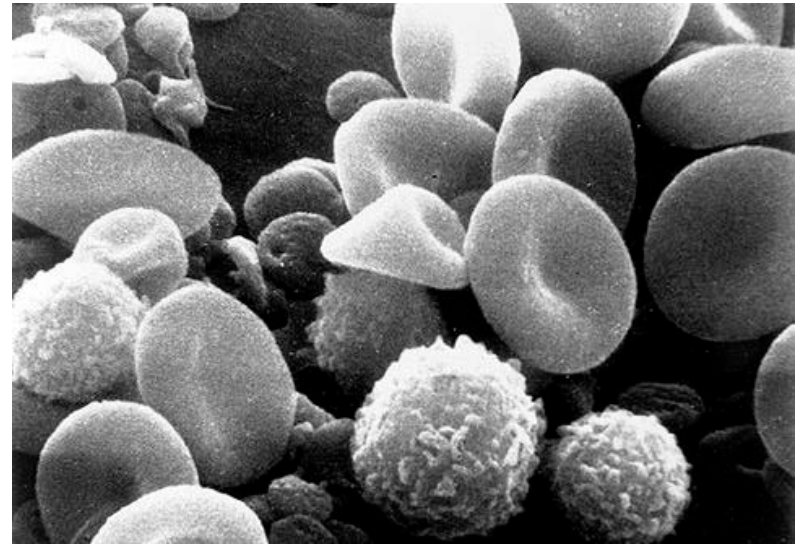
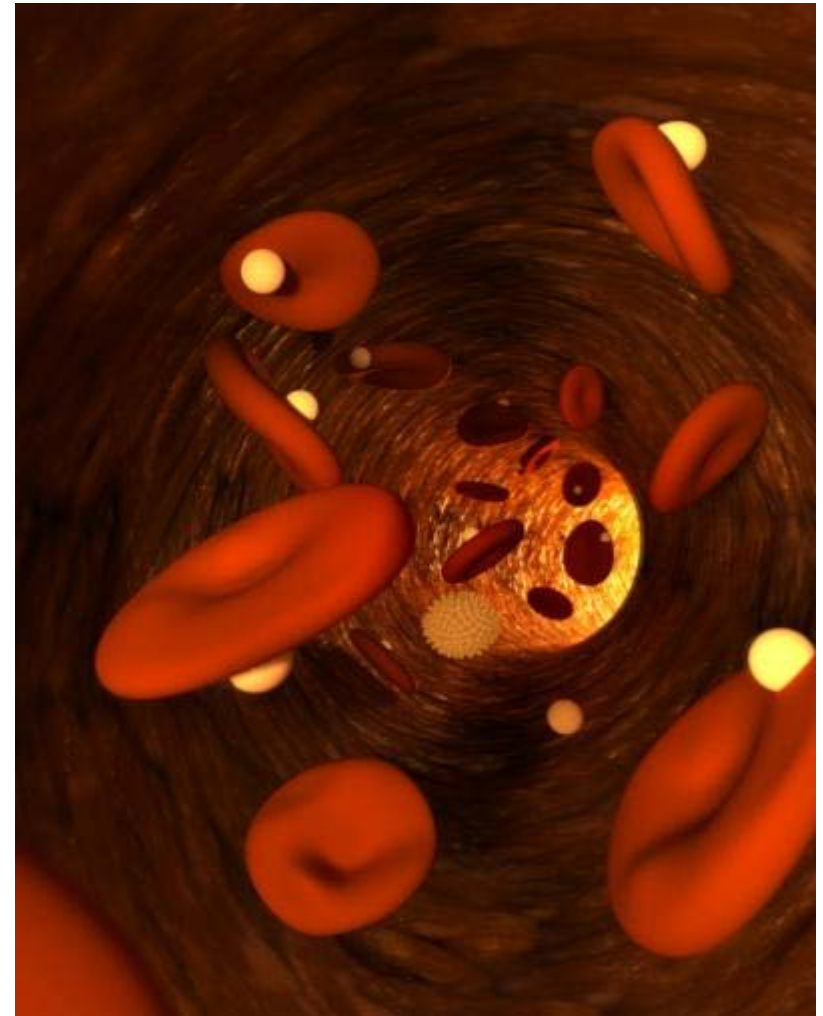
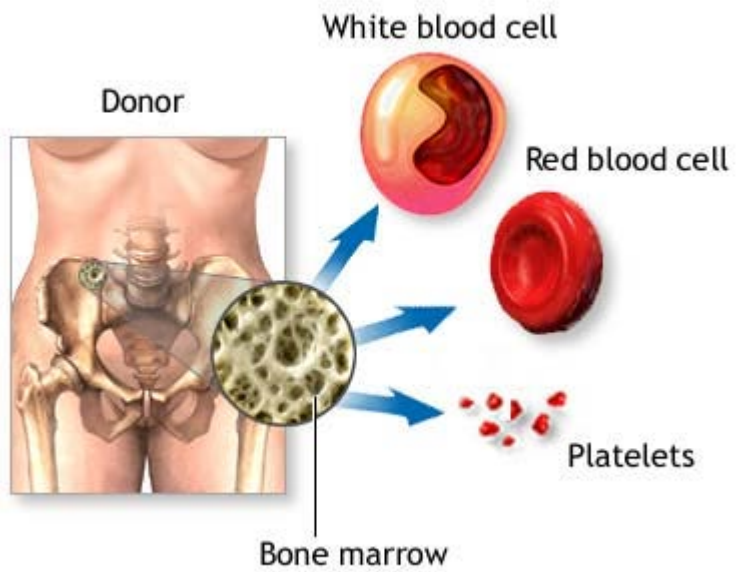
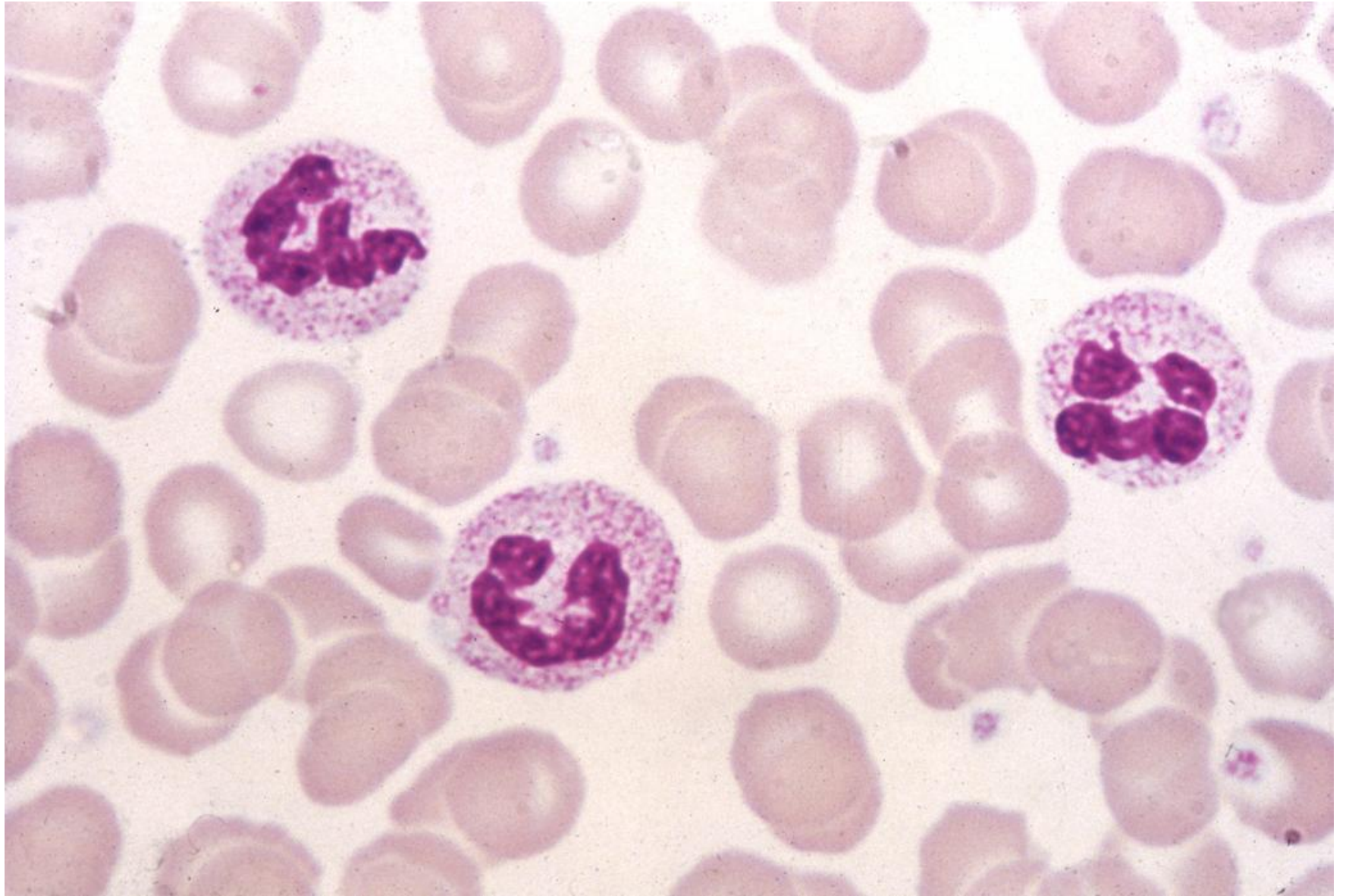


