

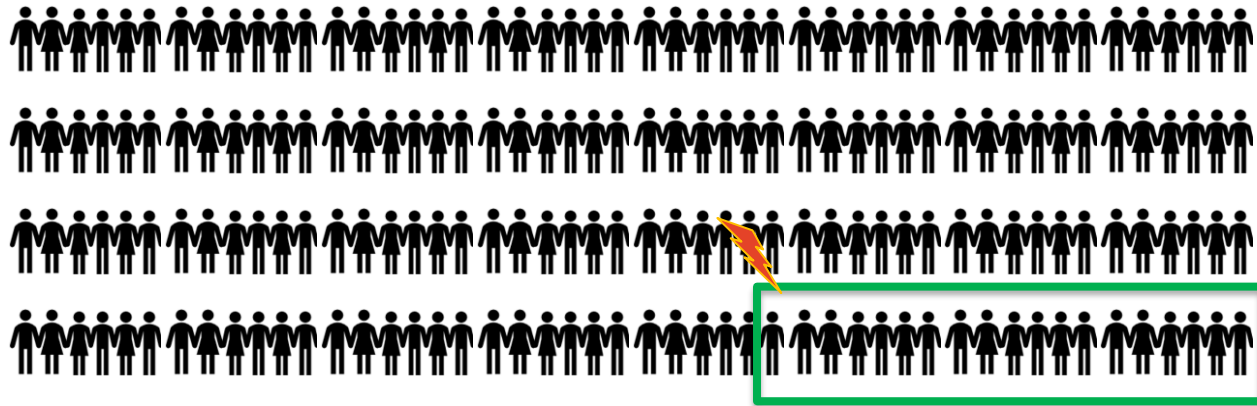
DANSKE KRÆFTFORSKNINGS DAGE 2025

Hvordan spiller alder og biologi sammen?

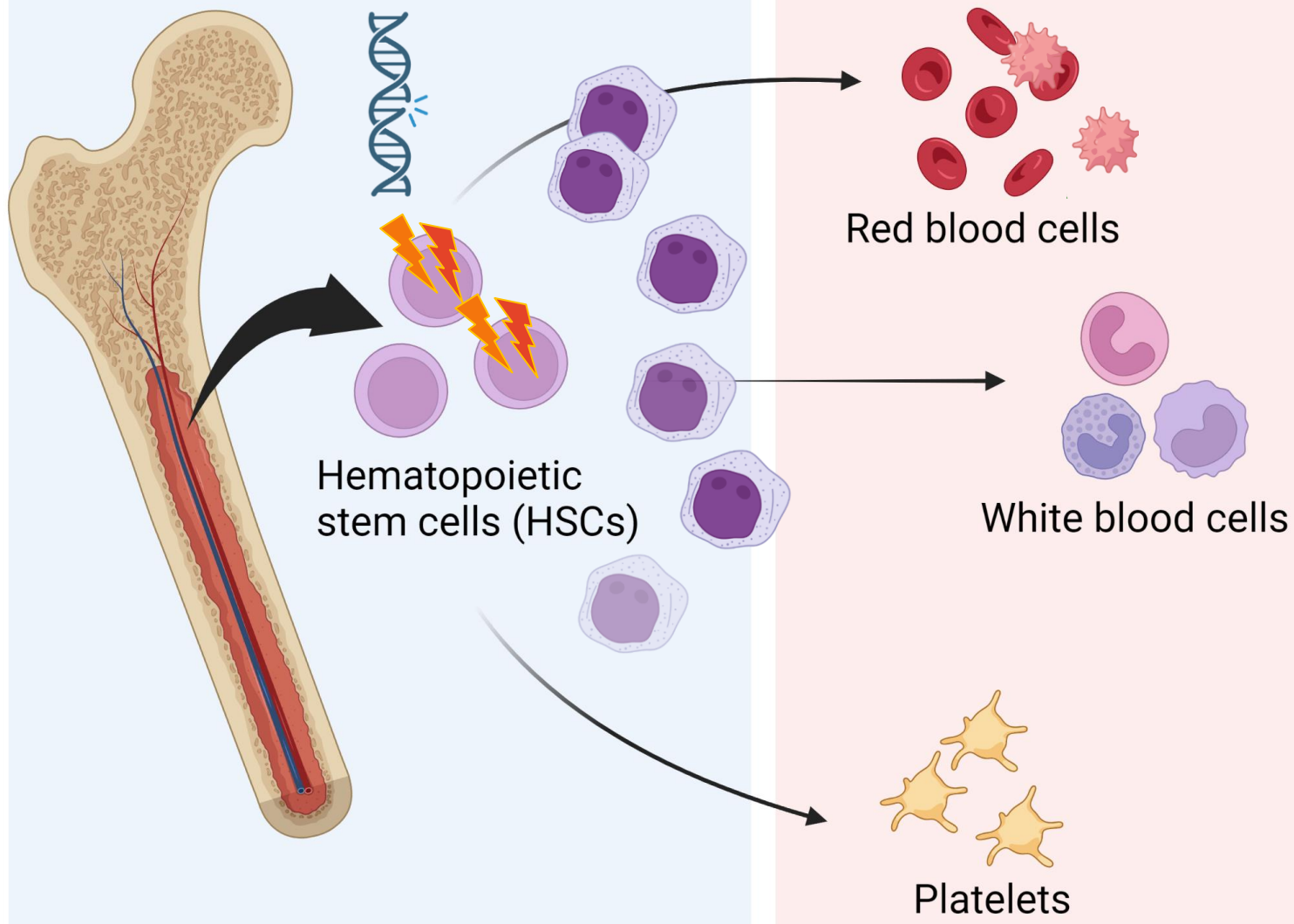
Kirsten Grønbæk, Professor, overlæge
Afdeling for Blodsygdomme, Rigshospitalet
og Institut for Klinisk Medicin, Københavns Universitet

En god og en dårlig nyhed.....

