

# HELP PROTECT YOUR PATIENT'S FUTURE WITH SEPROFILM®

SEPROFILM IS INTENDED AS AN ADJUNCT IN ABDOMINAL, PELVIC AND THORACIC SURGERY TO REDUCE THE INCIDENCE, EXTENT AND SEVERITY OF POSTOPERATIVE ADHESIONS, AND TO REDUCE ADHESIVE SMALL BOWEL OBSTRUCTION WHEN PLACED IN THE ABDOMEN<sup>1</sup>

- Well-established efficacy in clinical practice
- Established safety profile
- Site specific and stays on intended sites for up to 7 days during the critical healing period
- Cost-effective—may lower healthcare costs by reducing incidence of hospital readmissions, shortening operating theatre time, and lowering the risk of adhesive small bowel obstruction<sup>2-4</sup>

## SEPROFILM ORDERING INFORMATION

CONFIGURATIONS	CATALOG NUMBERS	FILM DIMENSIONS	POUCH CONTENTS	PACKAGING
Seprafilm	4301-03	12.7 cm x 15.2 cm	1 film	10 pouches per carton
Seprafilm Procedure Pack	5086-03	12.7 cm x 7.5 cm	6 films	5 pouches per carton
Seprafilm Single Site	6641-03	12.7 cm x 7.5 cm	1 film	5 pouches per carton
Seprafilm Mini Site	6379-03	6.5 cm x 7.5 cm	1 film	10 pouches per carton
Seprafilm 4-Section	6380-03	6.5 cm x 7.5 cm	4 films	10 pouches per carton



## MANUFACTURED BY

Genzyme Corporation, a Sanofi company  
76 New York Avenue  
Framingham, MA 01701 USA

References:  
1. Seprafilm [CE Instructions for Use]. Cambridge, MA: Genzyme Corporation; 2007.  
2. Bristow RE, Santillan A, Diaz-Montes TP, et al. Prevention of adhesion formation after radical hysterectomy using a sodium hyaluronate-carboxymethylcellulose (HA-CMC) barrier: a cost-effectiveness analysis. *Gynecol Oncol*. 2007;104(3):739-46.  
3. Kusunoki M, Ikeuchi H, Yanagi H, et al. Biodegradable hyaluronate-carboxymethylcellulose membrane (Seprafilm) in surgery for rectal carcinoma: a prospective randomized clinical trial. *Surg Today*. 2005;35(11):940-5.  
4. Fazio V, Cohen Z, Fleshman J, et al. Reduction in adhesive small-bowel obstruction by Seprafilm adhesion barrier after intestinal resection. *Dis Colon Rectum*. 2005;49:1-11.



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# WHAT IF YOU COULD PREVENT ADHESIONS?



# ADHESIONS: A FREQUENT COMPLICATION WITH UNDER-RECOGNIZED DANGERS

# SEPRAFILM® ADHESION BARRIER

## ADHESIONS ARE NOT PREVENTABLE BY SURGICAL TECHNIQUE ALONE<sup>1,2</sup>

Adhesions develop routinely following both open and laparoscopic abdominal surgery, and have been reported at second-look surgery to occur in up to 93% of patients following initial laparotomy.<sup>2</sup>

### ADHESION-RELATED CONSEQUENCES

<b>Secondary infertility</b>	Adhesions are the leading cause of secondary female infertility (20% to 40% of all cases) <sup>3</sup>
<b>Chronic pelvic pain</b>	Adhesions are implicated as the primary cause in up to 48% of chronic pelvic pain cases <sup>4,5</sup>
<b>Small bowel obstruction (SBO)</b>	Up to 80% of SBO cases are caused by adhesions <sup>6</sup> Adhesive SBO has a high risk of recurrence with mortality rates ranging from 3% to 10% <sup>6,10</sup> Abdominal hysterectomy is the leading contributor to SBO; in one retrospective study of female patients diagnosed with adhesion-related SBO, abdominal hysterectomy accounted for 38% of the surgical procedures. <sup>11</sup>
<b>Inadvertent enterotomy</b>	Adhesions increase the risk of iatrogenic bowel injury by 10% to 25% <sup>12,13</sup>
<b>Reoperative complexity</b>	Adhesions prolong operative time and may limit access to surgical sites <sup>14-16</sup> Adhesions may complicate repeat cesarean deliveries and lengthen operating time, which may negatively impact fetal well-being <sup>17</sup> Adhesions are the primary reason for conversion from laparoscopy to laparotomy <sup>18</sup>



