

# **Therapik**

## **Clinical Study**

### **Clinical Data**

To demonstrate the efficacy of the Therapik device for its intended use, clinical evaluations were conducted in Venezuela, France, Italy and Reunion (Mascarene Islands).

### **Therapik Clinical Experience in Venezuela (1988-1989)**

#### **Patient Population:**

In Venezuela, a total of 35 individuals were treated (self-administered therapy) with the Therapik over a 4 month period in 1988-89. Employees of a forest clearing company were invited to carry the Therapik device, and to use it in accordance with the product instructions if stung by a bee, wasp or other insect. This user population was selected for the study because of the relatively high frequency of bee and wasp stings during forest clearing operations. The individual users in this study included both male and female subjects ranging in age from 18 months to 53 years of age. This group included two of the employee's children (ages 18 months and 6 years) who were treated with the Therapik device.

#### **Type of Injury Treated:**

Thirty-two of the 35 users had received hymenopterous insect stings (thermolabile venom) and the remaining 3 users applied the device to treat mosquito and flea bites (non-thermolabile venom). It was reported that several varieties of insects within the generic categories of "bees" and "wasps" were included, but the users were unable to identify the actual species.

#### **Number of Stings per Device Use:**

Most commonly, the Therapik was used to treat a single sting. In some cases, however, multiple stings were treated including one 30 year old male who incurred a total of 30 wasp stings. Here, the Therapik was used to provide palliative pain relief during transportation to the hospital for further medical treatment. This patient was successfully treated at the hospital with antihistamine injections.

#### **Elapsed Time Between Sting and Therapik Treatment:**

Each study participant was provided with their own device; therefore, the elapsed time between the sting and the treatment was usually quite short (from a "few seconds" to 1 minute). In the one instance in which the device was not applied until 15 minutes after the wasp sting was received, however, the user still rated the device effectiveness as "very good."

#### **Duration of Heat Application:**

In all cases, the average duration of heat application from the Therapik device ranged from 8 - 18 seconds. The participants in this study counted the duration of heat application from the moment that the actual sensation of heat was initially felt.

**Data Collection Procedure:**

Users were asked to record the number and type of stings or bites, the time elapsed between the sting and the Therapik treatment, and the duration of heat application. Users were also asked to rate the efficacy of the device on a scale from 1 (very good) to 4 (no effect), and to detail any side effects.

Summary of Specific Injuries Treated:

The specific breakdown of the injuries treated in the Venezuelan study was as follows:

Bee stings: 6 subjects/12 stings

Mosquito bites: 2 subjects/20 - 25 bites

Wasp stings: 25 subjects/63 stings

Ant stings: 1 subject/2 stings

Flea bite: 1 subject/10 bites

**Device Efficacy:**

In 33 of 35 cases, the efficacy of the Therapik was rated as “very good.” The remaining ratings consisted of one “good” rating for a total of 10 mosquito bites, and one “moderate” for the individual with 30 wasp stings. With the exception of the man with 30 wasp stings and one 30 year old male with an allergic reaction to a bee sting, no side effects were reported. A detailed summary of the data from this study is presented in Table 1.

**Side Effects:**

Two users reported side effects in the Venezuelan study. Patient #3, who had received 30 bee stings, required hospital-administered antihistamine injections to relieve the pain and inflammation resulting from this large number of stings. This patient also reported that he had previously experienced a strong localized reaction to a single bee sting. The patient’s wife applied the Therapik to each sting site while he was being transported to the hospital, and reported that her husband’s pain and “haziness” was improved following the Therapik treatment. Patient #24 also reported that he was an “allergic patient” with respect to bee stings, but did not provide any additional details. Despite his allergic status, this patient rated the device’s effectiveness as “very good.” No users reported pain or burns resulting from the action of the device itself.

## **Therapik Clinical Experience in France, Italy and Reunion (1988)**

### **Patient Population:**

In 1988, a similar 4-month clinical study was conducted at various locations in France, Italy, and in Africa on the Mascarene Island of Reunion. A total of 34 subjects of both sexes ranging in age from 1 to 78 years were included in the study.

