

The great debate 1: Colorectal mass screening programme

Colonoscopy first

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QUALITY IN ENDOSCOPY

COLONOSCOPY &
COLONIC NEOPLASMS

Berlin, Germany May 4 - 5, 2012



www.quality-in-endoscopy.org

Debate

- primary colonoscopy
(every 10 years, once in a life-time)

vs

- primary sigmoidoscopy
(every 5 years, once in a life-time)

vs

- biological test (stool test, every 1-3 yrs)



Randomised controlled trials with mortality endpoint

		Score
• Colonoscopy	No	0
• Sigmoidoscopy	2 RCT's	1
• Stool, only guaiac	3 RCT's	1

Recommendation by EU

Score

- | | | |
|-----------------|-----|-------|
| • Colonoscopy | No | 0 |
| • Sigmoidoscopy | No | 1 |
| • Stool test | Yes | 1 + 1 |

Italian, population based, RCT, 18,114 screenees
comparing FIT vs sigmoidoscopy vs colonoscopy

	<u>FIT</u>	<u>Sigmo</u>	<u>Colo</u>
Attendance	32%	32%	27%
Attendance (Ver)	56%	52%	47%
Cancer	0,1%	0,6%	0,8%
Adv adenoma	1,1%	4,6%	6,3%

Segnan N et al. Gastroenterology 2007

Quality in Endoscopy: Colonoscopy, Berlin 2012

Multivariable OR's, 95% CI for advanced adenomas and cancer

Sigmo	1
FIT	0,22 (0,14 – 0,35)
Colo	1,42 (1,08 – 1,88)

Conclusions:

despite lower attendance the yield is highest for colonoscopy

Segnan N et al. Gastroenterology 2007

Colonoscopy vs FIT

Spanish RCT, 53,302 screenees

	<u>FIT</u>	<u>Colo</u>
Attendance	34%	25%
Adv neoplasia		
proximal	0,2%	0,8%
distal	0,9%	1,5%

