

# AML - Epidemiologi

Fortbildningskurs 26-28 April 2021

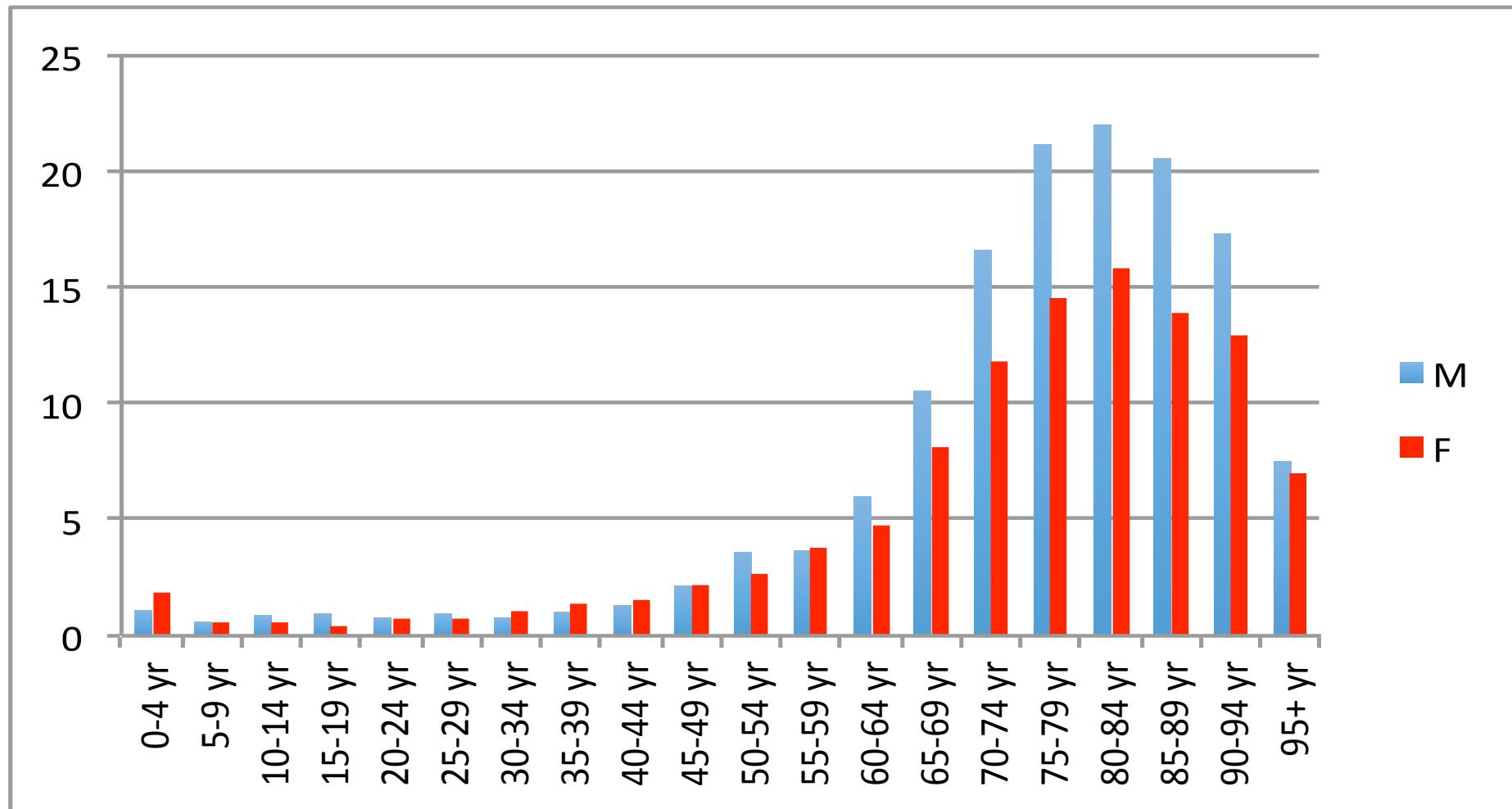
Gunnar Juliusson

# AML: Epidemiologi

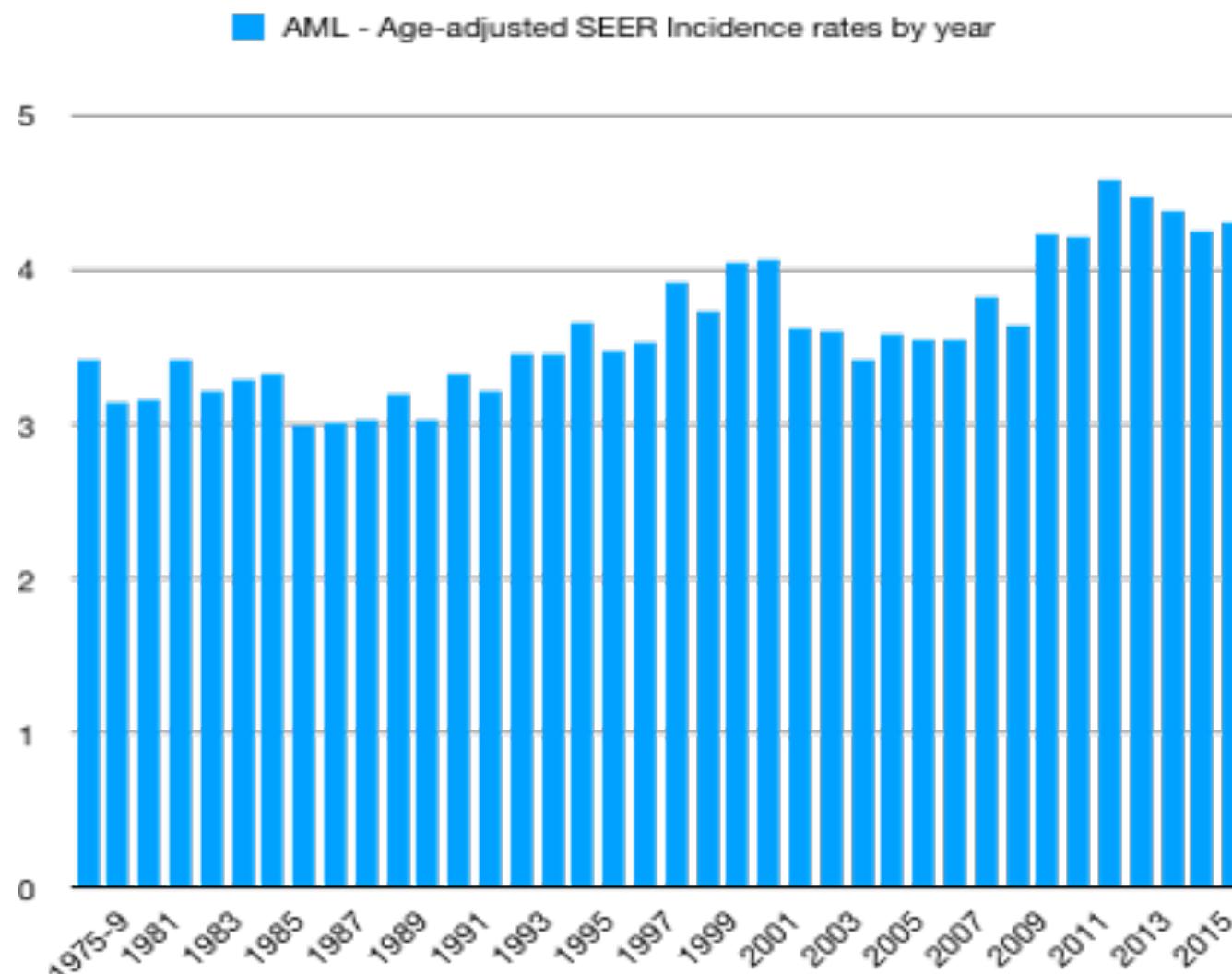
- Nya diagnoskriterier 2002
  - blaster 30% => 20%
- Riskfaktorer
  - Ovanligt med familjär distribution
    - ärftliga former <5%, nytt i WHO 2016
    - konstitutionella syndrom
  - Tidigare exposition: bensen, rökning, lantbruk, övervikt,
  - **Tidigare DNA-skadande behandling**
    - Alkylerade cytostatika, strålbehandling
      - MDS, 5q-, monosomi 7, komplex karyotyp, latens 5 år
    - Topoisomeras II-hämmare (*etoposid, antracykliner*)
      - MLL / 11q23, latens 1,5 år
  - **Tidigare hematologisk sjukdom:** MDS, MPN
  - Klonal hematopoes

# Incidens AML Sverige

1997-2013, antal / 100 000 / år

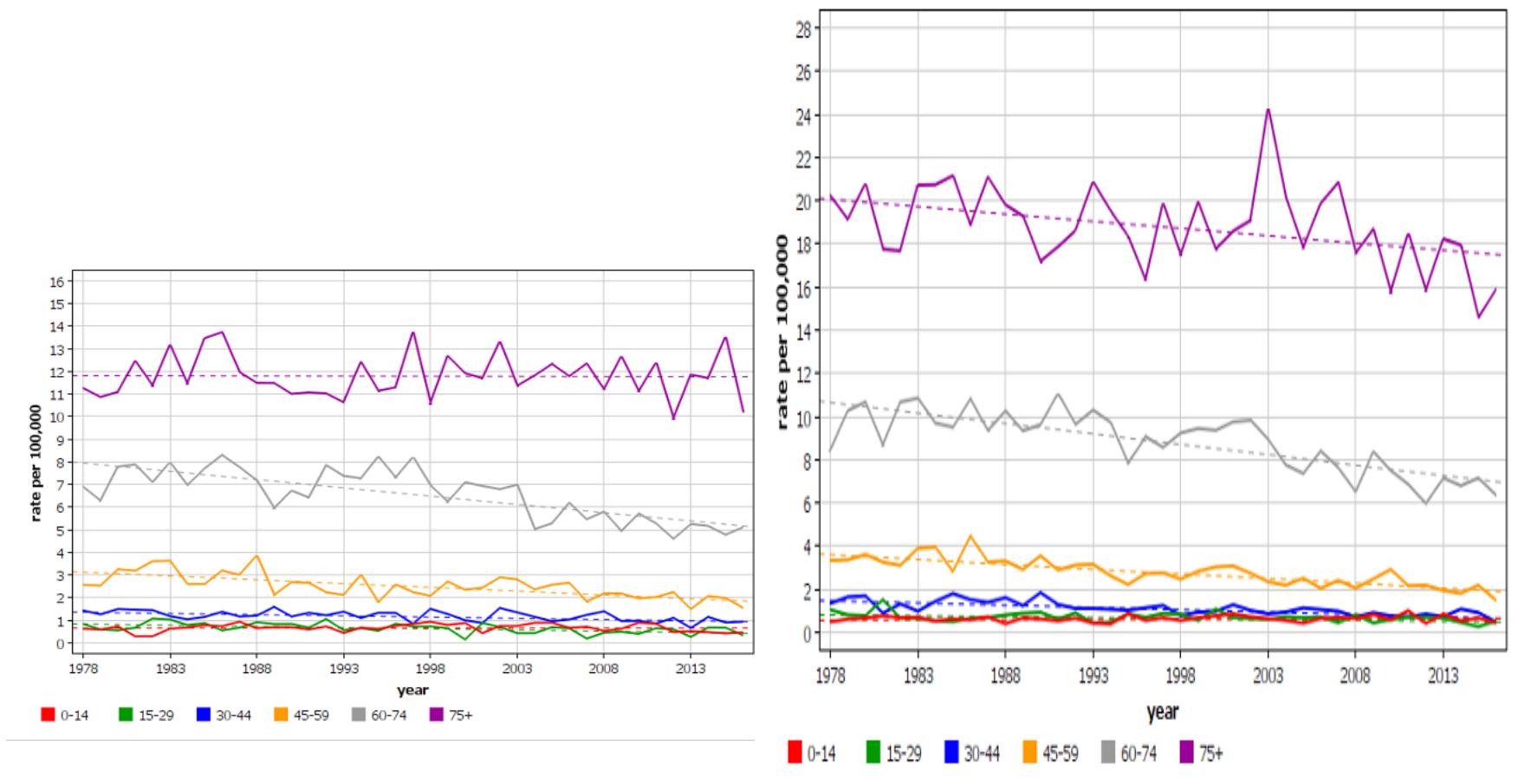


# USA: Incidens 1975-2016



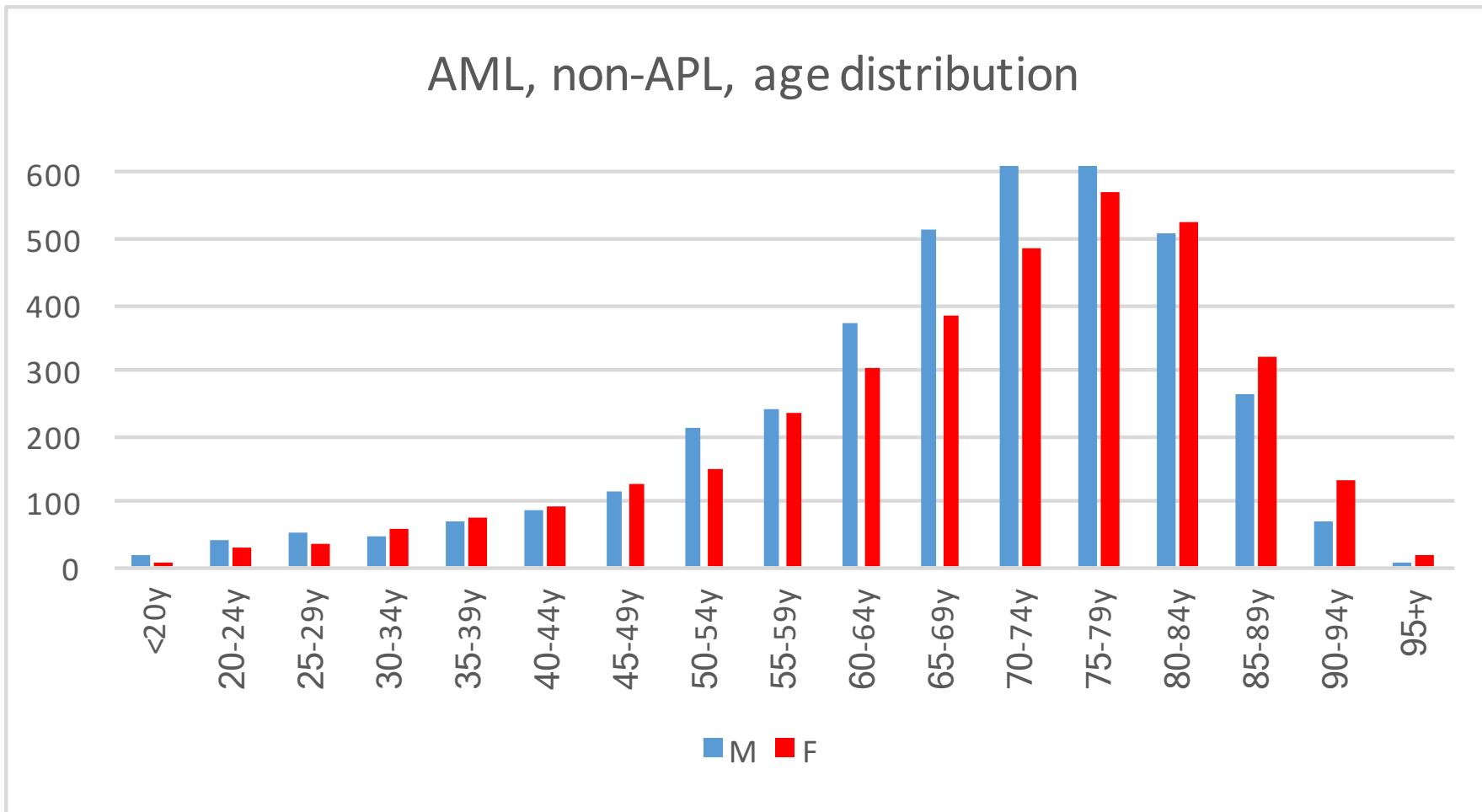
Incidence rates per 100,000  
and years 1975-2016  
from SEER,  
age-adjusted to the  
2000 US standard  
population (SEER 2020).

