

# Thonic Innovation

**Thonic Bandage: Bridging a gap for  
self-bandaging and homecare**

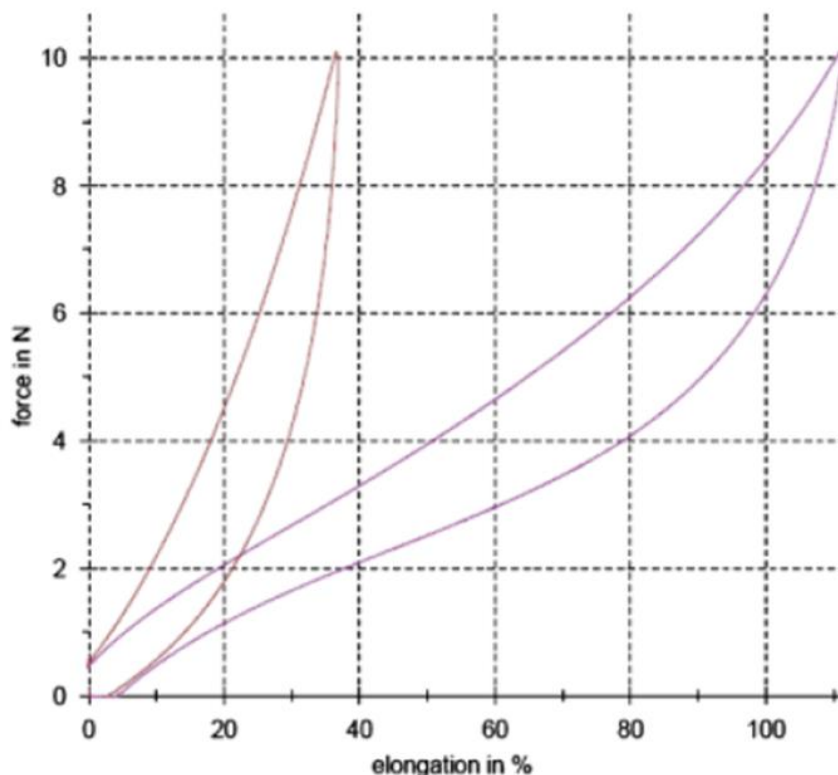
ICC Meeting, Florence – 25/09/2016

Pierre Gonon

**[www.thonic.care](http://www.thonic.care)**

*We bring Value Innovation to lymphoedema, lipoedema and chronic oedema care*

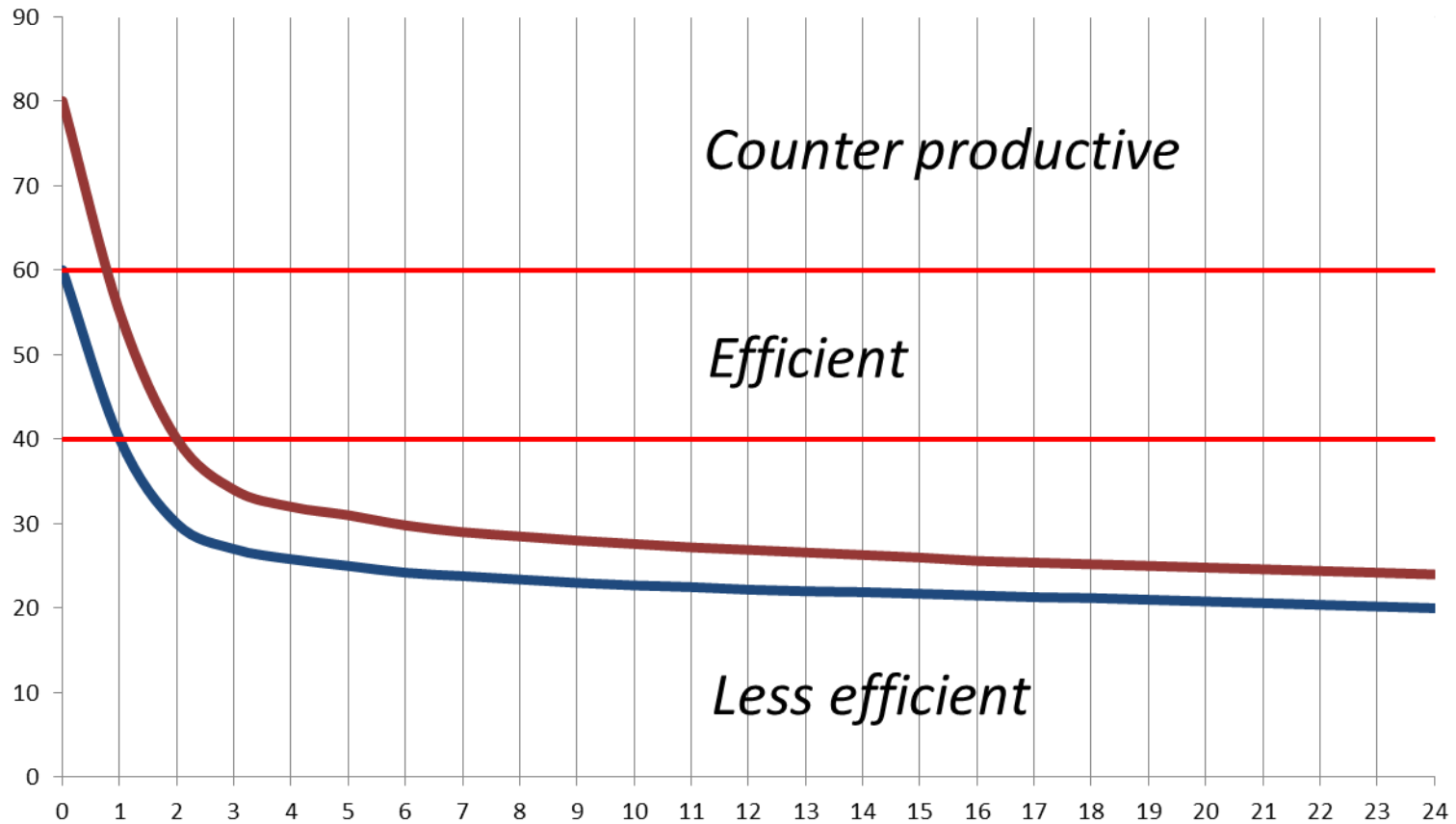
## Classification of Compression Bandages: Practical Aspects



**Figure 1.** Load-extension curve of an inelastic (short-stretch; left) and an elastic (long-stretch) bandage (right). For a 10-cm-wide bandage, the steepness of the curve at the level of 10 N represents the dynamic module, which is much higher for the short-stretch bandage (0.35 N/%) than for the long-stretch bandage (0.18 N/%; Lohmann & Rauscher Textile Laboratory, Schönaun/Tr, Austria). For the practical significance of this, see Figure 2.