Pelvic adhesions are the cause of postoperative complications.

- References**
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  - Van Goor H. Consequences and complications of peritoneal adhesions. *Colorectal Dis*. 2007;9 (Suppl 2):25-34.
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  - Van Goor H. Consequences and complications of peritoneal adhesions. *Colorectal Dis*. 2007;9(Suppl 2):25-34.
  - Beck DE, Cohen Z, Fleshman JW, Kaufman HS, van Goor H, Wolff BG. Adhesion Study Group Steering Committee; A prospective, randomized, multicenter, controlled study of the safety of Seprafilm adhesion barrier in abdominopelvic surgery of the intestine. *Dis Colon Rectum*. 2003 Oct;46(10):1310-9.
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  - Tang C-L, Seow-Choen F, Fook-Chong S, Eu K-W. Bioreversible adhesion barrier facilitates early closure of the defunctioning ileostomy after rectal excision: a prospective, randomized trial. *Dis Colon Rectum* 2003;46:1200-1207.

## REDUCE ADHESIONS AND THEIR COMPLICATIONS WITH SEPRAFILM

No adhesion barrier has been more extensively evaluated than Seprafilm (HA/CMC).

### CLINICAL FEATURES AND BENEFITS

Demonstrated in five prospective, randomized, controlled, clinical studies to significantly reduce adhesions and related complications<sup>19,23</sup>

Separates tissues for up to 7 days – the critical tissue healing period

Composed of Sodium Hyaluronate/Carboxymethylcellulose (HA/CMC)—two bioresorbable, inert, non-animal-derived polysaccharides

**Important Safety Information**—No clinical studies have been conducted in women who become pregnant in the first month after application of Seprafilm. Therefore, avoiding pregnancy during the first complete menstrual cycle after the use of Seprafilm should be considered. Foreign body reaction may occur as with most surgical adjuncts but have been rarely reported during clinical use. Please see full Seprafilm Instructions for Use (IFU).



Seprafilm is intended to reduce the incidence, severity and extent of post-operative adhesions.

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14. Beck DE, Ferguson MA, Opelka FG, et al. Effect of previous surgery on abdominal opening time. *Dis Colon Rectum*. 2000;43(12):1749-53.
15. Van Goor H. Consequences and complications of peritoneal adhesions. *Colorectal Dis*. 2007;9 (Suppl 2):25-34.
16. Coleman MG, McLain AD, Moran BJ. Impact of previous surgery on time taken for incision and division of adhesions during laparotomy. *Dis Colon Rectum*. 2000;43(9):1297-9.
17. Morales KJ, Gordon MC, Bates GW Jr. Postcesarean delivery adhesions associated with delayed delivery of infant. *Am J Obstet Gynecol*. 2007;196(5):461.e1-6.
18. Van Goor H. Consequences and complications of peritoneal adhesions. *Colorectal Dis*. 2007;9(Suppl 2):25-34.
19. Beck DE, Cohen Z, Fleshman JW, Kaufman HS, van Goor H, Wolff BG. Adhesion Study Group Steering Committee; A prospective, randomized, multicenter, controlled study of the safety of Seprafilm adhesion barrier in abdominopelvic surgery of the intestine. *Dis Colon Rectum*. 2003 Oct;46(10):1310-9.
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21. Diamond MP, For the Seprafilm Adhesion Study Group. Reduction of adhesions after uterine myomectomy by Seprafilm® membrane (HAL-F): a blinded, prospective, randomized, multicenter clinical study. *Fertil Steril*. 1996;66:904-910.
22. Fazio VW, Cohen Z, Fleshman JW, et al. Reduction in adhesive small-bowel obstruction by Seprafilm adhesion barrier after intestinal resection. *Dis Colon Rectum*. 2006 Jan;49(1):1-11.
23. Tang C-L, Seow-Choen F, Fook-Chong S, Eu K-W. Bioreversible adhesion barrier facilitates early closure of the defunctioning ileostomy after rectal excision: a prospective, randomized trial. *Dis Colon Rectum* 2003;46:1200-1207.

