Hyposensitization, sometimes referred to as immunotherapy, is the process by which increasing concentrations of the allergen(s) to which a patient is sensitive are injected subcutaneously over a period of time. The rationale of hyposensitization is to allow the immune system the opportunity to develop defense mechanisms against the offending allergens, such that over time the patient can live harmoniously in their environment.

As serum allergy testing detects levels of allergen specific IgE, it is those allergens that are placed in hyposensitization treatment sets. This can be done for inhalant allergens and not foods where elimination of offending food types is the method of choice.

A treatment set is a series of 3 vials to which up to 21 allergens have been added in the following weight per volume (w/v) dilutions.

- Vial A -- 1:720 w/v
- Vial B -- 1:180 w/v
- Vial C -- 1:60 w/v

The hyposensitization protocol begins with gradually increasing volumes of Vial A, initially every other day and then increasing at intervals. After approximately 3 weeks, injections are administered from Vial B (also in increasing volumes) with the time between injections increasing from 5 day to 10 day intervals. Finally, after 3 months patients are injected with increasing concentrations of Vial C with the intervals increasing from 10 days to 30 days.

The initial 3 vial series lasts a total of 9 months. Following the initial series, patients are injected with once monthly with doses of the maintenance vial. This vial is at the same 1:60 w/v concentration of vial C from the initial 3 vial set.

As one proceeds through the series the immune system is stimulated to produce IgG, which in turn prevents allergen binding.
to the IgE on the surface of the mast cells and therefore prevents the mast cells/basophils from rupturing and releasing mediators such as histamine. The more IgG that is produced, the less allergen is allowed to bind to IgE and therefore the less mast cells are degranulated. This results in a decrease of elimination of Type 1 (anaphylactic) allergic reactions associated with atopy. On average it takes 4-6 months for the IgG response to reach its peak (at which point the patient is protected). Thereafter maintenance therapy is undertaken to maintain the IgG levels at peak concentration.

In a recent study, a series of 170 animals were tested using the Ultimate SPOT test (91 allergens). These patients had their diets changed according to the SPOT food results and placed on hyposensitization treatment for their inhalant allergens. After 1 year (3 months into maintenance) the submitting veterinarians were surveyed and asked to score the patients with respect to level of improvement. Table 1 represents the results of the survey.

Note from the table that 85% of the patients showed more than a significant improvement in their symptoms. This was usually defined as dramatic reduction to complete elimination of other therapies such as corticosteroids and antihistimines.

<table>
<thead>
<tr>
<th>Improvements</th>
<th>Number</th>
<th>%</th>
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<tbody>
<tr>
<td>50-75%</td>
<td>91</td>
<td>54</td>
</tr>
<tr>
<td>&gt;50%</td>
<td>18</td>
<td>11</td>
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<tr>
<td>Slight</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>No improvements</td>
<td>5</td>
<td>3</td>
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<tr>
<td>Worse</td>
<td>0</td>
<td>0</td>
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Note from the table that 85% of the patients showed more than a significant improvement in their symptoms. This was usually defined as dramatic reduction to complete elimination of other therapies such as corticosteroids and antihistimines.

2008 NAVC in Orlando, NAVC Celebrates 25 Years

While exhibiting at this year’s NAVC 2008 in Orlando, Florida, Mary McKenna (Technical Support) and Laura Benakovich (Marketing Assistant) got the opportunity to meet with many of our international distributors. Among those we met were Shelley Skedden of Central Sales in Canada, Dr. Charlie Kim of Vetcom Korea in Korea, Dr. Amos Gershony of Biogal Galed Labs in Israel, Mr. Junya Yasuda of Spectrum Labs in Japan, Dr. Lyndon Comencencia of Curacao Veterinary Centre in Curacao, and Dr. Sandor Gal of Global Veterinary Connection P.L.C. representing Hungary. There were many new contacts from all over the world that introduced themselves, as well, at the conference. We look forward to this helping Spectrum Labs continue to expand our testing and treatment services throughout the globe.

Mary McKenna (Technical Support) and Laura Benakovich (Marketing Assistant) get friendly with the locals at this year’s NAVC in Orlando, Florida.

Congratulations to our ipod winners:

Dr. Amelia Besola
A Small Animal Hospital in Federal Way, WA

And:

Ms. Carole Patten
Lamoille Veterinary Services in Hyde Park, VA
Q: “Why do most of the laboratories that provide hyposensitization sets that only include 12 allergens?”