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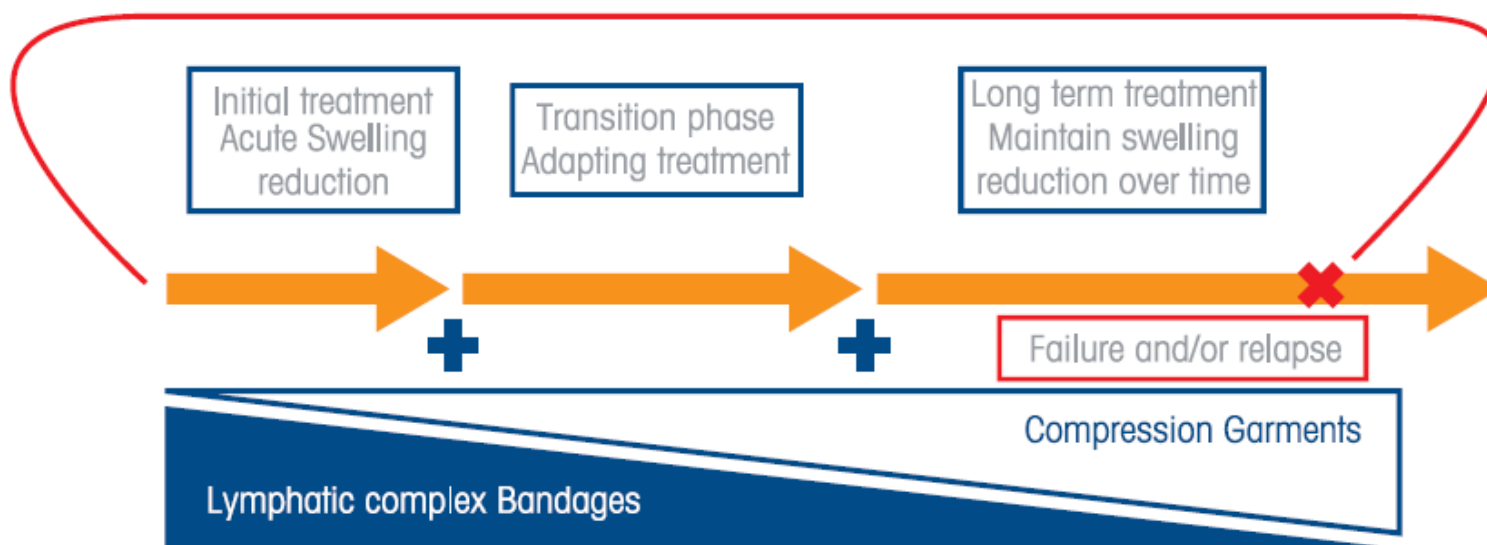
# Bandaging is a Science



*Adapted with kind permission from Prof. H. Partsch*

# Bandaging is a Science

Figure 2: The use of compression bandages or garments in lymphoedema treatment



# Bandaging is a Science

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**European  
Dermatology  
Forum**

**S3-Guideline for Diagnostics and Treatment  
of Venous Leg Ulcers**

Developed by the Guideline Subcommittee of the  
European Dermatology Forum



INTERNATIONAL  
LYMPHOEDEMA  
FRAMEWORK

**Position document**

**BEST PRACTICE**  
FOR THE MANAGEMENT OF  
LYMPHOEDEMA - 2<sup>ND</sup> EDITION

**Compression Therapy:**  
A position document on  
compression bandaging

[www.lympho.org](http://www.lympho.org)

Belong  Together

# Bandages must be applied by trained staff !

**Table 2: Methods of compression**

Type	Examples	Application	Advantages	Disadvantages	Stiffness
<b>Inelastic</b>	Zinc paste (Unna)	Trained staff, may stay for some days	High working pressure, well tolerated during rest	Messy	Very high
<b>Single component Short-stretch wrap</b>	Double Comprilan <sup>®</sup> , Pütter <sup>®</sup> , Porelast <sup>®</sup> , Panelast <sup>®</sup> (adhesive), Actico <sup>®</sup> (cohesive)	Trained staff, may stay for some days	High working pressure, well tolerated during rest. Comprilan and Pütter are washable and reusable	Slippage Adhesive and cohesive materials not reusable	High
<b>Multi component Inelastic*</b>	Lymphsets*, Lymph kits*, Rosidal <sup>®</sup> sys, Coban <sup>®</sup> 2 and Coban <sup>®</sup> 2 Layer Lite (cohesive) Actico <sup>®</sup> + Sofban <sup>®</sup> (cohesive)	Trained staff, may stay for some days	High working pressure, well tolerated during rest, Less slippage Non-adhesive, non-cohesive : Washable and reusable	Cohesive materials not reusable	High
<b>Multi component Long-stretch</b>	Four layer (Profore*)	Trained staff, may stay for some days	High working pressure, well tolerated during rest,	Not reusable, bulky and warm	High
<b>Single component Long-stretch wrap Elastic</b>	Ace™, SurePress <sup>®</sup> , Perfekta <sup>®</sup> , Dauerbinde <sup>®</sup> , Biflex <sup>®</sup> Thuasne	Easy application, needs to be removed over night	Self-application, restricted reusability	Low working pressure, not tolerated when applied with high pressure	Low



The key question for a bandage prescriber is:

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***Who's going to apply the  
bandage I am prescribing?***

