


3M™ Coban™ 2
2 Compression System
Lymphoedema Intensive Therapy



Maintain
Mobility
While Reducing Oedema



The background is a solid light blue color. On the right side, there are several thin, white, concentric circles of varying radii. A horizontal band of a darker, muted blue color runs across the middle of the image, behind the text.

3M is redefining the
practice of compression
bandaging for lymphoedema
intensive therapy

A Breakthrough for Patients and Clinicians

Extensive research, design and testing led 3M scientists to develop 3M™ Coban™ 2 Compression System - a breakthrough in compression bandaging with the potential to change the practice of lymphoedema intensive therapy.

- Clinically effective volume reduction without the bulk of traditional bandages¹
- An effective twice-weekly application regimen proven in controlled clinical trial¹
- Provides comfort, mobility and function enabling patients to carry on with everyday life
- New application techniques that make bandaging sessions less taxing for clinicians and patients
- Lower overall cost of care resulting from fewer visits required to achieve oedema reduction^{1,2}

Coban 2 compression system delivers all this and more, improving the intensive therapy experience for patients and clinicians.



“...it's made a great deal of difference. The swelling and the leakage have really improved but best of all I can actually walk again by bending my knees. I can wear normal trousers and I got my shoes on”

Patient P5, United Kingdom¹

Proprietary Materials Make the Difference

“The efficacy of compression therapy depends mainly on the exerted pressure and the stiffness of the material.”

– Hugo Partsch³

Lymphoedema is a chronic, debilitating condition. Patients experience a wide range of psychological and physical difficulties including poor body image, anxiety, depression, embarrassment, impaired mobility and pain.¹

3M™ Coban™ 2 Compression System materials were developed with unique stretch and cohesion properties to provide ideal compression and help patients overcome the challenges of wearing bandages during lymphoedema intensive therapy.

Therapeutic Compression without the Bulk

Coban 2 compression system comprises two thin layers proven¹ to provide the stiffness required to generate sustained working pressures/low resting pressures to reduce oedema equally as well as traditional bandages, without the bulk.

Stays in Place for Improved Wearability

The unique interlocking layers cohere to each other, creating an inelastic sleeve that conforms to the limb and reduces the potential for bandage slippage and discomfort. The inner comfort layer consists of a medical grade polyurethane foam laminated to a cohesive non-woven backing. When compressed, the foam grips to the skin, and the non-woven backing provides a cohesive surface for attachment of the outer compression layer to work together as a system.

Low-Profile Bandages Improve Mobility and Function

Patients can more easily perform daily activities because the bandages are lightweight, flexible and facilitate mobility. Plus, as the layers are so thin, patients may wear regular footwear and clothing.

Safe for Skin

The system is latex-free, hypoallergenic and non-irritating⁴ which helps to protect and maintain skin integrity.

See page 10 to learn how inelastic compression bandaging works to improve lymphatic flow.



New Application Techniques Improve the Bandaging Experience for Clinicians and Patients

Until now, bandaging sessions have often been physically and emotionally taxing for patients and clinicians. 3M™ Coban™ 2 Compression System uses different techniques for a better intensive therapy experience.¹

The compression layer is applied at full stretch to reduce application variability and will give a consistent, uniform pressure over the limb.

Easy to Apply and Remove. No Need for Extra Padding.

Coban 2 compression system bandaging sessions are less demanding for patients and clinicians. The comfort foam layer protects the skin and the inelastic sleeve conforms to the limb to reduce volume and normalise limb shape as oedema is reduced, without the need to apply additional foams or pads. The compression layer is cohesive, eliminating the need for tapes or other products to hold the bandages in place.

The compression layer is applied at full stretch to reduce application variability and will give a consistent, uniform pressure over the limb.

Clinical training workshops, videos and guides are available to demonstrate various application and removal techniques.

“They are so much easier for the therapist to put them on and honestly you don’t know they are on when she has finished.”

