

Round Table Discussion

Payudara

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EMBRIOLOGI PAYUDARA

- ☐ Payudara adalah organ integumentery (modifikasi kelenjar kulit) yang terletak di bagian depan dinding dada.
- ☐ Merupakan penebalan ectodermal
- ☐ Tumbuh sejak minggu ke 6
- ☐ Terletak di garis susu



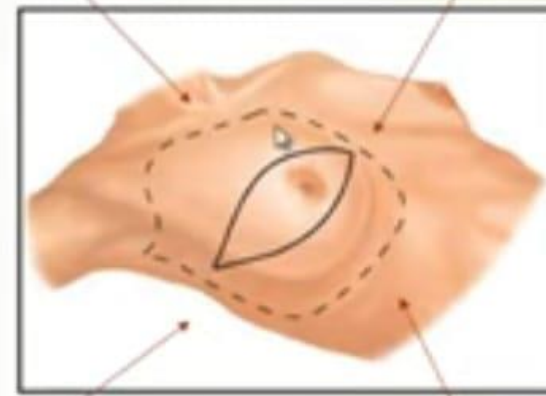
ANATOMI

Batas payudara :

- Superior : ICS II
- Inferior : ICS VI
- Medial : Linea parasternalis
- Lateral : linea midaxillaris
- Dasar : dinding dada

Superior
ICS II

Medial
Linea parasternal



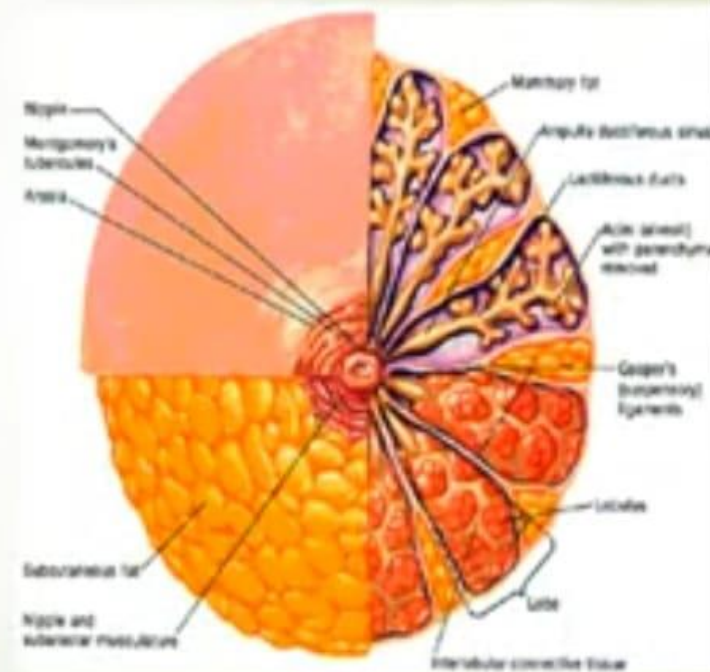
Lateral
Linea Axillaris Media

Inferior
Inframammary Fold
Costa VI

ANATOMI

Jaringan Payudara

- **Parenkim** : 10-15% jaringan payudara
 - Acini → Lobulus → Lobus → Duktus lactiferous
 - Sinus lactiferous
- **Stroma** : 85-90% jaringan payudara
 - Ligamentum suspensorium Cooper
 - Jaringan ikat, lemak, Saraf
 - Pembuluh darah
 - Pembuluh limfe



ANATOMI

Vaskularisasi

1. Arteri Mammaria Interna

cabang a.subklavia : bercabang menjadi a. interkostalis → a. perforantes : mendarahi mammae, m.pectoralis mayor dan kulit

2. Arteri Thorakalis Anterior

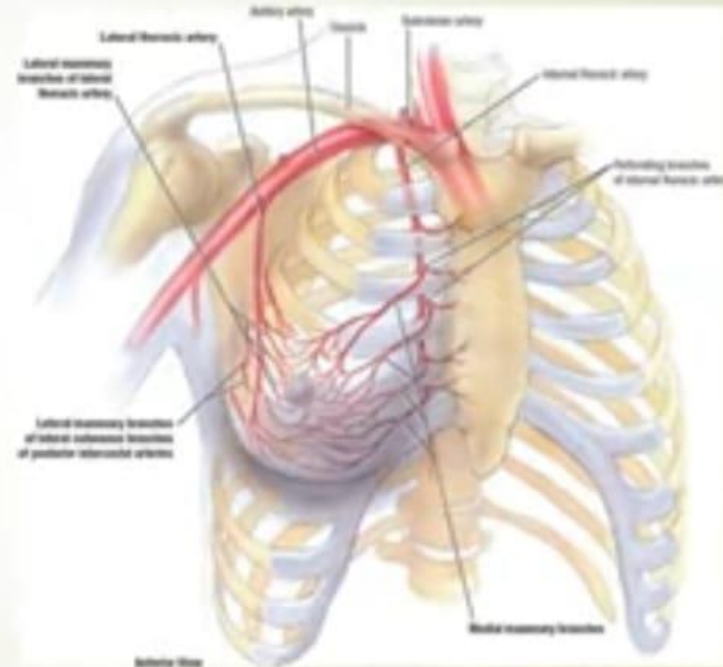
cabang a.axillaris atau a. thoracoacromialis

3. Arteri Thorakalis Lateralis

cabang a.axillaris : mendarahi mammae, m.pectoralis minor dan m.serratus anterior

4. Arteri Thorakalis Dorsalis

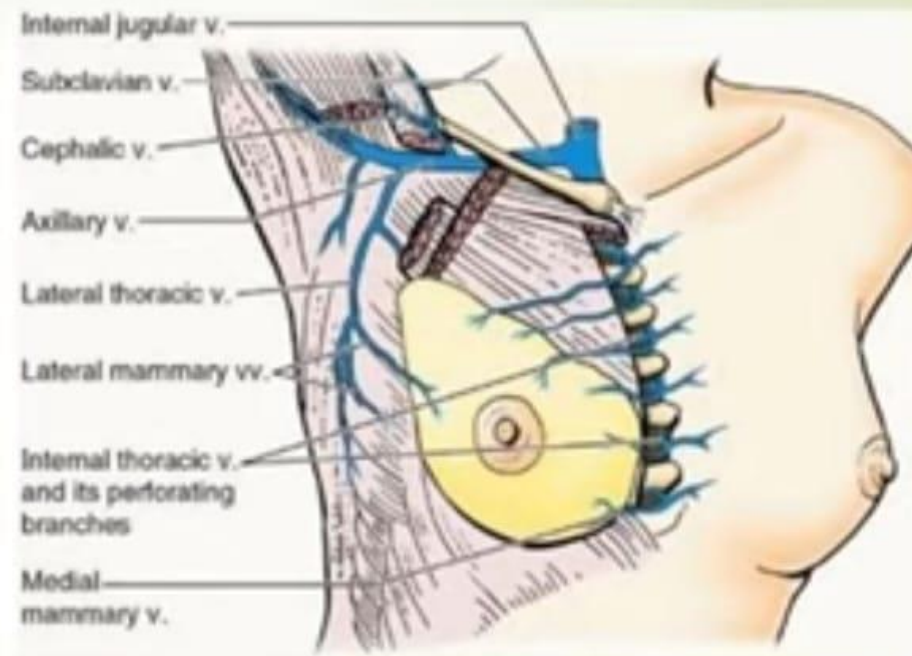
cabang a.axillaris ke m. latissimus dorsi dan m.serratus anterior