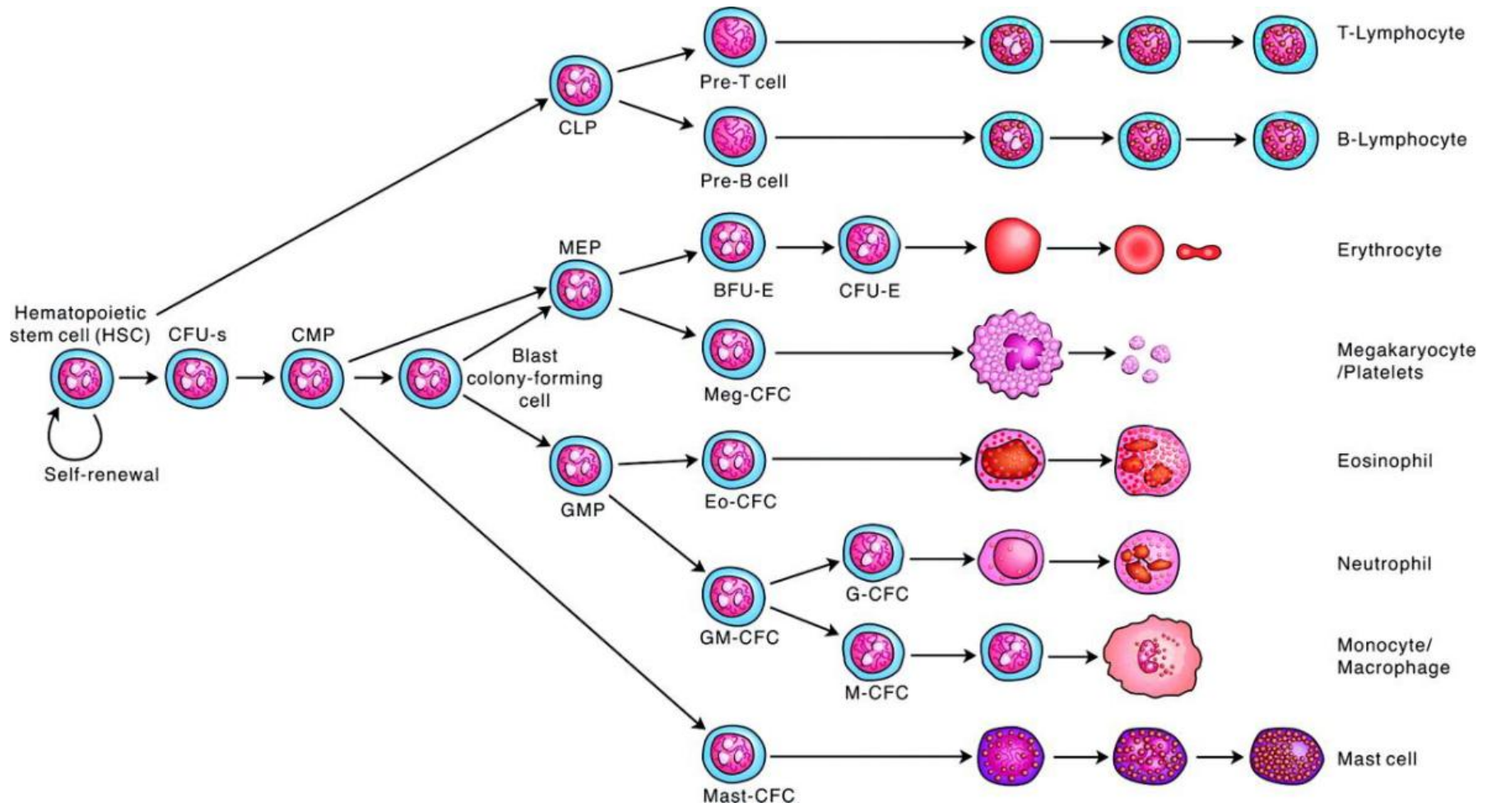
Fanconi anaemia and blood production



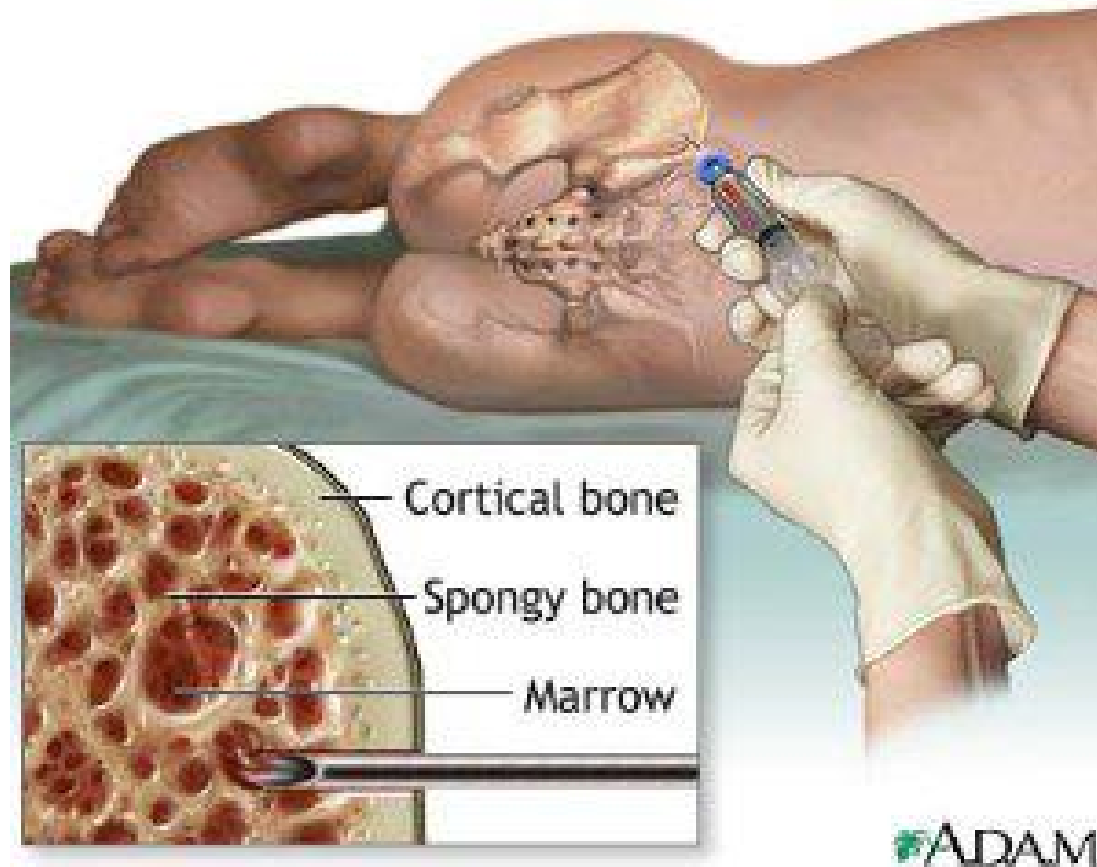
Josu de la Fuente
St. Mary's Hospital

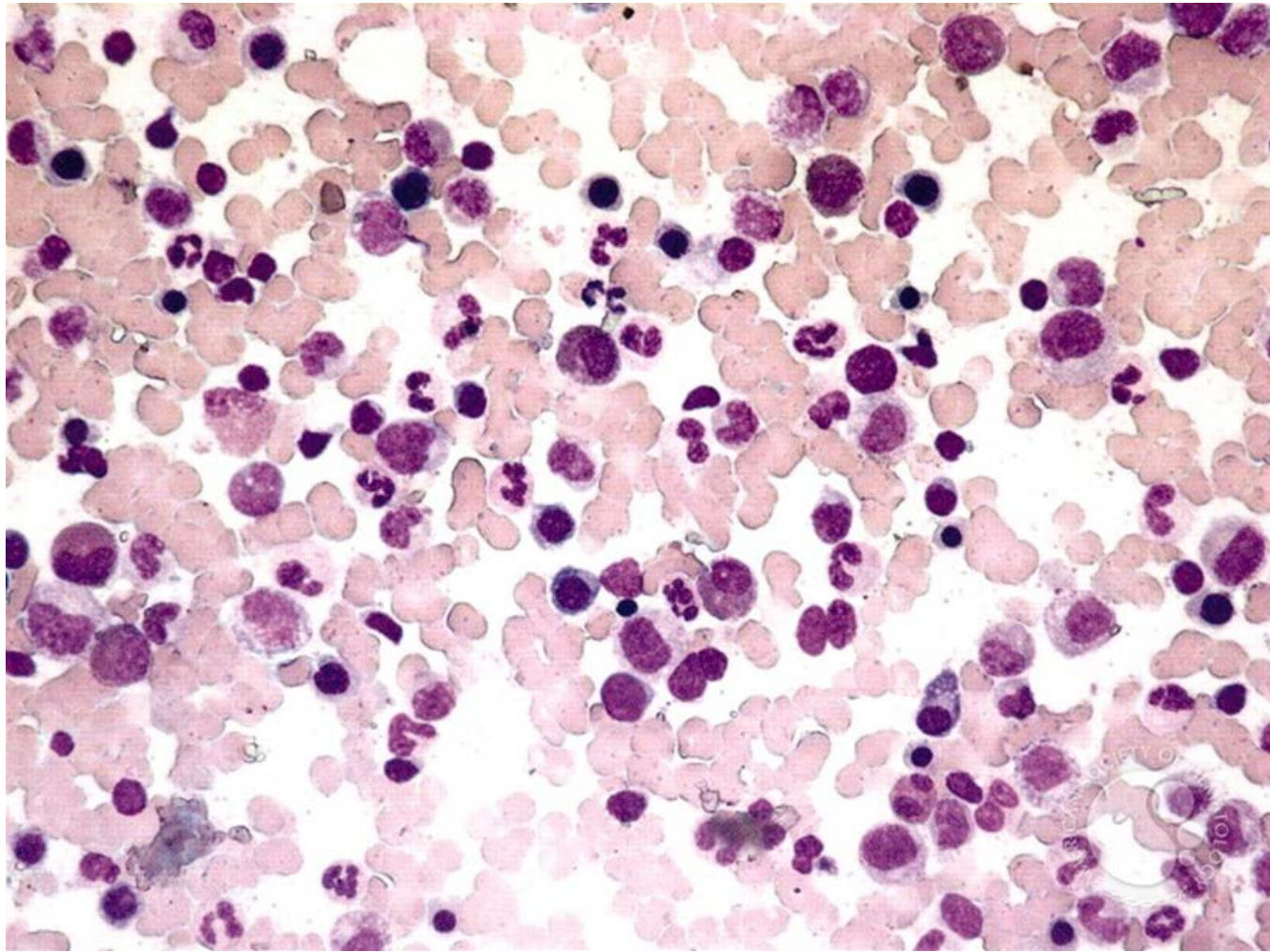




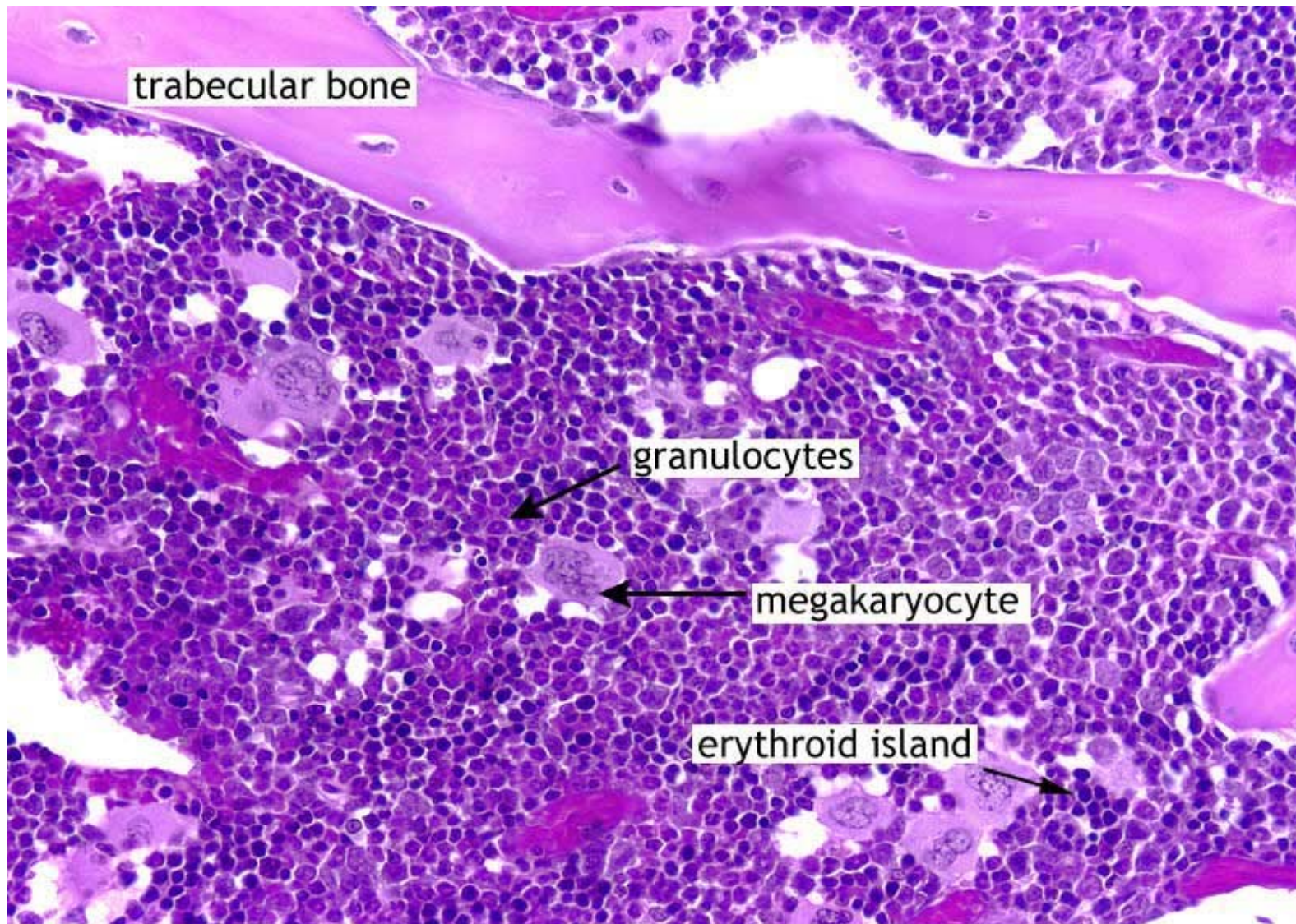


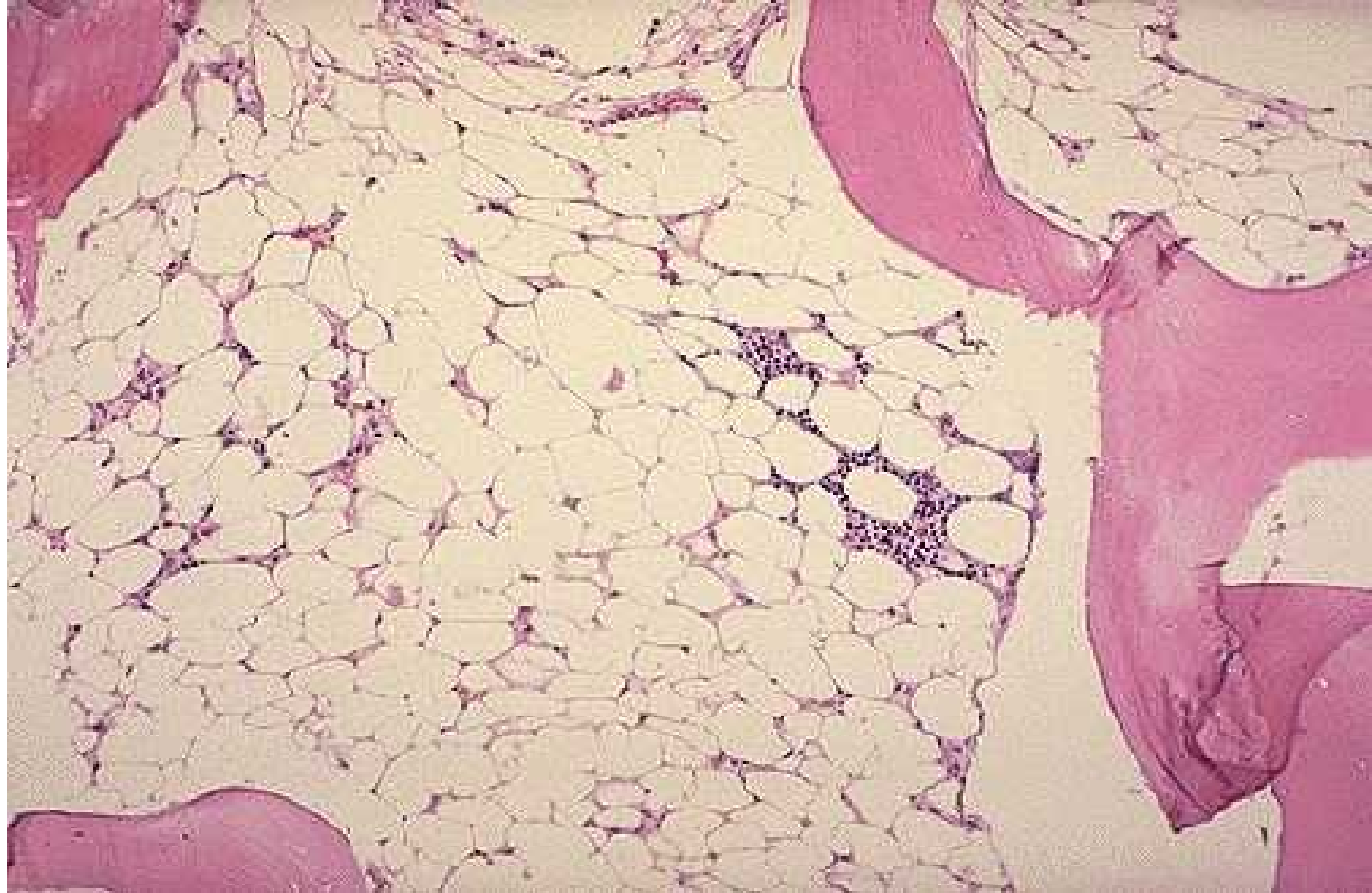
Bone Marrow biopsy



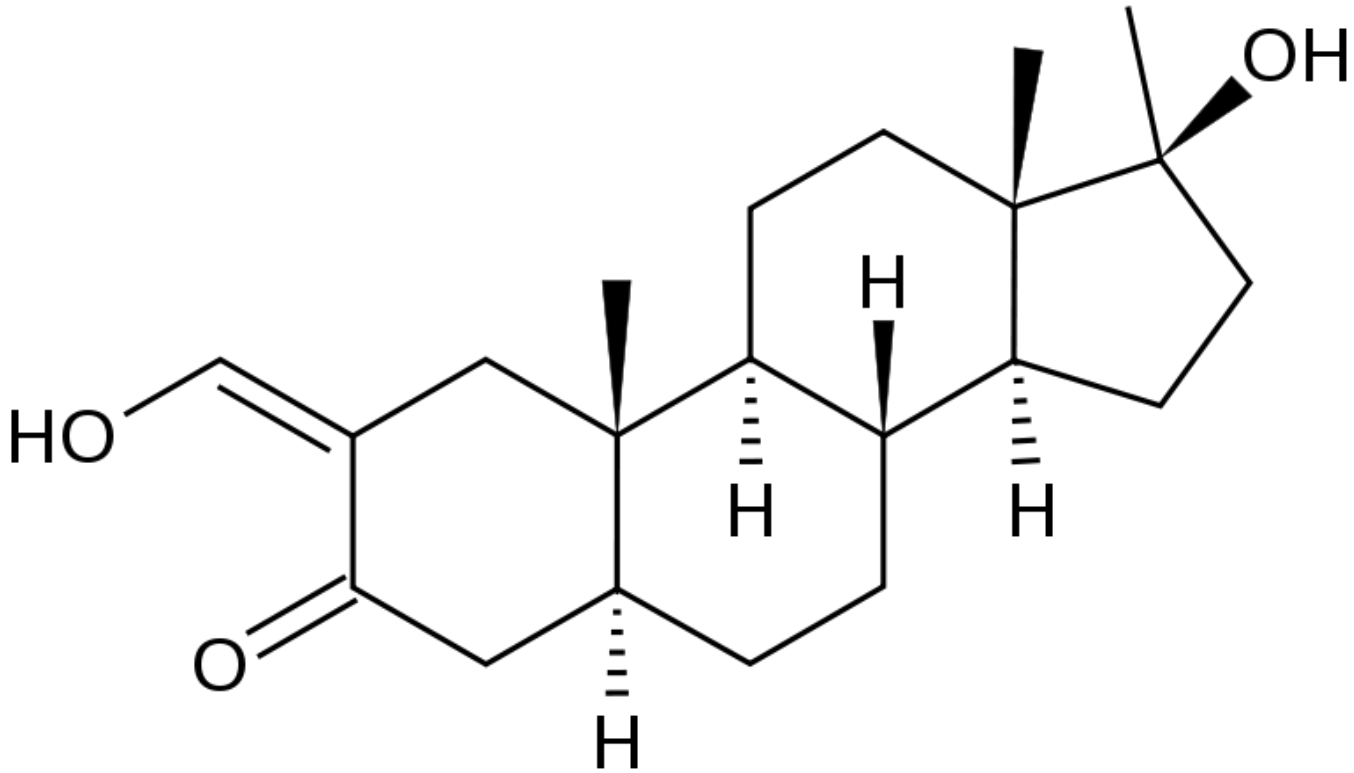


ASH bank





Oxymetholone



Start before a patient becomes transfusion dependent: platelets $< 40-50 \times 10^9/L$

