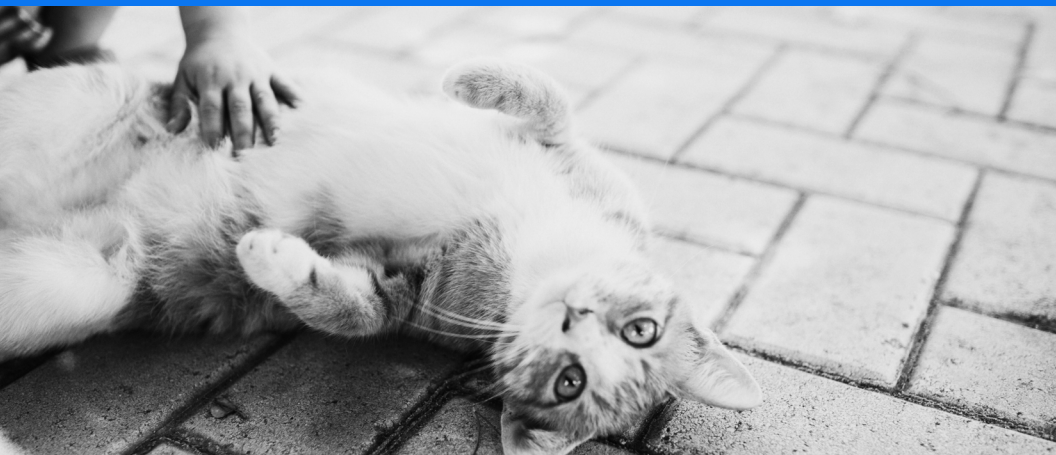


REACTIONS	CURRENT ITCHINESS LEVEL (Scale: 10 = high, 1 = none)

	STRENGTH	DAY	DATE	SCHEDULED DOSE	ACTUAL DOSE
Maintenance	<b>Red Top</b> 10000 or 20000 PNU/mL or 1:200 w/v, mite only (Strongest)  Continue with 1.0 mL every 10 days.  <b>Please consult your veterinarian before making any dosage changes.</b>  In some cases, the interval between injections may be gradually extended to 21 days.  Some pets benefit from receiving 1/2 the maximum tolerated dose at more frequent intervals. Your veterinarian may choose 0.5 mL every 7 days.				



REACTIONS	CURRENT ITCHINESS LEVEL (Scale: 10 = high, 1 = none)



## Controlling allergens in your pet's environment

Avoidance of all environmental allergens is virtually impossible. However, it can decrease exposure and may lessen your animal's symptoms. Here are a few suggestions.

- + Dust and vacuum often, but not when the pet is present.
- + Consider installing air conditioning, air filtration systems and/or a vacuum with air filtration to avoid reintroducing allergens back into the pet's environment.
- + Use dehumidifiers which help control mold and mites.
- + Bathe your pet frequently with a veterinarian recommended shampoo.
- + Use other topical products as prescribed by your veterinarian.
- + Limit the pet's outdoor time during peak allergy seasons.
- + Avoid going outside at dawn and dusk which can be times of high outdoor pollen.
- + Rinse off pet's paws right after they've been outdoors.
- + Seek veterinary care to treat any suspected skin infections immediately and aggressively.



# Frequently asked questions

## **What exactly is allergen specific immunotherapy?**

Allergen specific Immunotherapy is a long-term treatment that builds your pet's immunity to allergens through injections with increasingly larger doses of a serum specifically formulated to your pet's specific sensitivities. This option is effective for treating allergies from pollen, molds, house dust, and other common airborne substances, but it is not recommended for food allergies.

## **Does immunotherapy cure my pet's allergies?**

Allergies are lifelong problems that can be controlled but not cured. Unlike medications that "cover up" or suppress your pet's abnormal immune system, immunotherapy works to regulate the immune response. In the long term, it is often more effective than many medications and has been shown to have no lasting side effects.

