

# 3M™ Coban™ 2 Layer Compression System

## Key Clinical Evidence



### A randomised controlled 8-week crossover clinical evaluation of the 3M™ Coban™ 2 Layer Compression System versus Profore™ to evaluate the product performance in patients with venous leg ulcers

**Authors:** Moffatt C, Edwards L, Collier M, Treadwell T, Miller M, Shafer L, Sibbald G, Brassard A, McIntosh A, Reyzelman A, Price P, Kraus SM Walters SA, Harding KG *Int Wound J* 2008;5(2):267-279.

**Key message:** Highest level of evidence supporting Coban 2 Layer Compression System compared to Profore™

**Results:** Over 7 day wear study, there was statistically less slippage, significantly higher improvements in physical symptoms and daily living scores, and no differences in wound healing with Coban 2 Layer compression system than with Profore. In addition, 72% of the patients preferred Coban 2 Layer compression system over Profore.

70-2009-9662-0: Reprint of article

#### Relevance:

Clinical problems associated with traditional 3 and 4 layer bandage systems include: slippage, bulky, hot and painful at night

### Macro- and microperfusion during application of a new compression system designed for patients with leg ulcers and concomitant peripheral arterial occlusive disease

**Authors:** Arnold A, Lutze S, Jünger M, Haase H, Bichel J\*, Schuren J\*, Ladwig A *J Clin Microcirc Hemorheol* 2013, vol. 53(3), 281-293.

**Key Message:** Safety of Coban 2 Lite compression system was demonstrated in patients with ABPIs of 0.5-0.8 and was well tolerated by patients who normally would not be placed into compression. Coban 2 Lite system also provided beneficial effects on the dermal capillary system.

**Results:** Average resting pressure was 28 mmHg, no pain or pressure related skin damage occurred, and the Laser Doppler assessments indicated significant improvements of dermal microcirculation under Coban 2 Lite system.

70-2010-9238-7 Reprint of article

70-2010-7575-4 Abstract summary titled Compression therapy in patients with peripheral arterial occlusive disease: A prospective clinical study with the 3M™ Coban™ 2 Layer Lite Compression System for ABPI  $\geq 0.5$

#### Relevance:

Approximately 30% of patients require reduced compression and because clinicians are afraid they may cause harm, they modify the products they use to create “less than” pressures. This results in “less than” effectiveness. Here is a bandage that when applied as directed, provides safe and effective compression for an at-risk population.

### Pascal's law and the dynamics of compression therapy: a study on healthy subjects

**Authors:** Schuren J, Mohr K, *Int Angiology* 2010;29(5):431-5.

**Key Message:** A different law of physics can be used to explain the dynamics of compression therapy.

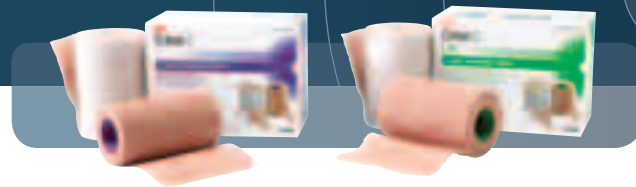
**Results:** The dynamics of effective compression therapy can be explained by Pascal's Law which states that when pressure is applied on a fluid (a muscle or muscle group) in a closed container (fascia muscularis and compression bandage), there is an equal increase at every other point in the container.

20-2010-8084-6 Reprint of article

#### Relevance:

The greater understanding of how compression works was advanced through the many experiments conducted during the development of a new-to-the-world bandage material.





### Comparison between a new 2–component compression system with zinc paste bandages for leg ulcer healing: a prospective, multicentre, randomized controlled trial monitoring subbandage pressures

**Authors:** Giovanni Mosti, MD; Aldo Crespi, MD, Vincenzo Mattaliano, MD. *Wounds* 2011;23(5):126-134.

**Key Message:** Using subbandage pressure measurements obtained at application and prior to removal on day 7, Coban 2 Layer system delivers comfortable, skin friendly, sustained compression supporting edema reduction and ulcer healing.

**Results:** Coban 2 Layer system demonstrated a better capacity to maintain pressure over time and proved to be effective in treating venous leg ulcers with the additional benefits of high tolerability and ease of application and removal.

70-2010-8341-0 reprint of article

**Relevance:**

Coban 2 Layer was as effective as the zinc based bandages described in this study with the advantage of being easier to apply and remove.

### 3M™ Coban™ 2 Compression made easy

**Authors:** Vowden K, Vowden P, Partsch H, Treadwell T. *Wounds International* 2011; 2(1).

**Key Message:** An article summarizing the clinical challenges with traditional multilayer compression bandages and how Coban 2 Layer compression system meets the criteria of an ideal bandage and has been proven through a number of clinical studies to be effective with reduced slippage and patient comfort.

**Results:** Coban 2 Layer systems are suitable for a wide variety of patients with reduced slippage and effective, consistent pressures to manage edema.

Available at <http://www.woundsinternational.com>

**Relevance:**

Respected clinical authors have summarized the studies and experience supporting the efficacy of Coban 2 Layer systems.

### Prospective, randomized, controlled trial comparing a new 2-component compression system with inelastic multicomponent bandages in the treatment of leg lymphoedema

**Authors:** Lamprou, D-A,A, Damstra, R, Partsch, H, *Dermatological Surgery* 2011;37:985-991.

**Key Message:** Simple, 2 layer system was as effective as traditional, multilayer, inelastic bandages used for lymphedema treatment.

**Results:** Through subbandage pressure and leg volume measurements, the 2 layer system demonstrated similar efficacy in patients with moderate to severe lymphedema.

Reprints available upon request

**Relevance:**

Traditional lymphedema bandages are bulky, heavy and limit the mobility and comfort of patients undergoing treatment. New materials with low profile and comfort offer an option for the intensive treatment phase.



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