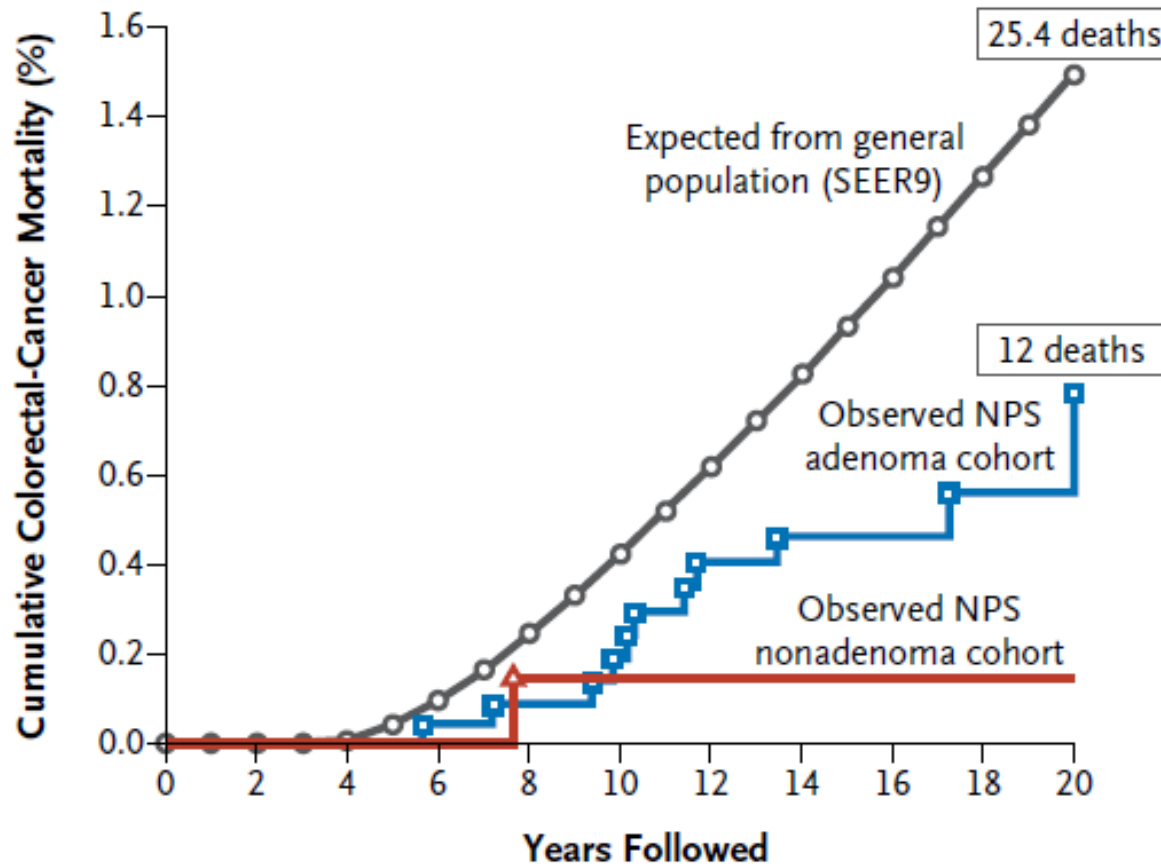
Quintero E et al. NEJM 2012

The highest yield despite lowest compliance

	Score
• Colonoscopy	0 +1
• Sigmoidoscopy	1
• Stool, FIT	2

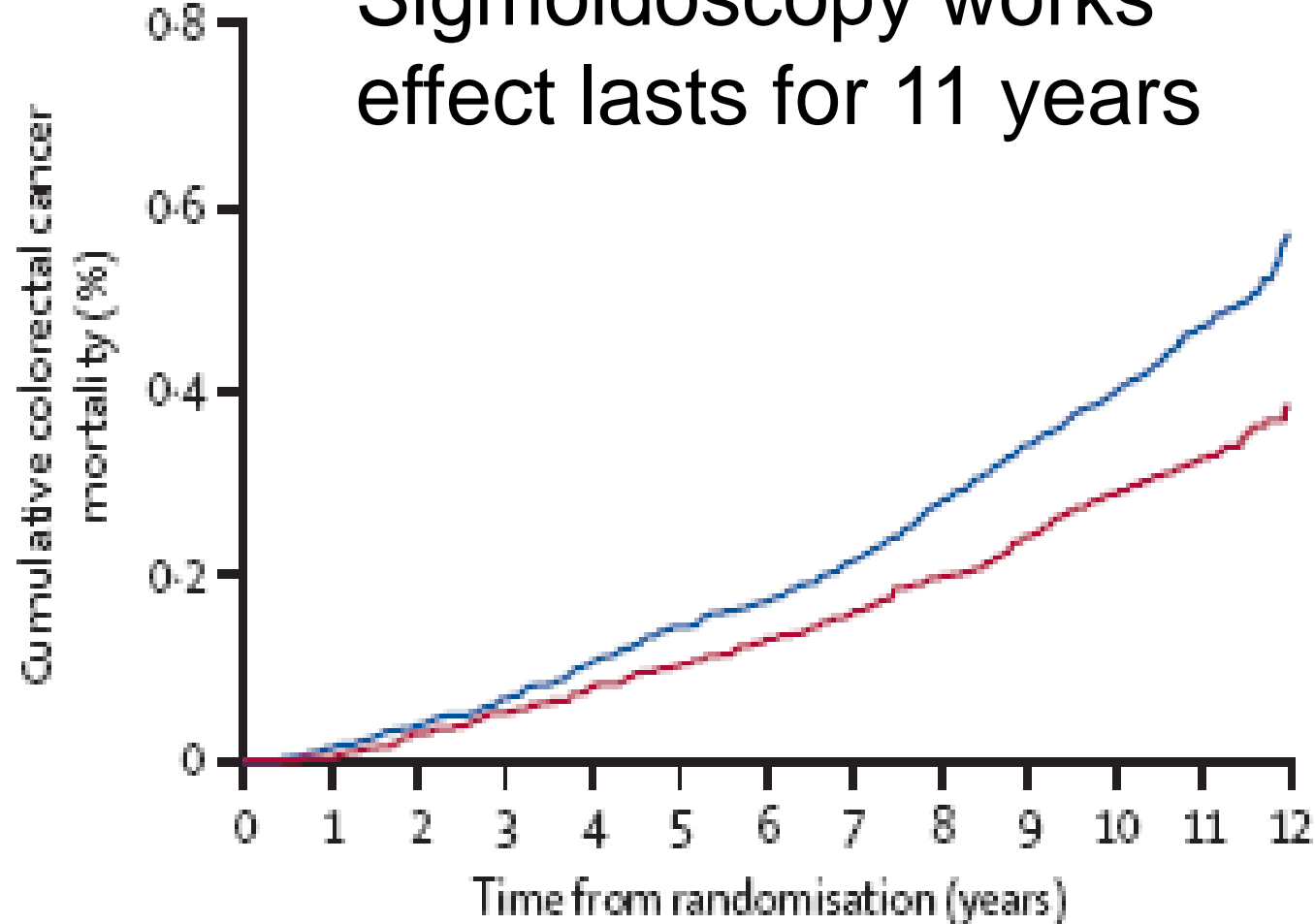
Does it work in terms of mortality
reduction?

