

to help patients diagnosed with breast cancer make an informed and values-based decision

There are various options for breast cancer surgery, and each carries its own benefits and risks.

This decision aid seeks to help women diagnosed with breast cancer decide whether to undergo breast-conserving surgery or mastectomy, and whether or not to undergo breast reconstruction after undergoing mastectomy.

It also helps them understand why the surgical method proposed by surgeons is suitable for them.





Step 1: Learn to make an informed and values-based decision · · · · · · · · · · · · · · · · · · ·
Step 2: Know your options (medical knowledge of breast cancer surgery) · · · · · · · · · · · · · · · · · · ·
Step 3: Know your options (impact on lifestyle and daily life) · · · · · · · · · · · · · · · · · · ·
Step 4: Clarify what is important to you · · · · · · · · · · · · · · · · · · ·
Step 5: Make your own decision • • • • • • • • • • • • • • • • • • •
Conclusion · · · · · · · · · · · · · · · · · · ·

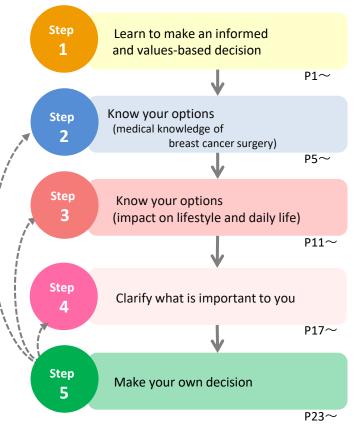


What is the decision aid for choice regarding surgical treatment for breast cancer?

There are benefits and risks associated with breast cancer surgery.

This decision aid is for people who have been diagnosed with breast cancer and want to decide convincingly which breast-conserving and mastectomy options is appropriate for them, whether to undergo breast reconstruction after mastectomy, and to understand why the surgical options proposed by their surgeon is appropriate for them Created for. It is designed to assist those who want to gain a better understanding of why the surgical procedure proposed by their doctor is appropriate for them.

The steps in this decision aid are as follows. When you first read it, follow the order of the steps.



- Understand how to use the decision aid. Make sure this decision aid is appropriate for your situation and your decision-making preferences.
- By compare medical knowledge of surgical options for breast cancer. you can have a better understanding of which aspects are similar and which are different.
- Compare the impact of breast cancer surgery options on your lifestyle and daily life for a better understanding of which aspects are the same and which are different.
- Let's examine four perspectives regarding what you want to consider when making a decision. It will help clarify what is important to you while making a decision.
- Make sure you are ready to make a decision. If you feel you are not yet ready, organize what to do next (you can go back to the previous steps if necessary).

Learn to make an informed and values-based decision

How to use the decision aid for choice regarding surgical treatment of breast cancer

Make sure this decision aid is useful to you.

The decision aid for choosing a breast cancer surgery procedure is not intended to recommend which option is best for you. It is designed to help you choose an option that is appropriate for you and that you are comfortable with, by reading the information included, comprehending accurate information, and examining what is important to you when making a decision, and by facilitating communication with doctors, nurses, and other medical professionals, family members, acquaintances, and breast cancer survivors.

This decision aid is designed for people mentioned below

Who can use this decision aid?

- Those who have been diagnosed with breast cancer and are planning to undergo breastconserving surgery or mastectomy.
- Those who have been diagnosed with breast cancer and have almost decided to undergo mastectomy, but are reconsider whether to have reconstruction.
- The surgeon has recommended breast-conserving surgery or mastectomy, but you would like to know why the doctor recommended that method and whether it is suitable for you.

However, it does not contain information for those who, should be informed and are discussing their individual situations with their doctor.

You need to discuss your individual situation with your doctor if

(You need more information other than what is in this decision aid)

- You found out that you have breast cancer during your pregnancy
- You have a strong genetic background
- Your doctor has recommended treatment options other than surgery (e.g., Stage IV breast cancer).

* If you are planning your pregnancy, inform and discuss with your healthcare professionals about your desire to become pregnant or have a baby before starting treatment. You may be able to obtain information about the effects of anti-cancer drug treatment and hormone therapy on pregnancy ahead of starting treatment, so that your doctor can decide your treatment plan.

Identify what role you would like to play in your treatment decisions.

You have identified that this decision support tool is suitable for your breast cancer situation.

Another important thing to consider is what decision-making role you prefer.

There are three main types of roles in decision-making.



If either or both of the above apply to you, you may find this decision aid helpful.

If you would prefer someone else, such as a doctor or a family member, to make the decision for you, you may not find the information in this section useful. For example, you could read this decision aid with your family and use it to check whether your doctor has made the right decision for you.