ANATOMI

ALIRAN VENA :

berjalan bersama
arteri kecuali
v.intercostalis ke
v.cava superior
melalui v. vertebralis
dan v.azygos



ANATOMI

Sistem Limfatik

- **linn MAMMARIA EKSTERNA** : 50% aliran limfe dari lateral payudara
- **linn SUBSCAPULARIS** : mengikuti vasa thoracodorsalis
- **linn CENTRALIS** : dekat v. axilaris
- **linn SUBCLAVICULARIS** : di apex axilla, mendapat aliran limfe dari ln. axilla atau ln. Supraclaviculara
- **LLNN SUPRACLAVICULARIS** : dari subclaviculara

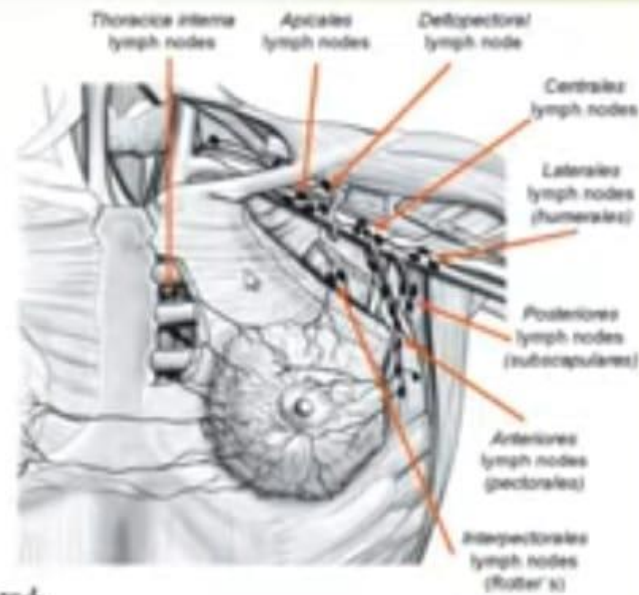


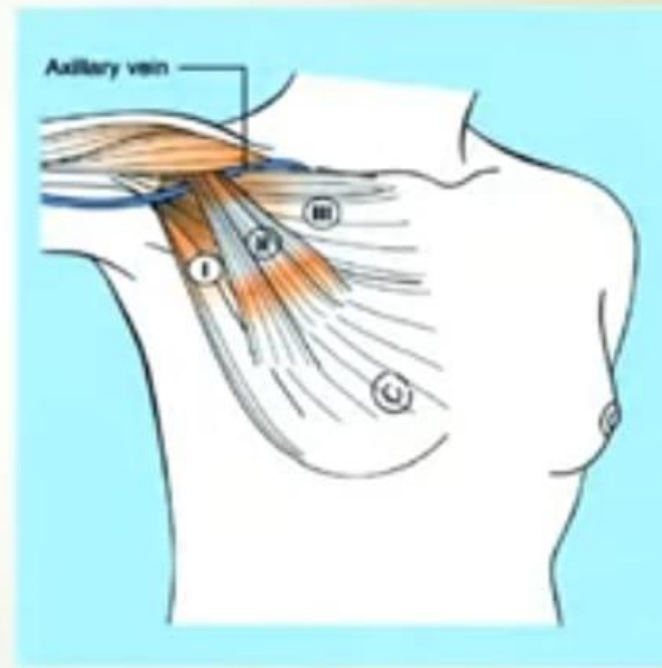
Fig. 3. Axillary, interpectoral and deltopectoral lymph node groups (anterior view of the left axillary region).

ANATOMI

Sistem Limfatik

BERG'S CLASSIFICATION:

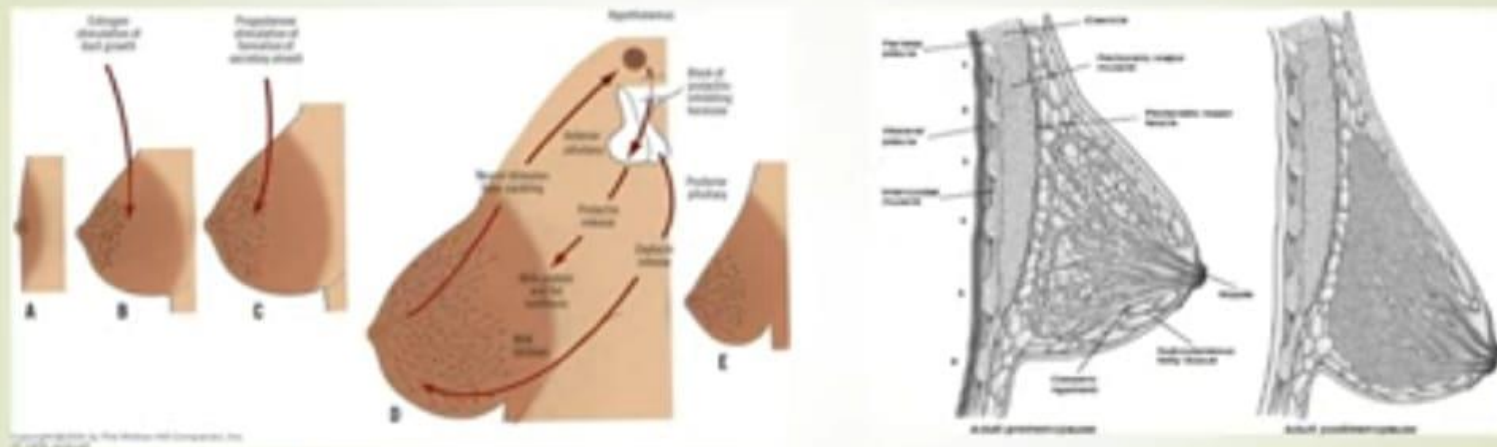
- Level 1 : lateral m. pectoralis minor
- Level 2 : posterior m. pectoralis minor
- Level 3 : medial m. pectoralis minor



FISIOLOGI

- ❑ Dipengaruhi oleh hormon
- ❑ Ada 3 macam perubahan payudara
 - Perubahan I
Masa Anak – Puber
 - Perubahan II
Masa Fertilitas
 - Perubahan III
Masa klimakterum – Menopause

FISIOLOGI PAYUDARA



- ☐ Payudara mengalami perkembangan sesuai dengan fasenya.
 - ☐ Pembentukan duktus dan kelenjar dipengaruhi oleh hormon
- A.** Bayi. **B.** Dewasa muda. **C.** Dewasa. **D.** Wanita menyusui. **E.** Postlaktasi.
F. Premenopause **G.** Menopause

TANNER SCALE OF BREAST DEVELOPMENT



- | | |
|------------|--|
| Tanner I | prepubertal: no glandular tissue: areola follows the skin contours of the chest (typically age 10 and younger) |
| Tanner II | breast bud forms, with small area of surrounding glandular tissue; areola begins to widen (age 10 – 11.5) |
| Tanner III | breast begins to become more elevated, and extends beyond the borders of the areola, which continues to widen but remains in contour with surrounding breast (age 11.5 – 13) |
| Tanner IV | increased breast size and elevation; areola and papilla form a secondary mound projecting from the contour of the surrounding breast (age 13 – 15) |
| Tanner V | breast reaches final adult size; areola returns to contour of the surrounding breast, with a projecting central papilla (age 15 y. and older) |

