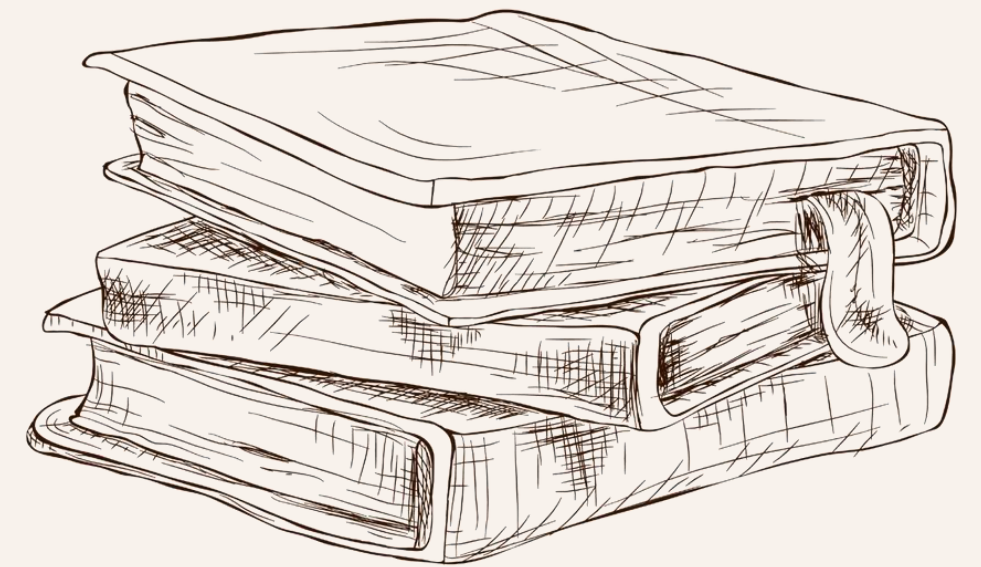
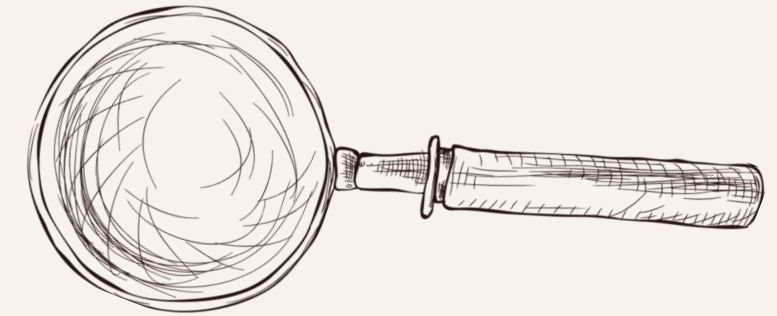


