$3M^{\scriptscriptstyle{\rm TM}} \ Tegaderm^{\scriptscriptstyle{\rm TM}} + Pad$

Film Dressing with Non-Adherent Pad



Clinical Evidence Summary





Full Surround Protection Fewer Barriers to Healing

Despite modern advancements in infection prevention, health care-acquired infections (HAIs) remain one of the top 10 leading causes of death in the United States and are responsible for nearly 100,000 deaths each year.¹ Surgical site infections (SSIs) are the second most-common HAI, accounting for 20% of all HAIs among hospitalized patients.² Post-operative SSIs are the most common health care-associated infection in surgical patients³, occurring in up to 5 percent of surgical patients.⁴

SSIs are a major public health concern for health care providers and patients alike.

Studies find that surgical patients who develop an SSI are more than twice as likely to die as those who don't.⁵ If an SSI occurs, a patient is 60 percent as likely to spend time in the ICU after surgery than is an uninfected surgical patient.⁵



Patients who develop a surgical site infection after hospital discharge are also five times more likely to be readmitted to the hospital.⁵

To equip your healthcare facility with tools to implement infection prevention strategies, help improve patient outcomes and reduce costs, 3M offers a full line of 3M[™] Tegaderm[™] +Pad Film Dressings with Non-Adherent Pad to help facilitate infection prevention efforts.

Tegaderm[®] +Pad Dressing products are supported by a variety of clinical data and publications. 3M has created this document to help summarize the publications in a brief and easy-to-use format. If you have questions or need additional information, please refer to the citation referenced.

- 1. U.S. Department of Health & Human Services, Agency for Healthcare Research & Quality (AHRQ). http://www.ahrq.gov/qual/hais.htm
- 2. Klevens RM, Edwards JR, et al. Estimating health care-associated infections and deaths in U.S. hospitals, 2002. *Public Health Reports* 2007;122:160-166.
- 3. Mangram AJ, Horan TC, Pearson ML, Silver LC, Jarvis WR, The Hospital Infection Control Practices Advisory Committee. Guideline for the prevention of surgical site infection, 1999. *Infect Control Hosp Epidemiol.* 1999;20:247-280.
- 4. Cheadle W G. Risk factors for surgical site infection. Surg Infect. 2006;7 Suppl 1:S7-11.
- Kirkland KB, Briggs JP, Trivette SL, et al. The impact of surgical-site infections in the 1990s: attributable mortality, excess length of hospitalization, and extra costs. *Infect Control Hosp Epidemiol.* 1999;20:725-730.

3M[™] Tegaderm[™] +Pad Film Dressing with Non-Adherent Pad

Big Impact. Small Solution.

Stopping infections before they start is a big part of your job. Surgical site infections (SSIs) are the second most-common hospital-acquired infection (HAI) accounting for 20% of all HAIs among hospitalized patients,' and costing up to \$29,000 depending on the pathogen and procedure.²

Improved Infection Control

Tegaderm[™] +Pad Dressings create a transparent, sterile, barrier that is impervious to liquids, bacteria, and viruses^{*}, providing an effective barrier to external contaminants. The adhesive is gentle to the skin, yet has good adherence.



* In vitro testing shows that the transparent film dressing provides a viral barrier from viruses 27 nm in diameter or larger while the dressing remains intact without leakage.



Less Risk of Infection

Clinical studies have shown higher infection rates in chronic and complex wounds for which gauze dressings were used compared to wounds dressed with transparent films.³

Simple Cost Control

Tegaderm[™] +Pad Dressings decrease the amount of nursing time spent on dressing application and changes. Less frequent dressing changes save time, supply costs and reduce the potential for site contamination.⁴

Tegaderm[™] Film Dressings Proven Effective By More Studies Than Any Other Brand

Tegaderm[™] Film Dressings are supported by more clinical studies than any other brand of transparent dressings.



1. Klevens RM, Edwards JR, et al. Estimating health care-associated infections and deaths in U.S.hospitals, 2002. Public Health Reports 2007;122:160-166.

- 2. Surgical Site Infection Toolkit, Berrio-Torres, CDC Division of Healthcare Quality Products, 2009.
- 3. Hanging wet-to-dry dressings out-to-dry. Ovington LG. Advances in Skin and Wound Care 15(2):79-84, March-April 2002.
- 4. Kahl, Ann Marie, Evaluation of Composite Dressings on Post-Operative Wounds: Clinical Outcomes, Cost-Effectiveness and Labor Savings, 1999.

Covering your SSI prevention needs

Protecting your patients and organization from surgical site infections (SSIs) never comes down to just one thing. It's recommended to use a sterile dressing to help reduce the risk of infection.* So we engineered 3MTM TegadermTM +Pad Film Dressing with Non-Adherent Pad to include three advanced performance features.

