

## Encircle Wins MDEA Award in US

***The innovative new 'Encircle Compression Therapy' has been announced as a winner in the 'Medical Design Excellence (MDEA) award in the United States, and announced as a finalist in the DuPont ANZ Innovation Awards in Australia.***



Mt. Maunganui, Tauranga, New Zealand – (April 11, 2011)

The Encircle Compression Therapy was developed in New Zealand for The Merino Company (TMC) by a team led by product development company Locus Research that included; Ag Research Textiles Group & Medical Research Institute of New Zealand (MRINZ). It utilises the specific attributes of Merino in an advanced medical application to prevent and treat circulation based conditions that affect up to 40% of people over the age of 45.

CEO of TMC; Andy Wynne states 'We are delighted to receive international recognition for this development; it recognises the quality of the work and the commercial potential of this unique development. We are developing a whole business around Encircle and see significant potential in taking Merino to a new level. The MDEA award will spearhead our US launch and provides us with a profile that would not have otherwise been possible'. TMC's involvement in the whole merino supply chain provides a unique perspective to improve returns to industry across the board.

Encircle is being launched nationwide in 2011 in Australia by Symbion Pharmacy Services (SPS) under the highly respected 'Faulding' brand. Lisa Robertson from SPS is excited by the potential in Encircle 'Encircle is a preventative treatment for a condition which a large number of people suffer; the product range offers our customers a highly

innovative and proven treatment for a range of circulatory conditions'. The product is likely to be released in New Zealand later this year and in Scandinavia in 2012.

For Encircle Programme Director, Blythe Rees-Jones from Locus Research "The recognition is a further confirmation of the great team we have through from design, production, and science through to clinical research. The potential for further products that merino can deliver in the medical domain is clearly evident."

The Encircle Compression Therapy was developed to add significant value to merino fibres and textiles. It was born out of the unique 'Transform Initiative' created by Locus Research for Textiles New Zealand in 2007. This programme has led to a number of successful developments including Encircle; Easy Care Wool (Ag Research) & The Bio harness (Zephyr Technology).

**-Ends-**



### **Encircle Compression Images**

The Encircle Compression Therapy range.

[View set on Flickr](#)

### **Notes to Editors**

#### **The Merino Company**

TMC provides natural fibre, textile and apparel solutions to leading retailers and brands globally (from Sheep to Shelf - S2S). It does this by seeking out the world's best retail, apparel and textile brand customers and recognising their needs for innovative wool products. TMC then manages the supply chain from wool grower through to customer, or works with the customer's existing vendors.

TMC's has developed a HUB in Christchurch which is led by Andy Wynne. There is a talented team of people covering all key aspects of textile development, garment design, distribution and supply chain. For further information visit:

<http://www.merinocompany.com> .

## **Locus Research**

Locus Research creates new products and delivers them to market for established companies, start-ups and spin-offs to existing businesses. It provides a complete team from research, design, engineering, testing, brand, graphics and digital media to deliver a packaged product into the market. Their innovative Cost-plus business model reduces the development cost by 50% taking a risk on downstream commercial success. For further information visit: [www.locusresearch.com](http://www.locusresearch.com).

## **Symbion Pharmacy Services**

Symbion Pharmacy Services is a company with 165 years of history and a firm focus on the future of Australian pharmacy. Their goal is to help improve customers' businesses through delivering the right products and services, while implementing retail programs and supply-chain initiatives that add genuine value. For further information visit: [www.symbionhealth.com](http://www.symbionhealth.com)

## **Medical Design Excellence Awards**

The Medical Design Excellence Awards (MDEA) competition is the premier awards program for the medical technology community, recognizing the achievements of medical product manufacturers and the many people behind the scenes—engineers, scientists, designers, and clinicians—who are responsible for the groundbreaking innovations that are changing the face of healthcare. For further information about the Medical Design Excellence Awards, please visit: [www.mdeawards.com](http://www.mdeawards.com).

## **DuPont ANZ Innovation Awards**

In the tradition of DuPont innovation, the DuPont Australia and New Zealand Innovation Awards recognise the commercialisation of outstanding science and technology. It recognises technical innovation in 4 key categories and also recognises young innovation and sustainability. DuPont ANZ Innovation Awards.

## **Ag Research**

AgResearch is one of New Zealand's leading research organisations. They have an outstanding team of scientists, engineers, technicians and support staff. They have a track record of conducting excellent scientific research and producing commercially-relevant technologies.

New Zealand-based AgResearch operates internationally, and has formal research collaboration agreements with more than 100 organisations around the world. For further information visit: [www.agresearch.co.nz](http://www.agresearch.co.nz).

### **Medical Research Institute of New Zealand**

The Medical Research Institute of New Zealand is an independent medical research organisation. Their scientists are dedicated to investigating the causes of important public health problems in New Zealand and internationally, to use this knowledge to improve the prevention and treatment of diseases, and to provide a base for specialist training in medical research. Their particular focus is on research which has the potential to lead to improvements in clinical management. For further information visit: [www.mrinz.ac.nz](http://www.mrinz.ac.nz).

### **Transform Initiative**

The “Transform” initiative was established to support New Zealand textile industry companies to develop innovative export oriented products in 2007. The initiative was designed by Locus Research in conjunction with Textiles New Zealand to promote the uptake of research and development in the textiles sector. 6 key programmes were selected for funding provided by the Ministry of Economic Development and administered by the Ministry of Science and Innovation. [www.transform.org.nz](http://www.transform.org.nz).