# Incidens Kvinnor – Män, Norden 1978-2016



Incidence rates by age and years 1978-2016 in the Nordic countries.  
Left: females; Right: males (NORDCAN 2020).

# Svenska AML-Registret

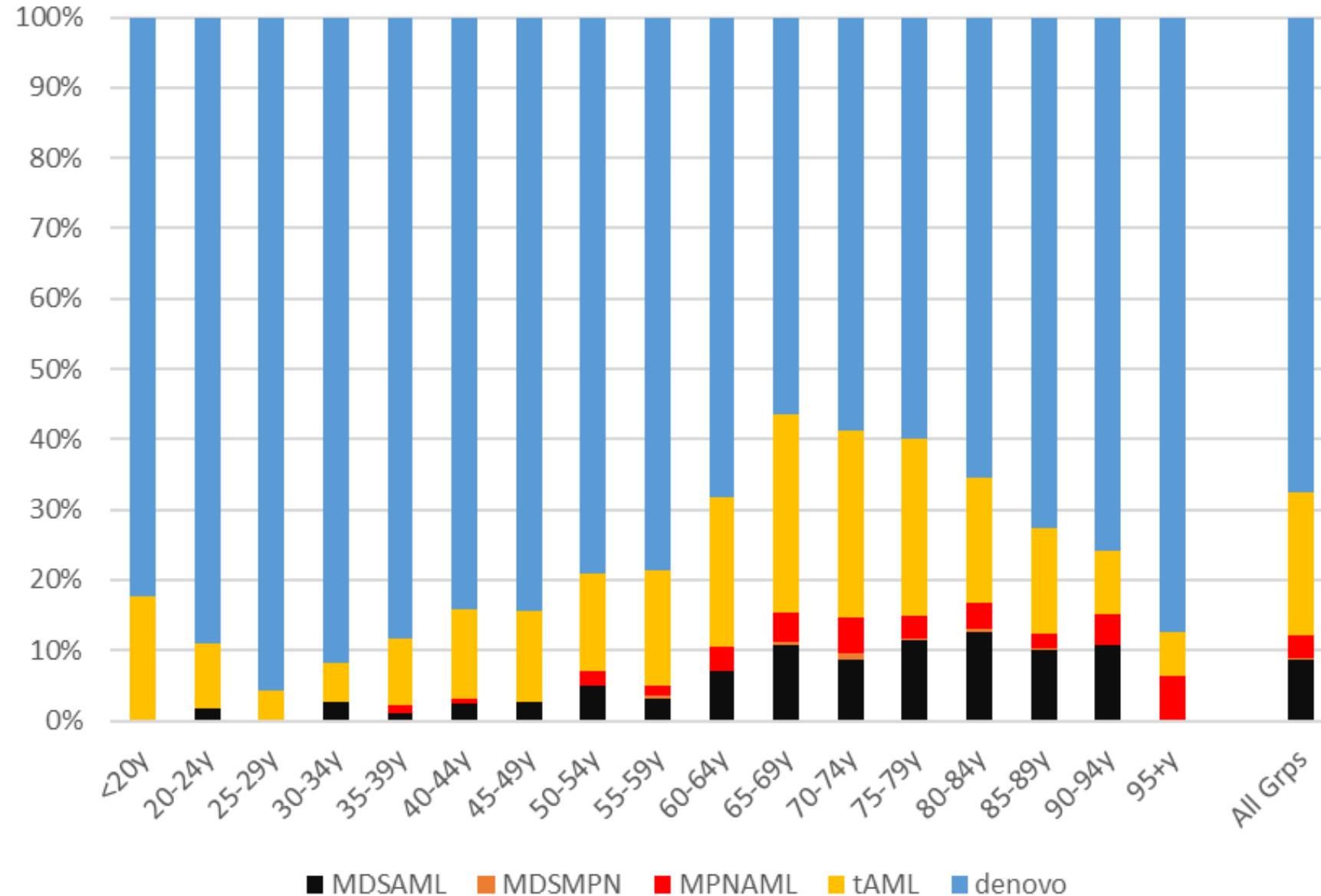


N=9000 (Jan 2021)  
350/år  
APL, n=304 (4%)  
Median uppföljning >8 år  
max >22 år  
Män 52%  
Medianålder 72 år  
Medelålder 68.5 år

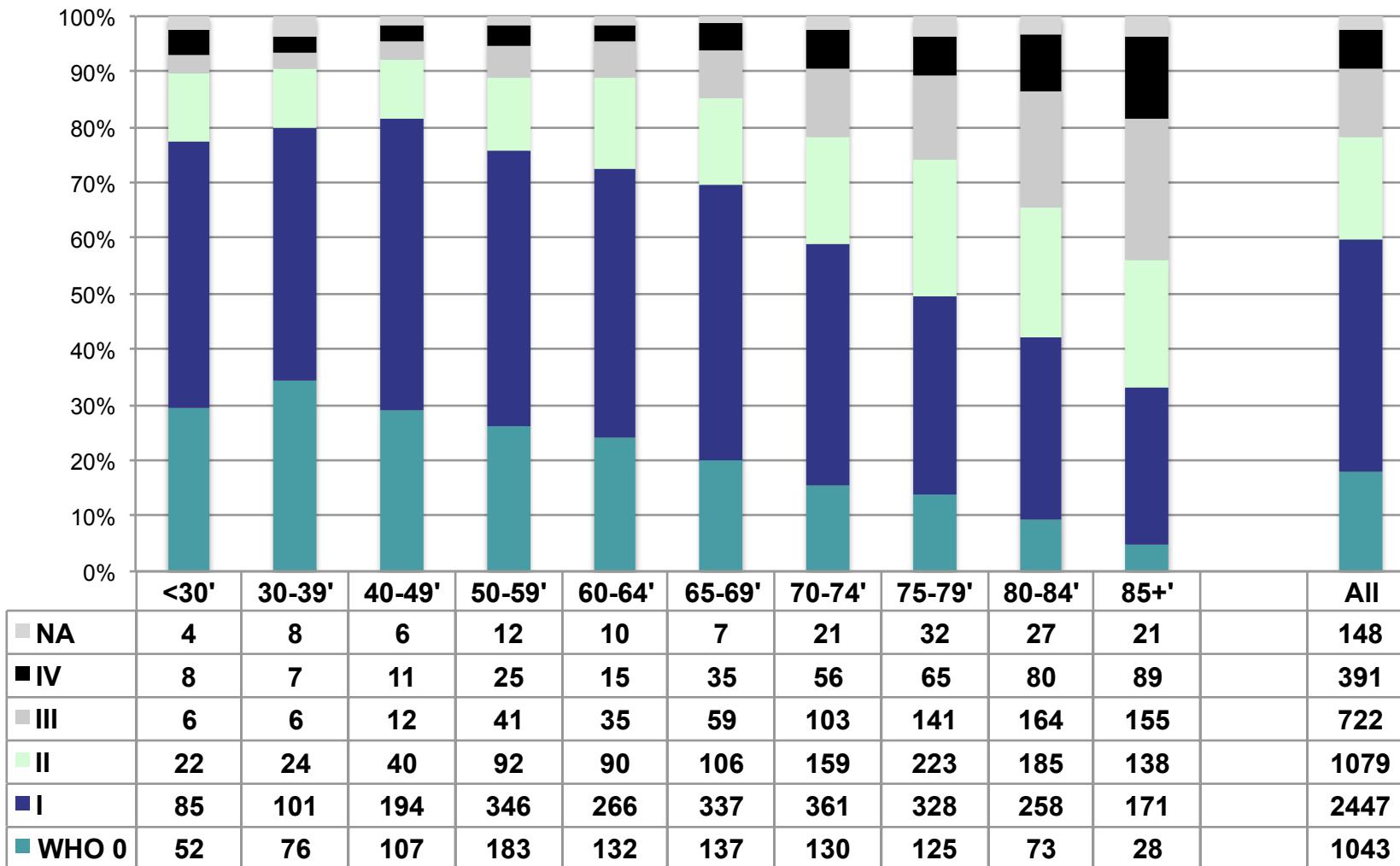
# AML-registret: Nyheter

- Nya rapportformulär
  - Diagnos, Behandling, Uppföljning, Transplantation
    - Bättre logistik
    - Vissa poster borttagna
    - Tillägg: **mer molekylära data, nya läkemedel, hereditet**
  - utökad APL-modul
    - klar till sommaren
- Öppna data (utan inloggning)
  - <https://statistik.incanet.se>

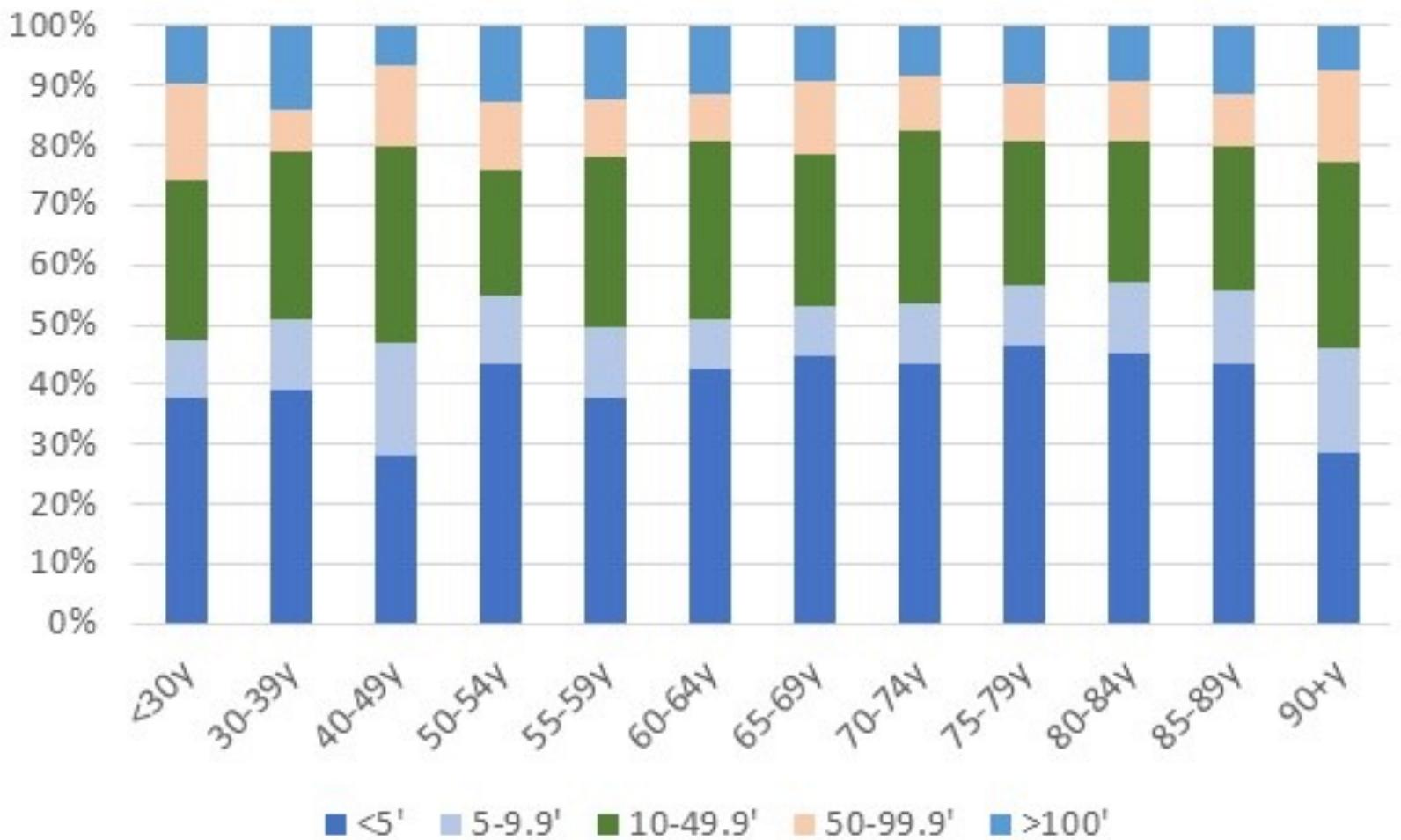
## AML (non-APL) Type by Age, 2007-2019, n=5218