***Training?***

***Time?***

***Remuneration?***

# What happens on the field ?

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## Survey of district and community nurses in 2013 Report to the Royal College of Nursing

Jane Ball & Julia Philippou  
*NNRU, King's College London*

Geoff Pike & Jacqueline Sethi  
*Employment Research Limited*

June 2014





# What happens on the field ?

**Table 5.2 Patient numbers seen per shift: distributions of key variables**

	Cases				By job title <sup>23</sup>				
	N=	Missing	Mean	Median	DN	CN	CM	CM/TL	NS
No. patients seen by WHOLE team	1166	231	61	50	63	59	67	69	45
No. patients personally seen on last shift	1389	8	9	9	9	11	6	7	7
'Typical' no. of patients seen per shift	1375	22	10	9	9	11	6	8	7
Shift length divided by total patients (mins per patient)	1344	53	62.9	50	66	50	90	83	95
Available mins per patient (total time inc. additional time, minus administration and travel)	1259	138	38.7	32	41	32	57	46	55

Source: RCN/KCL District Nurse Survey, 2014

The vast majority (85%) of respondents work 7-9 hour shift lengths, nine per cent work less than seven hour shifts and six per cent work longer than nine hours.

**However, working large amounts of additional hours is commonplace.**

On their last shift eight out of ten **(81%)** nurses worked additional hours to the hours they were contracted to work, typically for an additional **80 minutes**.

## What happens on the field ?

Nurses were asked two specific questions in relation to the quality of care provided to patients on their last shift.

*1) Were there any activities that were necessary but were left undone because you lacked the time to complete them?*

*2) How would you describe the quality of care provided to patients on your last shift?*

**Across all respondents three quarters (75%) reported that they had left necessary activities undone.**

Where nurses felt they had left necessary tasks undone on their last shift they were also likely to have worked longer hours, 8 hours 48 minutes, than where nurses had not left necessary tasks undone, 8 hours 22 minutes.

These findings suggest that nurses working extra hours beyond their shift length is not contributing better quality care but it is likely to be contributing to their sense of workload pressure (see below).

How can we bridge this gap ?

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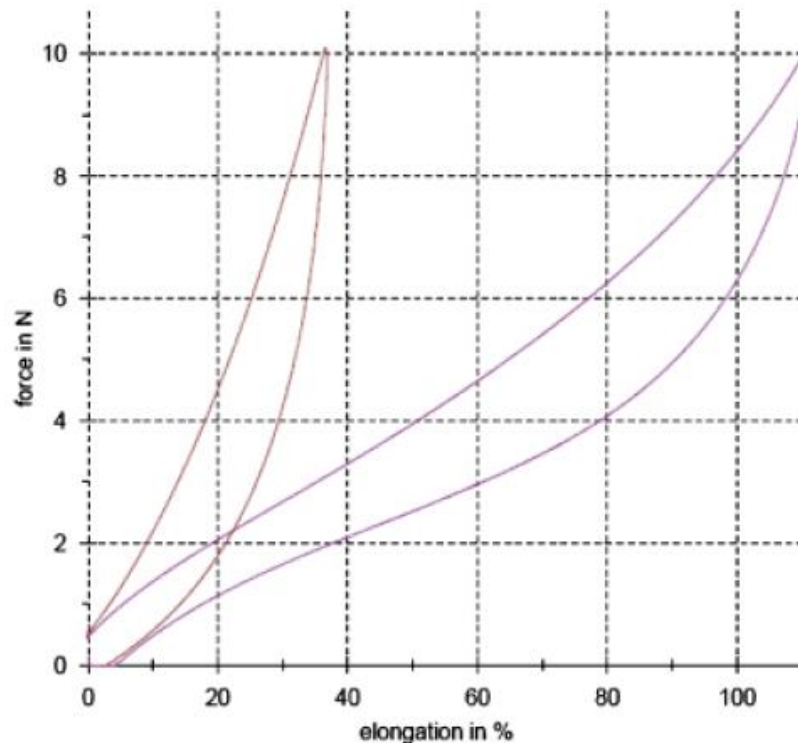
*“Now, more than ever, there is a need for  
**cost-effective, time-efficient,**  
compression bandaging systems .....to make a major  
contribution to meeting the challenges of  
contemporary lymphoedema practice”*



