



PURACOL[®] PLUS
PURACOL[®] PLUS Ag⁺
MOIST WOUND DRESSINGS WITH MICROSCAFFOLD™

Native 100% Collagen Promotes Natural Healing



Puracol Plus and Puracol Plus Ag+



Unique Collagen Dressings Promote Natural Healing

The Puracol Plus line of wound dressings promote natural healing with type I bovine, native 100% collagen. Our exclusive, gentle manufacturing technology preserves the collagen's natural structure, resulting in dressings that provide more collagen to a wound for a longer period of time.

The innovative rope configurations are interesting solutions for tunneling wounds that are difficult to dress because of the tendency of nonbiodegradable dressing materials to be retained in the wound even after their attempted removal.

The Microscaffold Collagen dressings promote natural healing even while the dressing absorbs the wound exudate. When using Puracol Plus Ag+, the silver antimicrobial agent provides a barrier to microbes thus providing additional aid in the natural healing process.

Educational Show-and-Tell Booklet

Many times the wound dressing outer box is thrown away and the product is distributed to the end user with the inner package only. For that reason Medline provides an educational show-and-tell booklet of all the pertinent information needed to provide bedside support to the nurse, the patient and the family.



Remarkable Results in Clinical Studies on Severely Chronic Wounds^{1,2}

STUDY 1

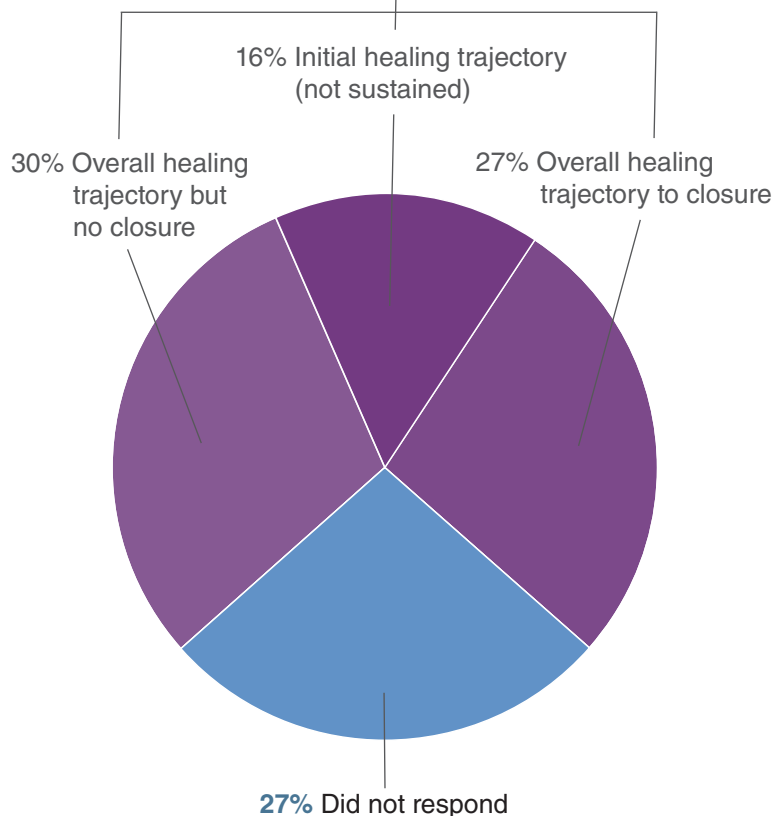
A study on 33 wounds in 18 patients, over a 4-week period was performed.¹ All had co-morbidities, and all had previously failed to close with other advanced therapies.

