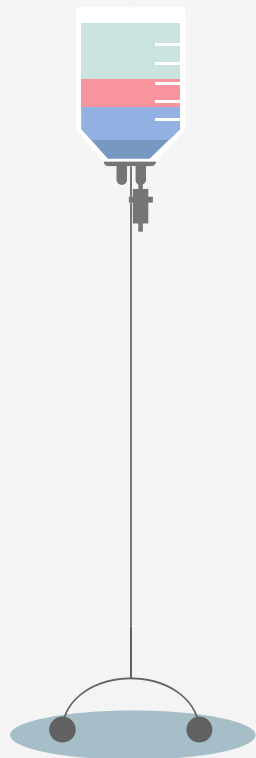


*Pediatric Hodgkin
Lymphoma
&
Euronet Protocol*

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Lymphoma

- Lymphoma affects a type of white blood cells known as lymphocytes. It occurs when lymphocytes grow and multiply uncontrollably.
- Lymphoma is the third most frequent childhood malignancy closely following acute leukemia and CNS tumors.
- The lymphatic system includes the Lymph, Lymph vessels, lymph nodes, spleen, thymus and bone marrow.

Hodgkin& Non Hodgkin Lymphoma

Hodgkin Lymphoma

Common Age:10-20years.

Slow growing in months to years.

40% of lymphoma.

Better prognosis.

B cell.

Treatment :Chemo, Radiation &BMT

Non Hodgkin Lymphoma

Common Age:5-10years.

Fast growing in weeks to months.

60% of lymphoma.

Poor prognosis.

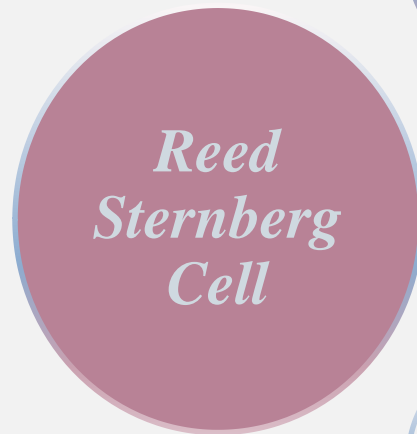
B /T Cell.

Treatment :Surgery, Chemo, Radiation &stem cell
transplantation.

Hodgkin Lymphoma

- Hodgkin lymphoma or Hodgkin disease (HD) is a type of Lymphoma and accounts for 1% of all cancers.
- Hodgkin disease spreads predictably along lymphatic pathways and is curable in 90% of cases, depending on its stage and sub-type.
- It is malignant tumor and may travel to other parts of the body. As it progresses, it may compromise the body's ability to fight infection since it is attacking the immune system.

How Hodgkin Lymphoma is differentiated?



