

deteksi dini

KANKER PAYUDARA

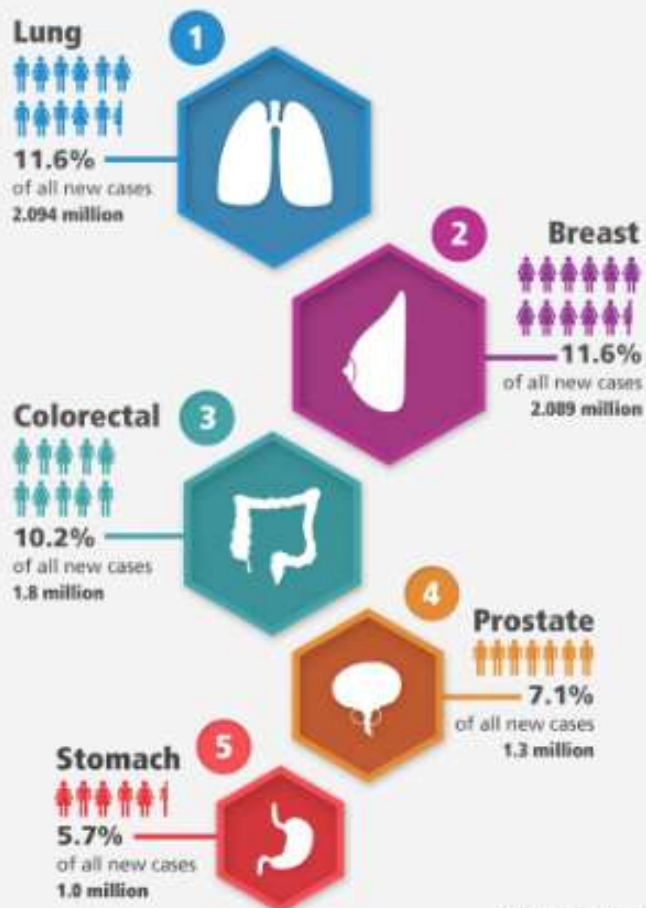
Oleh :
I PUTU ARYA DHARMA

PENDAHULUAN

- Di Indonesia, kanker payudara merupakan kanker dg insiden tertinggi no 2 setelah kanker leher rahim
- Insiden semakin meningkat dengan meningkatnya umur
- Seluruh wanita berisiko
- Lifetime risk :
 - 1970 ; 1 diantara 11 wanita
 - 2018 ; 1 diantara 8 wanita

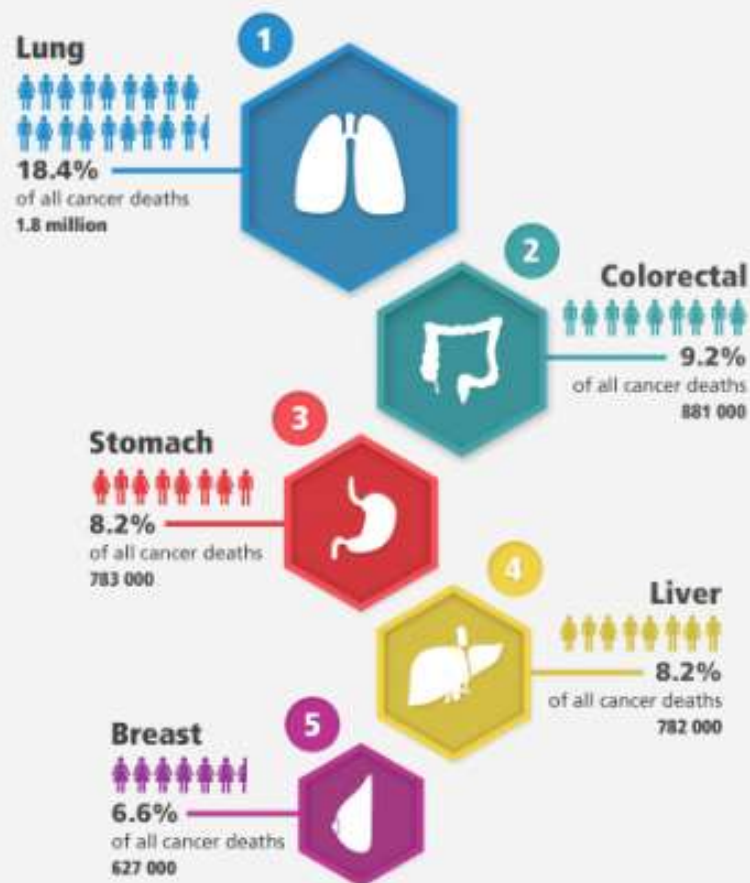
Percentages of new cancer cases and cancer deaths worldwide in 2018

Incidence



For both sexes, all cancers
for all ages, worldwide in 2018

Mortality



For both sexes, all cancers
for all ages, worldwide in 2018

Data source: GLOBOCAN 2018

Available at Global Cancer Observatory (<https://gco.iarc.fr/>)

