



MESYNTHES PROVIDES A NEW WEAPON IN THE BATTLE AGAINST WOUND INFECTIONS

Mesynthes is developing Endoform Infection Control™, an easy to apply tissue substitute that can be used internally or externally to promote faster healing and prevent infection.

THE CHALLENGE

Every year two to five percent of all patients undergoing inpatient surgery in a United States hospital experience a surgical site infection (Centers for Disease Control and Prevention, National Center for Health Statistics Vital and Health Statistics, 1994. Department of Health and Human Services; 1997).

The Centers for Medicare and Medicaid Services and Qualis Health reported that patients who develop surgical site infections (500,000 cases) are twice as likely to die, likely to stay in the hospital twice as long and incur US\$30,000 to US\$50,000 higher costs for major surgical procedures compared with patients that do not develop surgical site infections. Such infection also causes complications for patients undergoing surgical reconstruction and for those with acute and chronic wounds, leading to increased hospital costs and longer recovery periods for patients.

THE SOLUTION

Endoform Infection Control brings together two key technologies.

- A strong biomaterial which allows damaged tissue to be repaired and promotes tissue regeneration and new blood vessel growth.
- An in-built antimicrobial drug delivery system which prevents, or significantly reduces, the risk of infection.

WHY IS ENDOFORM INFECTION CONTROL UNIQUE?

It is the only existing tissue repair system that combines the benefits of a strong regenerative biomaterial and a broad spectrum antimicrobial.

THE BENEFITS

Endoform Infection Control is the perfect combination to promote healing – a regenerative template with antimicrobial activity.

The regenerative template:

- promotes tissue regeneration and new blood vessel growth
- can be applied internally or externally
- is naturally replaced by the patient's own tissue
- significantly reduces scarring
- provides strength to a reconstructed surgical site.

The antimicrobial:

- provides sustained activity for up to seven days
- reduces the presence of bacterial biofilms
- is effective against drug resistant bacteria strains
- promotes better patient outcomes resulting in lower hospital costs
- is compatible with concurrent antibiotic administration.





“Endoform Infection Control provides surgeons and clinicians with a unique antimicrobial tissue regeneration template to use where there is a high risk of post-operative infection, for structural repair during reconstructive surgery and for the prevention and treatment of infection in acute and chronic wounds.”

THE TECHNOLOGY

Endoform Infection Control is a strong, shelf-stable, extracellular matrix implant. It provides immediate support and structure to damaged tissues allowing cells to repopulate the area and synthesize new matrix. It is not chemically cross-linked like other similar products. This means, over time, the regenerative template is completely integrated, remodelled and replaced by the patient's own tissue.

Endoform Infection Control is a natural protein framework comprised mainly of collagen. It also contains important macromolecules including fibronectin, heparin sulphate and laminin which help to orchestrate the tissue regeneration process.

Mesynthes uses a proprietary manufacturing process to avoid immunological reactions while conserving the authentic molecular complexity of the extracellular matrix. Endoform is ovine derived which lowers the risk of disease transmission compared with human and bovine derived products.

Endoform Infection Control is the first extracellular matrix-based soft tissue reconstruction product to incorporate sustained antimicrobial drug delivery. Endoform Infection Control is set to revolutionize the way doctors and surgeons treat and prevent infections in wounds and surgical sites.

THE TEAM

The Mesynthes management team has over 60 years of international experience in health and life science companies. The team is led by Chief Executive Dr Brian Ward. Dr Ward is a trained veterinarian and has held clinical and senior corporate roles in life science and health care companies over the last 20 years. He is supported by Scientific Director Dr Barnaby May, who has considerable research experience with world leading academic and commercial programmes. Nancy Yopp is the Regulatory and Quality Director. Nancy has over 25 years of technical manufacturing and operations experience in the US medical device industry.

Mesynthes innovation and technological advancement has recently been recognized as a finalist in the **New Zealand Trade and Enterprise Focus on Health Challenge**, a highly competitive initiative to identify innovation in the health sector and assist in its commercialization into the United States market.



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