*Reed
Sternberg
Cell*

*Characteristic
Hall Mark of HL*

*Clonal cell
transformation
of Bcell Origin*

*Large
Bi or Multinucleated
cell*

Hodgkin Lymphoma Types



Hall Mark

Classical HL

95%

Reed Sternberg Cell

Express CD 15,30

*First Treatment
Line...Euronet
Protocol*

Nodular lymphocyte- predominant HL

5%

*Pop Corn Shaped
Cell*

*Express CD
19,20,22,79A*

*First Treatment
Line...RCHOP
Protocol*

Hall Mark

Causes &Diagnosis

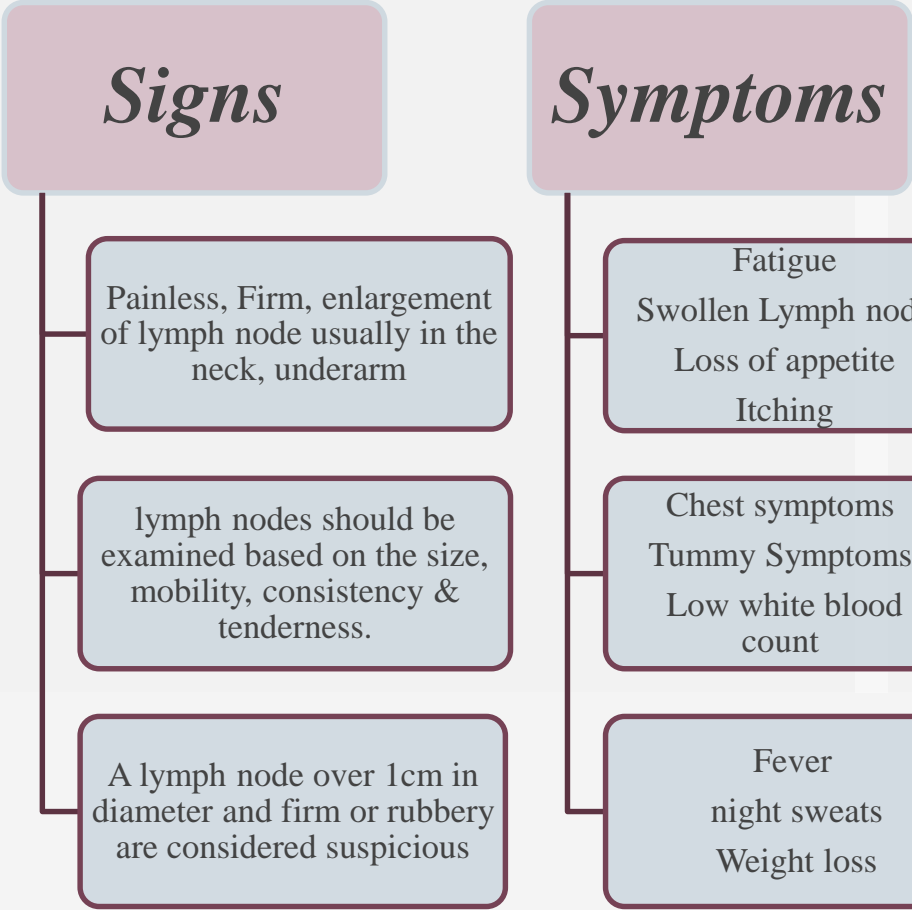
Causes

- Exposure to viruses such as EPV or HIV
- Family history.
- Weakened immune system.
- Autoimmune disorders.
- Smoking tobacco.

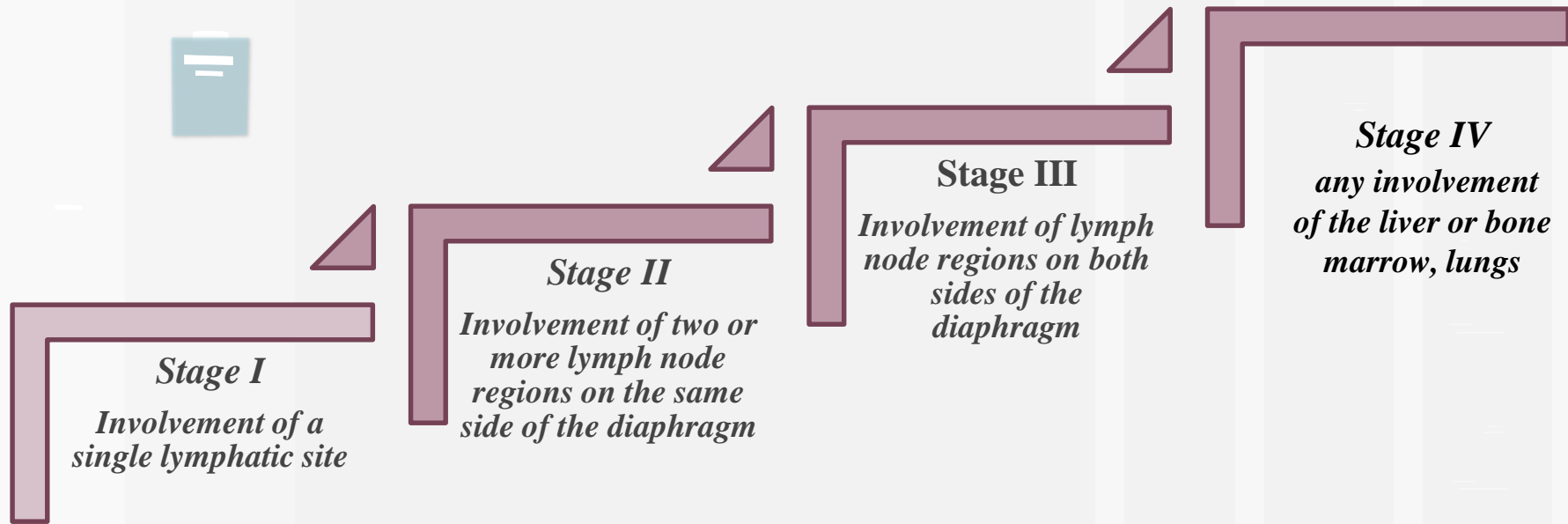
Diagnosis

- Physical exam: doctor checks for swollen lymph nodes in the neck, underarms ,swollen spleen and liver.
- Lymph node biopsy.
- PET CT for staging.
- CBC,ESR,LDH, liver function tests, kidney function & uric acid
- X-Rays: show whether the glands in the chest are enlarged.

Clinical Presentation



HL Staging



HL Staging

Doctors stage HL by looking at:

- The number of groups of lymph nodes that have lymphoma.
- Which lymph nodes have lymphoma and whether they are all above the diaphragm, all below the diaphragm or on both sides of the diaphragm.
- Whether the lymphoma is found in an organ or tissues other than lymph nodes.
- Whether the lymphoma has spread in the same area of the body or farther away.