Colonoscopy with polypectomy decreases CRC mortality by 53%



Zauber A et al. NEJM 2012

Sigmoidoscopy works effect lasts for 11 years



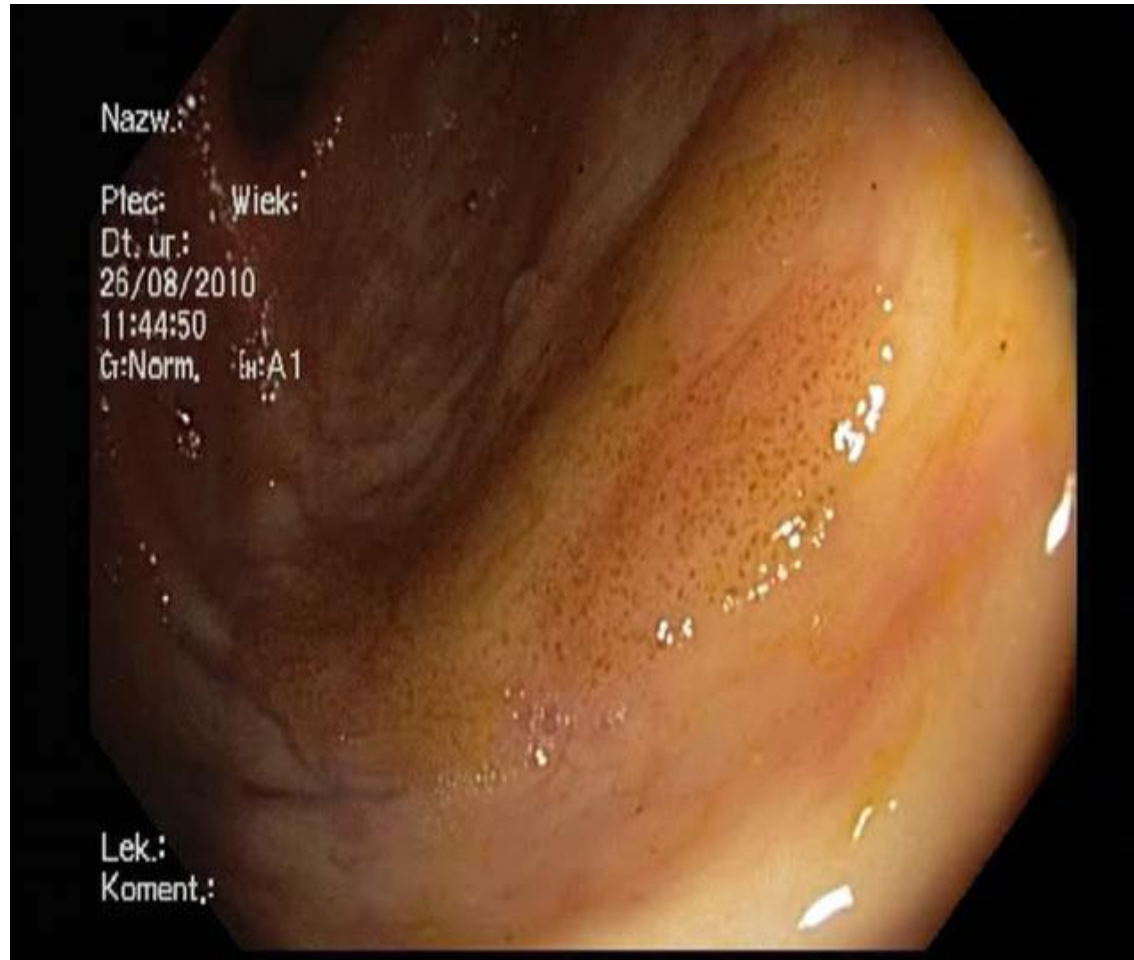
HR 0,68 (0,59-0,82) in ITT analysis

Atkin W.et al. Lancet 2010

If so ...