As demonstrated in prospective, randomized clinical trials,

# SEPRAFILM® REDUCES ADHESIONS AND SIMPLIFIES REOPERATION

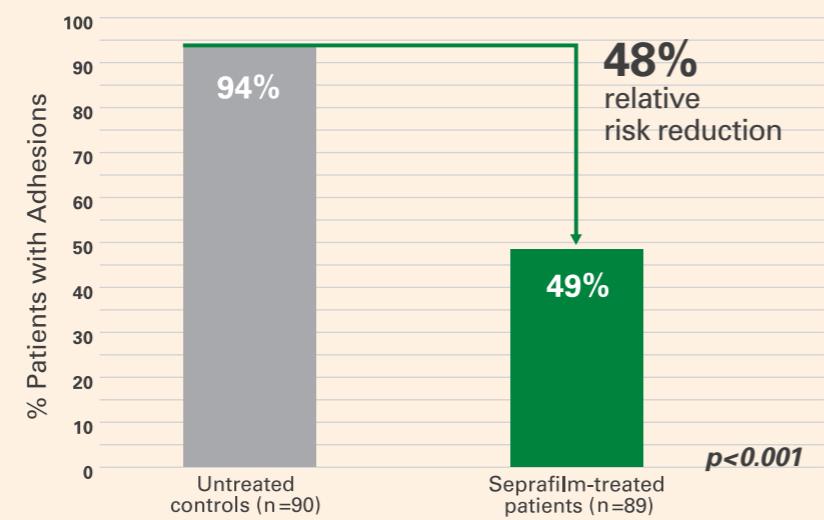
As demonstrated in prospective, randomized clinical trials,

# SEPRAFILM® SIGNIFICANTLY REDUCES ADHESION-RELATED MORBIDITY

## PREVENTION OF POSTOPERATIVE ABDOMINAL ADHESIONS BY A HA-BASED BIORESORBABLE MEMBRANE

**STUDY DESIGN:** Randomized, prospective, double-blind, multicenter study evaluating the safety and effectiveness of Seprafilm in preventing post-operative adhesions in patients undergoing 2-stage intestinal resection (N=183).

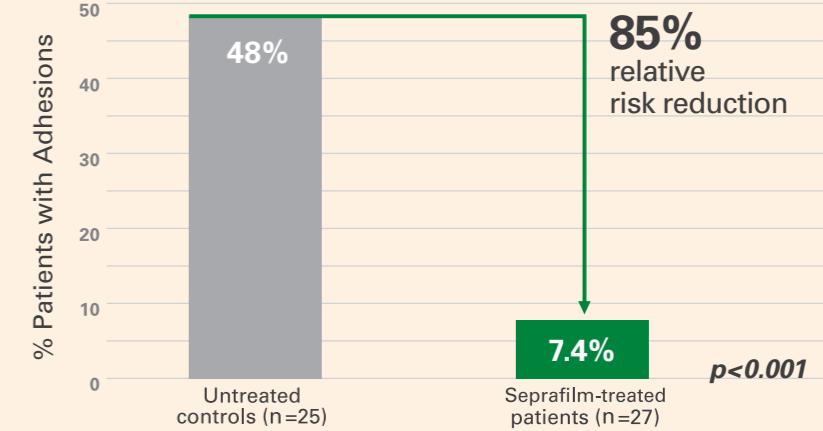
**RESULTS:** Seprafilm significantly reduced the incidence of adhesions and there was no statistical difference in adverse events between the Seprafilm and control groups.