# What is Thonic Bandage? – The Challenge

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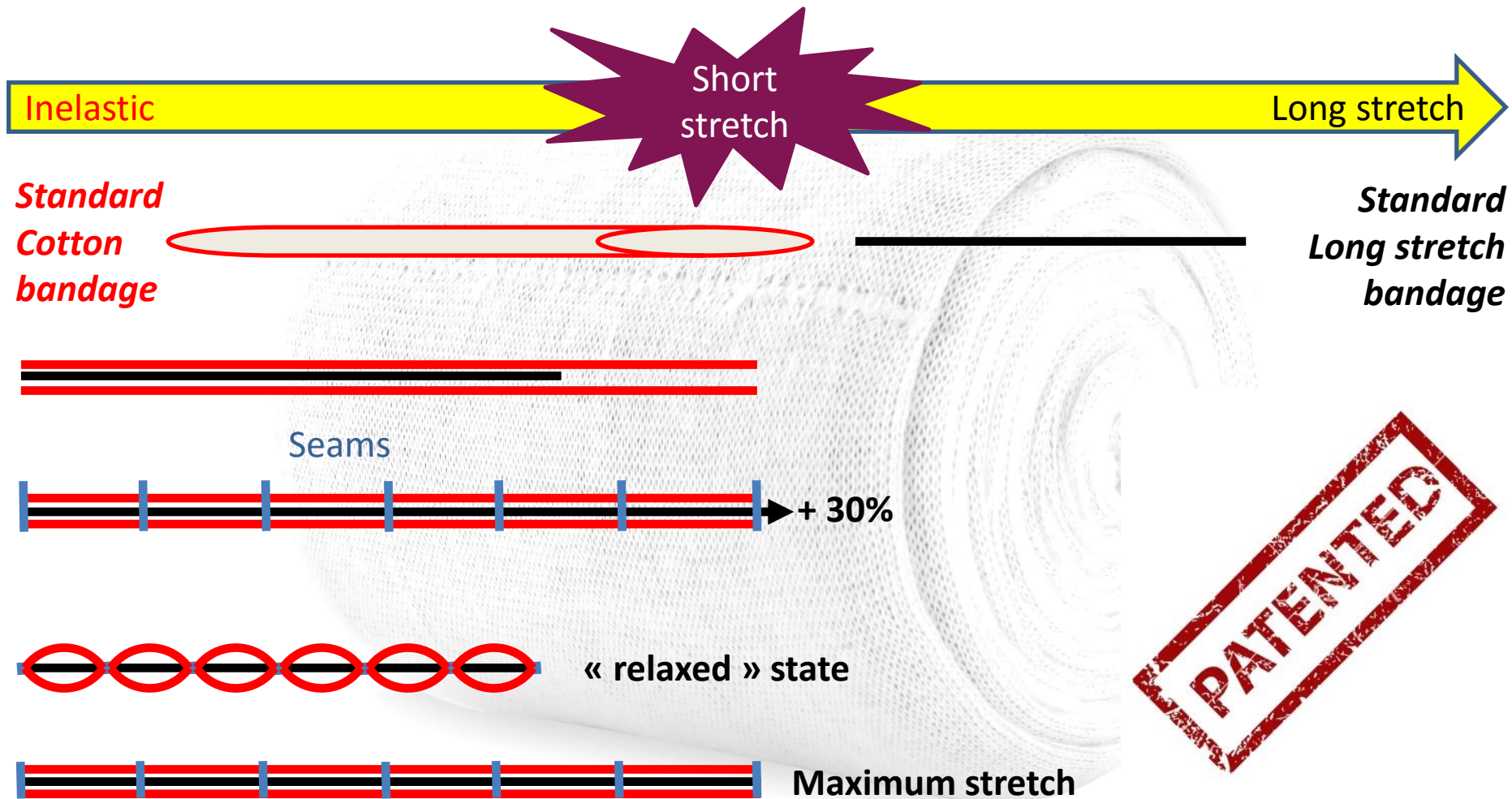
*To combine the respective **benefits** of **elastic** and **inelastic** materials while **getting rid** of their respective **inconvenients** to design a **bandaging system** that is **simple and safe to apply**, and **Cost-efficient** !*