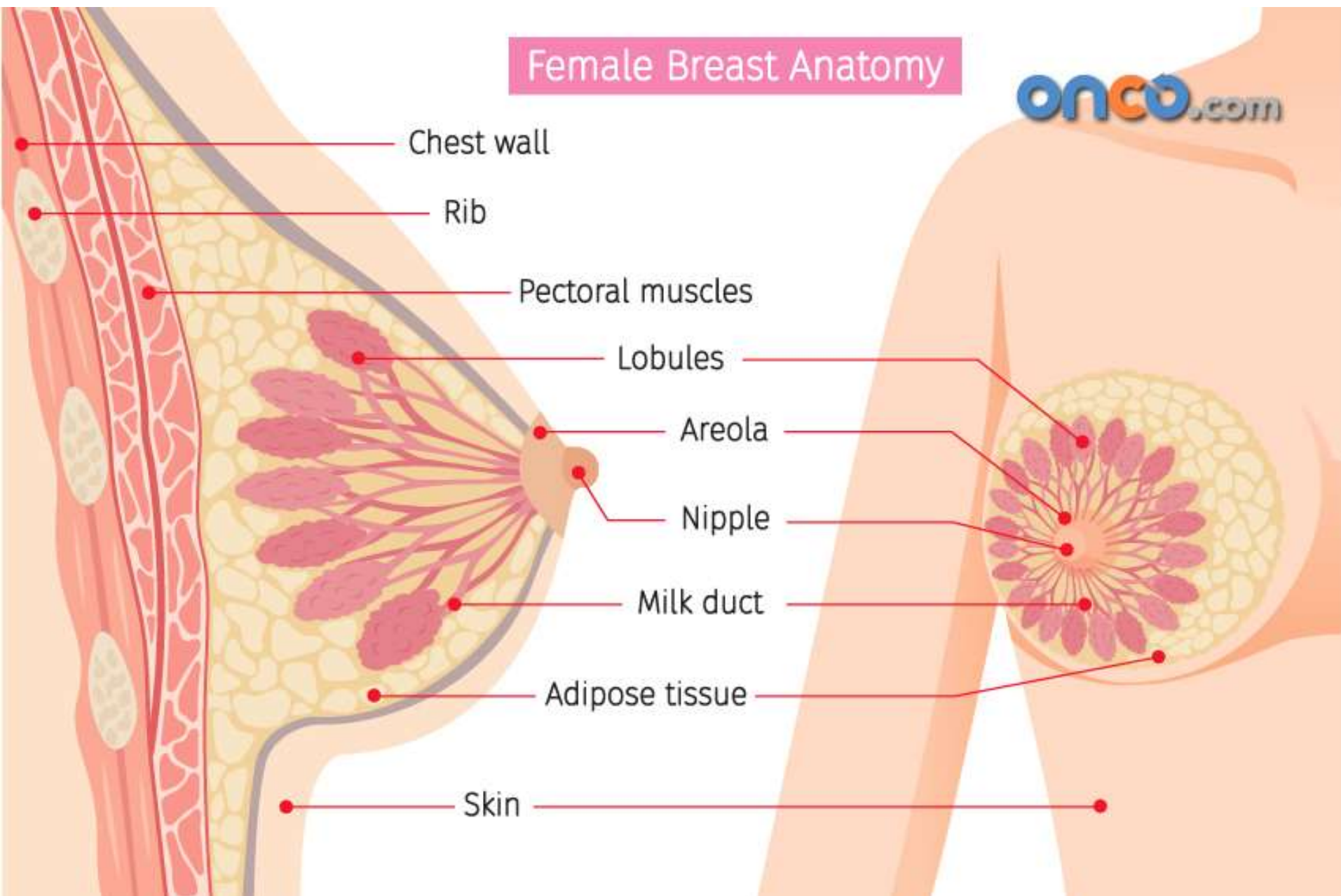
© International Agency for Research on Cancer 2018

ANATOMI PAYUDARA

- Payudara merupakan elevasi dari jaringan glandular dan adiposa yg tertutup kulit pada dinding dada.
- Melekat pada otot pektoralis mayor.
- Ukuran tergantung variasi jumlah jaringan lemak dan jaringan ikat, bukan pada jumlah glandulanya.

