

# Età dello screening per il cancro colorettale

6 novembre 2019

Verona

**GISCOR**

Nereo Segnan

**CPO Piemonte e AOU Città della Salute e della Scienza Torino**

**WHO Collaborative Center for Cancer Early Diagnosis and Screening**

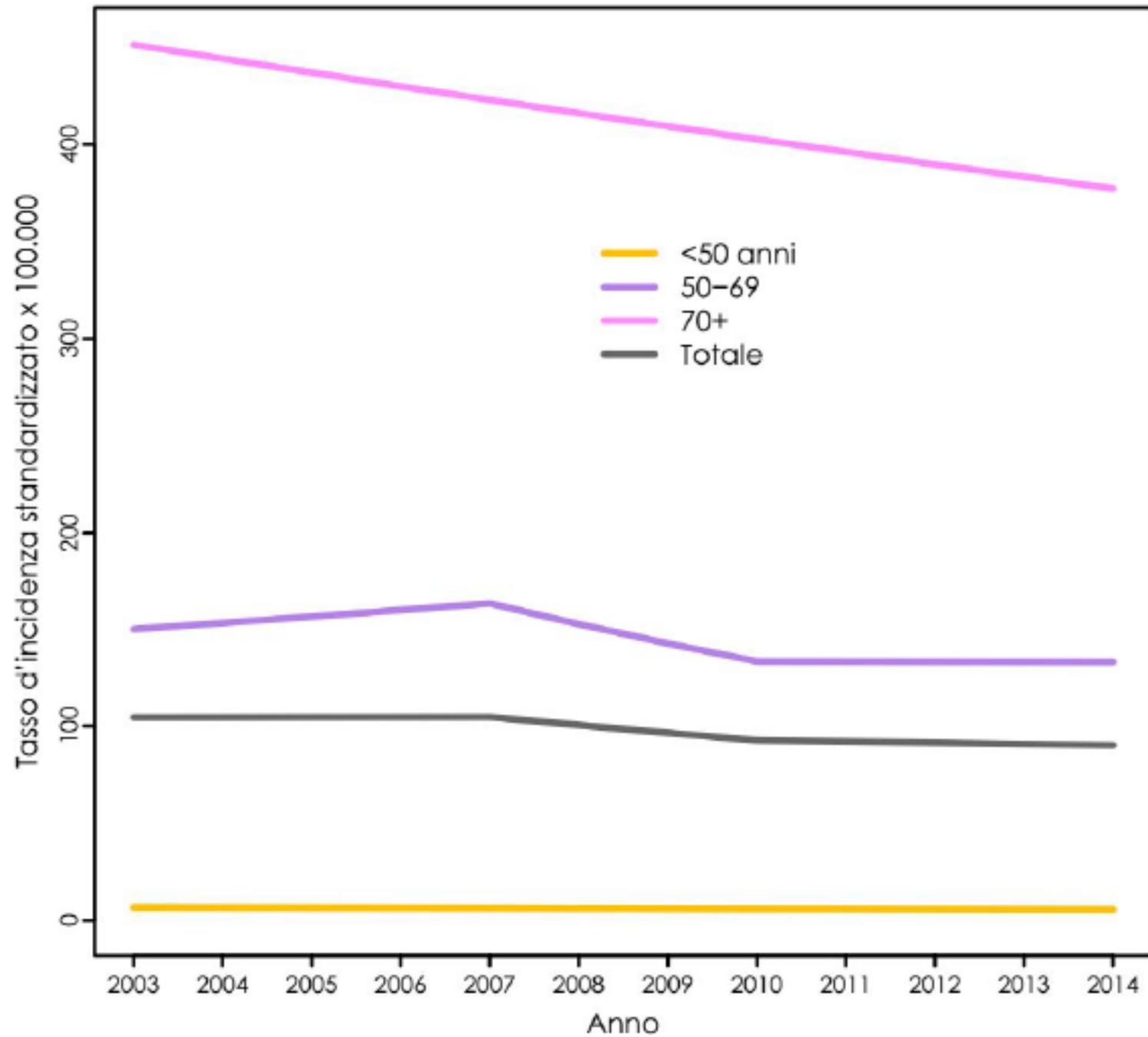


Centro di Riferimento per l'Epidemiologia  
e la Prevenzione Oncologica in Piemonte