You can use this decision aid to read, write and discuss the contents.







Preparing for informed values-based choice

You need time to think about your surgical options.

When you are diagnosed with breast cancer, it is natural to want to eliminate the cancer as soon as possible. However, if you are diagnosed with early-stage breast cancer, there is no medical urgency to have imediate surgery. Time is also needed to carry out a full examination to decide the appropriate surgical procedure. It may take between one and three months from the time of diagnosis to surgery (depending on the medical facility).

Talk to your doctor about the time you have to think about your surgical options. This will give you sufficient time to calm down, obtain information and consider the best option.

It is crucial to know how much time you have to think carefully.

If the doctor suggests that you have to decide immediately or that this is definitely the better option, there must be a reason. Ask your doctor why you need to do so. If you wish, you can get a second opinion.

You are not alone.

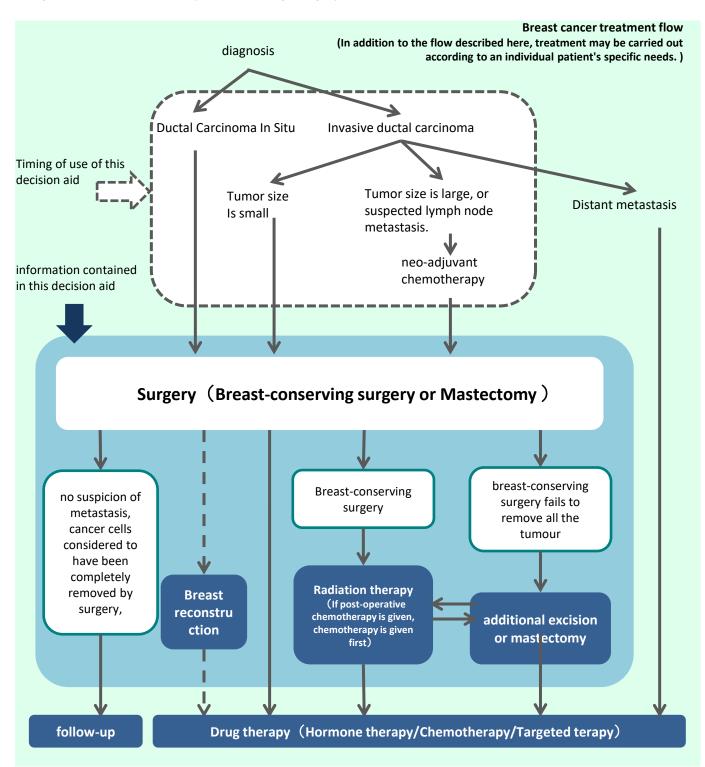
Your surgeons and nurses can help you to better understand your medical condition and assist you to consider carefully about what is important for you before you take any decision. When you are feeling distressed, you may not be able to comprehend the information well, it may take you a long time to understand it or you may not be able to think clearly.

Don't put up with the hard feelings. Emotional support is also important for you. Talk to your surgeons and nurses.



Breast cancer treatment flow

This decision aid focuses on the treatment flow for breast cancer, particularly the decision on the surgical method and whether to undergo breast reconstruction. The decision aid is designed to be used for patients diagnosed with cancer and required to undergo surgery.



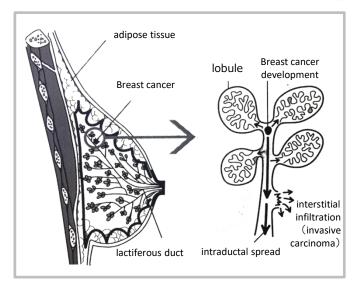
Know your options (medical knowledge of breast cancer surgery)

Choosing an appropriate treatment requires a proper understanding of the medical characteristics of the options. Learn about the options from a medical point of view. Then compare the different types of surgical procedures and the differences between them.

What is breast cancer?

The breast consists of mammary glands that produce milk, the ducts that carry the milk and the fat that supports them. Each mammary gland is divided into lobules, which are connected by duct-like structures called milk ducts.

About 90% of breast cancers originate from these ducts and are called ductal carcinomas. About 5–10% of breast cancers arise from the lobules and are called lobular carcinomas³⁾. Treatment of breast cancer includes surgery (surgical treatment), radiotherapy and drug therapy (e.g., hormone therapy, targeted therapy and chemotherapy).