### **Type of Injury Treated:**

In addition to insect stings and bites, this study also included stings from various sea animals (weaver fish, jellyfish, and scorpion fish) as well as two incidents involving stinging nettles.

### **Number of Stings per Device Use:**

In the cases involving insect stings, the Therapik was most commonly used to treat a single sting. Both encounters with stinging nettles resulted in multiple injuries (8 and 10). Both jellyfish encounters resulted in multiple stings; because of the configuration of the animal's tentacles, it was difficult to accurately determine the number of actual stings. Both users reported the number of jellyfish stings as a range (10 - 15, and 7 - 10). In the case of multiple injuries, all users were instructed to apply the device to the site of each sting.

### **Elapsed Time Between Sting and Therapik Treatment:**

In this study, the time elapsed between the sting and the initial application of heat from the Therapik device ranged from as little as 10 seconds for a wasp sting to 12 hours for a tick bite. The vast majority of the most painful injuries such as bee or wasp stings and jellyfish stings were treated within a few minutes; the two cases with a prolonged time lapse between injury and treatment were insect bites which may be characterized as more irritating than painful (tick and mosquito bites).

### **Duration of Heat Application:**

In this study, the duration of heat application ranged from 20 seconds to one minute or more. In most cases, the bee and wasp stings were treated with heat application for 60 seconds or less. The sea creature stings required slightly longer heat applications (60 seconds to 2 minutes).

There was a slight difference in the data recording between the two studies in that the Venezuelans recorded the duration of application as the time for which a sensation of heat was actually felt, while the subjects at all other sites counted the application period as the time during which the power button was actually depressed. The data may be compared by adding approximately 10 seconds to the Venezuelan data.

### **Data Collection Procedure:**

As in the Venezuelan study, the users were asked to record the number and type of stings or bites, the time elapsed between the sting and the Therapik treatment, and the duration of heat application. Users were also asked to rate the efficacy of the device on a scale from 1 (very good) to 4 (no effect), and to detail any side effects.

### **Summary of Specific Injuries Treated:**

The specific breakdown of the injuries treated in the France/Italy/Reunion study was as follows:

Bee stings: 13 subjects/13 stings	Mosquito bites: 3 subjects/11 bites
Wasp stings: 4 subjects/4 stings	Spider bites: 1 subject/1 bite
Hornet stings: 2 subjects/2 stings	Nettle stings: 2 subjects/18 stings
Ant stings: 2 subject/7 stings	Tick bites: 1 subject/1 bite
Sea Creatures	
Weaver fish stings: 3 subjects/3 stings	
Jellyfish stings: 2 subjects w/17 - 25 stings	
Scorpion fish stings: 1 subject/1 sting	

### **Device Efficacy:**

In 28 of 34 cases in this study, the efficacy of the Therapik was rated as “very good.” Five users rated the efficacy of the device as “good;” these subjects had received stings from a hornet, a scorpion fish, a weaver fish, a jellyfish and a spider. One subject rated the efficacy as “moderate” for a single bee sting. Two users reported itching following the Therapik treatment, and the spider bite victim reported the presence of a vesicle at the site of the injury. A detailed summary of the data from this study is presented in a **Table 2**.

### **Side Effects:**

In this study, three users reported side effects, all of which were attributed to the injury rather than the use of the device. One user who had been stung by a bee (#28) and one user who had received 10 - 15 jellyfish stings (# 29) reported post-treatment itching. One user who had been bitten by a spider reported the development of a vesicle at the site of the bite. Side effect results were not provided by one user (#3). As in the Venezuelan study, no burns or injuries were reported to have been caused by the Therapik device itself.