WHO Collaborating Centre for cancer early  
detection and screening

I numeri del  
Cancro in Italia  
2018 - Colon retto



	PERIODO		TASSO	APC	95% CI	
<b>Totale</b>	<b>2003</b>	<b>2014</b>	<b>98,0</b>	<b>-1,3</b>	<b>-1,8</b>	<b>-0,9</b>
	2003	2007	104,5	0,1	-0,7	0,8
	2007	2010	98,4	-4,0	-6,0	-1,9
	2010	2014	91,2	-0,7	-1,4	0,0
<b>0-49</b>	2003	2014	6,0	-1,6	-2,1	-1,1
<b>50-69</b>	2003	2007	157,3	2,1	0,3	4,0
<b>50-69</b>	2007	2010	148,6	-6,5	-11,8	-0,9
<b>50-69</b>	2010	2014	133,7	0,0	-1,9	1,9
<b>70+</b>	2003	2014	413,3	-1,6	-1,9	-1,4
<b>NORD-OVEST</b>	2003	2007	120,1	-1,6	-3,1	-0,1
<b>NORD-OVEST</b>	2007	2010	105,6	-6,6	-11,1	-1,8
<b>NORD-OVEST</b>	2010	2014	92,9	-0,9	-2,5	0,7
<b>NORD-EST</b>	2003	2006	113,5	3,5	0,4	6,7
<b>NORD-EST</b>	2006	2010	109,8	-4,2	-7,0	-1,4
<b>NORD-EST</b>	2010	2014	97,6	-1,3	-3,1	0,6
<b>CENTRO</b>	2003	2008	107,5	0,6	-1,1	2,3
<b>CENTRO</b>	2008	2014	97,4	-3,6	-4,8	-2,4
<b>SUD E ISOLE</b>	2003	2014	83,6	0,3	0,0	0,6

	2007	2010	98,4	-4,0	-6,0	-1,9
	2010	2014	91,2	-0,7	-1,4	0,0
<b>0-49</b>	2003	2014	6,0	-1,6	-2,1	-1,1
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Zorzi M, Guzzinati S, Mazzoleni G, Piffer S, Serraino D, Dal Maso L, Rugge M.

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- METODI

Abbiamo analizzato i tassi di incidenza del CCR dei Registri Tumori del Nord Est (Alto Adige, Friuli Venezia Giulia, Trento e Veneto; popolazione complessiva = 7.200.000 residenti), dal 2003 al 2014, complessivi e separatamente per le fasce d'età 40-44 e 45-49 anni. Sono stati calcolati gli AnnualPercentChange (APC), con Intervalli di Confidenza al 95% (95%CI).

- RISULTATI

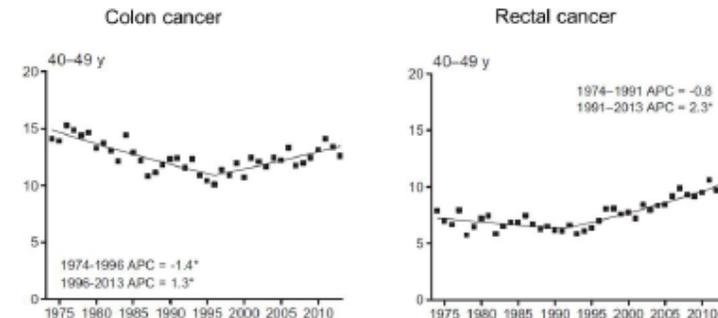
Dal 2003 al 2014 non si sono registrate variazioni statisticamente significative dei tassi di CRC nei soggetti di età compresa tra 40 e 49 anni. Nei 40-44enni l'APC è stata pari a -0,1 nei maschi (95%CI da -3,8 a +3,8) e a 0,2 nelle femmine (95%CI da -3,2 a 3,7) (Figura 1), mentre nei 45-49enni è risultata pari a -1,2 nei maschi (95%CI da -2,9 a 0,5) e a 0,8 nelle femmine (95%CI da -1,7 a 3,3).

### Box 1. Trend di incidenza USA 1975-2010 e raccomandazioni ACS sullo screening coloretale

#### Colorectal Cancer Incidence Patterns in the United States, 1974-2013

Rebecca L. Siegel, Stacey A. Fedewa, William F. Anderson, Kimberly D. Miller, Jiemin Ma, Philip S. Rosenberg, Ahmedin Jemal