The remarkable 73% response rate on severely chronic wounds led the clinician to conclude: "...the usage of a minimally denatured collagen dressing may be a viable compliment to other wound-care therapies in chronic non-responding lower extremity ulcers".¹

"...native structure collagens... manipulated the wound bed to the degree that in most cases partial to complete rebuilding of the skin structure was achieved."¹

Results

73% Of treated wounds responded favorably

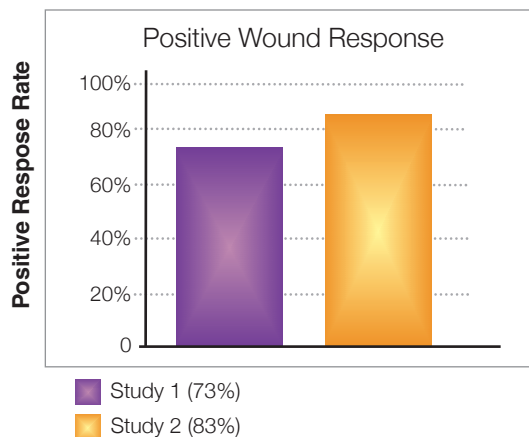


STUDY 2

Twenty patients suffering from non-healing wounds were treated with Puracol Plus.² "The study showed among 20 patients that 83% responded positively over the course of the treatment with Puracol Plus, proceeding to full closure in an average of 40.1 days.

Adverse events were few, with local dermatitis type reaction seen in two of these twenty patients. Given the typical difficulty in healing expected in these chronic wounds with an average known chronicity period of 9.25 months, it is remarkable to be able to close these wounds with an 83% response rate."²

Results



Native 100% Collagen - Likely to Last Longer in the Wound

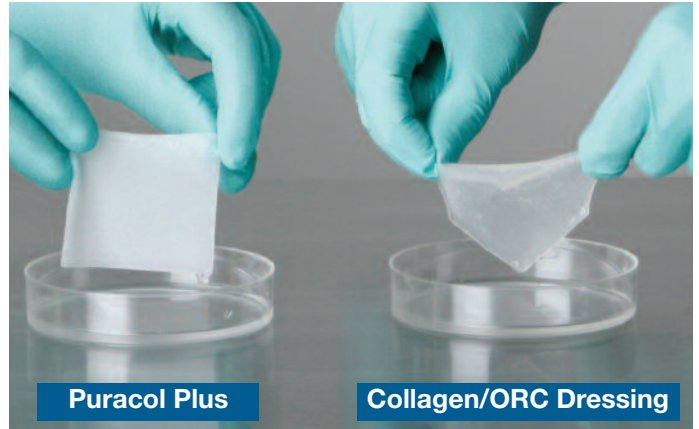
Denatured collagen – commonly used in other wound-care products – is chemically processed to the extent that its sophisticated triple helix structure is damaged, which seems to affect the dressing’s structural integrity in any fluid substance.^{3,4,5} The preservation of the triple helix is essential in maintaining the proper structure (nativity) of collagen.

Puracol Plus and Puracol Plus Ag⁺ feature a unique three-dimensional structure known as the MicroScaffold.⁶ Puracol Plus native collagen is less likely to immediately convert to a jelly-like paste or be absorbed by the secondary dressing. If collagen dressings solubilize (biodegrade) between dressing changes, they cannot exert their natural healing properties.

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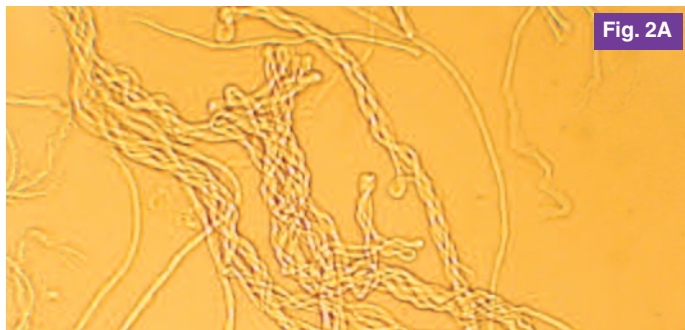
Sensitive analytical tests using well-established methods^{3,4,7} (figs. 1A and 1B) and microscopic

techniques⁸ (figs. 2A and 2B) show that Puracol Plus and Puracol Plus Ag⁺ retain their triple helical structure (nativity) better than other denatured (damaged) collagen-based products.

