

Breast  
Reconstruction  
With **Sientra**  
**Silicone Gel**  
Breast Implants

PATIENT EDUCATIONAL BROCHURE



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# Glossary

<b>Abdomen</b>	The part of the body between the upper chest (breasts) and the pelvis (hips); often called the stomach.
<b>Anaplastic Large Cell Lymphoma (ALCL)</b>	ALCL is not breast cancer; it is a rare type of non-Hodgkin's lymphoma (cancer of the immune system).
<b>Areola</b>	The pigmented or darker colored area of skin surrounding the nipple.
<b>Asymmetry</b>	Uneven appearance between a woman's left and right breasts in terms of their size, shape, or breast level.
<b>Atrophy</b>	Thinning or diminishing of tissue or muscle.
<b>Autoimmune Disease</b>	An autoimmune disease is a disease in which the body's immune system attacks its own cells or tissues by mistake, causing damage and dysfunction. Autoimmune diseases can affect connective tissue in the body (the tissue that binds together body tissues and organs). Autoimmune diseases can affect many parts of the body, like nerves, muscles, glands, and the digestive system.
<b>Bilateral</b>	Relating to both the left and right side.
<b>Biocompatible</b>	The ability to exist along with living tissues or systems without causing harm.
<b>Biopsy</b>	The removal and examination of tissue, cells or fluid from a living body.
<b>Body Dysmorphic Disorder (BDD)</b>	A psychological condition characterized by excessive worry about an imagined or minor physical flaw to the point that it can interfere with normal daily activities.

<b>Body Esteem Scale</b>	A series of questions asking about a person’s feelings about his or her body.
<b>Breast Augmentation</b>	<p>A surgical procedure to increase breast size and to treat such conditions as sagging or drooping of the breast (ptosis) or breasts of different size, shape, or placement (asymmetry).</p> <p>The first time a breast implant is placed to increase breast size or treat such conditions as ptosis or asymmetry, it is referred to as “primary augmentation.” Any time there is another surgery to replace the implant, it is referred to as “revision-augmentation.”</p>
<b>Breast Implant</b>	Any surgically implanted artificial device intended to replace missing breast tissue or to enhance a breast.
<b>Breast Mass</b>	A lump in the breast.
<b>Breast Reconstruction</b>	<p>A surgical procedure to replace breast tissue or reconstruct a breast after tissue was taken out because of cancer or injury. Breast reconstruction also includes the surgical correction of a breast that has failed to develop properly due to a severe abnormality or congenital defect.</p> <p>The first time a breast implant is placed to replace breast tissue is referred to as “primary reconstruction.” Any time there is another surgery to replace the implant, it is referred to as “revision-reconstruction.”</p>
<b>Calcification/ Calcium Deposits</b>	The process of a soft tissue hardening when the mineral calcium builds up in a certain place.

<b>Capsular Contracture</b>	Tightening of the scar tissue (also called a capsule) that normally forms around the breast implant during the healing process after surgery. In some women, the scar tissue (capsule) squeezes the implant. When this occurs, it is called capsular contracture. This results in firmness or hardening of the breast. Capsular contracture is classified by a scale named Baker Grade.
<b>Capsule</b>	Scar tissue that forms around the breast implant.
<b>Capsulotomy (closed)</b>	An attempt to break the scar tissue capsule around the implant by pressing or pushing on the outside of the breast. This method does not require surgery but may rupture the implant.
<b>Capsulotomy (open)</b>	A surgery to create an incision in the capsule (scar tissue).
<b>Chest Wall</b>	The system of structures outside the lungs that move as a part of breathing, including bones (the rib cage) and muscles (diaphragm and abdomen).
<b>Congenital Anomaly</b>	An abnormal body part that existed at birth. Also called a congenital malformation or congenital deformity.
<b>Connective Tissue Disease/Disorder (CTD)</b>	A disease, group of diseases, or conditions affecting connective tissue, such as muscles, ligaments, skin, etc. and/or the immune system. Connective tissue diseases ("CTDs") that involve the immune system include autoimmune diseases such as rheumatoid arthritis, lupus, and scleroderma.
<b>Contraindication</b>	A use that is improper and should not be followed. Failure to follow contraindications identified in the labeling could cause serious harm.
<b>Contralateral</b>	The opposite side of the body.

<b>CORE Clinical Study</b>	The major clinical study that supports the approval of a medical product (such as breast implants). For Sientra’s breast implants, the CORE study includes augmentation, reconstruction, and revision (revision-augmentation and revision-reconstruction) patients. Information on the safety and effectiveness of the implants are collected every year for 10 years after study participants get their implants.
<b>Delayed Reconstruction</b>	Breast reconstruction that takes place weeks, months, or years after a mastectomy.
<b>Delayed Wound Healing</b>	Unusually slow progress in the healing of a wound; surgical incision site fails to heal normally or takes longer to heal.
<b>Displacement</b>	Movement of the implant from the usual or proper place.
<b>Extrusion</b>	Skin breakdown with the implant pressing through the skin or surgical incision.
<b>Fibrocystic Breast Disease</b>	Common, benign (noncancerous) changes in the tissues of the breast. The term “disease” is misleading, and many doctors prefer the term “change.” The condition is so commonly found in breasts, it is believed to be a variation of normal. Other related terms include “mammary dysplasia,” “benign breast disease,” and “diffuse cystic mastopathy.”
<b>Fibromyalgia</b>	A chronic condition characterized by widespread pain in muscles and joints. It may include fatigue, difficulty sleeping and morning stiffness.
<b>Fibrous Tissues</b>	Connective tissue composed mostly of fibers (for example, tendons).
<b>Flap</b>	A portion of tissue (which may include muscle, fat, and skin), moved from one part of the body to another. The tissue flap may or may not have its blood supply attached.

<b>Free TRAM Flap</b>	A TRAM (transverse rectus abdominus musculocutaneous) flap (section of skin, muscle and other tissue from the abdomen) that is disconnected from (completely cut away from) the blood vessels in the rest of the body before being relocated to the breast area for reconstruction. The blood vessels must then be surgically reconnected when the flap is placed at the breast.
<b>Gel Bleed/Gel Diffusion</b>	When silicone gel leaks or “bleeds” or “diffuses” through the implant shell.
<b>Granuloma</b>	Noncancerous lumps that can form around foreign material, such as silicone. Like any lump, it should be evaluated to distinguish it from a lump that might be cancerous.
<b>Groin</b>	The fold where the lower abdomen meets the inner part of the thigh.
<b>Hematoma</b>	A collection of blood inside the body, for example in skin tissue.
<b>Hypertrophic Scarring</b>	An enlarged scar that remains after a wound heals.
<b>Infection</b>	The growth in the human body of microorganisms such as bacteria, viruses or fungi. An infection can occur as a result of any surgery.
<b>Inflammation/Irritation</b>	The response of the body to infection or injury characterized by swelling, redness, warmth and/or pain.
<b>Inframammary Fold</b>	The crease under the breast where the breast and chest meet.
<b>Inframammary Incision</b>	An incision made in the fold below the breast.
<b>Inpatient Surgery</b>	A surgical procedure in which the patient is required to stay overnight in the hospital.
<b>Lactation</b>	The production and secretion of milk by the breast glands.

<b>Latissimus Dorsi</b>	Two triangular muscles running from the spinal column (backbone) to the shoulder.
<b>Latissimus Dorsi Flap</b>	A section of muscle and tissue on a person's back, consisting of the latissimus dorsi muscle, skin, fat, connective tissue, and vascular [blood vessels] tissue.
<b>Latissimus Dorsi Flap Reconstruction</b>	Breast reconstruction using a patient's own tissue (a latissimus dorsi flap) from the side of the back to create the new breast or provide enough skin and breast tissue to cover a breast implant.
<b>Local Complications</b>	Complications that occur in the breast or chest area.
<b>Lymph Nodes</b>	Lymph nodes are glands that play an important part in the body's defense against infection. They produce lymph, which travels throughout the body in the lymph system, and filters impurities from the body. Common areas where the lymph nodes can be felt with the fingers include: groin, armpit, neck, under the jaw and chin, behind the ears, and on the back of the head.
<b>Lymphadenopathy</b>	Enlarged lymph node(s).
<b>Lymphedema</b>	Swelling of the lymph node(s).
<b>Malposition</b>	When the implant is placed incorrectly during the initial surgery or when the implant has shifted from its original position. Shifting can be caused by many factors, such as gravity, trauma, poor initial placement and capsular contracture.
<b>Mammary</b>	Pertaining to the breast.
<b>Mammography</b>	A type of x-ray examination of the breasts used for detection of cancer.
<b>Mammoplasty</b>	Plastic surgery of the breast.
<b>Mastectomy</b>	Partial or complete removal of the breast.

<b>Mastopexy</b>	Surgical procedure to raise and reshape sagging breasts.
<b>Metastatic Disease</b>	A stage of cancer after it has spread from its original site to other parts of the body.
<b>Migration/Gel Migration</b>	Movement of silicone material outside the breast implant to other areas of the body.
<b>MRI (Magnetic Resonance Imaging)</b>	MRI uses a magnetic field to create a 3-dimensional picture of a body part or organ. MRI is the imaging method that currently has the best ability to detect rupture of silicone gel breast implants.
<b>Necrosis</b>	Death of cells or tissues.
<b>Oncologist</b>	A medical doctor who specializes in diagnosing and treating cancer.
<b>Outpatient Surgery</b>	A surgical procedure in which the patient is not required to stay in the hospital overnight.
<b>Palpability/Visibility</b>	Palpability is when the implant can be felt through the skin. Visibility is when the implant can be seen through the skin.
<b>Pectoralis</b>	Major muscle of the chest.
<b>Pedicle TRAM Flap</b>	A TRAM flap (section of skin, muscle and other tissue from the abdomen) that stays connected to the blood vessels in the rest of the body while being relocated (through a tunnel under the skin) to the breast area for reconstruction.
<b>Periareolar</b>	The areola is the pigmented or darker colored area of skin surrounding the nipple. Periareolar refers to the area just around the areola.
<b>Periumbilical</b>	Around the belly button.
<b>Plastic Surgery</b>	Surgery intended to enhance or improve the appearance of the body.

<b>Platinum</b>	A metallic element used to help make both silicone elastomer (the rubbery material of the breast implant shell) and silicone gel.
<b>Post-Mastectomy</b>	After a mastectomy.
<b>Postoperative</b>	After surgery.
<b>Precautions</b>	Information that warns the reader of a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
<b>Prosthesis</b>	Any artificial device used to replace or represent a body part.
<b>Ptoxis</b>	Sagging or drooping of the breast.
<b>Redness/Bruising</b>	Bleeding at the surgical site that causes discoloration and varies in degree and length of time. This is expected following breast implant surgery or other breast procedures.
<b>Removal</b>	Removal of the implant, with or without replacement using another implant.
<b>Reoperation</b>	Any additional surgery performed to the breast or chest area after the first breast implantation.
<b>Risks</b>	The chance or likelihood that an undesirable effect will occur.
<b>Rosenberg Self-Esteem Scale</b>	A questionnaire that measures overall self-esteem.
<b>Rupture</b>	A hole or tear in the shell of the implant that allows silicone gel filler material to leak from the shell.
<b>Saline</b>	Saltwater (A solution made of water and a small amount of salt).
<b>Scar Revision</b>	A surgical procedure to improve the appearance of a scar.

<b>Scarring</b>	Formation of tissue at an incision site; all wounds heal by the formation of a scar.
<b>Seroma</b>	Similar to a bruise, a seroma occurs when the watery portion of the blood collects around a surgical incision or around a breast implant.
<b>SF-36 Scale</b>	The Short Form 36 Health Scale; a questionnaire intended to measure physical, mental, and social health.
<b>Sientra Clinical Study</b>	The Clinical Study that supports the approval of a medical product (such as breast implants). For Sientra’s breast implants, the Study includes augmentation, reconstruction, and revision (revision-augmentation and revision-reconstruction) patients. Information on the safety and effectiveness of the implants are collected every year for 10 years after Study participants get their implants.
<b>Silent Rupture</b>	A breast implant rupture without symptoms or a visible change. Silent rupture cannot be felt by the woman or detected by a doctor through physical examination. Silent rupture can only be discovered through appropriate imaging techniques such as MRI.
<b>Silicone</b>	Silicone is a man-made material that can be found in several forms such as oil, gel, or rubber (elastomer). The exact composition of silicone will be different depending on its use.
<b>Silicone Elastomer</b>	A type of silicone that has elastic properties similar to rubber.
<b>Silicones - Low Molecular Weight (“Low Molecular Weight (LMW) Silicones”)</b>	Small silicone molecules that may be present in gel bleed/gel diffusion.

<b>Subglandular Placement</b>	When the implant is placed under and within the breast glands (breast tissue) but on top of the chest muscles.
<b>Submuscular Placement</b>	When the implant is placed underneath the chest muscles.
<b>Surgical Incision</b>	A cut made to body tissue during surgery.
<b>Symptom</b>	Any perceptible change in the body or its functions that indicates disease or a phase of a disease.
<b>Symptomatic</b>	Experiencing symptoms; any evidence or sign of disease or disorder.
<b>Symptomatic Rupture</b>	A breast implant rupture that is associated with symptoms (such as lumps, persistent pain, swelling, hardening, or change in implant shape).
<b>Systemic</b>	Pertaining to or affecting the body as a whole.
<b>Tissue Expander</b>	An adjustable implant that can be inflated with salt water (saline) to stretch the tissue at the mastectomy site. This is used to create a new tissue flap that is large enough to cover the breast implant.
<b>Tissue Flap Reconstruction</b>	A surgical procedure used to reconstruct a breast using the patient's own tissue, taken from another part of the body. See also TRAM flap, TRAM flap reconstruction, Latissimus dorsi flap, and Latissimus dorsi flap reconstruction.
<b>Toxic Shock Syndrome (TSS)</b>	A rare, but life-threatening bacterial infection that may occur after surgery. Symptoms include sudden fever, vomiting, diarrhea, fainting, dizziness, and sunburn-like rash. A doctor should be seen immediately for diagnosis and treatment if toxic shock syndrome (TSS) is suspected.

<b>TRAM Flap</b>	The transverse rectus abdominus musculocutaneous (TRAM) flap. This section of muscle and tissue consists of the transverse rectus abdominus muscle, skin, fat, connective tissue, and vascular (blood vessels) tissue. It is taken from the abdomen (stomach area) and can be used to create a new breast for reconstruction purposes. A TRAM flap is also sometimes used to add breast tissue and skin to cover a breast implant during reconstruction.
<b>TRAM Flap Reconstruction</b>	Breast reconstruction using a patient's own tissue (a TRAM flap) from the abdomen to create the new breast or provide enough skin and breast tissue to cover a breast implant.
<b>Transaxillary</b>	Under the arm.
<b>Unilateral</b>	Affecting only one side of the body.
<b>Vascular Tissue</b>	Blood vessels (arteries and veins) that carry blood to the skin and tissues of the body and back to the heart.
<b>Warnings</b>	A statement that alerts the reader about a situation which, if not avoided, could result in serious injury or death.
<b>Wrinkling/Rippling</b>	Wrinkling of the implant that can be felt or seen through the skin.