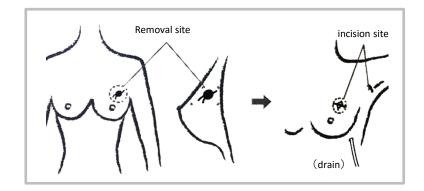
Basic knowledge about surgery

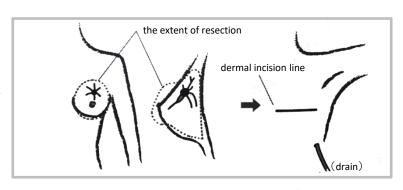
Breast-conserving surgery(Partial mastectomy)

Breast-conserving surgery (partial mastectomy) is a procedure in which only the part of the breast which is cancerous is $removed^{7)}$.

Modified ladical mastectomy(Mastectomy)

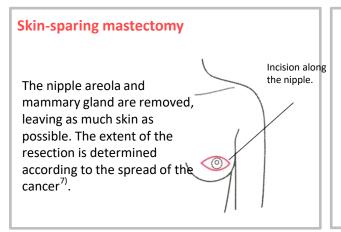
The breast is removed, leaving the pectoralis muscle, including part of the skin⁴⁾. Mastectomy is a surgical procedure in which the nipple, nipple areola and breast bulge are generally removed in their entirety. It is also called a total mastectomy.

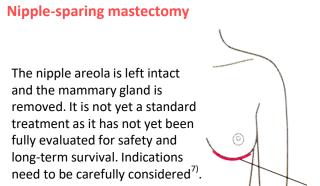




Subcutaneous mastectomy

The two methods listed on the previous page are the most commonly performed procedures, but the following two methods are also being increasingly used. However, there are conditions for the indications. If you want reconstruction after surgery, you may consult your doctor to see if this type of surgery is possible⁷⁾.

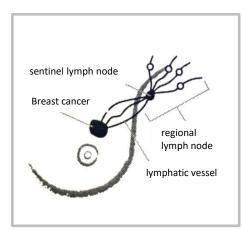




Axillary lymph node surgery

Sentinel lymph node biopsy

The sentinel lymph node is where lymph is assumed to first arrive from breast cancer. Sentinel lymph node biopsy is a surgical procedure in which only these sentinel lymph nodes are removed to check for the presence of metastatic cancer cells. If there are no cancer cells in the sentinel node, it is assumed that no other lymph nodes have metastasized, and lymph nodes other than the sentinel node are not removed. Sentinel lymph node biopsy is 95–97% accurate in identifying metastases⁵⁾.



Incision under the breast.

Axillary dissection

This is indicated for patients who have obvious metastases on pre-operative examination or who have been found to have metastases on sentinel lymph node biopsy. The lymph nodes in the axilla are buried in fatty tissue. The removal of these in one lump to a defined extent is called dissection⁵⁾.

Breast reconstruction

This is a surgical procedure to reconstruct a new breast that has been lost as a result of breast cancer surgery. There are two types of reconstruction: an artificial breast implanted under the muscle (artificial breast reconstruction) or a portion of fat or muscle from the back or abdomen transplanted into the breast (autologous tissue reconstruction). It can be performed following breast cancer surgery (one-stage reconstruction) or again months or years later (two-stage reconstruction)⁵⁾.

If you are considering reconstruction, you should inform your surgeon and plastic surgeon about your preference, gather information and discuss with them.

When mastectomy is considered more suitable than breast-conserving surgery

In the case of early-stage breast cancer, the medical outcome (outcome in terms of survival) is the same regardless of whether breast-conserving surgery or mastectomy is $chosen^2$.

However, mastectomy may be more appropriate in some cases considering following factors.

Mastectomy is more suitable than breast-conserving surgery.

The following are some reasons why mastectomy may be more suitable than breast-conserving surgery

☐ If the lump is large compared to the size of the breast
☐ If the cancer has spread widely
☐ If there are two or more lumps separated by more than one in the breast
☐ If you are pregnant or for any reason it is considered inappropriate or unsafe to have radiotherapy
☐ If the cancer is so close to the nipple that the nipple must also be partially or completely removed.

There are other cases not listed here where the doctor considers a mastectomy to be suitable.

Comparison of the benefits (pros) and risks (cons) of the surgical options from a medical point of view

Let's compare the benefits and risks of each options from a medical point of view.

Depending on your medical condition, you may be able to compare all the options before you, or you compare two options: mastectomy only or mastectomy plus breast reconstruction.