— Patient P3, Canada¹



Designed for Comfort, Proven to Work

“It has really amazed me. When it came off the other day I said, ‘look, I have knuckles on my hand!’ I haven’t seen them for 15 years.”

— Patient P5, Canada¹

3M™ Coban™ 2 Compression System materials, with *Intelligent Compression Dynamics*, create a conformable, inelastic sleeve that stays in place and is comfortable to wear. These *Intelligent Compression Dynamics* enhance the effectiveness of muscle and joint movements to encourage lymph flow and reduce oedema.⁵

Effective with Twice-Weekly Application

Application two times per week has been clinically proven to reduce limb volume.¹ As the Coban 2 compression system stays in place and is comfortable¹, patients are more likely to keep the bandages on, increasing concordance and improving the potential for more effective therapy.

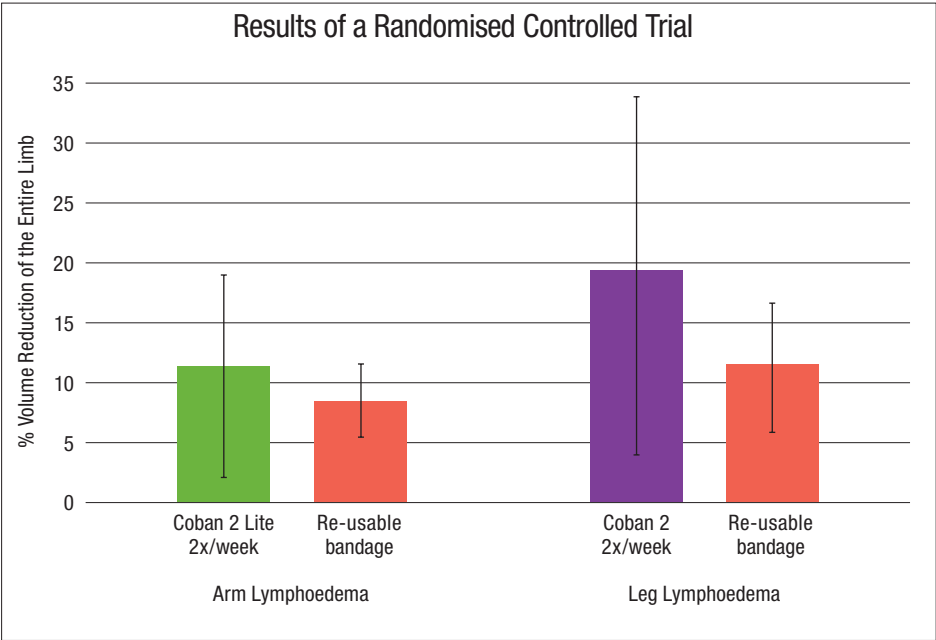


Figure 1: Percent volume reduction of study limb, end of treatment compared to baseline.¹

“The cumulative results from these research studies¹ support that the ‘Coban 2 compression system’ is clinically effective and is set to fundamentally change the field of Lymphoedema.”

Christine Moffatt CBE PhD
Lead Researcher, 3M preliminary randomised control trial.¹
Leader research, Derby Hospitals and Honorary Professor
in Nursing and Health Care, Glasgow University.

Helps Patients Maintain Independence and Self-Esteem

3M™ Coban™ 2 Compression System helps patients maintain control of their lives during intensive therapy. Living with lymphoedema can be a physically and emotionally painful experience. Multi-layer bandages can be both bulky and stiff and hence reduce mobility. This may lead to patients having to rely on family, friends and caregivers to perform even routine tasks. Many are unable to continue working, further deteriorating their financial security and self-esteem.

Mobility and Comfort Improves Quality of Life

Patients bandaged with Coban 2 compression system rated their limb mobility 'as good as' that of their unbandaged limb and reported a significant improvement in their quality of life during treatment.¹

The lightweight flexible materials allow a full range of motion and increased function, which minimises the stiffness and pain associated with immobility.