Prognosis for HL

- About 85 to 90% of patients with limited-stage classic Hodgkin lymphoma are cured compared with 75 to 80% of patients with advanced-stage disease.
- Limited-stage disease is frequently subdivided into favorable and unfavorable prognostic groups.
- Unfavorable disease is based on risk factors, *for example*:

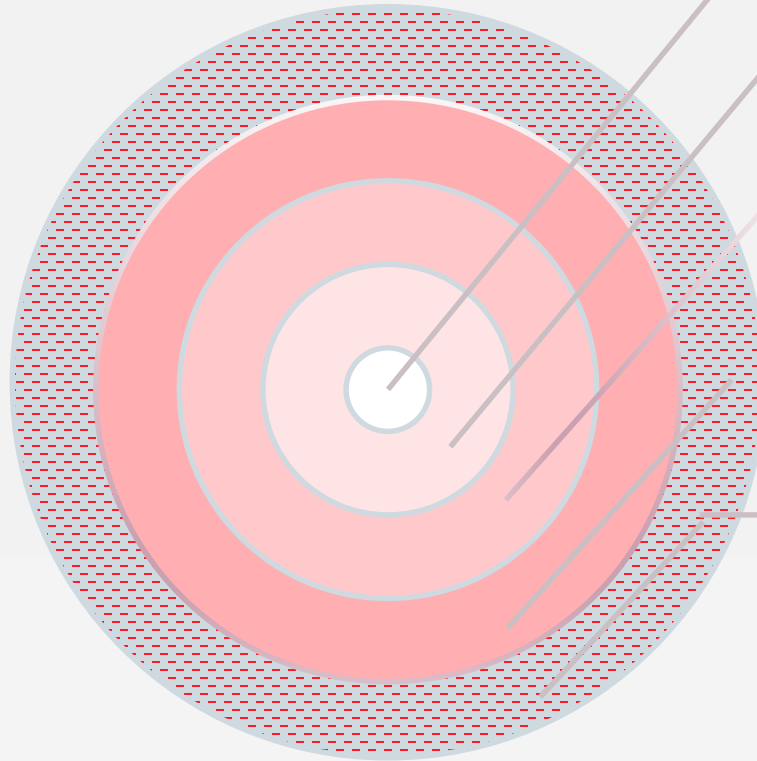
Presence of bulky disease

≥ 4 nodal sites involved

ESR > 50 mm/hour with no B symptoms OR

> 30 mm/hour with B symptoms

A, B, E, S & X categories



A

No B symptoms (fever, night sweats or weight loss)

B

B Symptoms

E

lymphoma has grown into nearby tissue outside of the lymph nodes(extra nodal site).

