



Pregnancy during endocrine therapy



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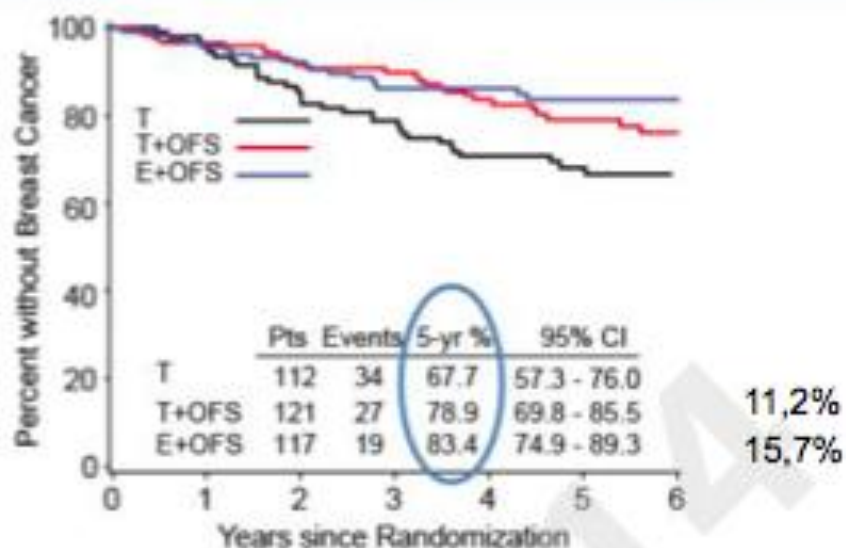
Agenda

- **Risk of Relapse of the patient**
 - in young women in general
 - Influence of Pregnancy
- **Possibility of Decreased Fertility**
 - Chemotherapy used
 - Biological age of the patient at the time of treatment start
- **Endocrine Therapy**
 - Type of endocrine therapy
 - Duration of endocrine therapy
- **Age**
 - At the time of wish to become pregnant

Very Young women in SOFT /TEXT

San Antonio Breast Cancer Symposium, December 9-13, 2014

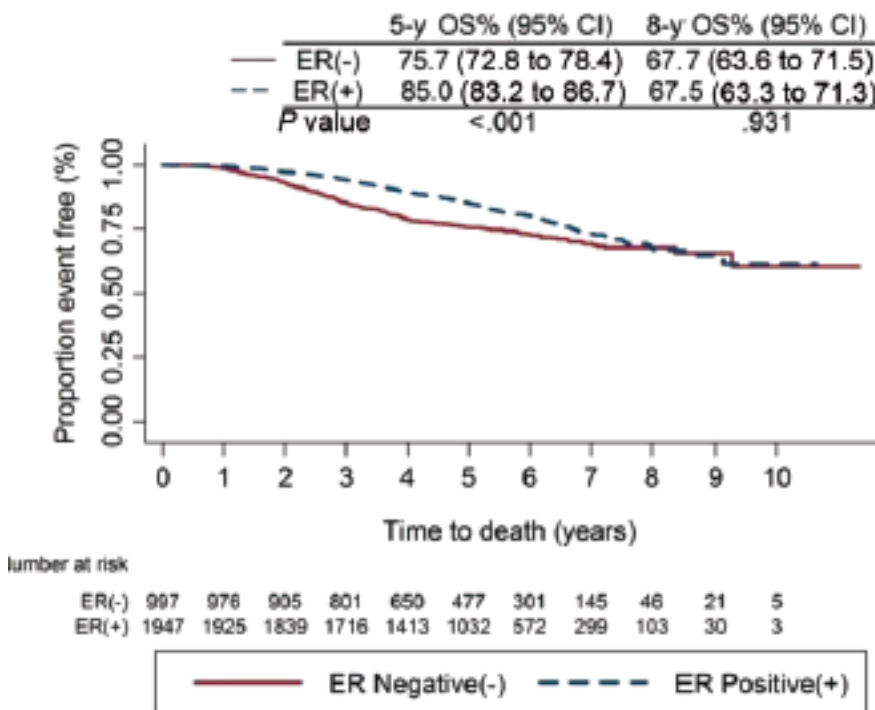
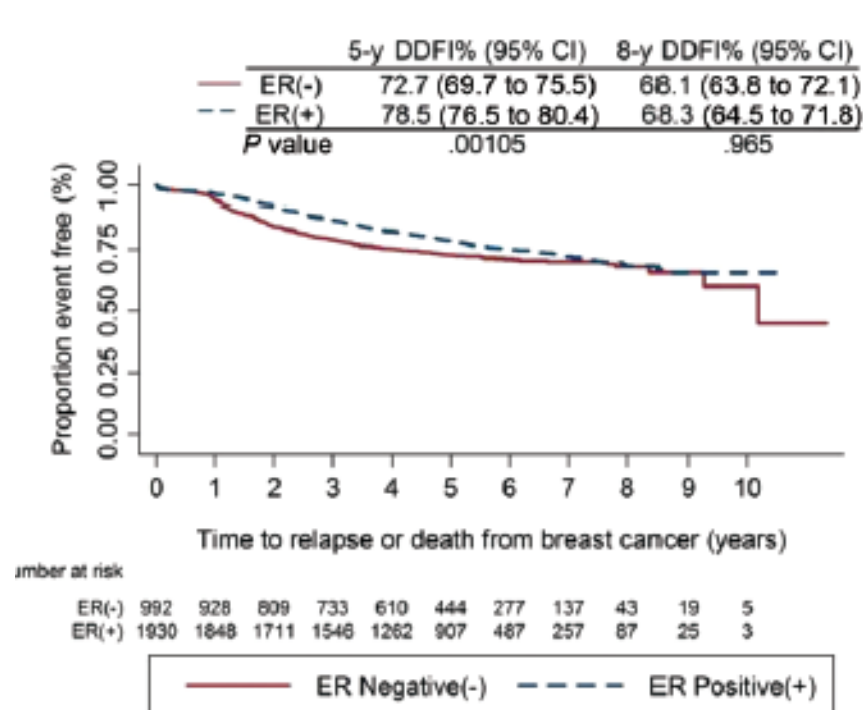
All women < 35 years of age