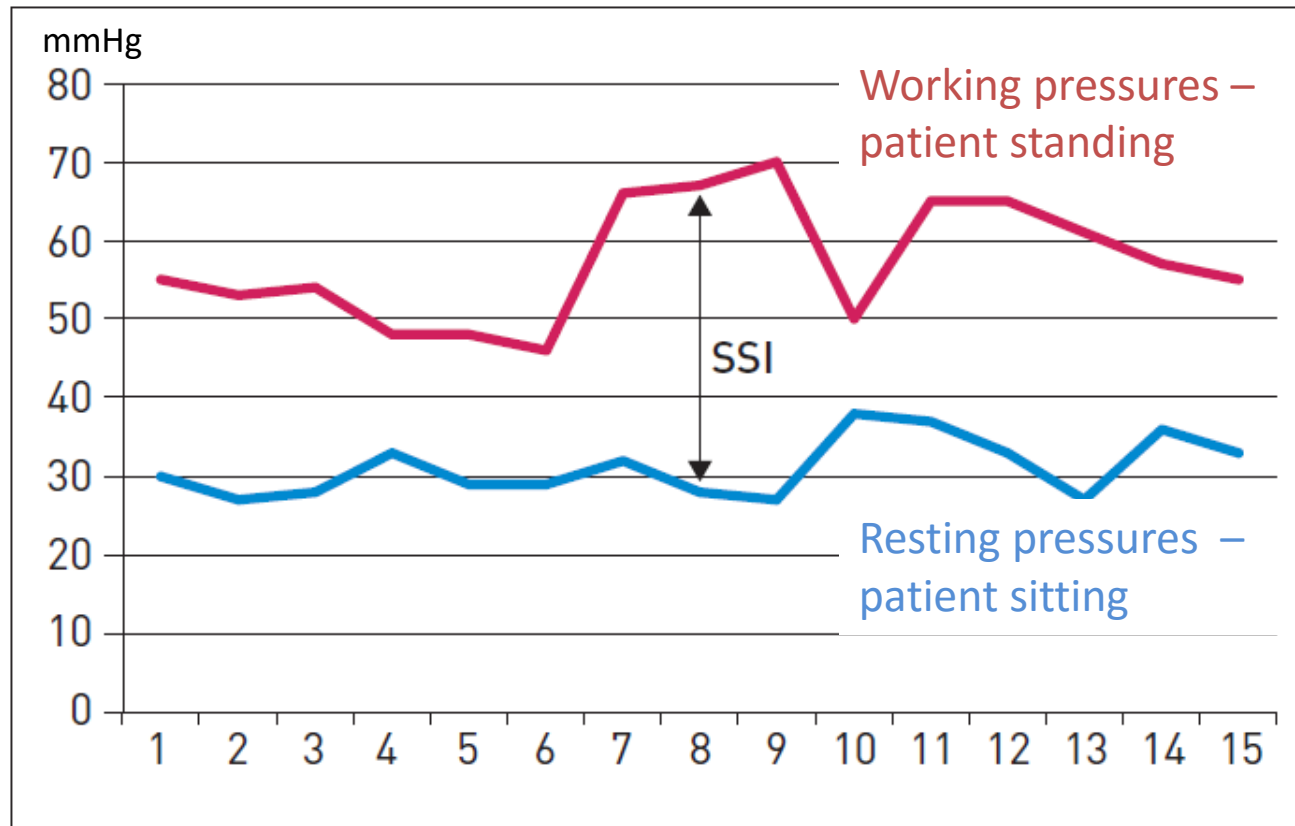
# The solution: Thonic bandage

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# Initial interface pressures measurements