### **Baseline Data to Establish Pain Responses to Insect and Sea Creature Injuries**

The clinical effectiveness trials summarized above did not include a control group in order to provide a baseline for the pain ratings of an untreated insect or sea creature bite/sting. This was not considered necessary, since virtually everyone has experienced some sort of bee or wasp sting at some time in their lives, and the pain rating for such injuries is widely known! Commonly available home medical and first aid texts such as the Time-Life **Medical Advisor** and the **Johnson & Johnson First Aid Book** describe the symptoms of a bee or wasp sting as “pain, swelling, redness, itching & burning,” and “local swelling,

pain, redness, itching & burning at the site of the sting.” A study by Prince, Gunson and Scarpa published in the March 1988 issue of *Trends in Biochemical Sciences* describes the acute effects of honeybee stings as “a sharp stabbing pain lasting for perhaps five minutes, followed some hours later by delocalized swelling and itching.”

Schmidt, *et. al.* have analyzed the venoms of 20 species of hymenopterous insects (wasps, ants and bees) in order to characterize the venoms with respect to enzymatic activity and pain-inducing activity (algogenicity). The pain-inducing activity of these insects was rated on a scale of 0 - 4, with 4 being the most painful. The bite of the *Paraponera clavata* species of ant was designated as most painful (4), with various wasps and one other ant rated as 3. Pain-inducing ratings of 2 were assigned to the majority of the other hymenopterous insects.

Most individuals are not as familiar with the pain and other reactions resulting from encounters with sea animals. The **J&J First Aid Book** describes the symptoms of jellyfish and Portuguese man-of-war stings as “burning pain, red skin and rash, muscle cramps, nausea, possible difficulty breathing, and possible shock.” The response to a stingray sting includes “severe pain.” An article published by Kaufman in *Pediatric Emergency Care* describes a 14-year-old girl’s reaction to a Portuguese man-of-war envenomation as “intense burning and pain” followed by “numbness and paralysis” of the affected extremity. The girl was taken to the hospital, where she was released after six hours of observation.

The **Cecil Textbook of Medicine** describes the pain resulting from scorpionfish and stonefish stings as “a devastating experience, with intense local tissue swelling and discoloration.” It is, therefore, significant to note that the Therapik device was given an effectiveness rating of “good” when used to treat a scorpionfish sting in the France/Italy/Reunion study.

In an study published in *The Journal of Dermatology* (Cutaneous Reactions Caused by Experimental Exposure to Jellyfish, *Carybdea rastonii*), twenty-five volunteers (15 female and 10 male, aged 20 - 53 years) were exposed to tentacles cut from a living jellyfish. The persistent time of pain and erythema as well as the presence of any subsequent flare-up reaction was noted for each volunteer. All 25 volunteers reported persistent pain lasting from 10 minutes to 8 hours, and erythema which persisted between 24 hours and 7 days. The volunteers described their reaction to the envenomation as “severe pain and a burning sensation.” The article lists “pain, erythema, whealing, papulo-vesicular lesions and hemorrhage” as typical reactions to jellyfish stings; additional generalized reactions such as “abdominal pain, chills, fever, malaise and vomiting” are also described. In contrast, the two jellyfish sting victims who applied the Therapik in the France/Italy/Reunion study reported rated the device’s effectiveness as “good” and “very good.” Weaver fish stings are reported by Chhatwal and Dreyer to be “extremely painful and accompanied by swelling and necrosis.” The Therapik was used to treat two weaver fish stings in the France/Italy/Reunion study; the device’s effectiveness was rated as “very good” in one case, and as “good” in the other.

### **Overall Device Efficacy (Combined Clinical Experience):**

The Therapik device was used to collect clinical effectiveness data in a total of 69 cases involving stings and bites from various hymenopterous and non-hymenopterous insects and sea creatures. In an overwhelming majority of these cases (61/69, or 88.4%), the effectiveness of the device was rated as “very good.” An additional 7 users (10.1%) rated the device’s effectiveness as “good,” and 1 user (1.5%) reported the effectiveness to be “fair.” No serious side effects related to the use of the device were reported.