Empowers Patients to Live Their Normal Lives

The low-profile bandages are aesthetically pleasing and may be worn with normal clothing and footwear. Patients can easily perform daily activities like personal care and household tasks. As the bandages are applied less frequently than other systems, this could potentially reduce the need for time off work and place fewer restrictions on the patients' activities.

Ms G, breast cancer survivor, lymphoedema patient, demonstrates the flexibility and function of 3M™ Coban™ 2 Compression System.



Significantly Reduces Cost of Care

Lymphoedema intensive therapy can be time-consuming and costly for patients and healthcare providers. 3M™ Coban™ 2 Compression System can significantly reduce the overall cost of treatment by requiring fewer applications. The conformable, cohesive materials provide sustained compression for up to four days, requiring reapplication only as volume is significantly reduced, or as limb shape changes.

Longer Wear Time Reduces Number of Clinic Visits

A regimen of twice-weekly application is clinically proven to provide effective volume reduction. This long wear time significantly reduces the total number of bandaging sessions required to reduce oedema, from five times to twice-weekly application.¹

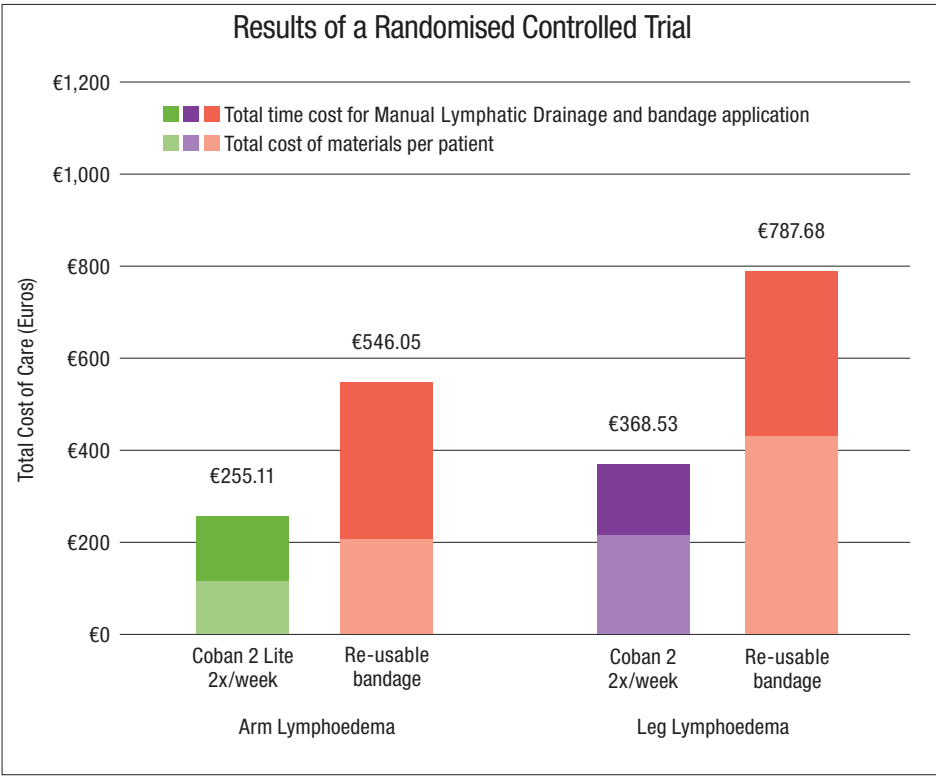


Figure 2: Total costs for nursing time and materials cost per patient showing significantly lower total cost of care with twice-weekly application of Coban 2 compression system.⁹

Single-Use System and More Cost-Effective

The disposable materials eliminate the time and expense of washing and re-rolling bandages, and minimise the risk and costs associated with potential contamination from re-using bandages.

Provides effective compression for up to four days, even with clinically relevant volume reduction.¹

Packaging Simplifies Product Selection

Colour-Coding Makes it Easy to Choose the Right Product

Green for Upper Extremities and Toes



3M™ Coban™ 2 Lite Compression System, with green packaging, offers sustained compression, with reduced resting pressure making it safe and comfortable for use on arms, shoulders, fingers and toes.