Start at a lower dose: oxymetholone 0.5 mg/kg alternate days

Hb best barometer of response

Discontinued if there is no response by 6 months

Response is relatively slow: 3-6 months

- Fastest: red cells
- Slowest: in platelets
- Neutrophils may respond: most patients with moderate neutropenia seem to get few bacterial infections.
 - Prophylactic antibiotics may help

Higher doses of androgens will often result in higher blood counts but worse side-effects: up to 2 - 5 mg/kg/day

50% of patients will respond but marked side effects are frequent

Use in girls restricted to low dose therapy: 0.5 -1 mg/kg alternate days

Many patients can decrease dose after response:

- if kept transfusion free
- albeit with platelet counts of $30-90 \times 10^9/L$
- minimal side effects
- as low as oxymetholone 0.5 mg/kg every 3 - 5 days

Most patients eventually become resistant: median duration 7 - 8 years

Some patients (perhaps mosaicism) may be able to stop completely

Side effects:

- virilisation (acne, deepening of the voice, facial hair/hair loss)
- growth spurt followed by premature closure of the epiphyses
- behavioural changes
- cholestatic jaundice/transaminitis
- hepatic adenoma or hepatoma, peliosis hepatis
- hypertension

May be irreversible

Platelet counts may fluctuate quite markedly: perhaps in relation to viral infections.