**Tables 3, 4, 5, 6 and 7** have been compiled to demonstrate the clinical effectiveness of the device for the treatment of specific injuries.

**Table 3** summarizes the clinical data for wasp stings (29 cases), **Table 4** includes data for bee stings (19 cases), and **Table 5** includes the data from two cases of hornet stings. Wasps, bees and hornets are all hymenopterous insects known to have thermolabile venom. The Therapik device was reported to have a user efficacy rating of “very good,” or 1 on a scale of 1 to 4 in 48 of 50 cases involving wasp, bee and hornet stings. One of 50 users reported an efficacy rating of “good,” or 2 on a scale of 1 to 4 for a hornet sting. The remaining user rated the device’s efficacy as “fair” for a bee sting. Side effect data was provided for 49 of the 50 uses. One of the 3 reported cases with side effects involved a man who received 30 wasp stings, and was taken to the hospital for antihistamine injections; the Therapik was used to make the patient more comfortable during the trip to the hospital. One of the users reported only that he was an “allergic patient;” another reported itching at the site of a bee sting which appeared unrelated to the use of the Therapik.

**Table 6** summarizes the data for 5 cases of mosquito bites, 3 cases of ant bites, 2 cases of stinging nettles, and one case each for a flea bite, spider bite and a tick bite. Once again, the device’s effectiveness was rated as “very good” in 10 of these 13 cases. One mosquito bite victim reported the effectiveness as “good,” as did the single ant and spider bite victims. One side effect was reported as a vesicle at the site of the spider bite. With the exception of ants, the insects listed in this table are not hymenopterous, and therefore are not believed to have thermolabile venom. The Therapik is still an effective treatment for relief of the irritation of such bites, because the heat appears to relieve inflammation in much the same way that the predicate infrared heating devices provide relief from the inflammation associated with arthritis and bursitis. Because of the potentially poisonous nature of some spider venoms, and also because spider venom is not known to be thermolabile, the Therapik is specifically contraindicated in its labeling for the treatment of spider bites.

**Table 7** summarizes data from 6 encounters with sea creatures including weaver fish, scorpion fish and jellyfish, all of which have thermolabile venom. The effectiveness of Therapik was reported as “very good” in 3 cases (two weaver fish and one jellyfish), and as “good” in 3 cases involving a weaver fish, a scorpion fish and a jellyfish. One jellyfish sting victim reported subsequent itching at the site of the envenomization.

The Jenex Corp. believes that the data collected during these clinical trials effectively documents the Therapik device's utility and efficacy for the treatment of pain and discomfort resulting from a variety of insect and sea animal stings. In addition, the device appears to provide good relief for any users from the itching and discomfort of other non-venomous insect bites. In fact, the Therapik has been so widely accepted in France (where it has been available in pharmacies since 1990) that it is routinely supplied to all of the Lifeguard Associations at seaside resorts, and is carried by many fire department rescue squads.

### **Additional Clinical Reports (France):**

A copy of a clinical report summarizing the effectiveness of the "Body-Pic" device was obtained in France. The Body-Pic is a look-alike device which has design and performance characteristics identical to those of the Therapik. The Body-Pic was studied by Dr. Jacques Boisvert in Canada for the treatment of stings and bites from bees, horseflies, wasps, ticks, hornets, sand fleas, ants, and the mosquito known in Canada as a "Brulot." Fifty volunteers including forestry workers, workmen, office clerks and families with children participated in this study. As in the Therapik study, the device was reported to be very effective in reducing the pain and edema resulting from the insect stings or bites. No serious side effects were reported. Because the Body-Pic is essentially the same device as the Therapik, we believe that this anecdotal report is also useful in determining the safety and effectiveness of the Therapik device.