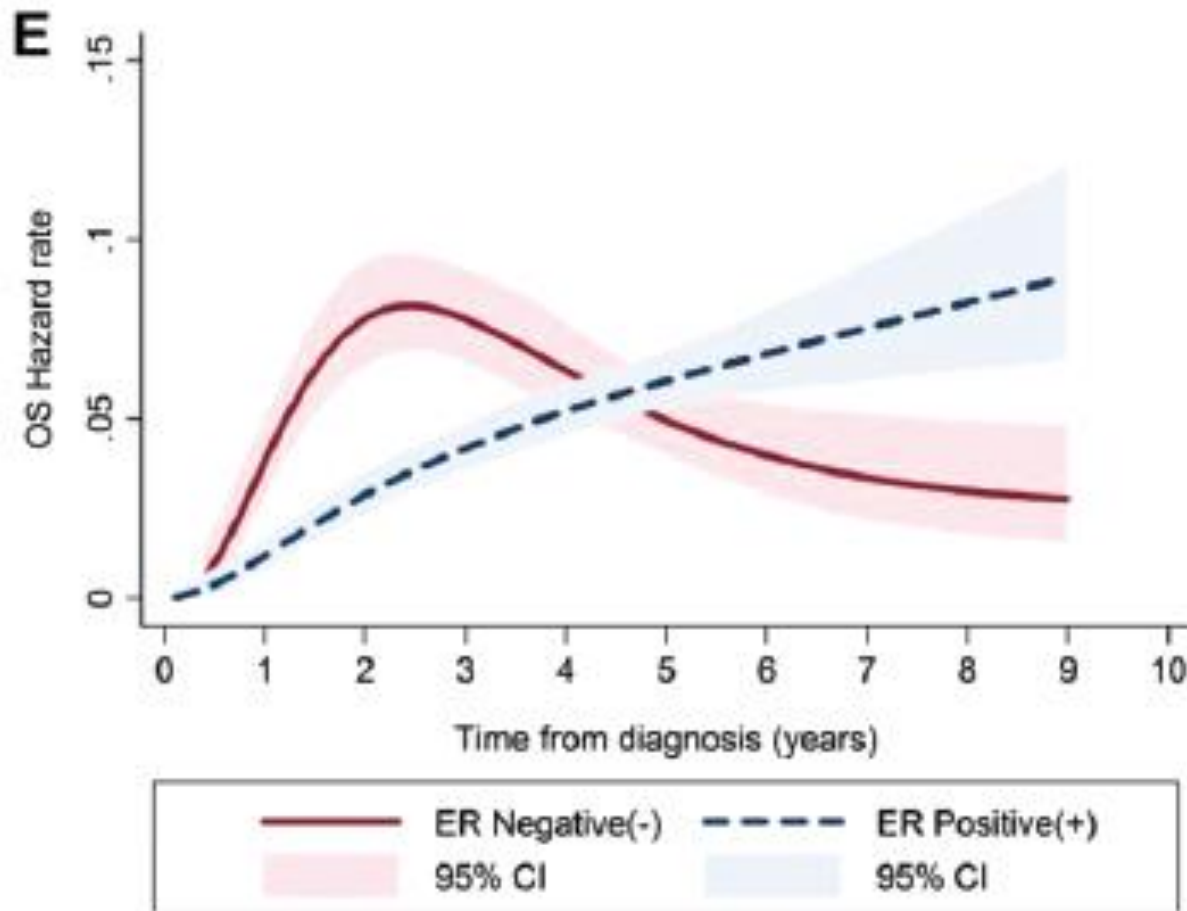
350 patients (11.5%) under age 35
94% received chemotherapy in this age group

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Survival in women <40 years – POSH study