	Breast-conserving surgery followed by radiation therapy	Mastectomy	Mastectomy with reconstruction	
Survival rate	The survival rate remains the same regardless of which surgical procedure is chosen. By undergoing surgery, one can live longer than if one does not undergo surgery.			
Risk of recurrence in the breast	Marginally higher than with mastectomy (about 10% over a 10-year period ⁵).	Marginally lower compared to breast-conserving surgery (around 3% over a 10-year period).	The risk of recurrence in the breast is the same as for those who undergo mastectomy only.	
Risk of cancer being left behind	There is a minor risk of the cancer being left behind. In this case, the surgery is performed again.	There is little risk of leaving behind cancer.	There is little risk of leaving behind cancer.	
Treatment required in addition to surgery	Radiotherapy is usually required after breast-conserving surgery. Radiotherapy is given on five consecutive weekdays for five minutes each session for three to five weeks.	Radiotherapy may not be necessary in some cases. If lymph node metastases are found as a result of the surgery,	Same as for mastectomy. There is a risk that complications from reconstruction may require surgery.	
Need for chemotherapy or other drug therapy				

A comparison helps to understand which of the benefits and risks of each are the same and which are different.

Know your options (medical knowledge of breast cancer surgery)

The decision aid contains basic medical information about surgery, but it is not all-inclusive. You should understand the basics here and use it while discussing surgical procedures with your healthcare professionals. If you feel the need to gather information on your own, you can do so through books.

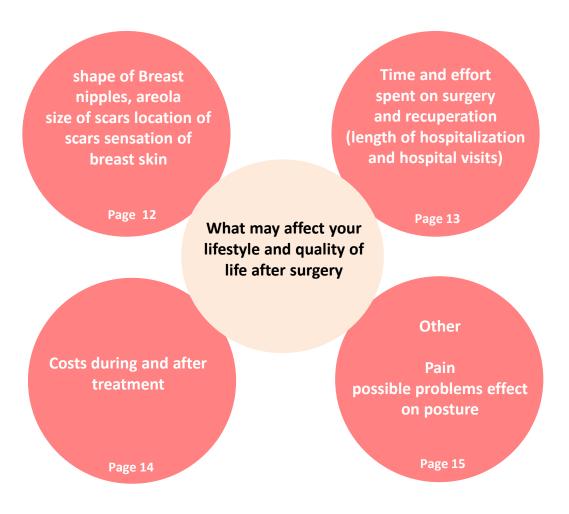
Whether or not you will be treated with medication after surgery, and what type of medication will be used, will be determined by examining the characteristics of the breast cancer tissue removed surgically, but we have not included information regarding this in this decision aid.

Surgery to remove the cancer is not the end of the process. Life continues long after surgery.

It is important to revamp your lifestyle and the impact on your daily life and to choose your treatment wisely.

For early-stage breast cancer, the medical outcome (outcome regarding survival) is the same regardless of which surgical procedure you choose ²). It is important to learn about both the effects of surgery and the impact on quality of life after surgery.

Let's look at the similarities and differences between the surgical options in four points that may affect your lifestyle and daily life.



● Shape of breast, nipple/areola, scar size, location and post-operative breast skin sensation

The table below shows the similarities and differences between the different options in terms of shape of breast, nipple/areola, scar size, location and post-operative breast skin sensation.

	of breast, hippie, areola, scar size, location and post-operative breast skin sensation.				
	Breast-conserving surgery followed by radiation therapy	Mastectomy	Mastectomy with reconstruction		
shape of breast, nipple/areola	The appearance of the breast may be the same as before surgery or it may be deformed due to the location, size and spread of the cancer. Whether the breast deformity is minor or major depends on the balance between the original breast size and the size of the cancer. A dimpling may occur after the tumor has been removed, or there may be a left—right difference in the position or orientation of the nipple.	There are several types of mastectomy. Removal of the entire breast, nipple and areola. The nipple and areola are left in place and the mammary glands are removed. The nipple, areola, and the mammary glands are hollowed out. You will have a flat chest after your breast is removed. The possible options depend on individual' situations. It is important to discuss this with your doctor.	Breast reconstruction can create a breast shape. If you have had your nipple or areola removed, reconstruction can also be used to create a nipple or areola. When and how to reconstruct -Timing- At the same time as breast cancer surgery. After a period of time following breast cancer surgery. -Methods- Reconstruction using an artificial breast There are advantages and disadvantages depending on the timing/method of reconstruction using autologous tissue (using part of the fat or muscle from the patient's abdomen or back). It is important to discuss this with your surgeon or plastic surgeon.		
scar size location	The size and location of the scar will depend on the location, size, and spread of the cancer.	The size and location of the scar will depend on the method used to perform the mastectomy.	The size and location of the scar will differ depending on the method of reconstruction. In the case of reconstruction using autologous tissue, the scar is larger than that of an artificial breast, and it is located where the skin, muscle, and fat are removed.		
post-operative breast skin sensation	There will still be sensation of the breast skin.	You may lose sensation of the skin in the area where the surgery was performed. Sensation may or may not recover over a year or two.	This is similar to mastectomy.		