Therapik

**Table 1**

<b>Therapik Clinical Data - Venezuela User ID</b>	<b>Age</b>	<b>Type of Sting</b>	<b>Number of Stings</b>	<b>Delay Before Heat Application</b>	<b>Duration of Heat Application</b>	<b>User's Efficacy Rating *</b>	<b>User Reported Side Effects</b>
1	23 years	Wasp	2	5 sec.	8 sec.	1	0
2	45 years	Wasp	1	3 sec.	few sec.	1	0
3	30 years	Wasp	30	During hospital conveyance	**	1	**
4	19 years	Wasp	1	5 sec.	9 sec.	1	0
5	18 years	Wasp	1	few sec.	9 sec.	1	0
6	35 years	Wasp	1	15 min.	few sec.	1	0
7	38 years	Wasp	1	few sec.	9 sec.	1	0
8	19 years	Wasp	1	few sec.	9 sec.	1	0
9	18 years	Wasp	1	few sec.	9 sec.	1	0
10	23 years	Wasp	1	3 sec.	8 sec.	1	0
11	37 years	Wasp	1	55 sec.	7 sec.	1	0
12	42 years	Wasp	1	5 sec.	7 sec.	1	0

13	29 years	Wasp	1	few sec.	7 sec.	1	0
14	19 years	Wasp	2	few sec.	8 sec.	1	0
15	39 years	Wasp	1	few sec.	8 sec.	1	0
16	29 years	Wasp	1	few sec.	8 sec.	1	0
17	19 years	Wasp	1	few sec.	8 sec.	1	0
18	18 years	Wasp	1	few sec.	8 sec.	1	0
19	18 years	Wasp	1	few sec.	7 sec.	1	0
20	45 years	Bee	1	few sec.	7 sec.	1	0
21	20 years	Bee	2	few sec.	10 sec.	1	0
22	42 years	Bee	2	few sec.	10 sec.	1	0
23	42 years	Bee	1	few sec.	5 sec.	1	0
24	30 years	Bee	1	few sec.	5 sec.	1	Allergic patient
25	25 years	Wasp	2	few sec.	18 sec.	1	0
26	53 years	Bee	5	few sec.	15 sec.	1	0
27	23 years	Wasp	9	few sec.	15 sec.	1	0
28	6 years	Mosquito	10 - 13	few sec.	12 sec.	1	0
29	17 years	Flea	10	few sec.	15 sec.	1	0
30	47 years	Wasp	3	few sec.	15 sec.	1	0
31	25 years	Mosquito	10	few sec.	15 sec.	2	0
32	18 months	Wasp	1	few sec.	10 sec.	1	0
33	26 years	Wasp	3	few sec.	15 sec.	1	0
34	29 years	Wasp	1	few sec.	15 sec.	1	0
35	42 years	Ant	2	few sec.	15 sec.	1	0

\* Efficacy Rating Scale: 1 = Very Good, 2 = Good, 3 = Moderate, 4 = Not effective

\*\* Patient #3 was treated with the Therapik while being transported to the hospital for treatment of a large number of wasp stings. He had previously experiences a very strong local reaction to a single bee sting. At the hospital, he was successfully treated with antihistamine injections.