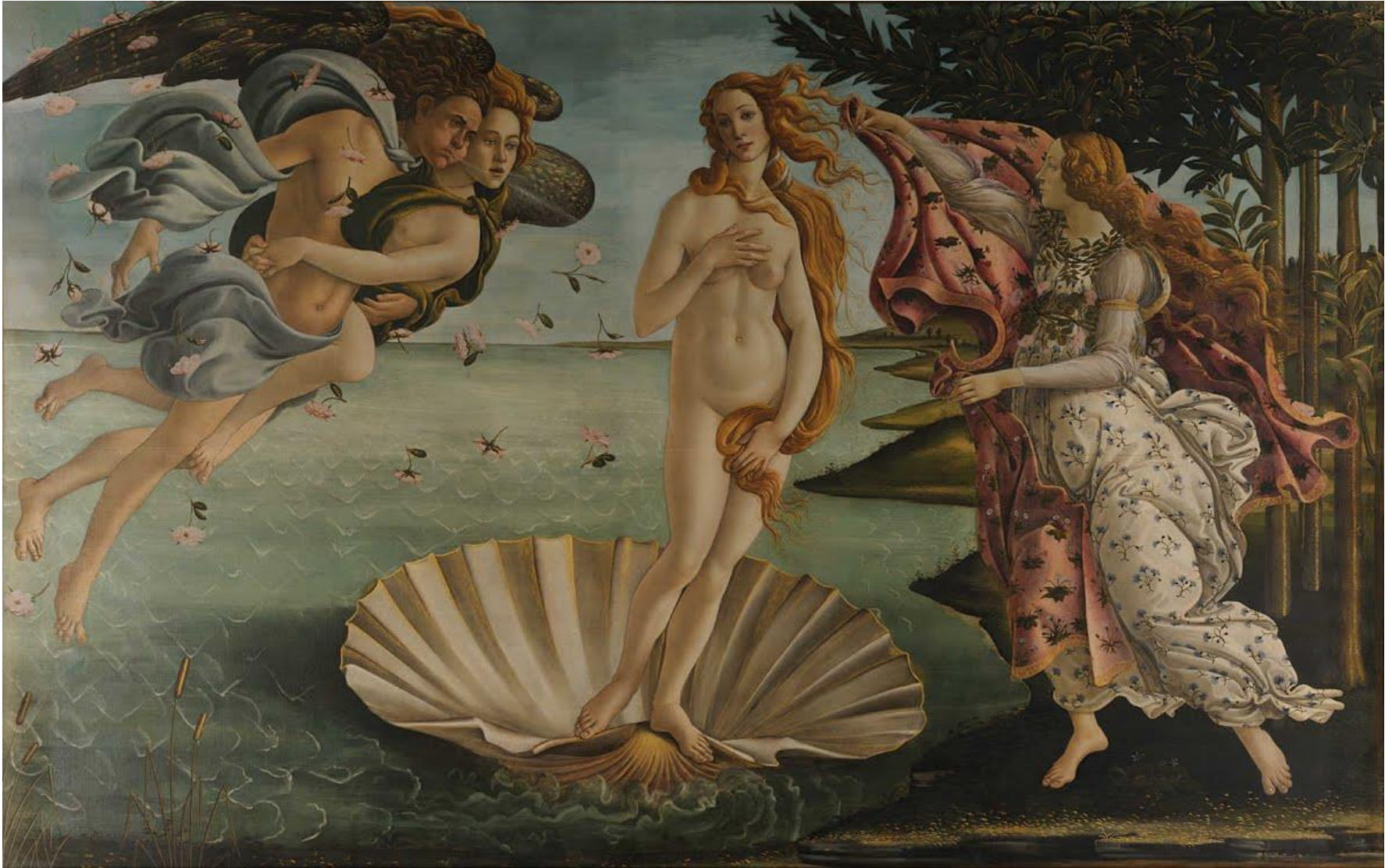
Interface resting/working pressures measured with Picopress on 5 healthy volunteers  
Circumferences at B1 between 24 and 31 cm – Courtesy of Dr JP Begnini & Dr J.F. Uhl

