

What age to start screening
with HPV?

30 or 35? this is the question

The Italian HTA report recommend:

“HPV-based screening should not start before 30-35 years. There is evidence that below 30 years HPV-based screening leads to an increased overdiagnosis of CIN2 that would regress spontaneously, with consequent overtreatment. Some increase in overdiagnosis is plausible also between 30 and 35.

30 or 35? this is the question

The draft (2010) of the European guidelines also (and the upcoming version will have probably the same recommendation):

- 1.3 Routine HPV primary screening can begin at age 35 years or above **(I-A)**.
- 1.4 Routine HPV primary screening should not begin under age 30 years **(I-E)**.
- 1.5 The available evidence is insufficient to recommend for or against beginning routine HPV primary screening in the age range 30 - 34 years **(VI)**

The evidences

NTCC STUDY

WOMEN AGE 25-34

DETECTION OF CIN 2 or 3 or AIS BY STUDY PERIOD

	Women enrolled (invited to round 2)	screening round1 N (%)	screening round2 N (%)	Total over both rounds N (%)
HPV group	12939 (12035)	193 (1.49%)	18 (0.15%)	211 (0.63%)
Cytology group	12596 (12350)	62 (0.49%)	31 (0.25%)	93 (0.74%)
RR (95%CI)		3.03 (2.28-4.03)	0.60 (0.33-1.06)	2.21 (1.73-2.81)
<i>P heterogeneity between phases</i>		0.007	0.21	0.054

NTCC STUDY

WOMEN AGE 25-34

DETECTION OF CIN3 or AIS BY STUDY PERIOD

Phase 1				
	Women enrolled (invited to round 2)	screening round1	screening round2	Total over both rounds
HPV group	6602 (5640)	23 (0.38%)	8 (0.14%)	31 (0.52%)
Cytology group	5808 (5721)	24 (0.41%)	6 (0.10%)	30 (0.53%)
RR (95%CI)		0.93 (0.52-1.64)	1.35 (0.47-3.90)	1.00 (0.61-1.65)
Phase 2				
HPV group	6937 (6395)	44 (0.63%)	2 (0.03%)	46 (0.66%)
Cytology group	6788 (6629)	11 (0.16%)	10 (0.15%)	21 (0.31%)
RR (95%CI)		3.91 (2.02-7.57)	0.21 (0.05-0.96)	2.14 (1.28-3.59)
P heterogeneity between phases		0.0009	0.037	0.036