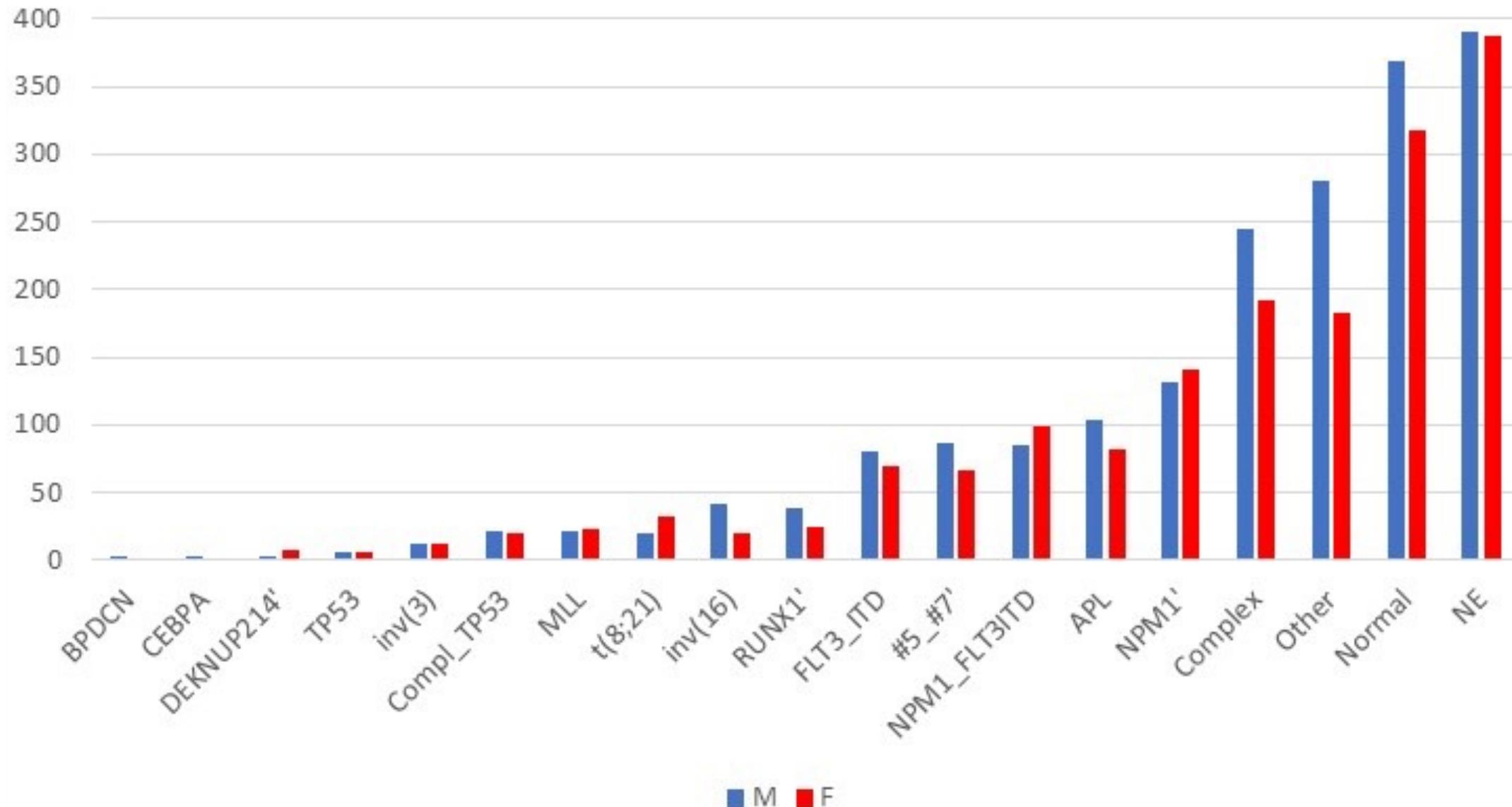
# WHO/ECOG Funktionsstatus efter ålder



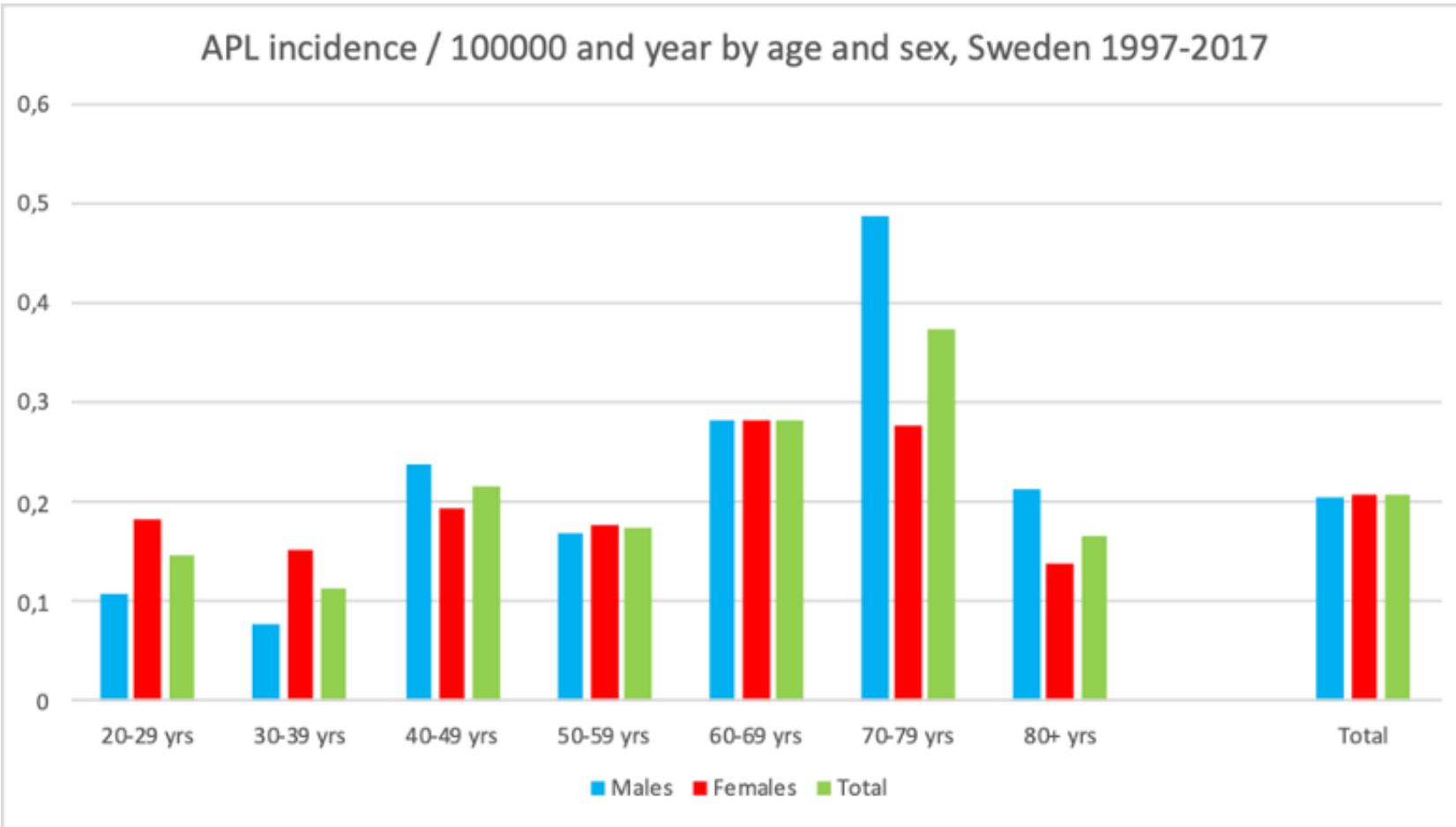
## AML (non-APL) 2012-2020 - Age and WBC



## AML: Antal 2012-2020, genotyp



# APL – Hur ovanligt? 4% av AML? 15%?

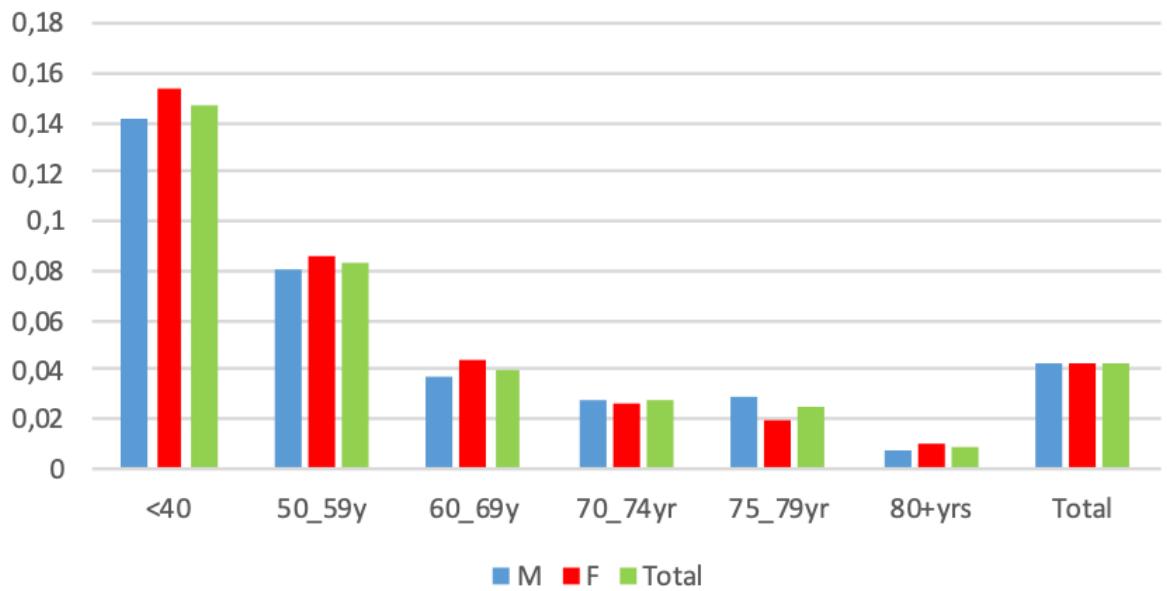


“great variation in incidence of APL between European countries, from 0.26 per 100,000 and year in Spain and Iceland to tenfold less in other countries, many of them in eastern Europe (Dinmohamed and Visser 2019); in Sweden the crude incidence of APL is 0.2 per 100,000 and year.”

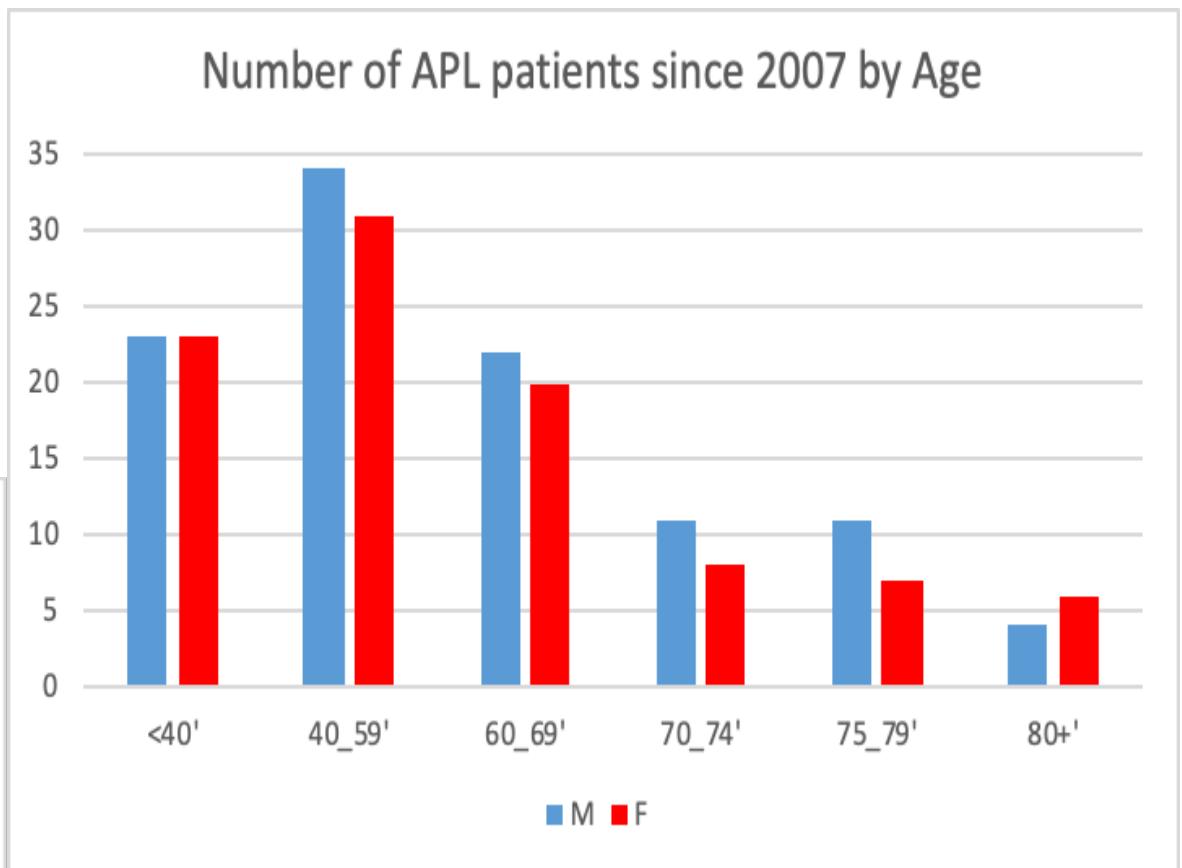
median 58 år

# APL

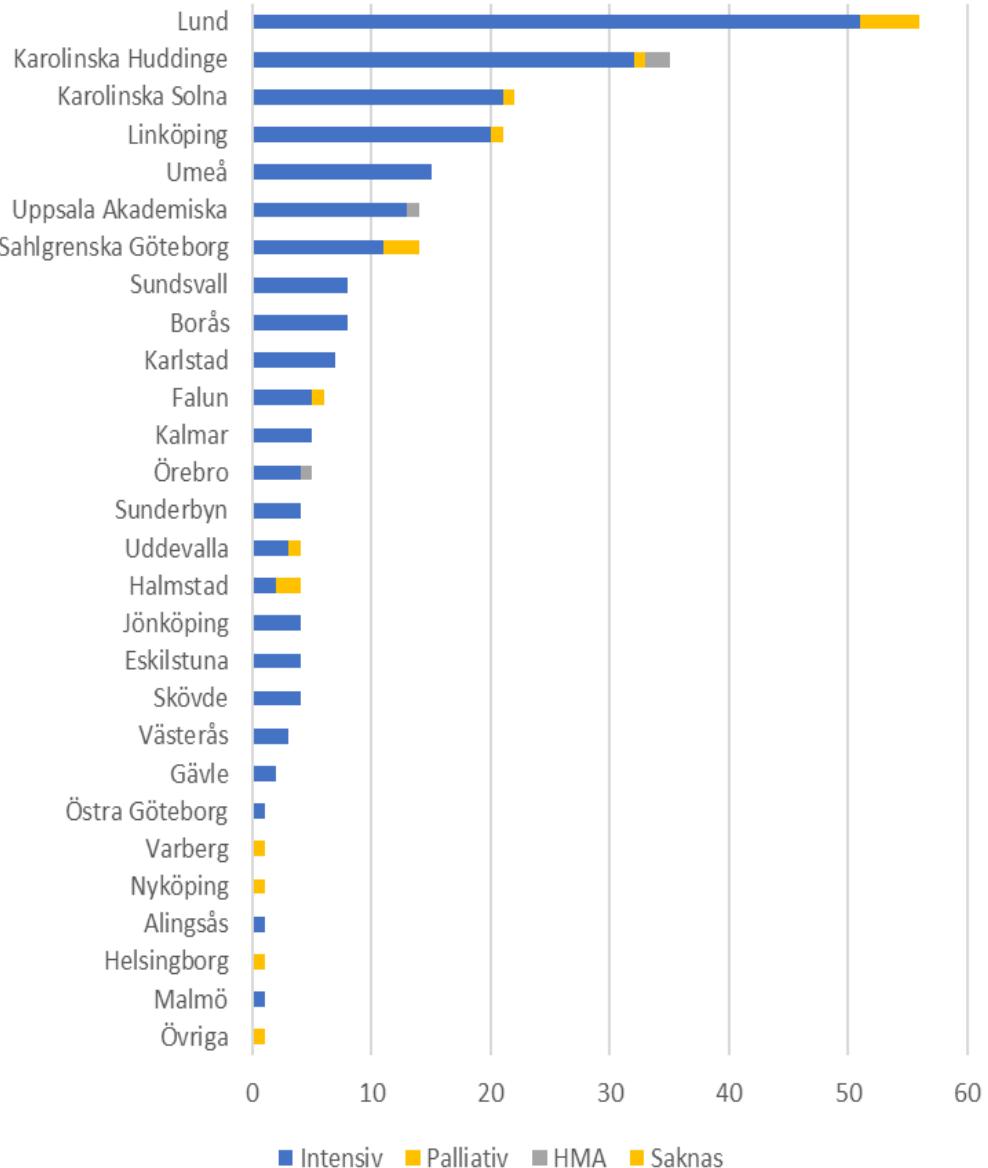
Proportion of APL of all AML by sex and age