## Therapik

**Table 2**

<b>Therapik Clinical Data - France, Italy, Reunion User ID</b>	<b>Age</b>	<b>Type of Sting</b>	<b>Number of Stings</b>	<b>Delay Before Heat Application</b>	<b>Duration of Heat Application</b>	<b>User's Efficacy Rating *</b>	<b>User Reported Side Effects **</b>
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1	33 years	Bee	1	6 min.	40 sec.	1	0
2	38 years	Bee	1	2 min.	40 sec.	1	0
3	30 years	Bee	1	1 min.	45 sec.	3	N/A
4	3 years	Hornet	1	2 min.	50 sec.	1	0
5	42 years	Bee	1	2 min.	40 sec.	1	0
6	37 years	Bee	1	20 sec.	30 sec.	1	0
7	8 years	Nettle	8	10 min.	20 sec./sting	1	0
8	5 years	Tick	1	12 hours	60 sec.	1	0
9	39 years	Weaver Fish	1	2 min.	60 sec.	1	0
10	13 years	Mosquito	5	20 sec.	20 sec./sting	1	0
11	11 years	Mosquito	3	1 min.	20 sec./sting	1	0
12	10 years	Scorpion Fish	1	3 min.	90 sec.	2	0
13	19 years	Hornet	1	80 sec.	60 sec.	2	0
14	78 years	Wasp	1	10 sec.	30 sec.	1	0
15	37 years	Weaver Fish	1	60 sec.	60 sec.	2	0
16	33 years	Bee	1	2 min.	45 sec.	1	0
17	41 years	Bee	1	50 sec.	45 sec.	1	0
18	41 years	Weaver Fish	1	2 min.	60 sec.	1	0
19	34 years	Wasp	1	25 sec.	30 sec.	1	0
20	13 years	Nettle	10	105 sec.	20 sec./sting	1	0
21	4 years	Mosquito	3	3 hours	30 sec./sting	1	0
22	35 years	Wasp	1	2 min.	60 sec.	1	0
23	37 years	Ant	3	60 sec.	40 sec.	1	0
24	30 years	Bee	1	3 min.	45 sec.	1	0
25	37 years	Bee	1	45 sec.	40 sec.	1	0
26	31 years	Bee	1	60 sec.	35 sec.	1	0
27	35 years	Wasp	1	30 sec.	45 sec.	1	0
28	45 years	Bee	1	60 sec.	30 sec.	1	itching
29	27 years	Jellyfish	10 - 15	2 min.	2 min.	2	itching
30	41 years	Jellyfish	7 - 10	3 min.	105 sec.	1	0
31	17 years	Ant	4	10 min.	30 sec.	2	0
32	1 year	Bee	1	30 sec.	30 sec.	1	0
33	35 years	Spider	1	30 sec.	60 sec.	2	vesicle
34	4 years	Bee	1	60 sec.	50 sec.	1	0

**Table 3**  
**Therapik Combined Clinical Data**

<b>Wasp Stings</b> Type of Sting	<b>User ID *</b>	<b>Number of Stings</b>	<b>Delay Before Heat Application</b>	<b>Duration of Heat Application **</b>	<b>User's Efficacy Rating ***</b>	<b>User Reported Side Effects</b>
Wasp	V1	2	5 sec.	18 sec.	1	0
Wasp	V2	1	3 sec.	few sec.	1	0
Wasp	V3	30	During hospital conveyance	See Table D.1	1	See Table D.1
Wasp	V4	1	5 sec.	19 sec.	1	0
Wasp	V5	1	few sec.	19 sec.	1	0
Wasp	V6	1	15 min.	few sec.	1	0
Wasp	V7	1	few sec.	19 sec.	1	0
Wasp	V8	1	few sec.	19 sec.	1	0
Wasp	V9	1	few sec.	19 sec.	1	0
Wasp	V10	1	3 sec.	18 sec.	1	0
Wasp	V11	1	55 sec.	17 sec.	1	0
Wasp	V12	1	5 sec.	17 sec.	1	0
Wasp	V13	1	few sec.	17 sec.	1	0
Wasp	V14	2	few sec.	18 sec.	1	0
Wasp	V15	1	few sec.	18 sec.	1	0
Wasp	V16	1	few sec.	18 sec.	1	0
Wasp	V17	1	few sec.	18 sec.	1	0
Wasp	V18	1	few sec.	18 sec.	1	0
Wasp	V19	1	few sec.	17 sec.	1	0
Wasp	V25	2	few sec.	28 sec.	1	0
Wasp	V27	9	few sec.	25 sec.	1	0
Wasp	V30	3	few sec.	25 sec.	1	0
Wasp	V32	1	few sec.	20 sec.	1	0
Wasp	V33	3	few sec.	25 sec.	1	0
Wasp	V34	1	few sec.	25 sec.	1	0
Wasp	O14	1	10 sec.	30 sec.	1	0
Wasp	O19	1	25 sec.	30 sec.	1	0
Wasp	O22	1	2 min.	60 sec.	1	0
Wasp	O27	1	30 sec.	45 sec.	1	0