JNCI J Natl Cancer Inst (2017) 109(8): djw322



#### Colorectal cancer screening for average-risk adults: 2018 guideline update from the American Cancer Society

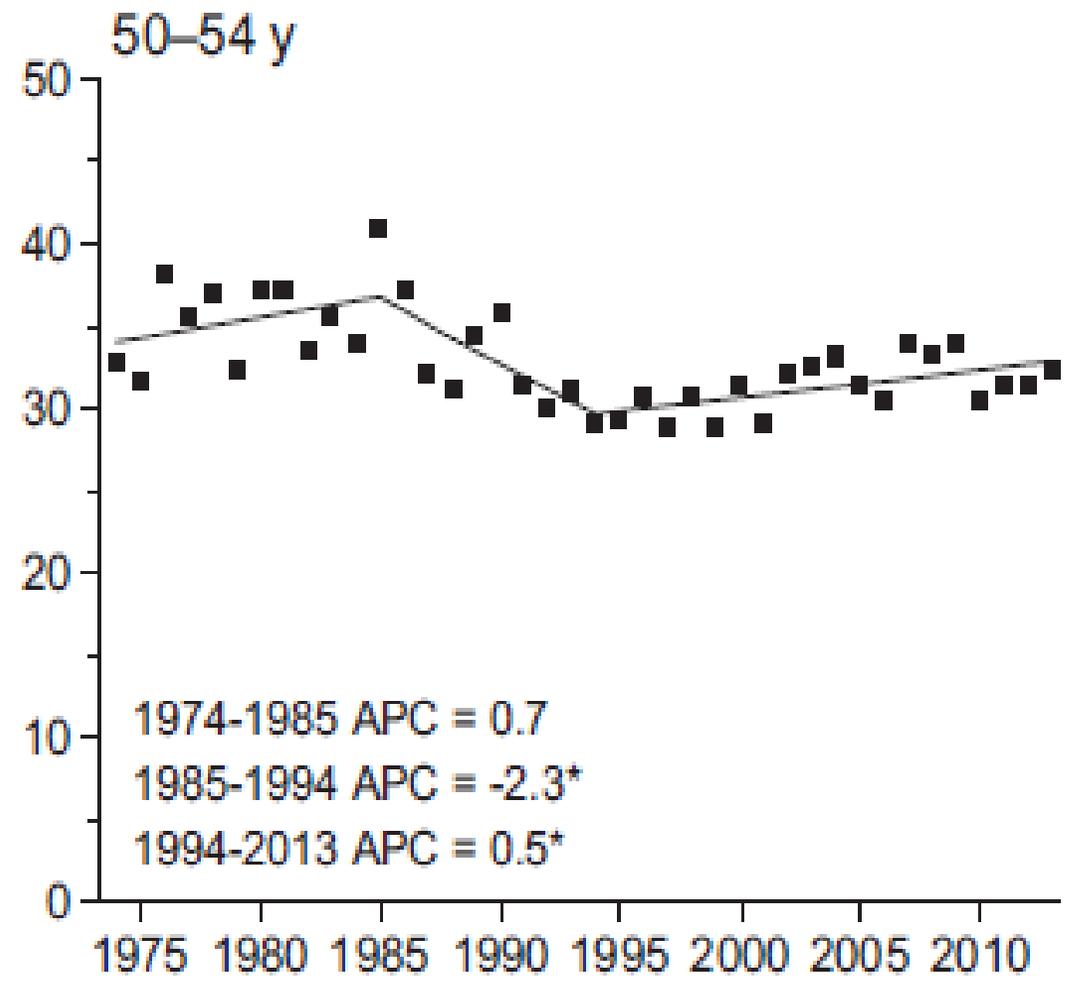