## EFFICACY OF SEPRAFILM AS AN ADHESION PREVENTION BARRIER IN C-SECTIONS<sup>3</sup>

**STUDY DESIGN:** Prospective, controlled, cohort study evaluating Seprafilm for the prevention of adhesions following cesarean section, as evaluated at repeat cesarean delivery (N=52).

**RESULTS:** Seprafilm significantly reduced the incidence and severity of adhesions following C-section. Seprafilm also decreased both delivery and overall procedure times. No significant difference in blood loss (including amniotic fluid) was observed between the two groups.



## IMPROVED OUTCOMES REPORTED IN SEPRAFILM CLINICAL TRIALS

### RESULTS

**Reoperative complexity** 15% relative reduction in operative time at repeat cesarean delivery (45.3 minutes in untreated controls vs. 38.7 minutes in Seprafilm-treated patients, P=0.009). No significant difference in blood loss (including amniotic fluid) was observed between the two groups.<sup>3</sup>

Prospective, cohort controlled study examining use of Seprafilm at first cesarean delivery to prevent pelvic adhesions, as evaluated at repeat cesarean delivery (N=52)

**Adhesive small bowel obstruction (ASBO)** 47% relative reduction in reoperative ASBO (3.4% of untreated controls vs. 1.8% of Seprafilm-treated patients, P=0.043). No significant difference between Seprafilm and control groups was reported for abdominal abscess, pelvic abscess, and pulmonary embolism. Foreign body reaction was not reported for any patient. However, in a subpopulation of patients in whom Seprafilm was wrapped around a fresh bowel anastomosis, leak-related events occurred more frequently.<sup>4</sup>

Randomized, prospective, multicenter, international, single-blind trial evaluating the efficacy of Seprafilm in preventing ASBO in patients undergoing intestinal resection (N=1701; mean follow-up 3.5 years)

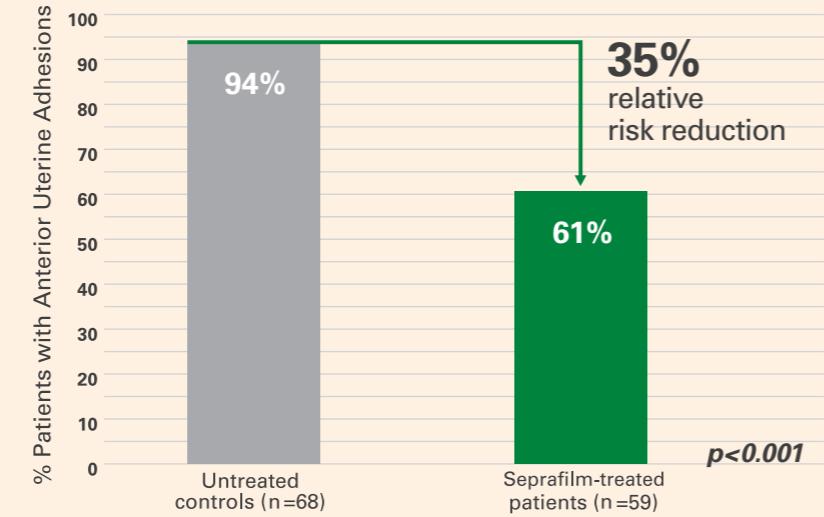
**Early postoperative small bowel obstruction (EPSBO)** 61% relative reduction in EPSBO (7.0% of untreated controls vs. 2.7% of Seprafilm-treated patients, P=0.045). There were no significant differences between Seprafilm and control in the incidence of complications.<sup>5</sup>

Randomized, prospective, multicenter, multinational, single-blind trial evaluating the efficacy of Seprafilm in reducing the incidence of adhesive intestinal obstruction within 30 days after colorectal resection (N=427)

## REDUCTION OF ADHESIONS AFTER UTERINE MYOMECTION WITH SEPRAFILM<sup>2</sup>

**STUDY DESIGN:** Randomized, prospective, blinded, multicenter study evaluating efficacy of Seprafilm in reducing incidence of adhesions after uterine myomection (N=127).