Kelainan Payudara



Kelainan Payudara

- Kongenital
- Gangguan Pertumbuhan
- Inflamasi
- Trauma
- Neoplasma (Jinak & Ganas)

Klasifikasi Kelainan Jinak Payudara

- Kelainan jinak payudara diklasifikasikan menurut kriteria ANDI (*Aberrations Of Normal Development And Involution Of The Breast*)
- Berdasarkan penyimpangan dari proses normal pada tahap :
 - Perkembangan payudara
 - Respon payudara selama siklus menstruasi
 - Selama proses involusi
- ANDI; kelainan pada payudara diklasifikasikan :
 - normal
 - penyimpangan (*aberration*)
 - penyakit (*disease*)

ANDI classification of benign breast disorders

Stage	Main clinical presentations		
	Normal process	Aberration	Disease
Early reproductive (15–25 years)	Lobular development Stromal development Nipple eversion	Fibroadenoma Adolescent hypertrophy Nipple inversion	Giant fibroadenoma Gigantomastia Subareolar abscess/mammary duct fistula
Mature reproductive (25–40 years)	Cyclical changes of menstruation Epithelial hyperplasia of pregnancy	Cyclical mastalgia Nodularity Bloody nipple discharge	Incapacitating mastalgia
Involution (35–55 years)	Lobular involution Duct involution – dilatation – sclerosis Epithelial turnover	Macrocysts Sclerosing lesions Duct ectasia Nipple retraction Simple epithelial hyperplasia	Periductal mastitis/abscess With atypia

KELAINAN BAWAAN PAYUDARA

1. AMASTIA
2. MAMMA AKSESORIS
3. MAMMA ABERANS

AMASTIA

- Jaringan payudara, areola dan puting susu tidak terbentuk/tidak ada akibat kelainan bawaan.
- Sangat jarang



KELAINAN BAWAAN PAYUDARA

Mamma Aksesoris

- Disebut juga **polymastia**, **supernumerary breasts**
- Ada payudara tambahan disamping 2 payudara yang ada.
- Terletak di garis susu
- Umumnya di ketiak



KELAINAN BAWAAN PAYUDARA

Mamma Abberan

- ✓ Kelainan letak
- ✓ Payudara yang tidak pada tempatnya
- ✓ Tidak terletak pada garis susu
- ✓ Biasanya tanpa areola dan puting



KELAINAN PERTUMBUHAN

Makromastia

- ✓ Hypertropi payudara
- ✓ Pembesaran merata pada kedua payudara.
- ✓ Respons berlebihan terhadap hormon
- ✓ Pubertal Macromastia
 - Dewasa muda*
- ✓ Pregnancy Macromastia
 - 1 diantara 100,000 Kehamilan*



KELAINAN PERTUMBUHAN

Ginekomastia

- ❑ Hypertropi payudara laki-laki
- ❑ Pembesaran payudara laki-laki
- ❑ Akibat ketidakseimbangan hormon



INFEKSI PAYUDARA

❑ Infeksi/inflamasi pada payudara disebut mastitis

- ✓ Biasanya satu sisi payudara
- ✓ Bengkak, kemerahan, nyeri, mengeras
- ✓ Disertai gejala sistemik seperti demam, lemah



❑ Jenis :

✓ Mastitis Puerperalis Akut

Infeksi payudara pada minggu pertama laktasi

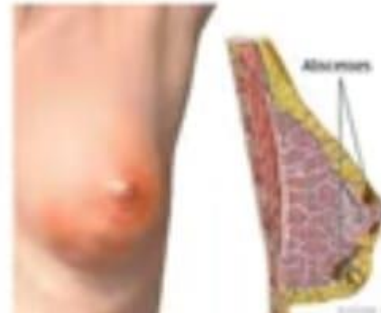
Disebabkan oleh kuman Stafilokokus

✓ Mastitis Tuberkulosa

✓ Absces

✓ Galaktokel

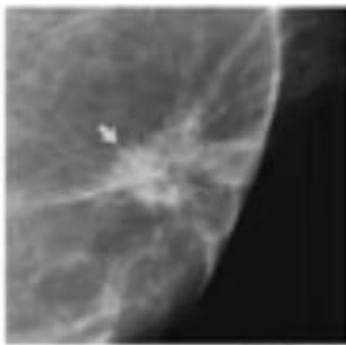
✓ Fistel Paraareola



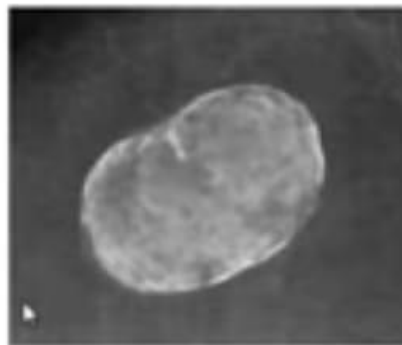
TRAUMA PAYUDARA

Necrosis Lemak

- Disebabkan oleh trauma
- Biasanya terjadi setelah aktivitas fisik
- Massa padat lunak, batas tidak jelas
- Biasanya tampak pada mammography



Fat necrosis manifesting as a spiculated mass



Densely calcified 3-cm area of fat necrosis 2 years after blunt trauma to the breast.

NEOPLASMA BENIGNA PAYUDARA

Nonproliferative

- Fibrocystic changes
- Simple cysts
- Lactational adenoma

Hyperplasia without atypia

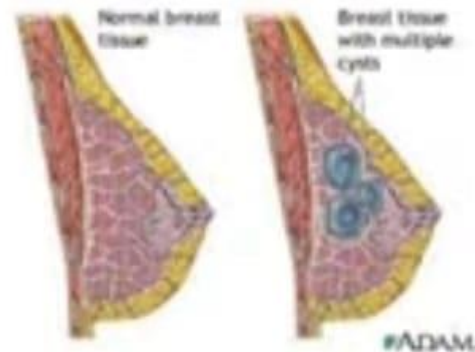
- Fibroadenoma
- Epithelial hyperplasia
- Sclerosing adenosis
- Intraductal papillomas

Hyperplasia with atypia

- Atypical Ductal Hiperplasia
- Atypical Lobular Hiperplasia

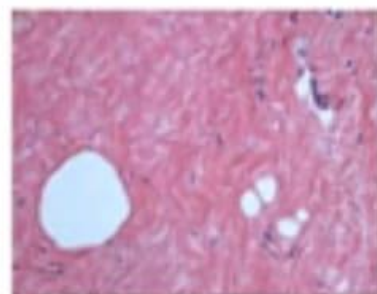
KISTA PAYUDARA

- Massa : cairan, bulat atau ovoid pada payudara
- Kelainan fisiologi lobular
- Dipengaruhi oleh hormon → hiperestrogenism.
- Mikrokista → Distensi + involusi lobus
- Makrokista → *simple* dan *apocrine cyst*

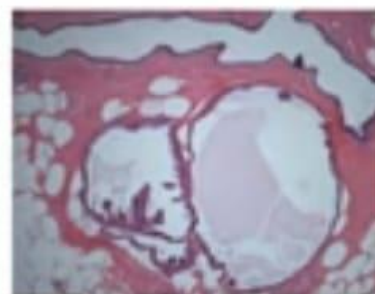


PENYAKIT FIBROCYSTIC

- Pada wanita premenopause
- Payudara bengkak dan mengeras premenstruasi
- Jaringan ikat yang berlebih