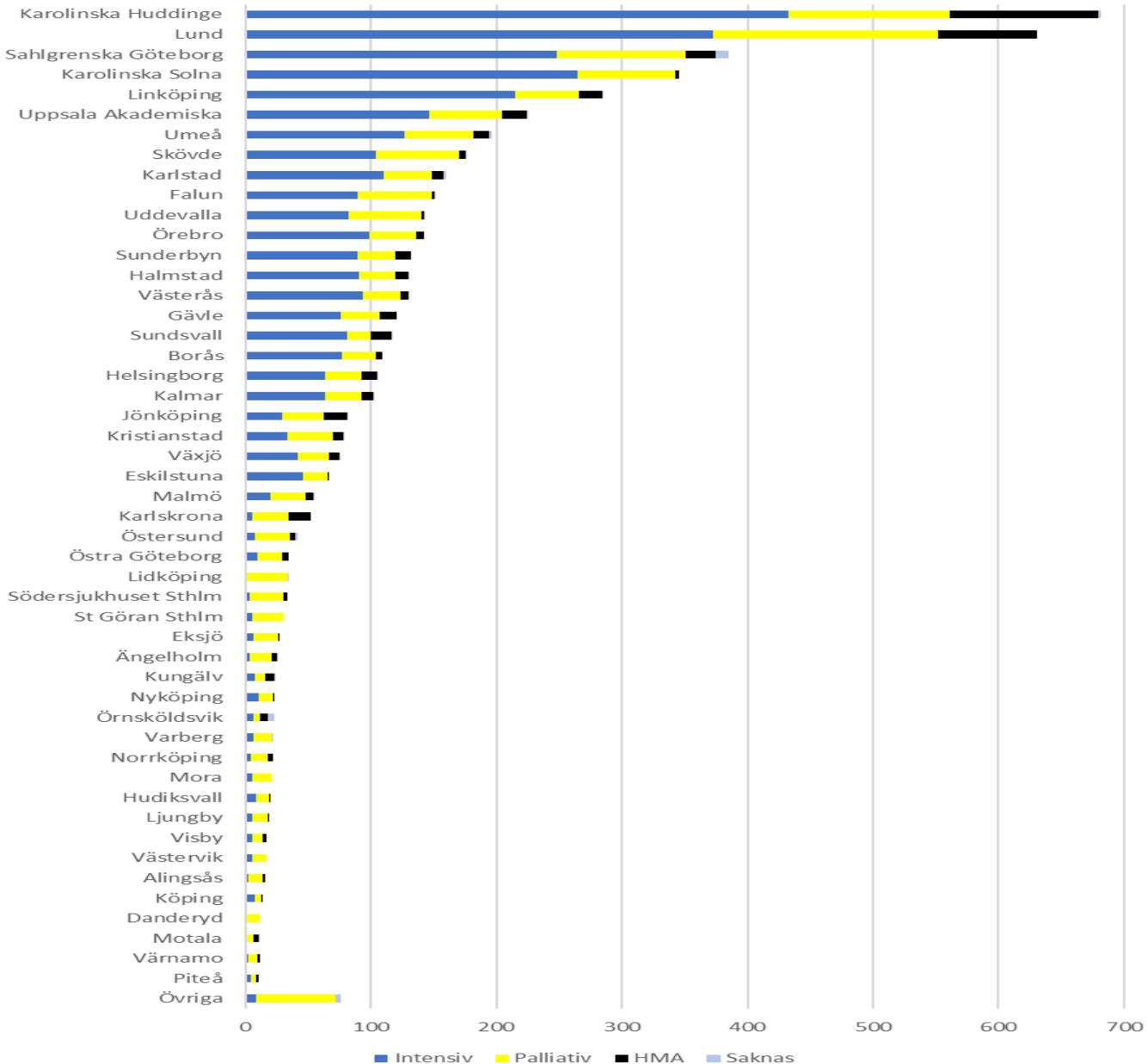
Number of APL patients since 2007 by Age



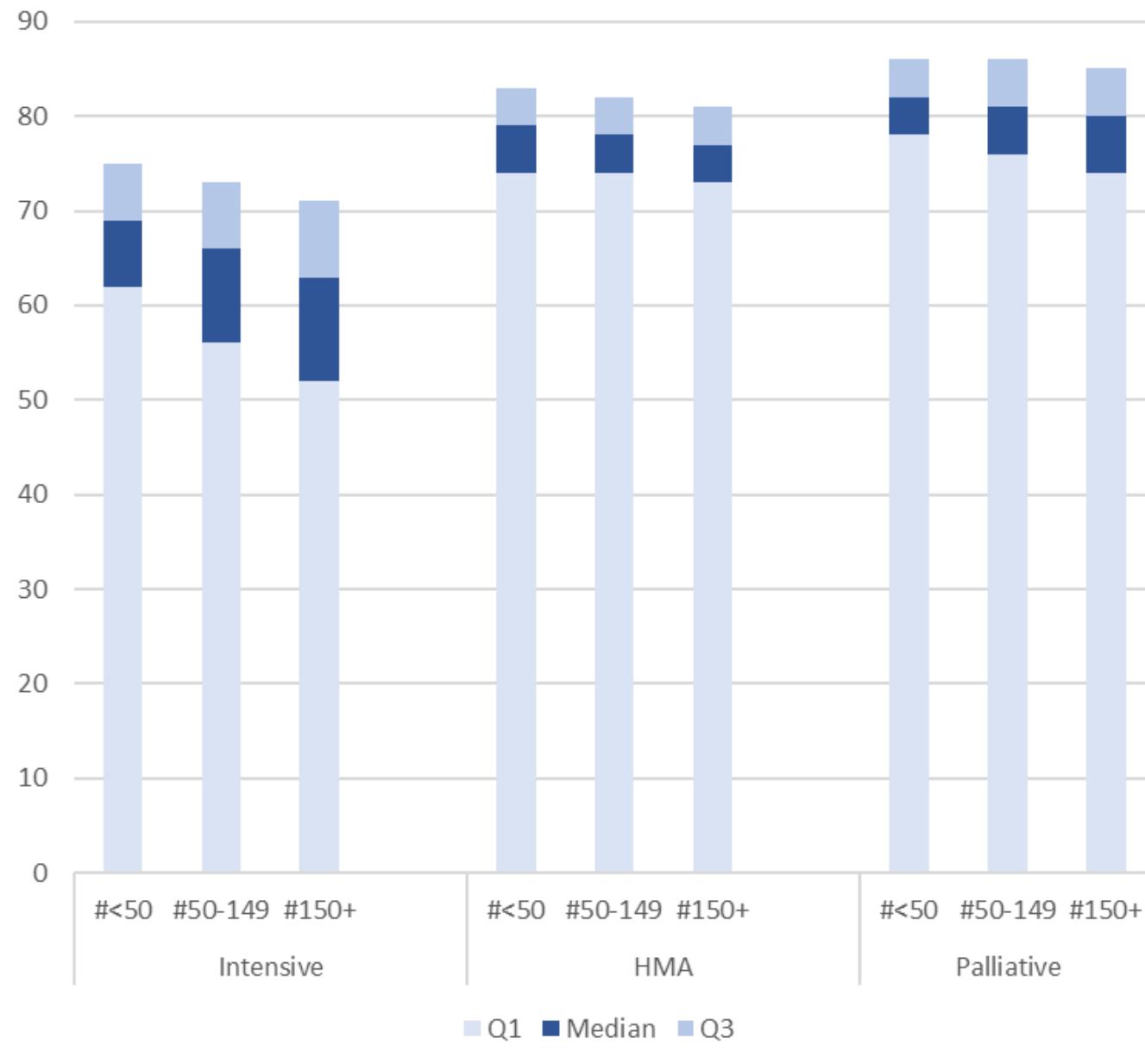
APL 2007-2020 (n=252): Antal per sjukhus



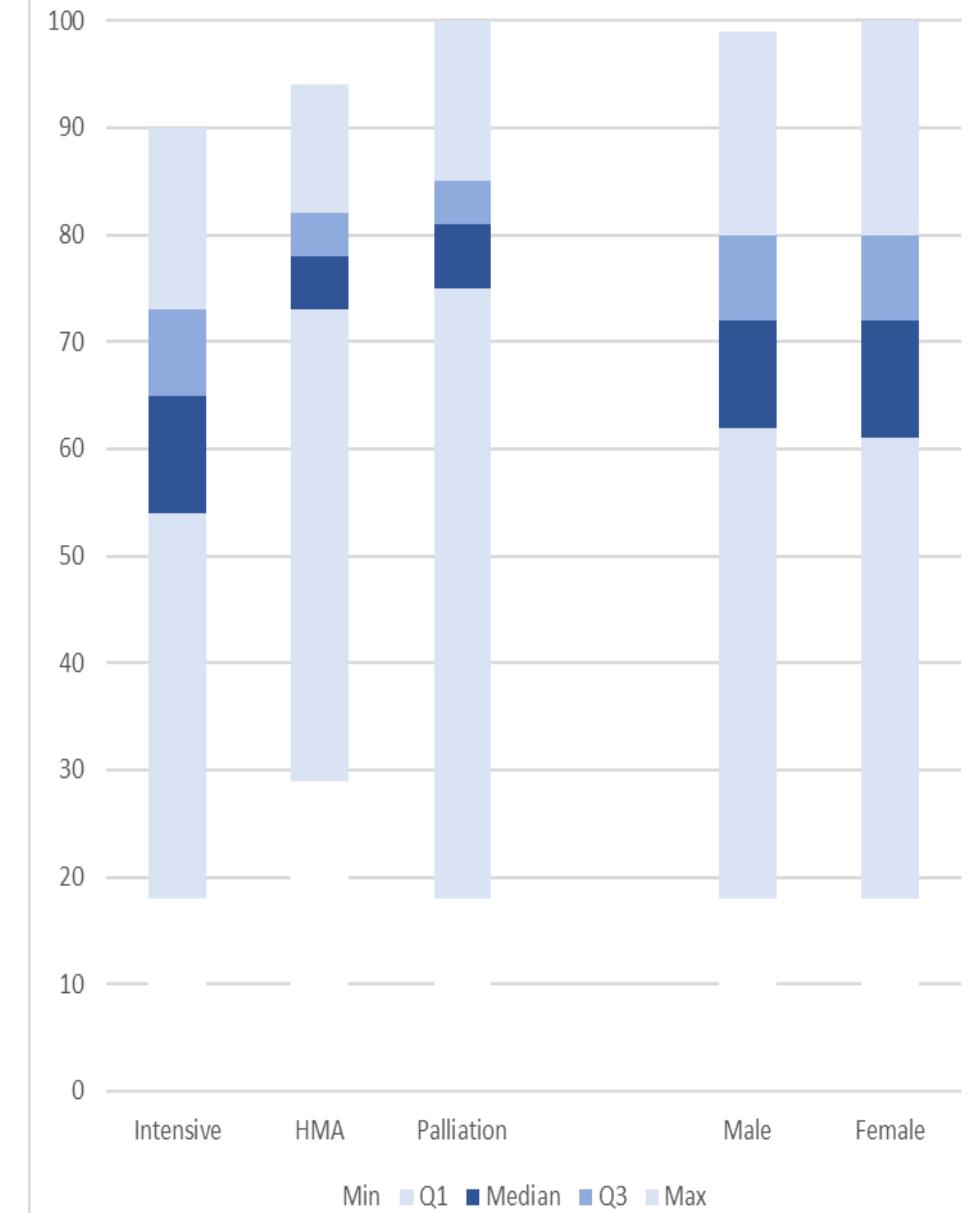
AML 2007-2020: Antal per sjukhus och behandling



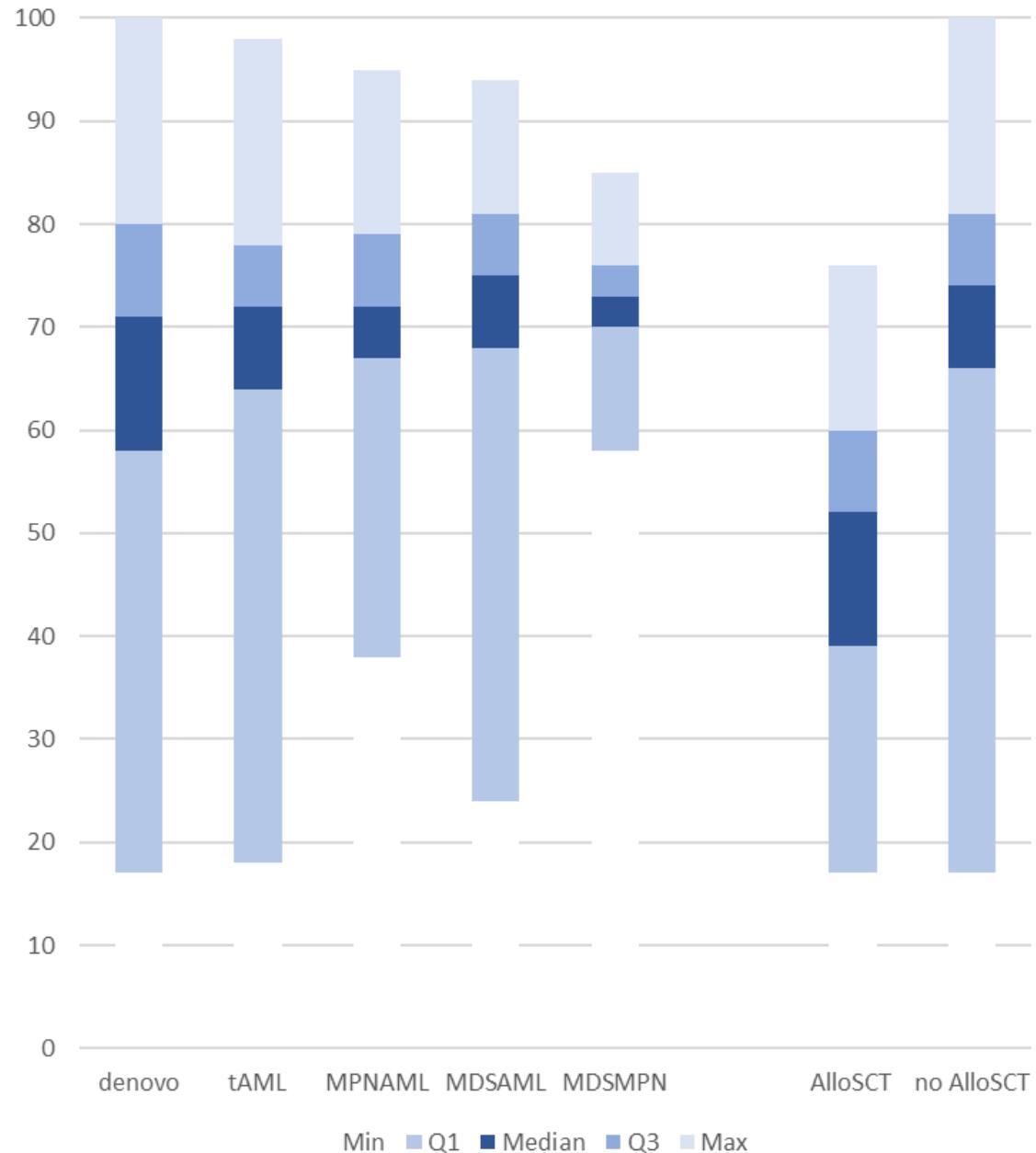
### Ålder (Q1 - median- Q3) utifrån antal patienter 2007-2019