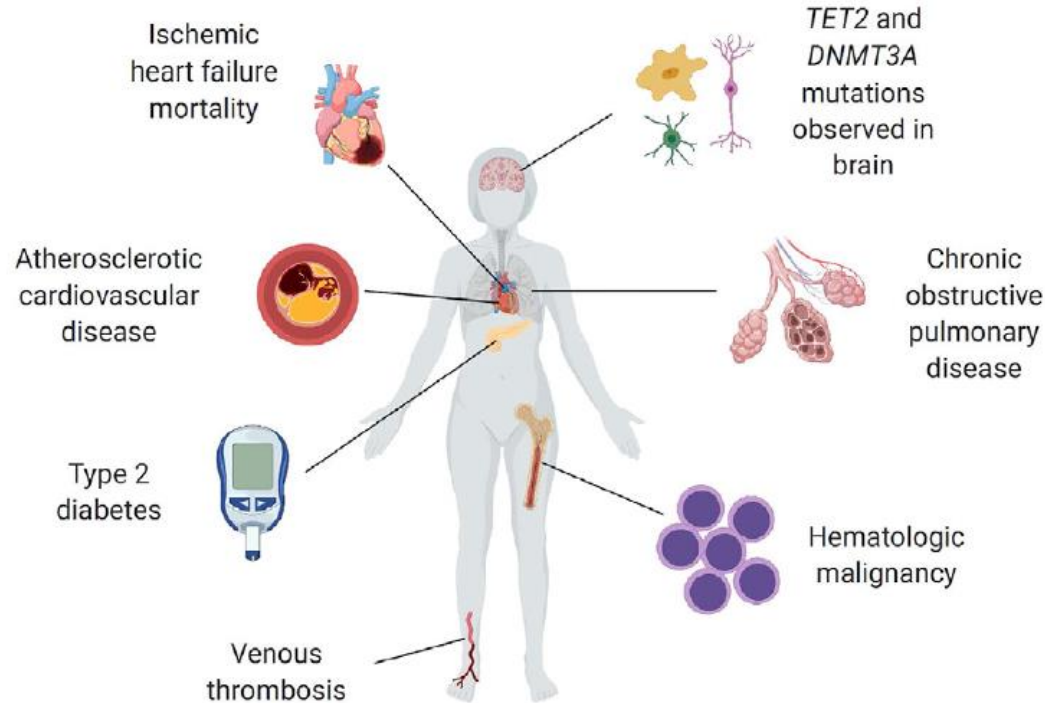
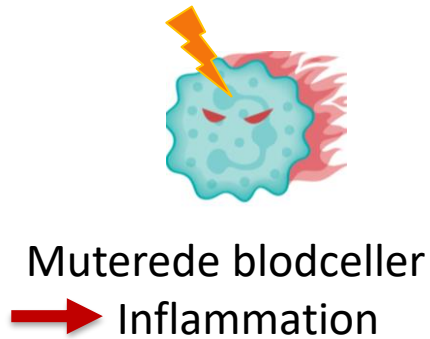
+ 60 år



CHIP: klonal hæmatopoiese



CHIP er associeret til mange aldersrelaterede sygdomme



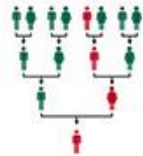
Hvorfor vokser CHIP klonen?

Alder



Medfødte faktorer

Germ line Risk



Sex Differences



Noget vi kan tage højde for?