**RESULTS:** Seprafilm significantly reduced the incidence, severity, extent, and area of adhesions following myomection. No adverse events were observed to be related to Seprafilm use.



### References

1. Becker JM, Dayton MT, Fazio VW, et al. Prevention of postoperative abdominal adhesions by a sodium hyaluronate-based bioreversible membrane: a prospective, randomized, double-blind multicenter study. *J Am Coll Surg.* 1996;183(4):297-306.
2. Diamond M. Reduction of adhesions after uterine myomection by Seprafilm membrane (HAL-F): a blinded, prospective, randomized, multicenter clinical study. Seprafilm Adhesion Study Group. *Fertil Steril.* 1996;66(6):904-10.
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Note: Data charts have been adapted from the respective clinical studies.

**Important Safety Information**—Seprafilm should not be wrapped directly around a fresh bowel anastomotic suture or staple line of the intestine, as this may result in an increased risk of bowel anastomotic leak-related events. However, the incidence of these events was not affected when Seprafilm was placed elsewhere in the abdomen. Please see full Seprafilm Instructions for Use (IFU).

As demonstrated by prospective, randomized trials and extensive clinical use,

# SEPRAFILM® HAS A WELL-ESTABLISHED SAFETY PROFILE

# USING SEPRAFILM® ADHESION BARRIER

## SEPRAFILM SAFETY PROFILE IS COMPARABLE TO UNTREATED CONTROLS

In a prospective, randomized, multicenter, international trial evaluating the safety and efficacy of Seprafilm in patients undergoing elective colorectal surgery (N=1791),<sup>1</sup>

- No statistical difference in adverse event rates between Seprafilm and untreated control groups

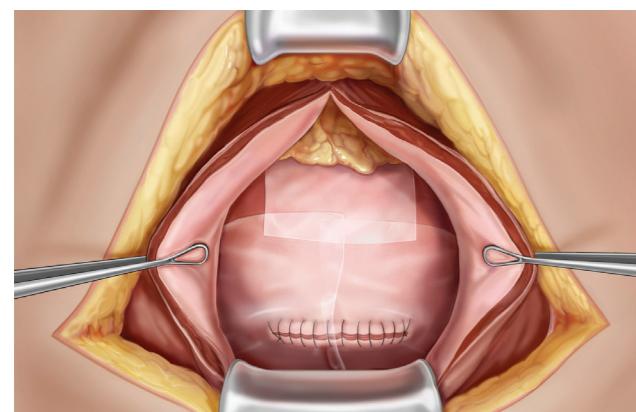
In a randomized, prospective, blinded, multicenter study evaluating Seprafilm to reduce adhesions after uterine myomectomy (N=127)<sup>2</sup>

- No adverse events and no increased risk of complication were observed to be related to Seprafilm use.

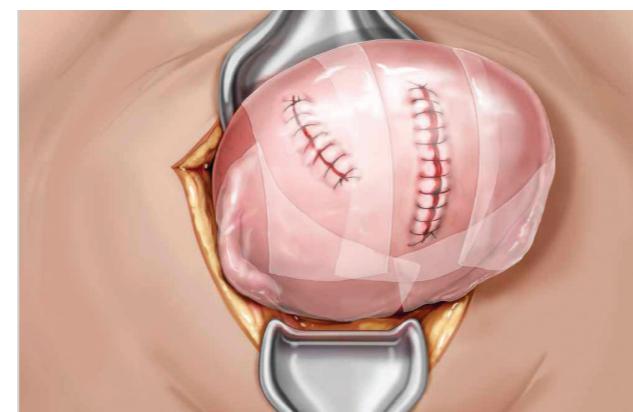
## THE CONFIDENCE OF EVIDENCE-BASED SURGERY