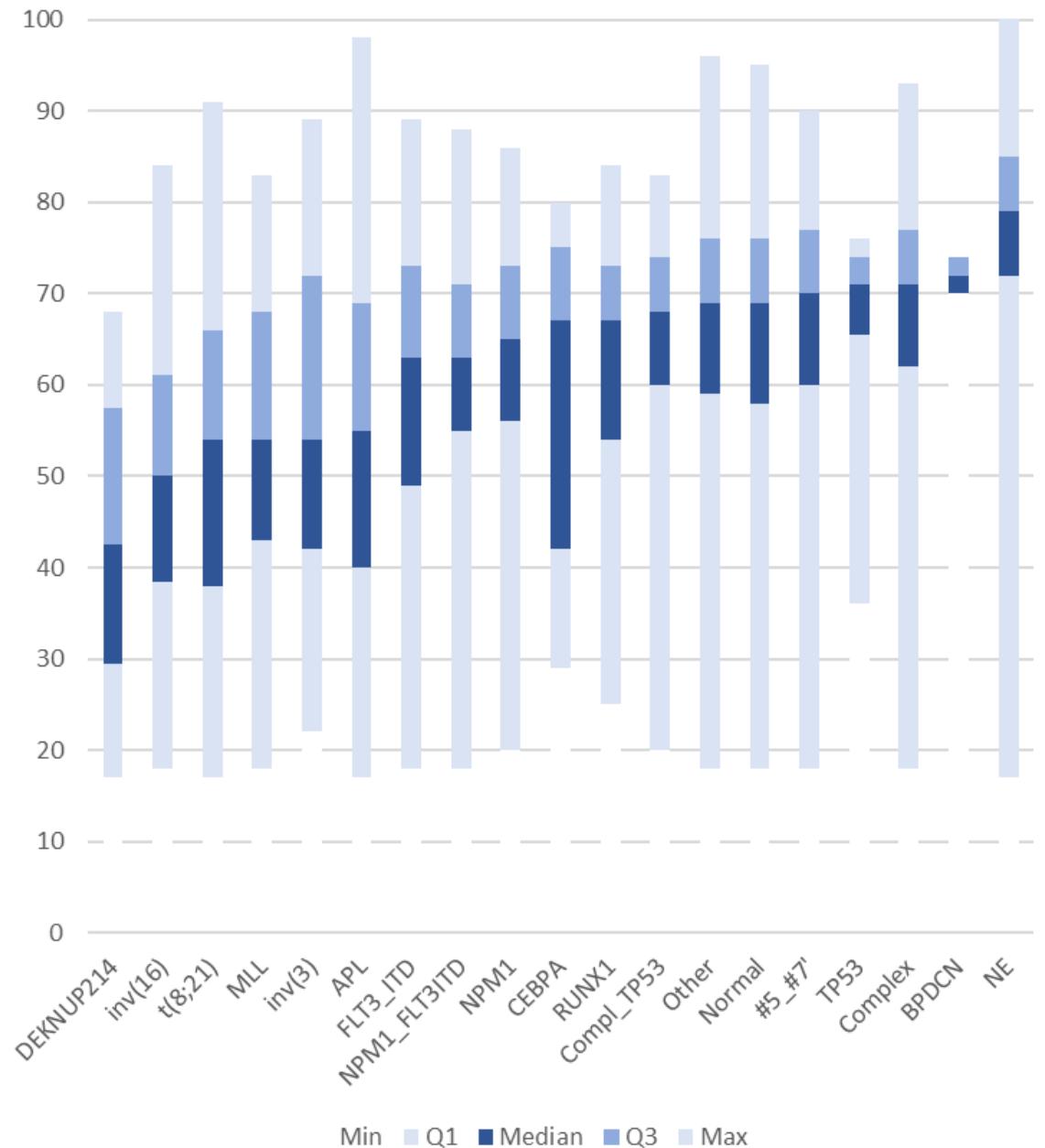
### AML (non-APL): Age



### AML (non-APL): Age



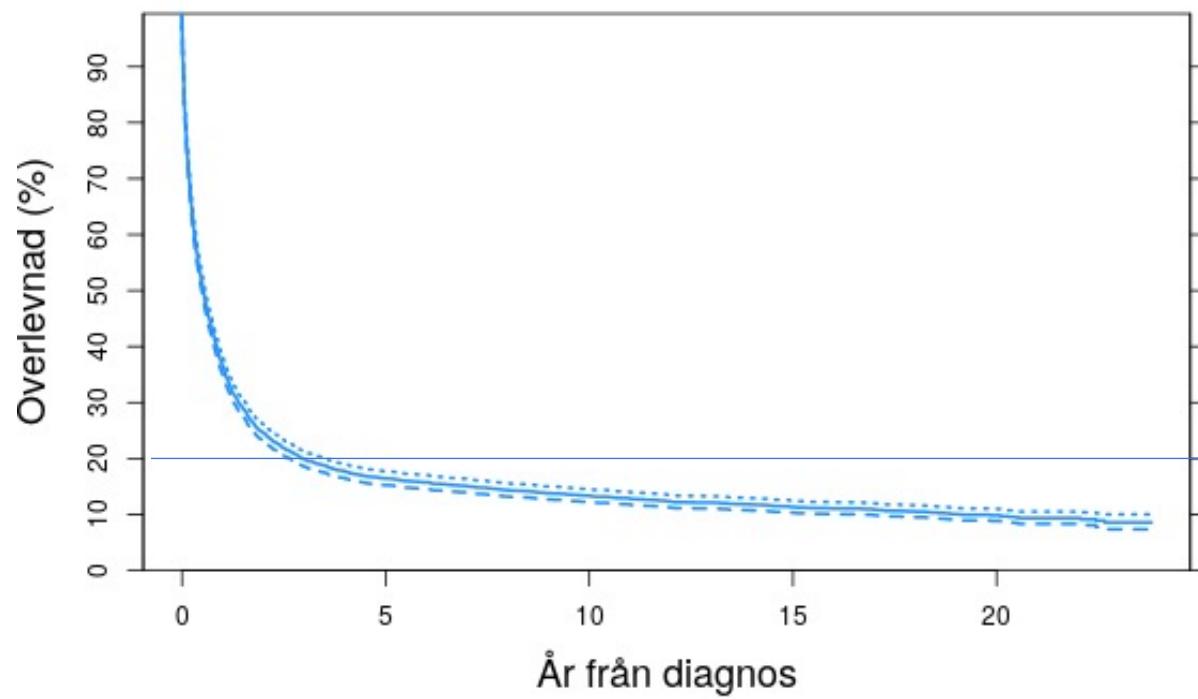
### AML: Age by Genetic subtype



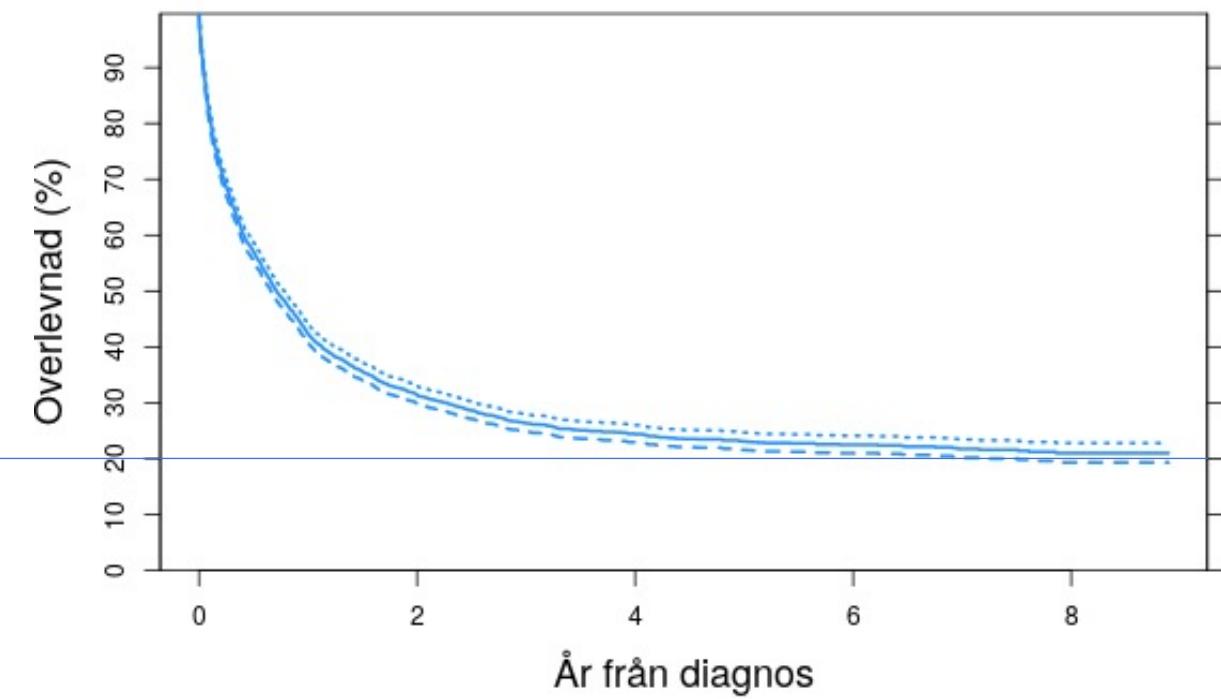
# AML: OS 1997-2006 vs 2012-2019

<https://statistik.incanet.se>

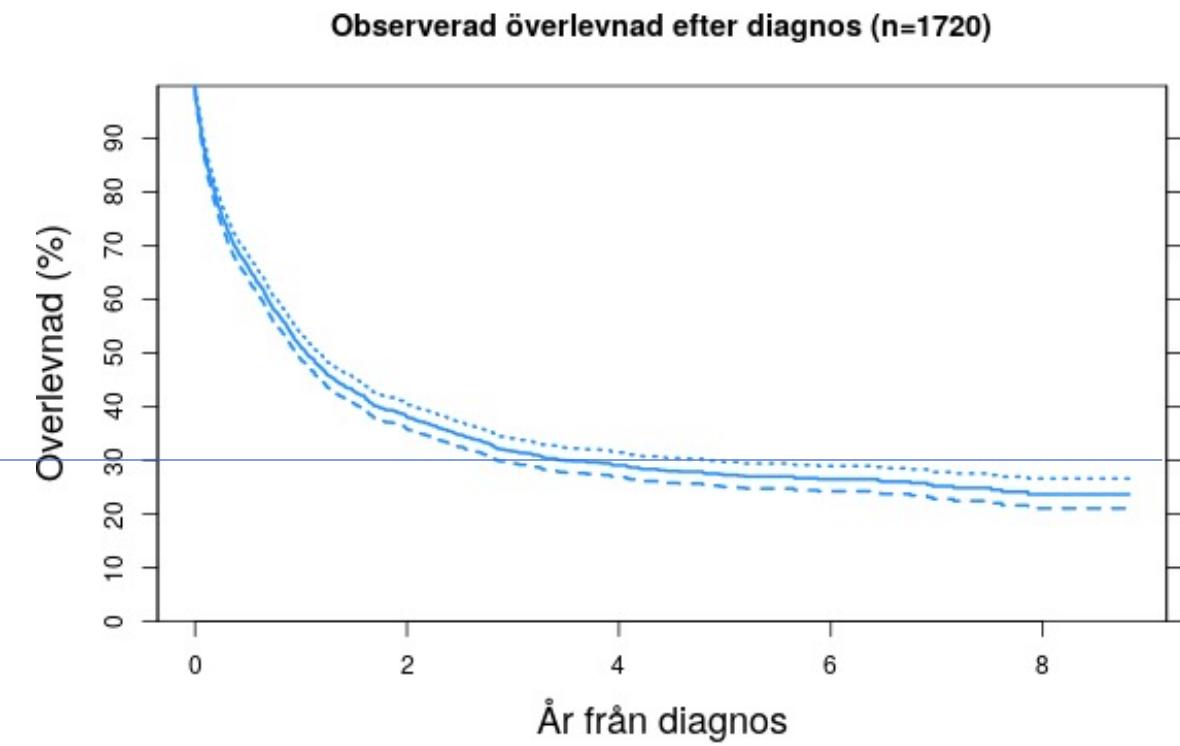
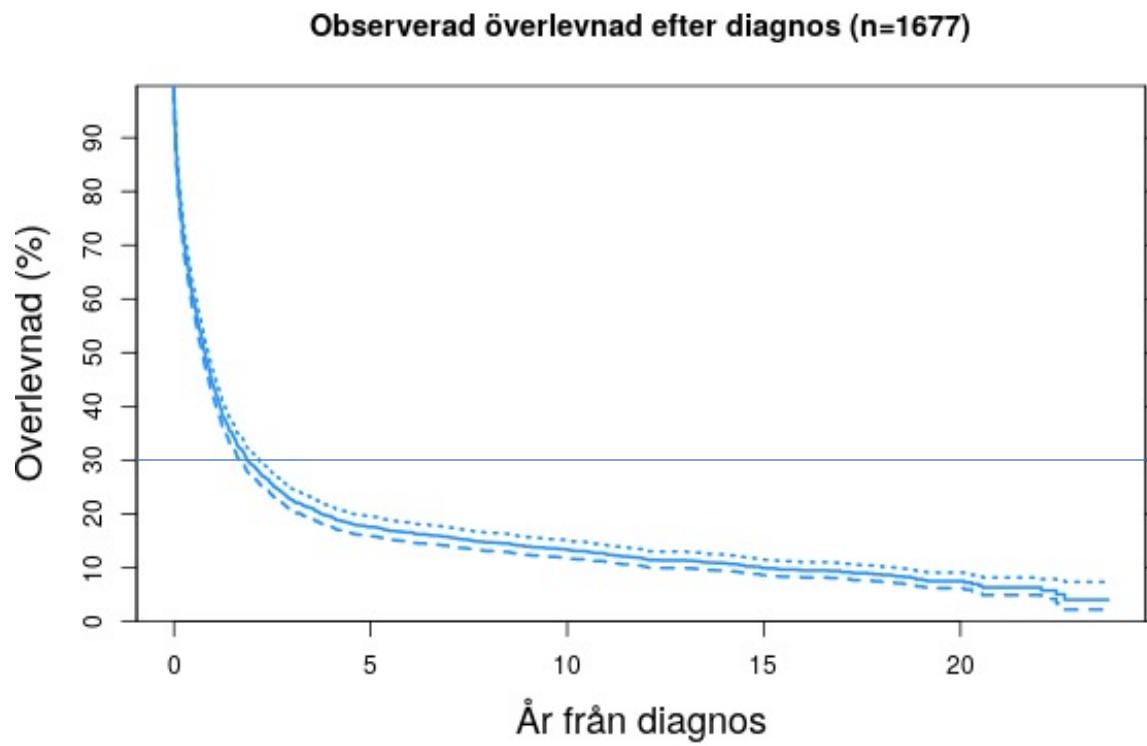
Observerad överlevnad efter diagnos (n=3372)