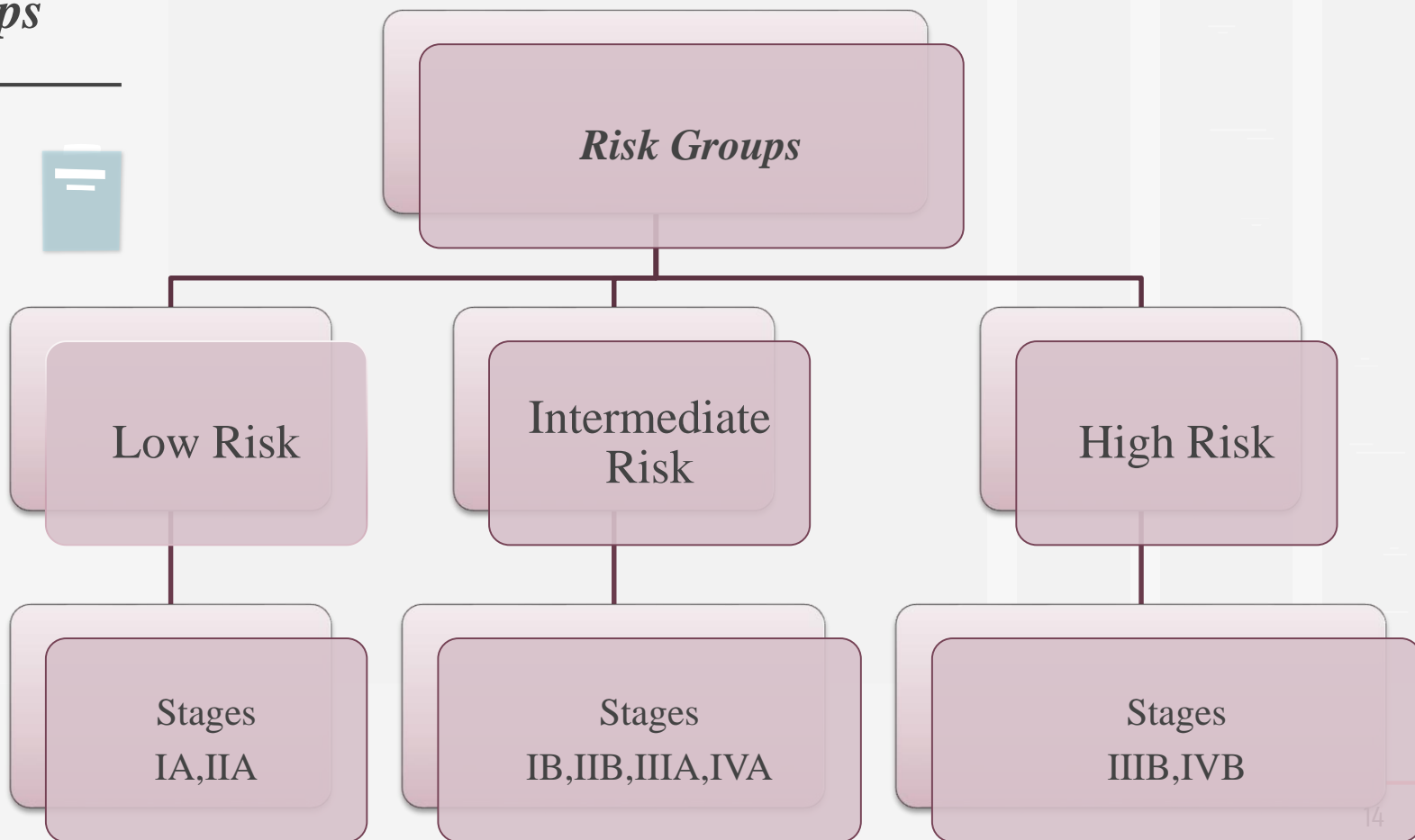
S

lymphoma has spread to the spleen.

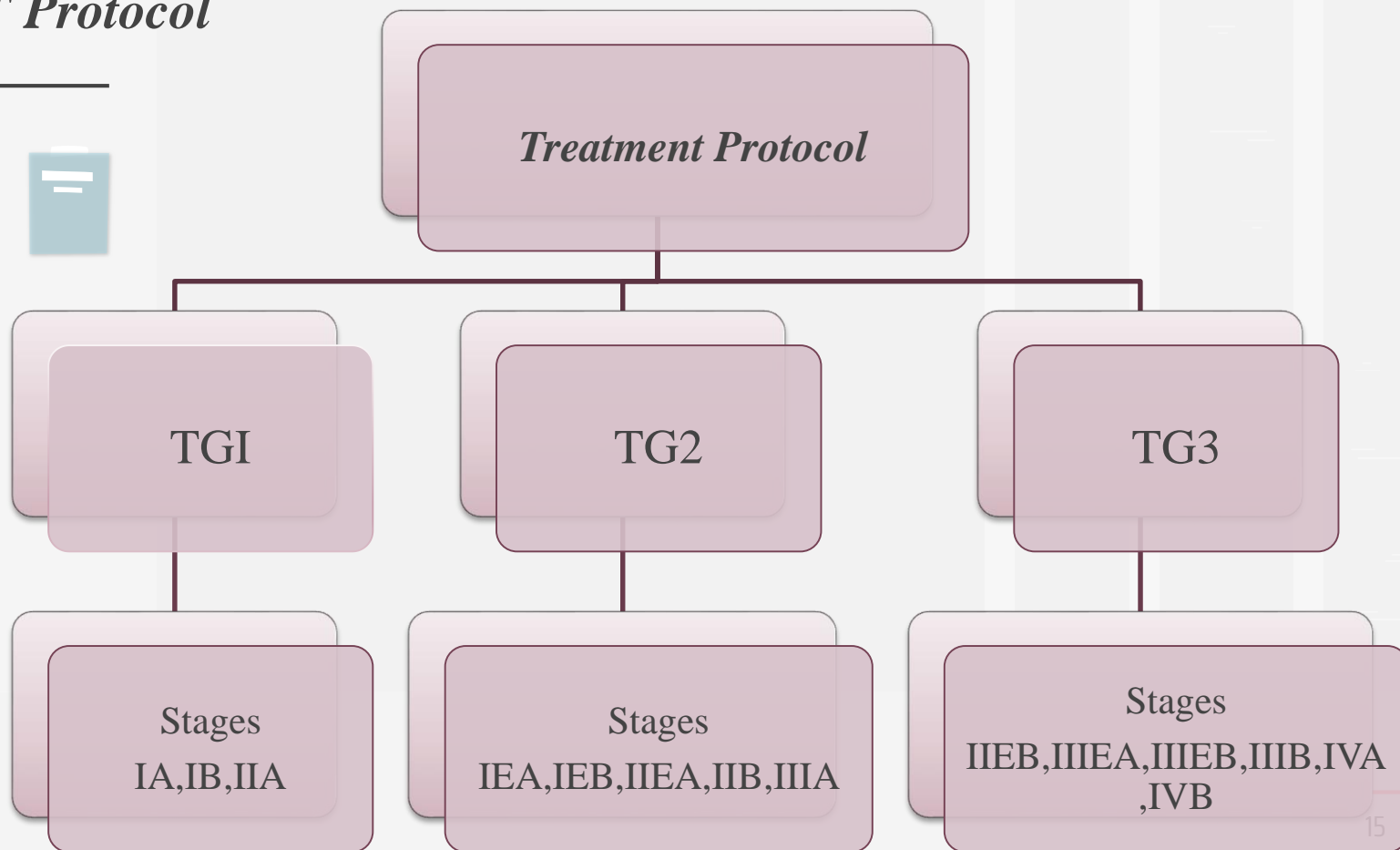
X

There are large areas of lymphoma (bulky disease)