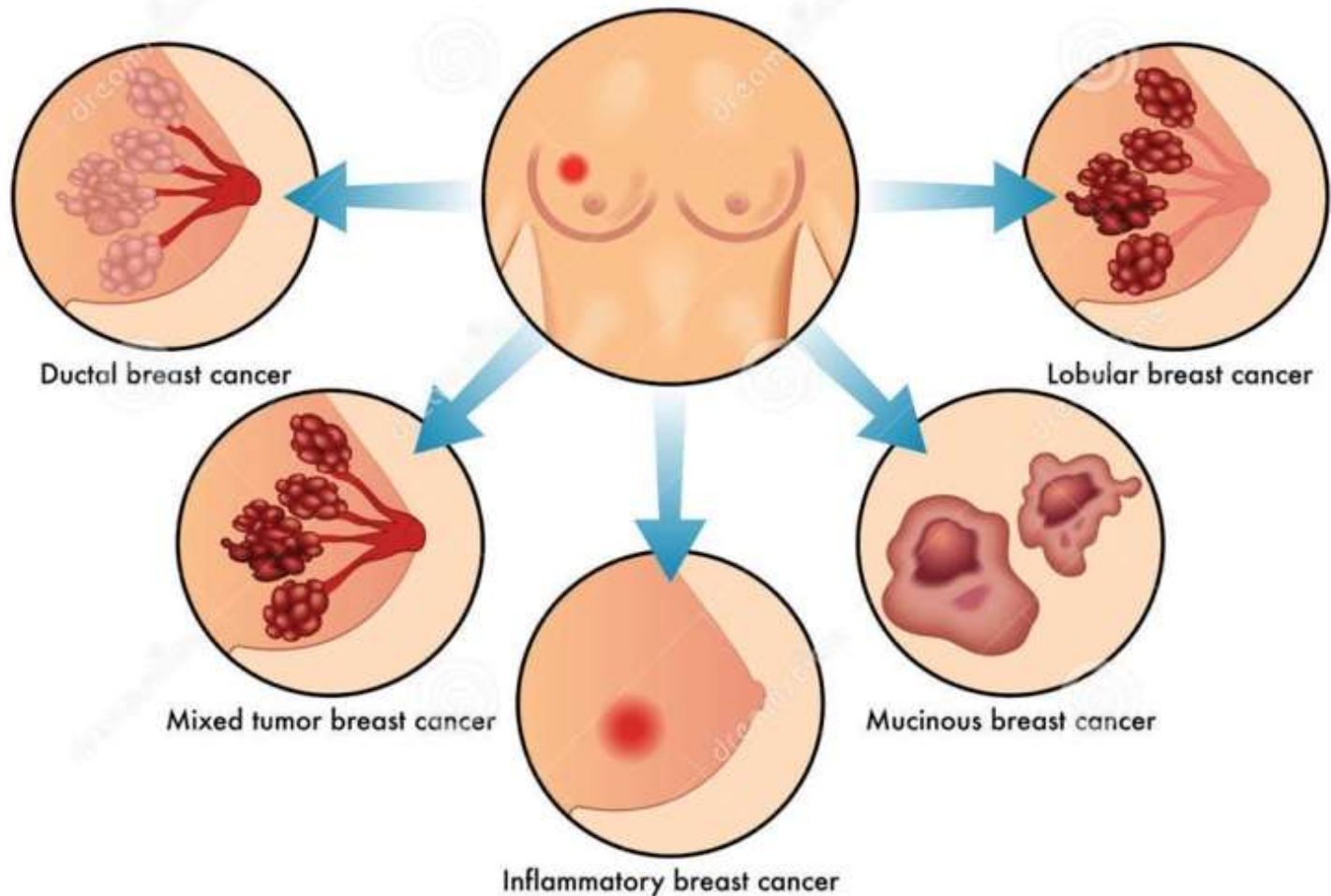
Female Breast Anatomy

onco.com



JENIS KANKER PAYUDARA

Types of Breast Cancer



PENYEBAB KANKER PAYUDARA

- Sebagian besar disebabkan oleh abnormalitas genetik (90 – 95%).
- Hanya 5 – 10% yang didapatkan dari faktor keturunan baik ibu atau ayah.
- Sampai sekarang penyebab pasti masih belum dapat dijelaskan.

FAKTOR RISIKO

- Tidak Dapat Dirubah :
 - ✓ Jenis Kelamin ;
 - ✓ Ras ;
 - ✓ Umur ;
 - ✓ Riwayat keluarga ;
 - ✓ Riwayat menstruasi ;
 - ✓ Riwayat menderita kanker di tempat lain ;

FAKTOR RISIKO

- Dapat Dirubah :
 - ✓ Riwayat melahirkan anak dan menyusui ;
 - ✓ Obesitas ;
 - ✓ Makanan ; lemak dan alkohol
 - ✓ Aktivitas fisik ;
 - ✓ Penggunaan terapi hormonal ; KB, HRT
 - ✓ Riwayat terpapar radiasi ;
 - ✓ Densitas payudara