1 The white Comfort Foam Layer is applied first.

2 The tan Compression Layer is applied second.

Purple for Lower Extremities



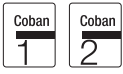
3M™ Coban™ 2 Compression System, with purple packaging, provides comfortable, therapeutic compression to reduce oedema in the legs, feet, hips and torso.



Patient icon

Roll icon

Comfort and Compression Layers Clearly Marked



The comfort and compression layers are packaged separately so clinicians can select and customise materials to meet the size and contour challenges of every lymphoedema patient. Each individual roll is clearly marked with either 1 or 2, to indicate the order of application.

Roll Icons



The easy access boxes also include a white or coloured roll icon with a 1 or 2 indicating the order of application. The roll icon identifies the contents as comfort or compression layer materials.

Changing Opinions on the Science of Compression Therapy

3M™ Coban™ 2 Compression System materials provide the stiffness and dynamics required for effective compression.

Coban 2 compression system materials are engineered with Intelligent Compression Dynamics to provide a conforming, inelastic sleeve with the required stiffness to support the muscle pump to support lymph flow and reduce lymphoedema. The role of compression during intensive therapy is to:

- support lymph flow
- shift fluid into non-compressed parts of the body
- reduce volume and break down fibrosclerotic tissue.

Traditional bandaging practices use layers of multiple, short stretch, inelastic bandages and a variety of padding materials to create a rigid casing believed to provide a pressure gradient from ankle to thigh to move fluid.

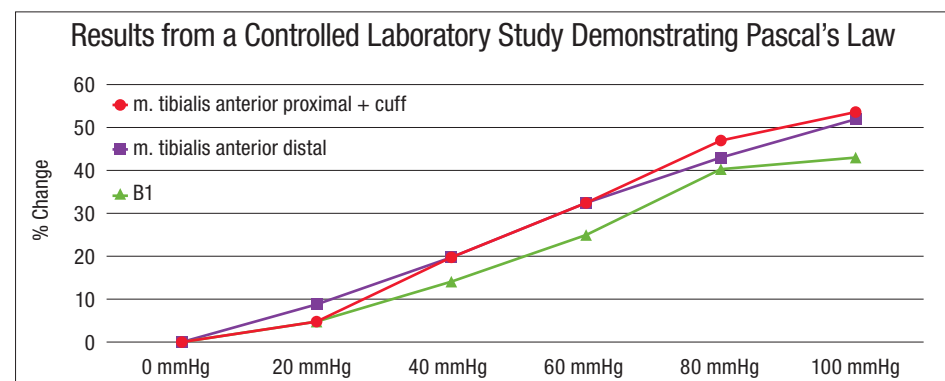
Pascal's Law a Better Predictor

Recent scientific evidence has demonstrated that Pascal's Law provides a sound understanding of the effects of compression.⁶ Pascal's Law states that when pressure is applied on a fluid (a muscle or muscle group) in a closed container (fascia and compression bandage), the pressure is transmitted equally and undiminished in all directions throughout the fluid.

Coban 2 compression systems and Pascal's Law

This principle has been demonstrated in a controlled laboratory study with 12 healthy subjects.⁶

Two sensors were placed distally and proximally on the anterior tibialis muscle with the third at the B1 position (where the tendon meets the muscle on the tendo achilles). Coban 2 compression system was then applied to the limb, providing a rigid sleeve, or closed container. A blood pressure cuff, applied over the proximal sensor was inflated in 20 mmHg increments.



Percentage change in pressure is similar for all sensors.