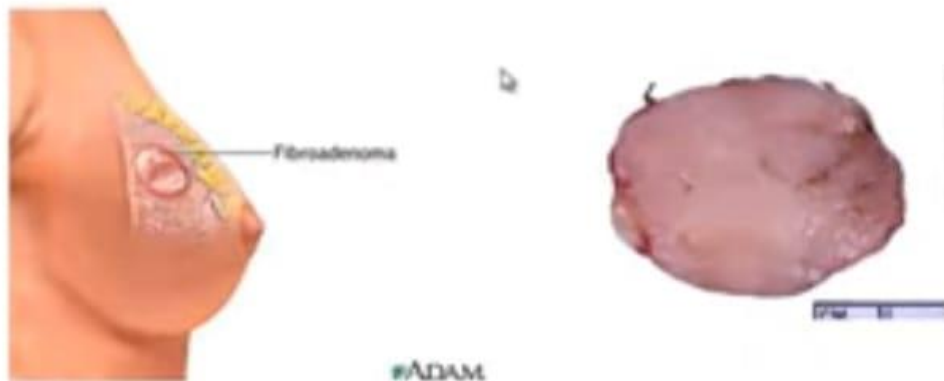
• Fibrous tissue



• Cystically dilated ducts
• $\pm$ Calcifications
• $\pm$ Ductal hyperplasia

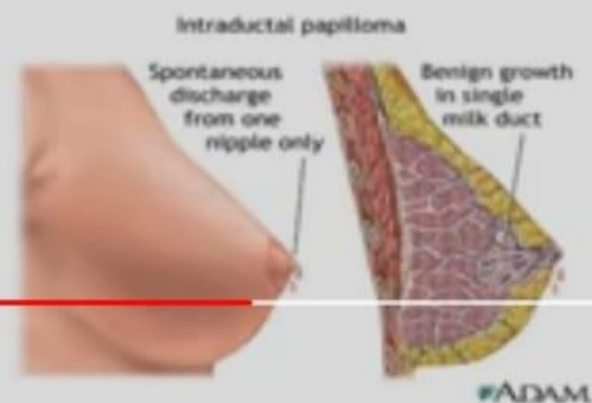
FIBROADENOMA

- Tumor jinak paling sering
- Sering pada wanita usia < 30 tahun
- Konsistensi padat, kenyal dapat digerakkan
- Lambat tumbuh (ipengaruhi oleh hormon)



INTRADUCTAL PAPILLOMA

- Berupa benjolan pada saluran (duktus) Sub-areola
- Ditandai dengan adanya benjolan dan bloody nipple discharge
- Biasanya terjadi satu sisi payudara



▶
10 detik

PHYLLOIDES TUMOR

- ▶ Adalah tumor yang berasal dari jaringan fibroepitelial payudara.
- ▶ Insidensinya sekitar 0,3-0,9%
- ▶ Bersifat jinak , namun juga bisa ganas .
- ▶ Karakteristik :
 - ✓ Adanya massa berukuran kecil → bertambah besar cepat
 - ✓ Payudara padat, Mudah digerakkan, batas tegas, lunak
 - ✓ Kulit nampak mengkilat dan vena- vena terlihat dengan sangat jelas



KANKER PAYUDARA

Kanker Payudara merupakan kanker terbanyak pada wanita di dunia

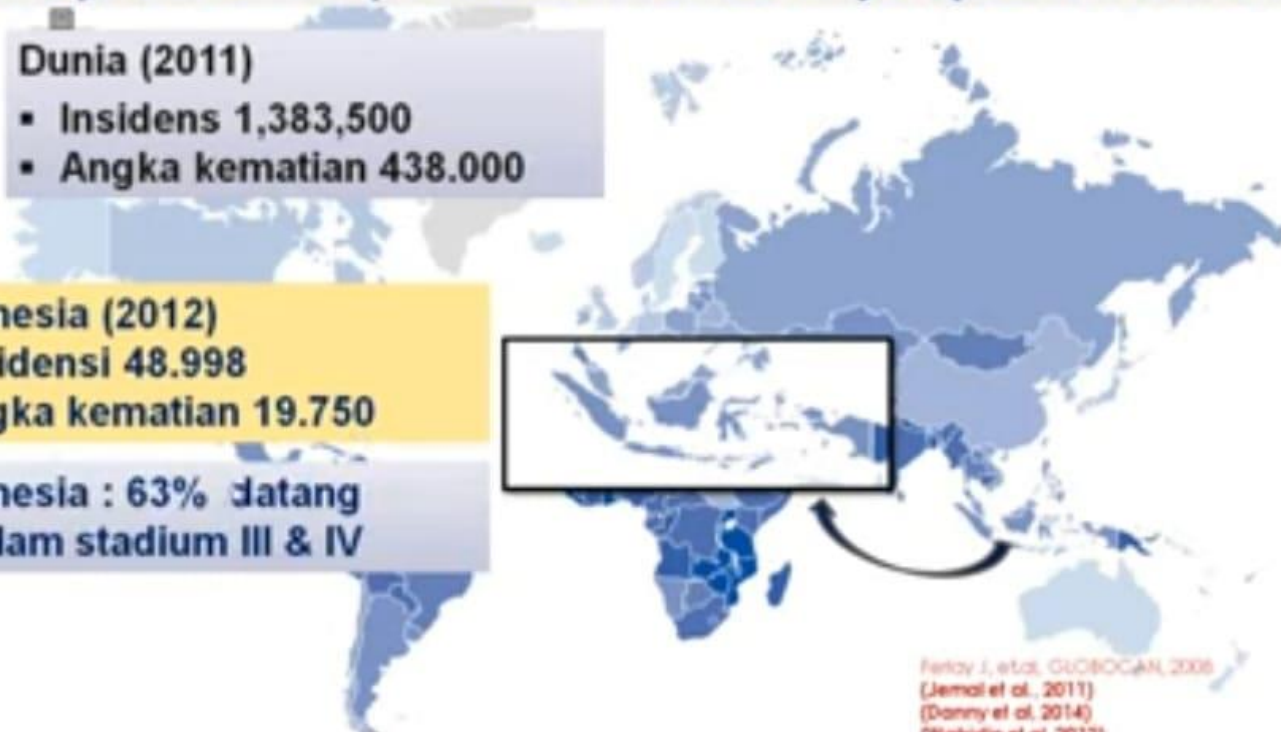
Dunia (2011)

- Insidens 1,383,500
- Angka kematian 438.000

Indonesia (2012)