● Time and effort spent on surgery and recuperation

The table shows the similarities and differences in the time and effort spent on surgery and recuperation by different surgical procedures.

	Breast-conserving surgery followed by radiation therapy	Mastectomy	Mastectomy with reconstruction
Length of hospitalization	The length of hospitalization depends on the medical institution where you are being treated and on your progress after the surgery. If the post-operative course is favorable, the patient may be discharged within a few days to a week. If the post-operative course is favorable, the hospital stay is usually shorter than for mastectomy or mastectomy plus breast reconstruction.	The length of hospitalization depends on the institution where the patient is treated and the course of the post-operative period. A relativery longer stay than for breast-conserving surgery is common.	The length of hospitalization depends on the treating medical institution and the course of the post-operative period. As a rough guide only, it can take from a day to a few days for artificial breasts (implants) and from about two weeks to a month for autologous tissue. Consult your doctor or plastic surgeon about the length of hospitalization due to reconstruction, regular visits to the hospital and how long you will need to stay.
Length of time	The time it takes to be able to perform your original activities may vary greatly from person to person. Recovery time after surgery may	The length of time until the patient is able to return to normal activities may vary greatly from person to person. Recovery time after surgery is	The length of time until you are able to do your original activities may vary greatly from person to person. Your recovery time may vary
ne to recovery	be shorter than with mastectomy or mastectomy plus breast reconstruction, if the patient is doing well after surgery.	generally somewhat longer than with breast-conserving surgery, even if the postoperative course is favorable.	depending on the different methods of reconstruction. Consult your surgeon or plastic surgeon for recovery time after
ery	The time and effort of daily visits to the hospital for radiation therapy for 3 to 5 weeks are required.		reconstruction.

Costs

The table shows the similarities and differences between the options about costs.

Breast-conserving surgery Mastectomy Mastectomy followed by radiation therapy with reconstruction

Costs related to standard treatment, including surgery for breast cancer, are covered by health insurance (public medical insurance).

In some cases, a high-cost medical care reimbursement system may also be available. Some coverage depends on the type of medical insurance that an individual has. If you have chemotherapy after surgery,

you will also have to pay for a wig. Wigs are not covered by health insurance and are self-paid.

After surgery, there may be costs for pads and bras to compensate for the appearance of the breasts (if the breasts retain their shape, there is no need to be purchase new ones).

You will have to pay for transport to and from hospital (every weekday for 3–5 weeks) while undergoing radiotherapy.

After surgery, you may have to pay for pads, artificial breasts and bras to compensate for the shape of your breasts.

Since 2013, some methods of reconstruction with artificial breasts are being covered by health insurance (autologous tissue has been covered by health insurance for some time).

Some methods are covered by health insurance and some are not.

Before reconstruction, talk to your plastic surgeon or surgeon about the costs as well.

Inform your healthcare professionals regarding any concerns you may have about your life after surgery.

By informing your healthcare professionals, you will be able to discuss with them specifically the best treatment options, together with the effects of the treatment and your life after treatment.











Other (pain, possible other problems, effect on posture)

The table also shows other similarities and differences between the options about pain, possible problems and postural effects.

	Breast-conserving surgery followed by radiation therapy	Mastectomy	Mastectomy with reconstruction			
Pain	You may experience pain at the surgical site shortly after surgery, which can be relieved with painkillers. You may experience heat and pain due to post-operative radiotherapy. You may still experience discomfort etc. after a period of time. Mammography is required for regular check-ups after surgery. Some pain may be felt during these procedures.	In the immediate post-operative period, you may experience pain at the surgical site, which can be relieved with painkillers. After some time, discomfort may still be experienced.	In the early post-operative period, pain at the surgical site may be experienced, but can be relieved with painkillers. For reconstruction with an artificial breast, pain may occur while the expander is creating a bulge.			
Other possible problems	Some people may feel depressed because of the change in the appearance of their breasts. Post-operative radiotherapy is required. Radiotherapy after surgery causes skin changes. If reconstruction is desired due to changes in the appearance of the breast, there is a risk that the radiotherapy will reduce the elasticity of the skin, making reconstruction difficult or causing problems after reconstruction.	Some people lose their breasts and become depressed. If lymph node metastases are present, additional radiotherapy may be recommended. You will need to ask your doctor's opinion on this.	-Reconstruction at the same time as mastectomy- It may be burdensome to think about both surgery and reconstruction. There is little or no loss of the breast. You may not have time to think carefully about reconstruction options. -Reconstruction afterwards- You may feel depressed by the temporary loss of your breasts. You can consider about reconstruction more gradually. You will have more surgeries. Some people are happy with their breasts after reconstruction, others are not. There is a risk of problems associated with reconstruction.			
Effect on Posture	Compared to a mastectomy, the effect on postural balance may be marginal, but some patients may feel that their postural balance has been compromised. The extent to which postural balance is affected may vary from person to person.	Losing one breast to a mastectomy can cause postural imbalance and neck and shoulder pain in some patients. The extent to which postural balance is affected may vary from person to person.	Compared to a mastectomy, postural balance may be less affected, but some patients may feel that their postural balance has been compromised. There are individual differences in the effects of postural balance.			