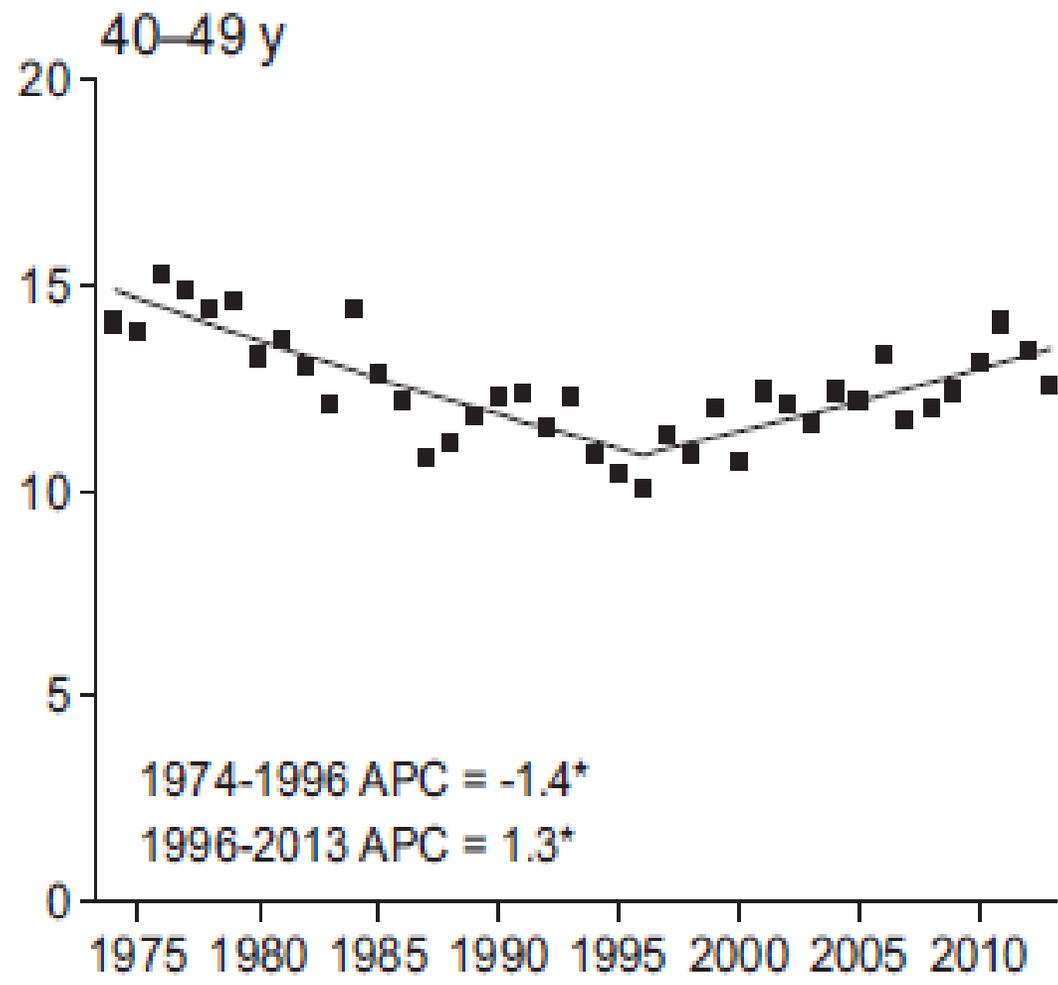
Andrew M.D. Wolf MD, Elizabeth T.H. Fontham MPH, DrPH, Timothy R. Church PhD, Christopher R. Flowers MD, MS, Carmen E. Guerra MD, Samuel J. LaMonte MD, ... See all authors