# 1. How To Use This Educational Brochure

Sientra, the company that sells these Silicone Gel Breast Implants, has designed this educational brochure to help you understand breast reconstruction with implants and to help you talk with your doctor(s) about breast reconstruction. Sientra sponsored a large clinical study of these breast implants (also referred to in this brochure as the "Study") that gathered data about these breast implants. The Study collected data from the primary augmentation and revision-augmentation cohorts of the CORE study, as well as pooled data from Sientra's CORE and Continued Access studies for primary reconstruction and revision-reconstruction cohorts. There are 1,788 patients participating in the Study. A total of 1,115 patients had primary augmentation and 362 patients had revision-augmentation. Of the 229 patients who had primary reconstruction, 156 patients were from the CORE study and 73 were from the Continued Access study. Of the 82 patients who had revision-reconstruction with Sientra Silicone Gel Breast Implants, 50 were from the CORE study and 32 were from the Continued Access study. Results from the Study are presented in Section 8 of this brochure.

After you receive this information, give yourself time to read and think about the information. Because breast implants will require monitoring and care for the rest of your life, you should wait 1-2 weeks after reviewing and considering this information before deciding whether to have the surgery, unless an earlier surgery is deemed necessary by your surgeon. If you are having a mastectomy, it may make sense to start or perform the complete reconstruction at the same time you have the mastectomy; in this case, there may be time considerations your doctor can discuss with you. If you are having revision-reconstruction surgery, your surgeon may advise you to have the surgery sooner.

If you decide to have the surgery, you will be asked to sign a statement before the surgery. The statement says you have read and understood the information in this brochure and that you have been informed of the benefits and risks of breast implants. This statement is called the "Acknowledgement of Informed Decision," and there is a copy of it at the end

of this brochure. Make sure all of your questions have been answered and you understand the information in this brochure, before you sign the “Acknowledgement of Informed Decision.”

## 2. General Information About Breast Reconstruction With Breast Implants

The information in this section provides some general information about breast reconstruction with breast implants.

### 2.1 What Gives The Breast Its Shape?

As shown in Figure 1, your breast consists of milk ducts, glands, blood vessels, and nerves that are surrounded by fatty tissue. Glandular tissue is firm and gives the breast its shape. The fatty tissue gives the breast its soft feel. The chest muscle (the pectoralis major muscle) is located underneath all this breast tissue but does not have much effect on the shape or feel of the breast.

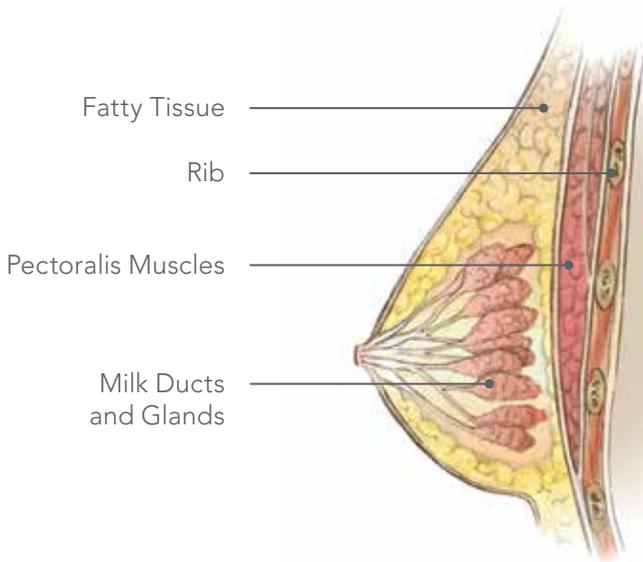


Figure 1. Anatomy of the Breast

Breast cancer surgery (full or partial mastectomy or lumpectomy) can greatly change the shape and appearance of your breast. When a woman has a mastectomy some, much, or all of the breast tissue may be removed, and some skin may be removed as well. There will be scarring and the tissue (skin and breast tissue) may be more sensitive because of the surgery, or chemotherapy, and/or radiation treatments. All of these can affect the size, shape, and overall outcome of reconstruction with breast implants.

## 2.2 What Is A Silicone Gel Breast Implant?

A silicone gel breast implant is a sac (implant shell) made of silicone elastomer (rubber), which is filled with clear silicone gel. Sientra uses implant grade silicone elastomer and implant grade high-strength silicone gel to manufacture its Implants. Sientra's Implants are designed to resemble the human breast in shape, weight and feel.

Sientra's Implants are available in a variety of shapes and sizes, with either a smooth or textured surface. You and your surgeon can choose the Sientra round or shaped implant option that best suits your individual needs. Round implants provide volume in the upper breast area (called upper pole area). Shaped implants are intended to match the anatomy of your chest wall. Depending on your needs, shaped implants can also provide more or less volume in the upper pole area.

Refer to Section 6.5 - *CHOOSING THE RIGHT IMPLANT FOR YOU*, for more information on the different silicone gel breast Implants available from Sientra.

## 2.3 How Do Breast Implants Work In Breast Reconstruction?

Breast implants are used to make the breasts larger or to restore or replace breast tissue. They are surgically implanted beneath your breast tissue, either on top of the chest muscle (subglandular placement) or underneath part or all of the chest muscle (submuscular placement).

When breast implants are used to reconstruct a breast, the reconstruction may be done in several ways. Any reconstruction will likely take more than one surgery to complete and may be done in stages. These are discussed in Section 6.2.

### 3. Deciding Whether To Have Breast Reconstruction Surgery With Implants

The answers to the questions in this section will help you to decide whether breast reconstruction surgery with implants is right for you.

#### 3.1 Am I Eligible For Reconstruction With Silicone Gel Breast Implants?

Breast implants have been approved for use in reconstruction in these cases:

- **Primary reconstruction** to replace breast tissue that has been removed because of cancer or injury. Primary reconstruction is also used to replace breast tissue that has failed to develop properly because of a severe breast abnormality.
- **Revision-reconstruction** surgery to correct or improve the result of primary reconstruction. Revision-reconstruction includes replacing an existing breast implant.

Women who do not fall into the above categories, but who desire cosmetic breast augmentation, may also use Sientra Silicone Gel Breast Implants (also referred to as Implants). If you do not qualify for breast reconstruction and are interested in cosmetic breast augmentation, a different educational brochure that describes breast augmentation is available for you to read.

If you have lost or will lose breast tissue due to treatment for cancer or injury, other factors will affect whether or not breast implants are appropriate for you. These factors include your body type, the size and shape of your breast(s) before mastectomy, the amount of skin and breast tissue left after

the mastectomy, the stage of your cancer, and follow-up treatments like chemotherapy or radiation that may affect the implant(s).

If you are considering reconstruction to correct a congenital anomaly or severe breast abnormality, the following factors may determine whether breast implants are appropriate for you: body type, size and shape of your breasts, whether your left and right breasts are sized, shaped, or located differently from each other, the amount of skin and breast tissue you have, and the size and placement of your chest muscles.

Your doctor can discuss whether or not you are a good candidate for reconstruction with implants given your medical situation.

### 3.2 Contraindications

A contraindication is a condition or circumstance that, if present, means a procedure should not be done. Contraindications for breast implant surgery are discussed in this section.

Silicone Gel Breast Implants are contraindicated in the following circumstances because the risk of undergoing breast reconstruction with implants outweighs the benefits:

- Women with active infection anywhere in their bodies,
- Women with existing cancer or pre-cancer of their breast who have not received adequate treatment for those conditions, and in
- Women who are pregnant or nursing.

Surgery in general is not recommended in patients with an active infection, existing cancer or pre-cancer, and existing pregnancy (unless the surgery is to treat the infection, cancer or pregnancy as recommended by your doctor), as it may interfere with the treatment of the infection or the cancer and safety of the pregnancy/nursing. In addition, these conditions may interfere with the healing after surgery.

Adequate studies have not been performed to demonstrate the safety of breast implant surgery in women with these conditions or under these circumstances; therefore, if you

have any of the above conditions or circumstances, breast reconstruction surgery with implants should not be performed at this time. Failure to take into consideration these contraindications may increase the risks involved with the surgery and could cause harm.

### 3.3 Precautions

**CAUTION:** Notify your doctor if you have any of the following conditions as the risks of breast implant surgery may be higher if you have any of these conditions.

- An autoimmune disease,
- A weakened immune system (for example, currently taking drugs that weaken the body's natural resistance to disease),
- Conditions that interfere with wound healing and/or blood clotting,
- Reduced blood supply to breast tissue,
- Chemotherapy or radiation to the breast following implantation, or
- Clinical diagnosis of depression or other mental health disorders, including body dysmorphic disorder and eating disorders. If you have been diagnosed with or treated for depression, an anxiety disorder, or another mental health condition, you should wait until your condition has resolved or stabilized before having breast implant surgery. Discuss any history of mental health disorders with your doctor(s) prior to surgery.

Before you have surgery, you should have a detailed conversation with all of your doctors (primary care doctor, surgeon, and any specialists you see) about breast implant surgery, in light of your medical history.

**CAUTION:** In order to avoid possible injury or damage to your incision site(s), you should avoid the following for the first month after your surgery:

- Sun exposure,
- Jerky movements or activities that stretch the skin at your incision site(s),

- Participating in sports or other activities that raise your pulse or blood pressure, and
- Unnecessary physical or emotional stress.

### 3.4 Warnings

Read this entire brochure before having breast implant surgery so that you will understand the risks and benefits and have realistic expectations of the outcome of your surgery. Breast implants are associated with many short-term and long-term risks.

WARNING – Smoking can make it harder for your body to heal. If you smoke, your doctor will probably have told you to stop before your surgery. Do not smoke while you are recovering from breast implant surgery.

WARNING – The following is a list of possible complications associated with breast implant surgery. Make sure you read and understand these before deciding whether to have breast implant surgery. Please refer to the following sections in this brochure for more detail on these factors: Section 4 - *RISKS ASSOCIATED WITH BREAST IMPLANTS*, Section 7 - *CARING FOR YOURSELF AFTER BREAST IMPLANT SURGERY* and Section 8 - *SIENTRA'S CLINICAL STUDY RESULTS*.

- Breast implants are not expected to last for the rest of your life, and breast implantation may not be a one-time surgery. It is likely that you will need other surgery related to your breast implants over the course of your life. These additional surgeries can include implant removal with or without replacement, or they can include other surgical procedures.
- Many of the changes to your breast that may occur as a result of breast implant surgery will be permanent and cannot be undone. If you have your implants removed, your skin may be permanently dimpled, puckered, or wrinkled.
- If you undergo a mastectomy, removal of the breast tissue eliminates the ability to breast-feed from the affected breast. In addition, if you undergo a contralateral breast

augmentation, your breast implant may affect your ability to produce milk (lactate) for breast-feeding in that breast. If you are planning to breast-feed your infant, be prepared to use formula and bottle-feed your baby in the event you have difficulty breast-feeding.

- Mammography for detecting breast cancer (or cancer recurrence) may be more difficult with breast implants in place. You will need more views captured than during a routine mammogram. Therefore, the procedure will take more time and you will be exposed to more radiation than during a standard routine screening mammogram. However, the benefits of mammograms outweigh this risk. You must tell the technologist that you have silicone gel breast implants before the procedure. The technologist can then use special techniques to get the best possible views of your breast tissue.
- Your implants could rupture without you feeling the rupture or noticing any change in your breasts. In some of these instances, even your doctor might not be able to tell that a rupture has occurred. A rupture that has no symptoms is called a “silent” rupture. The best way to diagnose a silent rupture is with an MRI examination. An MRI is similar to using x-ray imaging but an MRI machine uses magnetism and not x-ray radiation. Because silent ruptures can occur and because they are difficult to detect, you should have an MRI 3 years after your breast implant surgery and then every 2 years after that for as long as you have your breast implants.
- Routine self-examination of your breasts may be more difficult with implants. However, you should still perform an examination of your breasts every month for cancer screening. Ask your surgeon to help you distinguish the implant from your breast tissue. You should perform an examination of your breasts for the presence of lumps, swelling, hardening, or change in implant shape, which may be signs of rupture of the implant. Report any of these symptoms or persistent pain to your doctor. Your surgeon may recommend an evaluation via MRI to check for rupture.
- In general, private insurance that covers medically necessary mastectomies will also cover breast reconstructive surgery.

Insurance coverage for reoperation procedures or additional surgeon's visits following reconstruction may not be covered, depending on the policy. Because health insurance policies vary and can change over time, no general guidance can be provided regarding coverage under any particular health insurance plan. Be sure to check with your insurance company to obtain specific information about the extent of your health coverage before having breast reconstruction with implants.

### 3.5 What Are The Alternatives To Implantation With Silicone Gel-Filled Breast Implants?

If this is your first (primary) breast reconstruction surgery, your alternatives may include:

- Deciding not to reconstruct your breast(s) with implants,
- Wearing a padded bra or external prosthesis,
- Having a breast reconstruction surgery using your own tissue (a "flap procedure"), or
- Having breast reconstruction with saline-filled implants.

If you are considering a revision surgery, your alternatives may include:

- No revision surgery,
- Removing your implant(s) without replacing them,
- Wearing a padded bra or external prosthesis, or
- Having revision breast reconstruction with saline-filled implants.

## 4. Risks Associated With Breast Implants

Undergoing any type of surgery involves risks. There are a number of local complications (problems at or near the breast/surgical incision site) that may occur after you have silicone gel breast implant surgery. The following addresses both general, surgery-related complications and implant-related complications.

Tables 1 and 2 present the potential risks associated with breast implant surgery, the likelihood of the risks based on the results from Sientra’s Clinical Study through 3 years, as well as the possible effects of the events for primary and revision-reconstruction patients.

**TABLE 1**  
**Potential Risks Associated with Primary Breast Reconstruction**

Event	Likelihood of the Event Occurring*	Possible Resulting Effects of the Event
<b>Key Risks</b>		
Reoperation	35 out of 100 patients (35%)	<ul style="list-style-type: none"> <li>• Infection</li> <li>• Scarring</li> <li>• Hematoma or Seroma</li> <li>• Delayed wound healing</li> <li>• Necrosis</li> <li>• Pain or Discomfort</li> <li>• Anesthesia-related complications</li> <li>• Loss of breast tissue</li> <li>• Undesirable cosmetic result</li> </ul>
Implant Removal with Replacement	19 out of 100 patients (19%)	<ul style="list-style-type: none"> <li>• Infection</li> <li>• Scarring</li> <li>• Hematoma or Seroma</li> <li>• Delayed wound healing</li> <li>• Necrosis</li> <li>• Pain or Discomfort</li> <li>• Anesthesia-related complications</li> <li>• Loss of breast tissue</li> <li>• Undesirable cosmetic result</li> </ul>
Implant Removal without Replacement	7 out of 100 patients (7%)	<ul style="list-style-type: none"> <li>• Infection</li> <li>• Scarring</li> <li>• Hematoma or Seroma</li> <li>• Delayed wound healing</li> <li>• Necrosis</li> <li>• Pain or Discomfort</li> <li>• Anesthesia-related complications</li> <li>• Loss of breast tissue</li> <li>• Undesirable cosmetic result</li> </ul>
Capsular Contracture (Baker Grade III/IV)	9 out of 100 patients (9%)	<ul style="list-style-type: none"> <li>• Pain or Discomfort</li> <li>• Breast hardness/firmness</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Implant Rupture	3 out of 100 patients (3%)	<ul style="list-style-type: none"> <li>• Implant removal</li> </ul>
<b>Other Risks Occurring in 1% or more of Patients</b>		
Asymmetry	9 out of 100 patients (9%)	<ul style="list-style-type: none"> <li>• Undesirable cosmetic result</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Infection	5 out of 100 patients (5%)	<ul style="list-style-type: none"> <li>• Redness or rash</li> <li>• Pain or tenderness</li> <li>• Swelling</li> <li>• Fever</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>