## **Will my pet always need injections?**

When your pet's symptoms are under control, it may be possible to extend the time between doses, but allergy injections will be necessary as long as symptoms persist.

## **How were the allergens chosen that are in my pet's prescription?**

Your pet's allergy test, history, and exposure to allergens revealed the specific allergens affecting your pet. The treatment vials contain a purified combination of these problem allergens.

## **What results should I realistically expect?**

Some decrease of symptoms may be seen as early as 3 weeks. However, the average length of time before an initial response is usually 3–4 months. Some pets may take up to a year to respond. Continued improvement is frequently seen with longer use. Your veterinarian will set goals with you for your specific situation.

## How can I keep my pet comfortable while we wait for the immunotherapy to take effect?

Your veterinarian can recommend medications to use for symptom relief. Also you can help by controlling your pet's environment. See page 16 for helpful hints to ease your pet's symptoms.

## What side effects should I expect?

The most common adverse reaction is an increase in itchiness. Redness or soreness at the injection site are occasionally seen.

If your pet has any of these signs, it means that the last dose of immunotherapy may have been too strong or was given too soon. Do not continue to increase the dose. Your pet could have a severe reaction if you do. *Contact your veterinarian* and read pages 8–9 for detailed instructions on changing the schedule. Call your veterinarian for help in deciding how to make the changes.

**Reactions that require you contact your veterinarian immediately include vomiting, diarrhea, weakness, collapse, hives, or facial swelling.** These reactions can occur with any injection, so it's important to monitor your pet, even if it has been receiving injections for months.

## Why does the dosage schedule need to be changed for most pets?

Just as pet sizes and personalities differ, so do their immune systems. Meanwhile, their environments vary daily because of season or weather. This can bring in new allergens, which increase the likelihood that a reaction may occur after an injection. Changing the dosage schedule enables the pet to tolerate immunotherapy.



### **What should I do if I miss a dose?**

During the initial phase, an injection may be given a few days early or a few days later than the schedule. If you miss an injection during the maintenance phase, continue your pet's optimal dose ASAP. If your pet has not had an injection in a month or longer, please call your veterinarian to help with the dose.

### **When should I order a refill?**

Your pet's prescription is individualized, so please allow 2–3 weeks for your prescription to be ordered, compounded, and delivered to your veterinarian for pickup. To ensure you do not run out, please order before the maintenance vial is no less than  $\frac{1}{4}$  full.

### **When is the best time to give my pet the injection?**

The best time to administer the immunotherapy is when you will be home for at least one hour after giving the injection to observe your pet for any reactions. Do not give the injection before a heavy exercise period or a big dinner. Small treats are okay. Let the pet rest and relax one hour before and one hour after an injection.

## **Tear off the attached S.T.A.R.S. System Quick Guide at the perforations.**

> > > >

Use this quick guide only after you have read the GREER® Aller-g-complete® Guide completely and understand the treatment process.

Fill out the form on the quick guide with your personal information, and place it on your refrigerator door or somewhere convenient to where you will be treating your pet.

# GREER® Aller-g-complete® Guide

## S.T.A.R.S. System Quick Guide for immunotherapy treatment

### Set up

- + Check the vial strength.
- + Clean the vial's top.
- + Draw the proper solution amount.

### Tent the skin

- + Make a "tent" at the nape of the neck.

### Administer

- + Hold the barrel of the syringe like a dart.
- + Inject in the tent.
- + Push the plunger with your index finger.

### Record

- + Properly dispose of the syringe and needle.
- + Refrigerate the prescription vial.
- + Record the treatment in your diary.

### See

- + Watch your pet for one hour in case of adverse reactions.

**See back for important patient information.**

## Personal information

Patient name \_\_\_\_\_

Prescription number \_\_\_\_\_

Owner's name \_\_\_\_\_

Treatment start date \_\_\_\_\_

Veterinarian \_\_\_\_\_