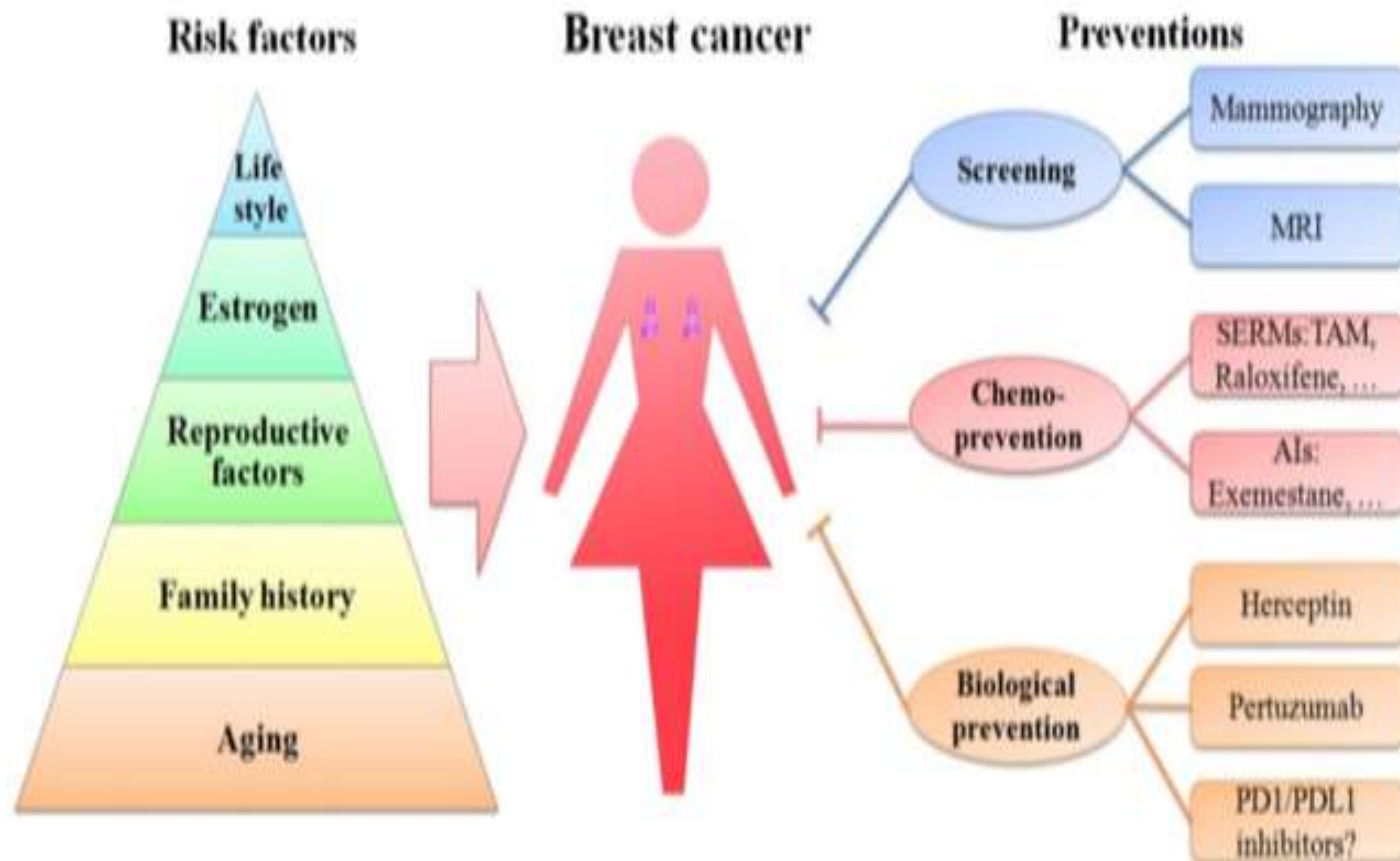


Figure 2. Schematic diagram of risk factors and preventions of breast cancer. Age, family history, reproductive factors, estrogen and life style are five important risk factors of breast cancer, represented in the pyramid chart. Screening (mammography and MRI), chemoprevention (with SERMs and AIs) and biological prevention (using Herceptin and pertuzumab) are currently being used to prevent breast cancer. PD1/PDL1 inhibitors are immunotherapy drugs and might be promising strategies in treating TNBC.

Signs & Symptoms of Breast Cancer



Visible lump
in armpit



Lump in
the breast



Dimpled or
depressed skin



Swelling of all
or part of breast



Nipple changes
or inversion



Pain in breast



Skin irritation or
textural change



Bloody discharge





DIAGNOSIS

- TRIPPLE DIAGNOSTIC :

KLINIS	IMAGING	PATOLOGI
<ul style="list-style-type: none">• Anamnese• Pem Fisik	<ul style="list-style-type: none">• USG Payudara• Mamografi• Foto Toraks• USG Hati	<ul style="list-style-type: none">• FNAB• Open Biopsi

STADIUM

- SISTEM TNM

Tumor size	Tumor size < 2 cm	Tumor size 2-5 cm	Tumor size > 5 cm	Tumor extends to skin or chest wall
T	 T1	 T2	 T3	 T4
Lymph Nodes	N0	N1	N2	N3
N	No lymph node metastasis	Metastasis to ipsilateral, movable, axillary LNs	Metastasis to ipsilateral fixed axillary, or IM LNs	Metastasis to infraclavicular/supraclavicular LN, or to axillary and IM LNs
Metastasis	M0	M1	<p>أحسن اونكولوجيست</p> <p>www.TheBestOncologist.com</p> <p>© The Best Oncologist™</p> <p>LN= Lymph Nodes; IM= Internal Mammary</p>	
M	No distant metastasis	Distant metastasis		

PENCEGAHAN

PRIMER	Mengurangi atau menghilangkan faktor-faktor resiko
SEKUNDER	Melakukan screening
TERTIER	Pengobatan yang tepat sehingga dapat mencegah komplikasi

6 Steps of Solid Tumor Management :

1. Diagnostic
2. Staging
3. Performance Status
4. Therapy Planning
5. Therapy Implementation
6. Evaluation

Standard **CANCER TREATMENT**



SURGERY



RADIATION



HORMONE
THERAPY



CHEMO-
THERAPY



TARGETED
THERAPY

LOCAL

SYSTEMIC



PROGNOSIS

Stage	5-year Relative Survival Rate
0	100%
I	100%
II	93%
III	72%
IV	22%

* www.cancer.org

Breast Cancer Survival Rates by Stage



Breast Cancer Survival Rates

STAGE 0 OR STAGE 1



The 5-year relative survival rate for women with stage 0 or stage 1 breast cancer is close to 100%.