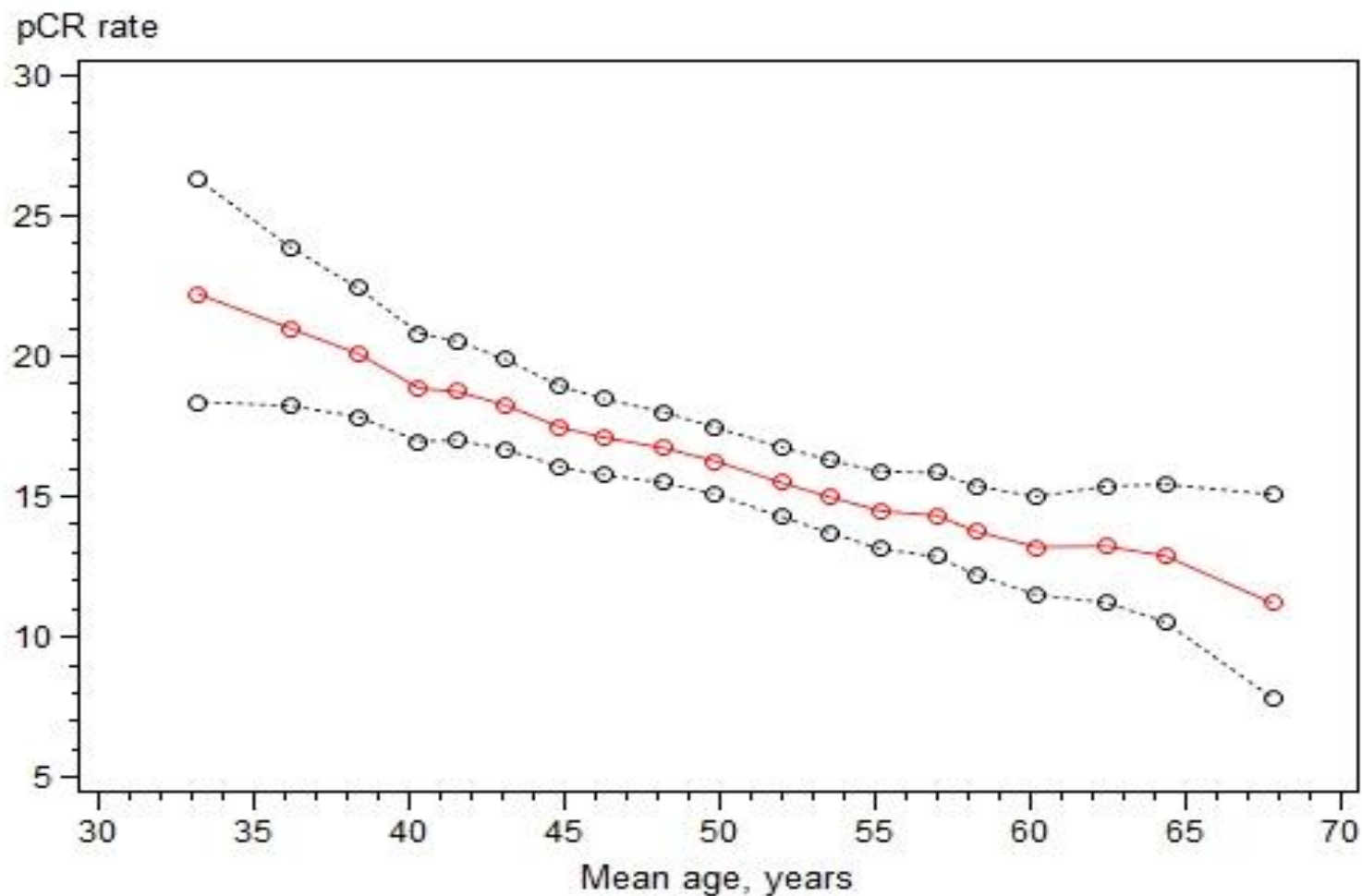


OS Hazards in ER-; ER+ women < 40 years – POSH study



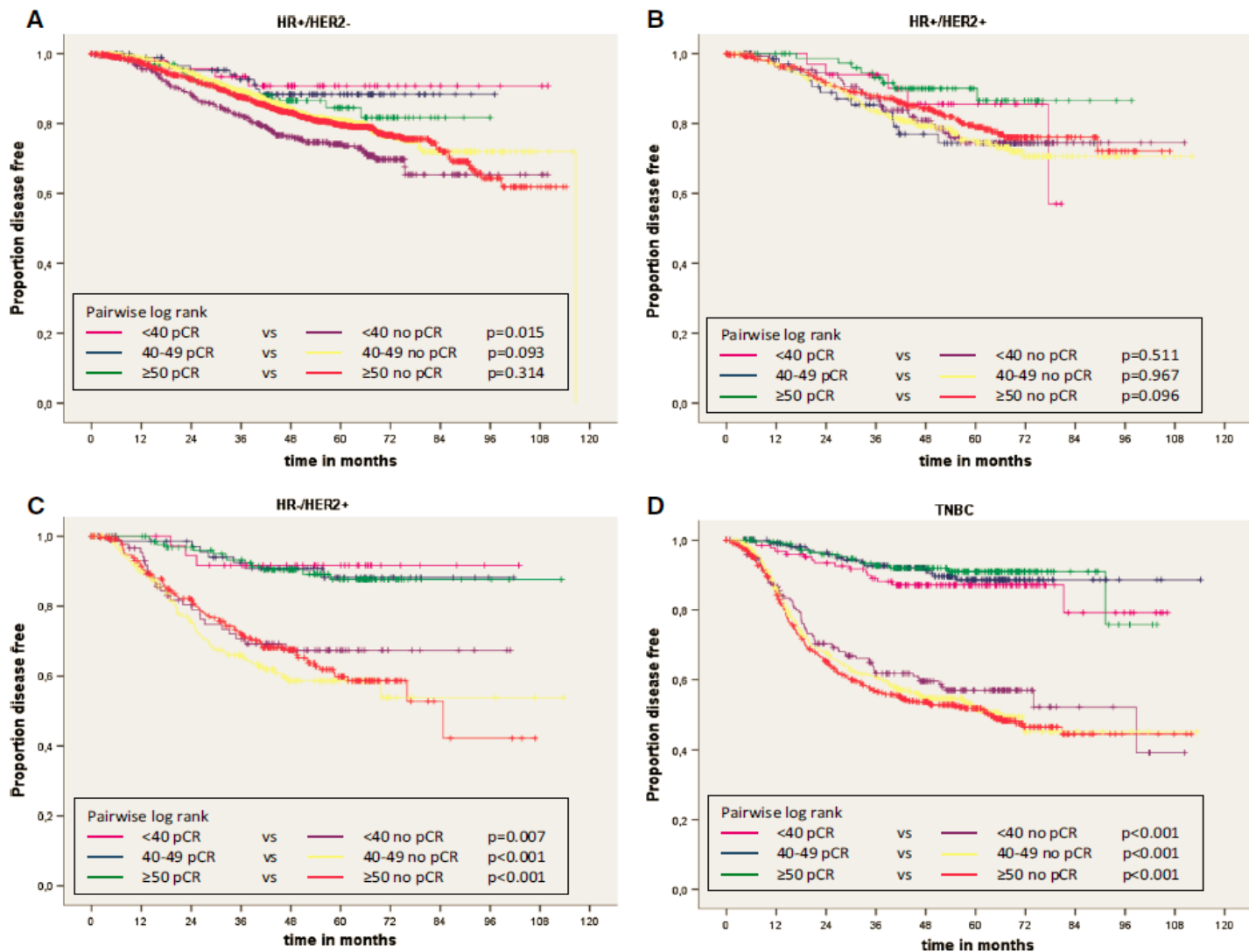


Correlation between age and pCR