You have learnt about your options from two aspects: the medical aspect and the impact on your lifestyle/day-to-day life. It is important that your decision is well informed and based on your values.

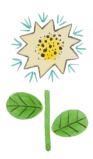
Once you are clear about your values, you are more likely to discuss your surgical choices with your surgeon.

Pages 18–21 provide four perspectives to help you clarify what is most important to you, so you can weigh up or check your concerns. As you gather information, talk to healthcare professionals and discuss with your family, your initial ideas about what you want to care for may change.

As long as you do not feel burdened, you may take some time in the run-up to your surgery to review and reevaluate what you have ticked off your list.







■ Shape of breast, nipple/areola, scar size, location and post-operative breast skin sensation

Thinking about the shape of the breast and the scars helps to visualize the prospects for life after surgery.

For example, will the appearance of the breast change, and

- Will I lose my femininity?
- How will my children and grandchildren react? Will I be able to bathe with them?
- Will I be able to go to hot spring again? Will the pads I use to compensate become a nuisance?
- Will my relationship with my partner change?

You may feel worried about these things. But not all is lost. There are many things you can learn to cope with and deal with successfully. Consider the table below to see how important each thing is to you, with 0 meaning 'not important' and the higher the number, the more important it is.

Circle the number that applies to how important it is to you. You can choose from the following or examine each one individually.

	not important important	
How important is it for you to keep your breasts?	0 1 2 3 4 5	
How important is it to you that you can feel the skin of your breast?	0 1 2 3 4 5	
If you have a mastectomy, how important is it that the shape of your breast is as close as possible to its original shape?	0 1 2 3 4 5	
If you were to have a mastectomy, how important would it be for you to have breast reconstruction simultaneously?	0 1 2 3 4 5	

You may also want to examine, for example, if necessary, you can ask your doctor questions in the run-up to surgery.

\sqcup How will the shape o	f my breasts	change if I u	ndergo surgery?
-------------------------------	--------------	---------------	-----------------

☐ Where and how long is the scar expected to remain?

(For example, do I still want to wear fashionable open-breasted dresses after the surgery?)

(I would like to know if there is a way to make the scars as inconspicuous as possible and whether this would be suitable in my case).

The risk of cancer recurrence in the breast after surgery and the risk of tumor being left behind

The risk of cancer recurrence in the breast after surgery differs only marginally depending on the surgical method.

The risk of tumor being left behind also differs. It may be difficult to think about this before surgery. However, thinking about this will help you envision how you feel after surgery.

In the table below, we can weigh the factors, with 0 meaning "not important" and a higher number meaning "important". Circle the number that best describes how important it is to you. You may choose from the following or consider them one by one.

	not important important
How important to you is a difference of a few percent in the risk of cancer recurrence in breast due to different surgical procedures?	0 1 2 3 4 5
How important to you is to reduce the chance of tumor being left behind?	0 1 2 3 4 5
How important is it to you to eliminate the risk of reoperation due to leftover cancer?	0 1 2 3 4 5

You may also consider the following

If I chose breast-conserving surgery and the chance of cancer recurrence in the breas	st was
only slightly higher, would that be acceptable?	

■ Would I feel more comfortable having my entire breast removed?

■ Time and effort spent on surgery and recuperation

The time and effort spent for treatment and recuperation differ depending on the method of surgery. Specifically, the length of hospitalization at the time of surgery, the time required for recovery after surgery, and whether radiotherapy is necessary after surgery differ (the length of hospitalization at the time of surgery varies depending on the facility where the patient receives treatment. Recovery time also varies from person to person. Your lifestyle (work, housework, taking care of family members such as childcare or nursing care, hobbies, etc.) may dictate the amount of time and effort you can spend on treatment and recuperation.

For example, if you wish to continue working, you will need to consider how long you can take off from work and whether you will be able to attend daily radiation therapy after breast-conserving surgery.

Considering the amount of time and effort involved will help you envision your hospital stay for surgery, your hospital visits, and your outlook on daily life after surgery.