Smoking



Obesity and overweight



Unhealthy Diet



Chronic Lung Disease



Diabetes



Chronic Infection and Autoimmune Disease



Cancer Treatment

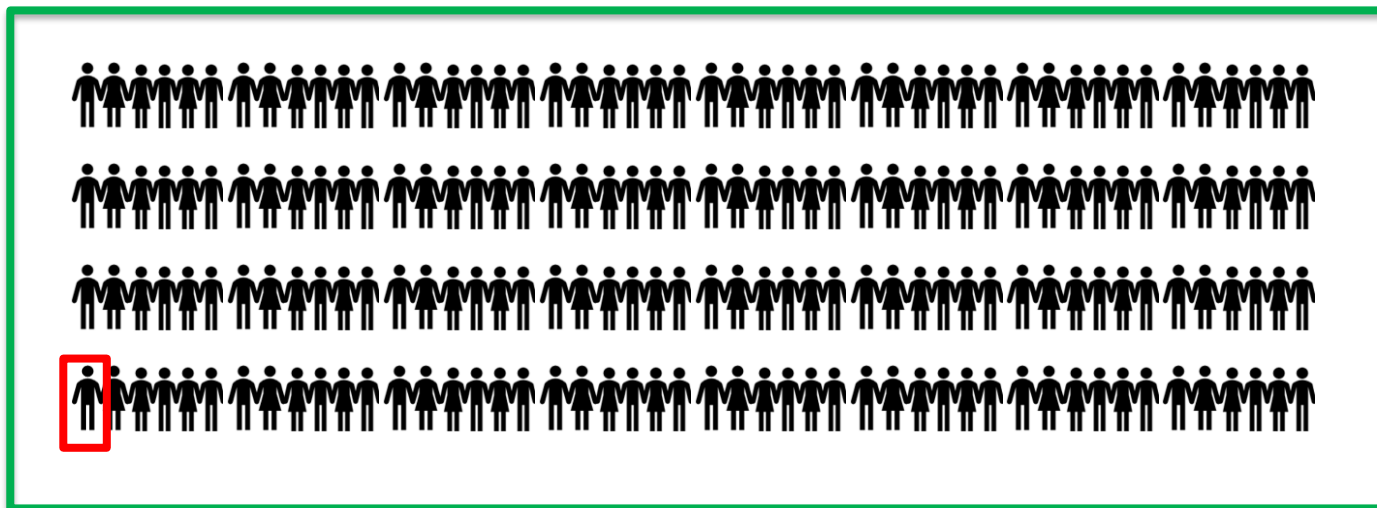


Radiation



Den gode nyhed

+ 60 år



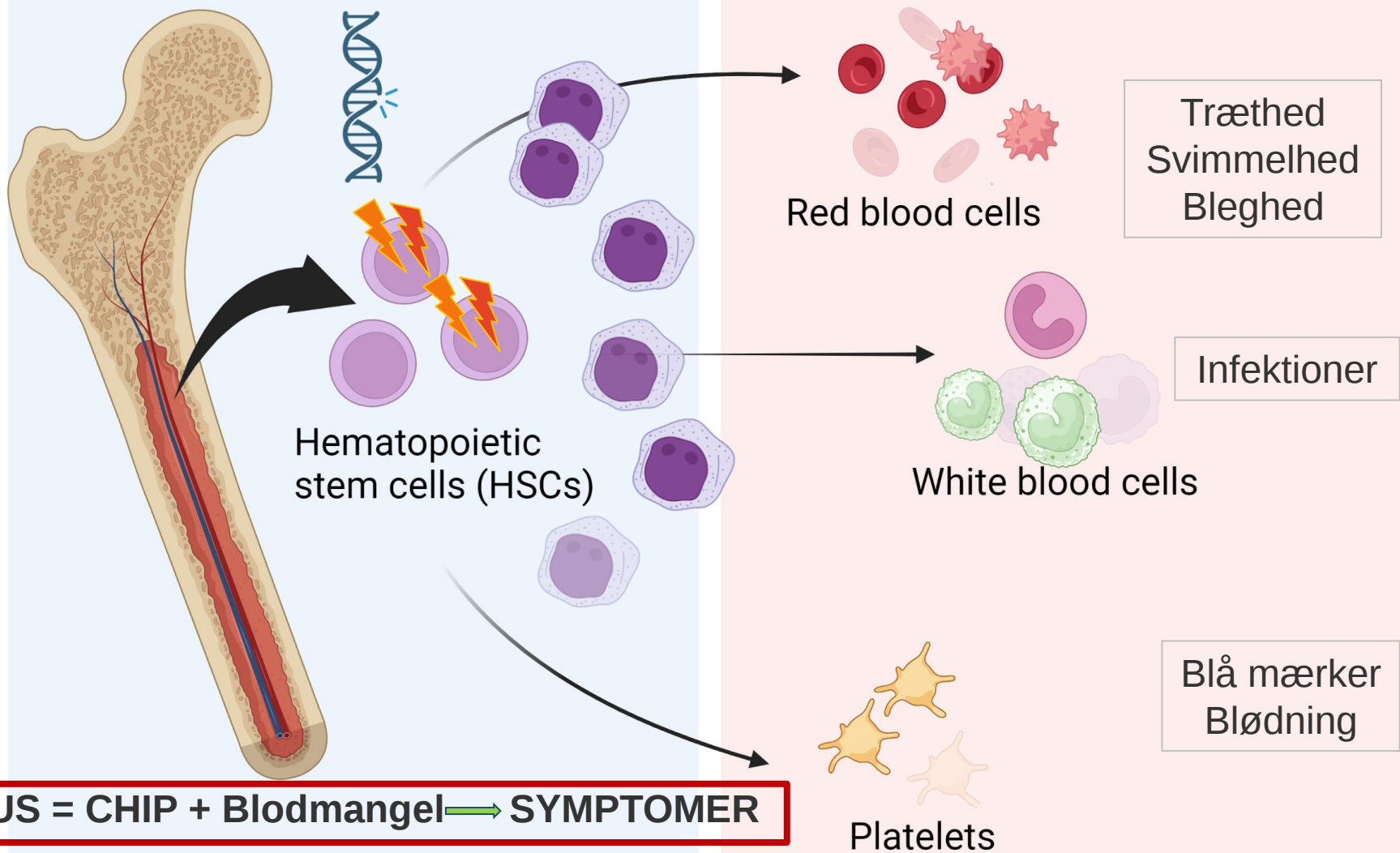
- Og dilemma! – Hvad skal man så gøre?

