DERMABOND®

Study Stats

Can a skin closure system provide greater overall satisfaction for surgeons and patients?

Double-blinded quantitative market research study (90% CI) of 88 total knee replacement patients and 83 Orthopaedic surgeons

August 16, 2017. Ethicon, Inc.[1]

CONCLUSION

In a double-blinded quantitative market research study, total knee replacement patients and their surgeons were **significantly more satisfied with the cosmetic results and less worried about postoperative care and possible infections** when the DERMABOND® PRINEO® Skin Closure System was used rather than traditional skin staples[1]

The DERMABOND PRINEO System is a novel skin closure device that combines DERMABOND® Topical Skin Adhesive with a self-adhering mesh patch to provide:

- A flexible, watertight, microbial barrier with 99% protection in vitro for 72 hours against organisms commonly responsible for surgical site infection[2-4*†]
- Significantly greater skin-holding strength than skin staples or subcuticular suture[5]
- Even distribution of tension for the incision

**Staphylococcus epidermidis, Escherichia coli, Staphylococcus aureus, Pseudomonas aeruginosa,* and *Enterococcus faecium.*
† Clinical Significance unknown

RESULTS

Among 83 Orthopedic Surgeons using both DERMABOND PRINEO System and Skin Staples[1]

	DERMABOND PRINEO System	Skin Staples
Better cosmetic results[1]	**88%**	40%
Better overall healing of the incision[1]	**82%**	52%
Less worried about surgical site infections[1]	**77%**	52%
Overall Satisfaction	**84%**	56%

"With the DERMABOND PRINEO System, the patient may start showering soon after the procedure and feel like a normal person again and mentally I think this helps them achieve a faster recovery period."

-Dr. Ryan Nunley, Orthopaedic Surgeon, Washington University, St. Louis MO, and Barnes Jewish Hospital

Dr. Nunley is a real doctor and paid consultant of Ethicon who used DERMABOND PRINEO System. Post-surgical interview was October 6, 2015. Dr. Nunley was not involved in the market research.

Among 88 Total Knee Replacement Patients

Skin staples n=50 DERMABOND PRINEO System n=38

With DERMABOND PRINEO System compared with staples:

Happier with the appearance of their incision[1]	✓
Less worried about post-operative care[1]	✓
Less concerned about complications[1]	✓

"After the DERMABOND PRINEO System came off, it was wonderful…I was so anxious to actually see the scar line…It's such a fine scar line!"

-Diane McGaw, Total Knee Replacement patient

Diane is a real patient whose doctor used DERMABOND PRINEO System in her surgery. Post-surgical interview was May 8, 2017. Diane was not involved in the market research.

METHODS

When directly comparing staples and DERMABOND PRINEO System (for both surgeons and patients), average scores were compared in both methods to each other using normative statistical testing via a two-tailed Z-test at the 90% confidence level ("statistically different").[1]

CONCLUSION

Overall, **patients and surgeons were more satisfied with DERMABOND PRINEO System** than with skin staples[1]

The quantitative market research adds to a growing body of evidence showing the value of the DERMABOND PRINEO System in orthopaedic surgery. Recently, two economic analyses demonstrated that its use may be associated with improved patient outcomes and lower healthcare costs for hospitals.[6,7]

57 RCTS | **6,173 patients** | **Trusted for 20 years**

The DERMABOND® Portfolio has more clinicial experience, outcomes data, and publications than any other topical skin adhesive.†‡

†Based on published literature in PubMed and SCOPUS, using only RCTs that evaluated the use of the product in a manner consistent with intended indication.
‡DERMABOND ADVANCED® Adhesive and DERMABOND® PRINEO® Skin Closure System test equivalent or superior to DERMABOND Adhesive in head-to-head testing for microbial barrier, wound-bursting strength, tensile strength, flexibility, durability, viscosity, drying time, water vapor transmission rate, water resistance, and physician satisfaction.

For complete indications, contraindications, warnings, precautions, and adverse reactions, please reference full package insert.

References: 1. PRINEO Claims Research Quant Detail. August 16, 2017. Ethicon, Inc. **2.** Singer AJ, Perry LC, Allen Jr. RL. In vivo study of wound bursting strength and compliance of topical skin adhesives. *Acad Emerg Med.* 2008;15(12):1290-94. **3.** DERMABOND® PRINEO® Skin Closure System. Instructions for Use. Ethicon, Inc. **4.** Su W. Study Report for in vitro evaluation of microbial barrier properties of DERMABOND ProTape. Report Number 06TR071. December 4, 2006. Ethicon, Inc. **5.** Kumar, A. AST-2014-0246: Study to compare the tissue holding strength of DERMABOND® PRINEO® 22 cm Skin Closure System (DP22) to conventional wound closure techniques. September 25, 2014. Ehticon, Inc. **6.** Johnston S, Sutton N. Comparison of economic and clinical outcomes between the DERMABOND® PRINEO® Skin Closure System and skin staples in patients undergoing knee replacement in real world clinical practice. Presented at ISPOR 22nd Annual International Meeting; May 20-24, 2017; Boston, MA. **7.** Sadik K, Flener J, Gargiulo J, Graves M, Nunley R, et al. A US hospital budget impact analysis of a skin closure system compared with standard of care in hip and knee arthroplasty. Poster presented at ISPOR 22nd Annual International Meeting; May 20-24, 2017; Boston, MA.

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