Risk Groups

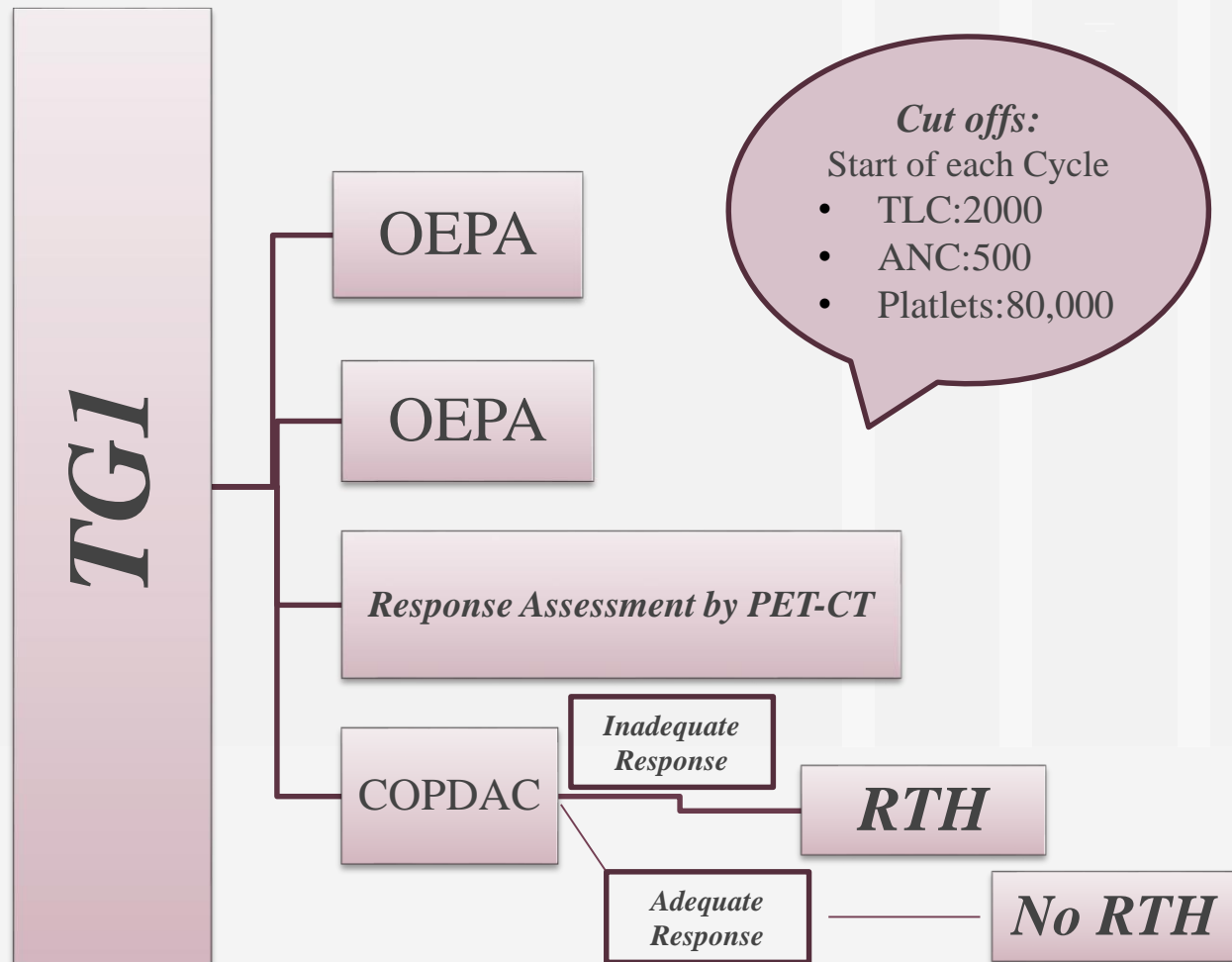


EURONET Protocol



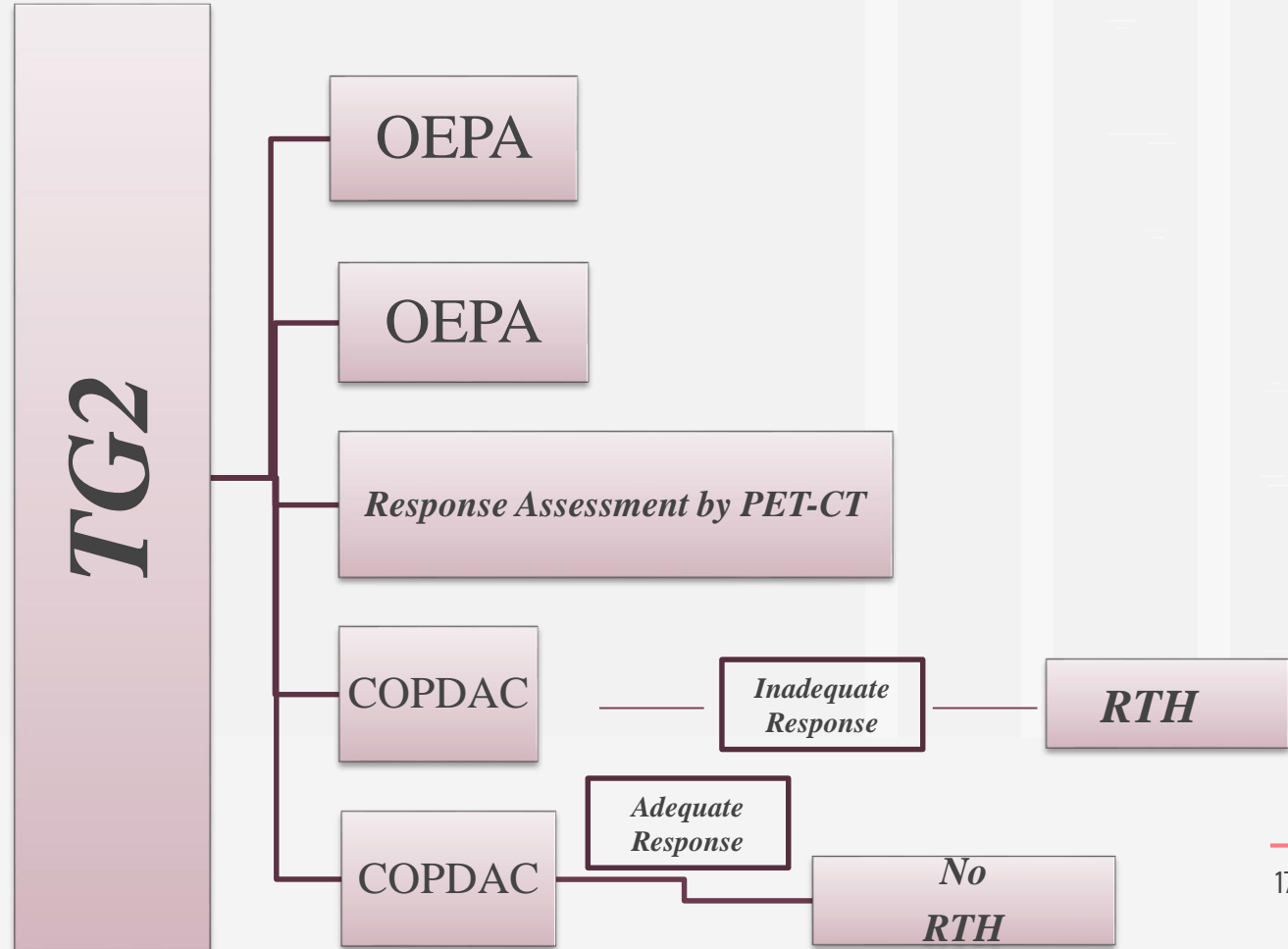
EURONET Protocol

TG1

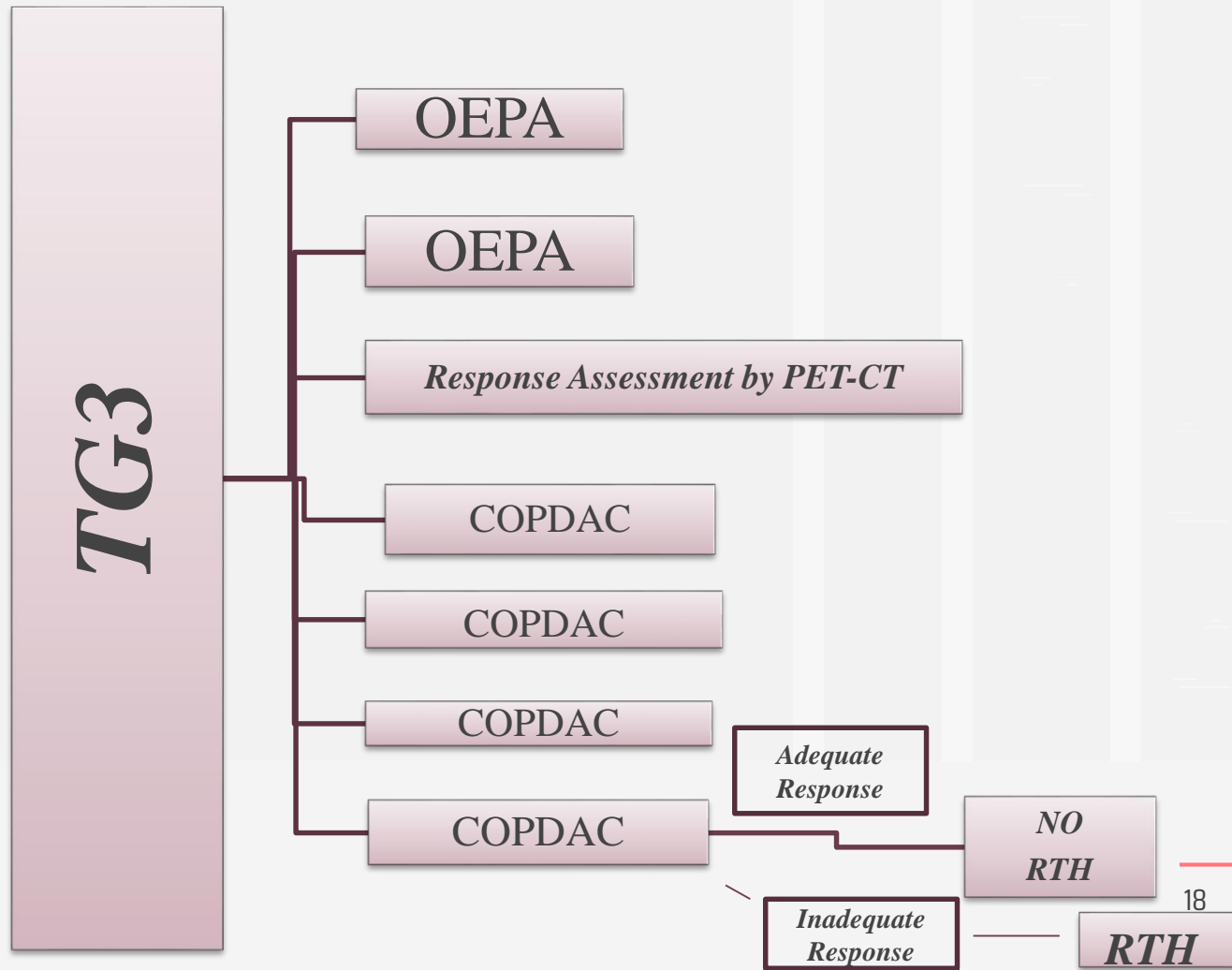


EURONET Protocol