**TABLE 1 (continued)**  
**Potential Risks Associated with Primary Breast Reconstruction**

Event	Likelihood of the Event Occurring*	Possible Resulting Effects of the Event
<b>Other Risks Occurring in 1% or more of Patients</b>		
Redness	3 out of 100 patients (3%)	<ul style="list-style-type: none"> <li>• Resulting effects are contingent on underlying cause(s)</li> </ul>
Implant Malposition	3 out of 100 patients (3%)	<ul style="list-style-type: none"> <li>• Implant visibility</li> <li>• Asymmetry</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Hypertrophic/ Abnormal scarring	3 out of 100 patients (3%)	<ul style="list-style-type: none"> <li>• Scar revision procedure (reoperation)</li> <li>• Undesirable cosmetic result</li> </ul>
Breast Pain	3 out of 100 patients (3%)	<ul style="list-style-type: none"> <li>• Resulting effects are contingent on underlying cause(s)</li> </ul>
Seroma/Fluid Accumulation	2 out of 100 patients (2%)	<ul style="list-style-type: none"> <li>• Swelling</li> <li>• Pain or Discomfort</li> <li>• Infection</li> <li>• Incision and drainage (reoperation)</li> <li>• Implant removal</li> </ul>
Nipple Sensation Changes	2 out of 100 patients (2%)	<ul style="list-style-type: none"> <li>• Increased or decreased nipple sensitivity</li> <li>• Breast-feeding difficulties</li> <li>• May affect sexual response</li> </ul>
Ptosis	2 out of 100 patients (2%)	<ul style="list-style-type: none"> <li>• Undesirable cosmetic result</li> <li>• Wrinkling/rippling</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Swelling	2 out of 100 patients (2%)	<ul style="list-style-type: none"> <li>• Pain or Discomfort</li> <li>• Resulting effects are contingent on underlying cause(s)</li> </ul>
Delayed Wound Healing	2 out of 100 patients (2%)	<ul style="list-style-type: none"> <li>• Pain or Discomfort</li> <li>• Scarring</li> <li>• Implant extrusion</li> <li>• Necrosis</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Implant Extrusion	2 out of 100 patients (2%)	<ul style="list-style-type: none"> <li>• Pain or Discomfort</li> <li>• Scarring</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Other Complications	1 out of 100 patients (1%)	<ul style="list-style-type: none"> <li>• Resulting effects are contingent on underlying cause(s)</li> </ul>
Wrinkling/Rippling	1 out of 100 patients (1%)	<ul style="list-style-type: none"> <li>• Discomfort</li> <li>• Undesirable cosmetic result</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Breast Mass/ Cyst/Lump	1 out of 100 patients (1%)	<ul style="list-style-type: none"> <li>• Pain or Discomfort</li> <li>• Reoperation or other procedures</li> </ul>
Implant Visibility	1 out of 100 patients (1%)	<ul style="list-style-type: none"> <li>• Undesirable cosmetic result</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>

\* Based on the results of Sientra's Clinical Study within the first 3 years after implant surgery.

**TABLE 2**  
**Potential Risks Associated with Revision-Reconstruction**

Event	Likelihood of the Event Occurring*	Possible Resulting Effects of the Event
<b>Key Risks</b>		
Reoperation	43 out of 100 patients (43%)	<ul style="list-style-type: none"> <li>• Infection</li> <li>• Scarring</li> <li>• Hematoma or Seroma</li> <li>• Delayed wound healing</li> <li>• Necrosis</li> <li>• Pain or Discomfort</li> <li>• Anesthesia-related complications</li> <li>• Loss of breast tissue</li> <li>• Undesirable cosmetic result</li> </ul>
Implant Removal with Replacement	23 out of 100 patients (23%)	<ul style="list-style-type: none"> <li>• Infection</li> <li>• Scarring</li> <li>• Hematoma or Seroma</li> <li>• Delayed wound healing</li> <li>• Necrosis</li> <li>• Pain or Discomfort</li> <li>• Anesthesia-related complications</li> <li>• Loss of breast tissue</li> <li>• Undesirable cosmetic result</li> </ul>
Implant Removal without Replacement	10 out of 100 patients (10%)	<ul style="list-style-type: none"> <li>• Infection</li> <li>• Scarring</li> <li>• Hematoma or Seroma</li> <li>• Delayed wound healing</li> <li>• Necrosis</li> <li>• Pain or Discomfort</li> <li>• Anesthesia-related complications</li> <li>• Loss of breast tissue</li> <li>• Undesirable cosmetic result</li> </ul>
Capsular Contracture (Baker Grade III/IV)	7 out of 100 patients (7%)	<ul style="list-style-type: none"> <li>• Pain or Discomfort</li> <li>• Breast hardness/firmness</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Implant Rupture	0 out of 100 patients (0%)	<ul style="list-style-type: none"> <li>• Implant removal</li> </ul>
<b>Other Risks Occurring in 1% or more of Patients</b>		
Asymmetry	7 out of 100 patients (7%)	<ul style="list-style-type: none"> <li>• Undesirable cosmetic result</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Implant Malposition	6 out of 100 patients (6%)	<ul style="list-style-type: none"> <li>• Implant visibility</li> <li>• Asymmetry</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>
Breast mass/ cyst/lump	3 out of 100 patients (3%)	<ul style="list-style-type: none"> <li>• Pain or Discomfort</li> <li>• Reoperation or other procedures</li> </ul>
Hypertrophic/ Abnormal Scarring	3 out of 100 patients (3%)	<ul style="list-style-type: none"> <li>• Scar revision procedure (reoperation)</li> <li>• Undesirable cosmetic result</li> </ul>
Wrinkling/Rippling	2 out of 100 patients (2%)	<ul style="list-style-type: none"> <li>• Discomfort</li> <li>• Undesirable cosmetic result</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>

**TABLE 2 (continued)**  
**Potential Risks Associated with Revision-Reconstruction**

Event	Likelihood of the Event Occurring*	Possible Resulting Effects of the Event
<b>Other Risks Occurring in 1% or more of Patients</b>		
Breast Pain	1 out of 100 patients (1%)	<ul style="list-style-type: none"> <li>• Resulting effects are contingent on underlying cause(s)</li> </ul>
Seroma/Fluid Accumulation	1 out of 100 patients (1%)	<ul style="list-style-type: none"> <li>• Swelling</li> <li>• Pain</li> <li>• Infection</li> <li>• Incision and drainage (reoperation)</li> <li>• Implant removal</li> </ul>
Infection	1 out of 100 patients (1%)	<ul style="list-style-type: none"> <li>• Redness or rash</li> <li>• Pain or tenderness</li> <li>• Swelling</li> <li>• Fever</li> <li>• Reoperation</li> <li>• Implant removal</li> </ul>

\* Based on the results of Sientra’s Clinical Study within the first 3 years after implant surgery.

For additional information on how often Sientra has reported these events in its studies of the Implants, please read the section of this brochure on the Clinical Study (Section 8). For example, using information from Sientra’s Clinical Study, the risk of a patient experiencing any complication at some point through 3 years was calculated. The risk is 45% for primary reconstruction patients and 43% for revision-reconstruction patients. This means that 45 out of 100 primary reconstruction patients may experience one or more complications (of some kind) within 3 years after receiving their implants.

## 4.1 What Are The Potential Complications?

**INFECTION** Infection is a possible consequence of any kind of surgery. It most often happens within days to weeks after the surgery, but you could develop an infection in your breast(s) at any time. Signs that you have an infection include: redness or rash, tenderness or pain, fluid accumulation in or around the breast(s), pain, and fever. If you experience any of these symptoms, call your doctor right away. It is harder to treat an

infection with an implant present. If antibiotics do not cure the infection, it is possible that your implant(s) may have to be removed to treat the infection.

In rare cases, Toxic Shock Syndrome (TSS) has been noted in women after breast implant surgery. TSS is a life-threatening condition. Symptoms of TSS occur suddenly: a high fever, vomiting, diarrhea, a sunburn-like rash, red eyes, dizziness, lightheadedness, muscle aches, and drops in blood pressure, which may cause fainting. If you believe that you are suffering from TSS or if you feel any of these symptoms, contact a doctor immediately.

**HEMATOMA OR SEROMA** You may experience a hematoma or a seroma following your surgery. A hematoma is similar to a bruise; hematomas related to breast implants are the collection of blood within the space around the implant. A seroma is a buildup of fluid around the implant.

Symptoms from a hematoma or seroma may include swelling, pain, and bruising. If a hematoma or seroma occurs, it will usually be soon after surgery. However, other injuries to the breast can cause hematomas and/or seromas in your breast. The body can absorb small hematomas and seromas on its own, but some will require surgery. When surgery is needed, it often involves draining the blood or fluid and sometimes involves placing a surgical drain in the wound temporarily for proper healing. A small scar can result from surgical draining. Implants may rupture if they are damaged by surgical instruments during the draining procedure.

**CAPSULAR CONTRACTURE** After your breast implant surgery, your breasts will begin to heal and to adapt to the presence of the breast implants. A regular part of this process is that the breast tissue typically forms an internal scar immediately surrounding the implant. In many cases, this tissue forms a capsule that helps hold the implant in place. However, in some women, the scar tissue around the implant tightens and squeezes the implant. When scar tissue squeezes an implant, it is called capsular contracture.

Capsular contracture causes the breast to feel abnormally firm or hard and can cause pain. There is a scale for describing the

severity of the contracture. It is called the Baker Grading Scale. The grades are:

- Grade I – contracture is observed, but the breast feels and looks normal (it is soft)
- Grade II – the breast is a little firm, but still looks normal
- Grade III – the breast is firm and looks abnormal
- Grade IV – the breast is hard, painful, and looks abnormal

Capsular contracture may be more common if you have had a breast infection or hematoma/seroma. The chances of having contracture typically increases the longer you have your implants. It also seems that women who have additional surgery to replace their implants (revision surgery) are more likely to have capsular contracture than women having their first reconstruction or augmentation. However, whether or not a woman experiences capsular contracture at all and to what degree of severity varies from woman to woman.

If you feel severe pain and/or firmness (usually Grades III and IV contracture), you may need surgery to correct the problem. This could mean that the surgeon has to remove the part of your breast tissue that has contracted around the implant (the scar tissue capsule), and you could lose some breast tissue during such a surgery. During such surgery, it is possible that your implant(s) would need to be replaced. Even after having surgery to fix contracture problems, contracture may happen again.

Based on the Sientra-sponsored Clinical Study of patients who had breast reconstruction with Sientra Implants, there is a 9% risk of experiencing Baker Grade III or IV capsular contracture for primary reconstruction patients through 3 years after receiving implants. For revision-reconstruction patients, the risk is 7%. This means that 9 out of 100 of primary reconstruction patients and 7 out of 100 revision-reconstruction patients may experience Baker Grade III or IV capsular contracture within 3 years after receiving implants. Capsular contracture results from the Study are discussed further in Section 8.4.

**RUPTURE** Breast implants are considered to have ruptured when the implant shell develops a tear or hole. Sometimes silicone gel can minimally leak or “bleed/diffuse” through the implant

shell even if there is no obvious tear in the shell. This is called “gel bleed” or “gel diffusion.”

Implants could rupture any time after your implant surgery, but the longer the Implants are in place, the higher the possibility that the Implants will rupture or the gel will leak. Breast implants may rupture or leak because of any of these reasons:

- Damage by surgical instruments at the time of implantation or during any subsequent surgical procedure,
- Stress to the implant during implant surgery that weakens it,
- Folding or wrinkling of the implant shell,
- Excessive force to the chest (for example, during closed capsulotomy, which is contraindicated),
- Trauma (like being in a car accident),
- Compression during a mammogram,
- Severe capsular contracture, or
- Normal use over time.

Sometimes there are symptoms associated with gel implant rupture that you or your doctor can notice. Sometimes your implants could rupture without you feeling the rupture or noticing any change in your breasts. In some of these instances even your doctor might not be able to tell that a rupture has occurred. A rupture that has no symptoms is called a “silent” rupture.

Sientra has done studies to better understand what causes breast implants to rupture or leak gel. These studies might not have identified all the causes of rupture and these studies are continuing.

When silicone gel breast implants rupture, most of the silicone gel usually stays in the implant, and if any silicone gel does escape through a tear or hole, most of the gel stays within the scar tissue (capsule) around the implant. Sometimes, the gel does not stay there and may move to other areas around the body (gel migration). There have been rare reports of gel moving to nearby tissues such as the chest wall, armpit, or upper abdominal wall, and to more

distant locations down the arm or into the groin. One group of researchers found silicone in the livers of women with ruptured silicone gel breast implants.

Sometimes silicone travels into the lymph nodes and they may become enlarged. When silicone gel moves into lymph nodes or other parts of the body, small, hardened lumps of silicone (called silicone granulomas) may be felt. These lumps are NOT cancer, but it can be hard to tell them from cancerous lumps just by feeling them. If you feel any lumps in your breasts, around your breasts, in your armpits or anywhere in your body, your doctor should examine them. Your doctor may have to remove a small amount of tissue from the lump(s) (called taking a biopsy) to find out if the lump is cancer. Before having a biopsy, be sure to tell your doctor that you have breast implants.

Studies have been done to find out what, if any, effects migrated silicone gel has on the body. In most cases, no serious problems were reported. Several studies report that some women with migrated silicone gel experienced breast hardness, numbness and/or tingling in their extremities, and some seemed more sensitive to sunlight.<sup>1-3</sup> In a few cases, migrated gel has caused nerve damage, hard silicone nodules (granulomas) in the body, and/or breakdown of the body tissues around the gel.

Most doctors and researchers agree that there is NO evidence that ruptured implants or migrated gel causes any disease that affects the whole body (systemic disease) like Connective Tissue Disease (CTD) or cancer. One group of researchers<sup>4,5</sup> reported that women who had migrated silicone gel had a higher risk of getting a CTD. This is discussed more fully in Section 4.2.

Studies on breast implants that women have had for a long time suggest that gel bleed may play a role in capsular contracture. However, complication rates for silicone gel breast implants are similar to or lower than those for saline-filled breast implants (which do not have silicone gel and, therefore, do not have gel bleed).

**REOPERATION** It is likely that you will need additional surgery

(a reoperation) at some point after your first breast implant surgery, either to correct a problem with or replace your breast implants. Common reasons for subsequent surgeries include capsular contracture and a woman deciding to change the size or style of her breast implant(s). Some changes to your breast(s) after having breast implants are irreversible (cannot be changed or fixed). These may include dimpling, puckering, wrinkling, or the appearance that the breast is empty or deflated.

In addition, reconstruction patients often require more than one surgical procedure to complete their reconstruction. This is called “staged” reconstruction. Procedures that represent a particular stage in the reconstruction, such as skin or nipple-related procedures, are also considered reoperations.

Based on the experiences of reconstruction patients in the Study, the 3-year risk of reoperation is 35% for primary reconstruction patients and 43% for revision-reconstruction patients. This means that 35 out of 100 primary reconstruction patients and 43 out of 100 revision-reconstruction patients who receive Implants may have a reoperation within 3 years after their implant surgery. Reoperation information from the Study is discussed in more detail in Section 8.5. This includes all reoperations, such as staged reconstruction and planned nipple procedures.

**IMPLANT REMOVAL** Your Implants may have to be removed (with or without being replaced) at some point during the course of your life. You and your doctor may decide to remove an implant or implants because of a complication or to improve the cosmetic result.

Based on the experiences of reconstruction patients in the Study, the 3-year risk of implant removal (including an implant that was removed and then replaced with a new implant, or for a size exchange) is 25% for primary reconstruction patients and 30% for revision-reconstruction patients. This means that 25 out of 100 primary reconstruction patients and 30 out of 100 revision-reconstruction patients who receive Implants may need to have one or both implants removed within 3 years after receiving their implants. Implant removal information from the Study is discussed more fully in Section 8.6.