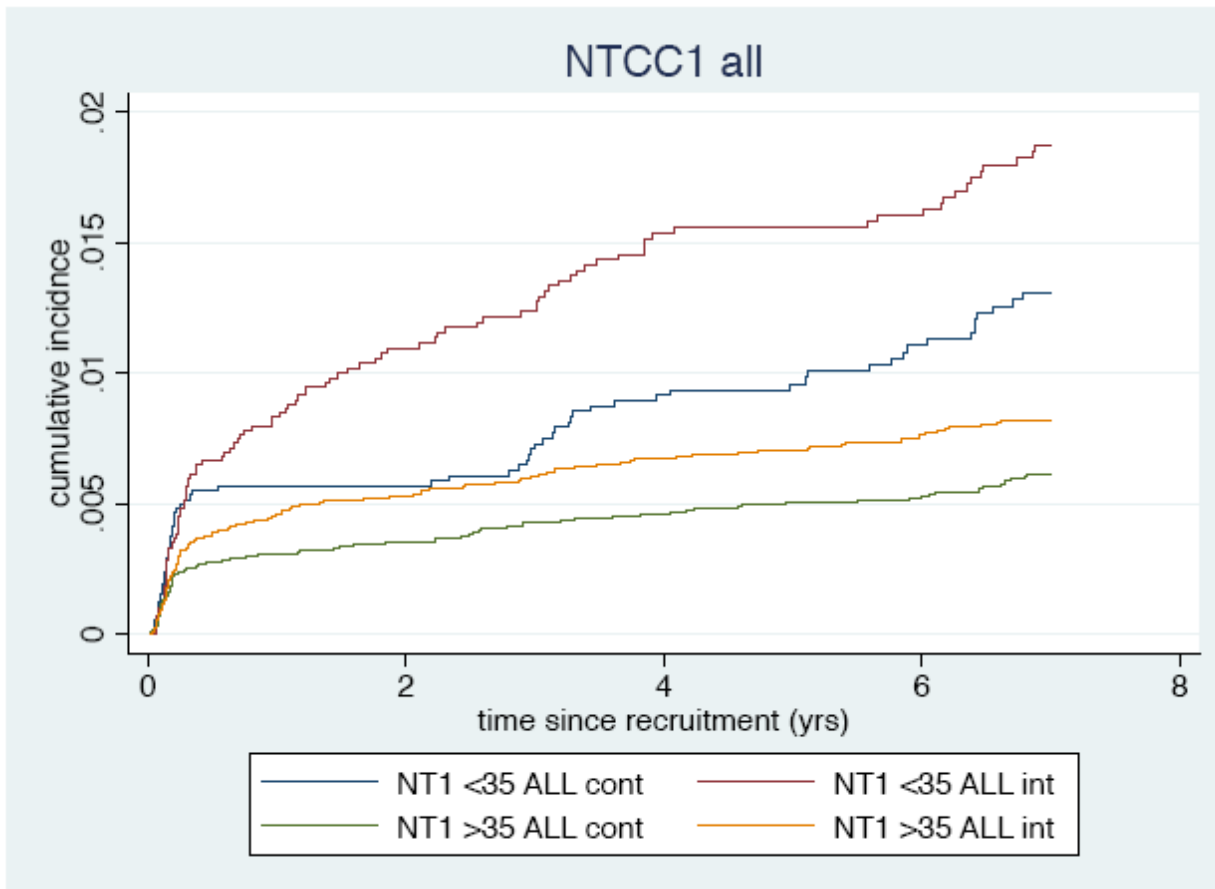
NTCC STUDY

WOMEN AGE 25-34

DETECTION OF CIN2 BY STUDY PERIOD

	Women enrolled (invited to round 2)	screening round1 N (%)	screening round2 N (%)	Total over both rounds N (%)
HPV group	12939 (12035)	126 (0.97%)	8 (0.07%)	134 (1.04%)
Cytology group	12596 (12350)	27 (0.21%)	15 (0.12%)	42 (0.33%)
RR (95%CI)		4.54 (3.00-6.88)	0.55 (0.23-1.29)	3.11 (2.20-4.39)
<i>P heterogeneity between phases</i>		0.65	0.66	0.60

Ancora sull'età: quanta sovradiagnosi e quanta attecipazione diagnostica



POBASCAM: The cumulative detection of CIN grade 3 or worse and CIN grade 2 or worse did not differ significantly between study arms, and age