- avoid excessively frequent FBC or micro-managing doses provided transfusion independent

Hepatic monitoring:

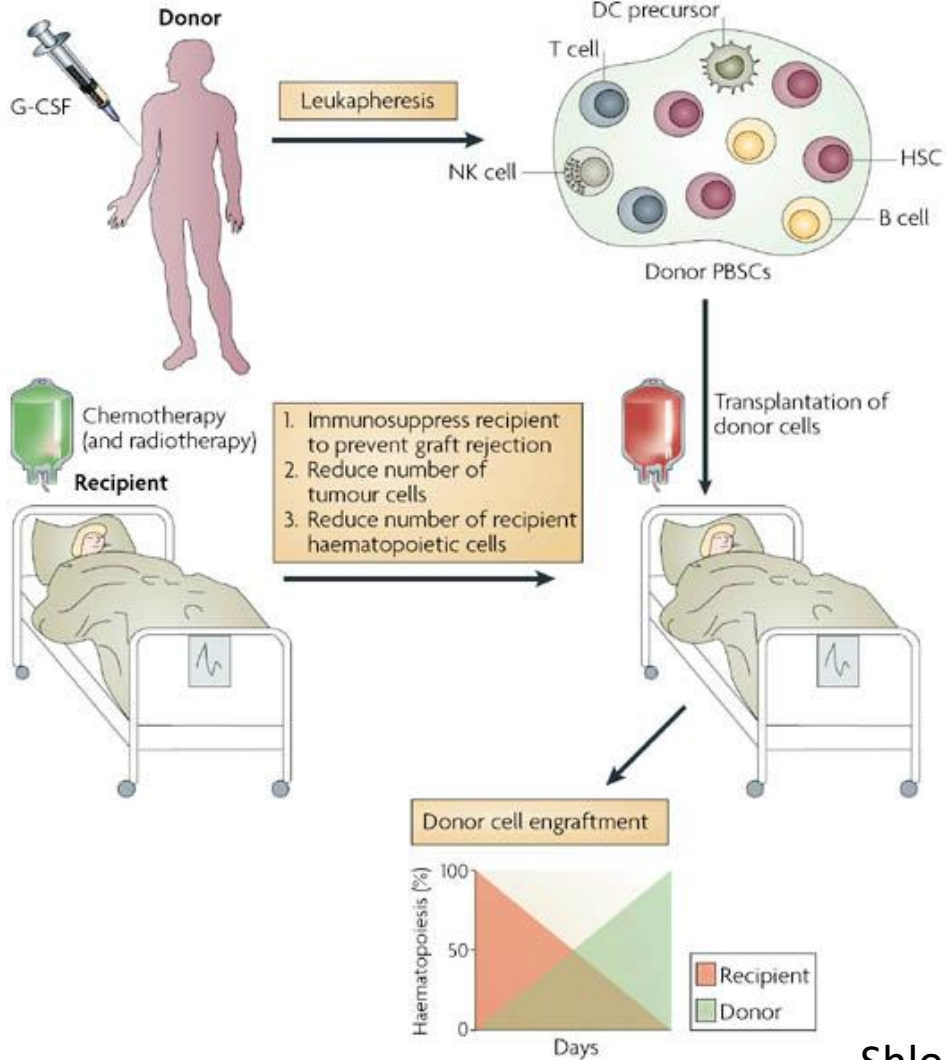
- 3 monthly: LFT
- 6 monthly: USS abdomen

If liver transaminases increase to >3 times normal the dose should be reduced until blood tests improve.

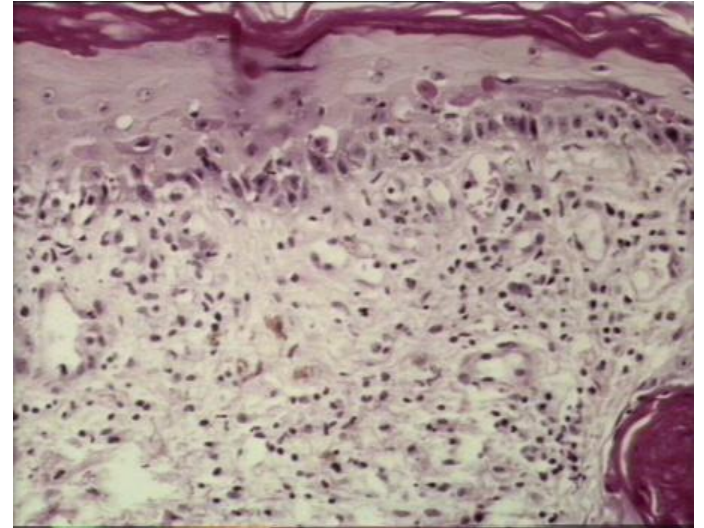
Hepatic adenomas can resolve after androgens are stopped but may persist for years