LUKEMIA

Name: Esraa Fuaad Omar Elzohiry

supervisor : Dr Lotfy Zakaria Habbak

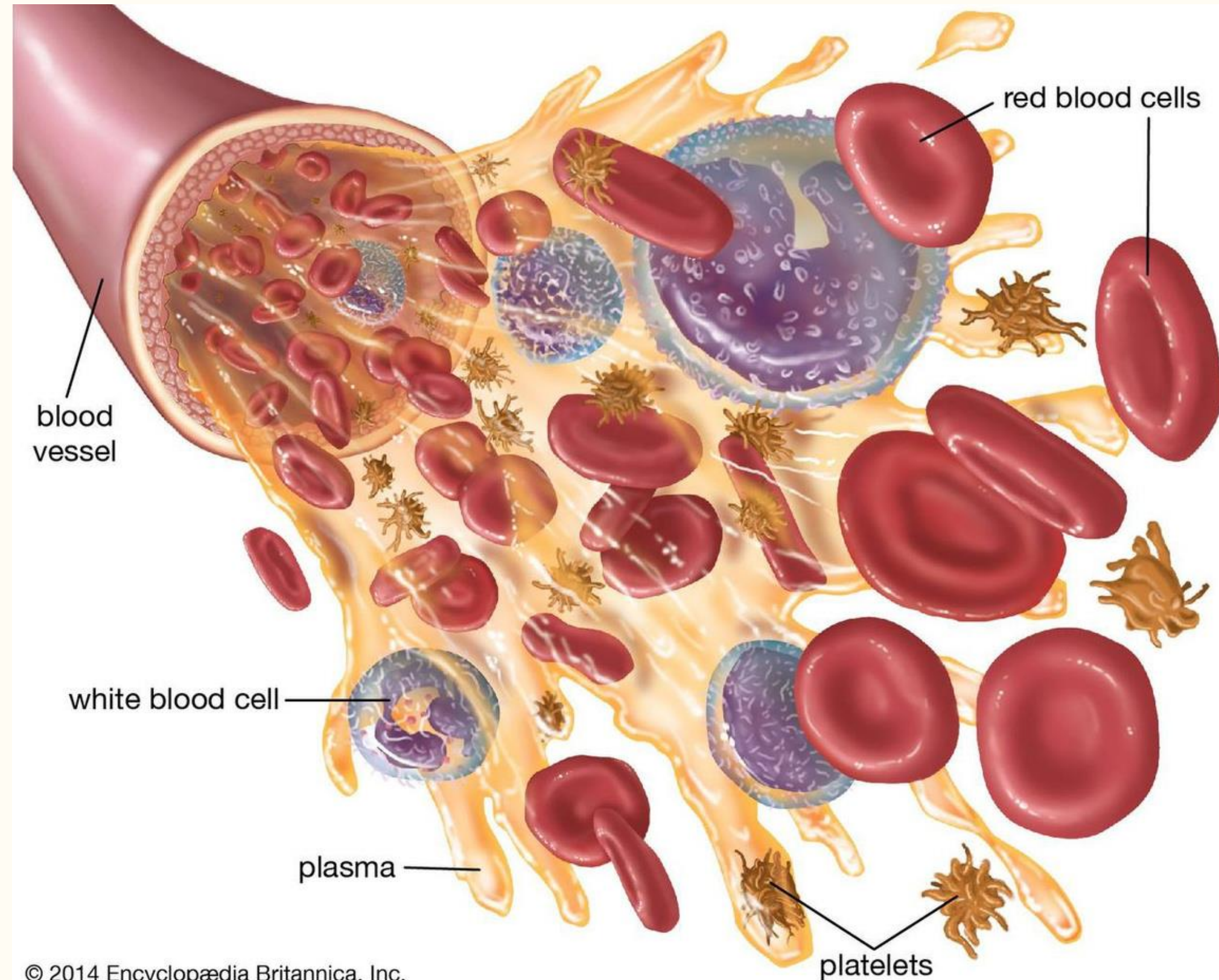


INTRODUCTION

Blood is a specialized body fluid. It has four main components: plasma, red blood cells, white blood cells, and platelets.