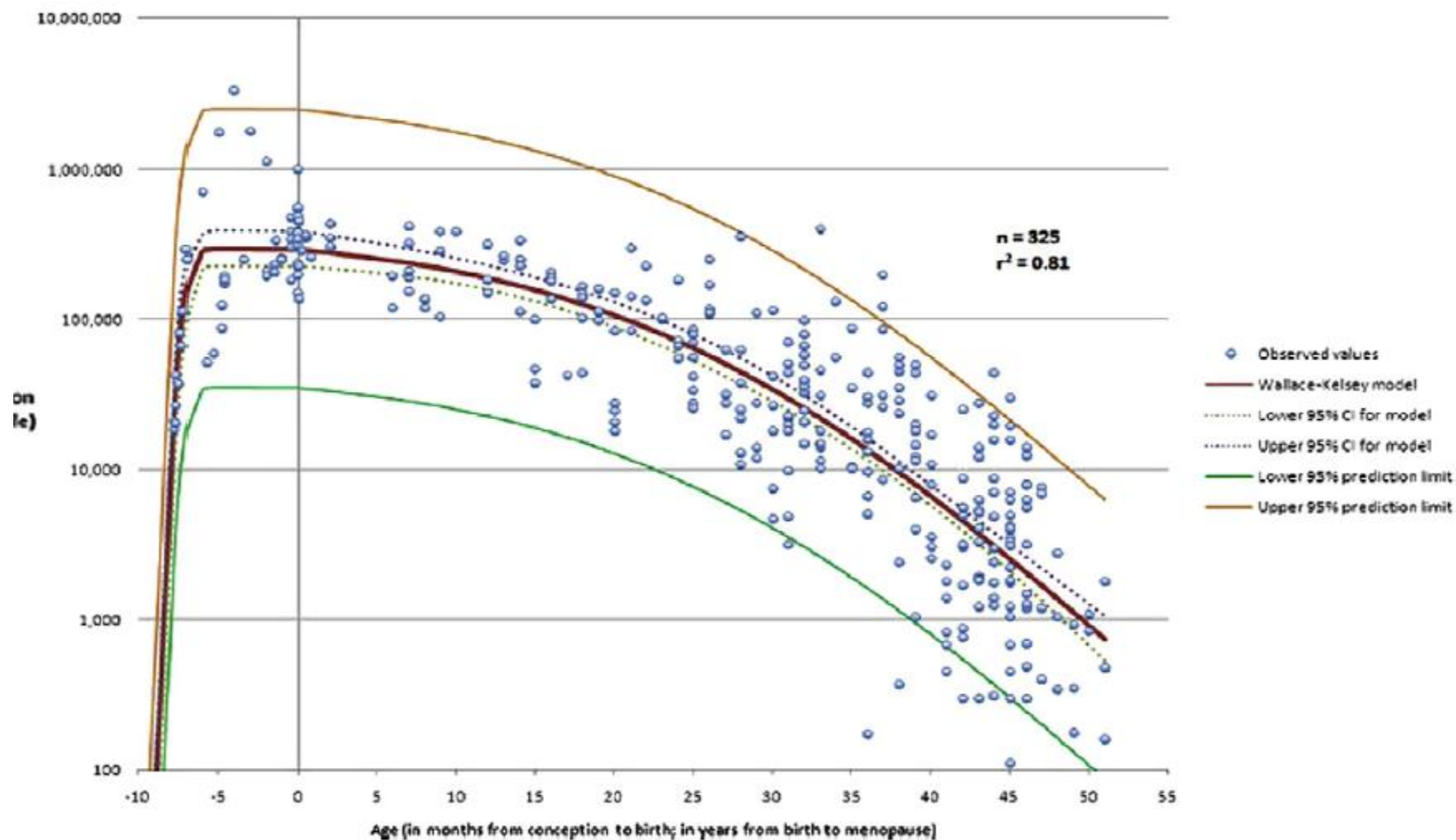


DFS after neoadjuvant therapy by age and subtype

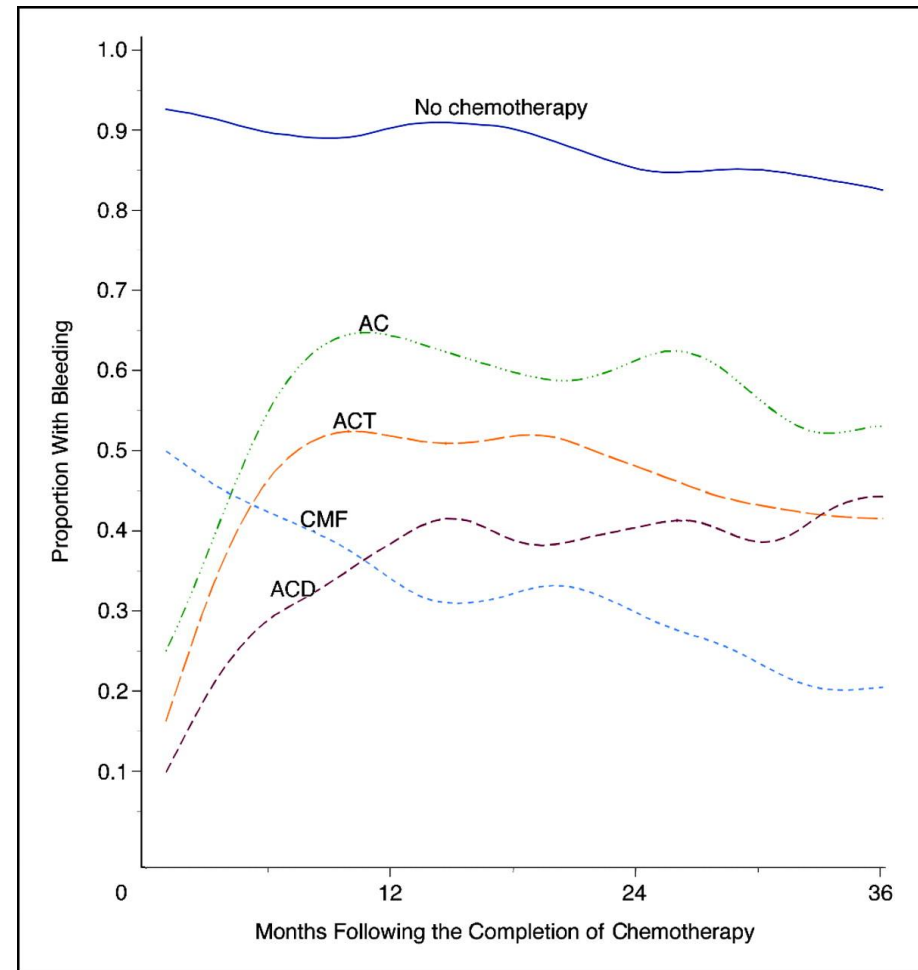
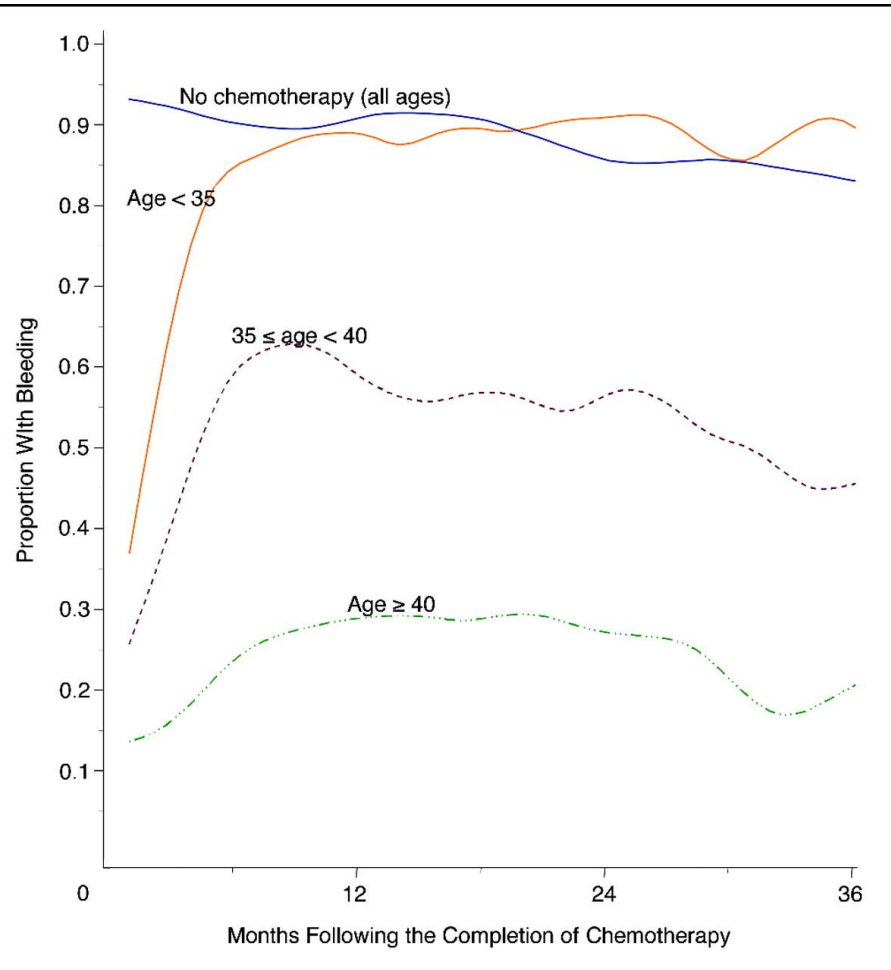