Clear Difference

Unlike gauze dressings, Tegaderm[™] +Pad Dressings offer a transparent, waterproof film that serves as a barrier. Tegaderm[™] +Pad Dressings are breathable, letting oxygen in and moisture vapor out, allowing the skin to function normally.

Dual Purpose Barrier

Testing has demonstrated that Tegaderm^{**} +Pad Dressings provide a bacterial barrier, even against some of the most common organisms associated with SSI: *Staphylococcus aureus, Enterococcus faecalis, Escherichia coli* and *Pseudomonas aeruginosa*.** Tegaderm^{**} +Pad Dressings also provide a viral barrier against HIV-1 and HBV and other potentially infectious body fluids while the dressings remain intact without leakage.***

Easy Does It

Latex-free, hassle-free design is both patient and clinician-friendly. The pressure-sensitive adhesive film conforms naturally, holds strongly and releases gently — ensuring skin integrity. Plus, the non-adherent pad will not adhere to the wound bed, reducing pain upon removal. And a wide variety of standard sizes and shapes ensure timely, accurate placement.

- * Mangram, AJ, et al. *Guideline for the Prevention of Surgical Site Infection*. Centers for Disease Control and Prevention (CDC) Hospital Infection Control Practices Advisory Committee. Vol. 20, No.4; 268, 1999.
- ** 3M Data on File.
- *** In vitro testing shows that the transparent film dressing provides a viral barrier from viruses 27 nm in diameter or larger while the dressing remains intact without leakage.



CDC Guidelines for Prevention of SSI (1999)

Postoperative Incision Care: Protect with a sterile dressing for 24 to 48 hours postoperatively an incision that has been closed primarily – Category IB.

Gauze Dressings: No Barrier to Bacteria

Clinical studies have shown higher infection rates in chronic and complex wounds for which gauze dressings were used compared to wounds dressed with transparent films.'

Gauze dressings do not present a barrier to bacteria, and one in vitro study demonstrated that **bacteria can pass through up to 64 layers of dry gauze.** Once gauze is moistened, it's even less effective as a barrier to bacteria.²

Viral* and Bacterial Barrier

Staphylococcus aureus is the leading cause of surgical site infections.³

- Hospital stays for Methicillin-resistant *Staphylococcus aureus* (MRSA) infection have more than tripled since 2000 and have increased nearly ten-fold since 1995.⁴
- Preventing a single case of SSI due to (MRSA) can save hospitals as much as \$60,000.⁵
- * In vitro testing shows that the transparent film dressing provides a viral barrier from viruses 27 nm in diameter or larger while the dressing remains intact without leakage.



A single layer of gauze dressings does not present a barrier to bacteria



Did You Know? Bacteria can penetrate up to 64 layers of dry gauze^a (illustrated above).



Tegaderm[™] +Pad Dressings provide a viral* <u>and</u> bacterial barrier.

- 1. Hanging wet-to-dry dressings out-to-dry. Ovington LG. Advances in Skin and Wound Care 15(2):79-84, March-April 2002.
- 2. Dressings and wound infection. Lawrence JC. Am J Surg; 1994;167:(Suppl 1A):21S-24S.
- 3. Hidron AI, et.al., Infect Control Hosp Epidemiol. 2008;29:996-1011; Hidron AI et.al., Infect Control Hosp Epidemiol. 2009;30:107.
- 4. Elixhauser A and Steiner C. Infections with Methicillin-Resistant *Staphylococcus aureus* (MRSA) in U.S. Hospitals, 1993–2005. *AHRQ Healthcare Cost and Utilization Project Statistical Brief* 2007; 35:1-10.
- 5. Anderson DJ, Kaye KS, Chen LF, Schmader KE, Choi Y, et al. (2009) Clinical and Financial Outcomes Due to Methicillin-Resistant *Staphylococcus aureus* Surgical Site Infection: A Multi-Center Matched Outcomes Study. PLoS ONE 4(12): e8305. doi:10.1371/journal.pone.0008305.

Tegaderm[™] Film Dressing Clinical Evidence Summaries

Tegaderm[™] +Pad Film Dressing with Non-Adherent Pad was less expensive to use than standard gauze dressings and decreased nursing time.

Evaluation of Composite Dressings on Post-Operative Wounds: Clinical Outcomes, Cost-Effectiveness, and Labor Savings.

Kahl, 3M Published Literature. 1999.

Purpose

The objective of this study was to evaluate the postoperative use of a composite dressing on patients undergoing general surgery by measuring clinical outcomes, labor savings and cost-effectiveness.