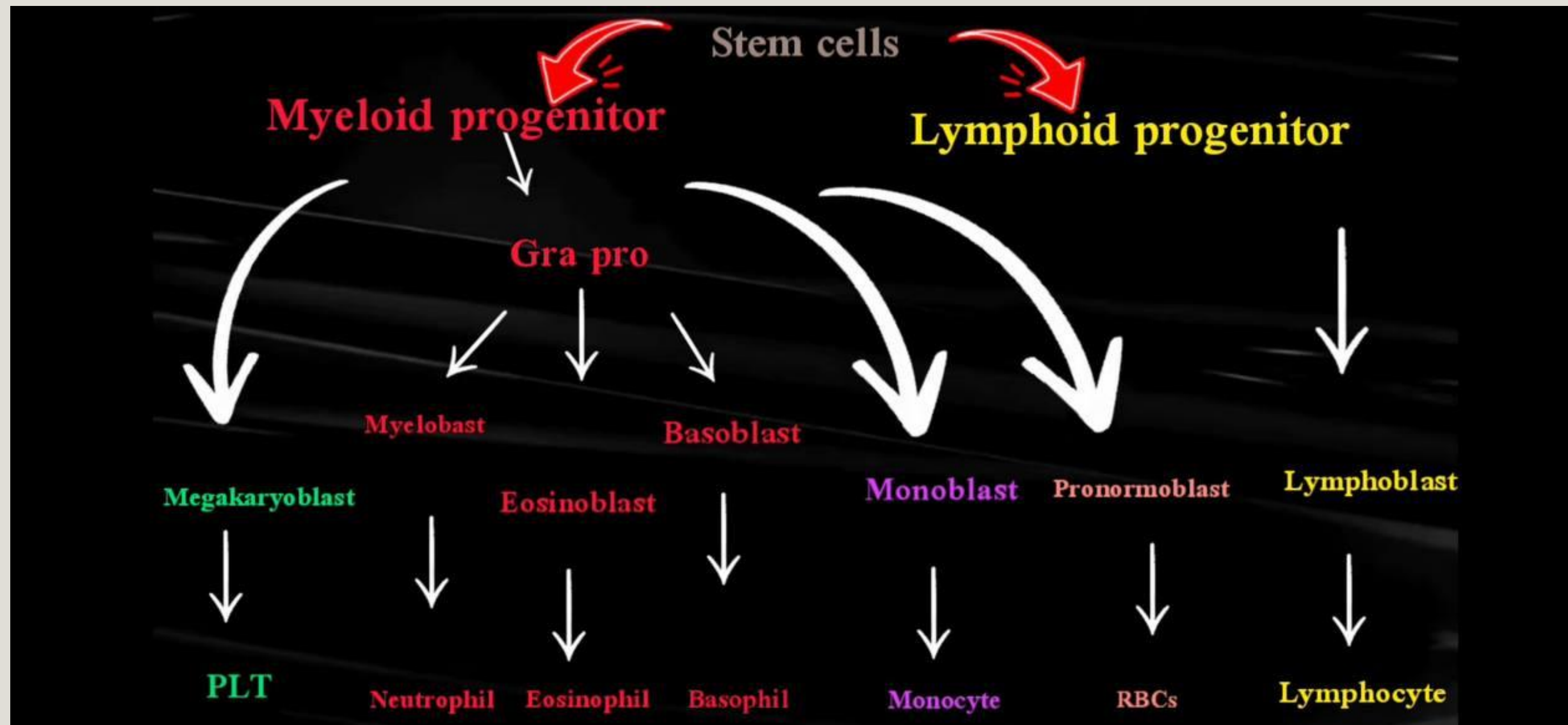
All these cells are synthesized in Bone Marrow and then transported to the blood.

If bone marrow made a certain type and more of it would still be produced this is "LEUKEMIA"



Bone Marrow (Myelo)

It has stem cells inside it and they are very active baseline. They give Two production line.