Examine how important the following points are to you. 0 means "not important" and the higher the number, the more important it is. Circle the number that applies to how important it is to you. How important is it to you that the recovery time and effort after surgery is minimal?

	not important important
If you have breast-conserving surgery, would you be able to attend radiotherapy every weekday for approximately three to five weeks, which would be necessary afterwards?	0 1 2 3 4 5

You may also want to consider the following

- If you have breast-conserving surgery, would you be able to attend radiotherapy every weekday for approximately three to five weeks, which would be necessary afterwards?
- ☐ If you choose breast reconstruction using an implant, would you be able to afford the hospital visits and the time required for the surgery?

Costs

The costs of surgery and post-operative costs can be discussed. In addition to the cost of breast cancer surgery, there are other costs such as hospitalization, transport costs for hospital visits, pads, breast prosthesis and bras.

In addition, if you have reconstruction, you will need to gather information on which methods are covered by health insurance (public medical insurance) and which are not. If you undergo non-surgical treatment, you will have to pay for that treatment. If you have chemotherapy, you will need to buy a wig.

Examine how important the following points are to you: 0 means "not important" and the higher the number, the more important it is. Circle the number that best describes how important it is to you.

	not important important
How important is it to you that the cost of treatment and the	
costs associated with treatment are as low as possible?	0 1 2 3 4 5

Other things to consider include

- ☐ Which treatments are covered by my private medical insurance?
- Where can I buy artificial breasts and special innerwear that can also be used after surgery? How much do they cost?



Make your own decision

Make sure you know how much you are ready to decide

You have the basic knowledge and have clarified what is important to you. Now let's see how ready you are to decide.

Check the boxes that apply to you.

Do you kno	w the benefits and risks of each option?
□Yes	□No
• Are you cle	ar about which benefits and risks matter most to you?
□Yes	□No
Do you hav	e enough support and advice to make a choice?
□Yes	□No
●Do you feel	sure about the best choice for you?
(It is importa	ant that you feel well-informed and congruent with your values.)
□Yes	□No
	The SUPE Test © O' Connor and Légaré 20088)

If you have a "No" to any one of the four above, you may not be fully prepared to make a decision yet. Is there anything you would like to do before you decide? Check the items on the following page to organize what you would like to do.

Make your own decision

Plan the next steps based on your needs.

You can also check the following items to prioritize what you would like to do next and take action.

☐ Nothing. I am ready to make a decision.
☐I need to discuss my options with
☐ I need to do more research on my options.
☐ I need to clarify which benefits (pros) and risks (cons) are most important to me.
☐ In addition, I need to

Many people are unsure of what to do and how to proceed until they decide. Once you know what you want to do in the above, it will be easier to take the next steps.

If you still feel you don't have a good understanding of your options, you can re-read the chapter on Page 5 – "Know your options (medical knowledge of breast cancer surgery)" in this decision aid, or ask your doctor to explain it to you.

If you are still unclear about what is important to you and what you want to decide, you can re-read the chapter "Clarify what is important to you" on Page 17, or talk to other people, such as nurses, family members, or breast cancer survivors.



Conclusion

For informed and values-based choice

There is no right or wrong choice for early breast cancer surgery. If you share your values and preferences along with the professional opinion of your healthcare professionals, you can make a choice that is right for you.

Each choice has its benefits (pros) and risks (cons). To help you understand the benefits (pros) and risks (cons) of each choice from a medical perspective and to help you examine which benefits and risks you think are important from your values and to make it easier to communicate with others, such as healthcare professionals, family members and others who have been through it, this decision aid is designed to help you do this.

Development process of the decision aid

This decision aid is based on the opinions of breast cancer survivors, doctors, nurses and nursing and medical informatics experts.

The medical information contained herein has been verified by experts specializing in breast cancer treatment.

However, it does not cover all medical literature, but it does contain basic information.

It is not funded by any companies or other organisations related to medicine (no conflict of interest).

Updated information in the decision aid

The content of this decision aid is reviewed and updated as needed. When using the decision aid, please check the date and time the information is updated.

The information provided here is intended to facilitate communication with your healthcare provider in making your decision and to help you organize the information you know.