- Seprafilm has been studied in over 20 published abdominopelvic surgical trials involving more than 4,000 patients
- More than 3.3 million patients worldwide have received Seprafilm since 1996<sup>3</sup>

**Important Safety Information**—No controlled clinical studies have been conducted in patients with active infections. Foreign body reaction may occur as with most surgical adjuncts but have been rarely reported during clinical use. Please see full Seprafilm Instructions for Use (IFU).



Seprafilm placement in a C-section

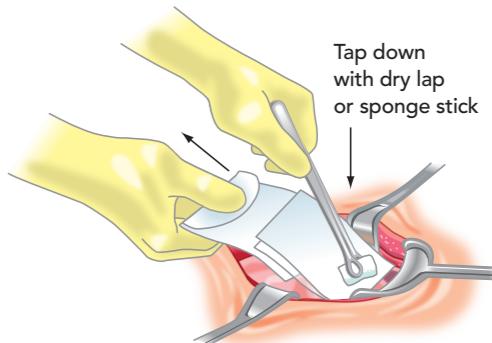
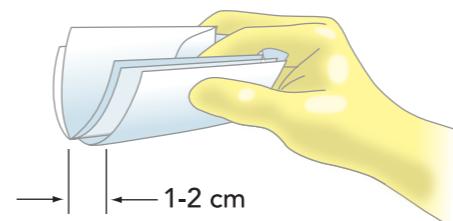


Seprafilm placement in a myomectomy

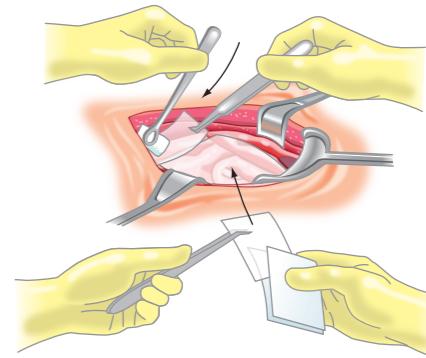
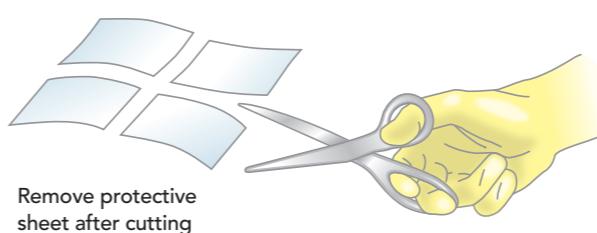
## PREPARATION AND HANDLING

- Dry off gloves and instruments before handling (Seprafilm is hydrophilic and will stick to moist surfaces)
- Seprafilm may be applied to any raw or denuded surface in the abdominopelvic cavity
- If incision or application site is small, Seprafilm may be cut to shape or size to aid in placement (Note: Remove protective sheets after cutting)
- Large pieces can be curved or rolled to facilitate application

## "TACO" APPLICATION TECHNIQUE



## "QUILTING" APPLICATION TECHNIQUE



### References

1. Beck DE, Cohen Z, Fleshman JW, et al. A prospective, randomized, multicenter, controlled study of the safety of Seprafilm adhesion barrier in abdominopelvic surgery of the intestine. *Dis Colon Rectum.* 2003;46(10):1310-9.
2. Diamond M. Reduction of adhesions after uterine myomectomy by Seprafilm membrane (HAL-F): a blinded, prospective, randomized, multicenter clinical study. Seprafilm Adhesion Study Group. *Fertil Steril.* 1996;66(6):904-10.
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