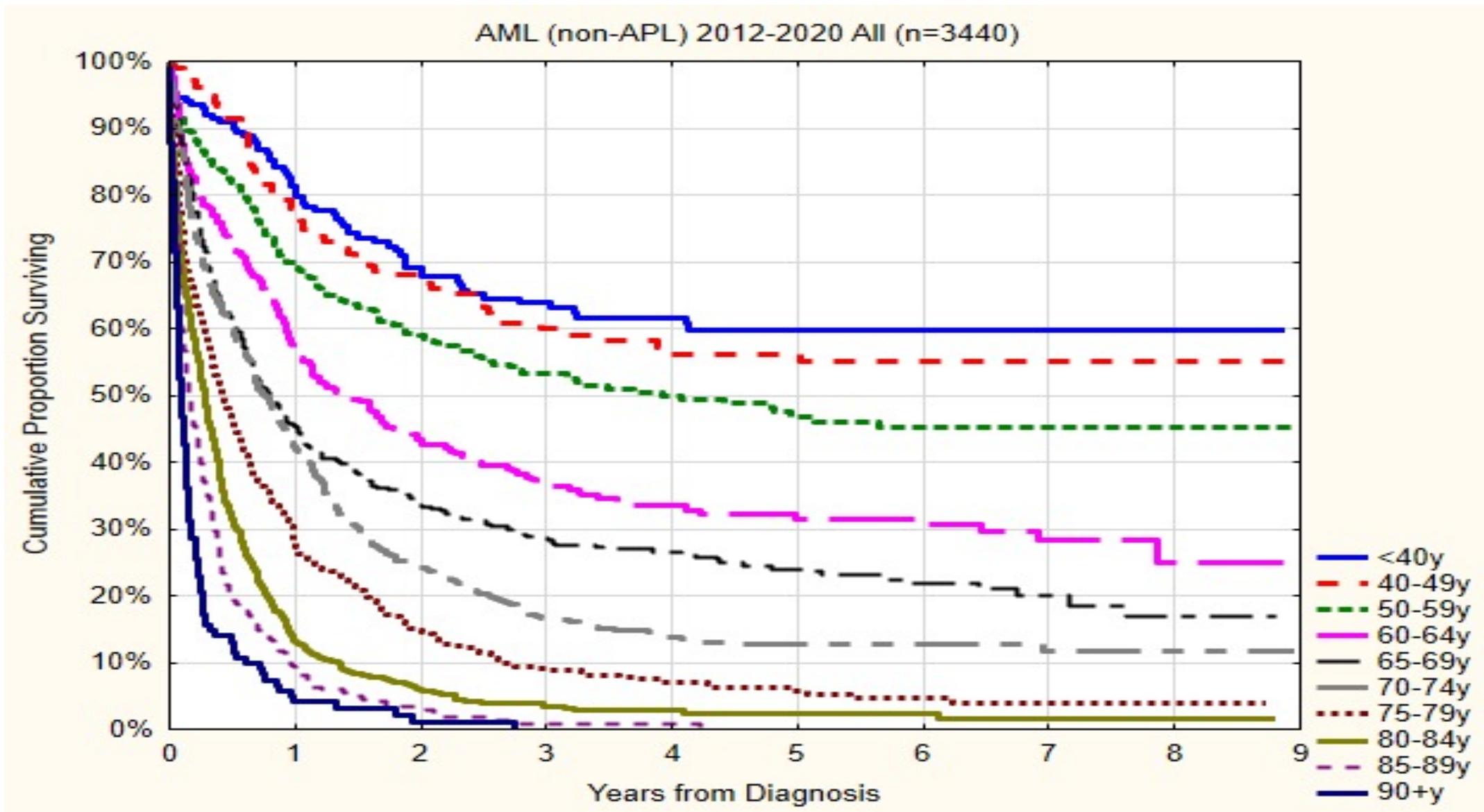


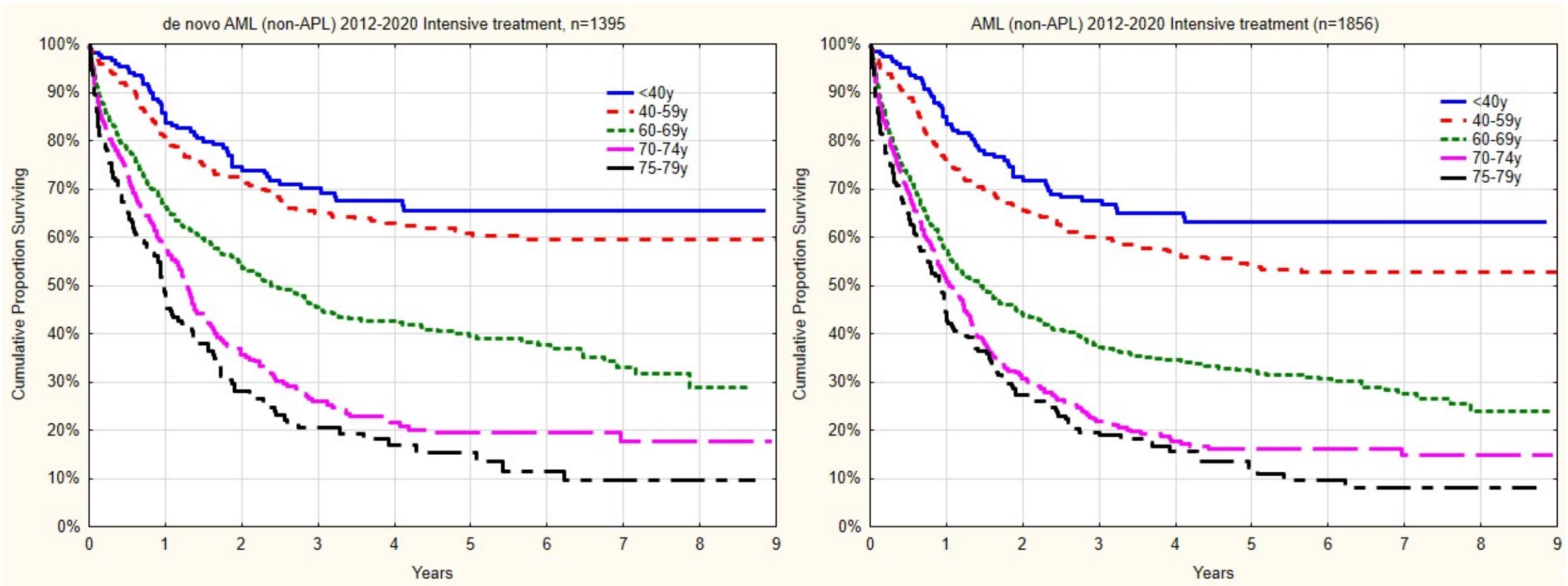
Observerad överlevnad efter diagnos (n=3376)



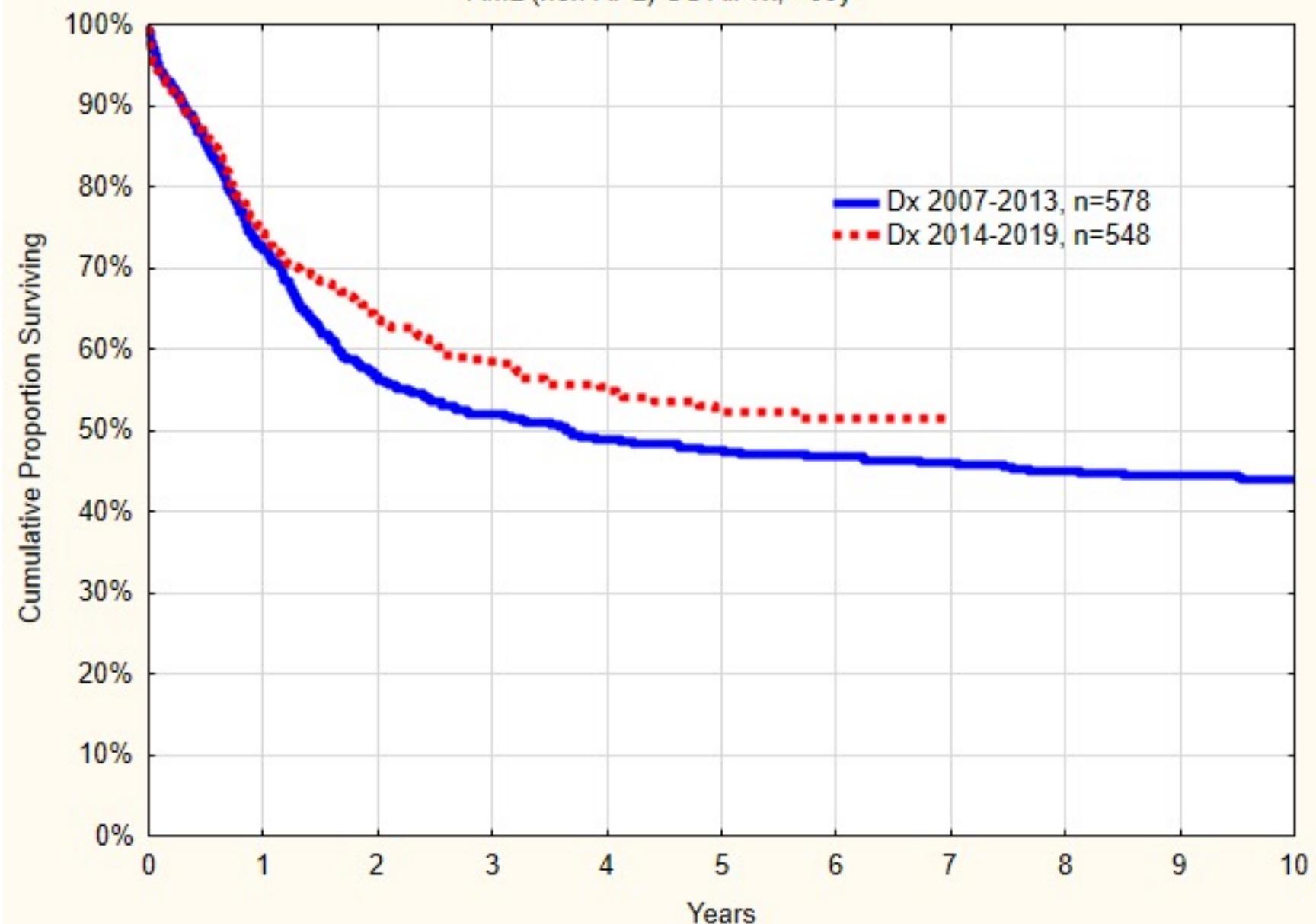
# AML 50-75 yr: OS 1997-2006 vs 2012-2019