Leukemia

Myeloblastic leukemia

Lymphoblastic leukemia

Gra pro

Myeloblast

Basoblast

Eosinoblast

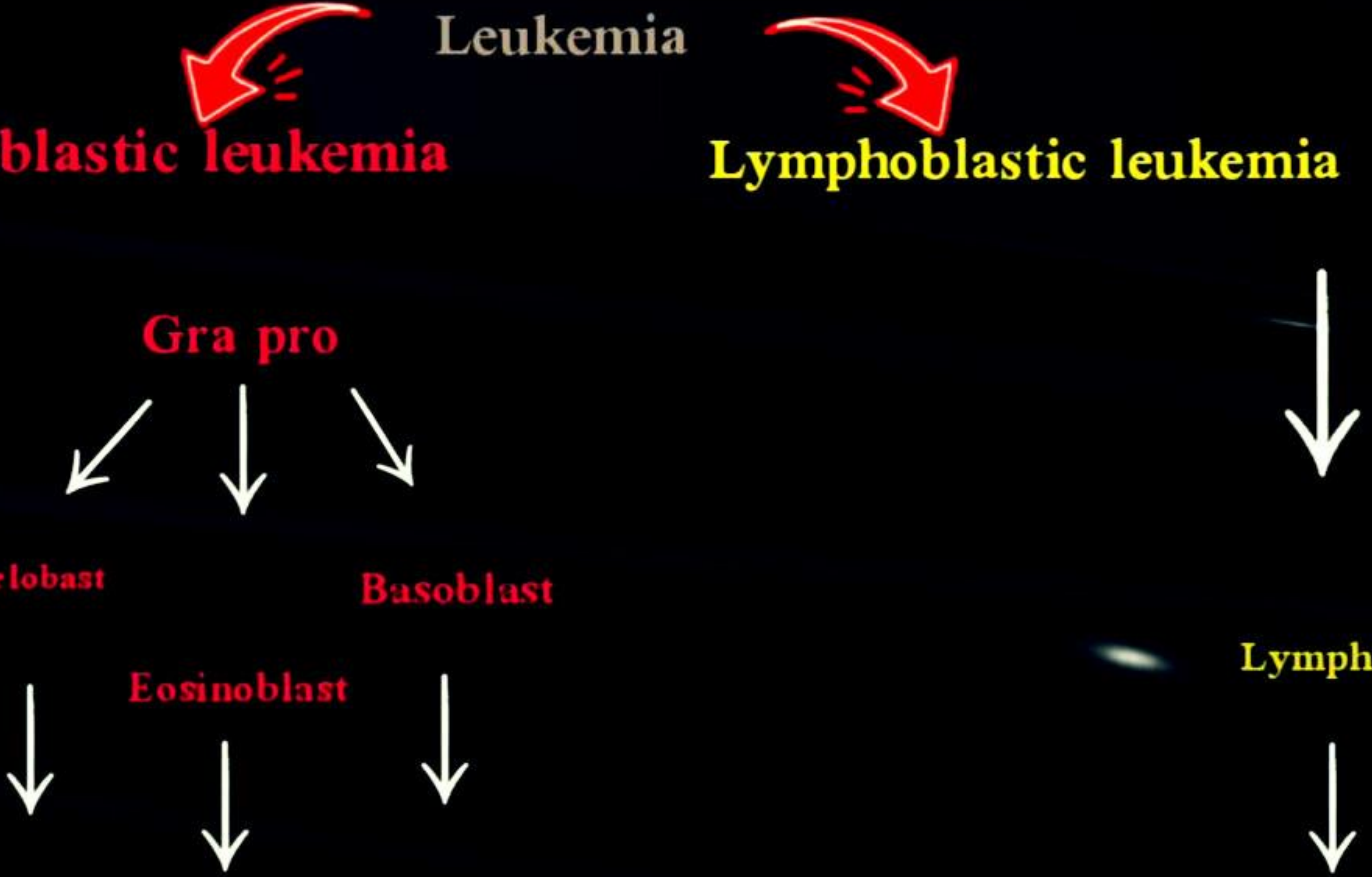
Lymphoblast

Neutrophil

Eosinophil

Basophil

Lymphocyte



Leukemia

Myeloblastic

Lymphoblastic



Acute

Chronic

Acute

Chronic

Myeloblastic

Myeloblastic

Lymphoblastic

Lymphoblastic

Leukemia

Leukemia

Leukemia

Leukemia

AML

CML

ALL

CLL

What is Acute Lymphoblastic Leukemia (ALL) ?

