

# ECONOMIC COMPARISON OF DIFFERENT METHODS FOR TREATING VENOUS LEG ULCERS WITHIN THE SCOPE OF THE ULCERTEC STUDY

Stahl H-W, Euro-Management-Institut Reutlingen, July 2004

BAUERFEIND.COM

## BACKGROUND AND STUDY OBJECTIVE

The costs of venous ulcers of the leg in terms of treatment and the national economy are considerable. In Germany, they are estimated at around EUR 1.3 billion each year. In view of demographic developments and consistently rising healthcare costs, physicians, hospitals, nursing staff, health insurers and pharmaceutical manufacturers alike are required to make cost savings in the treatment of venous leg ulcers.

VenoTrain ulcer tec allows venous leg ulcers to be treated using medically effective and yet cost-efficient compression therapy. In an economic study, the treatment costs that would arise from outpatient treatment using the VenoTrain ulcer tec set of compression stockings were directly compared with the costs arising from the use of a conventional phlebological compression bandage (short-stretch compression bandage).

## RESULTS

Using the VenoTrain ulcer tec to treat venous leg ulcers led to significantly better treatment successes than treatment using phlebological compression bandages. The number of non-responders was also lower in the VenoTrain ulcer tec group than in the PCB group by over half, measured against the total study population. The superiority of the VenoTrain ulcer tec in terms of effectiveness is also evident from the economic comparison of treatment costs.

For the group of responders (approach 1), the use of VenoTrain ulcer tec led to significantly lower costs per percentage of reduction in wound surface area. It was possible to achieve cost savings of 43% (Fig. 1).

## PATIENTS AND METHODS

The economic study was based on an open, randomized, prospective multi-center study in 16 study centers, focusing on the cost-effectiveness, safety and applicability of the VenoTrain ulcer tec compared with a phlebological compression bandage (PCB). 121 patients took part in the study (intention-to-treat population, ITT), 108 of whom remained at the end of the study (so-called completers).

Two different approaches were taken: approach 1 only considered the 98 patients for whom treatment caused the surface area of their wound to decrease (responders); approach 2 considered all 108 patients. Of the 98 responders, 52 patients were treated with VenoTrain ulcer tec and 46 with PCBs. The treatment costs were calculated in consideration of the treatment processes required for each patient and the resources used (direct personnel and material costs).

Fig. 1: costs per percentage of reduction in wound surface area

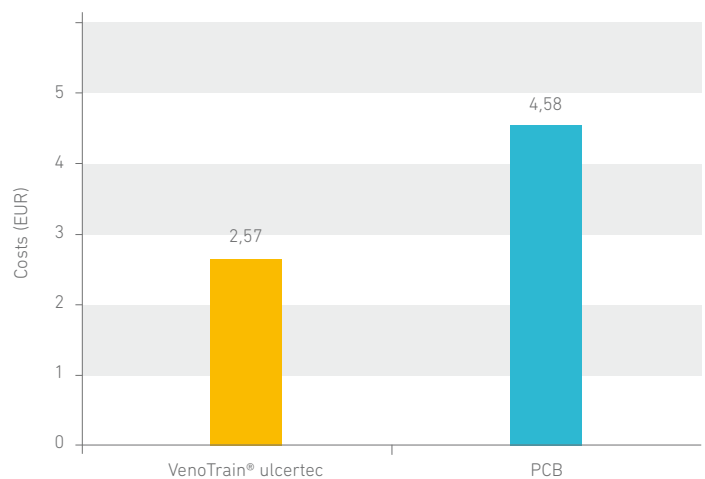


Fig. 2: treatment processes per patient

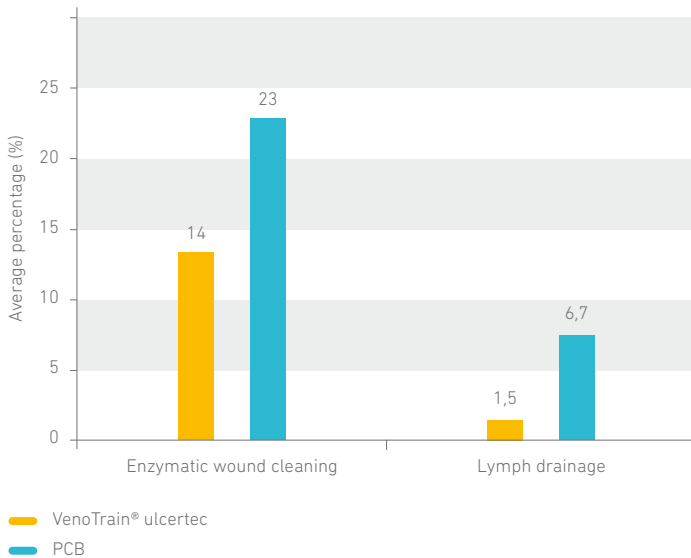
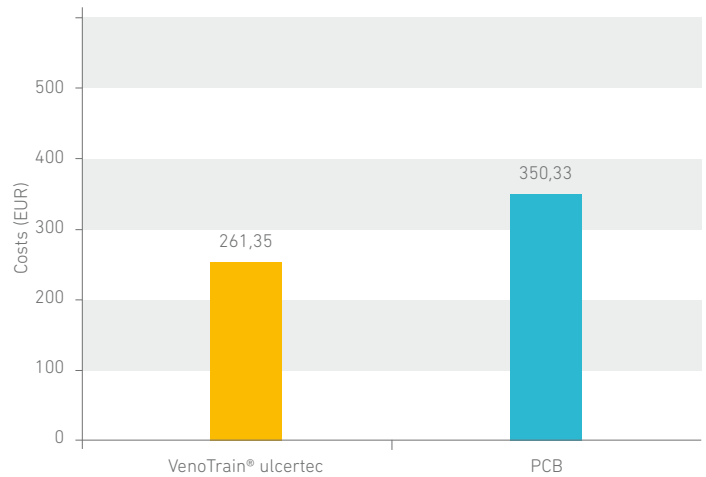


Fig. 3: costs per healed case\*\*



The lower number of treatment processes required in the case of Venotrain ulcertec also represented a cost benefit. The number of enzymatic wound cleaning treatments was 40% lower in the case of Venotrain ulcertec. The number of lymph drainage treatments was also significantly lower: 1.5 as against 6.7 in the case of PCBs (Fig. 2). In terms of the total study population (approach 2), too, the treatment costs work out as much lower when using the set of compression stockings: treating venous ulcers with Venotrain ulcertec can cut costs by up to 34% per healed case\* (Fig. 3).

**CONCLUSION**

The Venotrain ulcertec set of compression stockings proved itself significantly superior to conventional phlebological compression bandages in a direct economic comparison:

- Lower costs per percentage of reduction in wound surface area
- Fewer treatment processes
- Cost savings of up to 34% per healed case

\* Costs of treatment with Venotrain® ulcertec set at 100%

\*\* "Healed" patients are deemed to be those whose wounds reduced in surface area by 85% or more.

1 Jünger M, Wollina U, Kohnen R et al., Curr Med Res Opin 2004; 20(10): 1613–1624

**Venotrain® ulcertec 39**

10 mmHg      23–27 mmHg  
Liner          Overstocking

- Compression strength 34–39 mmHg
- Non-problematic venous ulcer of the leg with good tendency to heal
- Light liner for patients who can only tolerate little compression at night

**Venotrain® ulcertec 46**

18 mmHg      23–27 mmHg  
Liner          Overstocking

- Compression strength 40–46 mmHg
- Treatment-resistant ulcers
- Ulcers with a poor tendency to heal
- Given tolerance and a good level of acceptance of compression