**PAIN** You will probably have some pain after your surgery. The intensity of the pain and the length of time it lasts vary from patient to patient. The pain may persist long after you have healed from surgery. In addition, improper implant size, placement, surgical technique, or capsular contracture may result in pain. Tell your surgeon if you have a lot of pain or if your pain does not go away.

**CHANGES IN NIPPLE AND BREAST SENSATION** After contralateral augmentation or if the nipple is not removed as part of a mastectomy in the reconstructed breast, feeling in the nipple and breast can change after implant surgery. Nipples may become more or less sensitive. They may be painfully sensitive or feel nothing at all. These changes are temporary for many women, but for some, sensation may never be what it was before implant surgery. They may affect a woman's sexual response or ability to breast-feed.

**COSMETIC CHANGES** You may not be satisfied with the way your breasts look after your surgery. Unsatisfactory results such as scarring or asymmetry, wrinkling of the skin, implant displacement/migration, incorrect size, unanticipated shape and/or implant palpability/visibility may occur.

A surgeon can minimize the chances of these things happening by planning the surgery carefully and using good surgical techniques. You should understand the possible cosmetic results and discuss them carefully with your doctor before the surgery. Your surgeon cannot promise that after implant surgery your breast(s) will look exactly as you wanted them to look. Revision surgery may be the only way to improve a result you do not like.

**BREAST-FEEDING** If you have a mastectomy and all your breast tissue is removed, you will not be able to breast-feed with that breast. If you have the opposite breast augmented as part of a reconstruction (contralateral augmentation), you should know that breast implant surgery might interfere with your ability to successfully breast-feed. It is possible that you will produce less milk or not be able to produce milk at all. Some women with breast implants have also reported painful breast-feeding.<sup>6,7</sup>

The Institute of Medicine (IOM) and The American College of Obstetricians and Gynecologists (ACOG) encourage women with breast implants to try breast-feeding. The IOM concluded, "Breast feeding should be encouraged in all mothers when possible, including those with silicone breast implants. There is evidence that breast implantation may increase the risk of insufficient lactation, but no evidence that this poses a hazard to the infant beyond the loss of breast feeding itself. The evidence for the advantages of breast feeding to infant and mother is conclusive."<sup>6,8</sup>

The Clinical Study collected information from patients who had babies after reconstruction with Implants. Of those patients, 94% (15 of the 16 patients who gave birth) in the primary reconstruction group and 100% (the one patient who gave birth) in the revision-reconstruction group reported no difficulties with lactation. Lactation experiences from the Study are discussed more fully in Section 8.7.

**IMPLANT EXTRUSION** Extrusion is when the breast implant comes through the skin. This can happen if your surgical wound has not healed properly or if the skin over your breast weakens. Radiation therapy has been reported to increase the chances of implant extrusion.<sup>9</sup> Additional surgery is needed to fix implant extrusion. This can result in more scarring or loss of breast tissue. An extruding implant may have to be removed and not replaced.

**NECROSIS/DELAYED WOUND HEALING** Necrosis means that most or all of the cells in a certain part of your body have died. In the case of implanted breasts, it means dead or dying breast tissue or skin. This can mean that the implant may extrude. Necrotic tissue must be surgically removed. The additional surgery may cause more scarring or loss of breast tissue. Your implant may have to be removed with or without being replaced.

Some patients may take a long time to heal after breast implant surgery. The longer it takes for your surgical wound to close and heal, the greater the risk for infection, implant extrusion or necrosis. The normal time for wound healing is different for every patient. Infection, radiation, chemotherapy, smoking, taking steroids, and excessive heat or cold therapy

can cause necrosis and delayed wound healing. Be sure to ask your surgeon how long he or she expects healing to take for you. If you do not heal in that timeframe, talk to your surgeon immediately.

**BREAST ATROPHY/CHEST WALL DEFORMITY** The breast implant pressing on the breast tissue may cause the tissue to become thinner. When this happens, you may be able to see and/or feel the breast implant through the skin. This tissue thinning can occur while implants are still in place or following implant removal without replacement.

Additional surgery may be needed to correct either of these conditions, which may mean more scarring, and removal with or without replacement of your breast implant(s).

**CALCIUM DEPOSITS** Calcium deposits (hard lumps of calcium) may form in your breast(s) and may be painful. Calcium deposits form in women who have not had any breast surgery and in women who have had breast surgeries. They also become more common as women get older.

Calcium deposits do not mean you are ill, but they can be mistaken for cancer. It may be difficult to tell if the lumps are calcium deposits or cancer just by feeling them. They can show up on mammograms as possible cancer lumps. If you have hard lumps, your doctor may have to perform a biopsy (remove a small piece of the lump for testing) or operate to remove the lump(s). Tell your doctor about any lumps you feel in or around the breast or anywhere on your body.

**ENLARGED LYMPH NODES** There are a large number of lymph glands in the body, but it is the lymph nodes in the armpit that drain the breast area of fluid. Some patients with breast implants have been found to have enlarged lymph nodes in the armpit. This is referred to as lymphadenopathy. It has been reported to occur in women with both ruptured and intact silicone gel breast implants. If an enlarged lymph node becomes painful, it may need to be surgically removed. You should report any painful or enlarged lymph nodes to your doctor.

## 4.2 What Are Other Reported Conditions?

Sientra will continue its Clinical Study of its Silicone Gel Breast Implants through 10 years. Sientra will update the information it publishes about its implants (including this patient brochure) with the results of this Study. Contact your surgeon or Sientra (See Section 12 on *IMPORTANT CONTACT INFORMATION*) for updates.

Some women with breast implants have reported health problems that they believe are related to their implants, although the connection between their implants and their health problems has not been proven. Examples of such health problems include autoimmune diseases or connective tissue disease, cancer, or neurological problems (problems with the brain or nerves).

Studies have not shown that breast implants can cause these conditions. Most studies suggest that there is no connection between breast implants and these medical conditions. However, you should be aware of them. It is possible that there are risks that are not known and could be associated with breast implants in the future.

The information discussed in this section is based on studies published in the medical literature that include women with many different types, brands, and models of breast implants for augmentation and/or reconstruction.

The following potential long-term health effects of breast implants have been studied in relation to breast implants in general.

**CANCER** At this time, there is no scientific evidence that silicone gel breast implants increase the risk of any kind of cancer in women, but this possibility cannot be completely ruled out. Major research groups agree that silicone gel breast implants do not cause cancer.<sup>10-12</sup>

**BREAST CANCER** Patients with breast implants do not seem to have greater risk of developing breast cancer.<sup>7,13-23</sup>

The Institute of Medicine (IOM) report (a comprehensive review of studies that looked at the safety of silicone gel breast

implants since they were introduced in 1962) showed that breast cancer is no more common in women with implants than those without implants.

Some studies have suggested that breast implants may interfere with or delay breast cancer detection by mammography and/or biopsy. However, other studies reported that breast implants neither delayed breast cancer detection nor affected cancer survival.<sup>13,15,23-25</sup>

**BRAIN CANCER** Most studies of brain cancer in women with silicone gel breast implants have found no increased risk.<sup>7,16,18,21-23</sup> One study reported a higher rate of brain cancer in women with breast implants, compared to the general population,<sup>14</sup> but, rates of brain cancer were not significantly higher in women with breast implants when compared to women who had other non-breast implant plastic surgeries.

**LYMPHO-HEMATOPOIETIC CANCERS** Lympho-hematopoietic cancers are cancers that develop in the lymph nodes or certain blood cells. Lymph nodes and the affected cells are part of the body's immune system to fight infection. These kinds of cancers include non-Hodgkin's lymphoma, Hodgkin's disease, multiple myeloma, and leukemia. Although most studies have found no increased risk of these cancers for women with silicone gel breast implants,<sup>7,16,18,21,23</sup> some reports have suggested a possible association between a type of anaplastic large cell lymphoma (ALCL) and breast implants.<sup>26</sup>

#### *Breast Implant Associated Anaplastic Large Cell*

*Lymphoma* If you have breast implants, you have a very small, but increased risk of developing breast implant associated anaplastic large cell lymphoma, or BIA-ALCL. BIA-ALCL is not breast cancer—it is a rare type of non-Hodgkin's lymphoma (cancer of the immune system). In most cases, BIA-ALCL is found in the scar tissue and fluid near the implant, but in some cases it can spread throughout the body. In the cases that have spread beyond the scar tissue and fluid near the implant, rare cases of death have been reported.

Most patients were diagnosed with BIA-ALCL when they sought medical treatment for implant-related symptoms such as swelling, pain, lumps, or asymmetry that developed after their initial surgical sites were fully healed. In the cases known to FDA to date, BIA-ALCL was diagnosed years after the breast implant was placed. The earliest report was one year after implant placement and the latest was 23 years after the implant surgery. About half the cases occurred within the first 7 years after implant. BIA-ALCL was most often diagnosed in women who had textured implants. The textured implant may have been placed at the most recent surgery or at any other prior breast implant operation.

If you develop swelling or pain around your breast implants, be sure to talk to your health care provider. Your health care provider should consider the possibility of BIA-ALCL if, after you have recovered from your breast implant operation, you later notice changes in the way your breast looks or feels — including swelling or pain around the implant. If your health care provider suspects BIA-ALCL, they will refer you to an appropriate specialist for evaluation which may involve obtaining fluid and tissue samples from around your breast implant. If a diagnosis of BIA-ALCL is confirmed, the doctor will develop an individualized treatment plan for you. Because of the small number of cases worldwide and the variety of available treatment options, there is no single defined treatment. However, if you are diagnosed with BIA-ALCL, the National Comprehensive Cancer Network (NCCN) recommends removing the implant and the surrounding tissue.

If you have breast implants, you should monitor them and follow your routine medical care. You do not need to take any additional steps. It is not necessary to remove your breast implants if you have no symptoms and you have not been diagnosed with BIA-ALCL.

If you are diagnosed with BIA-ALCL, you can help the FDA understand the disease and the effectiveness of treatment.

You or your doctor should report all confirmed cases of BIA-ALCL to the FDA (<https://www.fda.gov/Safety/MedWatch/>) In some cases, the FDA may contact you for additional

information. The FDA will keep the identities of the reporter and the patient confidential.

In addition, if you are diagnosed with BIA-ALCL, talk to your doctor about reporting it to the PROFILE Registry (<https://www.thepsf.org/research/clinical-impact/profile.htm>). Every case of BIA-ALCL should be reported to the PROFILE Registry because this helps provide a better understanding of the disease.

If you are considering breast implant surgery, you should discuss the risks and benefits with your health care provider. You may also visit the FDA's Breast Implants website for additional information:

<https://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/BreastImplants/ucm064106.htm>.

For additional information on FDA's analysis and review of BIA-ALCL, please visit:

<https://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/BreastImplants/ucm239995.htm>.

**RESPIRATORY/LUNG CANCER** Several studies have found that women with silicone gel breast implants are not at greater risk for lung cancer.<sup>7,16,18,21-23</sup> One study found an increased risk of respiratory/lung cancer in women with breast implants<sup>14</sup> compared to women who had other kinds of plastic surgery (non-breast implant). However, the risk of lung cancer was not higher than national lung-cancer rates for the general population. Other studies of women in Sweden and Denmark have found that women who get breast implants are more likely to be current smokers than women who get breast reduction surgery or other types of cosmetic surgery;<sup>27-29</sup> this may increase their risk for lung cancer.

**REPRODUCTIVE SYSTEM CANCER** Reproductive system cancers in women are cancers of the cervix, ovaries, uterus, vulva, vagina, and other female genital organs. Most studies<sup>7,16,18,21-23</sup> found that women with silicone gel breast implants have no

greater risk of these cancers than women without implants. One study reported an increased incidence of cervical/vulvar cancer in women with breast implants.<sup>14</sup>

**OTHER CANCERS** Studies have examined other types of cancer including eye, urinary tract (related to the bladder and urethra), connective tissue (fibrous tissues like tendons, cartilage, and bone that provide structure and support throughout the body), and endocrine system (the parts of the body that make hormones). Studies show that women with silicone gel breast implants have no greater risk of these types of cancers compared to the general population.<sup>3,7,14,16,18,21,22,30</sup>

**CONNECTIVE TISSUE DISEASE (CTD) AND DISORDERS OF THE IMMUNE SYSTEM** The body's immune system protects the body from infection. It is a complicated system and includes a variety of different organs and cell types such as white blood cells and antibodies. Disorders of the body's immune system (also called autoimmune diseases) can cause CTDs when the patient's immune system mistakenly attacks parts of its own body, including the connective tissues of the body, like fibrous tissues (tendons), cartilage, and bones.

Autoimmune diseases include: lupus (inflammation and tissue damage in different body parts and organs), rheumatoid arthritis (inflamed and deteriorating joints), polymyositis (inflamed, weakened muscles), dermatomyositis (inflamed, weakened muscles and skin), and progressive systemic sclerosis or scleroderma (damaged skin or organs because of excess collagen, the main protein in connective tissue).

Other CTDs include:

- Fibromyalgia (ongoing fatigue, widespread pain in muscles and joints, difficulty sleeping, and morning stiffness)
- Chronic fatigue syndrome (ongoing mental and physical exhaustion, often with muscle and/or joint pain).

Some women with breast implants have experienced signs and symptoms that could be related to the immune system but that do not fit into a definable disease, like those listed above. These signs and symptoms include: painful or swollen joints, tightness, tingling, numbness, reddened and swollen

skin, swollen glands or lymph nodes, unusual or unexplained fatigue, swollen hands and feet, excessive hair loss, memory problems, headaches, and muscle weakness, pain, cramping and/or burning.

The scientific evidence strongly supports the conclusion that there is no increased risk of CTDs or autoimmune disorders for women with silicone gel breast implants.<sup>4-6,30-43</sup> Independent scientific panels and review groups have also concluded that the weight of the evidence shows no relationship between breast implants and CTDs, or at least if a risk cannot be absolutely excluded, it is too small to be measured.<sup>6,44,45</sup>

**EFFECTS ON CHILDREN BORN TO MOTHERS WITH BREAST IMPLANTS** It is not known if a small amount of silicone may move through the breast implant shell and pass into breast milk. There is no test for detecting silicone in breast milk that is considered accurate. There has been a study that measured silicon levels (one component of silicone). It did not indicate higher levels of silicon in breast milk from women with silicone gel breast implants when compared to women without implants.<sup>46</sup>

In addition, questions have been raised about whether silicone gel breast implants could harm babies whose mothers had implants while pregnant. Two studies in humans have found that the risk of birth defects overall is not increased in children born after breast implant surgery.<sup>47,48</sup> A third study looked at low birth weight and did not find an elevated risk.<sup>49</sup>

Overall, there is no evidence that silicone gel breast implants have any harmful effects on the children of implanted women.<sup>6,47-50</sup>

**SUICIDE** Some studies have reported a higher incidence of suicide in women with breast implants, but it is not clear whether these suicides were associated with having silicone gel breast implants or some other underlying condition that can lead to suicide, depression and/or anxiety.<sup>14,51-58</sup> One researcher<sup>59</sup> believes that some women who want cosmetic surgery suffer from a disorder called body dysmorphic disorder (BDD), which may cause them to think about suicide

or attempt suicide.

The strongest predictor for suicide is having been hospitalized for any psychiatric condition. One study found that women with breast implants were admitted to the hospital more often because of psychiatric problems before they even had their implant surgery, compared to women who had breast reduction or to the general population.<sup>52</sup> This may be a contributing factor to the reported higher incidence of suicide in women with breast implants.