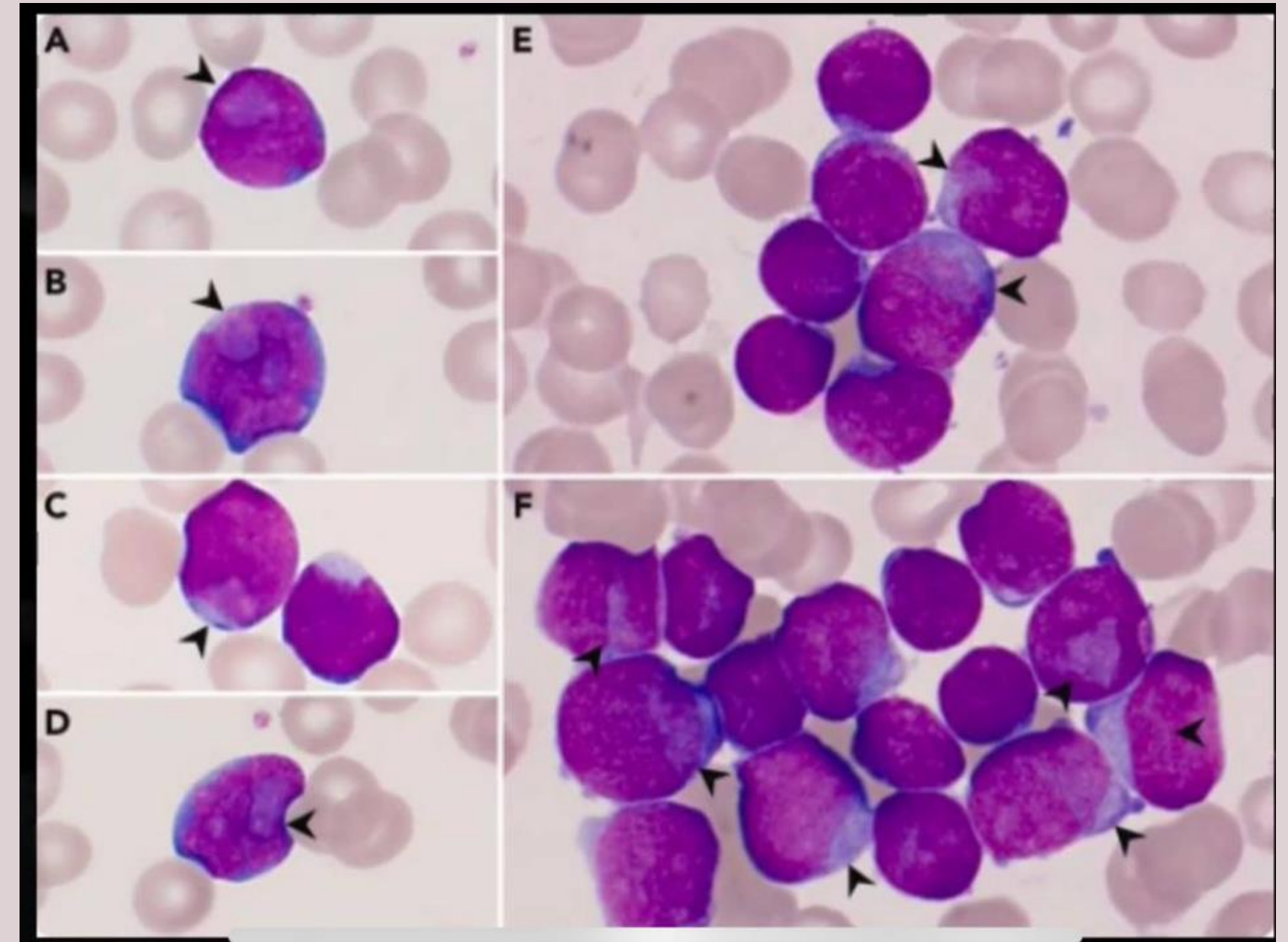
An acute and aggressive cancer that affects the bone marrow, specifically the lymphocyte production line, specifically the lymphoblast cell



SYMPTOMS ??

1. Bone Marrow Failure

Lethargy – Pallor – Dyspnea – Weight loss – Loss appetite – Fatigue – Low RBCs (Anemia)
Low Neutrophils (Neutropenia) Infection, tired
Low platelets (Thrombocytopenia) infiltrate to
Organs pain in bone and Enlargement Lymph
nodes, Liver, spleen, edema in lower limbs and
abdomen and Headache, vomiting.



What is the Risk Factor ??