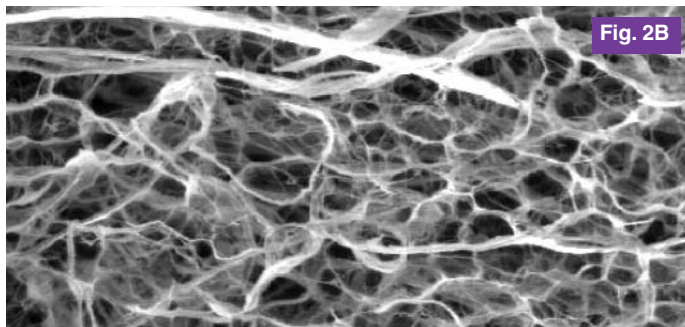


Puracol Plus Native MicroScaffold dressings tend to disintegrate in a more controlled fashion in a fluid environment – a major advantage.^{3,4,5}

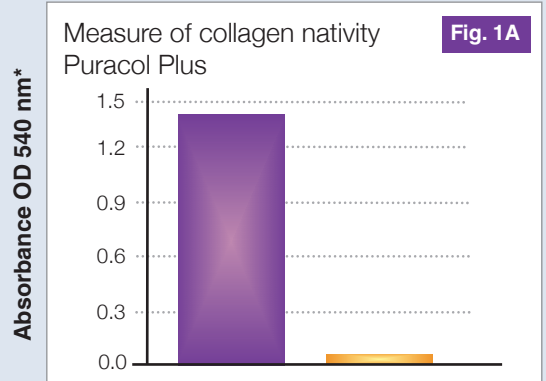
Sensitive analytical tests



2A. Puracol Plus Native MicroScaffold wound dressing as seen through an optical microscope. The intact super-structure (above) provides strong evidence that the nativity of the collagen triple helix is preserved.

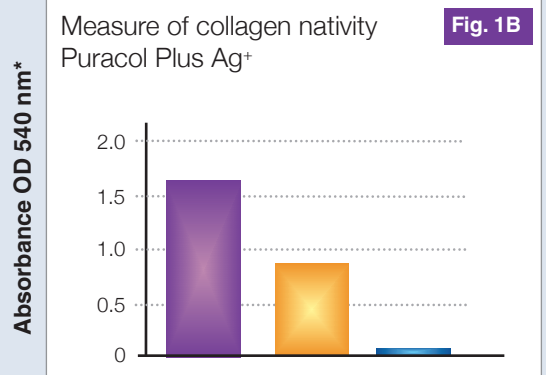


2B. Puracol Plus Native MicroScaffold wound dressing as seen through an electron microscope. The open porous structure increases the internal surface area for maximum absorption.



* Proportional to the extent of nativity, higher nativity is desirable.

■ Puracol Plus
■ Collagen/ORC



* Proportional to the extent of nativity, higher nativity is desirable.

■ Puracol Plus Ag⁺
■ Collagen/ORC-Silver
■ Denatured Collagen-CMC-Alginate-Silver-EDTA

The Strength is Measurable

- Resistant to rapid degradation by wound proteases (in vitro test data on file)^{3,4}
- Robust when moistened prior to administration (Table 1 and Table 2)
- Exceptional absorbency and remarkably high wet strength⁵

Table 1: Wet strength and absorbency of Puracol Plus

Product	Tear strength/mm (cN/mm)	Absorbency (g/g)
Puracol Plus	206.2	31.45
Collagen/Oxidized Regenerated Cellulose (ORC)	68.3	26.1

Table 2: Wet strength and absorbency of Puracol Plus Ag⁺

Product	Tear strength/mm (cN/mm)	Absorbency (g/g)
Puracol Plus Ag⁺ 100% Native Collagen-Silver	229.3	23.3
Collagen/Oxidized Regenerated Cellulose-Silver (ORC)	85.9	18.9
Denatured Collagen-CMC-Alginate-Silver-EDTA	103.4	21.3

Puracol Plus and Puracol Plus Ag⁺ products are comparable to other products in absorbency, yet are remarkably strong, thereby reducing the need for frequent dressing changes. These products are designed to promote wound healing without the unnecessary disturbance associated with frequent dressing changes.