**Table 4****Therapik Combined Clinical Data**

<b>Bee Stings Type of Sting</b>	<b>User ID *</b>	<b>Number of Stings</b>	<b>Delay Before Heat Application</b>	<b>Duration of Heat Application **</b>	<b>User's Efficacy Rating ***</b>	<b>User Reported Side Effects</b>
Bee	V20	1	few sec.	17 sec.	1	0
Bee	V21	2	few sec.	20 sec.	1	0
Bee	V22	2	few sec.	20 sec.	1	0
Bee	V23	1	few sec.	15 sec.	1	0
Bee	V24	1	few sec.	15 sec.	1	Allergic patient
Bee	V26	5	few sec.	25 sec.	1	0
Bee	O1	1	6 min.	40 sec.	1	0
Bee	O2	1	2 min.	40 sec.	1	0
Bee	O3	1	1 min.	45 sec.	3	N/A
Bee	O5	1	2 min.	40 sec.	1	0
Bee	O6	1	20 sec.	30 sec.	1	0
Bee	O16	1	2 min.	45 sec.	1	0
Bee	O17	1	50 sec.	45 sec.	1	0
Bee	O24	1	3 min.	45 sec.	1	0
Bee	O25	1	45 sec.	40 sec.	1	0
Bee	O26	1	60 sec.	35 sec.	1	0
Bee	O28	1	60 sec.	30 sec.	1	itching
Bee	O32	1	30 sec.	30 sec.	1	0
Bee	O34	1	60 sec.	50 sec.	1	0

**Table 5****Therapik Combined Clinical Data**

<b>Hornet Stings Type of Sting</b>	<b>User ID *</b>	<b>Number of Stings</b>	<b>Delay Before Heat Application</b>	<b>Duration of Heat Application **</b>	<b>User's Efficacy Rating ***</b>	<b>User Reported Side Effects</b>
Hornet	O4	1	2 min.	50 sec.	1	0
Hornet	O13	1	80 sec.	60 sec.	2	0

**Table 6****Therapik Combined Clinical Data**

<b>Miscellaneous Insect Stings (including Nettles)</b> Type of Sting	User ID *	Number of Stings	Delay Before Heat Application	Duration of Heat Application **	User's Efficacy Rating ***	User Reported Side Effects
Mosquito	V28	10 - 13	few sec.	22 sec.	1	0
Mosquito	V31	10	few sec.	25 sec.	2	0
Mosquito	O10	5	20 sec.	20 sec./sting	1	0
Mosquito	O11	3	1 min.	20 sec./sting	1	0
Mosquito	O21	3	3 hours.	30 sec./sting	1	0
Flea	V29	10	few sec.	25 sec.	1	0
Ant	V35	2	few sec.	25 sec.	1	0
Ant	O23	3	60 sec.	40 sec.	1	0
Ant	O31	4	10 min.	30 sec.	2	0
Tick	O8	1	12 hours	60 sec.	1	0
Spider	O33	1	30 sec.	60 sec.	2	vesicle
Nettle	O7	8	10 min.	20 sec./sting	1	0
Nettle	O20	10	105 sec.	20 sec./sting	1	0

**Table 7****Therapik Combined Clinical Data**

<b>Sea Creatures</b> Type of Sting	User ID *	Number of Stings	Delay Before Heat Application	Duration of Heat Application **	User's Efficacy Rating ***	User Reported Side Effects
Weaver Fish	O9	1	2 min.	60 sec.	1	0
Weaver Fish	O15	1	60 sec.	60 sec.	2	0
Weaver Fish	O18	1	2 min.	60 sec.	1	0
Scorpion Fish	O12	1	3 min.	90 sec.	2	0
Jellyfish	O29	10 - 15	2 min.	2 min.	2	itching
Jellyfish	O30	7 - 10	3 min.	105 sec.	1	0