CA: A Cancer Journal for Clinicians / Volume 68, Issue 4

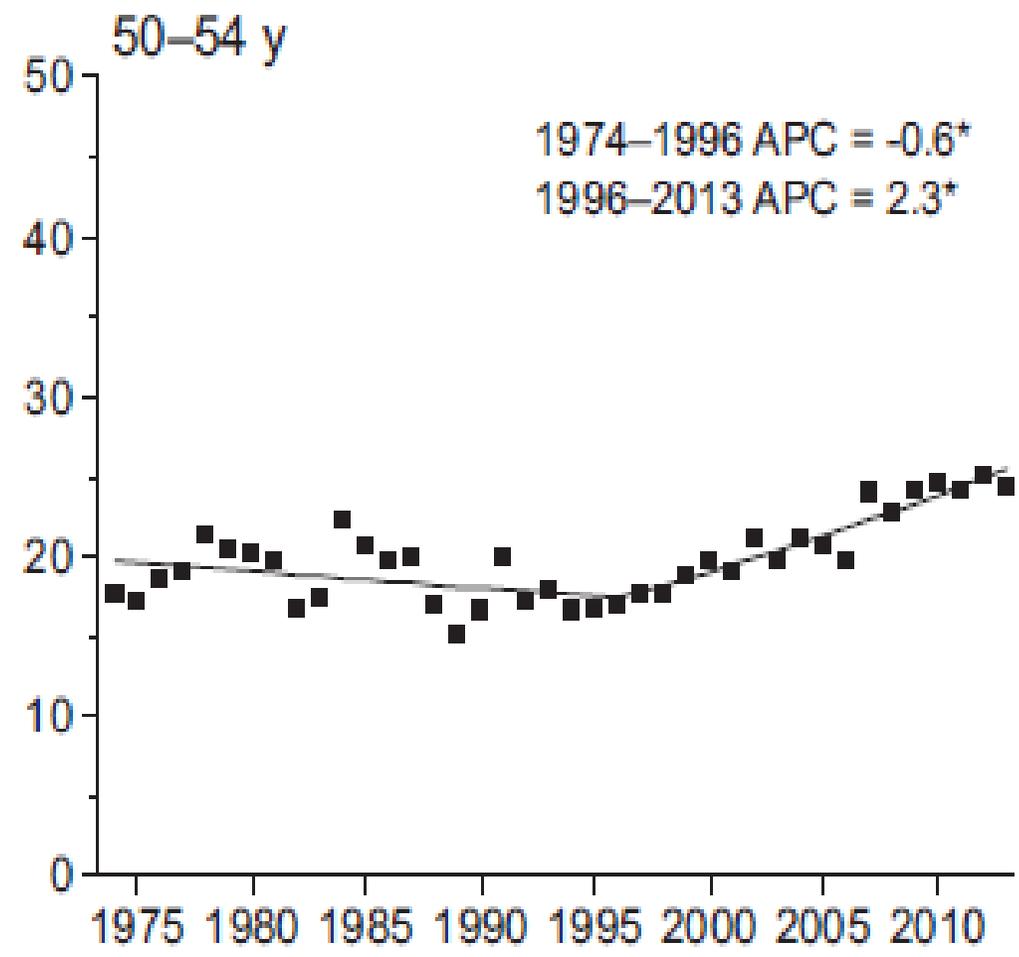
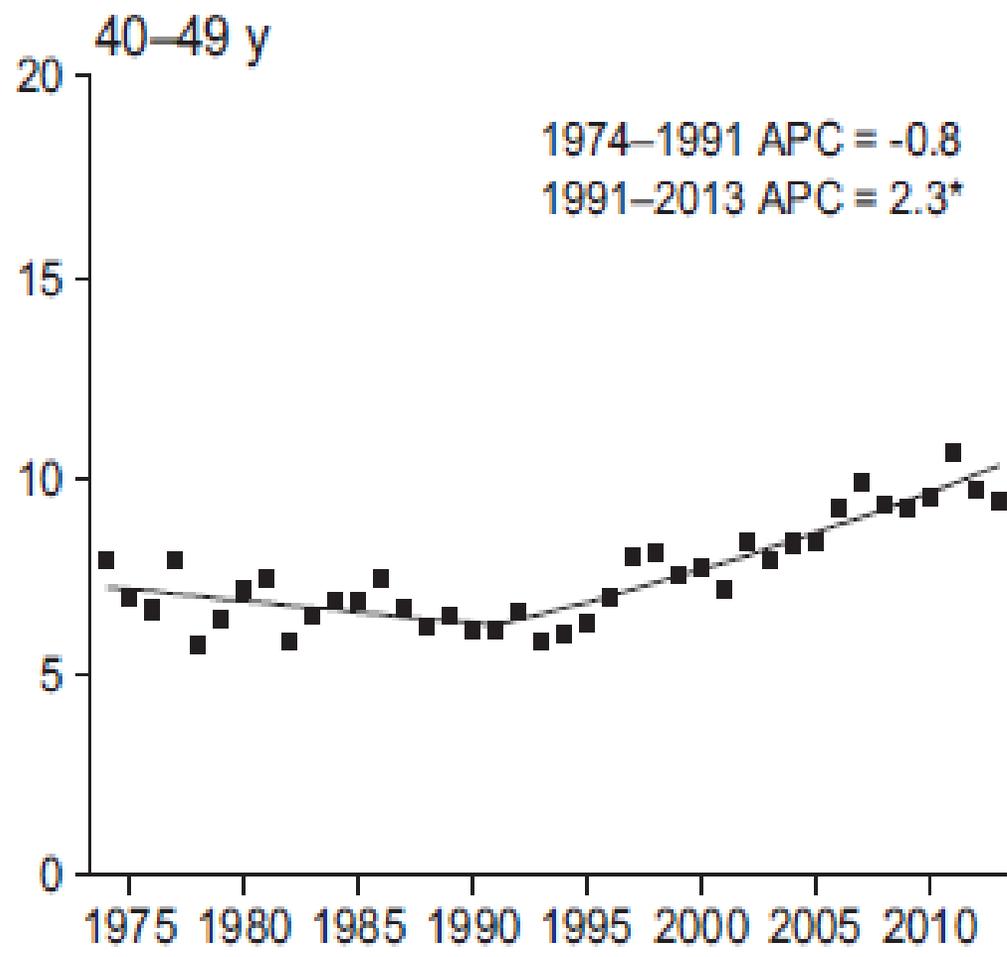
#### Recommendations