A: The number of allergens placed into a treatment set has been a subject dissected at length by many individuals. A number of years ago, individuals decided on the “magic number” of 10 as the maximum number of allergens that can effectively be placed in a set. Like many protocols, this number became gospel, while the original source and/or rationale for it remains elusive.

The decision to cut off placing no more than 12 allergens per set is purely an economical one in that they would rather sell two sets of 10 rather than one set of 20. We are absolutely sure that there is NO interference of allergens or reduced efficacy when you have 20 allergens in each set. We have tested this in multiple ways and are comfortable that placing 12 allergens in a single treatment set is nothing more than a marketing decision. It is not recommended that more than 20 be placed in a single treatment set, however, as the dilutions beyond that point become too weak.

Q: “If a pet owner has us draw serum for testing, then decides to wait before testing, should I freeze the serum sample until we are ready to send it to your lab?”

A: No. While it may seem a good idea to preserve the serum sample to test at a future date, freezing a serum sample is a no-no. Freezing causes a break down in the proteins needed for testing. Instead, wait to draw the sample from the animal at a better time for the pet owner or, if the owner only wishes to wait a week or two and you have already drawn the sample, you may refrigerate the sample until you send it to us. Please note the accurate date of when the blood was drawn on your accompanying paperwork.

Q: “What is the best way to increase the testing and treatment I do in my clinic?”

A: Spectrum Labs has just released two DVDs; one for Veterinarian information and one for pet owners. As always, Spectrum will provide, at no cost to you, marketing materials such as Office Posters, Pet Owner Brochures, Treatment Brochures, as well as a copy of each DVD. Please contact our Marketing Assistant, Laura Benakovich to request additional marketing materials free of charge at 1-800-553-1391 Ext. 116.

Spectrum Labs, Inc. has been performing human allergy testing and manufacture of treatment sets through our sister affiliate, Spectrum Health Care, Inc. for the last several years. We are pleased to announce that we are making these services available to all of our veterinary division clients* at a professional courtesy discount. You will now be able to provide our world famous SPOT Test to your office staff and members of their families at the discounted price of $115.00. The human SPOT Test includes 45 inhalant allergens consisting of local grasses, weeds, trees, molds and animal dander as well as 46 food allergens consisting of meats/poultry, dairy, seafood, grains, fruits, vegetables and spices.

Please call us at (800)553-1391 and ask us to fax you a copy of the special order form, blood draw and shipping instructions. We’ve designed this courtesy program. As usual, results will be available office within 48 hours after we receive the patient serum. Please feel free to take advantage of this special program that only Spectrum Labs is able to provide to the veterinary industry.

NEED A SPEAKER?

Let Spectrum Labs provide a speaker for your next meeting. Our presentations can be tailored to your needs in terms of length and style (formal or casual). A typical presentation lasts between 1-2 hours. There is no charge at all for the presentation, as long as there are a minimum number of 25 veterinarians present. The presentation provides a general overview on the subject:

“IMMUNOLOGY, TESTING AND TREATMENT OF YOUR ALLERGIC PATIENTS”

To get more information, or to schedule a speaker please call today and ask with a seminar coordinator at: (800) 553-1391

Spectrum Labs Introduces New DVDs!

Spectrum Labs has produced a Veterinarian DVD and Pet Owner DVD to add to your marketing material. As always with our marketing materials, there is no cost to you. For more information, contact Laura in Marketing at 800-553-1391 at extension 116.
WE WANT TO HEAR FROM YOU!!!
As Spectrum Labs is always striving for excellence in how we serve our clients we appreciate any questions, concerns, or suggestions that you may have that would help us to better serve you. Please take a moment to fill out the following survey and fax it to 480-464-0611.

**Customer Service:** When calling Customer Service, please rate the quality of the service you received.

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<td>Disappointing</td>
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**Technical Support:** Please rate the quality of the service you received from your Technical Support Representative.

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**Marketing Support:** Please rate the quality of the service you received from our Marketing Department.

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Please rate your overall experience with Spectrum Labs.

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<td>Exceptional</td>
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**Name and Title (optional):** ____________________________

**Clinic:** ____________________________

If you would like to be contacted regarding this survey, how would you prefer to be contacted?

- Email
- Telephone
- Fax

Please list contact address/phone or fax #: ____________________________

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**CVC Central**
KANSAS CITY, MO
AUGUST 23-26
BOOTH #

Come by and visit us at this show and be entered for a chance to win a $50 Visa Gift Card!

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