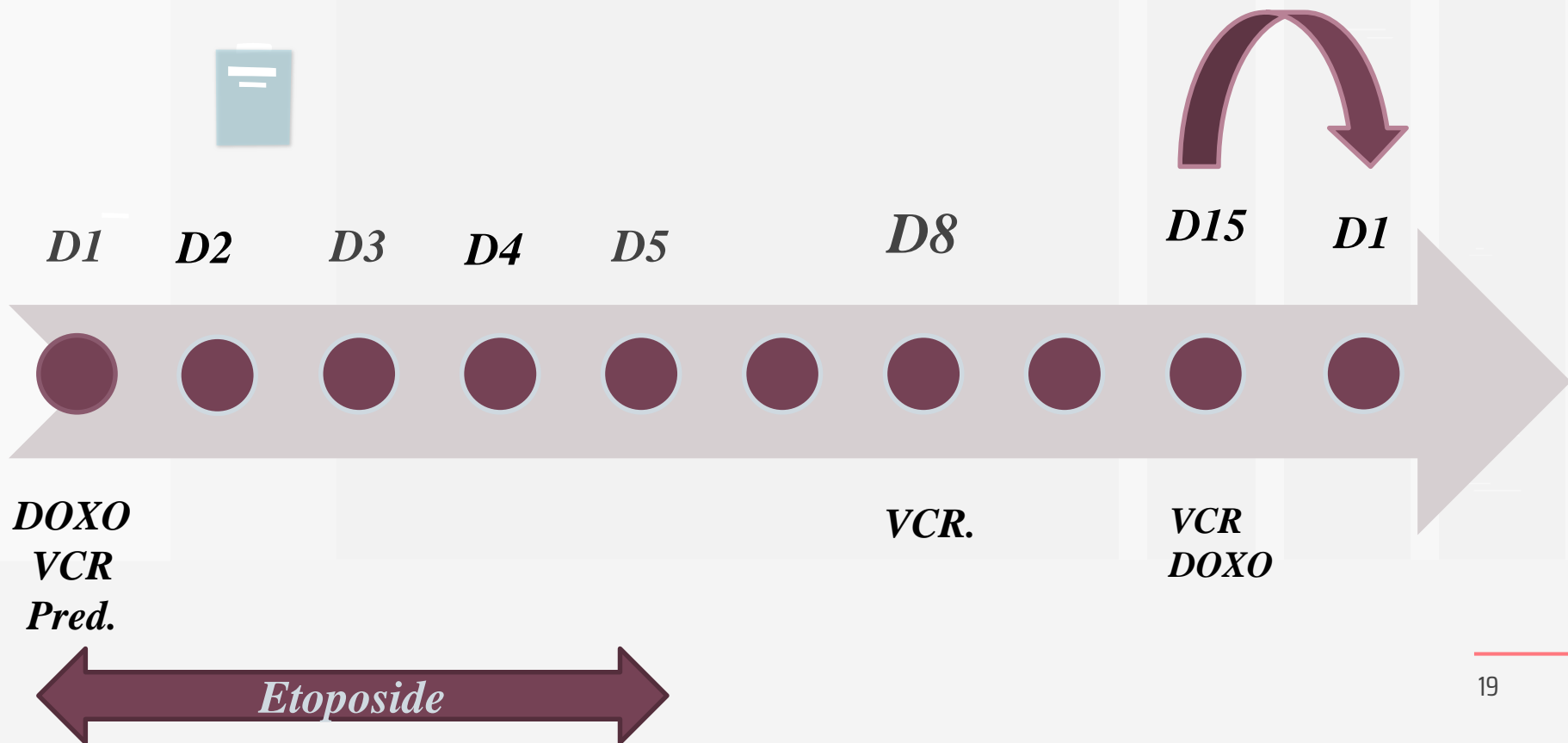
TG2



EURONET Protocol TG3



OEPA



COPDAC



D1

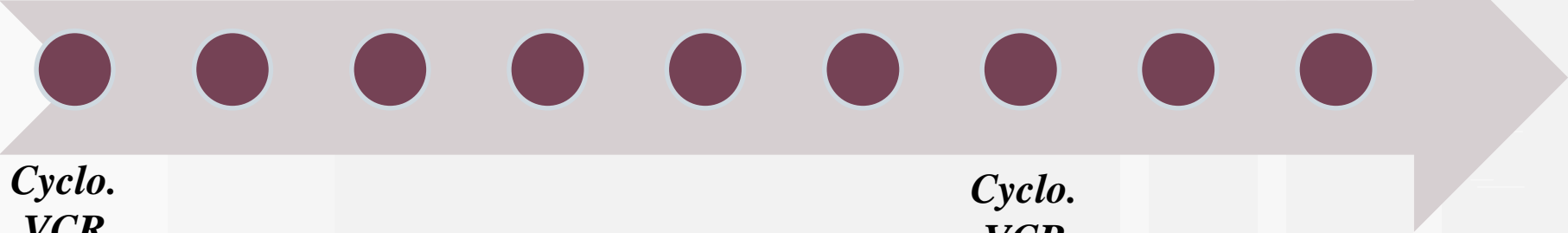
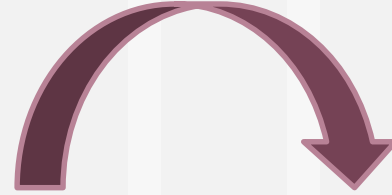
D2

D3

D8

D1

*Repeat the cycle after
3 weeks*

