

## Specific Immunotherapy (SIT) - Treatment of “summer itch” in horses (summer seasonal recurrent dermatitis = SSRD)

### SIT - what is it and how is it manufactured?

The specific immunotherapy is an individually formulated medication for each allergic patient based on the results of a serological test or an intradermal test.

Using a blood test SSRD or “Summer Itch” is diagnosed by detection of free allergen-specific

IgE antibodies against various insect allergens. The samples should be taken once the patient shows visible skin lesions. Best time is approx. 4-6 weeks after the first occurrence until the regression of the symptoms.

### How is the therapy implemented?

Following a detailed treatment plan the patient receives weekly subcutaneous injections. At first the dosage increases and later a fixed volume is applied. Two different concentrations of the allergen solutions are used. Treatment should be carried out one year minimum. It is recommended though to

continue for several years. In this case the maintenance dosage is given every 2-4 weeks. Occasionally modifications of the dosage or of the injection intervals may be required. A regular follow up by the veterinarian is therefore recommended.

### What therapy success can I count on?

In an internal laboratory survey data from 36 patients were evaluated. All patients had undergone immunotherapy for at least 6 months and had gone through an exposition phase during the therapy. Age of the animals varied between 2 and 20 years, the 7-10 year old horses representing the majority with 41.6% of the patients.

**Looking at all patients a therapy success was reported in 44,5%**, success being defined as symptom-free or substantial improvement of

the clinical symptoms. An additional 16.6% showed a slight improvement of the clinical symptoms.

These symptoms were generally well manageable by administering an accompanying therapy. In 38.9% of the cases the SIT showed little to no success, however in none of the patients a worsening to the symptoms was reported.

### Does success of therapy depend on the duration to the illness?

Patients with a **short duration of the disease (max. 1-2 years)** that were hyposensitised in the early stages showed by far better therapy results. **All of these patients responded to the therapy, more than 80% of them with significant improvement up to being free from symptoms** even during the flight season of insects.

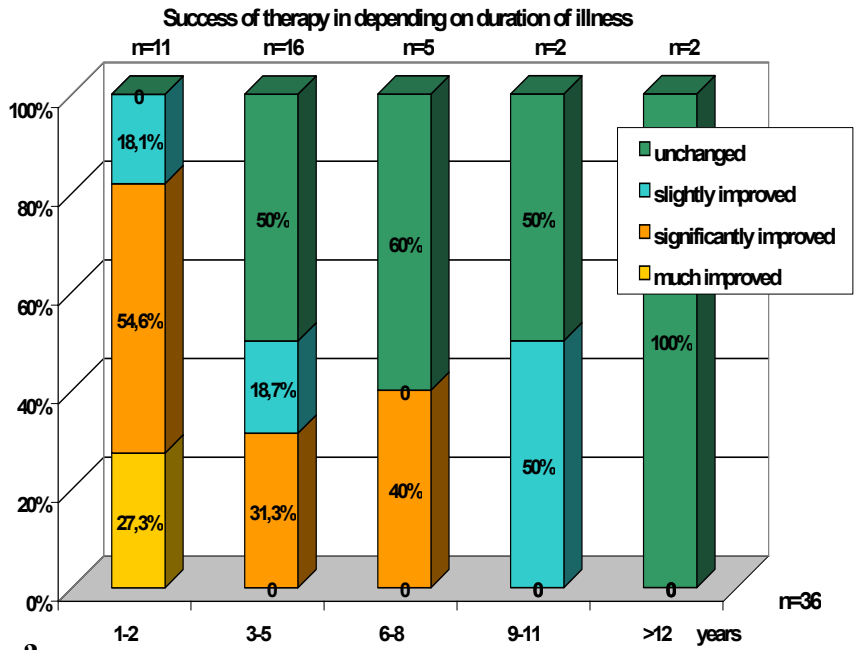
All horses that did not respond to the therapy had been suffering from “Summer Itch“ for more than 3 years (approx. 1/5 of them since birth) and more than 60% of these patients were being treated less than one year.

Since SSRD is a seasonal disease and therapy usually is started in the winter with no exposi-

tion of insects a first evaluation of therapy success can be made 3-6 months after beginning.

At that time all patients with good response to the therapy already showed significantly reduced symptoms or were completely free of symptoms. This fact generally contributed to a good acceptance of this treatment method with the owners of the patients.

A final evaluation of the therapy should be made after 1-2 years of treatment because the success may be observed with delay.



**What kind of side effects can occur?**

Occasionally localised swelling is seen at the injection site (2,7%) which regresses within a few hours. It proves helpful to inform the owner on possible side effects in order to avoid

premature termination of the therapy. In extremely rare cases a permanent deterioration of the symptoms may occur, however this was not observed in our evaluation.

**Conclusion**

1. In animals with a short duration of illness (less than 2 years) a success rate of more than 80% was observed, in chronically sick patients 45% can be treated successfully with SIT.
2. Early employment of the specific immunotherapy (approx. 1-2 years after first symptoms appear) plays a major key role for success of the treatment.
3. A consistent implementation of the treatment

for at least one year is crucial.

4. Side effects arise rarely and only for a short period of time and require no treatment.

Result: When applied under optimal conditions by the veterinarian the SIT proves to be a potent component in the reduction of the clinical symptoms for a large percentage of patients suffering from “Summer Itch”.

**Success of SIT for SSRD**