- Insidensi 48.998
- angka kematian 19.750

Indonesia : 63% datang
dalam stadium III & IV

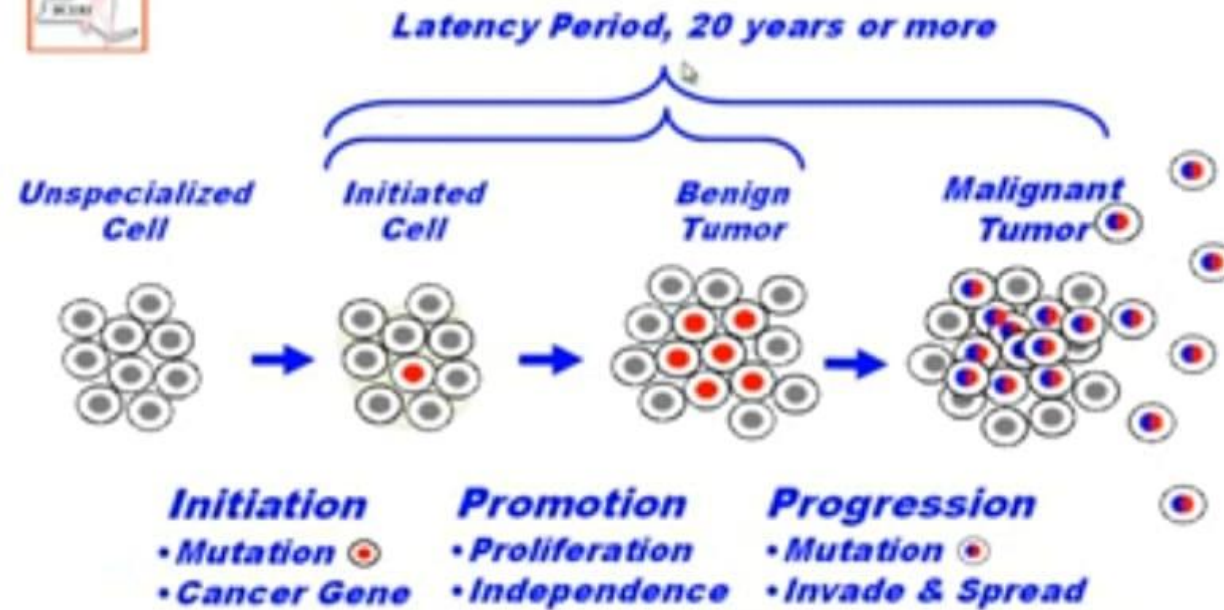


Ferlay J, et al. GLOBOCAN, 2008
(Jemal et al., 2011)
(Danny et al, 2014)
(Wahidin et al, 2012)
(Rhodes & Yip, 2012)

KANKER PAYUDARA

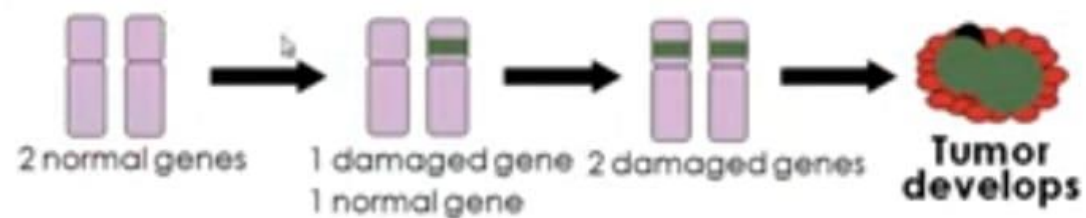
PENYEBAB

- ☐ Yang pasti ??
- ☐ Gen
- ☐ Hormon
- ☐ Diet

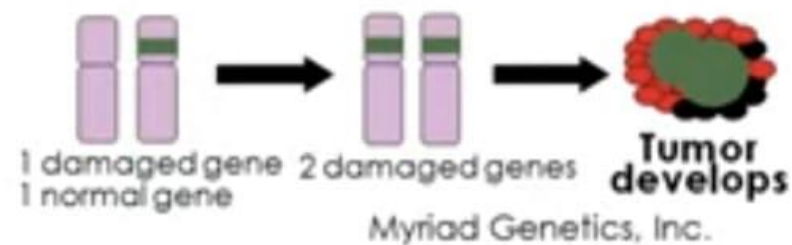


Carcinogenesis

CARCINOGENESIS



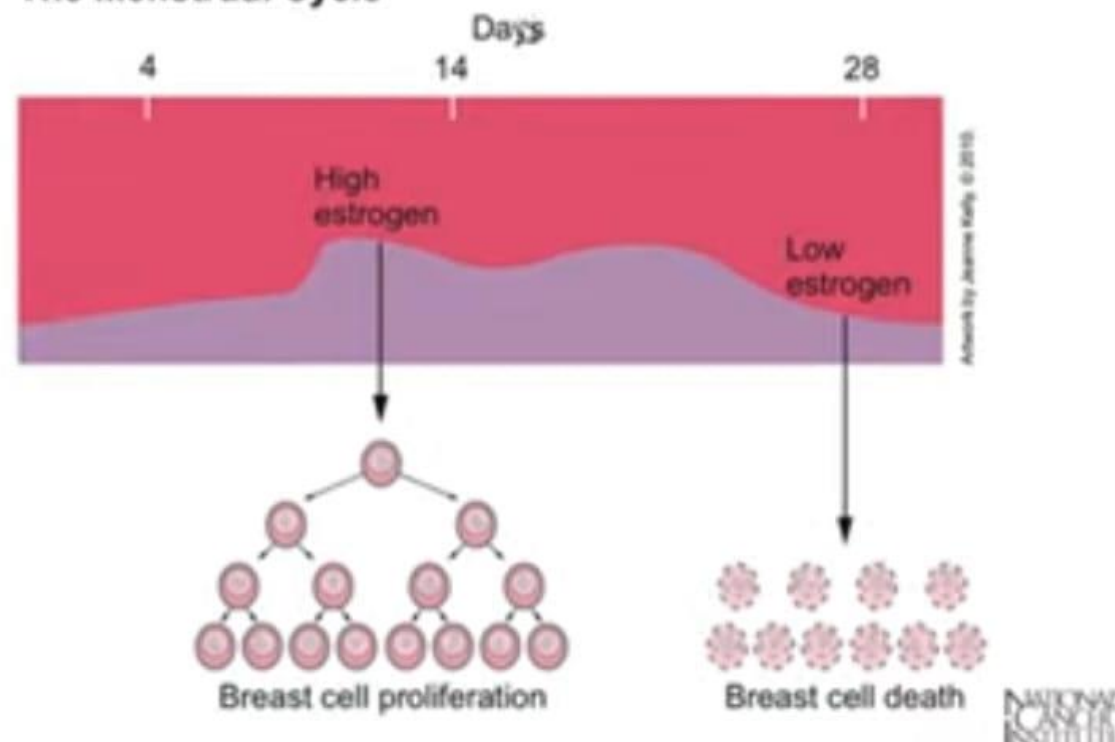
In hereditary cancer, one damaged gene is inherited.



Myriad Genetics, Inc.

Estrogen and Breast Cancer

The Menstrual Cycle



GEJALA DAN TANDA



Skin dimpling



Visible lump



Peau d'orange



Surface erythema



Surface ulceration



Recent nipple inversion



Blood-stained nipple discharge



Eczema around nipple (Paget's disease)

KANKER PAYUDARA

Faktor Resiko

- ◆ Riwayat keluarga
- ◆ Usia lanjut
- ◆ Haid pertama pada usia < 12 tahun
- ◆ Masih haid/menopause lambat (>50 th)
- ◆ Tidak pernah melahirkan/tidak kawin
- ◆ Anak I dilahirkan setelah usia 35 tahun
- ◆ Tidak menyusui anak
- ◆ Pernah operasi payudara sebelumnya
- ◆ Pernah radiasi daerah dada
- ◆ Diet lemak ↑