#DKD2025

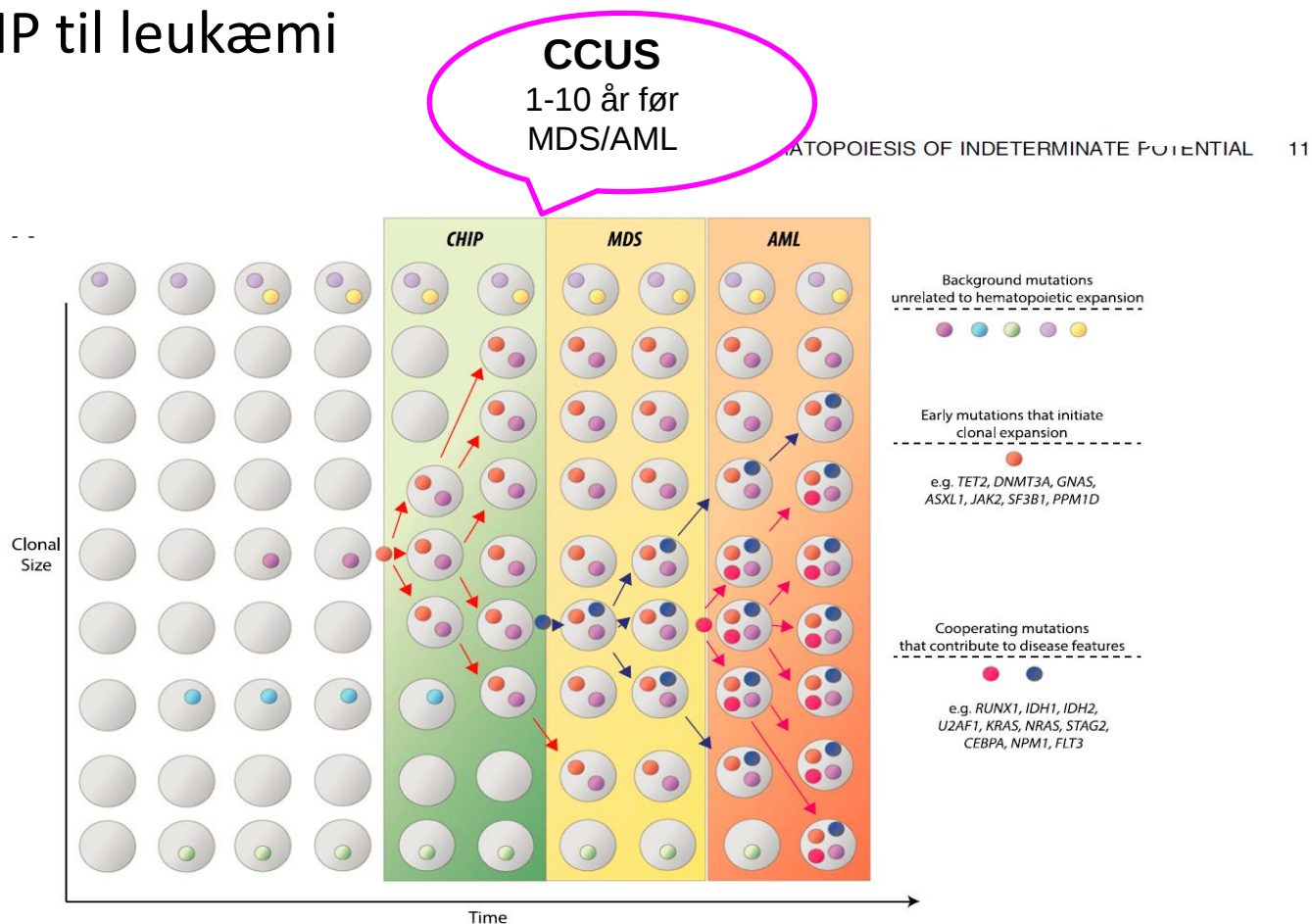
#SamarbejdeOmKræft

Slido

#131525



Udvikling fra CHIP til leukæmi

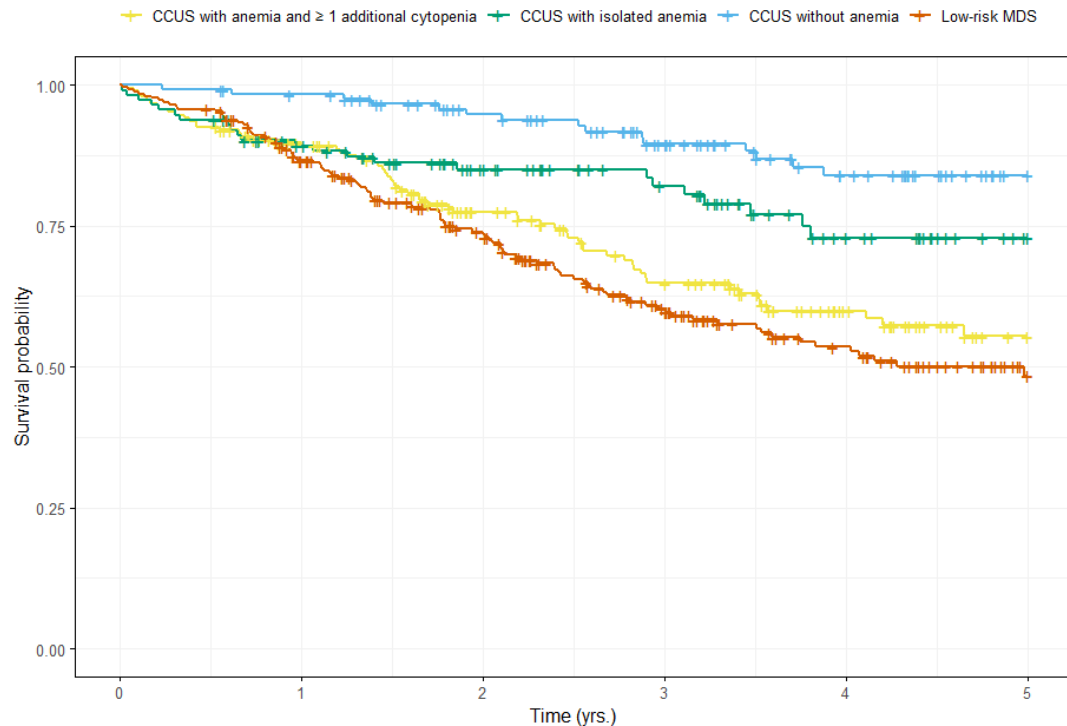


CHIP: Klonal hæmatopoiese
CCUS: Klonal Cytopeni

MDS: Myelodysplastisk syndrom
AML: Akut Myeloid Leukæmi

*modified from Steensma et al.
Blood 2015*

Overlevelse ved CCUS og LR MDS



Overall survival at 5 years (95%-CI)		
CCUS without anemia	84 %	(77-92 %)
CCUS with isolated anemia	73 %	(63-84 %)
CCUS with anemia and ≥ 1 additional cytopenia	55 %	(47-65 %)
Low-risk MDS	48 %	(41-57 %)