Androgens do not prevent progression to MDS or AML

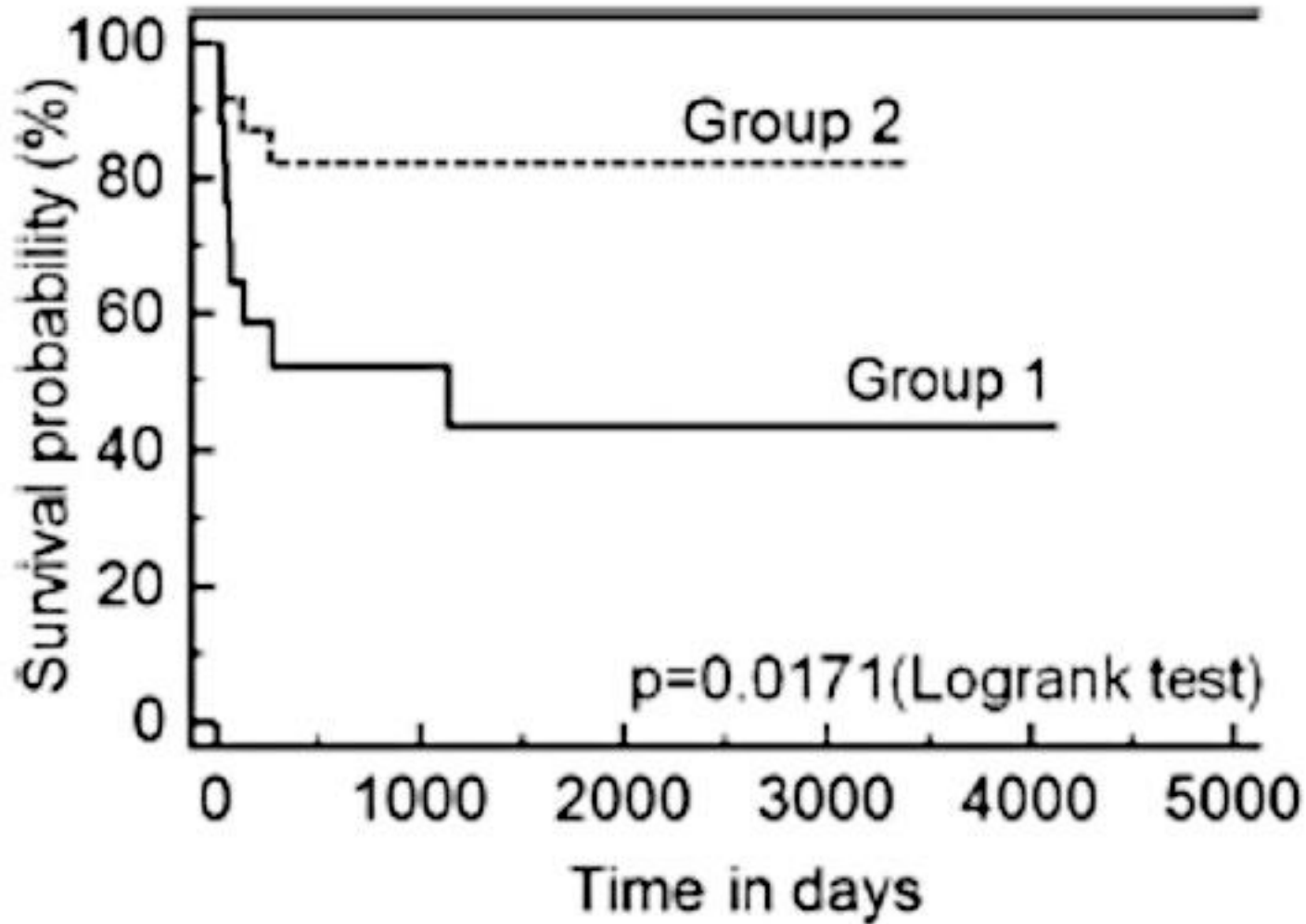
bone marrow transplantation



graft versus host disease

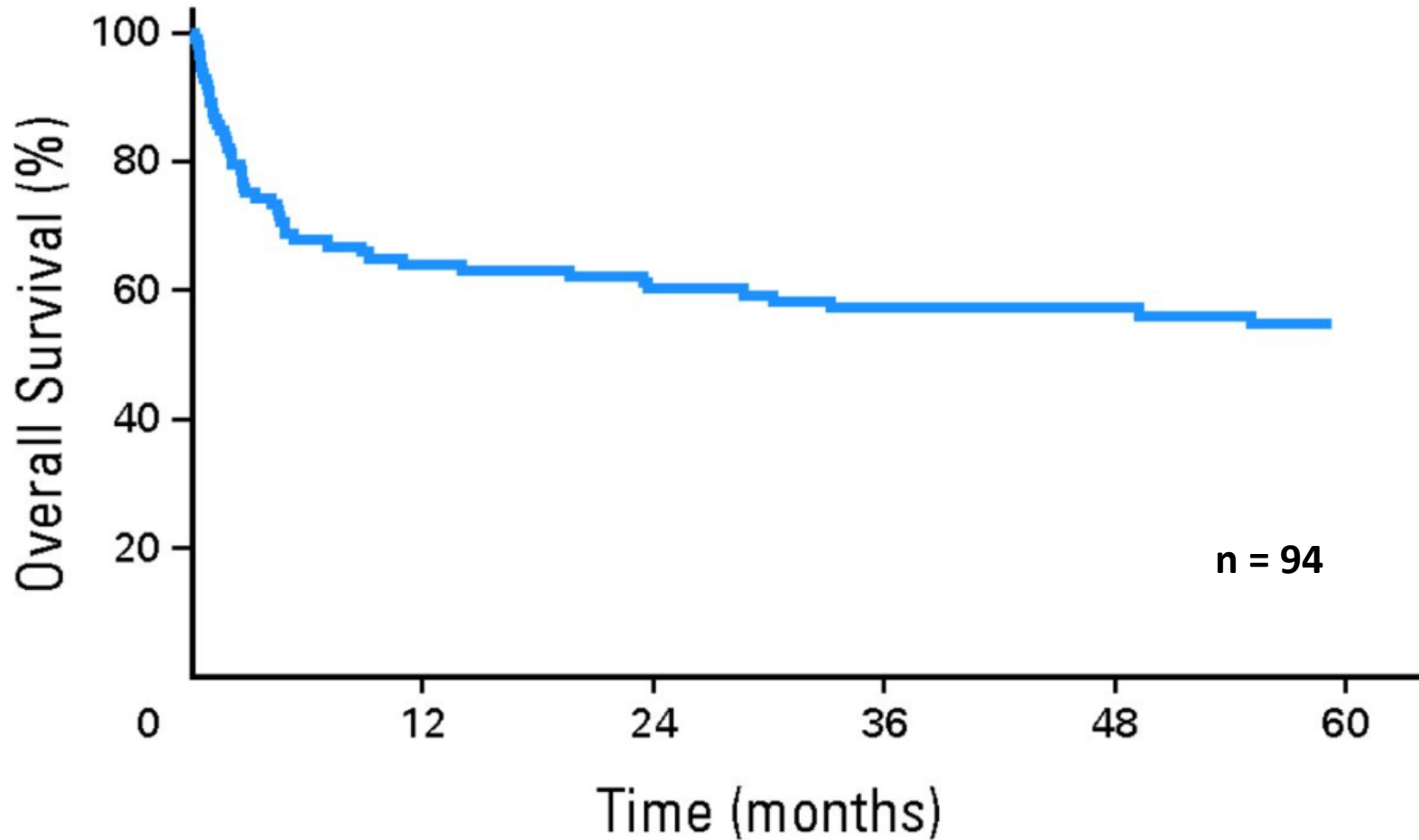


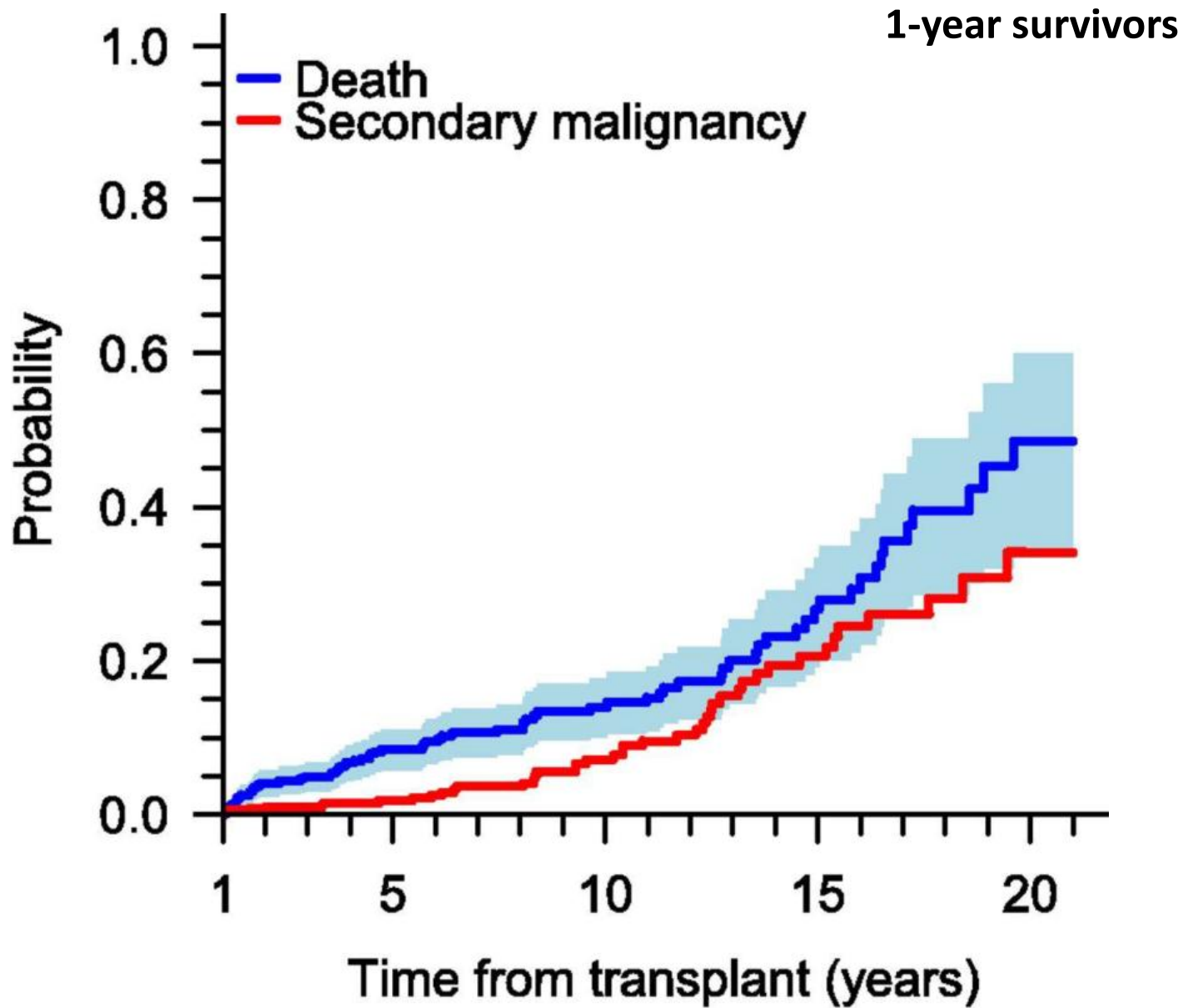
