



## Welcome to the NATRELLE® Interactive Surgery Planner.

This interactive planner is designed to assist in planning breast reconstruction and contralateral breast augmentation surgeries. Based on simple patient measurements and the type of surgery being planned, the Natrelle® Interactive Surgery Planner (ISP) will suggest a range of expander and implant choices. You may decide to use the information included in the output of this tool to order implants and tissue expanders, or to keep on file in a patient's records.

Simply Follow the Steps Below:

1. Enter a New Patient ID
2. Select the Procedure Being Planned for Each Breast
3. Input Required Breast Parameters (add optional fields if desired)
4. Select an Implant Choice

### Natrelle® Interactive Surgery Planner (ISP)

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**1 Patient Name or ID**

Doctor Name: Jane Doe

Expected Date: Dr. Johnson

**2 Procedure Being Performed**

RIGHT BREAST: Stage 1 (expander)

LEFT BREAST: Stage 2 (exp. to implant)

**3 Breast Parameters**

Original Breast Type\*: Type III Average

Patient Desires: Same

Pre-OP Volume (200-900) g: 400

Breast Width (10-16) cm\*: 12

Breast Height (6-16) cm\*: 14

N:IMF (4-12) cm\*: 9

SN:N (16-32) cm\*: 19

IMD (1-8) cm\*: 4

Areola Diameter (2-6) cm: 3

Removed Tissue (0-900 g): 400

Expander Used: 133MV-12 or 133MV-12-T

> Recommended Fill (cc): 300

> Expander Width (10-16 cm): 12

> Expander Height (7-16 cm): 11

> Expander Projection (cm): 5.2

> Actual Fill (150-900 cm):

\* required field / selection

Optional Measurements

**4 Stage 1: Tissue Expander**

Height: Low | Short | Mod | Full

Projection: V | X

Suture Tabs: Yes | No

Show Options: Suggested | All

Selected Expander: 133MV-12-T

Catalog No: 133MV-12-T

Volume (CC): 300

Width (cm): 12

Height (cm): 11

Projection (cm): 5.2

**4 Stage 2: Breast Implant**

Projection: Mod | Mid | High | Extra

Implant Type: Textured | Smooth

Show Options: Suggested | All

Selected Implant: 20-425

Catalog No: 20-425

Volume (CC): 425

Diameter(cm): 12

Projection (cm): 5.2

**Procedure: Stage 1: Tissue Expander**  
Breast Type: III Average

**Procedure: Stage 2: Breast Implant**  
Breast Type: III Average

Show Dimensions:  Breast  Expander  Implant [Print](#) [Email](#) [Reset](#)

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## Inputs

The inputs for the NATRELLE® Interactive Surgery Planner include the following. As you add the following inputs, the measurements will appear on the torso diagram on the right side of the interface.

Input	Acceptable Values
<b>Patient and Surgeon Parameters</b>	
Patient Name or ID*	Any string of characters
Doctor Name	Any string of characters
Expected Surgery Date	Any string of characters
<b>Procedure Parameters</b>	
Procedure Being Planned*	Select One From a Dropdown List: None Stage 1 (Tissue Expander Only) Stage 2 (Tissue Expander to Implant Exchange) Augmentation (Implant Only)
<b>Breast Parameters</b>	
Breast Type	Select One From a Dropdown List: Type I (Very Tight) Type II (Tight) Type III (Average) Type IV (Loose) Type V (Very Loose) Severe Ptosis
Patient Desires (Size)	Select One From a Dropdown List: Smaller Same Larger
Estimated Pre-Operative Volume	200-900 grams
Breast Width	10-16 cm
Breast Height	6-16 cm
Nipple to Inframammary Fold (N:IMF)	4-12 cm
Sternal Notch to Nipple (SN:N)	16-32 cm
Intermammary Distance (IMD)	1-8 cm
Areola Diameter	2-6 cm
Removed Tissue*	0-900g
Expander Used*	Choose a NATRELLE® Style 133 Tissue Expander from a Dropdown List or manually enter the dimensions for another tissue expander.