Ovarian Reserve



Amenorrhea rate and influence of age and chemotherapy



Petrek J A et al. JCO 2006;24:1045-1051

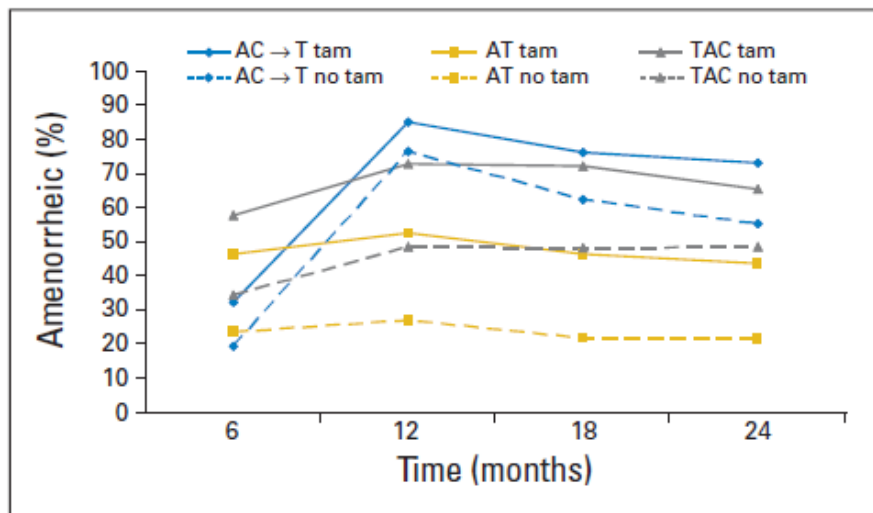
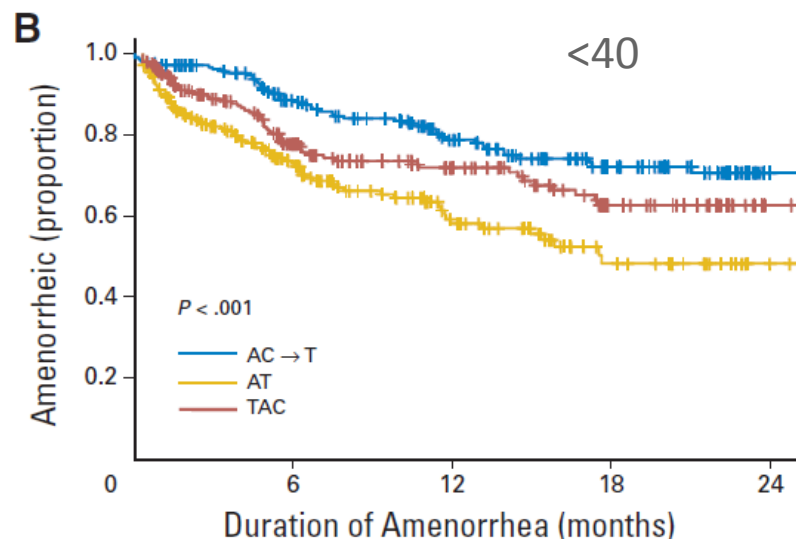
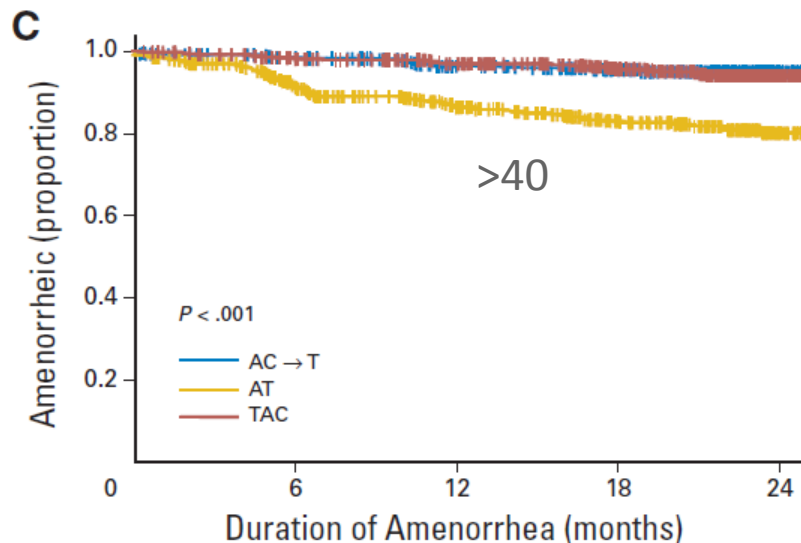
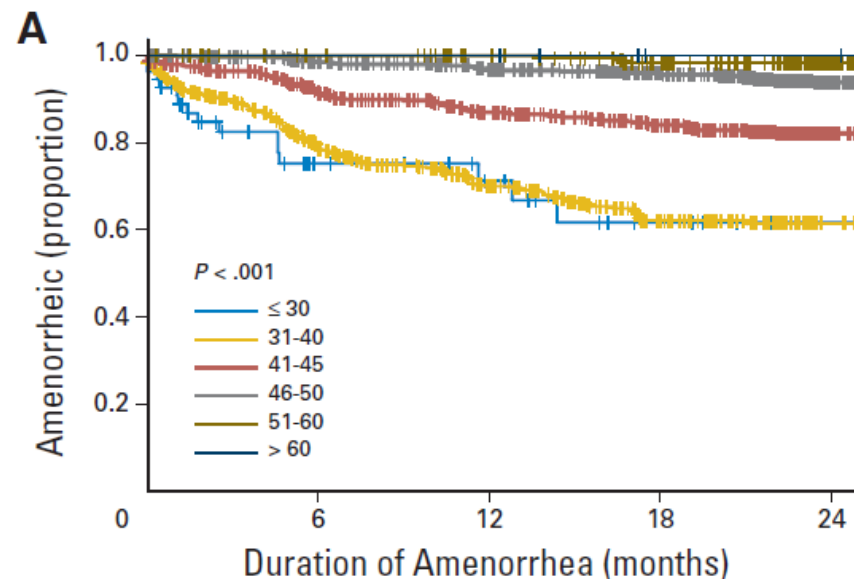
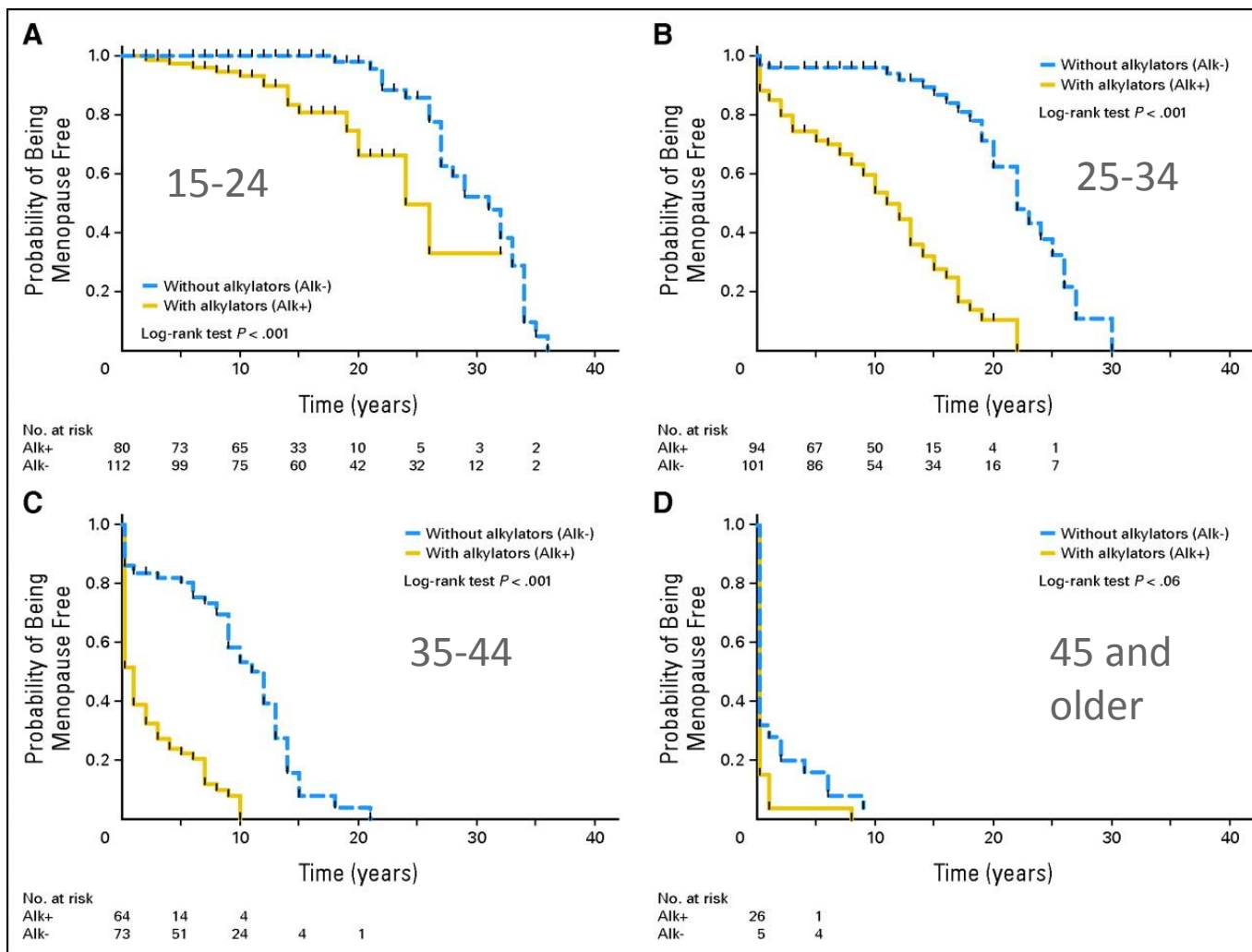


Fig 2. Rate of prolonged amenorrhea at each time point for chemotherapy and tamoxifen intention-to-treat groups. Excludes those who experienced amenorrhea for 3 months at baseline and those with a hysterectomy/oophorectomy or unknown status at each time point. A, doxorubicin; C, cyclophosphamide; T, docetaxel; tam, tamoxifen.