Median age at study entry: 74 years

Number at risk

188	154	106	80	46	24
113	93	70	54	31	16
122	117	99	78	56	35
259	208	149	96	63	30

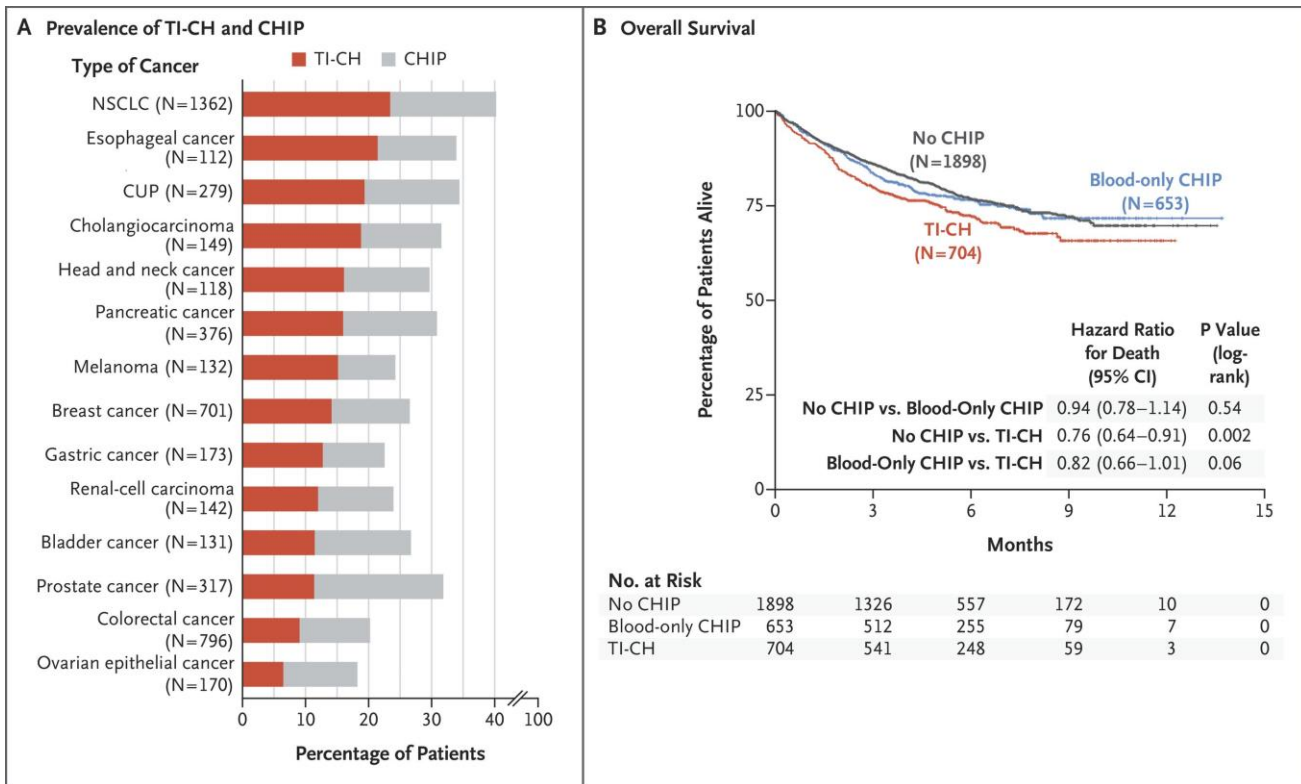
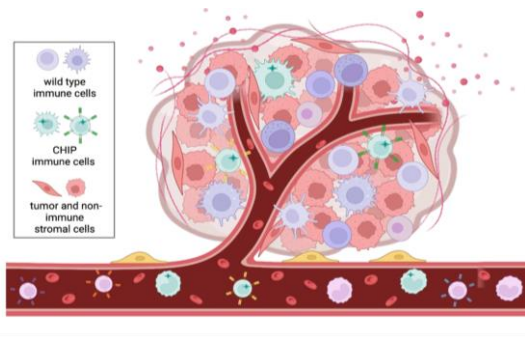


Hansen JW, Træden D et al., submitted

CHIP - og andre former for cancer



Tumorinfiltrerende klonal hæmatopoiese (TI-CH)



#DKD2025

#SamarbejdeOmKræft

N Engl J Med 2025 Apr 24;392(16):1594-16 and July 9th ;393:203-205

#131525

Terapi-relateret CHIP og CCUS (t-CHIP og t-CCUS)

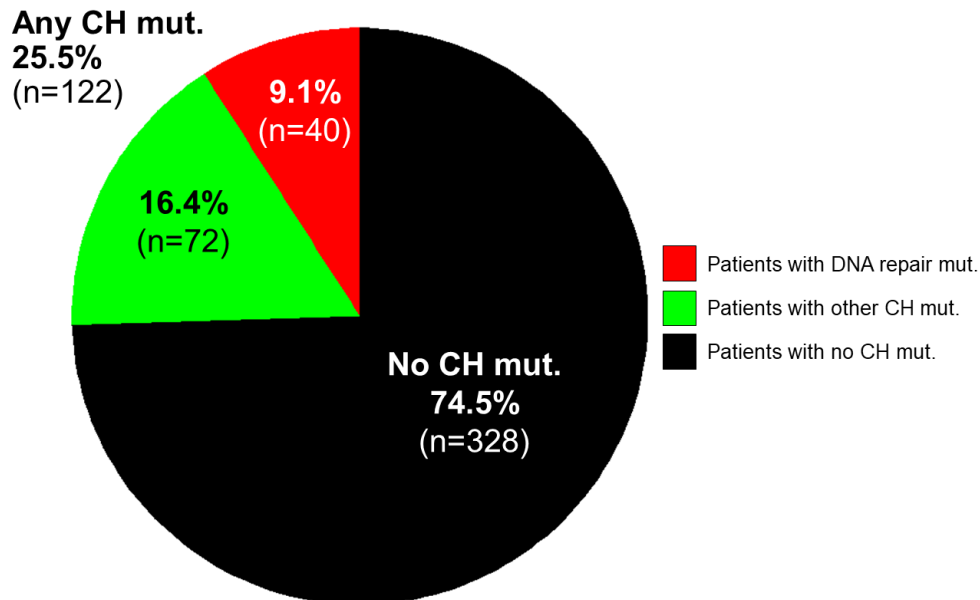


Terapi-relateret CHIP og CCUS

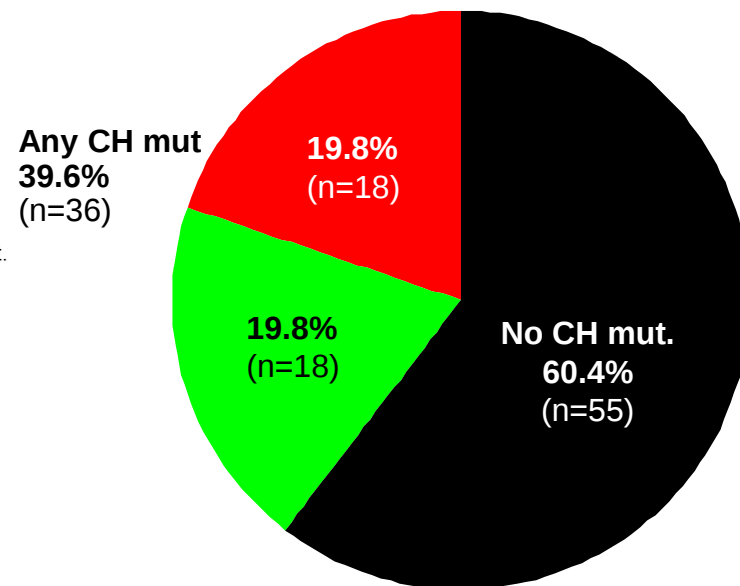
Lymfom efter Højddosis kemo



The full national HDT cohort
(median 56y, 45% 1. line)