PENATALAKSANAAN

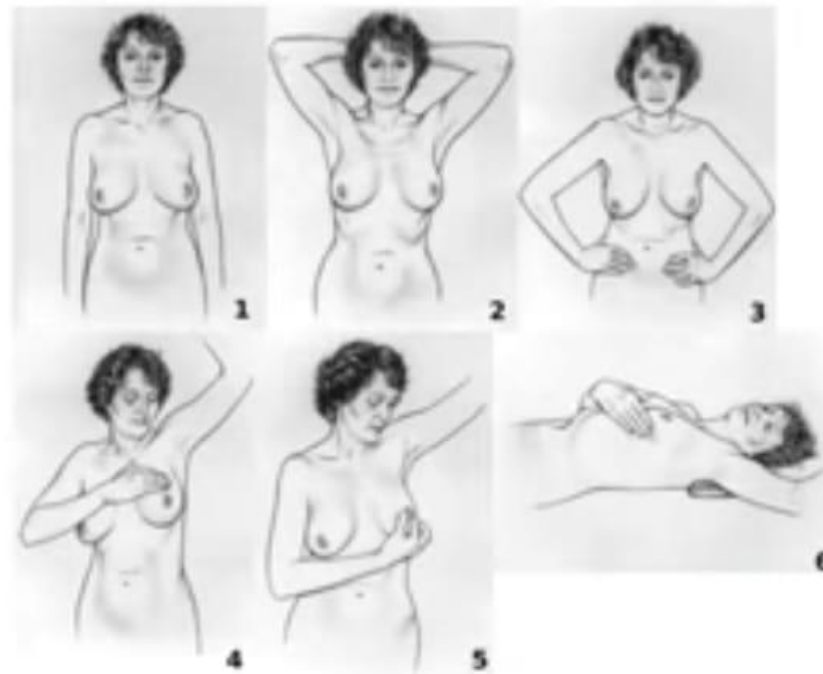
- 1. Diagnosis**
- 2. Stadium**
- 3. Status penampilan**
- 4. Rencana terapi**
- 5. Pelaksanaan**
- 6. Prognosis**
 - ☐ Follow-up
 - ☐ Rekonstruksi / Rehabilitasi

DIAGNOSIS

- ☐ Pemeriksaan Payudara sendiri (SADARI)
- ☐ Pemeriksaan Payudara medis
- ☐ Mammografi / USG
- ☐ BAJAH (Biopsi Jarum Halus)
- ☐ Biopsi

SADARI

- ❑ Setiap bulan, rutin
- ❑ Setelah menstruasi
- ❑ Awal 20-an
- ❑ Kenal payudara sendiri
- ❑ Sensitifitas : 20 – 30%



TRIPLE DIAGNOSTIK

PEMERIKSAAN PAYUDARA MEDIS



FNA = BIOPSI ASPIRASI JARUM HALUS



MAMMOGRAFI



USG PAYUDARA



PEMERIKSAAN PENUNJANG

TUMOR MARKER

- Pada kanker payudara tumor marker yang biasanya dilakukan adalah CA 15.3 dan CEA dengan mengambil sampel darah.
- tumor marker yang tinggi → indikasi adanya suatu proses yang tidak normal di dalam tubuh akibat kanker.
- Kurang bermanfaat untuk diagnosis, bermanfaat untuk dalam follow up.

PEMERIKSAAN PENUNJANG

PEMERIKSAAN LAINNYA

- *Ro Thorax* → Metastasis paru-paru
- *Bonescan* → Metastasis tulang
- *Computed Tomography Scan* → Detail letak tumor/metastasis
- *Positron Emission Tomography (PET) Scan*.

Cairan glukosa radioaktif disuntikan pada pasien. Sel kanker (metabolism tinggi) akan menyerap lebih cepat cairan glukosa tersebut dibandingkan sel normal. Sehingga akan terlihat warna kontras pada PET scan.

DIAGNOSIS PASTI

Standar Baku Emas



Pemeriksaan Histopatologis

KLASIFIKASI HISTOPATOLOGIS

WHO CLASSIFICATION OF BREAST CANCER (2012)

<i>Invasive breast carcinoma</i>	<i>metaplastic carcinoma with mesenchymal differentiation</i>
<i>Invasive carcinoma of no special type (NST)</i>	<i>Chondroid differentiation</i>
<i>Pleomorphic carcinoma</i>	<i>Ossous differentiation</i>
<i>Carcinoma with osteoclast-like stromal giant cells</i>	<i>Other types of mesenchymal differentiation</i>
<i>Carcinoma with choriocarcinomatous features</i>	<i>Mixed metaplastic carcinoma</i>
<i>Carcinoma with melanotic features</i>	<i>Myoepithelial carcinoma</i>
<i>Invasive lobular carcinoma</i>	<i>Rare types</i>
<i>Classic lobular carcinoma</i>	<i>Carcinoma with Neuroendocrine features</i>
<i>Solid lobular carcinoma</i>	<i>Neuroendocrine tumour, well differentiated</i>
<i>Alveolar lobular carcinoma</i>	<i>Neuroendocrine ca, poorly differentiated (small cell ca)</i>
<i>Pleomorphic lobular carcinoma</i>	<i>Carcinoma with neuroendocrine differentiation</i>
<i>Tubulolobular carcinoma</i>	<i>Secretory carcinoma</i>
<i>Mixed lobular carcinoma</i>	<i>Invasive papillary carcinoma</i>
<i>Tubular carcinoma</i>	<i>Acinic cell carcinoma</i>
<i>Griboform carcinoma</i>	<i>Mucosidermoid carcinoma</i>
<i>Mucinous carcinoma</i>	<i>Polymorphous carcinoma</i>
<i>Carcinoma with Medullary features</i>	<i>Oncocytic carcinoma</i>
<i>Medullary carcinoma</i>	<i>Lipid rich carcinoma</i>
<i>Atypical medullary carcinoma</i>	<i>Glycogen-rich clear cell carcinoma</i>
<i>Invasive carcinoma NST with medullary features</i>	<i>Sebaceous carcinoma</i>
<i>Carcinoma with apocrine differentiation</i>	<i>Adenomyoepithelioma with carcinoma</i>
<i>Carcinoma with Signet-ring cell differentiation</i>	<i>Adenoid cystic carcinoma</i>
<i>Invasive micropapillary carcinoma</i>	<i>Ductal carcinoma in situ</i>
<i>Metaplastic carcinoma of no special type</i>	<i>Lobular carcinoma in situ</i>
<i>Low grade adenosquamous carcinoma</i>	<i>Classic lobular carcinoma in situ</i>
<i>Fibromatosis-like metaplastic carcinoma</i>	<i>Pleomorphic lobular carcinoma in situ</i>
<i>Squamous cell carcinoma</i>	<i>Microinvasive carcinoma</i>
<i>Spindle cell carcinoma</i>	

Dikutip dari: WHO Breast 2012

GRADING

Modified Bloom-Richardson Histologic Grading

Tubule Formation

- Score 1 : >75% of tumor has tubules
- Score 2 : 10-75% of tumor has tubules
- Score 3 : <10% of tumor has tubules

Nuclear Size

- Score 1 : tumor nuclei similar to normal duct cell nuclei
- Score 2 : intermediate size nuclei
- Score 3 : very large nuclei, vesicular with prominent nucleoli

Mitotic Count:

- Jumlah mitosis - Leitz Ortholux Obyektif X25
- **Poin 1** 0-9 **Poin 2** 10-19 **Poin 3** >20

SCORE INTERPRETATION

- **3-5 : GRADE I**
WELL
DIFFERENTIATED
- **6-7 : GRADE II**
MODERATELY
DIFFERENTIATED
- **8-9 : GRADE III**
POORLY
DIFFERENTIATED