(Content last updated June 16, 2014)

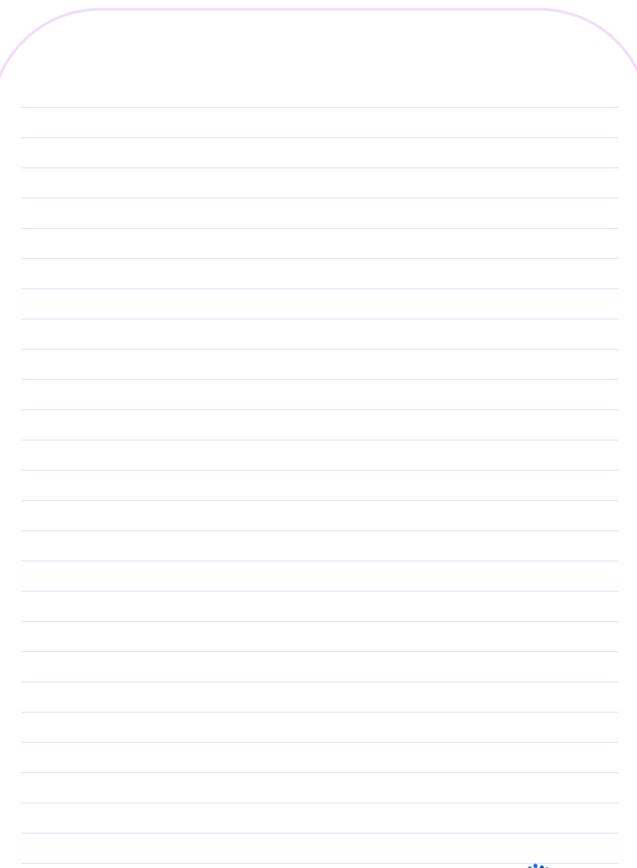
This decision aid is based on four such aids developed in other countries on the choice of breast cancer surgery.

<List of decision aids developed in other countries as a reference >

- Breast Cancer: Early-Stage Breast Cancer: Choosing Your Surgery (Health crossroad (Health Dialog))
 https://www.healthcrossroads.com/EXAMPLE/crossroad.aspx?contentGUID=c3c65b10-bd6f-409c-afd0-4bc15fec7145 [2014-01-10]
- Breast cancer: Should I have breast-conserving surgery or a mastectomy for early-stage cancer? (Healthwise)
 https://www.healthwise.net/cochranedecisionaid/Content/StdDocument.aspx?DOCHWID=tv6530#zx3718 [2014-01-10]
- Surgery Choices for Women with DCIS or Breast Cancer (National Cancer Institute) http://www.cancer.gov/cancertopics/treatment/breast/surgerychoices [2014-01-10]
- BresDex: Breast Cancer Decision Explorer http://www.bresdex.com/surgery_options.html [2014-01-10]

<References>

- 1. Stacey, D., Sammant R, Benett C. (2008). Decision making in oncology: A review of patient decision aids to support patient participation. CA: a cancer journal for clinicians, 58(5), 293-304.
- 2. Simone, N. L., Dan, T., Shih J., et al.(2012). Twenty-five year results of the national cancer institute randomized breast conservation trial, Breast cancer Research treatment, 132, 197-203.
- 3. 独立行政法人国立がん研究センターがん対策情報センター(2012). がんの冊子 各種がんシリーズ 乳がん 受診から診断、治療、経過観察への流れ.
- 4. 聖路加国際病院乳腺外科発行(2012). 乳がん患者のための冊子「乳がんの治療を受けられる方へ」.
- 5. 日本乳癌学会 編 患者さんのための乳がん診療ガイドライン 2012年版 金原出版株式会社.
- 6. 有森直子(2004). オタワ個人意思決定ガイド. http://www.kango-net.jp/decisionaid/public/pdf/otawa 01.pdf [2014-01-10]
- 7. 山内英子(2013). よくわかる最新医学 乳がん, 主婦の友社.
- 8. Légaré F., Kearing S., O'Connor A.(2008). Are you SURE? Assessing patient decisional conflict with a 4-item screening test, Canadian Family Fysician, 56, 308-314.
- 9. 中山和弘 岩本貴 編集(2012). 患者中心の意思決定支援 納得して決めるためのケア,中央法規.
- 10. W. Osaka, K. Nakayama. Effect of a decision aid with patient narratives in reducing decisional conflict in choice for surgery among early-stage breast cancer: A three-arm randomized controlled trial. Patient Education and Counseling, 2016, DOI: http://dx.doi.org/10.1016/j.pec.2016.09.011.







A decision aid for choice regarding surgical treatment

to help patients diagnosed with breast cancer make an informed and values-based decision

Developers

Wakako Osaka

Doctor's Program of Graduate School of Nursing, St. Luke's College of Nursing

Kazuhiro Nakayama

Professor at the Department of Nursing informatics, St. Luke's College of Nursing

Medical information supervision

Hideko Yamauchi

Director of the Department of Breast Surgical Oncology, St. Luke's International Hospital

Content last updated: June 16, 2014

This work was supported by JSPS KAKENHI Grant Number JP25670928. (Grant-in-Aid for Challenging Exploratory Research, Principal Investigator Kazuhiro Nakayama)