

What does it do?

With TempTest® the heat and cold urticaria can be determined. Additionally the exact temperature triggering it for the individual patient can be stated. This characterizes the severity of the disease.

The Principle

The patient places the inner forearm on an aluminum stencil on the device for 5 minutes. The stencil applies a temperature range from 4° to 44°C continuously.

After 10 more minutes, the wheals appearing on the arm are compared to the stencil and the threshold temperature is conveniently determined. The wheals can be marked on the stencil which can be stored in the patient file for medical documentation.

Fields of Application

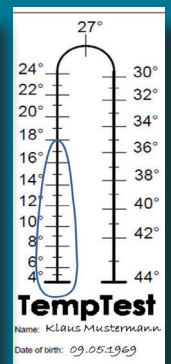
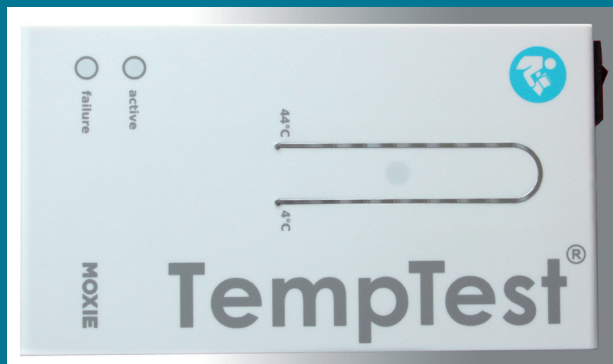
Cold and heat contact urticaria are both forms of physical urticaria, in which by contact of the skin with temperatures below or above skin temperature, symptoms like itching, burning wheals, etc. will occur. Cold contact urticaria however is the more frequent type.

Consuming ice cream or cold drinks or even the evaporative cool after sweating can induce reactions. Jumping into cold water or an infusion, as during anesthesia may end deadly.

There is no general threshold temperature for the patients. It differs individually. The success of the treatment needs to be monitored constantly by determination of the trigger temperature. Therefore the TempTest® is a very important diagnostic instrument in the dermatological practice and in hospital.

Advantages

- Medical device class IIa.
- The determination of the triggering temperature with TempTest® is defined in the guidelines for inducible urticaria (EAACI/GA²LEN/EDF/WAO Guideline), as it is the only device with this performance.
- Each urticaria consultation has to undergo an audit based on the application of TempTest® for joining the worldwide accepted UCARE (Urticaria Center of Excellence and Reference).
- Can be used on adult and pediatric patients.
- Unwanted side effects are very uncommon.
- Once the patient knows the individual threshold temperature, symptoms can be avoided as far as possible by appropriate behaviour, clothes or skin protection products.



Technical Data

Dimensions: approx. 35.5 x 14 x 9.5 cm (L x W x H), Weight: approx. 1.7 kg
 Power supply: 100-240 V, 50/60 Hz, Power consumption 1,5 -0,5 A, Fuse: T10AH250V, 5 x 20 mm
 Protecting class IP21, protection rating 1, class IIa medical product, accuracy: +/- 2° C, operation temperature: 10-27°C,
 max. r.H.: 80%, storage temperature: -10-35°C
 Technical changes may be made without prior notice.