KANKER PAYUDARA - Subtype

Intrinsic Subtype	Surrogate Definition
Luminal A	ER and/or PgR(+), HER2(-) Ki-67 low (<14%)*
Luminal B1	ER and/or PgR(+), HER2(-) □ Ki-67 high
Luminal B2	ER and/or PgR(+), HER2(+) Any Ki-67
HER2 over-expression	ER and PgR absent, HER2(+)
Basal-like	Triple negative ductal (not medullary, adenoid cystic)

* Using PAM50 cutpoint from Cheang et al. JNCI 2009

T N M STAGING

Ukuran Tumor (T)	Interpretasi
T0	Tidak ada bukti adanya suatu tumor
Tis	Lobular carcinoma in situ (LCIS), ductus carcinoma in situ (DCIS), atau Paget's disease
T1	Diameter tumor ≤ 2 cm
T1a	Tidak ada perlekatan ke fascia atau otot pektoralis
T1b	Dengan perlekatan ke fascia atau otot pektoralis
T2	Diameter tumor 2-5 cm
T2a	Tidak ada perlekatan ke fascia atau otot pektoralis
T2b	Dengan perlekatan ke fascia atau otot pektoralis
T3	Diameter tumor ≤ 5 cm
T3a	Tidak ada perlekatan ke fascia atau otot pektoralis
T3b	Dengan perlekatan ke fascia atau otot pektoralis
T4	Bebapa pun diameternya, tumor telah melekat pada dinding dada dan mengenai <i>pectoral lymph node</i>
T4a	Dengan fiksasi ke dinding toraks
T4b	Dengan edema, infiltrasi, atau ulserasi di kulit

T N M STAGING

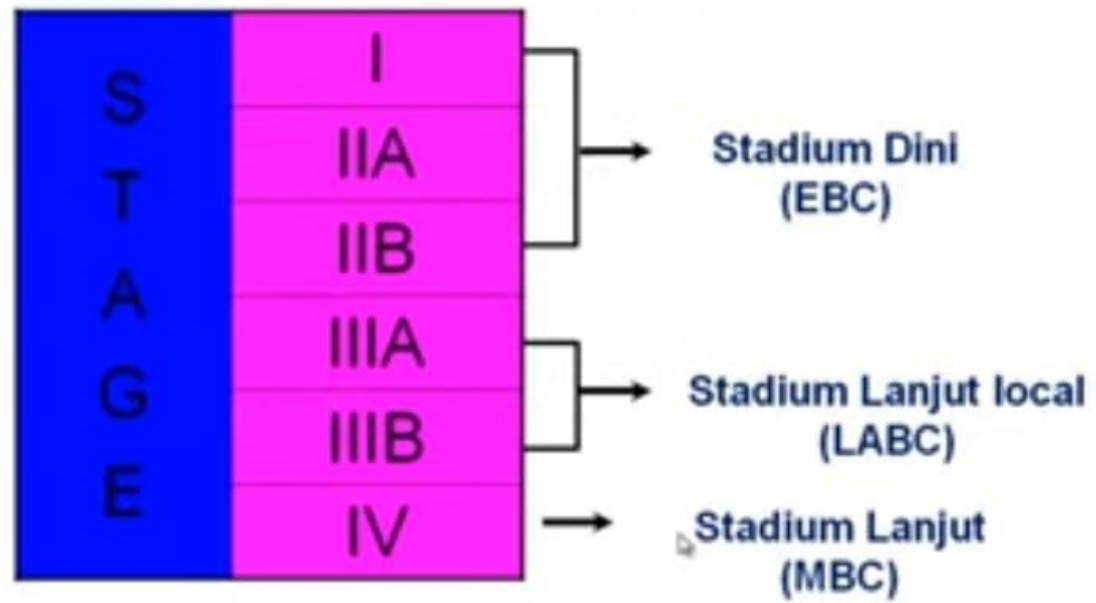
<i>Palpable Lymph Node (N)</i>	Interpretasi
N0	Kanker belum menyebar ke <i>lymph node</i>
N1	Kanker telah menyebar ke <i>axillary lymph node</i> ipsilateral dan dapat digerakkan
N2	Kanker telah menyebar ke <i>axillary lymph node</i> ipsilateral dan melekat antara satu sama lain (konglomerasi) atau melekat pada struktu lengan
N3	Kanker telah menyebar ke <i>mammary lymph node</i> atau <i>supraclavicular lymph node</i> ipsilateral

<i>Metastase</i>	Interpretasi
M0	Tidak ada metastase ke organ yang jauh
M1	Metastase ke organ jauh

STADIUM

Stadium 0	Tis	N0	M0
Stadium 1	T1	No	Mo
Stadium IIA	T0	N1	M0
	T1	N1	Mo
	T2	N0	Mo
Stadium IIB	T2	N1	M0
	T3	N0	Mo
Stadium IIIA	T0	N2	M0
	T1	N2	M0
	T2	N2	M0
	T3	N1	M0
	T3	N2	M0
Stadium IIIB	T4	N0	M0
	T4	N1	M0
	T4	N2	M0
Stadium IIIC	Tiap T	N3	M0
Stadium IV	Tiap T	Tiap N	M1

STADIUM



STATUS PENAMPILAN

Karnofky Performance Status

Able to carry on normal activity and to work; no special care needed.	100	Normal no complaints, no evidence of disease.
	90	Able to carry on normal activity, minor signs or symptoms of disease.
	80	Normal activity with effort, some signs or symptoms of disease.
Unable to work; able to live at home and care for most personal needs; varying amount of assistance needed.	70	Cares for self, unable to carry on normal activity or to do active work.
	60	Requires occasional assistance, but is able to care for most of his personal needs.
	50	Requires considerable assistance and frequent medical care.
Unable to care for self, requires equivalent of institutional or hospital care; disease may be progressing rapidly.	40	Disabled; requires special care and assistance.
	30	Severely disabled; hospital admission is indicated although death not imminent.
	20	Very sick; hospital admission necessary; active supportive treatment necessary.
	10	Moribund; fatal processes progressing rapidly.
	0	Dead

STATUS PENAMPILAN

→WHO/ECOG

ECOG PERFORMANCE STATUS*	
Grade	ECOG
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work
2	Ambulatory and capable of all selfcare but unable to carry out any work activities. Up and about more than 50% of waking hours
3	Capable of only limited selfcare, confined to bed or chair more than 50% of waking hours
4	Completely disabled. Cannot carry on any selfcare. Totally confined to bed or chair
5	Dead

PENATALAKSANAAN KANKER PAYUDARA

Surgery

Chemotherapy

Radiotherapy

Hormonal therapy

Targeting therapy

Immuno thrapy

TERGANTUNG PADA:

- STADIUM
- STATUS PENAMPILAN
- SUBTIPE INTRINSIK
- KEMAMPUAN PASIEN
- KEMAMPUAN RS
- KEMAMPUAN DOKTER



**TERAPI LOKOREGIONAL
- OPERASI
- RADIOTERAPI**

PEMBEDAHAN

☐ Operasi Kuratif

- Nipple / Skin Sparing Mastectomy
- Breast conserving Surgery
- Modified Radical Mastectomy
- Radical Mastectomy

☐ Operasi Paliatif

- Eksisi
- Debulking
- Simpel Mastektomi
- Metastasectomy

☐ Breast Reconstruction

KONTRAINDIKASI OPERASI MENURUT HAAGENSEN (1956)

1. Edema luas kulit payudara > 1/3 luas
2. Edema lengan
3. Nodul satelit pada kulit
4. Nodul para sternal
5. Metastase supraclavicular
6. Metastase jauh
7. Inflammatory carcinoma
8. Melekat pada dinding dada
9. Komorbiditas yang berat

RADIOTHERAPY

- ❑ Radioterapi adalah **terapi** menggunakan radiasi yang bersumber dari energi radioaktif.
- ❑ Radiasi menghancurkan material genetik sel sehingga sel tidak dapat membelah dan tumbuh lagi.