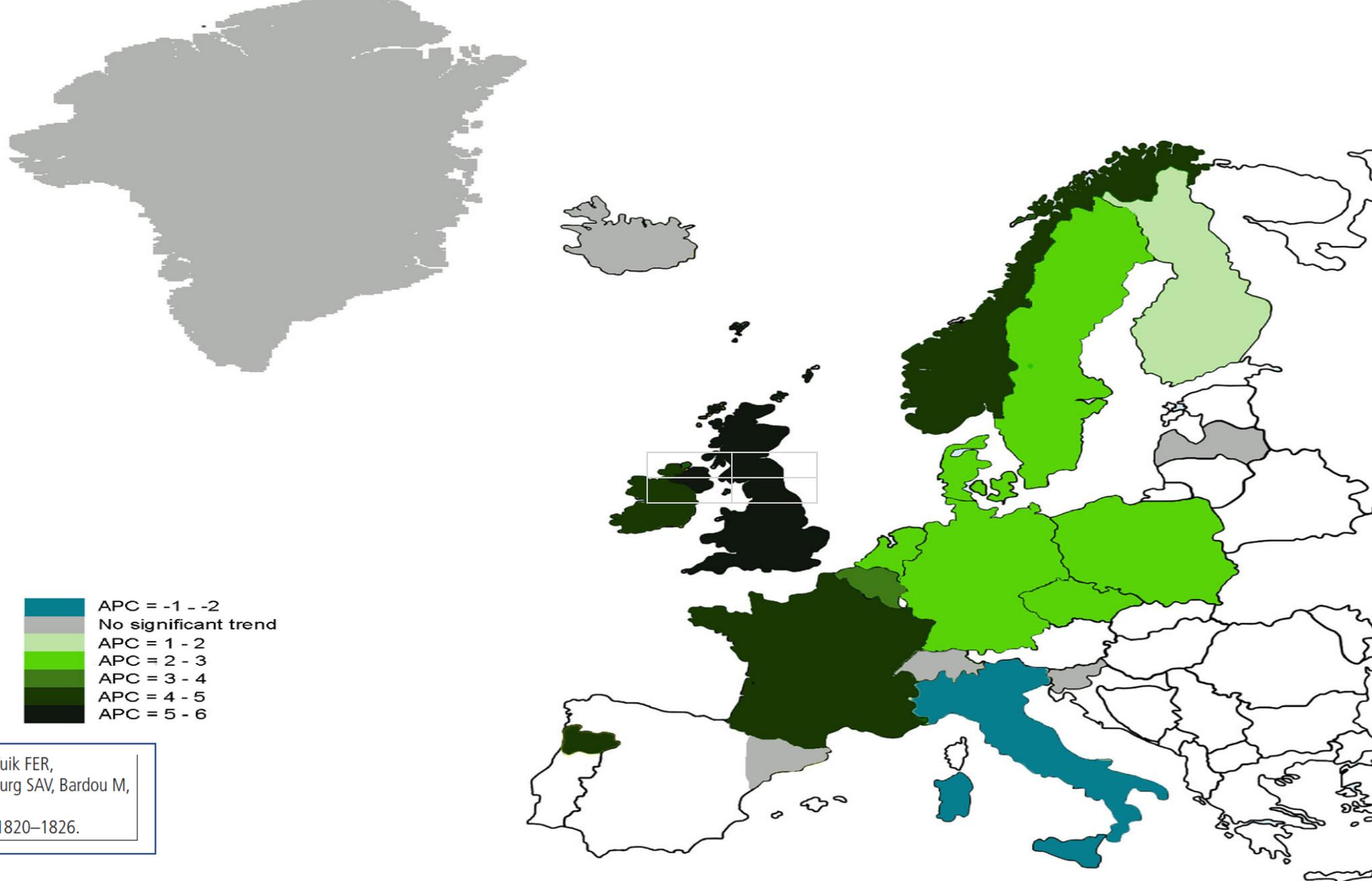
The ACS recommends that adults aged 45 years and older with an average risk of colorectal cancer undergo regular screening with either a high-sensitivity stool-based test or a structural (visual) examination, depending on patient preference and test availability. As a part of the screening process, all positive results on noncolonoscopy screening tests should be followed up with timely colonoscopy. The recommendation to begin screening at age 45 years is a qualified recommendation. The recommendation for regular screening in adults aged 50 years and older is a strong recommendation (Table 1).