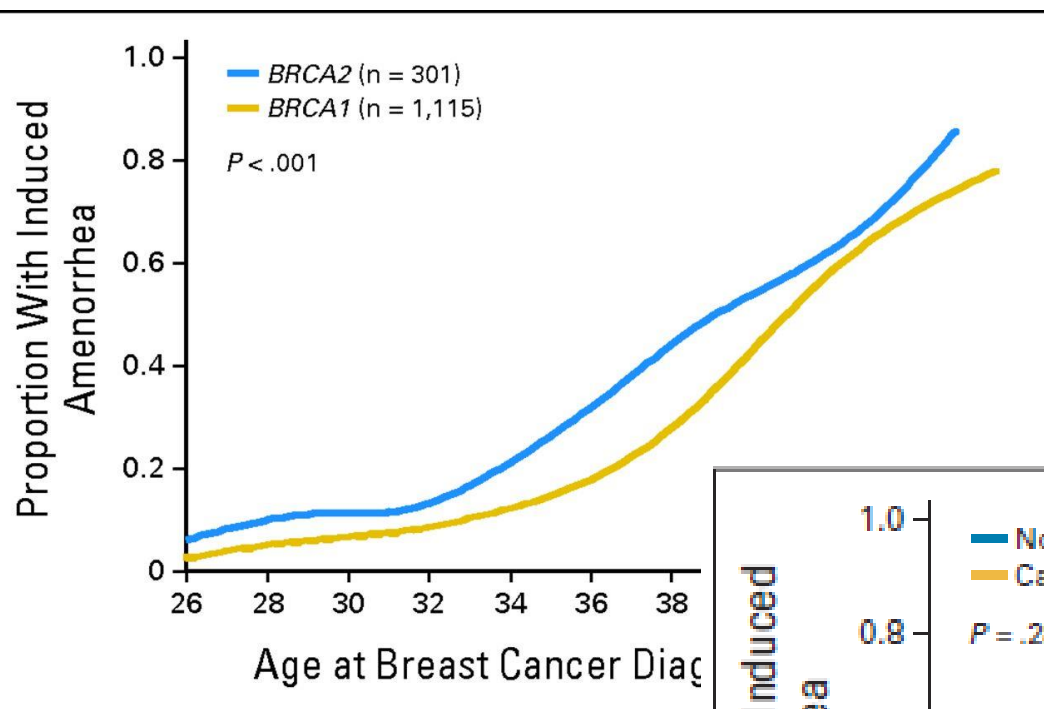
Time to menopause after treatment for Hodgkin's lymphoma by age at start of treatment:



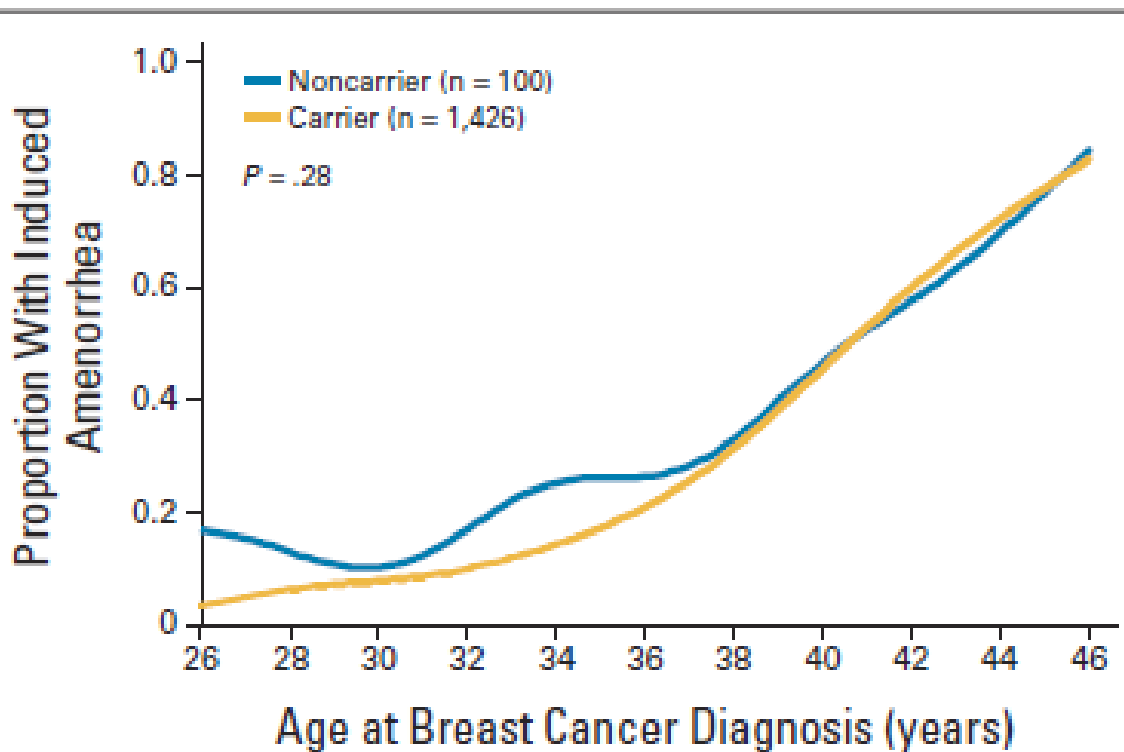
-- without
alkylating
substances

-- with alkylating
substances

Proportion of patients with induced amenorrhea by age at diagnosis and BRCA1-2 status