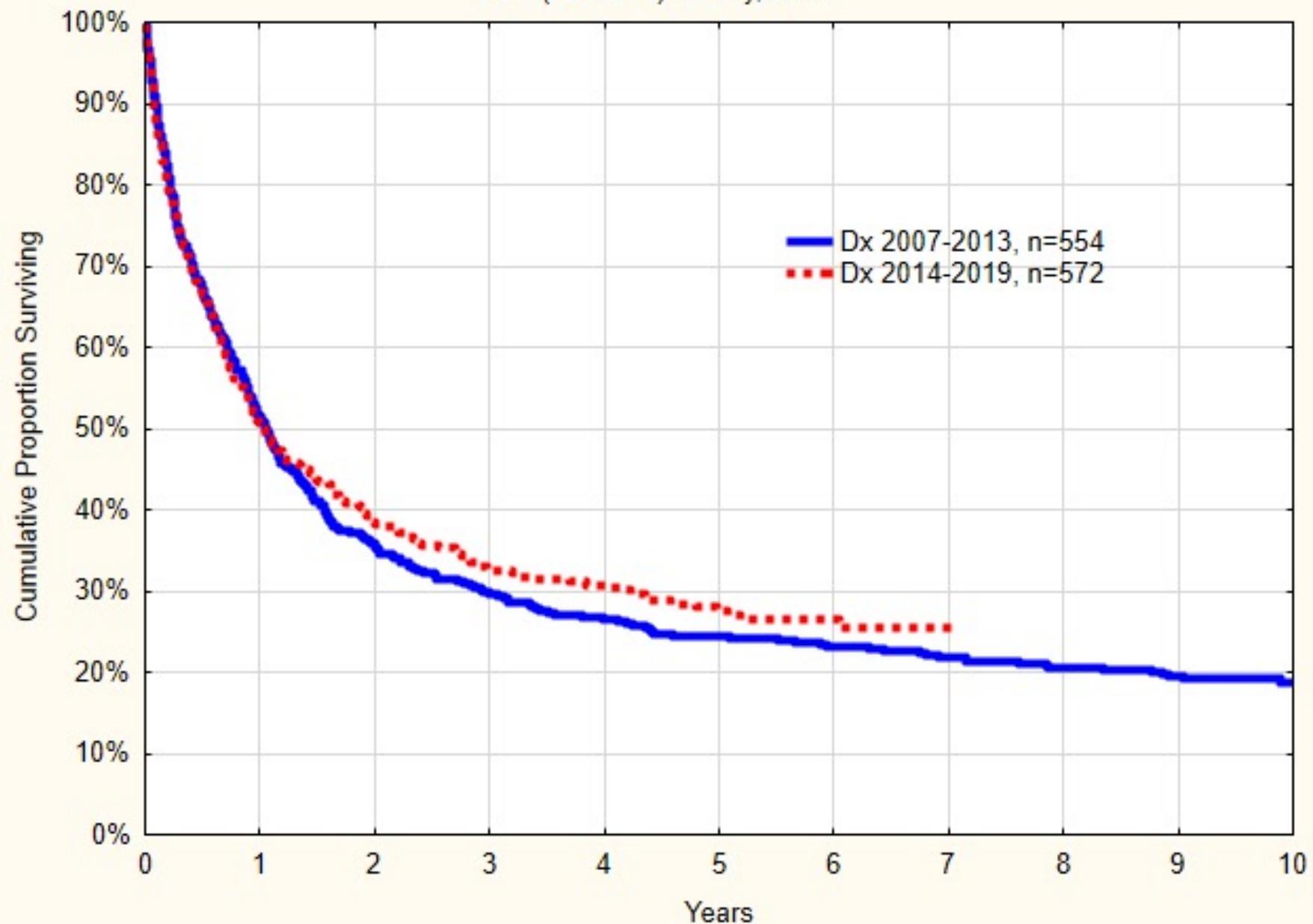


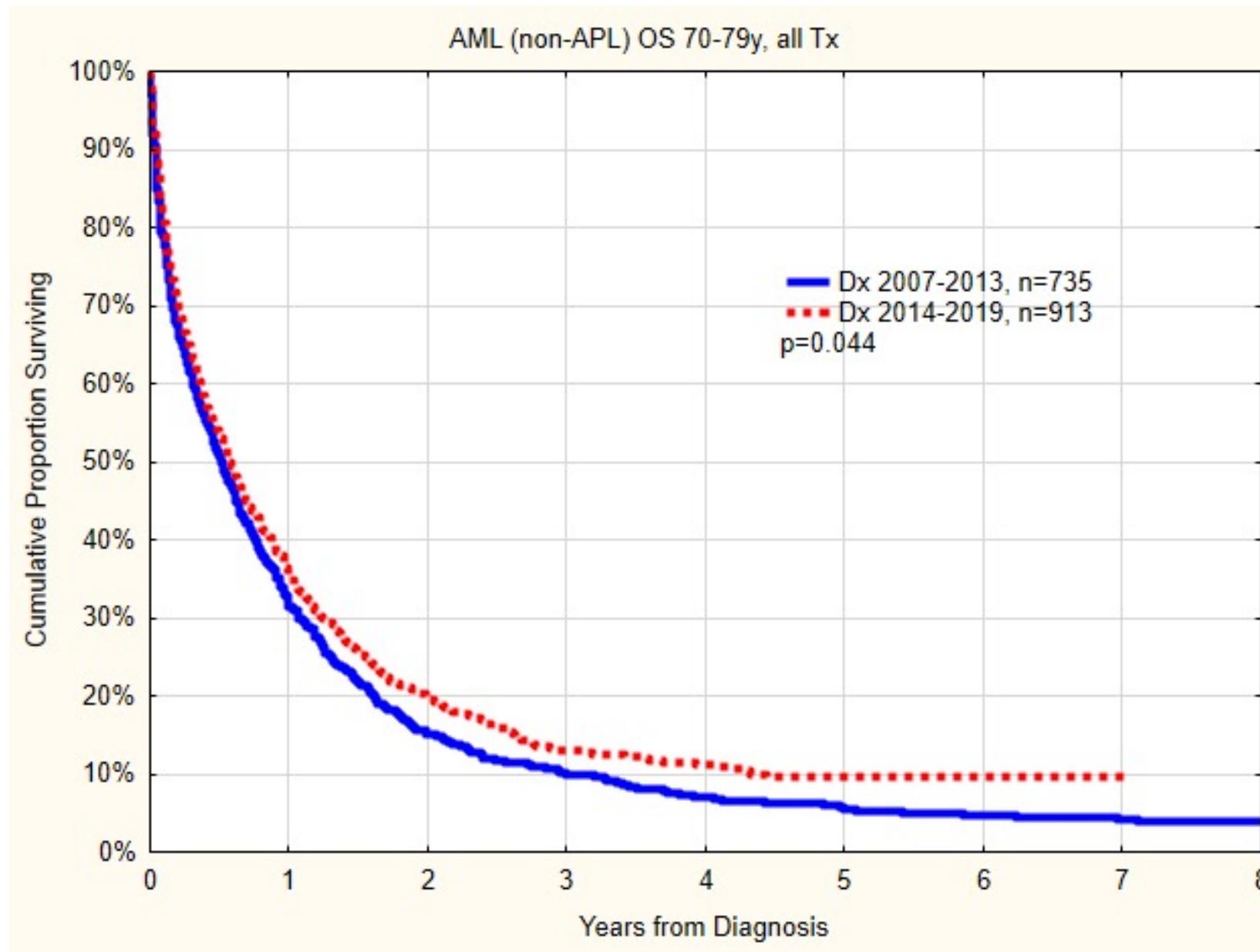


AML (non-APL) OS All Tx, <60y

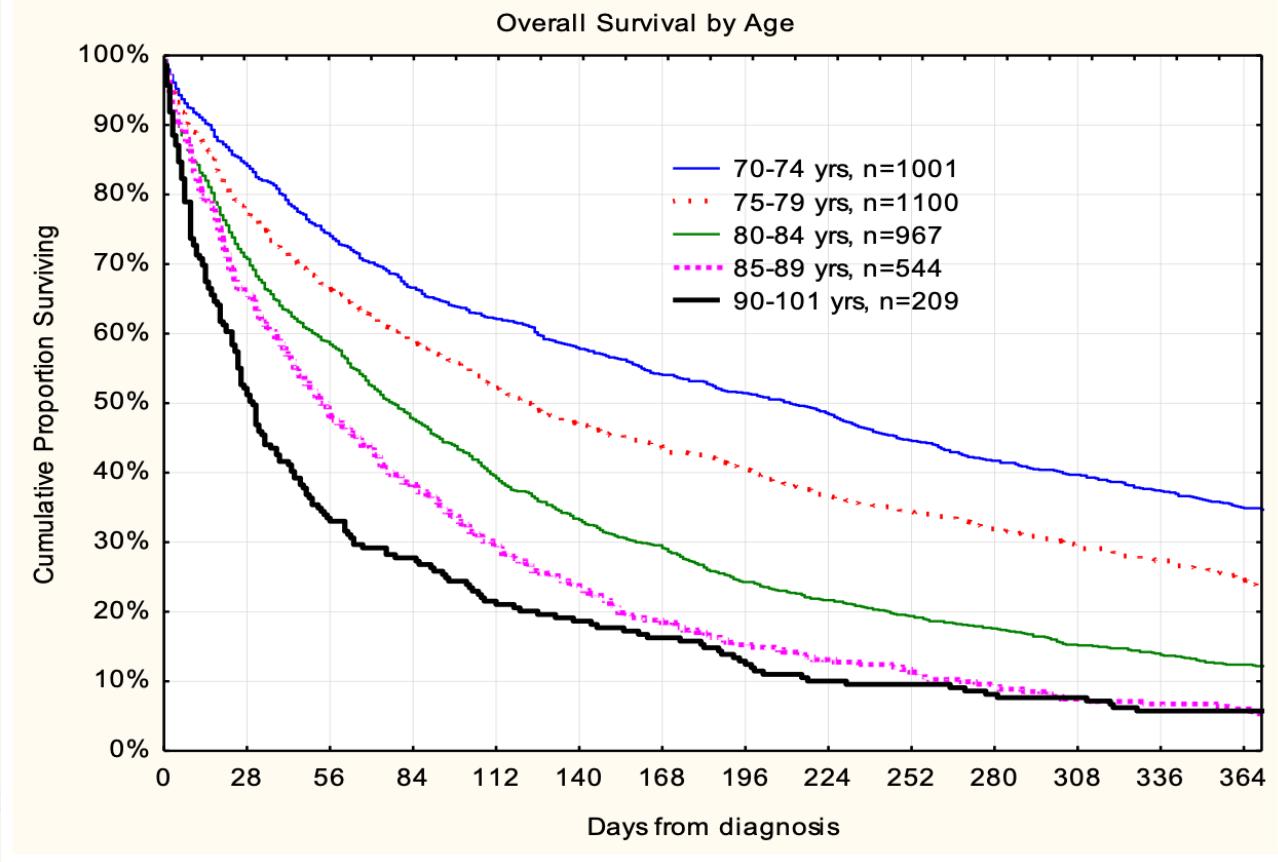
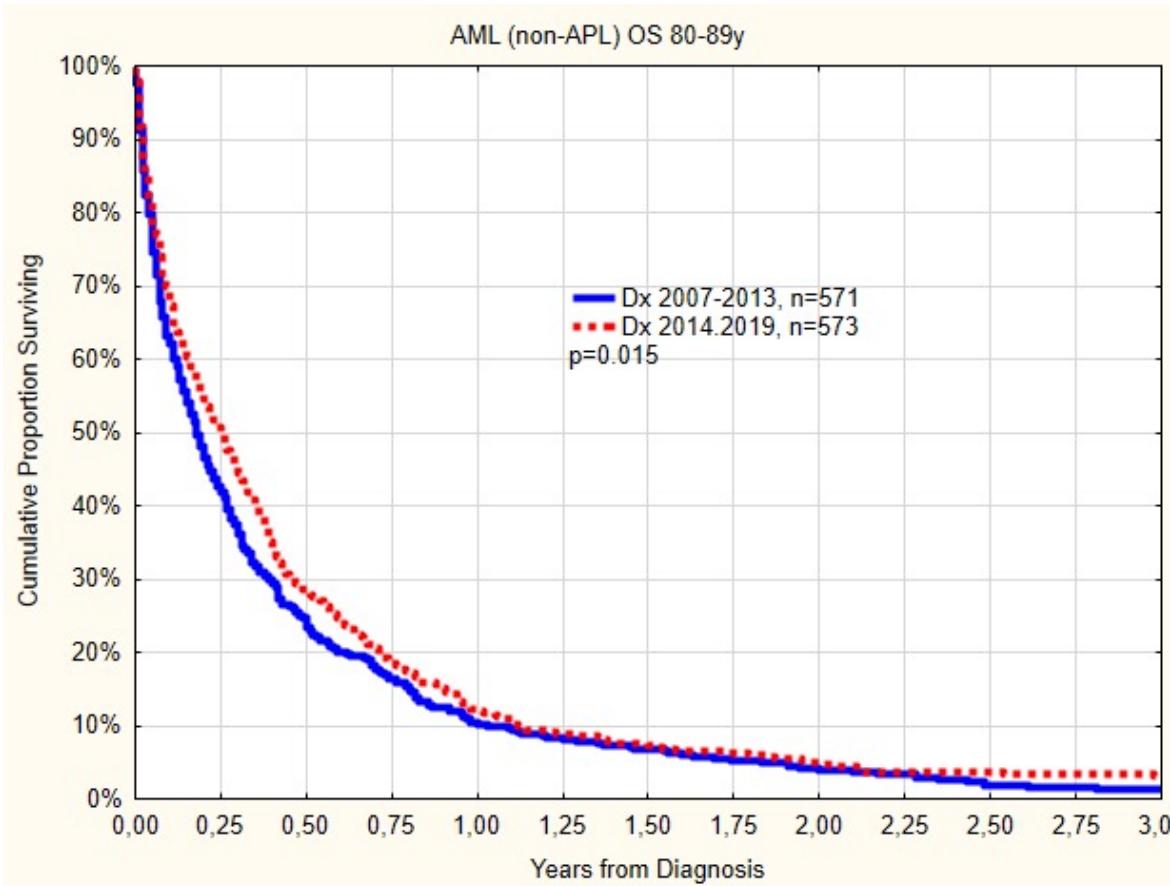


AML (non-APL) 60-69y, All Tx



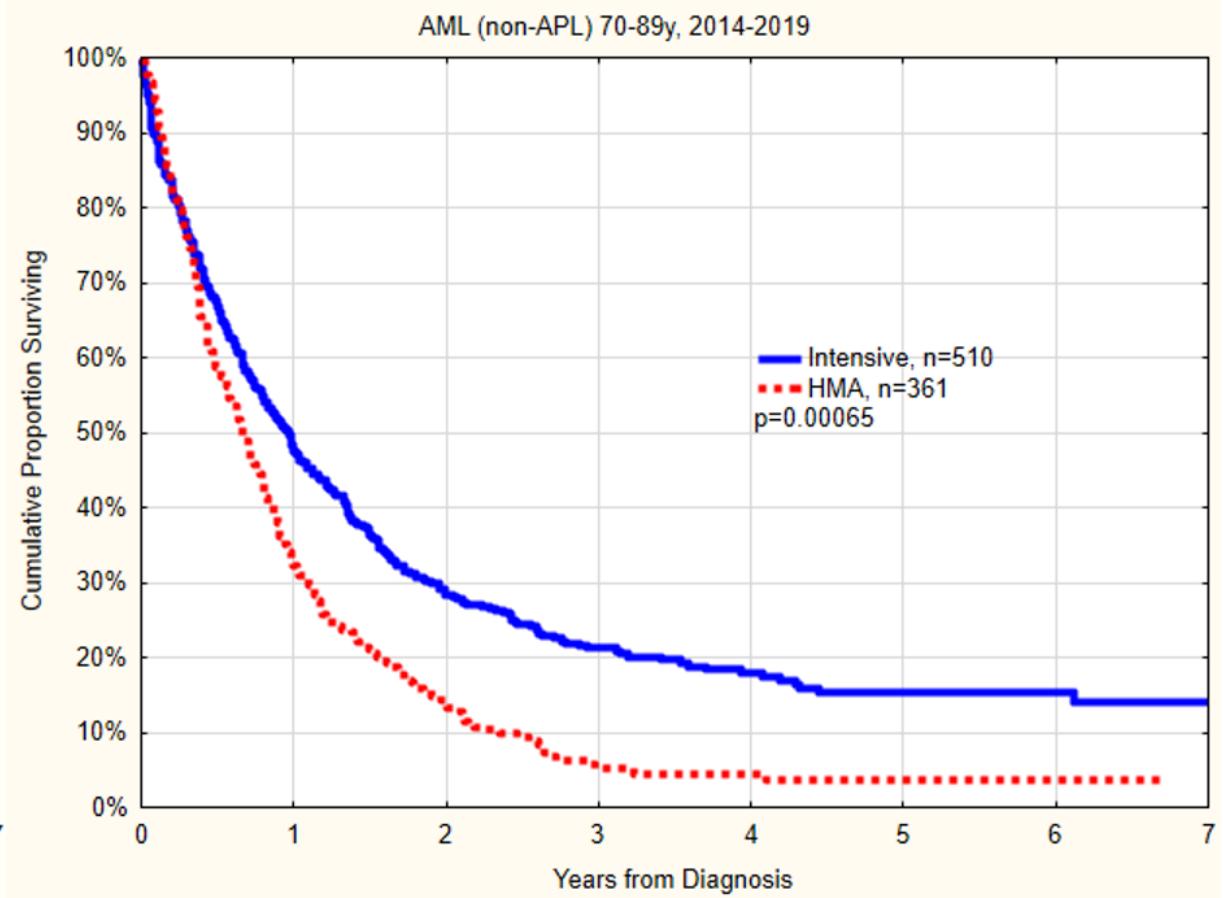
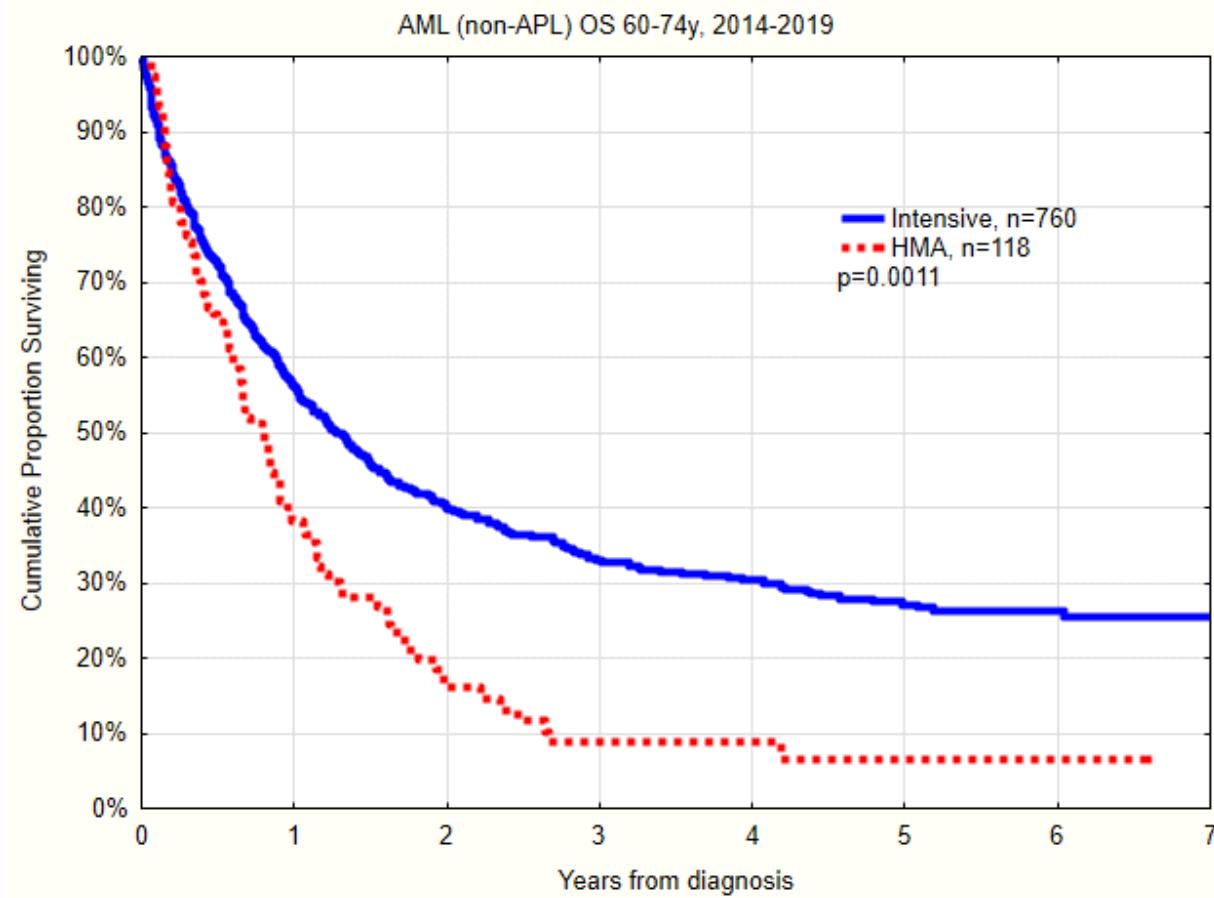