**NEUROLOGICAL DISEASE, SIGNS, AND SYMPTOMS** Some women with breast implants have complained of neurological symptoms such as difficulties with vision, sensation, muscle strength, walking, balance, thinking, or remembering things. Some have been diagnosed with diseases such as multiple sclerosis (which is an autoimmune disease that affects the nerves). Some of these women believe their symptoms are related to their implants. A scientific expert panel found that there is not enough reliable evidence that neurological problems may be caused by or associated with breast implants.<sup>6</sup> Other researchers have found more evidence that silicone gel breast implants do NOT cause neurological diseases or symptoms.<sup>6,17,60</sup> There is one published report of an increased risk of multiple sclerosis among women with silicone gel breast implants,<sup>34</sup> these researchers did not find any increased risk of other neurological symptoms.

**POTENTIAL HEALTH CONSEQUENCES OF GEL BLEED** Small quantities of low molecular weight (LMW) silicone compounds, as well as platinum (in zero oxidation state), have been found to diffuse (bleed) through an intact implant shell.<sup>6,61</sup> The evidence is mixed as to whether there are any clinical consequences associated with gel bleed. For instance, studies on implants implanted for a long duration have suggested that such bleed may be a contributing factor in the development of capsular contracture<sup>6</sup> and lymphadenopathy.<sup>62</sup> However, evidence against gel bleed being a significant contributing factor to capsular contracture and other local complications is provided by the fact that there are similar or lower complication rates for silicone gel-filled breast implants than for saline-filled breast implants.

Saline-filled breast implants do not contain silicone gel and, therefore, gel bleed is not an issue for those products. Furthermore, toxicology testing has indicated that the silicone material used in Sientra's implants does not cause toxic reactions when large amounts are administered to test animals. It should also be noted that studies reported in the literature have demonstrated that the low concentration of platinum contained in breast implants is in the zero oxidation (most biocompatible) state.<sup>63-66</sup>

Sientra performed a laboratory test to analyze the silicones and platinum (used in the manufacturing process), which may bleed out of intact implants into the body. Over 99% of the LMW silicones and platinum stayed in the implant. The overall body of available evidence supports that the extremely low level of gel bleed is of no clinical consequence.

## 5. Benefits Associated With Breast Implants

Women choose primary breast reconstruction surgery to replace breast tissue that has been removed because of cancer or injury, or to replace breast tissue that has failed to develop properly because of a severe breast abnormality. In addition, women choose revision-reconstruction surgery (replacement of an existing implant) to correct or improve the result of primary reconstruction surgery.

In Sientra's Clinical Study, most primary and revision-reconstruction patients were pleased with the results of their reconstruction surgery. The results of the Study showed that most women felt their breast implants make them feel more feminine and more attractive. In addition, the majority of women indicated that their breast implants made them feel better about themselves.

For more information on the benefits of breast reconstruction with Sientra's implants based on the results of the Clinical Study, refer to Section 8.3 of this brochure.

## 6. Preparing For Breast Reconstruction With Silicone Gel Breast Implants

Deciding to have breast reconstruction with implants is an important personal decision and it has both benefits and risks. You should decide whether it is the right choice for you after discussing all the options with your plastic surgeon and any other doctors who are treating you (for example, a general surgeon and/or oncologist). This section will give you the information you need to make an informed choice and help you make a number of decisions that have to be made before your surgery.

### 6.1 Should I Have Breast Reconstruction?

Breast reconstruction with silicone gel breast implant(s) is one option that may be available to you following a mastectomy or to correct a breast abnormality. A breast revision-reconstruction surgery may be appropriate if you have had a breast reconstruction with implants but need to complete, improve upon, or correct a part of that first surgery (called the primary reconstruction).

Whether breast reconstruction is right for you depends on many things; some of them are personal. You should take into account your medical condition, general health, lifestyle, how you feel emotionally, and your breast size and shape before surgery, as well as your hopes for breast size and shape after surgery. All of these things will affect the outcome of your surgery. Discuss your goals for breast reconstruction surgery with your doctors. You may also wish to consult your family and friends, breast implant support groups and breast cancer support groups to help you learn about the options and decide.

Many women who choose implants as part of their reconstruction say their reconstructed breast(s) help them feel more self-confident, feel better about their bodies, and/or give them a greater feeling of well-being. Other women are not satisfied with their implants because of complications, like capsular contracture, rupture, or pain.

You should know that there are alternatives to primary breast reconstruction with silicone gel implants. For example, a

breast can also be reconstructed using your own tissue and skin taken from another part of your body (a “tissue flap”) or a combination of tissue and implant(s) can be used. Other alternatives are discussed in Section 3.5.

## 6.2 Breast Reconstruction With Implants – Understanding The Procedure

The surgical procedure for breast reconstruction with implants consists of choices you and your surgical team (surgeon(s), nurses, anesthetist, etc.) will make as you plan your surgery. If you are continuing treatment for cancer (like chemotherapy or radiation), your surgeon(s) should consult with your oncologist. For breast reconstruction, the type of procedure that is available to you depends on your medical situation, breast shape and size, general health, lifestyle, and goals for the reconstruction. The outcome of a mastectomy will affect the amount of breast tissue left to cover a breast implant.

**BREAST RECONSTRUCTION WITH IMPLANTS – STAGING THE PROCEDURES** Breast reconstruction is usually done in stages. It often takes more than one surgery. A primary (first) reconstruction after mastectomy is often started during the same surgery as your mastectomy, but you may need follow-up surgeries to finish and make the reconstructed breast match the other breast. The stages may include

- Putting in a soft tissue expander, an implanted silicone shell that can be filled with more and more saline solution to slowly stretch your skin enough to allow it to cover an implant (more information is provided below),
- Taking out the tissue expander and putting in a breast implant (silicone gel-filled or saline-filled),
- Surgery to adjust the shape and or size of the opposite breast so it matches the reconstructed breast, and
- Nipple reconstruction (if you have a mastectomy, the nipple is usually removed; usually a new nipple is created later, as an outpatient procedure after the initial reconstruction surgery is finished; a nipple may be created using skin taken from the opposite breast or another part of your body).

## USE OF TISSUE EXPANDER(S) IN BREAST RECONSTRUCTION SURGERY

Placing a tissue expander may be one step in your breast reconstruction. If you are having a mastectomy, the surgeon will remove breast tissue and also some skin. Afterwards, your chest will be flatter and tighter. For many women (especially if you had small-to-medium-sized breasts before your mastectomy), there will not be enough skin and tissue to cover a breast implant comfortably; the breast “pocket” (space for an implant) will be too small.

Placing an implant in a breast pocket that is too small can cause complications such as drooping or sagging at an earlier age, implant extrusion, skin wrinkling, infection, and hematoma. You may also be able to feel folds on the implant created by the implant being squeezed tightly by the surrounding skin and other breast-area tissue.

Tissue expanders (also called soft-tissue expanders) are devices that are used when there is not enough skin or breast tissue to cover an implant. They are made of a silicone elastomer (stretchy, rubbery silicone) shell like a breast implant but are empty of filler when they are put in your breast. The tissue expander has a port (valve) that will lie under your skin after it is placed. Your surgeon can then gradually fill the tissue expander with sterile saline solution (saltwater) over several weeks or months by injecting the saline into the device through the port under your skin. As the device expands, it will cause your breast skin and tissues to stretch like a woman’s abdomen stretches during pregnancy. Eventually, the skin and breast tissue are stretched enough to create a space for your breast implant, as shown in Figure 2.

A tissue expander can be placed at the time of your mastectomy or months or years later. Your reconstruction surgeon can tell you whether tissue expansion may be necessary in your case.

The tissue expander is placed surgically, usually in an operating room under general anesthesia. You may be able to go home the same day or may stay overnight at the hospital. Most women can go back to their usual activities within 2 to 3 weeks after the expander is placed. If you have a tissue expander placed during the same surgery as your



Post-Mastectomy



Stage 1:  
Tissue Expander Placed  
and Expansion Under Way



Stage 2:  
Breast Implant and  
Nipple/Areola  
Reconstruction

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**Figure 2.** Breast Reconstruction Using a Tissue Expander and Breast Implant

mastectomy, the breast tissues are usually numb from the mastectomy; you may not feel pain after the tissue expander surgery. You will probably feel tightness, pressure, or discomfort each time the tissue expander is filled with saline. This can last a week or more, but goes away as the skin and tissues stretch. Tissue expansion may take up to 4 to 6 months.

### 6.3 Breast Reconstruction Without Implants (Tissue Flap Reconstruction)

A tissue flap is skin, fat, and/or muscle taken from another part of your body, like your stomach, back, hip, or bottom. Two kinds of flaps are usually used for breast reconstruction surgeries: a flap from your stomach (called a “TRAM flap”) or a flap from your back (called a “latissimus dorsi flap”). In each case, the flap is moved to the chest where it is shaped into a new breast. In some cases, a tissue flap is used just to provide more skin or tissue, for example, to cover an implant.

Breast reconstruction using only your own tissue flap is major surgery, and you will likely have a longer recovery time than for breast reconstruction using just a breast implant. Some women who have a tissue flap reconstruction return to their normal activities after a few weeks. Others may take up to a full year to get back to their normal lifestyle.

An advantage of breast reconstruction using a tissue flap may be that usually no other procedures are needed to make the opposite (unaffected) breast match the reconstructed breast.

**TRAM FLAP** The TRAM flap (the transverse rectus abdominus musculocutaneous flap) is named for the section of the abdomen from which the tissue flap is taken – that consists of the transverse rectus abdominus muscle and some tissue (skin, fat, connective tissue, and vascular [blood vessels] tissue) surrounding it. As shown in Figure 3, during a TRAM flap procedure your doctor will take the TRAM flap from your abdomen and move it to your breast to replace the breast tissue that was lost during your cancer surgery.



Post-Mastectomy



TRAM Flap



Final Result with  
Nipple/Areola  
Reconstruction  
(includes mastopexy  
to the other breast to  
improve symmetry)

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**Figure 3.** Breast Reconstruction Using a Tram Flap

The TRAM flap procedure is done in the hospital under general anesthesia. Your hospital stay may range from 2 to 5 days. The recovery time may be 6 to 8 weeks. You will have two incision sites (on your abdomen and on your breast) resulting in two wounds to heal after surgery and, therefore, two scars. Both TRAM flap methods can cause temporary or permanent muscle weakness in your tummy (because the muscles there have been cut).

If you are considering becoming pregnant after your reconstruction, discuss this with your doctors before surgery. You will have a large scar on your abdomen and scarring on your reconstructed breast(s) that may be affected as your skin stretches to accommodate a growing baby.

The TRAM flap procedure can be done two ways. In one method, the tissue flap is removed from your abdomen but the blood vessels are not cut. The TRAM flap is then moved through a tunnel made under your skin up to the breast area where it is sutured into place to create the new breast. This is called a "pedicle" TRAM flap procedure. It usually takes 3 to 6 hours in surgery to complete.

The other possibility is a "free" TRAM flap. In this case, the tissue is taken from your abdomen and the blood supply is cut. The flap is taken off completely from your tummy and then relocated and sutured in place to create the new breast. The doctor must reconnect blood vessels at the breast site. This is a very involved procedure: your surgeon will need to use a microscope to do it and it usually takes longer than a pedicle TRAM flap procedure. Your surgical team may ask a surgeon who specializes in surgery using a microscope to reconnect blood vessels to do that part of your procedure (a vascular surgeon). You may need to have a blood transfusion during or after a free TRAM flap procedure.

**LATISSIMUS DORSI FLAP** Breast reconstruction using a latissimus dorsi flap is illustrated in Figure 4. During latissimus dorsi flap reconstruction, a section of tissue [skin, fat, connective tissue, and vascular (blood vessels) tissue] is taken from your back. A latissimus dorsi flap is usually smaller than a TRAM flap, so this procedure may be better for a woman with smaller breasts.



Post-Mastectomy



View showing  
back scar



Latissimus Dorsi  
Flap and  
Nipple/Areola  
Reconstruction

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**Figure 4.** Breast Reconstruction Using a Latissimus Dorsi Flap

The latissimus dorsi flap procedure usually takes 2 to 4 hours of surgery. It is done in a hospital under general anesthesia. Most patients can resume their normal activities after 2 to 3 weeks.

### **COMPLICATIONS ASSOCIATED WITH FLAP RECONSTRUCTION**

Flap reconstruction is major surgery, especially TRAM flap reconstruction. It is more involved than a mastectomy and more involved than reconstruction with implants. Patients who choose this method of reconstruction should be in good general health and have strong emotional motivation. If you are very overweight, smoke cigarettes, have had other surgeries at the flap site, or have circulatory problems (problems with your heart or blood vessels), you may not be a good candidate for tissue flap reconstruction. If you are very thin, you may not be able to have tissue flap reconstruction because there may not be enough extra tissue on your abdomen or back to form a new breast. Complications of flap reconstruction procedures may include:

- Temporary or permanent muscle weakness in your abdominal muscles for TRAM flap and in your back or side for latissimus dorsi flap
- Distorted navel (belly button) and/or the need for the doctor to build a new belly button after the TRAM procedure
- Loss of feeling in the abdomen and/or reconstructed breast. You will probably not have normal sensation in that breast because nerves are cut during the surgery.
- A blood transfusion is sometimes necessary after a free TRAM flap procedure.

## **6.4 Choosing Breast Reconstruction With Breast Implants**

Your doctor(s) can tell you whether you are a good candidate for breast reconstruction with implants, given your health and medical condition. Your surgeon may recommend some other procedures for the opposite (non-implanted) breast to make your breasts look more symmetrical after reconstruction. The other procedures may include:

- Having an implant in the other breast (contralateral augmentation mammoplasty),
- Having the other breast made smaller (contralateral reduction mammoplasty) by surgically removing breast tissue and skin, or
- Having a surgery to lift one or both breasts (Mastopexy) so they are at the same level on your chest. This is done by surgically removing a strip of skin from under your breast or around your nipple to lift and tighten the skin.

If you do not want to change your unaffected breast, discuss this with your surgeon well before the surgery so he or she can plan the procedure to give you the best result.

## 6.5 Choosing The Right Implant For You

Sientra Implants are available in several different shapes, profiles (the contour the implant provides to your body), and sizes to help each woman achieve the result that is best for her body. If you are having one breast reconstructed, but the other one is not affected, you and your doctor can choose the implant that will most closely match your unaffected breast.

Table 3 lists the styles of Sientra Silicone Gel Breast Implants that are available.

TABLE 3 Sientra Silicone Gel Breast Implant Designs			
Implant Shell Texture	Implant Shape	Implant Profile	Volume Range
Smooth	Round	Moderate	80 - 700 cc
		High	95 - 695 cc
Textured	Round	Low	60 - 700 cc
		Moderate/High	95 - 695 cc
Textured	Shaped Inferior Pole	Low	170 - 500 cc
		Moderate/High	120 - 700 cc
		High	180 - 550 cc
Textured	Shaped Superior Pole	Moderate	115 - 690 cc

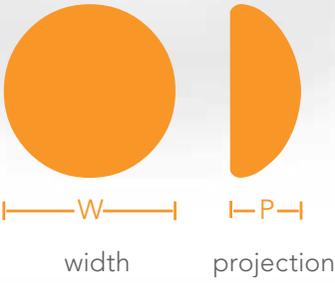
When you and your doctor decide what you want your breasts to look like after reconstruction, your doctor can help you choose the right implant to get the effect you want. Your body type, height, and weight will be factors your surgeon considers to help you achieve the best result.

**IMPLANT SIZE, SHAPE AND SURFACE** Your surgeon will examine your breast tissue and skin to figure out if you will have enough to cover the implant. This is especially important after mastectomy. It is possible that you will not have enough skin and/or breast tissue left to cover an implant. In this case, you may be offered several choices.