STAGE 2



For women with stage 2 breast cancer, the 5-year relative survival rate is about 93%.

STAGE 3



The 5-year relative survival rate for stage 3 breast cancers is about 72%. But often, women with these breast cancers can be treated successfully^[1].

STAGE 4



Metastatic, or stage 4 breast cancers, have a 5-year relative survival rate of about 22%.

Breast cancers that have spread to other parts of the body are more difficult to treat and tend to have a poorer outlook.



Still, there are often many treatment options available for women with this stage of breast cancer^[2].

Relative survival compares survival rates for people with breast cancer to survival rates for people in the general population.

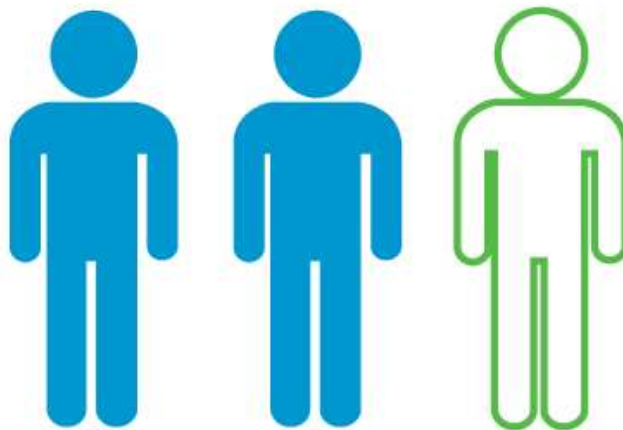
[1] <https://www.cancer.org/cancer/breast-cancer/understanding-a-breast-cancer-diagnosis/breast-cancer-survival-rates.html>

[2] American Cancer Society, December 20, 2017, <https://www.cancer.org/cancer/breast-cancer/understanding-a-breast-cancer-diagnosis/breast-cancer-survival-rates.html>

Cancer screenings are medical tests done when you're healthy, with no signs of illness. They help find cancer early, when the chances for successfully treating the disease are greatest. Find out what cancer screenings are right for you, based on age, gender and family history.

2020

The Impact of Improved Cancer Screening



1 in 3
Cancer
Deaths Could
Be Prevented
With Earlier
Detection

BREAST CANCER SCREENING

1. BREAST SELF EXAMINATION (BSE) = SADARI
2. CLINICAL BREAST EXAMINATION
3. MAMOGRAFI
4. PEMERIKSAAN IMAGING YG LAIN
 1. USG
 2. MRI
 3. CT
 4. PET

BSE = SADARI

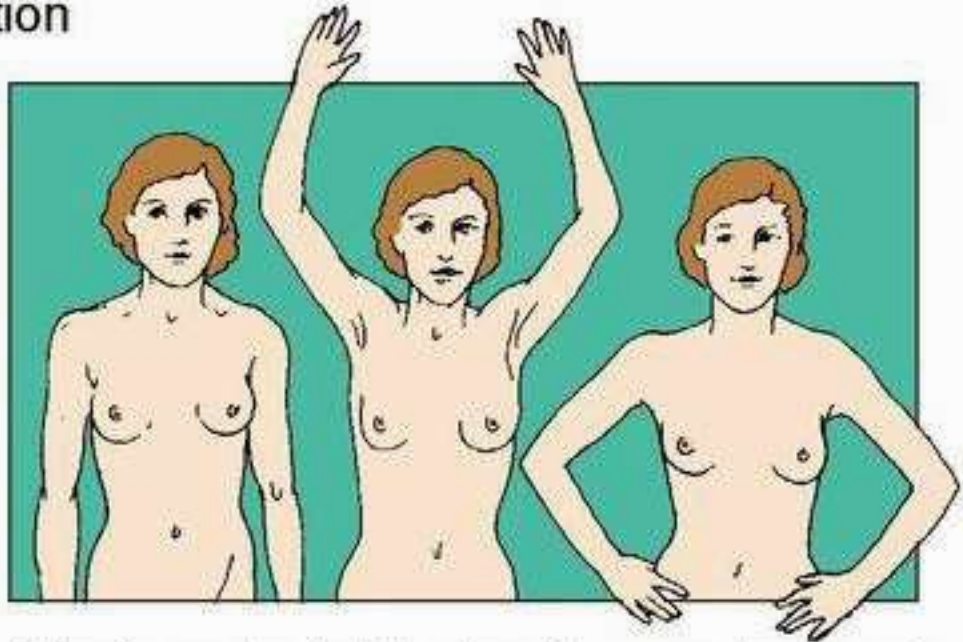
- Mulai usia 20 tahun
- 5 – 7 hari setelah selesai menstruasi
- Menopause : tanggal yang sama setiap bulan
- Hamil : tanggal yang sama setiap bulan
- Lakukan selama 5 - 10 menit
- Minimal 1 x sebulan
- Periksa seluruh payudara

SADARI

Breast Self-Examination



1. Examine your breasts in the shower.



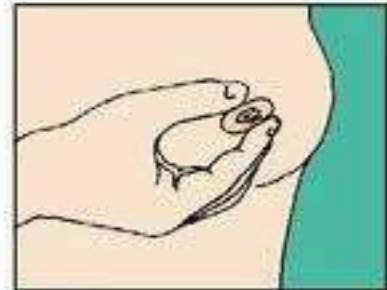
2. Examine your breasts in the mirror with your arms down, up, and on your hips.