The Properties of Silver with the Native 100% Collagen MicroScaffold



Normal wound healing involves three distinct but overlapping phases: inflammatory, proliferation and maturation.⁹ In normal healing, each phase progresses in an orderly and systematic way. However, bacterial presence in a wound may cause disruption, delay healing and have potentially serious health consequences.^{10,11,12}

Puracol Plus Ag⁺ contains a hydrated silver chloride, a known antibacterial agent.^{13,14} The silver ion works in multifaceted ways inside the dressing, disrupting metabolic processes in bacteria and inhibiting their growth within the dressing (Table 2). A review of scientific literature shows that it is difficult for bacteria to develop resistance to the silver ion in ways similar to the development of resistance observed in the case of antibiotics.¹⁵

With Puracol Plus Ag⁺, bacteria in the environment will be kept out of the wound by the dressing.

Table 2: Reduction in bacteria levels with Puracol Plus Ag⁺

Test Organism	Log Reduction with Puracol Plus Ag ⁺
<i>Staphylococcus aureus</i> (MRSA)	5.20
<i>Enterobacter cloacae</i>	5.08
<i>Pseudomonas aeruginosa</i>	5.18
<i>Enterococcus faecalis</i> (VRE)	5.11
<i>Escherichia coli</i>	5.20
<i>Staphylococcus epidermidis</i> (coagulase-negative)	5.08

* In vitro test data on file.

Log reduction in bacteria levels (in vitro) was observed in testing of large populations of selected microorganisms, including MRSA, that came into contact with the Puracol Plus Ag⁺. (Method: AATCC-100)

For more information on **Puracol Plus** and **Puracol Plus Ag⁺**, please contact your sales representative



Puracol Plus ordering information

Item #	Description	Packaging
MSC8622EP	2" x 2.25", 2 mm	10/bx, 5 bx/cs
MSC8622EPZ	2" x 2.25", 2 mm	1 bx, 10 ea
MSC8622EPH	2" x 2.25", 2 mm	1 each
MSC8644EP	4.25" x 4.5", 2mm	10/bx, 5 bx/cs
MSC8644EPZ	4.25" x 4.5", 2mm	1 bx, 10 ea
MSC8644EPH	4.25" x 4.5", 2mm	1 each
MSC861X8EP	1" x 8", 2mm	10/bx, 5 bx/cs
MSC861X8EPZ	1" x 8", 2mm	1 bx, 10 ea
MSC861X8EPH	1" x 8", 2mm	1 each

Puracol Plus Ag⁺ ordering information

Item #	Description	Packaging
MSC8722EP	2" x 2.25", 2 mm	10/bx, 5 bx/cs
MSC8722EPZ	2" x 2.25", 2 mm	1 bx, 10 ea
MSC8722EPH	2" x 2.25", 2 mm	1 each
MSC8744EP	4.25" x 4.5", 2 mm	10/bx, 5 bx/cs
MSC8744EPZ	4.25" x 4.5", 2 mm	1 bx, 10 ea
MSC8744EPH	4.25" x 4.5", 2 mm	1 each
MSC871X8EP	1" x 8", 2mm	10/bx, 5 bx/cs
MSC871X8EPZ	1" x 8", 2mm	1 bx, 10 ea
MSC871X8EPH	1" x 8", 2mm	1 each

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Medline Industries, Inc.

One Medline Place
Mundelein, IL 60060

Medline United States
1-800-MEDLINE (633-5463)

www.medline.com | info@medline.com

Medline Canada
1-800-396-6996

www.medline.ca | canada@medline.com

Medline México
01-800-831-0898

www.medlinemexico.com | mexico@medline.com

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