Inelastic Bandages Improve Efficacy

Scientific literature describes the effects of inelastic, short stretch bandaging as providing the required resistance to support and distribute the dynamic working pressures created by functional, muscle activities to move interstitial fluids, soften fibrotic tissues and stimulate lymphatic contractility.⁵

One measure used to define the elasticity of a bandage and predict its ability to optimise muscle movements is the Static Stiffness Index (SSI). A bandage with an SSI greater than 10 provides stiffness to keep muscle forces inside the bandage and encourage lymphatic flow.³

Recent studies have also shown that the inelasticity of the bandages is more important than sub-bandage pressures in predicting efficacy⁷. For treatment of arm lymphoedema, it has been reported that low-pressure bandages are as effective as high-pressure bandages and are more comfortable.⁸

Coban 2 compression system materials are designed to provide a thin, comfortable, conforming sleeve with the required stiffness to distribute muscle contraction forces equally beneath the bandage, thus supporting the muscle pump and reducing lymphoedema.

“It’s new, it’s innovative, it works!”

Denise Hardy, CNS (Lymphoedema)
Investigator for RCT.

A two day intensive training programme has been designed to introduce 3M compression bandaging products and application techniques for the treatment of lymphoedema.

The training programme provides comprehensive theory and hands-on workshops, aimed at experienced lymphoedema practitioners looking to develop their knowledge in compression bandaging.

The course is led by experienced clinicians, including Cheyl Pike, Denise Hardy and Sue Desborough. The Course Leader will vary, depending on the date and location.

For more information, please contact
ukcobantraining@mmm.com
or telephone 01509 613467




Enhances Patient
Mobility and
Function

Ordering Information

3M™ Coban™ 2 Compression System is available in a range of sizes and widths to accommodate all limb and digit bandaging needs.




3M™ Coban™ 2 Lite Compression System

Indication	3M Code	PIP Code	NPC Code	Description	Roll Dimensions
 Safe and effective for arms, shoulders, fingers and toes	20713	365-4951	ECA217	Comfort Foam Layer 1#	7,5 cm x 2,7 m
	20714	365-4969	ECA218	Comfort Foam Layer 1#	10 cm x 2,7 m
	20716	365-4977	ECA219	Comfort Foam Layer 1#	15 cm x 2,7 m
	20721	365-4985	ECA220	Compression Layer 2#	2,5 cm x 3,5 m
	20723	365-4993	ECA221	Compression Layer 2#	7,5 cm x 3,5 m
	20724	365-5008	ECA222	Compression Layer 2#	10 cm x 3,5 m
	20726	365-5016	ECA223	Compression Layer 2#	15 cm x 3,5 m



3M™ Coban™ 2 Compression System

Indication	3M Code	PIP Code	NPC Code	Description	Roll Dimensions
 Safe and effective for legs, hips and torso	20012	365-4886	ECA209	Comfort Foam Layer 1#	5 cm x 1,2 m
	20014	365-4894	ECA210	Comfort Foam Layer 1#	10 cm x 3,5 m
	20016	365-4902	ECA211	Comfort Foam Layer 1#	15 cm x 3,5 m
	20018	365-4910	ECA212	Comfort Foam Layer 1#	20 cm x 3,5 m
	20022	365-4928	ECA213	Compression Layer 2#	5 cm x 2,7 m
	20024	365-4936	ECA214	Compression Layer 2#	10 cm x 4,5 m
	20026	365-4944	ECA215	Compression Layer 2#	15 cm x 4,5 m

Learn More

To learn more about Coban 2 compression system, visit www.3m.co.uk/healthcare, contact your 3M Skin Health Sales Representative, or call 0800 616066.

1. Moffatt C, Franks P, Hardy D, Lewis M, Parker V, Feldman J. A preliminary randomised controlled study to determine the application frequency of a new lymphoedema bandaging system. *Brit J Derm* 2012; doi: 10.1111/j. 1365-2133. 2011. 10731.
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5. Mayrovitz H. The Standard of care for lymphoedema: current concepts and physiological considerations. *Lymphat Res Biol* 2009; 7(2): 101-108.
6. Schuren J, Mohr K. Pascal's law and the dynamics of compression therapy; a study on healthy volunteers. *Int Angiol* 2010;29(5): 431-435.
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9. 3M Health Care (pending publication).



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