# AML, mycket gamla

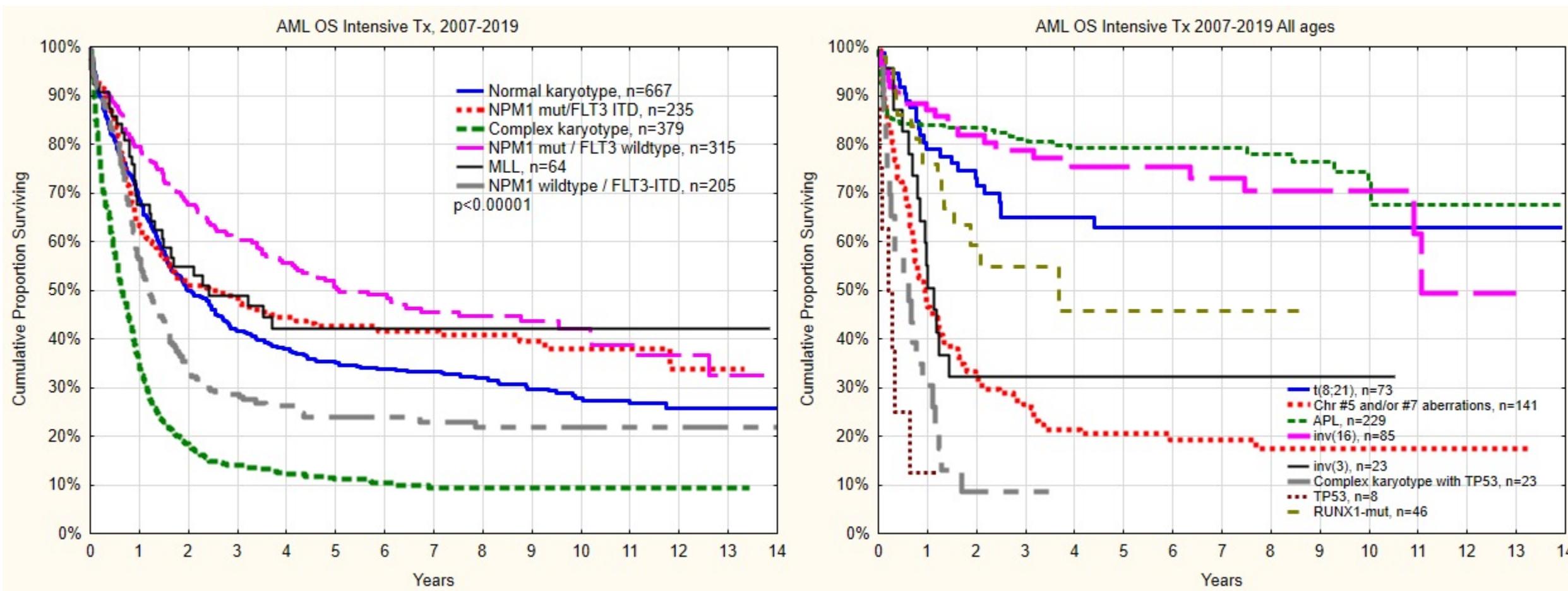


1997-2016

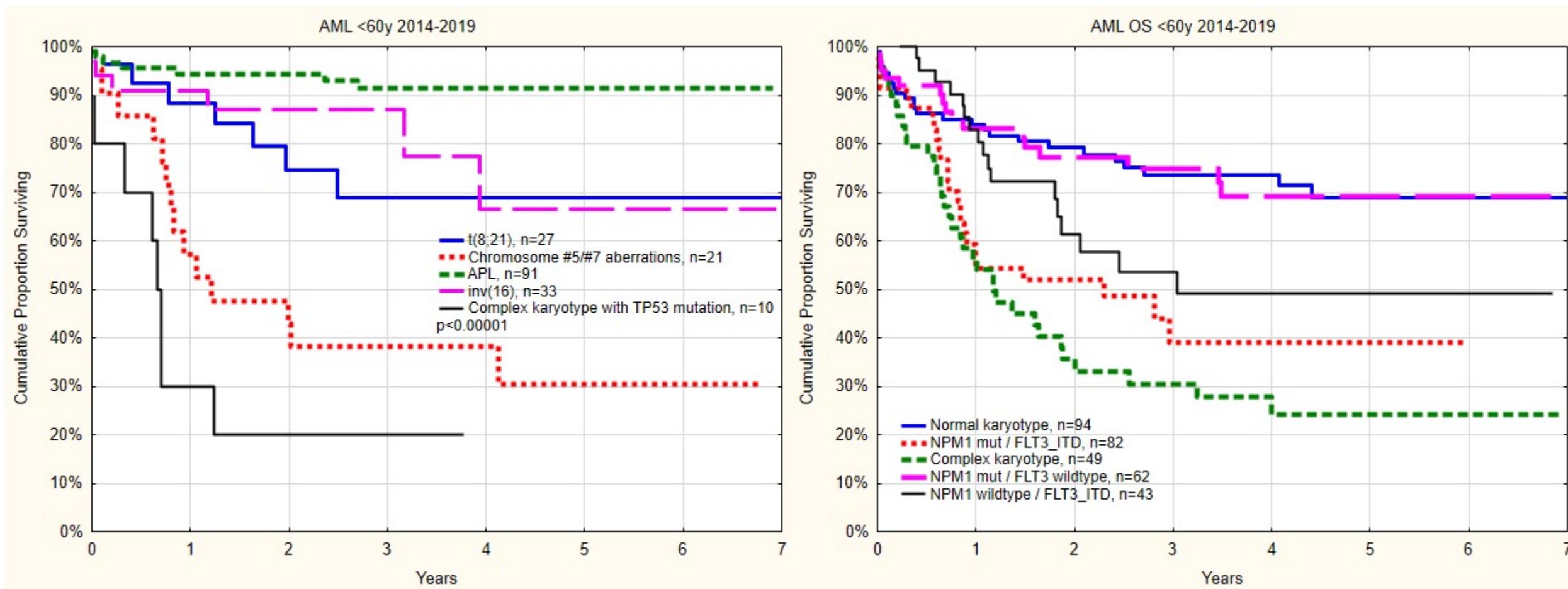
# AML $\geq 60$ år: OS - Intensiv vs HMA



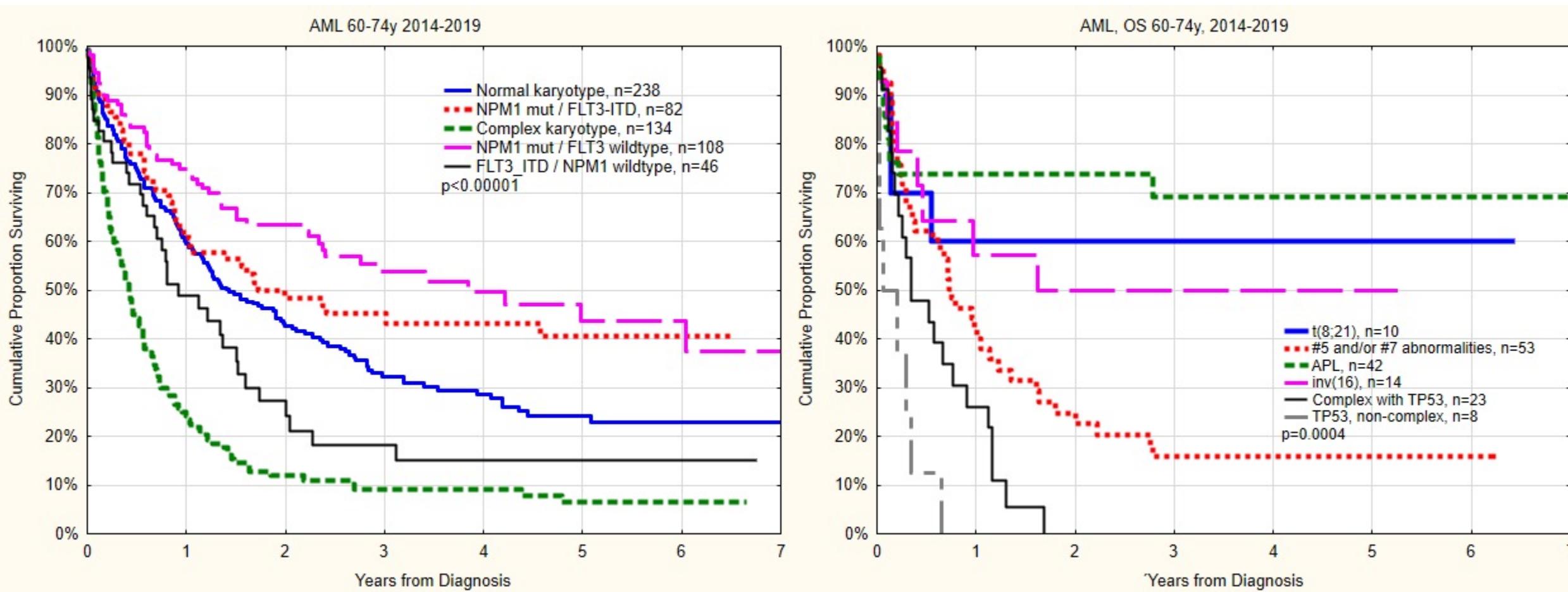
# AML Intensivbeh: OS - Genetik



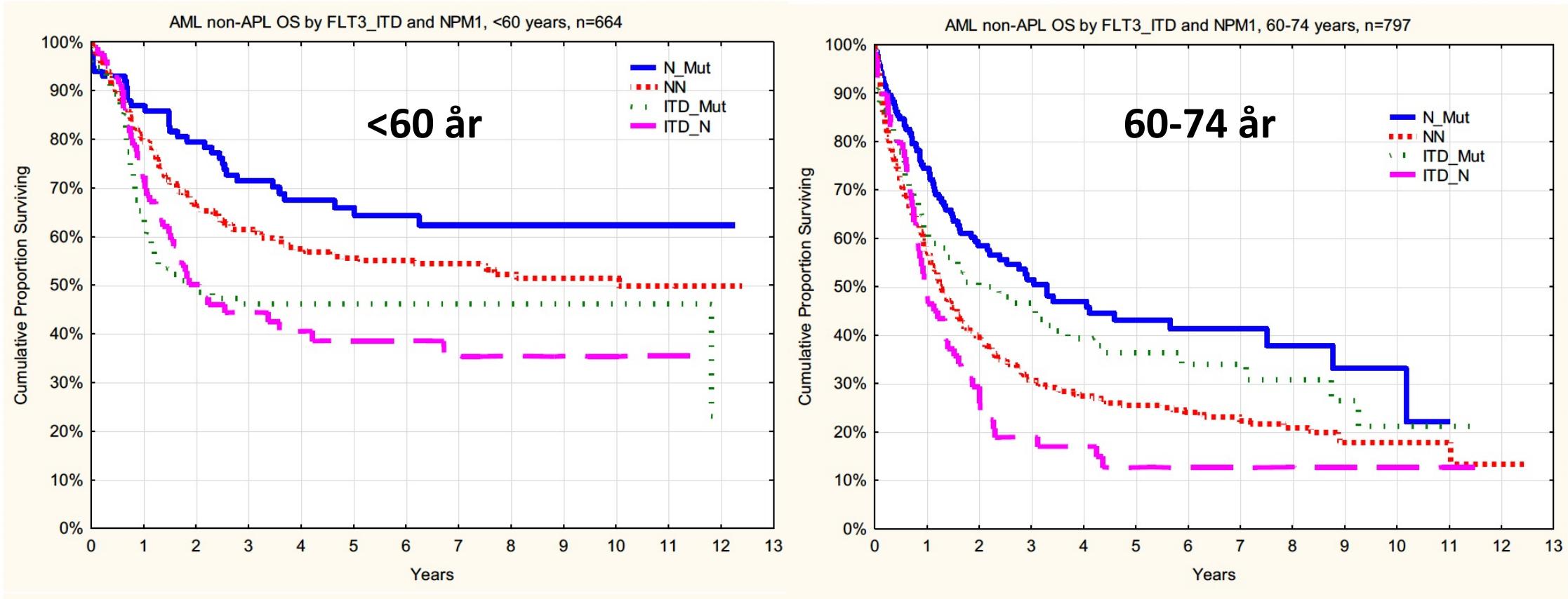
# AML <60 år: OS - Genetik



# AML 60-74 år: OS - Genetik



# AML: OS - *FLT3*-ITD och *NPM1*



Blood Adv. 2020 Mar 24;4(6):1094-1101. doi: 10.1182/bloodadvances.2019001335.