colon



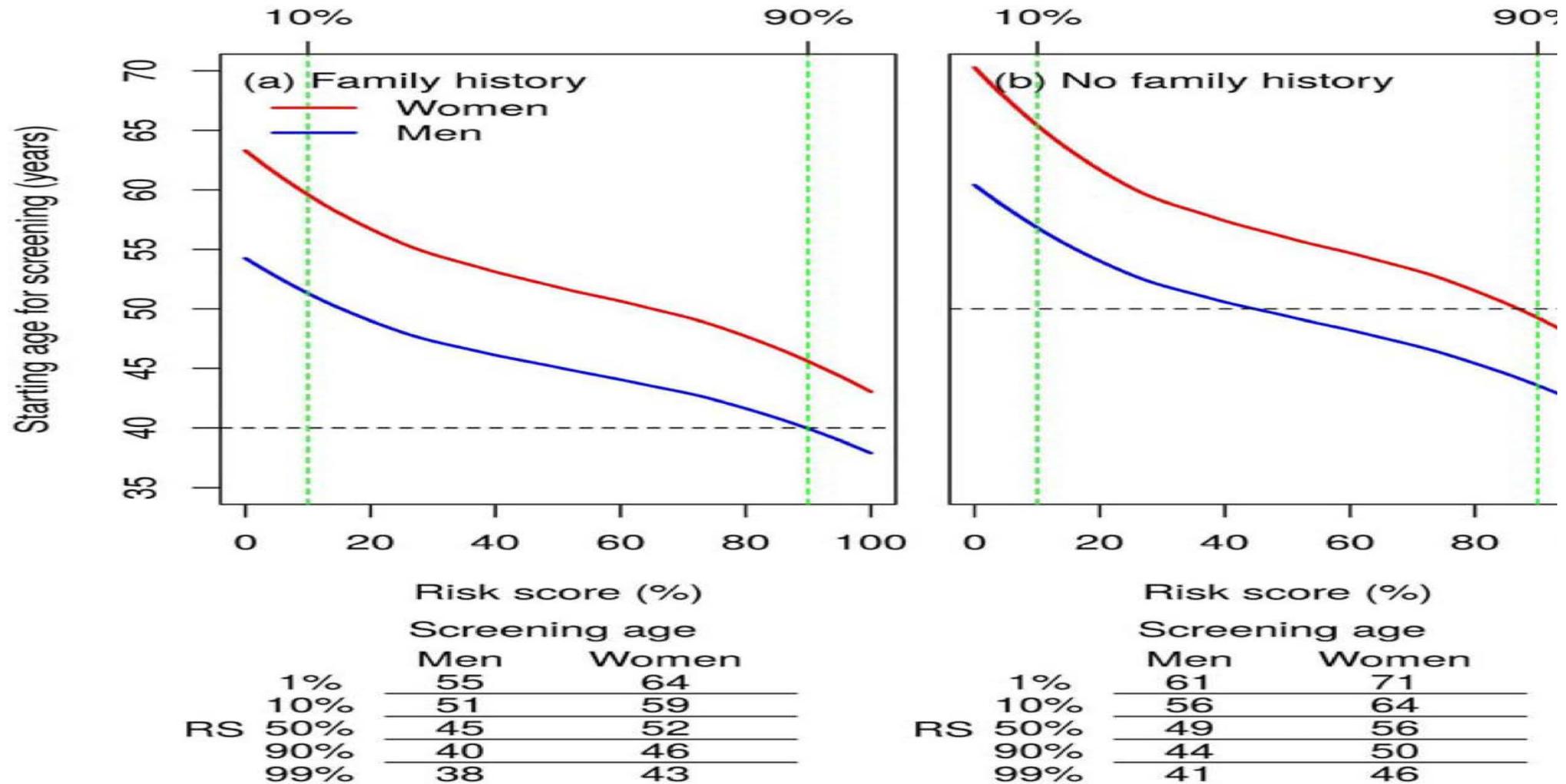
rectum





To cite: Vuik FER, Nieuwenburg SAV, Bardou M, et al. *Gut* 2019;**68**:1820–1826.

**Figure 1** Annual percent change (APC) in colorectal cancer (CRC) incidence from the European countries included in the analysis in adults aged 20–39 years, 1990–2016. Light green to dark green: significant increase in CRC incidence rate; blue: significant decrease in CRC incidence rate; grey: no significant trend



**Figure 2.** Recommended age to start CRC screening by various risk scores, which was based on both environmental risk score (E-score) and genetic risk score (G-score). The horizontal lines represent the recommended age for the first endoscopy depending on family history in the current screening guideline for CRC. The risk threshold to determine the age for the first screening was set as the average of 10-year CRC risks for a 50-year-old man (1.25%) and woman (0.68%), i.e.,  $(1.25\%+0.68\%)/2=0.97\%$ , who have not previously received an endoscopy.