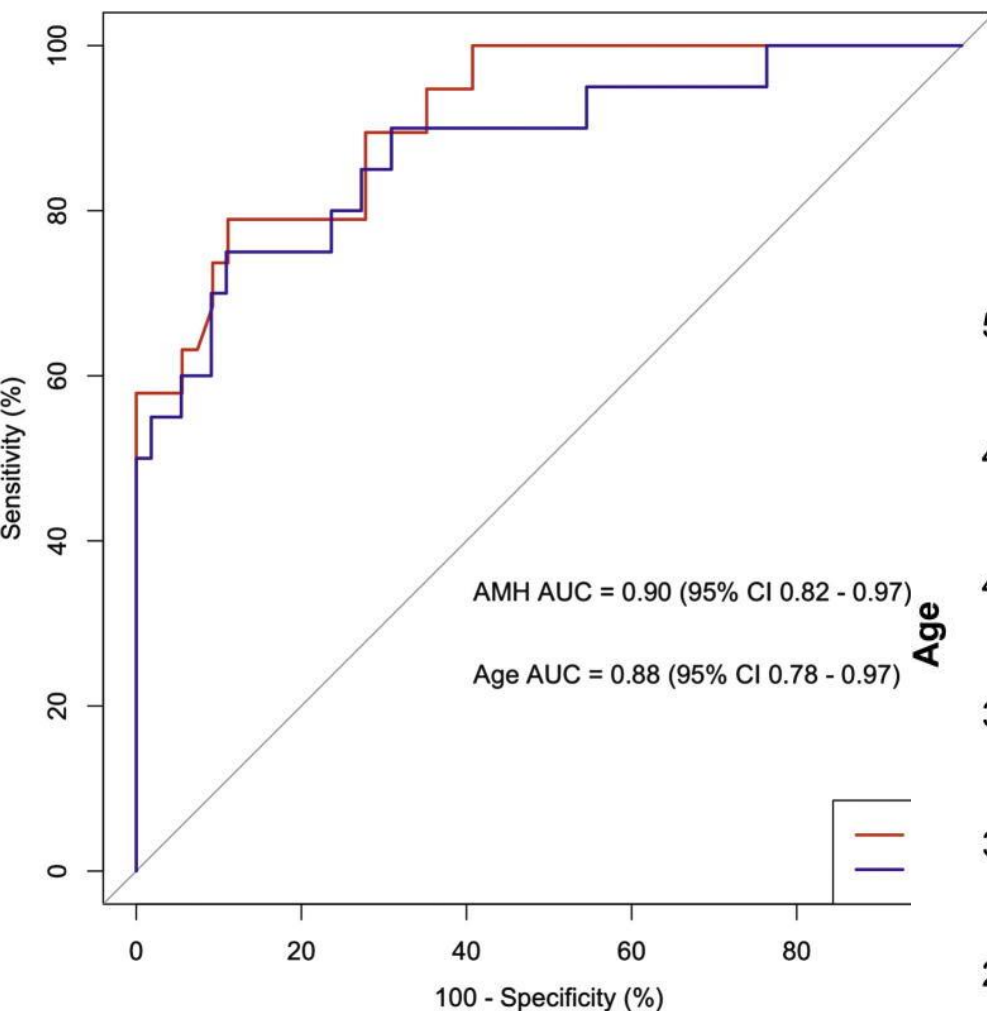


Proportion of patients with induced amenorrhea by age at diagnosis; carriers vs non carriers all patients received chemotherapy.