\* Required Fields if planning Reconstruction Stage 1 or Stage 2

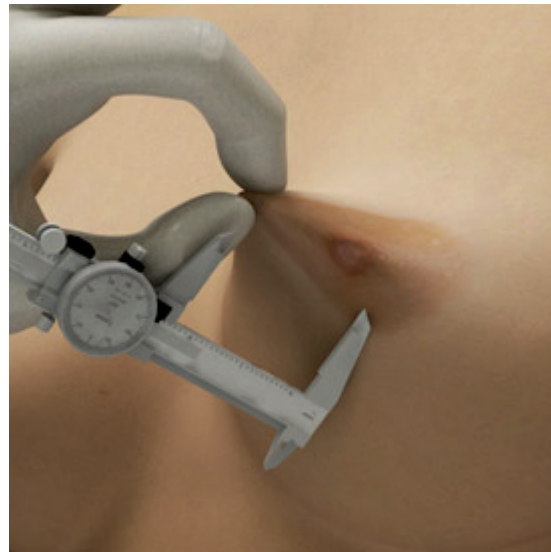
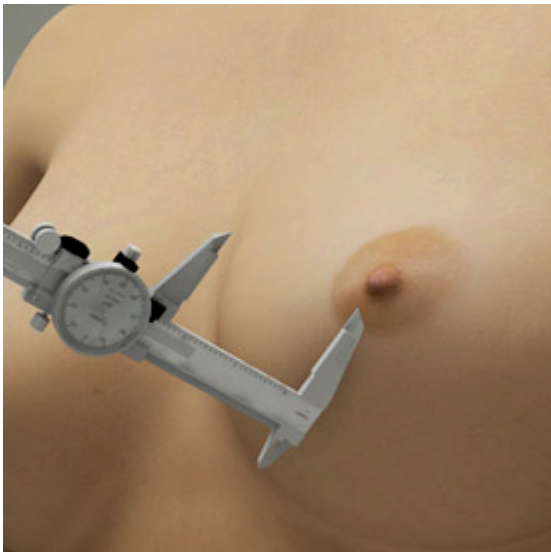
## Measuring Breast Type

Breast width alone is inadequate to determine the optimal volume to fill a patient’s breasts; there must also be an assessment of the patient’s breast type. The *NATRELLE®* Interactive Surgery Planner divides breasts into five different breast types based upon the elasticity of the skin, amount of parenchyma, and characteristics of that parenchyma (e.g. glandular vs. fatty). Recording this information can help determine what type of implant projection the patient may want and need to achieve her desired outcome.

To determine a patient’s breast type a quantitative assessment using the simple skin stretch (SS) test is the most accurate/objective method, but for surgeons with a large amount of experience with breast augmentation, who prefer a qualitative/subjective assessment, the breast type may be determined using the descriptors and pictures provided.

To perform the skin stretch (SS) assessment, grasp the skin of the medial areola and pull it maximally anteriorly (while holding a caliper to measure the amount of stretch). The calipers should measure the amount of stretch in centimeters (cm) from the resting plane of the areola to the stretched position.

See the following example:



The breast type is determined based on the following parameters

	Breast Type	Envelope Assessment		
		Skin Stretch(SS)	Appearance	
<div style="display: flex; align-items: center; justify-content: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 10px;">Glandular / Firm More Filled</div> <div style="font-weight: bold; margin-right: 10px;">↑</div> </div> <div style="display: flex; align-items: center; justify-content: center; margin-top: 20px;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-weight: bold; margin-right: 10px;">Soft / Fatty More Empty</div> <div style="font-weight: bold; margin-right: 10px;">↓</div> </div>	I	<1.5cm	Very Tight	
	II	1.5 - 2.0 cm	Tight	
	III	2.0 - 3.0 cm	Average	
	IV	3.0 - 4.0 cm	Loose (N:IMF < 9.0 cm)	
	V	3.0 - 4.0 cm	Very Loose (N:IMF 9.0 -10.0 cm)	
	VI	> 4.0 cm	Severe Ptosis (N:IMF > 10cm)	

The **primary** assessment of breast type is the skin stretch measurement (envelope characterization). The **secondary** assessment is the fill of the breast.

If the skin stretch is 2cm or the surgeon feels the envelope is between normal and tight (breast type III and II) the characterization of the fill may serve as a “tie-breaker.” Breast fill characteristics includes an assessment of the amount of breast tissue and also the character of the tissue (soft vs. glandular). The distribution of the parenchyma is also relevant as the more glandular/firm breast (Fig. 1) will have an even distribution of parenchyma throughout the breast with maintenance of upper pole fill. In the less glandular/less filled, empty breast (Fig. 2) the upper pole is less filled, with the fill more distributed to the lower breast.