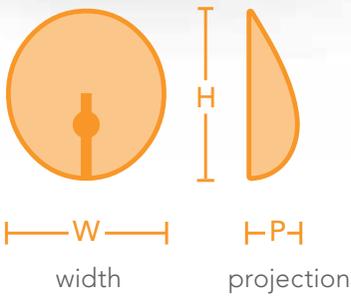
Breast implants that are too big for the amount of breast tissue or skin can cause problems. For example, your breasts may droop or sag earlier with implants that are too large. Implants that are too large can also cause implant extrusion, skin wrinkling, infection, and hematoma. You may be able to feel folds on the implant created by it being squeezed too tightly by the surrounding tissue and skin. If you do not have enough skin, and it is stretched too thin over the implant, you may be able to feel or see the edges of the implant under your skin surface after surgery. As shown in Figure 5, the Implants come with either a smooth shell (outer sac) or a textured shell.



Smooth Round Implant



Textured Shaped Implant



**Figure 5.** Photographs of smooth and textured Sientra implant styles

## 6.6 Surgical Setting And Anesthesia

Primary reconstruction surgery is usually performed in a hospital under general anesthesia. If you are having a mastectomy, the reconstruction will often be started at the same time. You will probably stay in the hospital for one or more nights after your surgery (inpatient surgery).

Some stages of the reconstruction may be performed later in a different setting. For example, you may be able to have nipple reconstruction or placement of an implant (after having had a soft-tissue expander) as an outpatient.

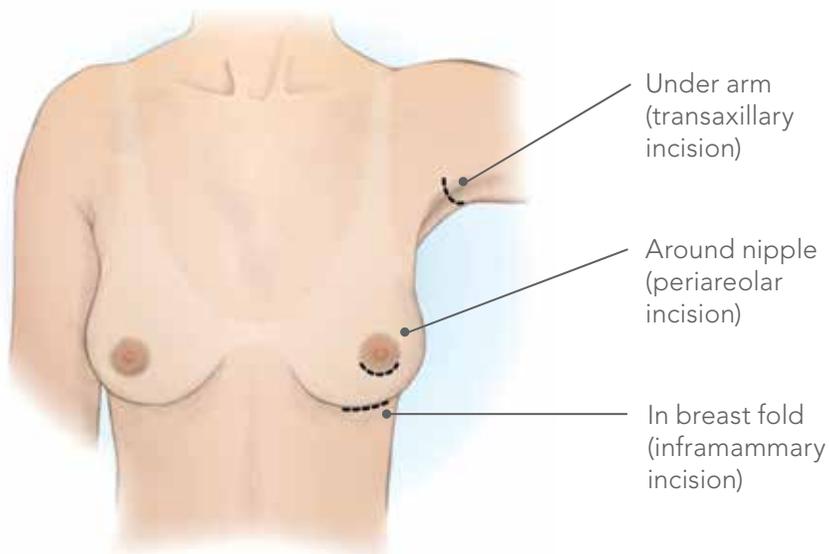
All anesthetics carry some risk. Discuss the risks and benefits of the anesthetic your surgeon and anesthesiologist recommend for you before the surgery.

## 6.7 Incision Sites

If you decide to have breast reconstruction with implants after a mastectomy, your doctor will choose the incision sites based on the type of mastectomy surgery that is planned for you. The extent of the mastectomy you need will determine the length and location of the incisions. In most cases, the breast reconstruction will start at the time of the mastectomy procedure, so the surgeon will use the same incision. Even if you have a breast reconstruction that starts after you have had a mastectomy, the incision can usually be made at the mastectomy scar so you won't have another scar.

Sometimes, a doctor will recommend placing an implant in the opposite breast after a unilateral (one breast only) mastectomy and reconstruction to create better symmetry. If you have an unaffected breast implanted to match a reconstructed breast, you may be able to choose the incision site. The three incision sites shown in Figure 6 are the incision sites usually used for breast contralateral augmentation surgery:

- Inframammary – the most common incision, made under your breast at the crease where the breast meets the body,
- Periareolar – an incision is made around the nipple, and
- Transaxillary – the incision is made in the armpit, which gives the surgeon easier access to the chest muscle.



**Figure 6.** *Incision Sites for Contralateral Augmentation Surgery*

You may hear about a fourth incision site – the “periumbilical approach” (incision at your belly button). This way of placing breast implants has not been studied in Sientra’s Study and should not be used. It may cause damage to the implant shell.

Your surgeon can explain which incision site he or she recommends for you and talk about the pros and cons of each with you.

## 6.8 Implant Placement

Breast implants are placed beneath your breast tissue, either on top of the chest muscle (subglandular placement) or underneath part or all of the chest muscle (submuscular placement). If you are having reconstruction after breast cancer surgery, your doctor will tell you which placement is likely to work best given the amount of skin and tissue left after the mastectomy. For breast reconstruction after a mastectomy, the implant is usually placed submuscularly.

## 6.9 Timing Of Breast Reconstruction Surgery

This discussion applies to reconstruction following breast cancer surgery such as mastectomy. Similar considerations apply to reconstruction surgery following trauma or to correct a congenital anomaly.

Breast reconstruction with or without implants can be done at the time of a mastectomy surgery (immediate reconstruction) or months to years after (delayed reconstruction). There are medical, financial, and emotional factors to consider when choosing when to have breast reconstruction. There may be reasons your doctor would advise you to begin breast reconstruction at the time of your mastectomy, but these reasons may not always outweigh your need to carefully consider your options and think about whether reconstruction with breast implants is right for you. Give yourself enough time to consider your decision and gather information to help you decide.

Immediate reconstruction starts during the same surgery as your mastectomy. After the cancerous tissues and some skin are removed, a breast implant may be inserted. More often, a soft tissue expander (a silicone shell that can be inflated with saline solution over time) is placed and your incision closed with stitches. The tissue expander is inflated with sterile saline solution over a period of weeks or months. This allows your skin to grow and stretch so there will be enough skin to cover the breast implant, which is placed during a later surgery. Most breast reconstructions take several steps to finish.

Immediate reconstruction may allow you to spend fewer days in the hospital overall and save money by combining your mastectomy and the first stage of reconstruction. However, if you need to have chemotherapy or radiation after your mastectomy, these may damage the implant or increase your

risk of capsular contracture, implant extrusion (the implant comes through the skin), and/or necrosis.

Table 4 compares the pros and cons of immediate and delayed breast reconstruction.

TABLE 4 Comparison of Immediate and Delayed Breast Reconstruction with Implants – Pros and Cons of Each		
Timing	Pros	Cons
Immediate	<ul style="list-style-type: none"> <li>• Mastectomy and first stage of reconstruction accomplished with one surgery</li> <li>• Uses one incision</li> <li>• Typically fewer hospital days overall</li> <li>• Costs may be lower</li> </ul>	<ul style="list-style-type: none"> <li>• If follow up chemotherapy or radiation is needed, may increase risk of complications (capsular contracture, implant extrusion, necrosis)</li> <li>• Initial operative time may be longer</li> <li>• Initial recovery time may be longer</li> </ul>
Delayed	<ul style="list-style-type: none"> <li>• Gives you plenty of time to decide if reconstruction with implants is right for you</li> <li>• Allows chemotherapy/ radiation to be completed before implants are present (no increased risk of capsular contracture, implant extrusion, or necrosis due to chemotherapy or radiation)</li> </ul>	<ul style="list-style-type: none"> <li>• Adds at least one additional surgery</li> <li>• May mean an additional scar</li> <li>• Costs may be higher</li> </ul>

Discuss these factors with your surgeon(s) and your oncologist so they may help you understand the “pros” and “cons” in your specific case.

## 6.10 Other Procedures At The Time Of The Breast Reconstruction

Your surgeon may recommend having other cosmetic procedures during the same surgery to get the best results from your breast implants. In some cases, breast implants alone may not give you the results you want. If, in the past, you have lost a lot of weight, been pregnant, or breast-fed, you may have sagging, stretched, or extra skin that is not completely filled out by breast tissue. Or, after mastectomy, your reconstructed breast may be firmer and higher than your opposite breast. In these cases, your surgeon may recommend doing a breast lift (mastopexy) to remove excess skin from the rest of the breast tissue in one or both breasts. Sometimes mastopexy is recommended in the unaffected breast to create better symmetry after reconstruction.

During mastopexy, your surgeon will remove a piece of skin from your breast (usually from under the breast or around the nipple). Then he or she will use stitches to close the incision where the skin was removed. This lifts the whole breast or nipple location and tightens the skin over the breast. This might cause more scarring than just having implants placed and may lengthen your recovery time. Mastopexy (to one or both breasts) may be done at the same time as the primary reconstruction or may be done at a later, follow-up procedure. It is not always best to do multiple procedures during one surgery. Your doctors can discuss the risks and benefits of this with you.

## 6.11 Choosing A Surgeon

The following are types of questions you should consider when choosing a surgeon:

- In which states is he or she licensed to practice surgery?
- Has he or she completed residency requirements in plastic surgery from a recognized and accredited academic program?
- Is he or she board certified in the United States? If so, which board?

- How many breast reconstruction surgeries does he or she perform each year?
- How many years has he or she been doing breast reconstruction surgeries?
- What is the most common complication he or she experiences with breast reconstruction patients?
- What is his or her reoperation rate for reconstruction patients?
- What is the most common type of reoperation that he or she performs (after completing the initial reconstruction with implants) in his or her practice?
- Will he or she perform all of my surgery in a hospital? (Many surgeons do breast implant surgery or components of breast reconstruction in their own surgery centers. Hospitals require surgeons to prove that they are properly trained before they can operate in the hospital.)

## 7. Caring For Yourself After Breast Implant Surgery

How you feel after your surgery and the level of care you need in the first few days vary from patient to patient and depend on the extent of your surgery (especially if you are having surgery for cancer). Your wounds will take several weeks or more to heal completely. Talk with your surgeon after your surgery about how to care for yourself and how long your recovery should take.

### 7.1 Postoperative Care In The Hours And Days After Surgery

The first few hours after your initial reconstruction surgery will be spent recovering in the hospital. You may be there for several days or you may be able to go home sooner. During these first days after your surgery, you will need to follow some simple directions to take care of yourself. Your surgeon will give you specific directions about what to do. Follow your surgeon's directions.

If you have had general anesthesia, you will remain in the hospital or surgery center until the anesthesia wears off. You may have drains in your breasts so that fluid or blood will drain out of the wound at the incision site.

You will probably leave your surgery wearing a bandage to protect the wound(s) and support your breasts. Your surgeon will tell you how long to keep your breast(s) bandaged. Eventually, you will be able to wear a bra for support instead of the bandages. Your doctor will give you instructions about bathing or washing the area during the first few days. He or she may tell you not to take baths for a certain period of time.

Call your doctor immediately if you think you may have an infection. If your incision sites or breasts are red, swollen, hot, painful, or are weeping (draining white or yellow fluid) or if you have a fever, chills, aches, nausea, or vomiting, you may have an infection.

If you do not have any complications, you will probably be able to go back to most of your usual daily activities in 1 to 2 weeks after surgery.

## 7.2 Postoperative Care In The First Weeks After Surgery

In the weeks after your reconstruction, the skin over your breasts may feel tight as it adjusts to your new breast size. This may be true even if you had tissue expansion first, with a soft tissue expander. After your stitches are removed, your doctor may tell you to massage your incision site(s) with a cream or lotion to keep the skin from drying out; this may make you more comfortable as well. Use the product(s) he or she recommends.

Your doctor may have special directions about avoiding exercise or activities that compress or put pressure on your breasts during the first weeks after surgery. Follow your doctor's directions.

### 7.3 Caring For Yourself In The Months And Years After Surgery

There are some things you should do to make sure your breasts stay healthy and to take care of your implants: mammograms, breast exams, and protecting your implants from certain types of damage. It will be important to monitor your breasts for breast cancer. Also, monitor regularly for breast implant rupture.

**MAMMOGRAMS** A mammogram is a special way of x-raying the breast. Whether or not you have breast implants, having a mammogram is considered the best way to detect breast cancer. However, there are some special considerations for women with breast implants:

- Breast implants can make it harder to see breast cancer on a mammogram.
- Breast implants can make it harder for the technologist to perform the mammogram.

The machine that does a mammogram squeezes the breast to make it as flat as possible while taking a picture. The pressure from this squeezing could make your implant rupture or cause gel bleed. You must tell the technologist that you have silicone gel breast implants before the procedure. The technologist can then use special techniques to get the best possible views of your breast tissue. He or she can also take steps to reduce the likelihood that your implants will rupture due to the mammogram.

It is a good idea to have a mammogram before your breast implant surgery. This establishes a baseline to which future mammograms can be compared. You are also encouraged to have another mammogram 6 months to 1 year after your implant surgery to establish a baseline with the implant present.

After that, the recommendations for mammograms are the same as for women without implants; have a mammogram every 1 to 2 years, starting at age 40, or as advised by your doctor. When you go for a mammogram, do the following things to get the most reliable pictures of your breast(s):

When you schedule a mammogram, tell the office that you have breast implants. Find a mammographer who is

experienced with imaging implanted breasts. (Your doctor should be able to help you find a qualified mammographer.)

You may want to request a “diagnostic” mammogram instead of a “screening” mammogram because more pictures are taken for a diagnostic mammogram. Using that language may help the mammogram site to schedule the right kind of procedure for you.

Make sure your mammographer knows what type of implants you have and how they are placed (for example, on top of the chest muscle or underneath).

Carry your Device Identification Card (that you will receive after surgery) with you and show it to the mammographer.

**OTHER BREAST EXAMS** Perform self-breast exams regularly. Once a month, after your period ends, is a good time to examine your breasts.

You can find brochures about how to perform breast self-exams through your doctor, a women’s health clinic, or online. Your doctor can show you how to do a self-breast exam. Ask your doctor to help you learn to tell the difference between your breast implant and breast tissue. This will help you do your self-breast exams without squeezing your implant too much. If you see or feel that something has changed, talk to your doctor promptly.

It is important to have regular exams by a doctor as well. It may be hard for you to feel changes in your breast because the implant is there, especially if you have capsular contracture. The doctor will look at your breasts and palpate your breasts like in a self-exam to feel for any changes. If your doctor finds anything, he or she may refer you for a mammogram to help diagnose the change. Your doctor may also ask for an MRI if he or she suspects rupture.

**PROTECTING YOUR IMPLANTS** To protect your implants, you should make sure that any healthcare practitioners (doctors, emergency medical technologists, nurses, massage therapists, acupuncturists, chiropractors, physical therapists, etc.) treating you know that you have silicone gel breast implants. If they do not know about your implants, they may damage them by accident and your implants could rupture. Carry your

Device Identification Card with you and show it to healthcare practitioners before receiving treatment.

You should also protect your implants by guarding against any strong or repeated pressure on your breasts.

#### **THINGS TO CALL YOUR DOCTOR ABOUT RIGHT AWAY**

Call your doctor immediately if you have:

- Signs of an infection,
- A lump,
- Skin around the nipple that has become dimpled or drawn in,
- Discharge from the nipple,
- Change in the position or shape of your implant, or
- Injury to your breast(s).

If your implant becomes damaged, it may have to be removed.

**PHYSICAL LIMITATIONS** After you have healed from surgery, you should be able to carry on normal activities including sports. Avoid situations that put a lot of pressure on your breasts or may cause trauma to your breast. Ask your doctor if there are any activities he or she does not recommend.

## **7.4 Monitoring Your Implants For Rupture**

Rupture is a rare occurrence with silicone gel breast implants. However, the following information will help you to monitor your implants for evidence of rupture.