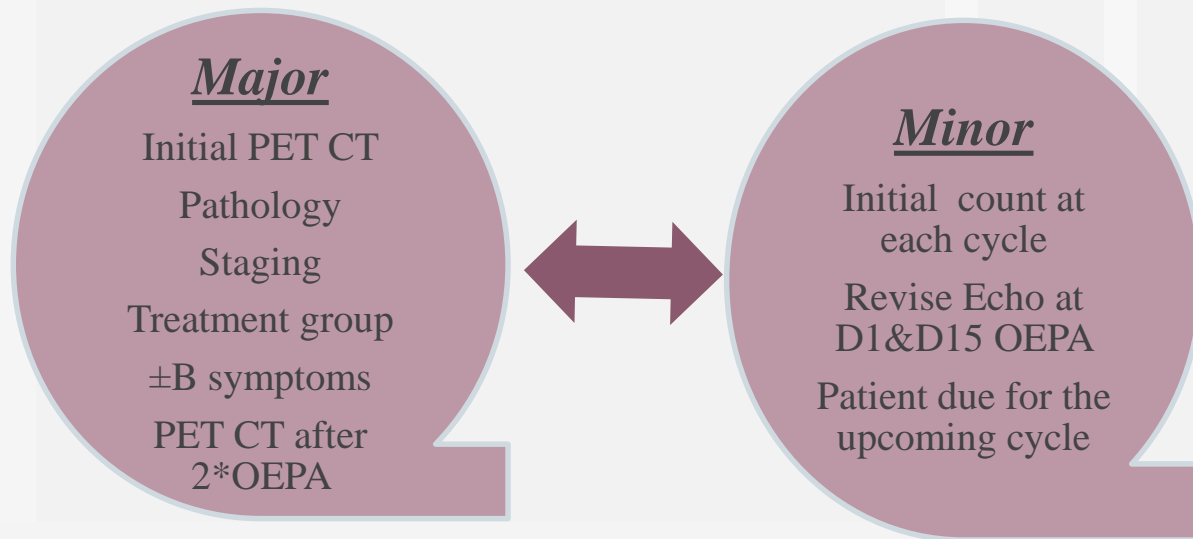


*Cyclo.
VCR
Pred.*

*Cyclo.
VCR
Pred.*



Major & Minor Check Points



RECAP...



1

Hodgkin lymphoma is of B cell origin.

2

Reed-Sternberg cells is characteristic hallmark of Hodgkin lymphoma.

3

Hodgkin disease spreads predictably along lymphatic pathways and is curable in 90% of cases, depending on its stage and sub-type.



OUR TEAM

Mayada elhenawy

Louay Eldeeb

Soha Mohamed