3. Stand and press your fingers on your breast, working around the breast in a circular direction.



4. Lie down and repeat step 3.



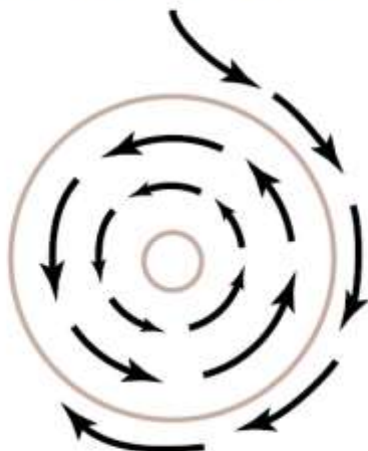
5. Squeeze your nipples to check for discharge. Check under the nipple last.

SADARI

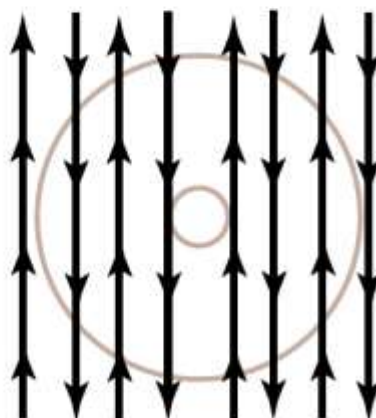
Search Patterns



Wedge



Circles



Lines

Finger Positions

Flat Pads

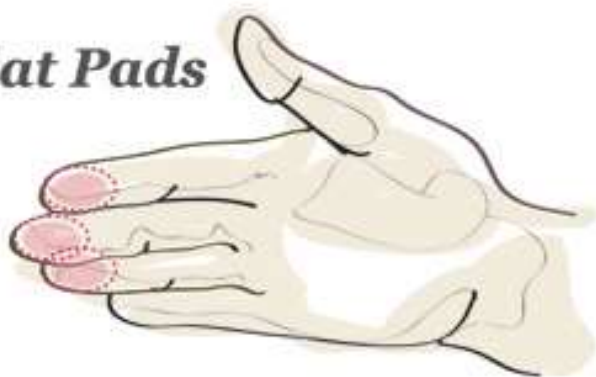


Table 3. Breast Cancer Screening Methods

Age (y)	Methods	Comments
Starting 20s	Breast self-exam: technique should be reviewed by a health professional during physical exam	Women may find a breast lump by chance or be aware of what is abnormal (lump, swelling, skin irritation, dimpling, nipple pain, or retraction). Women may feel stressed by trying to perform the self-exam technique correctly
20s to 30s	Clinical breast exam by a health professional at least every 3 y	Provides an opportunity for women and health professionals to discuss any changes in their breasts, early detection testing, and risk factors
40s and older	Per ACS, mammogram every year and continue as long as in good health. The USPSTF recommends biennial screening mammography for women aged 50-74 y	Very effective and valuable method to detect breast cancer; however, mammogram will miss some cancers and sometimes give false-positives
High-risk women	MRI and mammogram every year for women having a lifetime risk of breast cancer $\geq 20\%$; <i>BRCA1</i> or <i>BRCA2</i> gene mutation (or first-degree relative); radiation therapy to the chest between ages 10 and 30 y; or certain genetic syndromes ^a	MRI is not recommended for women with a lifetime risk of breast cancer $< 15\%$. MRI can detect cancer better than mammogram, but it can miss some cancers that mammogram can detect

^a *Li-Fraumeni syndrome, Cowden syndrome, Bannayan-Riley-Ruvalcaba syndrome, or first-degree relatives with one of these syndromes. ACS: American Cancer Society; BRCA: breast cancer susceptibility gene; USPSTF: U.S. Preventive Services Task Force. Source: References 1, 17.*