**DETECTING RUPTURE** A variety of factors can cause your breast implants to develop a tear or hole in the shell. These tears or holes are usually called ruptures because they can allow silicone gel from inside the implant to exit your implant.

If your implant(s) ruptures, you may experience certain symptoms. Any of the following may indicate that your implant has ruptured: hard knots or lumps surrounding the implant or in the armpit, changes in breast size or shape, pain, tingling, swelling, numbness, burning, and/or hardening of the breast.

If you feel any of these symptoms, contact your doctor for an exam.

If your implant ruptures, it is more likely that you will not experience any symptoms and you will not even know your implant has ruptured. In these situations, even your doctor may not be able to determine that a rupture has occurred. This is referred to as a “silent” rupture.

MRI examination (taking pictures of your implants with a device similar to an x-ray machine) is the best way to tell if a silent rupture has happened. For this reason, it is strongly recommended that you have an MRI the third year after your surgery and then every 2 years after that for as long as you have your breast implants.

#### **WHAT TO DO IF YOU SUSPECT AN IMPLANT RUPTURE**

If you suspect that an implant has ruptured or if you suspect that silicone gel has moved out of your implants, call your doctor right away and schedule an exam. Your doctor may recommend an MRI or other kind of tests to help diagnose possible rupture. MRI is currently considered the best way to diagnose rupture.

#### **WHAT TO DO IF THE IMPLANT RUPTURE IS CONFIRMED**

If your doctor confirms that you have a ruptured implant or that silicone gel has bled (moved) out of your implant shell, he or she will talk with you about your options. As a precaution, Sientra recommends that the implant be taken out permanently and either replaced with a new implant or not replaced, depending on your preference or medical need.

If your implant is taken out, your surgeon may also have to remove some of your breast tissue (the tissue capsule that forms around the breast implant), which will involve additional surgery, with associated risks and costs. In some cases, it may not be possible to replace your implant(s).

## 8. Sientra's Clinical Study Results

As part of the premarket approval requirements for the Silicone Gel Breast Implant, Sientra conducted the Clinical Study with patients who received the Implants for augmentation (primary and revision) and reconstruction (primary and revision). The Study collected data from the primary augmentation and revision-augmentation cohorts of the CORE study, as well as pooled data from Sientra's CORE and Continued Access studies for the primary reconstruction and revision-reconstruction cohorts. The results of the Study will provide you with useful information on the experience of other women who have received Sientra Silicone Gel Breast Implants. The results of the Study should not be used to predict your own experience with the Implant, but the information can be used as a general guide about what you may expect. Your own benefits and complications depend on many individual factors.

### 8.1 Overview Of The Study

The Study is a prospective, 10-year, multicenter clinical study conducted to examine the safety and effectiveness of the Sientra Silicone Gel Breast Implants (now referred to as Sientra Implants or Implants) in patients undergoing primary augmentation, primary reconstruction, revision-augmentation, and revision-reconstruction of the breast.

There are 1,788 patients participating in the Study. A total of 1,115 patients had primary augmentation and 362 patients had revision-augmentation. Of the 229 patients who had primary reconstruction, 156 patients were from the CORE study and 73 were from the Continued Access study. Of the 82 patients who had revision-reconstruction with Sientra Silicone Gel Breast Implants, 50 were from the CORE study and 32 were from the Continued Access study. Of these patients, 230 primary augmentation patients, 74 revision-augmentation patients, 34 primary reconstruction patients and 7 revision-reconstruction patients are assessed for implant rupture by MRI at years 3, 4, 6, 8, and 10 years after receiving implants.

Assessment of the safety of the Implants is based on the incidence of complications, including device failures. Effectiveness was assessed based on changes in bra size, chest circumference, and patient satisfaction in terms of quality-of-life, self esteem (how you feel about yourself overall), and body esteem (how you feel about your body). Several scales and questionnaires about these topics were used to collect information for analysis, including a patient-reported quality-of-life (QOL) outcomes questionnaire, the Short Form Health Survey (SF-36), the Rosenberg Self-Esteem Scale, and the Body Image Scale.

The Study will continue to follow patients through 10 years after their breast implant surgery. Results provided here represent the first 3 years of data. This brochure will be updated as more information becomes available. You should also ask your surgeon if he or she has received any updated clinical information.

The following sections provide more information about the benefits and complications you may experience following reconstruction with Sientra Silicone Gel Breast Implants, based on experiences of the reconstruction patients in the Study.

## 8.2 What Are The 3-Year Follow-Up Rates?

The Study enrolled 229 primary reconstruction patients. Of the women expected to be seen at the 3-year follow-up visit, 83% were seen. The Study enrolled 82 revision-reconstruction patients. Of the women expected to be seen at the 3-year follow-up visits, 76% were seen.

## 8.3 What Are The Benefits?

The benefits of the Implants were examined by assessing patient satisfaction and quality-of-life (QOL). Patient satisfaction and quality-of-life were determined using several questionnaires that the patients responded to, including a health survey, a numeric scale that assessed body esteem, and a numeric scale that assessed body image.

The information was collected before implantation and at scheduled follow-up visits (1 year and 2 years after their surgery).

**PRIMARY RECONSTRUCTION PATIENTS** Most primary reconstruction patients were pleased with the results of their implant surgery. Patients reported satisfaction in terms of their quality of life, self esteem (how they feel about themselves), body esteem (how they feel about their bodies), and sexual attractiveness. According to their scores on a questionnaire about a variety of general QOL concepts (health, mental and social well-being), these women felt better about themselves than a sample of average women in the United States. However, compared to their QOL before getting implants, most women experienced unchanged or even slightly decreased QOL on most measures. Another finding of the Study showed that most women felt their breast implants made them feel more feminine (79%) and more attractive (77%). In addition, the majority of women indicated that their breast implants made them feel better about themselves (72%).

**REVISION-RECONSTRUCTION PATIENTS** Most revision-reconstruction patients were pleased with the results of their additional reconstruction surgery. According to their scores on a questionnaire about a variety of general QOL concepts (health, mental and social well-being), these women felt better about themselves than a sample of average women in the United States. However, compared to their QOL before getting implants, most women experienced unchanged or even slightly decreased QOL on most measures. Another finding of the Study showed that most women felt their breast implants made them feel more feminine (76%) and feel more attractive (76%). In addition, the majority of women indicated that their breast implants made them feel better about themselves (73%).

## 8.4 What Are The 3-Year Complication Rates?

The safety of Sientra Silicone Gel Breast Implants was determined by assessing the incidence of complications, including device failures.

**PRIMARY RECONSTRUCTION** The complications observed in women who had primary reconstruction through 3 years are presented in Table 5. The most common reported complication within the first 3 years after reconstruction surgery was reoperation (35% or approximately 35 out of 100).

**TABLE 5**  
**Complication Rates Reported through**  
**3 Years for Primary Reconstruction Patients**  
**(N=229 Patients)**

Key Complications	%
Reoperation	34.9%
Implant Removal with Replacement	19.1%
Capsular Contracture (Baker Grade III/IV)	8.8%
Implant Removal without Replacement	7.0%
Implant Rupture (MRI cohort) <sup>1</sup>	2.8%
Other Complications Occurring in 1% or more of Patients <sup>2</sup>	%
Asymmetry	8.7%
Infection	5.1%
Redness	3.0%
Implant Malposition	3.0%
Hypertrophic/abnormal scarring	2.7%
Breast Pain	2.6%
Seroma/fluid accumulation	2.4%
Nipple Sensation Changes	2.0%
Ptosis	2.0%
Swelling	2.0%
Delayed Wound Healing	1.9%
Implant Extrusion	1.5%
Other Complications	1.1%
Wrinkling/Rippling	1.1%

**TABLE 5 (continued)**  
**Complication Rates Reported through**  
**3 Years for Primary Reconstruction Patients**  
**(N=229 Patients)**

Other Complications Occurring in 1% or more of Patients <sup>2</sup>	%
Breast Mass/Cyst/Lump	1.0%
Implant Visibility	1.0%

<sup>1</sup> No ruptures were reported in the non-MRI cohort.

<sup>2</sup> The following complications were reported at a risk rate of less than 1%: bruising, hematoma, implant palpability, irritation, necrosis, skin rash, skin sensation changes and upper pole fullness.

**REVISION-RECONSTRUCTION** The complications observed in women who had revision-reconstruction through 3 years are presented in Table 6. The most common reported complication within the first 3 years after revision-reconstruction surgery was reoperation (43% or approximately 43 out of 100).

**TABLE 6**  
**Complication Rates Reported through**  
**3 Years for Revision-Reconstruction Patients**  
**(N=82 Patients)**

Key Complications	%
Reoperation	42.5%
Implant Removal with Replacement	23.2%
Implant Removal without Replacement	10.3%
Capsular Contracture (Baker Grade III/IV)	6.8%
Implant Rupture (MRI cohort) <sup>1</sup>	–

TABLE 6 (continued)  
 Complication Rates Reported through  
 3 Years for Revision-Reconstruction Patients  
 (N=82 Patients)

Other Complications Occurring in 1% or more of Patients	%
Asymmetry	7.1%
Implant Malposition	5.5%
Breast Mass/Cyst/Lump	3.1%
Hypertrophic/Abnormal Scarring	3.1%
Wrinkling/Rippling	1.5%
Breast Pain	1.4%
Seroma/Fluid Accumulation	1.3%
Infection	1.2%

<sup>1</sup> No ruptures were reported in the revision-reconstruction cohort (including both the MRI and the non-MRI cohorts).

## 8.5 What Are The Main Reasons For Reoperation?

Patients may require a reoperation for a number of reasons, including size and/or style change, implant removal (with or without replacement), capsular contracture procedures, incision and drainage, implant repositioning, or scar revision, etc. In addition, patients often require more than one surgical procedure to complete their reconstruction. This is called “staged” reconstruction and procedures that represent a particular stage in the reconstruction, such as skin or nipple-related procedures, are also considered reoperations.

**PRIMARY RECONSTRUCTION** In the Study, 32% of the patients had at least one reoperation through 3 years (a total of 85 reoperations performed in 74 patients). Table 7 provides the main reasons for reoperation. The most common reason for reoperation through 3 years in these patients was the patients requesting a change in the size or style of their implants.

**TABLE 7**  
**Main Reasons for Reoperation through**  
**3 Years for Primary Reconstruction Patients**  
**(N=85 Reoperations)**

Reasons for Reoperation through 3 Years <sup>1</sup>	%
Patient request for size/style change	24.7%
Asymmetry	18.8%
Infection	11.8%
Capsular Contracture	8.2%
Ptosis	5.9%
Implant Malposition	4.7%
Mass/Lump/Cyst	4.7%
Delayed Wound Healing	3.5%
Hematoma/Seroma	3.5%
Scarring/Hypertrophic Scarring	3.5%
Unknown	3.5%
Implant Extrusion	2.4%
Nipple-related Complications	1.2%
Palpability/Visibility	1.2%
Skin Related	1.2%
Suspected Rupture	1.2% <sup>2</sup>

<sup>1</sup> Some reoperations were performed for multiple reasons; only the primary reason is provided in the table.

<sup>2</sup> Although the surgeon suspected rupture, this implant was found to be non-ruptured during the surgery.

**REVISION-RECONSTRUCTION** In the Study, 38% of the patients had at least one reoperation through 3 years (a total of 38 reoperations performed in 31 revision-reconstruction patients). Table 8 provides the main reasons for reoperation. The most common reason for reoperation through 3 years was the patients desiring a change in the size or style of their implants.

**TABLE 8**  
**Main Reasons for Reoperation through**  
**3 Years for Revision-Reconstruction Patients**  
**(N=38 Reoperations)**

Reasons for Reoperation through 3 Years <sup>1</sup>	%
Patient request for size/style change	26.3%
Asymmetry	23.7%
Capsular Contracture	15.8%
Implant Malposition	10.5%
Mass/lump/cyst	5.3%
Breast Cancer	2.6%
Hematoma/Seroma	2.6%
Infection	2.6%
Nipple-related Complications	2.6%
Pain	2.6%
Trauma	2.6%
Wrinkling/rippling	2.6%

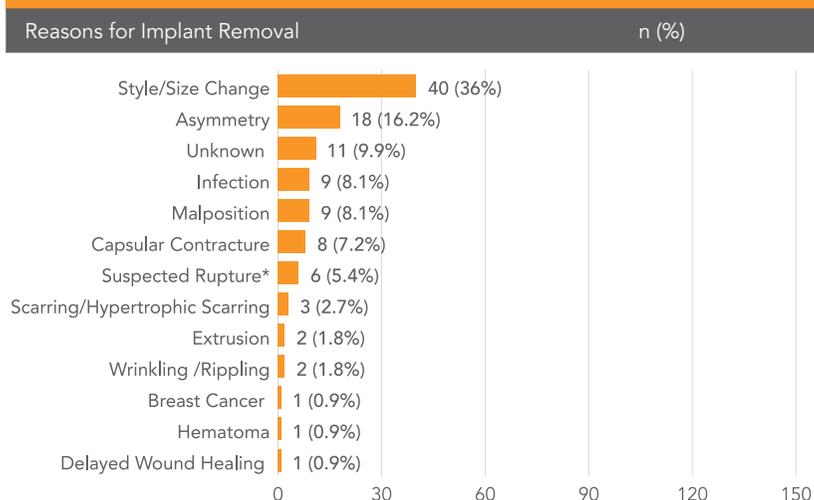
<sup>1</sup> Some reoperations were performed for multiple reasons; only the primary reason is provided in the table.

## 8.6 What Are The Main Reasons For Implant Removal?

Breast implants may be removed (with or without replacement) in response to a complication or to improve the cosmetic result.

**PRIMARY RECONSTRUCTION** In the Study, 23% of the patients had at least one removal (76 implants removed from these 52 patients). Of these 76 implants, 74% were replaced. As Figure 7 shows, the most common reason for implant removal was the patient requesting a different implant style or size.

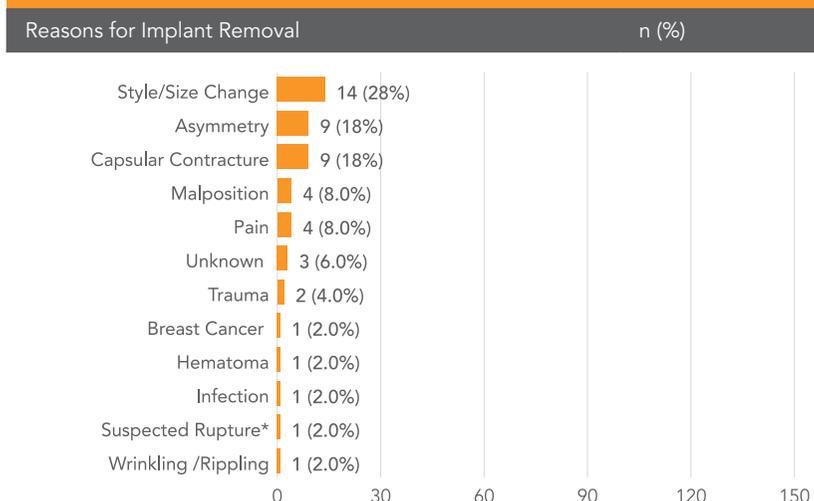
**TABLE 9**  
**Main Reasons for Implant Removal through 10 Years**  
**Primary Reconstruction (n=111 implants)**



\* Two of the 6 devices were confirmed not ruptured at explantation.

**REVISION-RECONSTRUCTION** In the Study, 27% of the patients had at least one removal (30 implants removed from 22 patients). Of these 30 implants, 73% were replaced. Figure 8 shows that the most common reason for implant removal was the patient requesting a new size or style.