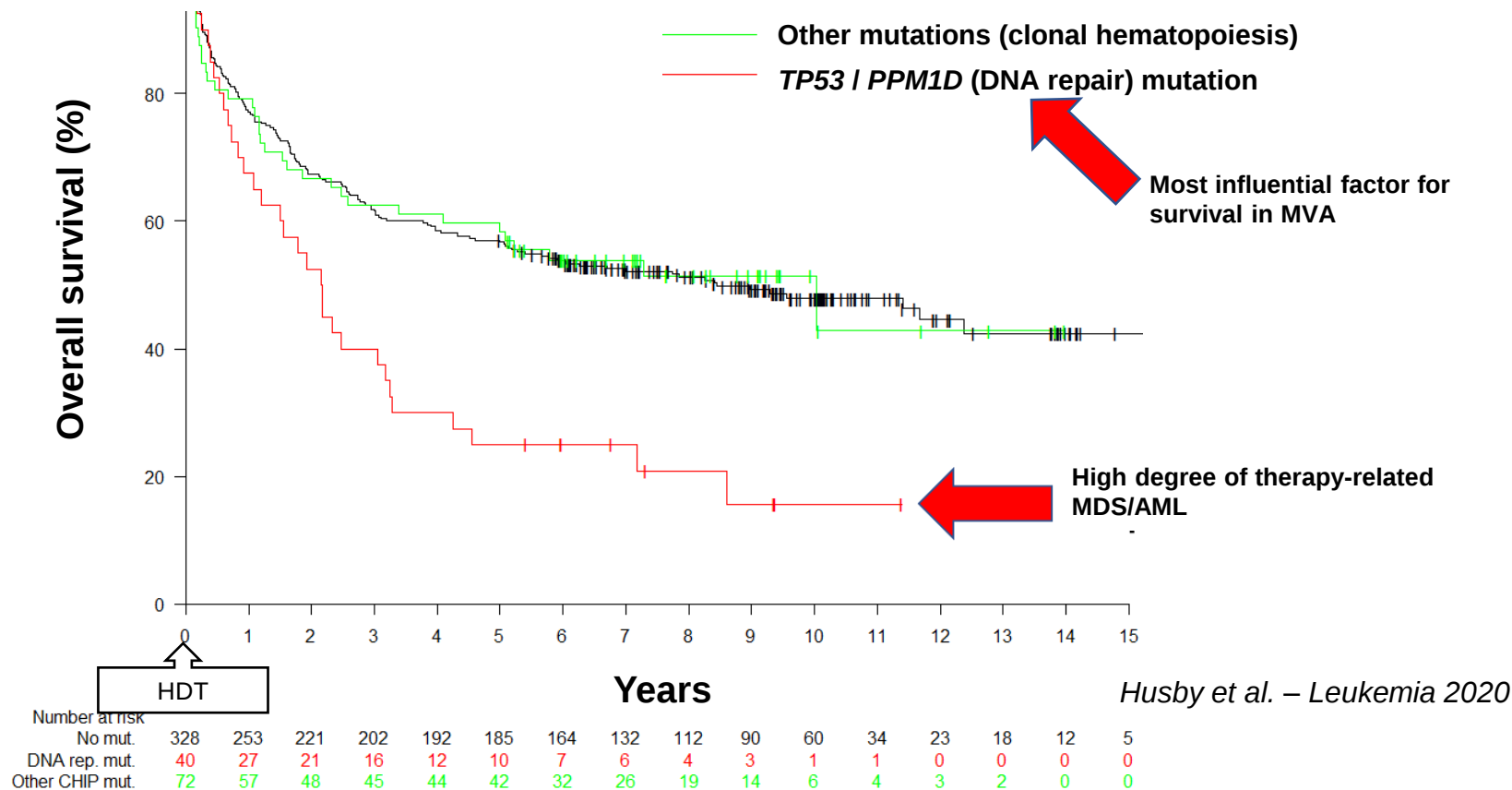


Subcohort
(60-70 y, min. 2. line treatment)