### **Encircle Compression Therapy**

Chronic Venous Disease is a condition that affects an estimated 40% of the population aged 45 years and over, now has a non-surgical merino based treatment option promising to significantly advance care for CVD sufferers.

Many products have tried and failed to produce a therapy that can help in preventing venous insufficiencies and chronic venous disorders (CVD) such as venous stasis, hypertension, oedema and lymphedema, thrombosis and deep vein thrombosis (DVT), pulmonary embolism and ulceration.

The Merino Company (TMC) in conjunction with Locus Research have developed Encircle Compression Therapy; a new system of compression therapy that Andy Wynne from TMC believes “Encircle can create a step change in the specification and use of compression products. At the beginning of this project the team set about investigating future opportunities of merino in medical applications”.

Encircle is the first 'natural' two layer graduated compression system that delivers preventative treatment to those that suffer venous insufficiency. The product has moved from strength to strength after winning both national and international design and medical innovation awards. Blythe Rees-Jones who leads the programme states that the clinical breakthroughs achieved by this multi-disciplinary team is a result of a very sound developmental process which put the user first, at the heart of the project. "We carried out a comprehensive medical and design research project whereby, in a way, we became the patient. Very quickly we realised that there was a series of critical issues or pain points with existing products. Our goal has been to makes compression easier to specify, apply and manage during use while lowering the overall cost to the healthcare system."

The Encircle compression garment is made from a bi-component textile with two physical properties that help create a skin micro-environment for healing and a pressure gradient to increase venous blood flow by 24%.

Andy Wynne said that merino has a lot of very interesting properties that are ideal for creating a second skin in some medical situations. "Merino is comprised of keratin, and it offers excellent comfort and thermoregulation, while being anti-microbial and odour-resistant. Encircle leverages these attributes in a very interesting way. Encircle has allowed us to move into a new market that is experiencing significant growth with a branded product that unique point of difference and utilises these naturally occurring properties of merino."

The Encircle project received funding from Textiles NZ and the Foundation for Research Science & Technology (now the Ministry for Science & Innovation) through the Transform Initiative. Encircle has now been clinically studied by the Medical Research Institute of NZ and commercialised in Australia and New Zealand under a partnership agreement with leading suppliers of pharmaceutical products in each country.

### **Andy Wynne – CEO – TMC Apparel**

"In late 2007, with the support from Textiles New Zealand and the Ministry of Science and Innovation through the Transform initiative, we set out to look into possible future applications of superfine merino, with a specific interest in medical applications.

TMC targeted developing a new therapy to treat venous insufficiency, a condition that affects 40% of people over the age of 45. From our research all existing therapies are made from 100% synthetic materials which do little to manage the skin or wound environment.

The Encircle team has developed a product that is made of a bi-component textile that creates a micro-environment for healing, and a pressure gradient within the body to increase vein blood flow, among other innovations.

Encircle represents a change for us, allowing us to move into a new market that is experiencing significant growth with a branded product that utilises the medicinal properties of merino and a unique point of difference.”

**Blythe Rees-Jones – Encircle programme Director – Locus Research**

“Encircle is different from other products because everything we have achieved in the research and development of the product has been driven from putting the user first. We carried out a comprehensive medical and design research project whereby, in a way, we became the patient. Very quickly we realized that there was a series of critical issues or pain points with existing products. Over the last 3 years we have developed five clinical breakthroughs which make compression easier to specify, apply and manage during use while lowering the overall cost to the healthcare system.

Encircle has been clinically proven by the Medical Research Institute of NZ to help improve vein blood flow and help in preventing venous stasis, hypertension, oedema and lymphoedema, thrombosis and deep vein thrombosis (DVT), pulmonary embolisms, skin issues and ulceration.”

**Professor Richard Beasley – Director – Medical Research Institute of NZ**

“The clinical testing of the novel Merino wool below-knee graduated compression stocking was undertaken by researchers at the Medical Research Institute of New Zealand. A randomised controlled trial was undertaken in 20 healthy adults who wore the stocking on one leg while seated for 120 minutes, with the other leg used as the control.

Blood flow was assessed by ultrasound at the popliteal vein and measurements were made of leg circumference to assess the influence of the stocking on leg swelling. The use of the stocking led to a 24% increase in popliteal vein peak systolic velocity.

The magnitude of the increase in venous blood flow was similar to that observed with other Class 1 and 2 below-knee graduated compression stockings. Class 1 and 2 below-knee graduated compression stockings have been shown to reduce the risk of DVT associated with long distance travel. As a result, it is reasonable to conclude that

the novel Merino wool stocking is likely to be effective in reducing the risk of DVT associated with prolonged seated immobility due to long distance travel.

This has important implications for New Zealand in which prolonged seated immobility during either work or travel is now the most common risk factor for DVT. The stocking was also associated with a reduction in the swelling of the leg at both the ankle and calf, which suggests potential utility in the treatment of lower limb oedema, secondary to chronic venous insufficiency and lymphoedema."

Professor Richard Beasley said that he was impressed by the commitment of The Merino Company to undertake rigorous testing of its product prior to marketing. This commitment has been acknowledged in the Medical Excellence Award and provides a good model for other New Zealand companies who develop health care products.

[Medical Design Excellence Award Winners](#)

[Encircle Medical Devices](#)