Key Points

- Tegaderm[™] +Pad composite dressings eliminated the incidence of periwound blistering.
- Tegaderm[™] +Pad composite dressings decreased the amount of nursing time spent on dressing application and changes and reduced the cost of supplies when compared to conventional dressings.

Health Economics

"Tegaderm™ +Pad eliminated the incidence of periwound blistering and decreased the amount of nursing time spent on dressing application and changes, and showed cost savings when compared to the standard protocol dressing." Semi-permeable postoperative film dressings are particularly useful if the area is at risk of cross-contamination and provide a bacterial and waterproof barrier.

Surgical Wounds: Why Do They Dehisce?

Oldfield A, Burton F. Wound Essentials. Volume 4: 84-91, 2009.

Purpose

Outline common cause of dehiscence, suggest methods for accurate assessment and a plan of care for patients with postoperative wounds.

Key Points

- Film dressings tend to be more conformable, making them an excellent choice for areas where postoperative blistering could be a problem.
- Patients may feel more comfortable with their wounds being covered because it prevents clips from being caught on clothing and causing trauma.
- Keep the wound clean and dry to manage postoperative surgical wounds.

"Semi-permeable dressings provide a waterproof and bacteria-proof barrier."

Best

Practice

Tegaderm[™] Film Dressing Clinical Evidence Summaries

Clinical study results demonstrated that Tegaderm[™] Film dressing was statistically easier to apply than DuoDERM dressing.

A Study to Compare Two Film Dressings Used as Secondary Dressings

Thomas, Journal of Wound Care, Vol. 6, No. 7, July 1997, pp. 333-336.

Purpose

Comparative, prospective, randomized study comparing Tegaderm[™] Film dressings to DuoDERM Extra Thin film dressings as secondary dressings on 100 patients with acute or chronic wounds.

Key Points

- Results demonstrated that Tegaderm[™] Film dressing was statistically easier to apply and remove.
- Areas of skin that are at risk of damage from friction or shearing are sometimes protected by the prophylactic use of film dressings.

"The final score for ease of application showed evidence of a genuine difference in favor of [Tegaderm™ dressings]."

Ease of Use Surgical wound patients treated with semi-occlusive transparent film dressings resulted in faster wound healing, decreased pain and less scarring when compared to traditional gauze dressings.

Use of Semi-Occlusive, Transparent Film Dressings for Surgical Wound Protection: Experience in 3,637 Cases

Rubio, International Surgery, Vol. 76, No 4, Dec. 1991, pp. 253-254.

Purpose

The purpose of this study was the analysis of semi-occlusive transparent film dressings compared to traditional dressings (gauze with Petroleum or Antimicrobial ointment) in the treatment of 3,637 surgical wound patients.

Key Points

- Study confirms that semi-occlusive transparent film dressings are appropriate for all types of clean, surgical wounds in a variety of locations, including curved or irregular surfaces and joints.
- The semi-occlusive dressings promoted patient mobility and hygiene, as well as permitted the patient to shower or bathe.
- The semi-occlusive film dressings provide for continuous wound monitoring.

Wound Healing Pain

Reduction

"Compared with traditional methods, the semi-occlusive dressing resulted in faster wound healing, decreased pain, and less scarring."

Tegaderm[™] Film Dressing Clinical Evidence Summaries

Use of Tegaderm[™] Film dressing on a scalp donor site provided an optimal wound environment allowing for more rapid skin reharvesting compared to a gauze dressing.

Scalp as Skin Graft Donor Site: Rapid Reuse with Synthetic Adhesive Moisture Vapor Permeable Dressings

Barnett, The Journal of Trauma, Vol. 23, No. 2, 1983, pp. 148-151.

Purpose

Comparative, prospective, randomized study of Tegaderm[™] Film dressing, OpSite dressings and mesh gauze on 24 patients with 60 split thickness graft donor sites.

Key Points

- Pain was substantially reduced with the use of film dressings and the scalp as a donor site for rapid reuse of a donor site.
- Rate of healing is increased as well when film dressings are used on the scalp site.

"[Tegaderm™] dressings have been shown to be moisture vapor permeable, yet impenetrable to liquid and bacteria."

Wound

Healing

Pain Reduction Tegaderm[™] Film dressing was associated with better wound appearance, easy application and an estimated cost reduction when compared to wounds covered with gauze dressings.

Tegaderm[™] versus Gauze Dressing in Breast Surgery

Moshakis et al. The British Journal of Clinical Practice, Vol. 38, No. 4, 1984, pp. 149-152.

Purpose

Comparative, prospective, randomized study of dry gauze vs. Tegaderm[™] Film dressing on wounds of 120 breast surgery patients.