SCREENING

ACS Guidelines for Cancer Detection

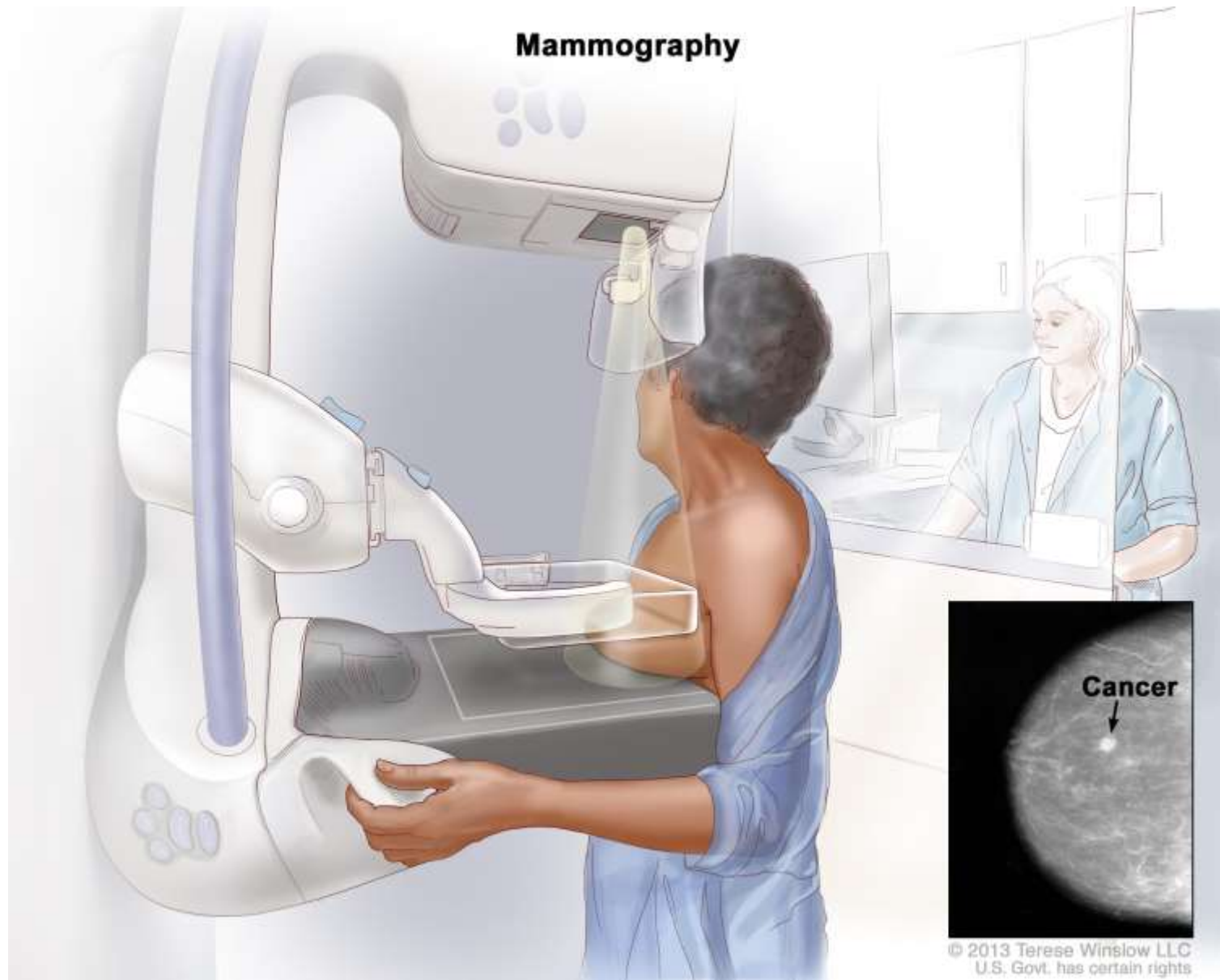
Age	Recommendation
20	Self Exam Monthly
20-40	Physician Exam every 3yrs
40+	Physician Exam every 1yr
35-40	Initial Mammogram
40-49	Mammogram every 1-2yrs
50+	Mammogram every 1yr

Table

**NATIONAL ASSOCIATION RECOMMENDATIONS FOR BREAST
CANCER SCREENING**

Organization	Recommendations for Mammography Screening
National Cancer Institute	Women 40 years and older should have a mammogram every 1 to 2 years. Women who are at higher than average risk of developing breast cancer should talk with their health care providers about whether to have mammograms before age 40 and how often to have them.
American Cancer Society	Women 40 years and older should have a yearly mammogram and should continue to do so for as long as they are in good health.
The American College of Obstetricians and Gynecologists	Mammography every 1 to 2 years for women aged 40 to 49 years. Mammography every year for women 50 years or older.
American College of Radiology	Women 40 years and older should have a screening mammogram every year.
US Preventive Services Task Force	Before age 50, the decision about when to start screening every 2 years should be an individual one, taking into account a woman's risk factors and values regarding the specific benefits and harms of mammography. Women aged 50 to 74 years, mammography screening every 2 years.

MAMOGRAFI



MAMOGRAFI

- SANGAT BERMANFAAT UTK WANITA 40-70 TH
- CEPAT
- HARGA RELATIF TERJANGKAU
- SENSITIVITAS MENURUN PADA "DENSE BREAST"
DAN PREMENAPAUSE
- RADIASI
- KURANG NYAMAN

USG

- BISA SEBELUM ATAU SESUDAH MAMOGRAFI
- MURAH
- CEPAT
- TANPA RADIASI
- BEBERAPA KASUS SULIT MEMBEDAKAN ANTARA JARINGAN NORMAL DAN KANKER
- PERLU OPERATOR YANG BERPENGALAMAN

MRI

- BELUM RUTIN
- MAHAL
- SENSITIVITAS YG TINGGI ; OVER DIAGNOSIS
- INDIKASI ;
 - INCONCLUSIVE FINDINGS
 - UNKNOWN PRIMARY
 - MENDIAGNOSIS PAGET DS
 - EVALUASI PENYEBARAN KE DINDING THORAX
- SCREENING WANITA DENGAN RESIKO TINGGI (RIWAYAT RADIASI, MUTASI GEN BRCA1/2)

Table 1. Conventional breast screening methods and their limitations.