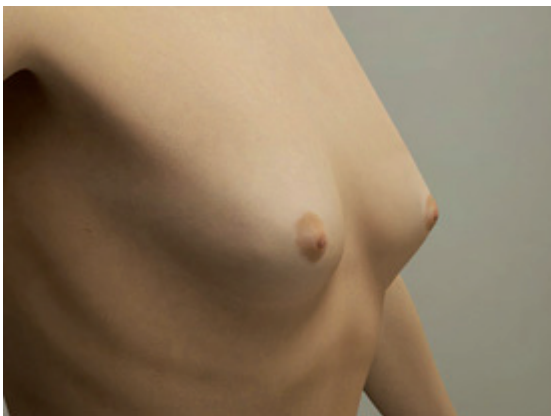


Fig 1 Glandular/firm/more full



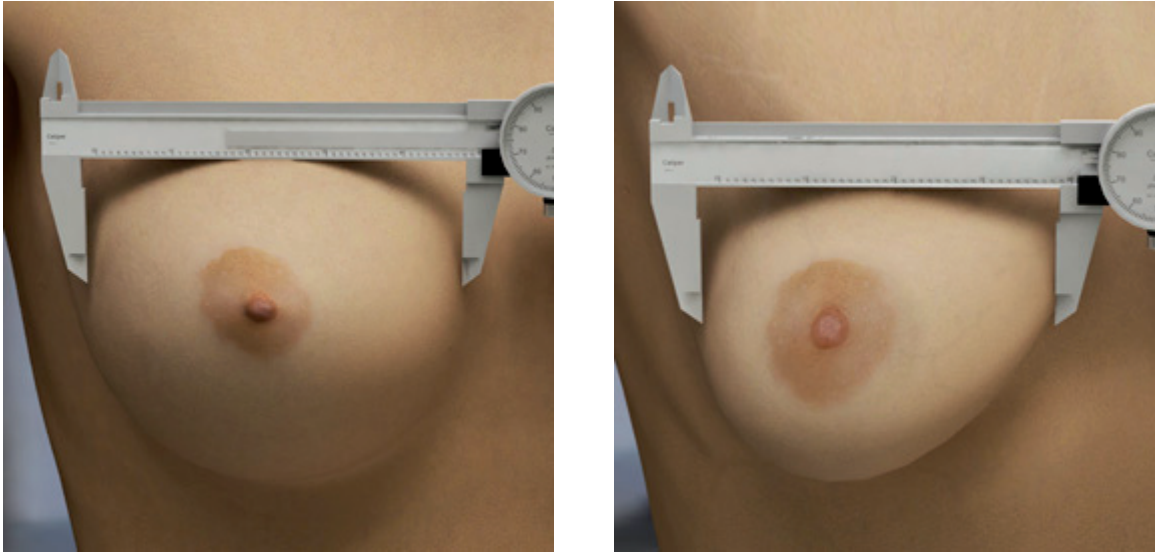
Fig 2 soft/fatty/more empty

Breast Type III is the average. Type II is tighter and fuller; Type IV is looser with N:IMF < 9cm; Type I is the tightest and fullest; Type V is the loosest and emptiest, N:IMF 9-10cm. Anything “beyond” a V would be considered to have “Severe Ptosis”.

## Measuring Breast Width

A patient's breast width is another critical factor for successful outcomes. Measure the breast width of the breast mound at the level of the nipple as a linear measurement from the visible medial border of the breast mound to the visible lateral border of the breast mound in centimeters (cm).

See the following examples:

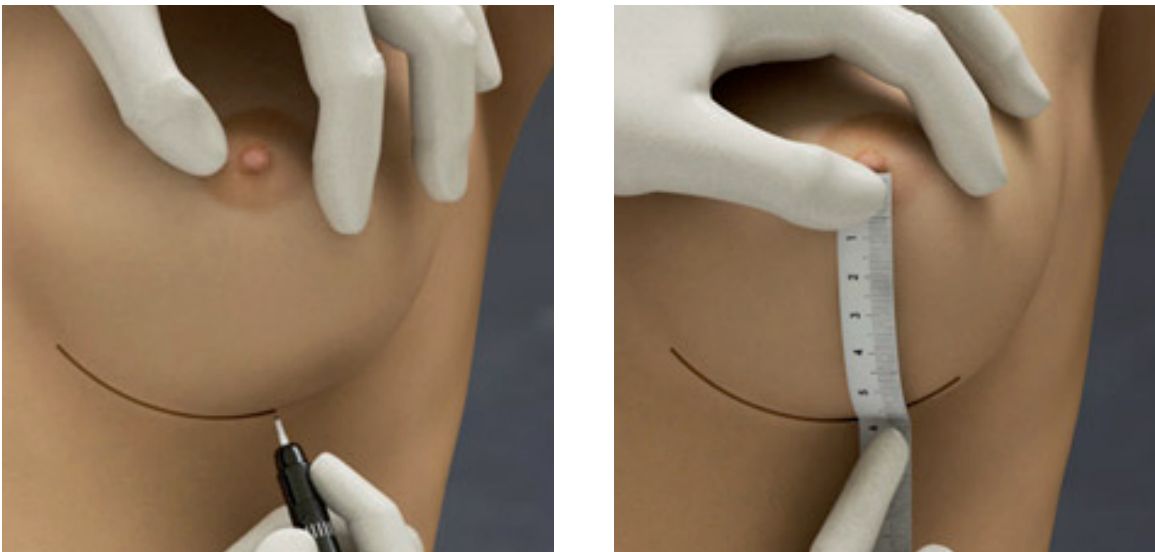


Round to the nearest 0.5 cm and enter the breast width into the NATRELLE® Interactive Surgery Planner.

## Measuring Nipple to Inframammary Fold Distance (N:IMF)

Measure the nipple to inframammary fold distance (N:IMF) under maximal stretch. Mark the exact inframammary fold crease (near the 6-o'clock position and in-line with the midpoint of the nipple). Then, use a flexible tape measure to measure the distance from the nipple to the marking in centimeters (cm). See the following example:

For this patient, the existing IMF is 7.0cm.



## Tissue Expander and Implant Selection

Based on key measurements, the NATRELLE® Interactive Surgery Planner will suggest a range of tissue expander and implant choices. It is also possible to select tissue expander and implant options from the list of “Suggested” or “All” tissue expander and implants. For a description of the algorithm used to generate the list of suggested expanders and implants, see the section of this guide entitled “Algorithm”.

NATRELLE® tissue expanders and implants are available in a variety of heights, diameters and projections. The matrix of available implants will meet a variety of patient needs and deliver the results you expect. The NATRELLE® Interactive Surgery Planner will show all dimensions of each tissue expander and implant, as well as visually draw the outline of each implant on the torso model. This should improve visualization and surgical planning.

Each NATRELLE® Style 133 tissue expander model is designated with two letters and is available in a range of base widths. Since NATRELLE® Style 133 tissue expanders are anatomical in shape, both height and width will vary by model. The first letter describes the implant’s height (F for full, M for moderate, S for Short, or L for Low). The second letter describes the implant’s projection (X for extra, or V for variable).

Each NATRELLE® gel-filled breast implant has a base width (or diameter) and a projection. Each style of NATRELLE® gel-filled breast implant has its own diameter-to-projection ratio (Style 10 for Moderate, Style 15 for Moderate-Plus, Style 20 for High, Style 45 for Extra-High).

All models of NATRELLE® Style 133 Tissue Expanders are available with optional suture tabs. Simply add a „-T” to the catalog number for the version with suture tabs.

## Algorithm

Based on key measurements, the NATRELLE® Interactive Surgery Planner will suggest a range of tissue expander and implant choices using the following algorithm:

### Stage 1 – Tissue Expander Suggestions:

1. WIDTH
  - Generally, the breast width is matched to the nearest tissue expander width (rounding down).
  - For example, an 11.3 cm breast width includes tissue expanders that are 11 cm wide.
2. HEIGHT
  - The default height is the Moderate (M) height tissue expander.
3. PROJECTION
  - Variable (V) projection is the standard default suggestion for consistent lower-pole fullness.
4. SUTURE TABS
  - No suture tabs is the default suggestion.

### Stage 2 or Augmentation – Breast Implant Suggestions:

1. WIDTH
  - Generally, breast width is matched to the nearest implant width within 1 cm.
2. PROJECTION
  - For Stage 2, the default suggestion is the NATRELLE® Style 20 high profile implant. This is done because the expanded breast has little existing breast volume, thus requiring more projection.
  - For Augmentation, the default suggestion is the NATRELLE® Style 15 moderate-plus profile. This is done because the augmented breast will already have some existing breast volume. So, the augmented breast implant will likely need a lower projecting implant than the reconstructed side.

**NOTE:** Based on the patient’s desired outcome, you may wish to increase or decrease the implant projection. For example, the NATRELLE® Style 10 implant has a lower profile while the NATRELLE® Style 45 implant has the highest available profile.

## Outputs

After an appropriate tissue expander or implant is selected for this patient, all measurements will be shown on the right side of the interface.

- Click “Order Form” to print an order form that can be faxed into Allergan customer service. The tissue expander and implant choices will be pre-populated.
- Click “Print Screen” to print a copy of everything visible on the interface. This print out may be incorporated into the patient’s charts and records.

For more information about NATRELLE® breast implants and tissue expanders, contact your Allergan representative.