## More studies needed...

## What makes Thonic bandage different?

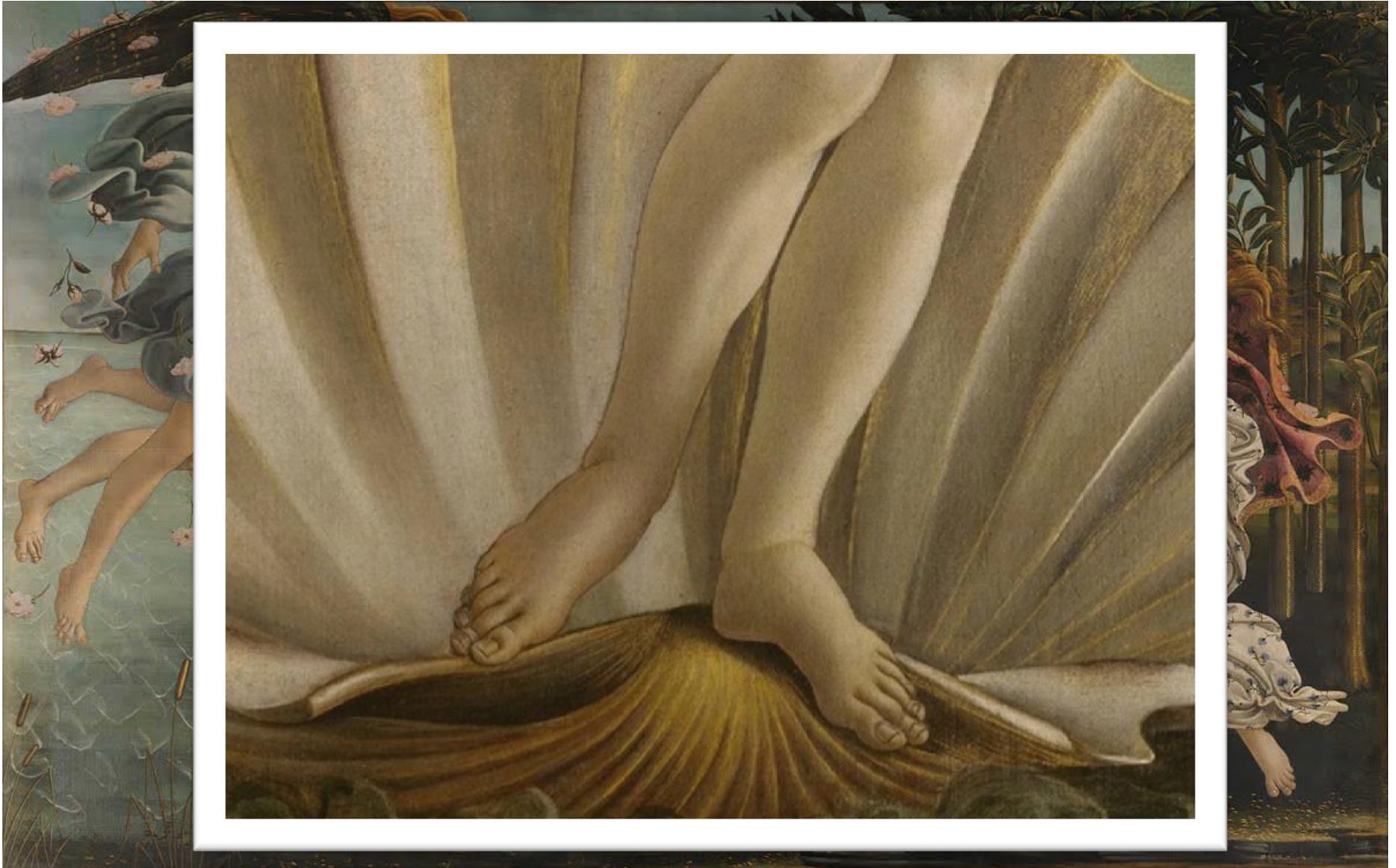
- It is **simpler** to apply
- It is **safer** to apply
- It is **washable** and **reusable**
- It is **less bulky** and allows a **better limb mobility** than most multi-component systems currently available on the market.
- It is **very soft against the skin** (100% cotton) and therefore **comfortable to wear**
- It exists in **limited editions in colours**

# What about Venus?





# What about Venus?



# What about Venus?





# Thank you very much for your attention !

Please do not hesitate to contact me

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