				45-49 anni		Tasso inc 30	per 100000			DR 3volte inc			
													totale
	CA	AAD	sani	totale			se (ca)	0,7		PV	0,018		
positivi test	63	175	3262	3500			se(aad)	0,5		PV	0,059		0,068
negativi test	27	175	96298	96500									
							sp(ca)	0,97					0,968
totale	90	350	99560	100000			ap(aad)	0,95					
				50 54 anni		tasso inc 40	per 100000						
	CA	AAD	sani	totale			se (ca)	0,7		PV	0,018		
positivi test	84	500	4416	5000			se(aad)	0,5		PV	0,101		0,116
negativi test	36	500	94464	95000									
							sp(ca)	0,97					0,95
totale	120	1000	98880	100000			ap(aad)	0,95					

## Screening for Colorectal Cancer in Asymptomatic Average-Risk Adults: A Guidance Statement From the American College of Physicians

Amir Qaseem, MD, PhD, MHA; Carolyn J. Crandall, MD, MS; Reem A. Mustafa, MD, MPH, PhD; Lauri A. Hicks, DO;  
and Timothy J. Wilt, MD, MPH\*; for the Clinical Guidelines Committee of the American College of Physicians\*

*Guidance Statement 1: Clinicians should screen for colorectal cancer in average-risk adults between the ages of 50 and 75 years.*

*Guidance Statement 2: Clinicians should select the colorectal cancer screening test with the patient on the basis of a discussion of benefits, harms, costs, availability, frequency, and patient preferences. Suggested screening tests and intervals are fecal immunochemical testing or high-sensitivity guaiac-based fecal occult blood testing every 2 years, colonoscopy every 10 years, or flexible sigmoidoscopy every 10 years plus fecal immunochemical testing every 2 years.*

*Guidance Statement 3: Clinicians should discontinue screening for colorectal cancer in average-risk adults older than 75 years or in adults with a life expectancy of 10 years or less.*

Idealmente tutti i positivi al test dovrebbero avere la stessa probabilità di essere veri positivi: equità, riduzione dei malefici, riduzione dei costi

# Quale età per iniziare e terminare lo screening. Quando sospendere lo screening

- Quale strategia di screening
- Categoria (Score) di rischio
- DALY's per genere e classi di età
- $VP/FP > ?$  ( $se/(1-sp)$ )
- Densità di screening nei 10 anni precedenti per età e genere



## Risk Prediction Models for Colorectal Cancer (CRC)

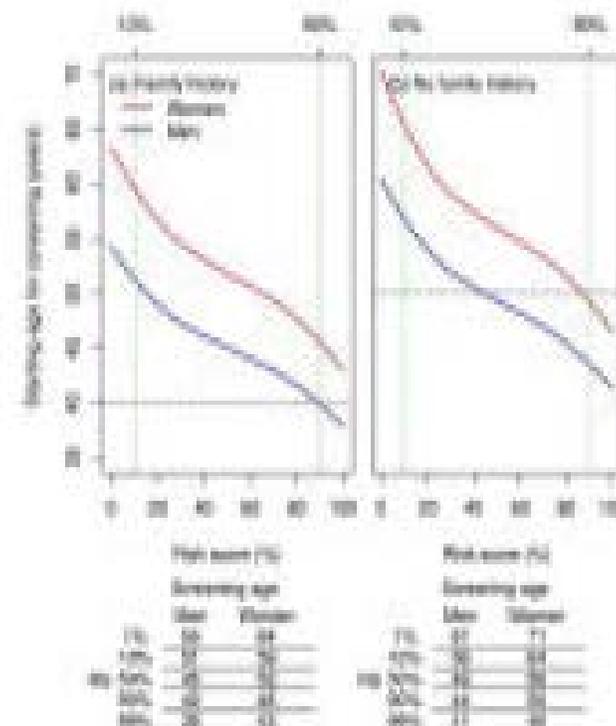


### AUC Estimates

	Men (N=4,656)	Women (N=5,514)
	AUC (95% CI)	AUC (95% CI)
Model I Family history & E-score	0.60 (0.59 to 0.61)	0.60 (0.59 to 0.61)
Model II Family history & G-score	0.59 (0.58 to 0.60)	0.59 (0.58 to 0.60)
Model III Family history & E-score & G-score	0.63 (0.62 to 0.64)	0.62 (0.61 to 0.63)

E-score: 18 lifestyle/environmental factors; G-score: 63 genetic variants

### Age to start CRC screening



Gastroenterology