- colonoscopy should be at least as good (or better) in the left colon (as sigmoidoscopy)
- colonoscopy should protect much better right colon
providing high quality is ensured

Only colonoscopy can detect such lesion



Colonoscopy 1-10 yrs earlier protects from CRC

Right colon
OR (95%CI)

Left colon
OR (95%CI)

Year of recruitment

2003-2004

0.63 (0.42-0.94)

0.27 (0.18-0.39)

2005

0.51 (0.30-0.86)

0.17 (0.10-0.29)

2006-2007

0.38 (0.25-0.57)

0.11 (0.07-0.17)

Brenner et al. Ann Int Med. 2011

Probably the best protection providing high quality is ensured

Score

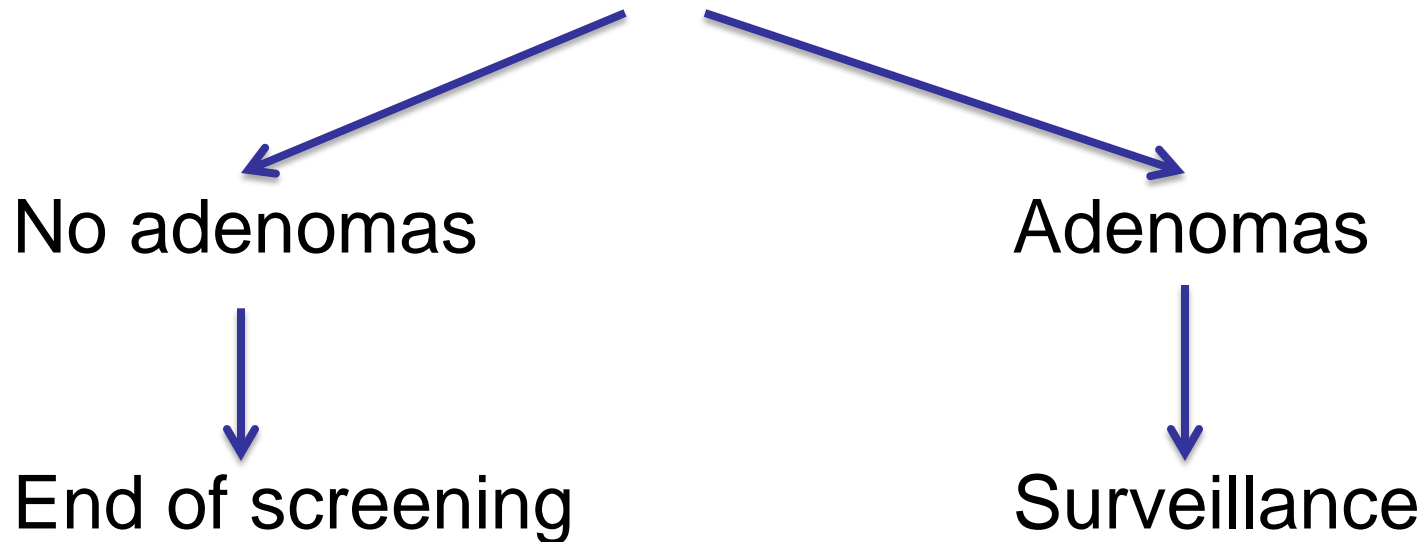
- | | | |
|-----------------|-----|-----|
| • Colonoscopy | No | 1+1 |
| • Sigmoidoscopy | No | 1 |
| • Stool test | Yes | 2 |

Colonoscopy - simplicity

- the only 1-stage strategy
- the simplest to organize
- once in a life time
- cheap in some countries

New concept

Once in a life-time colonoscopy as screening
test at age 60 yrs



Bretthauer M. NEJM 2012

Organisational simplicity

	<u>Score</u>
• Colonoscopy	2+1
• Sigmoidoscopy	1
• Stool, FIT	2

The correct choice !!!

- Colonoscopy (once in lifetime)
 - quality assurance and safety
 - need of defining optimal age
(different for men and women?)
 - optimal organisation population-based
(invitations)
 - resources to be ensured
 - decisions to be taken locally/nationally