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 staples¹

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 infection²-⁴*  
- Significantly greater skin-holding strength than skin staples or subcuticular suture⁵  
- Even distribution of tension for the incision

*Staphylococcus epidermidis, Escherichia coli, Staphylococcus aureus, Pseudomonas aeruginosa, and Enterococcus faecium.
RESULTS

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

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<th>DERMABOND PRINEO System</th>
<th>Skin Staples</th>
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<tr>
<td>Better cosmetic results</td>
<td>88%</td>
<td>40%</td>
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<tr>
<td>Better overall healing of the incision</td>
<td>82%</td>
<td>52%</td>
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<tr>
<td>Less worried about surgical site infections</td>
<td>77%</td>
<td>52%</td>
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<tr>
<td>Overall Satisfaction</td>
<td>84%</td>
<td>56%</td>
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Among 88 Total Knee Replacement Patients

Skin staples n=50     DERMABOND PRINEO System n=38

With DERMABOND PRINEO System compared with staples:

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<tr>
<td>Happier with the appearance of their incision</td>
<td>✓</td>
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<tr>
<td>Less worried about post-operative care</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Less concerned about complications</td>
<td>✓</td>
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"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.

"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")

CONCLUSION

Overall, patients and surgeons were more satisfied with DERMABOND PRINEO System than with skin staples

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.

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

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

References:

1. PRINEO Claims Research Quant Detail, August 16, 2017 Ethicon, Inc.
3. 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 Ethicon, Inc.

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

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