Fanconi anaemia

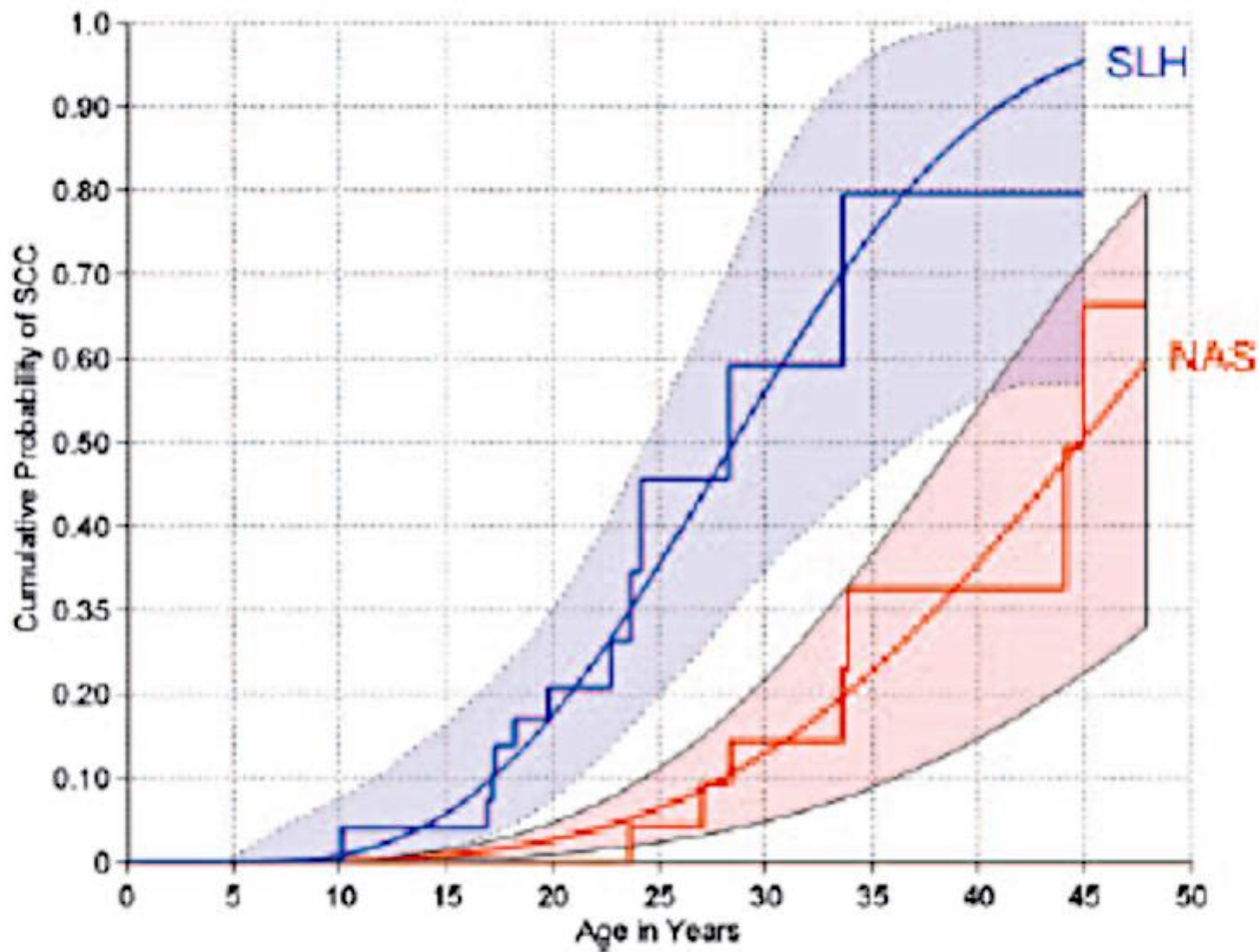


fludarabine-based conditioning regimens

survival with evidence of clonal evolution







Median:

- NAS: 33 years
- SLH: 18 years

96% 6-years after BMT