**TABLE 10**  
**Main Reasons for Implant Removal through 10 Years**  
**Revision-Reconstruction (n=50 implants)**



## 8.7 What Are Other Clinical Data Findings?

The Study evaluated several possible long-term health effects that have been reported in breast implant patients. These include rupture, cancer, CTD, CTD signs and symptoms, complications with lactation, reproductive complications, and suicide.

**RUPTURE** In the Study, there are 34 primary reconstruction patients enrolled in an MRI cohort study who have routine MRI screening of their implants to track rupture. Through 3 years, 97% of these patients (98% of implants) had no evidence of rupture. Through Year 3, there has been one unconfirmed implant rupture occurring in 1 patient.

Overall, the 3-year risk of rupture was 3% per patient. This means that after receiving Silicone Gel Breast Implants, 3 out of 100 women may experience a rupture during the first 3 years. This 3% risk rate is only an estimate (based on the Study data and on statistical analysis).

There are 7 revision-reconstruction patients enrolled in the MRI cohort who have routine MRI screening of their implants to track rupture. All of these patients (100%) had no evidence of rupture through 3 years.

**CANCER** There have been no cases of breast cancer or fibrocystic breast disease identified in primary reconstruction patients through 3 years. Other types of cancers (including lung, ovarian, skin, and metastatic cancers) have been reported in 7 (3%) primary reconstruction patients. Two revision-reconstruction patients (4%) reported breast cancer through 3 years in the Study. One case of metastatic cancer (liver and spine) was reported in the revision-reconstruction cohort, representing a rate of 1%. There were no cases of fibrocystic breast disease reported through 3 years in revision-reconstruction patients.

There were no reports of ALCL in any patient cohort in the Sientra Study.

**CONNECTIVE TISSUE DISEASE (CTD)** No primary reconstruction or revision-reconstruction patients have been diagnosed with a CTD in the 3 years after receiving implants.

**CTD SIGNS AND SYMPTOMS** The Study collected information on CTD signs and symptoms (that did not result in a diagnosis of a CTD) in reconstruction and revision-reconstruction patients every other year during follow up. Thirteen categories of CTD signs and symptoms were examined in the Study, including symptoms related to skin, muscles, joints, brain and/or nerves, pain, fatigue, fibromyalgia, eyes, ears, nose, and throat (EENT), blood or lymph, constitution (unexplained weight loss or fever, depression, or lupus [a disease in which there is inflammation and tissue damage in different parts of the body]); endocrine/exocrine system; and blood vessels.

In Sientra's Study, self-reported CTD signs and symptoms were collected. Compared to before having implants, a significant increase was found in only 1 of the 13 sign/symptom categories in the pooled primary reconstruction and revision-reconstruction cohorts: EENT, for which the statistical significance is driven by reports of dry eyes. This increase was not found to be related to simply getting older.

The Sientra Study was not designed to evaluate the cause and effect associations because there is no comparison group of women without implants, and because other contributing factors, such as medications and lifestyle/exercise, were not studied. Therefore, it cannot be determined whether or not this 1 increase was due to the implants.

However, you should be aware that you may experience an increase in dry eyes after receiving breast Implants.

**LACTATION COMPLICATIONS** Lactation complications including difficulties with breast-feeding, breast infection (mastitis), and pain were examined in the Study.

There were 16 primary reconstruction patients who delivered a baby after receiving their Sientra Implants, and none (0%) reported lactation difficulties through 3 years.

There was one revision-reconstruction patient who delivered a baby after reconstruction with Sientra Implants; this patient reported no problems with breast-feeding.

**REPRODUCTION COMPLICATIONS** Reproduction complications that were examined in the Study include miscarriage, preterm labor (going into labor before a complete pregnancy), and having a stillborn baby.

Of the 229 patients in the primary reconstruction cohort, 2 (1%) reported postoperative difficulties through 3 years. Of the 82 patients in the revision-reconstruction cohort, none (0%) had postoperative difficulties.

**SUICIDE** There were no reports of suicide in primary reconstruction or revision-reconstruction patients in the Study through 3 years.

## 9. What To Do If You Have A Problem

If you have a problem with your breast implant(s), tell your doctor about it immediately. Your doctor may need to examine you.

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(Write your doctor's contact information here)

In addition to informing your doctor, you can report a problem to Sientra and/or to the U.S. Food and Drug Administration (FDA). Your doctor or other healthcare provider may do this or you may report it yourself.

You can report any serious problem directly to the FDA through its voluntary reporting program called MedWatch. (See <http://www.fda.gov/medwatch>). There is a special form you must use for voluntary reporting (FDA Form 3500). You can obtain it several ways:

- Complete Form 3500 and submit it online at <https://www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm>

- Download Form 3500 from the website (<https://www.accessdata.fda.gov/scripts/medwatch/medwatch-online.htm>) and print it out, fill it in, and send it to FDA, or
- Call the FDA to get a reporting package at 1-800-FDA-1088 (1-800-332-1088).

If you need to complete a Form 3500, the FDA recommends that you take Form 3500 to your doctor, who can help you to complete it.

## 10. Where To Find More Information

Sientra has more information about its Silicone Gel Breast Implants available to you. You may request a copy of the package insert given to surgeons that describes how to use the Implant. It also discusses safety information and research performed on implants in general and on Sientra Silicone Gel Breast Implants in particular. Note that this document is intended only for surgeons, so it has a large amount of undefined medical and technical language.

You can find more detailed information on the studies (in animals and humans or other laboratory testing) done on these Implants in Sientra's Summary of Safety and Effectiveness Document (SSED) on the FDA's website at <http://www.fda.gov/breastimplants>.

You can find these resources on Sientra's website at [www.sientra.com](http://www.sientra.com) or through Sientra Customer Service (888) 708-0808.

There are several other sources of information about breast implants and breast implant surgery.

The U.S. Food and Drug Administration (FDA) has published a breast implant complications booklet titled "Breast Implants: Local Complications and Adverse Outcomes." It contains descriptions of the risks of having breast implants (similar to this brochure) and links to more information. The booklet is available through the FDA website at: <http://www.fda.gov/breastimplants>.

Professional organizations for surgeons offer helpful information on their websites about making decisions about plastic/cosmetic surgery and about choosing a surgeon. You can find this information at the following websites:

The American Society for Aesthetic Plastic Surgery -  
<http://www.surgery.org>

American Society of Plastic Surgeons -  
<http://www.plasticsurgery.org>

In 2000, the Institute of Medicine (IOM) published a comprehensive review of studies that have looked at the safety of silicone gel breast implants. The report is available on the website at: <http://www.iom.edu/Reports/1999/Safety-of-Breast-Implants.aspx>.

Patient groups offer support and information to women who have had breast cancer and/or problems with their breast implants. Several such websites are listed at:  
<http://www.fda.gov/breastimplants>.

Websites relevant to breast cancer treatment and breast reconstruction include:

Breastcancer.org - <http://www.breastcancer.org/tips/reconstruction>

The American Cancer Society – <http://www.cancer.org>

Susan G. Komen for the Cure - <http://cms.komen.org>

## 11. Sientra's Implant Tracking Program

Each breast implant has a unique serial number that allows Sientra to identify the Implant(s) and locate important information about how and when they were manufactured. Sientra has developed an Implant tracking program to help facilitate contacting you with updated information if needed.

### 11.1 Breast Implant Tracking

At the time of your implant surgery, you will be asked to participate in Sientra's Implant tracking program. This will

help to ensure that Sientra has a record of your contact information so that Sientra can contact you in the event there is updated information on your breast implant(s) that you need to know about.

Federal regulations require Sientra to track its Silicone Gel Breast Implants. Your surgeon will report the serial number(s) of your breast implants to Sientra, along with the date of your surgery, your personal contact information, and contact information about his or her practice. Sientra maintains this information in a confidential manner.

***Participation in Sientra's Device Tracking program is mandatory in order to activate the product warranty.***

Your doctor or his or her staff will fill out the Device Tracking and Limited Warranty Enrollment Form for you and return it to Sientra. A sample copy of the form is attached to this brochure. Sientra's warranty program is discussed in Section 13.

## 11.2 Device Identification Card

After your surgery, your surgeon will provide you with a card containing important information about your breast implants. This card will have the style, size, and serial number of your implant(s), along with other information. Carry the card with you and show it to doctors or other healthcare providers when you visit them. It will help them treat you appropriately and protect your implants during any medical treatment you need in the future.

If you have your implants replaced, you will get a new Device Identification Card for those implants.

Your doctor should keep a copy of the Device Identification Card with your medical records.

***Please tell Sientra whenever your contact information, e.g. mailing address, email, etc., changes so that we may keep you up to date with important information about your breast implant(s).***

## 12. Important Contact Information

Your Silicone Gel Breast Implants are manufactured for and sold by:

Sientra, Inc.

PO Box 1490, Santa Barbara, CA 93116-1490

U.S. Toll-Free Phone: (888) 708-0808

Phone: (805) 562-3500

Fax: (805) 562-8401

[www.sientra.com](http://www.sientra.com)

My surgeon's name and contact information:

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## 13. Warranty Information

Sientra's Limited Warranty provides limited replacement and limited financial reimbursement in the event of shell leakage or breakage resulting in implant rupture. Sientra's standard Limited Warranty program applies to every Silicone Gel Breast Implant recipient who agrees to participate in the Device Tracking program. For more information, please contact Sientra's Customer Service at (888) 708-0808.



## 14. Acknowledgement Of Informed Decision

I understand that this patient brochure provided by Sientra is intended to provide information regarding the benefits and risks of silicone gel breast implants. I understand that some of this information is about breast implants in general and some is specific to Sientra's Implants. I understand that choosing to have reconstruction breast surgery with implants involves both benefits and risks. I also understand that scientists and doctors have not been able to identify or quantify all of the risks of breast reconstruction with implants and that, over time, additional information may become available.

I have had adequate time to review and understand the information in this brochure, and my questions and concerns have been addressed by my doctor. I have considered alternatives to reconstruction surgery, including the use of external prostheses, flap procedures or surgery with saline-filled breast implants, and I am choosing to proceed with silicone gel-filled breast implant surgery.

By circling my response for each statement below and signing below, I acknowledge that:

- Y N** I have had adequate time to read and fully understand the information in this brochure,
- Y N** I have had an opportunity to discuss this information with my surgeon and to ask any questions I may have,
- Y N** I have carefully considered options other than reconstruction surgery with breast implants and have decided to proceed with silicone breast implant surgery,
- Y N** I have been advised to wait an adequate amount of time after reviewing and considering this information before scheduling my silicone breast implant surgery,
- Y N** I understand that, in order to activate Sientra's Limited Warranty, I must participate in Sientra's Device Tracking program, and
- Y N** I will retain this brochure, and I am aware that I may also ask my surgeon for a copy of this signed acknowledgement.

---

Patient or Guardian Name (Printed)

---

Patient or Guardian Signature

Date

By my signature below, I acknowledge that:

- My patient has been given an opportunity to ask any and all questions related to this brochure, or any other issues of concern,
- All questions outlined above have been answered "yes" by my patient,
- My patient has been given an adequate amount of time before making her final decision, unless an earlier surgery was deemed medically necessary, and
- This *Acknowledgment of Informed Decision* will be retained in my patient's permanent record.

---

Implanting Surgeon Name (Printed)

---

Implanting Surgeon Signature

Date



# 15. Device Tracking And Limited Warranty Enrollment Form

sientra®

## ENROLLMENT FORM SIENTRA SILICONE GEL BREAST IMPLANT DEVICE TRACKING AND LIMITED WARRANTY

PLEASE SEND FORM VIA EMAIL: ENROLLMENT@SIENTRA.COM or FAX: 888.906.0101

### IMPORTANT

\*Please Note: Patients must participate in Sientra's Device Tracking Program in order to activate the Sientra Product Warranty. Please complete section 2 of this form, all fields not marked optional must be completed for warranty activation.

1. DEVICE AND SURGERY INFORMATION			
PATIENT'S LEFT SIDE Place LEFT Patient Record label here or write in below:		PATIENT'S RIGHT SIDE Place RIGHT Patient Record label here or write in below:	
REF #	SIZE / VOLUME	REF #	SIZE / VOLUME
[SN]		[SN]	
PRODUCT NAME		PRODUCT NAME	
REASON FOR SURGERY <input type="checkbox"/> AUGMENTATION <input type="checkbox"/> RECONSTRUCTION <input type="checkbox"/> REPLACEMENT		REASON FOR SURGERY <input type="checkbox"/> AUGMENTATION <input type="checkbox"/> RECONSTRUCTION <input type="checkbox"/> REPLACEMENT	
DATE OF IMPLANTATION (mm/dd/yyyy)		DATE OF IMPLANTATION (mm/dd/yyyy)	
2. PATIENT INFORMATION*			
<input type="checkbox"/> Patient Refused to Release Patient Identifying Information <small>(Non-Patient specific information must still be collected. All fields not marked optional must be complete.)</small>			
LAST NAME		FIRST NAME	M.I.
TELEPHONE	CELL PHONE (OPTIONAL)	FAX (OPTIONAL)	EMAIL (OPTIONAL)
ADDRESS			DATE OF BIRTH (mm/dd/yyyy)
CITY	STATE	ZIP CODE	COUNTRY
3. IMPLANTING / EXPLANTING PHYSICIAN INFORMATION			
LAST NAME		FIRST NAME	
TELEPHONE	FAX	EMAIL	
ADDRESS			
CITY	STATE	ZIP CODE	
4. FOLLOW-UP PHYSICIAN INFORMATION <small>If different than above (e.g. primary care provider) <input type="checkbox"/> N/A</small>			
LAST NAME		FIRST NAME	
TELEPHONE	FAX	EMAIL	
ADDRESS			
CITY	STATE	ZIP CODE	
FORM COMPLETED BY: _____ (SIGNATURE: _____)			
(DATE): _____ (TELEPHONE): _____ (FAX): _____ (EMAIL): _____			

MDC-005 R1

# 16. Device Identification Card

**SIENTRA DEVICE IDENTIFICATION AND LIMITED WARRANTY CARD**  
KEEP FOR YOUR RECORDS

PATIENT WARRANTY ENROLLMENT ACTIVATED

PATIENT NAME \_\_\_\_\_

DATE OF SURGERY \_\_\_\_\_

PHYSICIAN NAME \_\_\_\_\_

**sientra.**  
SIMPLICITY IS BEAUTY

**LEFT SIDE**

REFERENCE NUMBER \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

IMPLANT SIZE \_\_\_\_\_

Smooth Round     Augmentation  
 Textured Round     Reconstruction  
 Textured Shaped     Implant Replacement

**RIGHT SIDE**

REFERENCE NUMBER \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

IMPLANT SIZE \_\_\_\_\_

Smooth Round     Augmentation  
 Textured Round     Reconstruction  
 Textured Shaped     Implant Replacement

MDC-0007 R1

TOIL FREE: 888.708.0808  
info@sientra.com  
sientra.com

**sientra.**  
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**DEVICE IDENTIFICATION AND LIMITED WARRANTY CARD**

*Plastic Surgeon and Staff: This enclosed card should be provided to the patient to retain for her records. Please follow the instructions below.*

Remove the attached Device Identification Card and place the patient record labels (supplied with packaging) from each device used on the Device ID Card.

If the Patient Record Label is not available, please use a ball point pen to record the serial number and reference number from the package label.

Please complete the remaining fields prior to giving to the patient.

Completion and submission of the Device Tracking Form (supplied with packaging) is required to activate the patient's Product Warranty. Please check the box on the front of the card for the patient's records of warranty enrollment.

MDC-0008 R1

**DEVICE ID CARD**

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