Type	Use	Sensitivity *	Specificity *	limitations	Time
Mammography	Mass screening. Image bone, soft tissue and blood vessels all at the same time. Shadowing due to dense tissues	67.8%	75.0%	Ionizing radiation, low sensitivity and specificity, sensitivity drops with tissue density increases	few seconds
Ultrasound	Evaluate lumps found in mammography; Not suitable for bony structures	83.0%	34.0%	Low sensitivity; experienced operator is required during examination; low resolution image;	10–20 min
MRI	Young women with high risk; Images small details of soft tissues	94.4%	26.4%	Some types of cancers cannot be detected such as ductal and lobular carcinoma; expensive;	40–60 min
CT	To determine and image distant metastasis in a single exam	91%	93%	Low sensitivity; radiation risks; expensive scanner;	5 min
PET	Functional imaging of biological processes. To image metastasis or response to therapy	61.0%	80.0%	Ionizing radiation, radioactive tracer injection	90–240 min

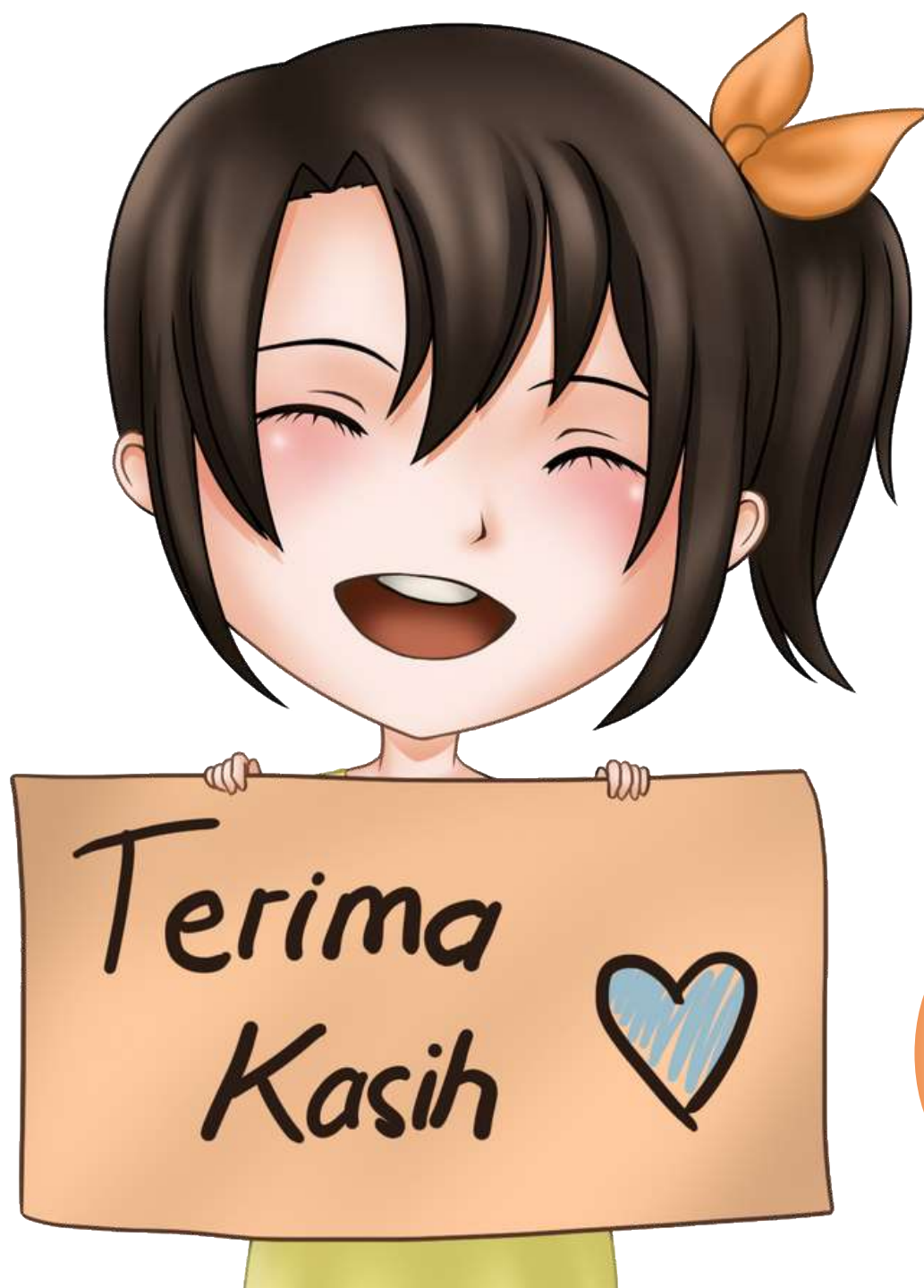
* Sensitivity and specificity are related to the types of cancer and breast composition.



BECAUSE OF SCREENING AND IMPROVED TREATMENT, FOR THE LAST 20 YEARS,
THE DEATH RATE FROM BREAST CANCER HAS BEEN DECREASING BY **2.4%** PER YEAR



**EARLY
DETECTION
SAVES
LIVES**



Semoga
bermanfaat