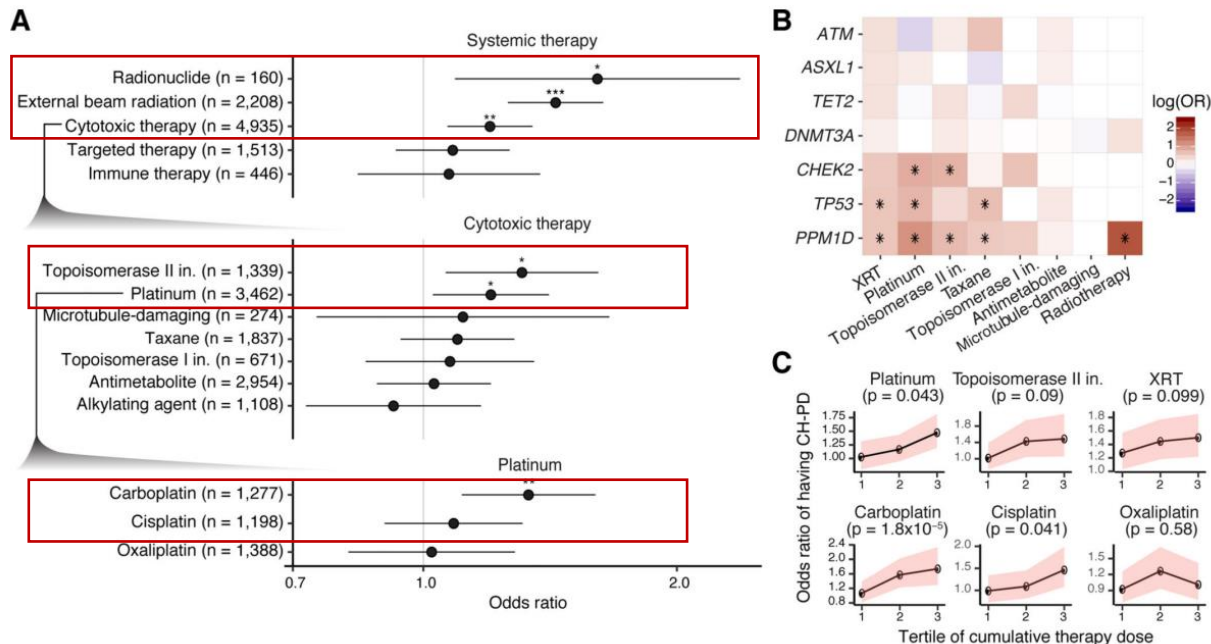


Husby et al. – Leukemia 2020

t-CHIP efter HD Kemo og autolog transplantation for lymfom



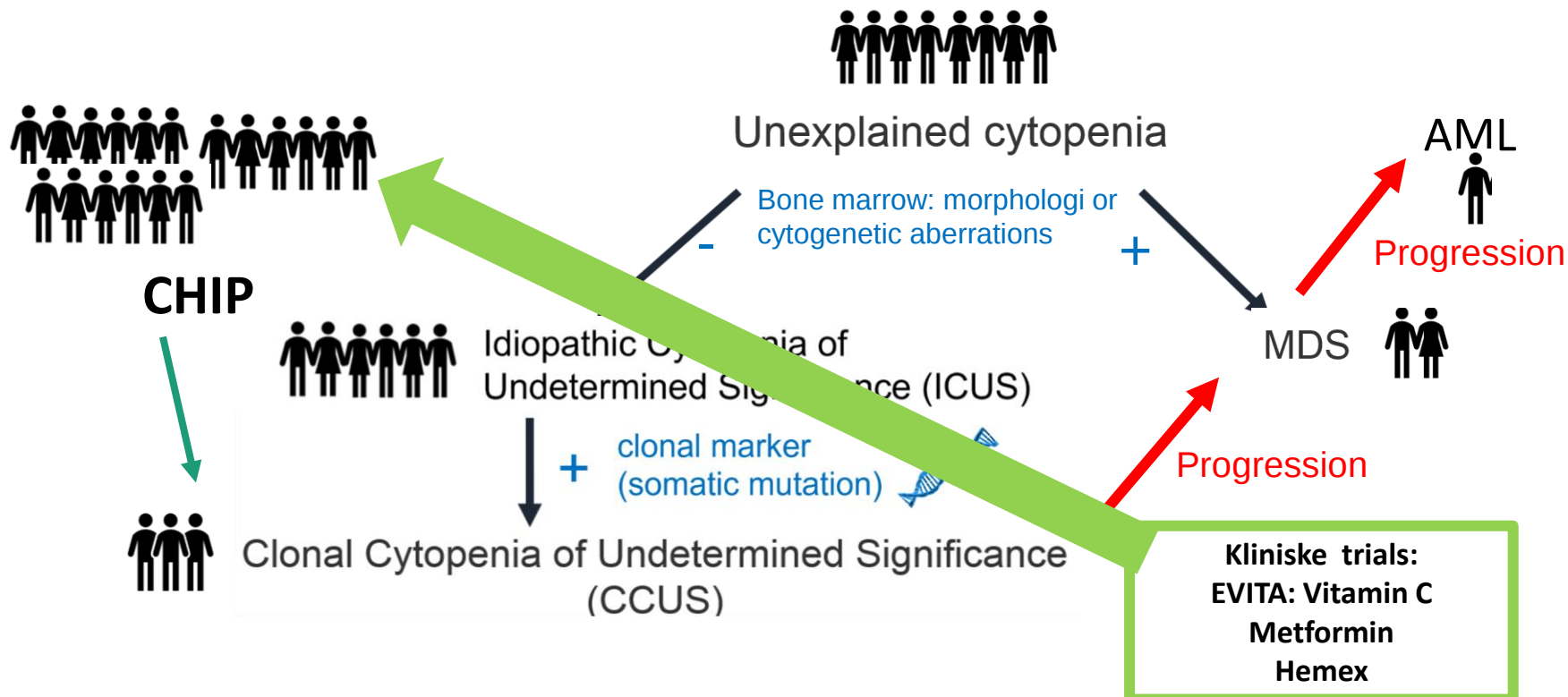
Specifikke behandlinger og udviklingen af CHIP



Interception: Kan vi holde CHIP klonerne i skak?



Leukæmi og forstadier



STOR TAK TIL:

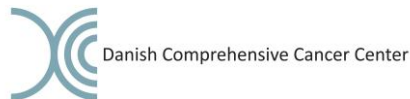
Alle patienter og deres pårørende

Alle i GNOM-lab

Alle vores kollegaer i DCCC-Hæmatologi
- og alle vores andre samarbejdspartnere



novo nordisk
fonden



Glæd jer til kl. 16.15!