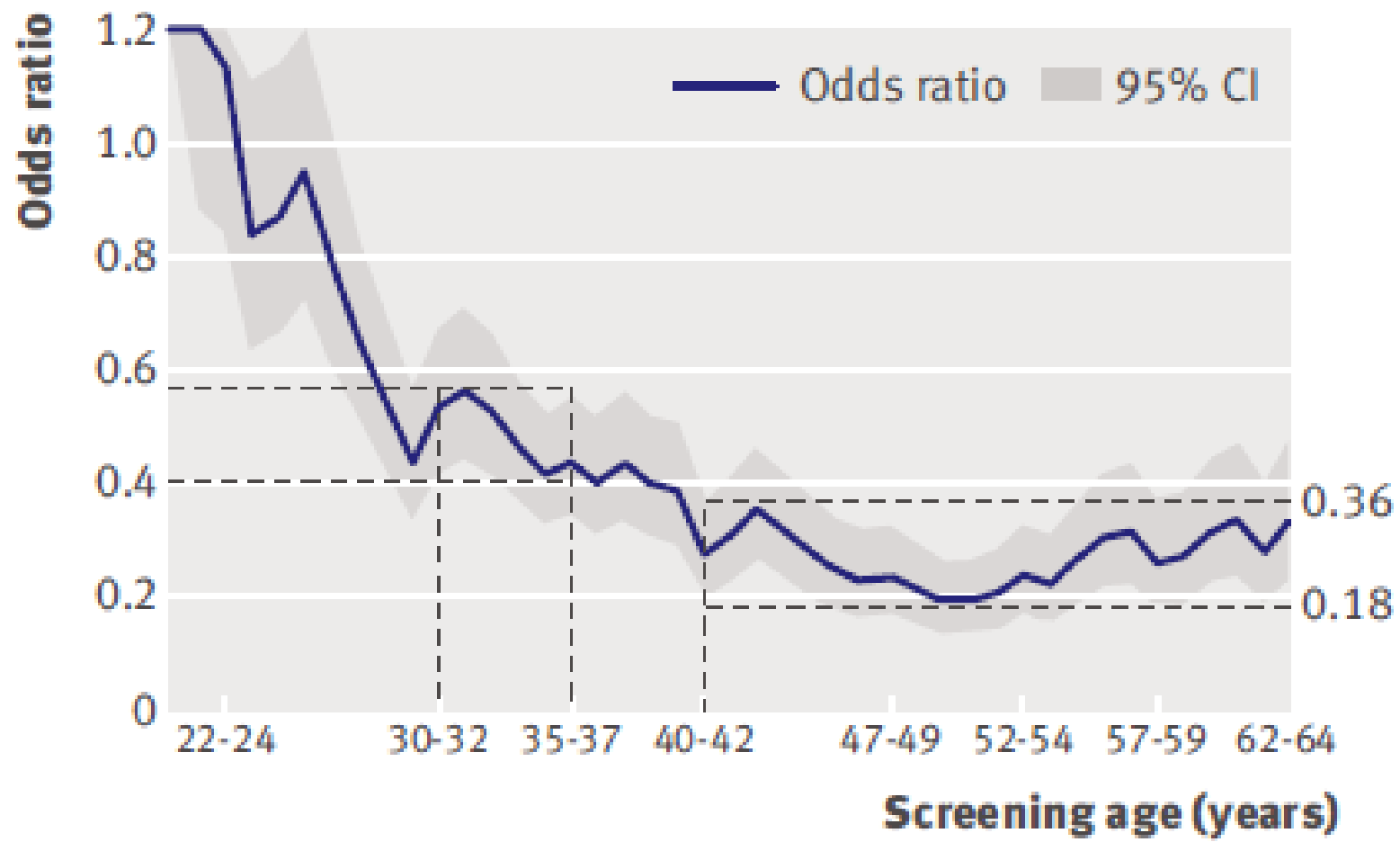
	Test	screened	CIN2+	RR	CIN3+	RR
29-33	HPV	3,139	153	1.01 (0.81-1.26)	102	0.97 (0.74-1.27)
	Pap	3,128	151		105	
34-56	HPV	16,860	274	1.11 (0.94-1.32)	157	0.95 (0.76-1.18)
	Pap	16,978	248		167	
Total	HPV	19,999	427	0.96 (0.81-1.14)	259	1.08 (0.94-1.24)
	Pap	20,106	399		272	

The efficacy in preventing invasive cancer is major in women 30-34

	Pooled rate ratio* (95% CI)	I ² (p for heterogeneity between studies)
Morphology		
Squamous-cell carcinoma	0.78 (0.49-1.25)	0.0% (0.84)
Adenocarcinoma	0.31 (0.14-0.69)	0.0% (0.59)
Adenocarcinoma vs squamous-cell carcinoma	0.34 (0.12-0.90)	..
Stage		
1A	0.58 (0.34-1.01)	0.0% (0.82)
>1A	0.56 (0.31-1.00)	31.8% (0.22)
>1A vs 1A	0.86 (0.35-2.13)	..
Age at enrolment (years)		
<30†	0.98 (0.19-5.20)	0.0% (0.34)
30-34	0.36 (0.14-0.94)	7.2% (0.36)
35-49	0.64 (0.37-1.10)	0.0% (0.55)
≥50	0.68 (0.30-1.52)	36.5% (0.21)

Odds Ratio of developing a cancer in women with or without a Pap test in the previous five years:

Younger women are those less protected by Pap screening



Future perspectives: new recommendations for vaccinated women

- Possible increase in starting age: first invitation at 30
 - Only for vaccinated women?
 - For all the cohort over a given threshold of immunization coverage?
- In any case if age for starting HPV screening will be \leq the age of first active call for vaccinated women there will be a great organizational advantage.