Key Points

- At the final assessment, 78% of wounds treated with Tegaderm[™] were thought to be "very good" compared to 45% for gauze dressings.
- The Tegaderm[™] film was convenient, easy to apply and waterproof.
- Estimated cost of the dry gauze dressing was
 3.5 times as much as a single Tegaderm[™] dressing.

Ease of Use Health

Economics

"Patients and nursing staff found the Tegaderm™ dressing significantly better than the gauze dressing."

Supporting Your Infection Prevention Efforts

3M helps you deliver tangible, positive results – by bringing the broadest array of solutions to the fight against hospital-acquired conditions.

- A recognized leader in research and development, 3M has been providing health care professionals and patients with innovative solutions that help make people's lives better since 1948.
- 3M delivers the resources you need to be a leader in detecting, preventing and controlling hospitalacquired conditions and access to key opinion leaders who can help clinical managers understand and lead through these changes.
- Evidence-based solutions. Customers expect it and 3M is committed to continuously expanding the extensive body of clinical evidence that supports the effectiveness of 3M products and solutions.
- 3M is a trustworthy, credible partner for hospitals dedicated to helping hospitals do the right thing for their business and their patients.

3M also provides:

- Experienced sales and support teams, specialized in the areas of skin, wound and IV site care.
- Clinical and technical specialists who provide support using a variety of methods
 - In-service training, professional continuing education and conversion programs.
 - Protocol and formulary development to promote clinical outcomes, standardization and utilization within your departments.
- Toll-free helpline that offers experts to assist customers with technical and product information.
- Customer service representatives who are available to handle daily calls for order entry and special shipment requests to ensure customer satisfaction.
- Free, on-line education delivered by recognized clinical experts. Learn more at **3M.com/LearningConnection.**

Suggested Applications

Simple solution. Multiple applications.

- Post-operative wounds
- Acute wounds such as abrasions and lacerations
- Superficial and partial thickness burns
- Light-to-moderately-draining chronic wounds
- I.V. catheter sites

Ordering Information

Catalog No.	Dressing Size	Pad Size	Dressings/Box	Boxes/Case
3M [™] Tegaderm [™] +Pad Film Dressing with Non-adherent Pad				
3582	2 in. x 2-3/4 in. 5 cm x 7 cm	1 in. x 1-1/2 in. 2,5 cm x 4 cm	50	4
3584	2-3/8 in. x 4 in. 6 cm x 10 cm	1 in. x 2-3/8 in. 2,5 cm x 6 cm	50	4
3586	3-1/2 in. x 4 in. 9 cm x 10 cm	1-3/4 in. x 2-3/8 in. 4,5 cm x 6 cm	25	4
3587 Oval	3-1/2 in. x 4-1/8 in. 9 cm x 10.5 cm	1-3/4 in. x 2-3/8 in. 4,5 cm x 6 cm	25	4
3588	6 in. x 6 in. 15 cm x 15 cm	4 in. x 4 in. 10 cm x 10 cm	25	4
3589	3-1/2 in. x 6 in. 9 cm x 15 cm	1-3/4 in. x 4 in. 4,5 cm x 10 cm	25	4
3590	3-1/2 in. x 8 in. 9 cm x 20 cm	1-3/4 in. x 6 in. 4,5 cm x 15 cm	25	4
3591	3-1/2 in. x 10 in. 9 cm x 25 cm	1-3/4 in. x 8 in. 4,5 cm x 20 cm	25	4
3593	3-1/2 in. x 13-3/4 in. 9 cm x 35 cm	1-3/4 in. x 11-3/4 in. 4,5 cm x 30 cm	25	4



3593

3M[™] Tegaderm[™] +Pad

Film Dressing with Non-Adherent Pad



$3M^{\text{TM}} \underset{\text{Dressings}}{\text{Tegaderm}} \text{ simple. dependable. trusted.}$

To learn more about Tegaderm[™] products, visit **www.3M.com/tegaderm**. For more information about the 3M Critical & Chronic Care family of products, visit **3M.com/C3SD**, contact your 3M Critical & Chronic Care representative or call the 3M Health Care Customer Helpline at 1-800-228-3957. Outside of the United States, contact your local 3M subsidiary.



3M Critical & Chronic Care Solutions Division 3M Health Care 2510 Conway Avenue St. Paul, MN 55144 USA 1-800-228-3957 www.3M.com/healthcare

3M Canada P.O. Box 5757 London, Ontario N6A 4T1 Canada 1-800-364-3577 www.3M.com/cahealthcare

3M and Tegaderm are trademarks of 3M. Used under license in Canada. Please recycle. Printed in U.S.A. © 3M 2013, 2014. All rights reserved. 70-2010-9164-5