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- Siebenhaar, F., Staubach, P., Metz, M., Magerl, M., Jung, J., & Maurer, **Peltier effectbased temperature challenge – an improved method for diagnosing cold urticaria.** J. Allergy Clin. Immunol. 2004; 114; 1224-1225.
- Magerl, M., Schmolke, J., Siebenhaar, F., Zuberbier, T., Metz, M., & Maurer, **Acquired cold urticaria symptoms can be safely prevented by Ebastine.** Allergy 2007; 62; 1465-1468.
- Siebenhaar, F., Weller, K., Mlynek, A., Magerl, M., Altrichter, S., Vieira dos Santos, R., Maurer, M., and Zuberbier, **Acquired cold urticaria: clinical picture and update on diagnosis and treatment.** Clin. Exp. Dermatol. 2007; 32; 241-245.
- Siebenhaar, F., Degener, F., Zuberbier, T., Martus, P., & Maurer, **High-dose desloratadine decreases wheal volume and improves cold provocation thresholds as compared with standard dose treatment in patients with acquired cold urticaria: randomized, placebo-controlled, crossover study.** J. Allergy Clin. Immunol. 2009; 123; 672-679.
- Magerl, M., Borzova, E., Giménez-Arnau, A., Grattan, C. E. H., Lawlor, F., Mathelier-Fusade, P., Metz, M., Mlynek, A., & Maurer, **The definition and diagnostic testing of physical and cholinergic urticarias – EAACI/GA2LEN/EDF/UNEV consensus panel recommendations.** Allergy 2009; 64; 1715-1721.
- Metz, M., Scholz, E., Ferrán, M., Izquierdo, I., Giménez-Arnau, A., & Maurer, **Rupatadine and its effects on symptom control, stimulation time, and temperature thresholds in patients with acquired cold urticaria.** Ann. Allergy Asthma Immunol. 2010; 104; 86-92.
- Mlynek, A., Magerl, M., Siebenhaar, F., Weller, K., Vieira dos Santos, R., Zuberbier, T., Zalewska-Janowska, A., and Maurer, **Results and relevance of critical temperature threshold testing in patients with acquired cold urticaria.** Brit. J. Dermatol. 2010; 162; 198-200.
- Krause, K., Zuberbier, T. & Maurer, **Modern approaches to the diagnosis and treatment of cold contact urticaria.** Curr. Allergy Asthm. 2010; 10; 243-249.
- K.Krause, E.Ardelean, B.KeBler, M.Magerl, M. Metz, F. Siebenhaar, K. Weller, T. Zuberbier, M. Maurer; **Causes, Triggers and Mechanisms of Physical Urticarias – Insights from Cold Urticaria;** www.advances-in-psoriasis.com; Vol. 1 Issue 3 2010
- Abajian, M., Mlynek, A., & Maurer, **Physical urticaria.** Curr. Allergy Asthma Rep. 2012; 12; 281-287.
- Magerl, M., Pisarevskaja, D., Staubach, P., Martus, P., Church, M. K., & Maurer, **Critical temperature threshold measurement for cold urticaria: a randomised controlled trial of H1-antihistamine up-dosing.** Br. J. Dermatol. 2012; 166; 1095-1099.
- Abajian, M., Schoepke, N., Altricher, S., Zuberbier, T., & Maurer, **Physical urticarias and cholinergic urticaria.** Immunol. Allergy Clin. North. Am. 2014; 34; 73-88.
- Krause, K., Spohr, A., Zuberbier, T., Church, M. K., & Maurer, **Up-dosing with bilastine results in improved effectiveness in cold contact urticaria.** Allergy 2013; 68; 921-928.
- Magerl, M., Abajian, M., Krause, K., Altrichter, S., Siebenhaar, F., & Church, **An improved Peltier effect-based instrument for critical temperature threshold measurement in cold- and heat-induced urticaria.** J. Eur. Acad. Dermatol. Venereol. 2014.
- T. Zuberbier, W. Aberer, R. Asero, C. Bindslev-Jensen, Z. Brzoza, G. W. Canonica, etc., **The EAACI/GA2LEN/EDF/WAO Guideline for the definition, classification, diagnosis, and management of urticaria: the 2013 revision and update;** Allergy 69 (2014) 868–887 © 2014 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd
- M.E. Martinez-Escala, L. Curto-Barredo, L. Carnero, R.M. Pujol, A.M. Giménez-Arnau, **Temperature thresholds in assessment of the clinical course of acquired cold contact urticaria: a prospective observational one-year study.** Acta Derm. Venereol. 2015 Mar; 95(3): p. 278-282
- M. Abajian, L. Curto-Barredo, K. Krause, E. Santamaria, I. Izquierdo, M. K. Church, M. Maurer, A. Giménez-Arnau, **Rupatadine 20 mg and 40 mg are effective in reducing the symptoms of chronic cold urticarial,** Acta Derm. Venereol. 2016; 96; p. 56-59
- M. Bertolln-Colilla, G. Deza, L. Curto-Barredo, R. M. Pujol, A. M. Gimenez-Arnau, **Thresh-old's value in acquired cold urticaria: Prognostic and therapeutic monitoring,** 3rd GA2LEN GLOBAL URTICARIA FORUM Berlin, 29-30 November 2016
- M. Metz, A. Schutz, K. Weller, N. Schoepke, A. Peveling-Oberhag, P. Staubach, S. Müller, T. Jakob, M. Maurer, **Omalizumab in symptomatic dermographism: Results of a randomized, placebo-controlled trial,** 3rd GA2LEN GLOBAL URTICARIA FORUM Berlin, 29-30 November 2016
- M. Abajian, L. Curto-Barredo, K. Krause, E. Santamaria, I. Izquierdo, M.K. Church, M. Maurer, A. Giménez-Arnau, **Rupatadine 20 mg and 40 mg are Effective in Reducing the Symptoms of Chronic Cold Urticaria,** Acta Derm Venereol. 2016 Jan;96(1): p. 56-9
- M. Gorczyza, N. Schoepke, K. Krause, T. Hawro, M. Maurer, **Patients with chronic cold urticaria may benefit from doxycycline therapy,** Br J Dermatol. 2017 Jan; 176(1): p. 259-261
- H. Shizukawa, K. Iwamoto, T. Hiragun, M. Hide, **Temperature Threshold of a Case of Cold Contact Urticaria Evaluated with TempTest®,** J Environ. Dermatol. Cutan. Allergol. 11 (2), p. 138-143, 2017
- M. Sánchez-Borges, L. González-Aveledo, F. Caballero-Fonseca, A. Capriles-Hulett, **Review of Physical Urticarias and Testing Methods,** Curr Allergy Asthma Rep. 2017 Aug;17(8): p. 51
- J.G. Holm, T. Agner, S.F. Thomsen, **Diagnostic properties of provocation tests for cold, heat, and delayed-pressure urticarial,** Eur J Dermatol. 2017 Aug 1;27(4): p. 406-408
- M. Maurer, A. Schutz, K. Weller, M. Gorczyza, A. Peveling-Oberhag, P. Staubach, H. F. Merk, M. Metz, **Omalizumab in cold urticaria: Results of a randomized placebo-controlled trial,** 3rd GA2LEN GLOBAL URTICARIA FORUM Berlin, 29-30 November 2016 and J. Allergy Clin. Immunol., 2017