- **C-vitamins rolle i behandlingen af blodkræft**

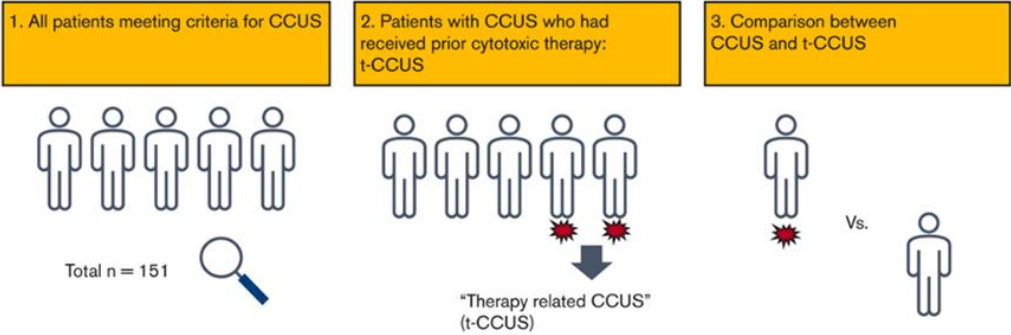


Stine Ulrik Mikkelsen, læge, ph.d.,
Afdeling for Blodsygdomme,
Københavns Universitetshospital - Rigshospitalet

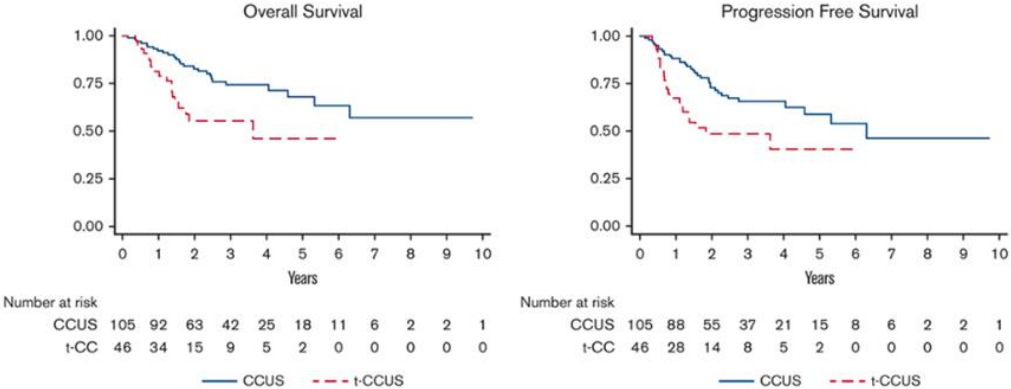
SYMPTOMER er det vigtigste !

Back up hereafter

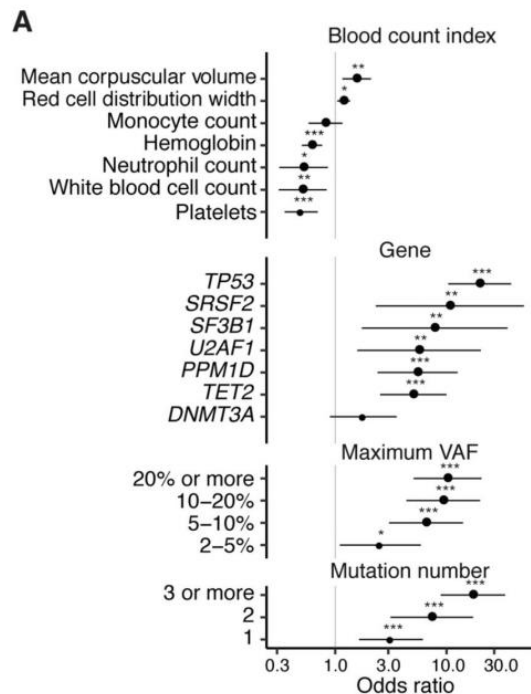
Patients with T-CCUS have higher risk of progression and death

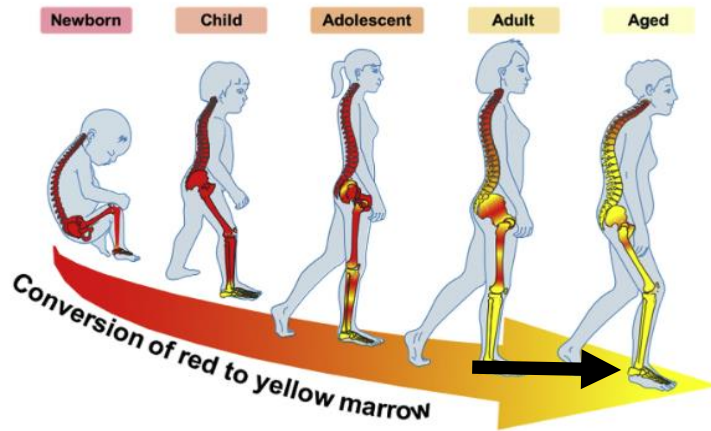


Conclusions: Patients with CCUS who received previous cytotoxic therapy had distinct clinical features and a higher risk of progression to myeloid neoplasm and death.

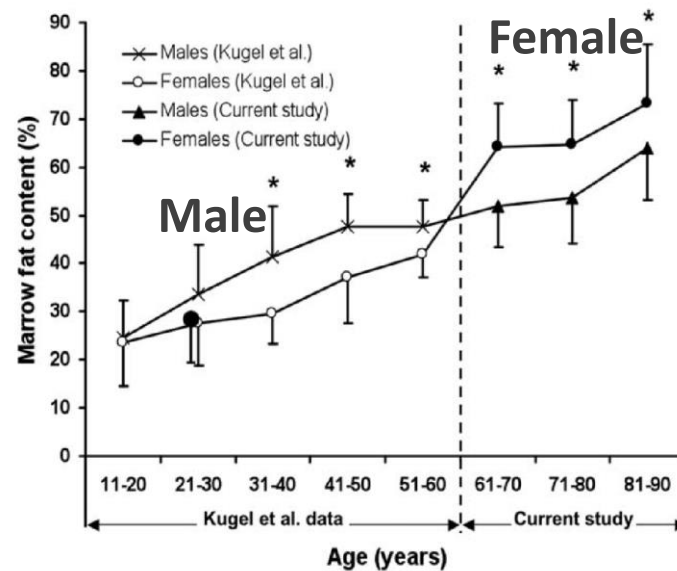


Risk of AML or MDS by clinical and CH mutational characteristics in patients with solid tumors





Li et al. Bone 2018



Griffith et al. MAGNETIC RESONANCE IMAGING 2012

Slide from Liran Shlush