TERAPI SISTEMIK

Systemic treatment recommendations

Subtype	Type of therapy	Notes
'Luminal A'	Endocrine therapy alone	Few require cytotoxics (e.g. high nodal status).
'Luminal B (HER2 negative)'	Cytotoxics ± endocrine therapy	Inclusion and type of cytotoxics may depend on level of endocrine expression, perceived risk and patient preference.
'Luminal B (HER2 positive)'	Cytotoxics + anti-HER2+ endocrine therapy	No data are available to support the omission of cytotoxics in this group.
'HER2 positive (non luminal)'	Cytotoxics + anti-HER2	Patients at very low risk may be observed without treatment
'Triple negative (ductal)'	Cytotoxics	
'Special histological types'		
A. Endocrine responsive	Endocrine therapy	
B. Endocrine non responsive	Cytotoxics	Medullary and apocrine carcinomas may not require any adjuvant cytotoxics (if node negative).

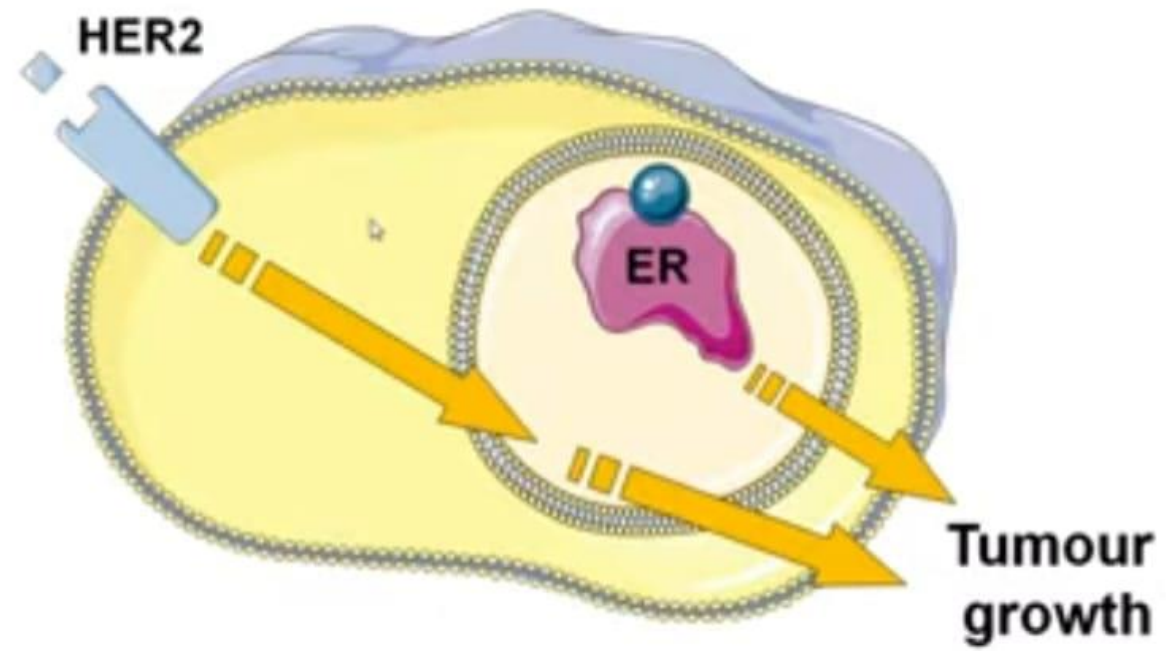
Goldhirsch A. *Annals Oncol* 2011, doi:10.1093/annonc/mdr304

CHEMOTHERAPY

- ☐ Penggunaan obat-obat sitotoksik
- ☐ Terapi Neoadjuvant
- ☐ Terapi Adjuvant → 3 minggu setelah operasi
- ☐ Induksi Kemo-Radioterapi
- ☐ Paliatif



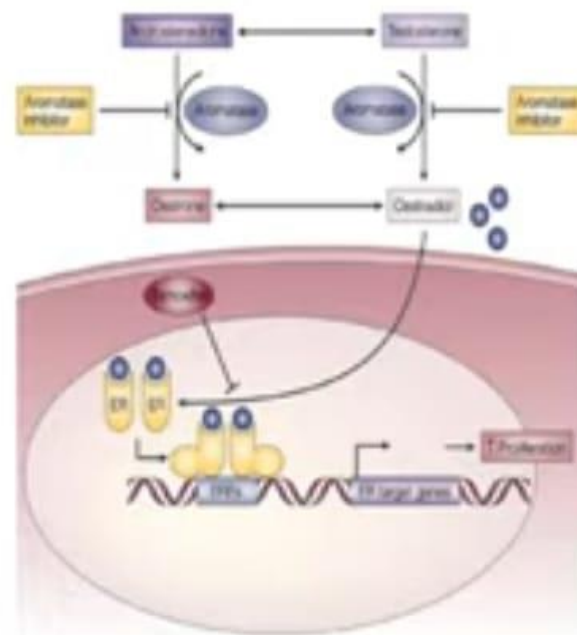
BREAST CANCER CELL



HORMONAL THERAPY

ER / PR positive

- ❑ 75% Pasien Kanker Payudara
- ❑ Apabila pemeriksaan IHC ER/PR positive
→ "hormonal therapy"
- ❑ Premenopause → Ablasi (Surgical, Medical)
- ❑ Postmenopause → SERM : Tamoxifen
→ Aromatase Inhibitor
Arimidex, Femara, Aromasin



TARGETING THERAPY

- ❑ 25% Pasien Kanker Payudara HER2 positive
- ❑ Apabila pada pemeriksaan IHC → HER2 positive
- ❑ Dapat diberikan targeting terapi → Trastuzumab



PERKEMBANGAN OBAT BARU

Targeting HER2

- Neratinib
- Tovok
- Pertuzumab

Targeting EGFR

- Gefitinib
- Erlotinib
- Cetuximab

Anti-angiogenesis

- Bevacizumab

Other

- Vitamin D
- Bisphosphonates



FOLLOW UP /TINDAK LANJUT

❑ SETELAH OPERASI MASTEKTOMI

➤ PERAWATAN LUKA

- Tiap 3 hari sampai luka kering
- Cabut drain sampai produksi minimal
- Lepas jahitan hari > 12 hari

➤ REHABILITASI

- Latihan lingkup gerak sendi

❑ KEMOTERAPI

- #### **➤ 3 Minggu setelah operasi (luka sembuh)**

FOLLOW UP /TINDAK LANJUT

❑ FOLLOW UP / KONTROL

➤ Tahun 1 dan 2

6 bulan pertama : kontrol tiap bulan

Selanjutnya kontrol tiap 2 bulan sekali

➤ Tahun 3 s/d 5 ; kontrol tiap 3 bulan

➤ Setelah 5 tahun ; kontrol tiap 6 bulan



TERIMAKASIH