1. Genetic abnormality

■ Numerical abnormality Change of the chromosome number

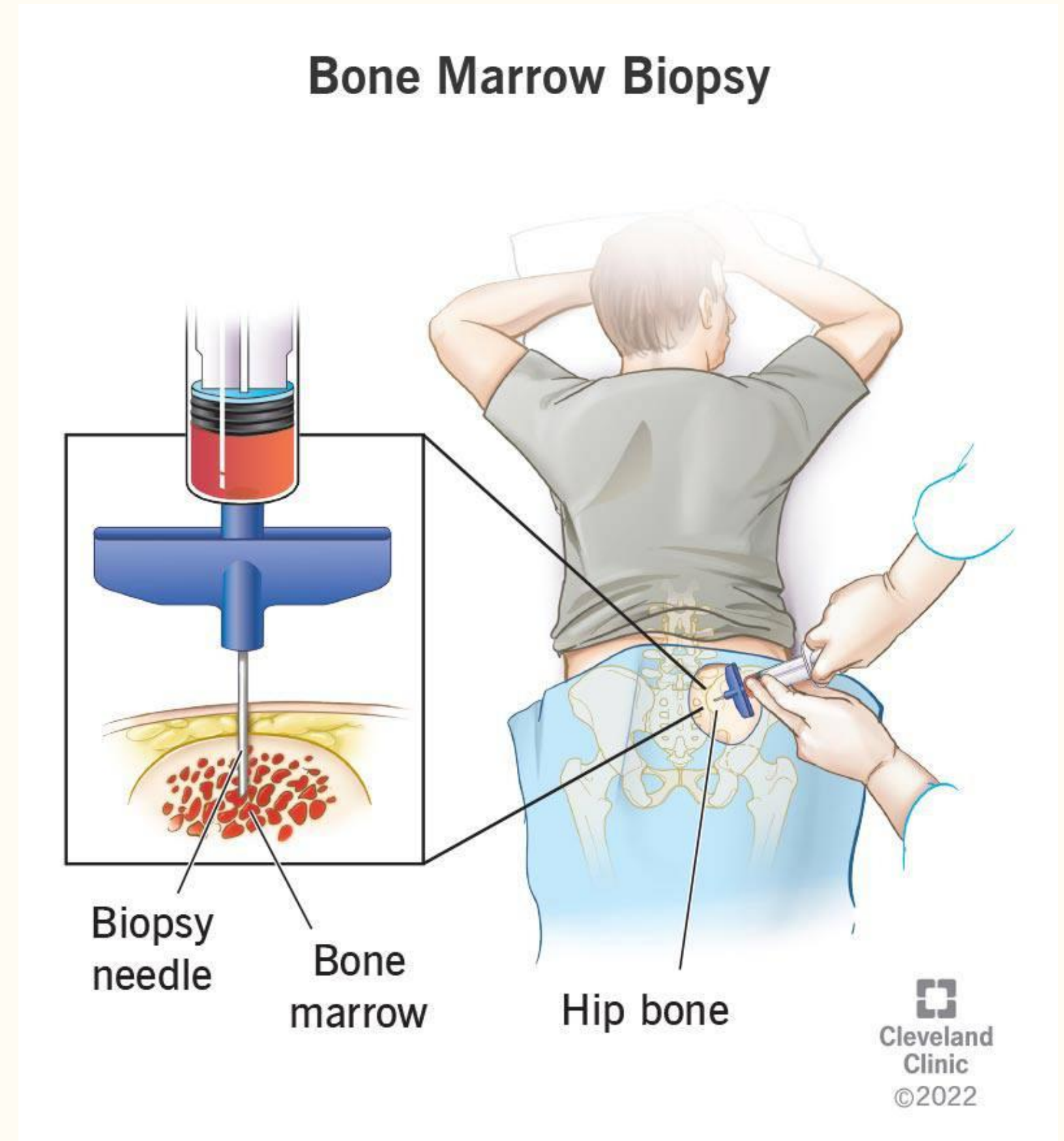
Hyperploidy , Hyperploidy

■ Structural abnormality

**Down syndrome, Fanconi anemia, Bloom syndrome,
X-linked agammaglobulinemia, severe combined
immunodeficiency, Shwachman–Diamond
syndrome, Kostmann syndrome, neurofibromatosis
type 1, ataxia–telangiectasia, paroxysmal nocturnal
hemoglobinuria, and Li–Fraumeni syndrome**

How We Diagnosis Acute Leukemia ?