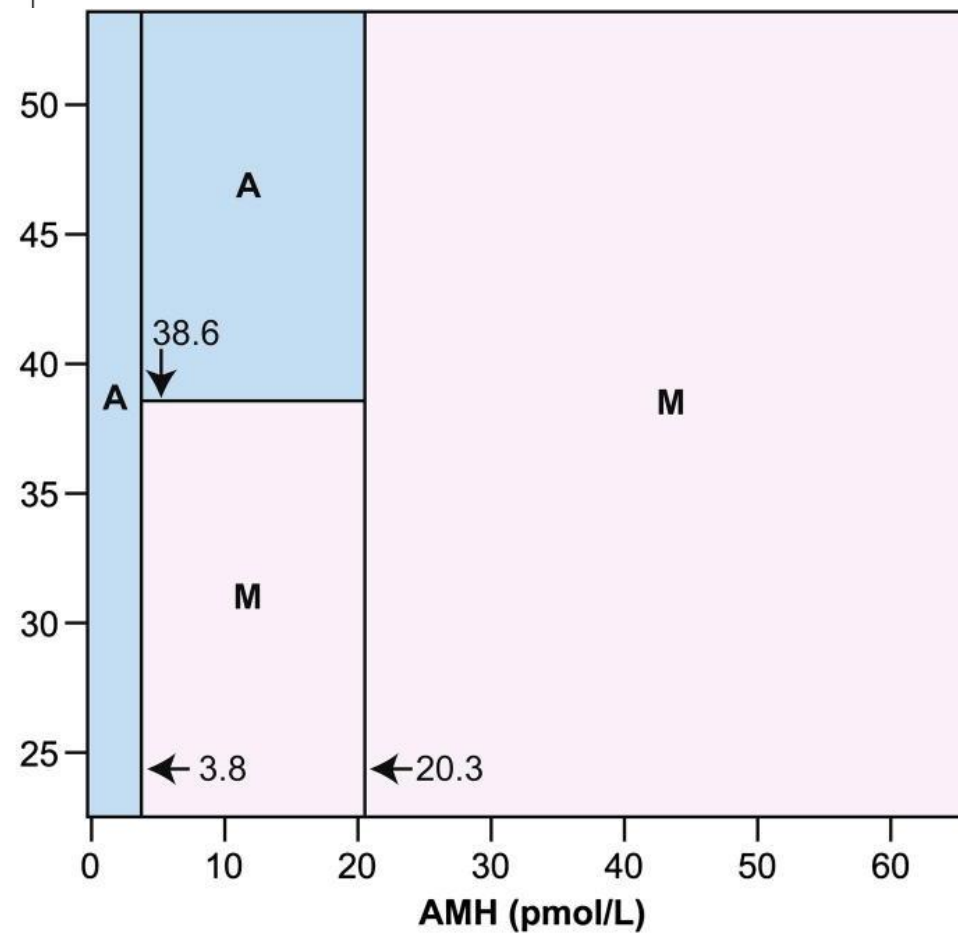




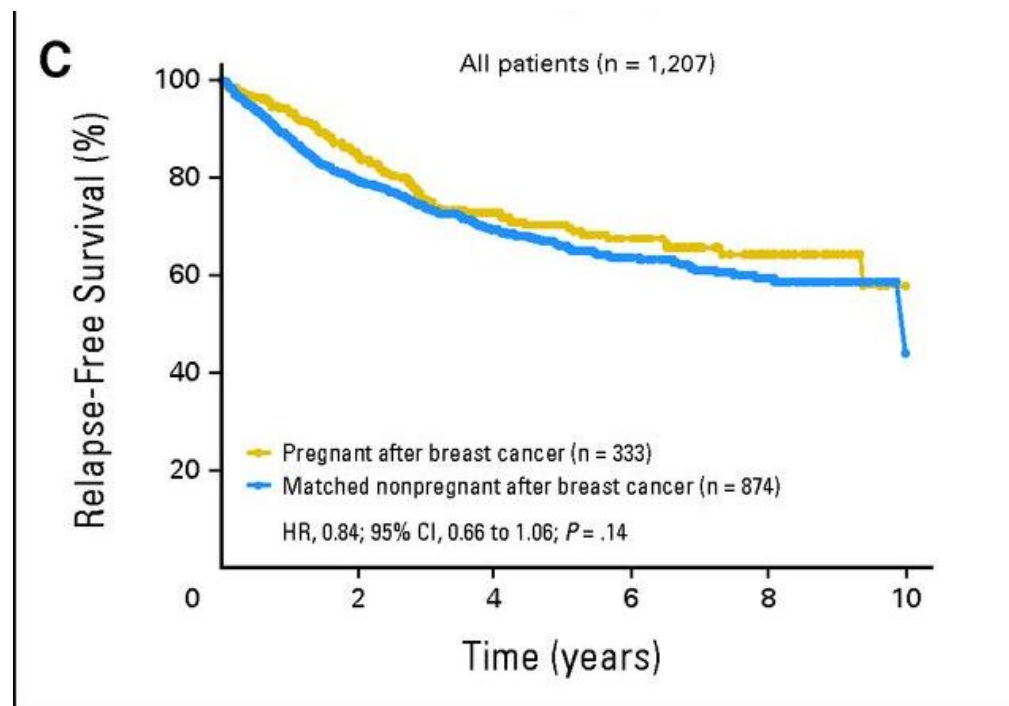
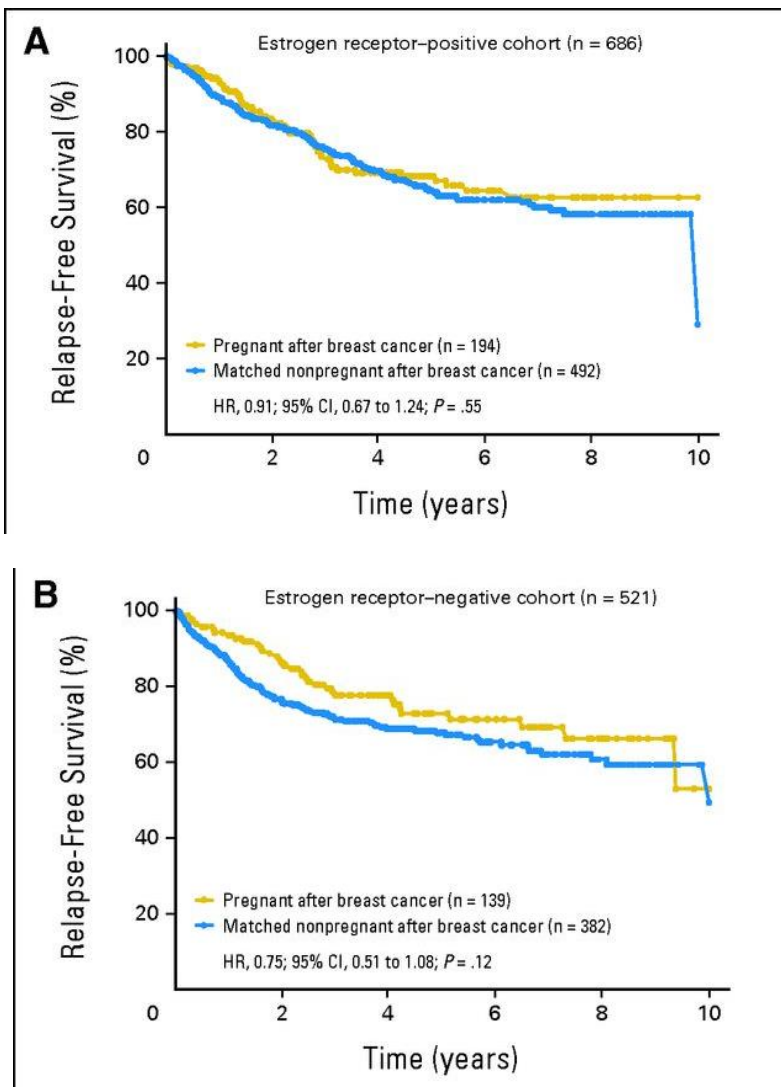
Baseline AMH and Age as predictors of amenorrhea



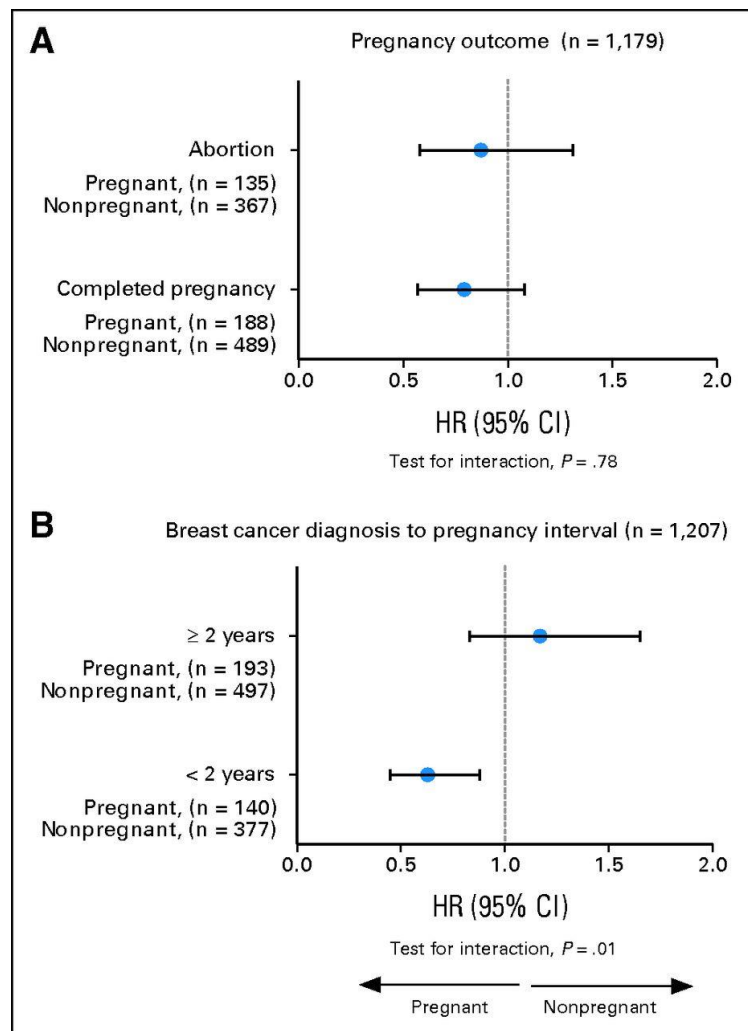
Anderson R et al. Eur J Cancer 2013



DFS between the pregnant group and matched nonpregnant group.



DFS depending on pregnancy outcome and interval from primary diagnosis to pregnancy



Azim H A et al. JCO 2013;31:73-79

Screening/eligibility:
Patients with ER+
early breast cancer
≥ 18 and ≤ 42 years at
enrollment

Completing 18-30
months of ET (SERMs
alone, GnRH
analogue + SERM or
Als)¹

Pregnancy desire

Stop
ET²

POSITIVE SCHEMA

E
N
R
O
L
L
M
E
N
T

0

3

24

mos

10

yrs

Up to 2 years' break to allow
conception, delivery ±
breast feeding

ET
resumption
to complete
5 (-10) yrs

Follow-up



Translational
research

Ovarian function evaluation

Uterine evaluation

Circulating tumor DNA (ctDNA)

Genomic evaluation of primary breast tumor

¹ ± CT

² No more than 1 month prior enroll.



Summary

- **To advise our patients to become pregnant or not after bc**
 - we need to know the general risk of relapse
 - the treatment she has received and is currently receiving, respectively
 - the menstruation history
- **Women with breast cancer can become pregnant**
 - without influencing the prognosis
 - there is no best time to become pregnant
- **Women with HR positive disease**
 - should not become pregnant while on ET
 - stoppe ET/Tamoxifen for at least 2-3 months
 - Resume ET afte 2 years latest or after delivery and breast feeding
- **Do not advise not to become pregnant after breast cancer!!**