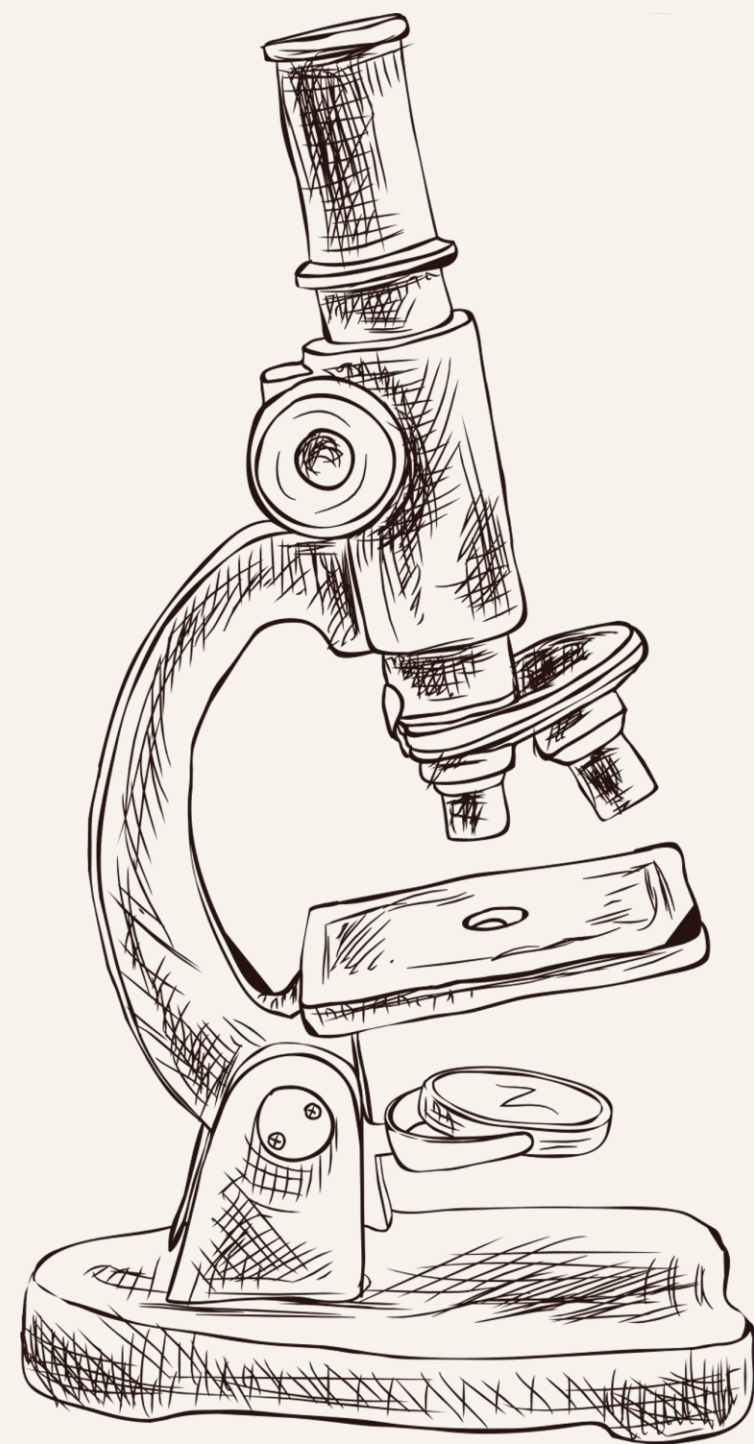
1. Clinical Examination
2. Radiology Tests
3. Lab Tests (CBC , Blood film , Bone Marrow Examination
4. General Check Up (Liver function)
5. Immunophenotyping



What's Treatment ??

1. Chemotherapy (remission induction, intensification, maintenance therapy)
2. Radio Therapy
3. Biological Therapy
4. Immunotherapy
5. Supportive Therapy
6. Gene Therapy
7. Bone marrow transplant





Thank you!

