

RELATORI:

W.Atkin – Imperial College London
L.Bisanti - ASL Città di Milano
E.DiGiulio - SIED, Roma
A.Ederle - Ospedale Fracastoro, S.Bonifacio, Verona
A.Federici - CCM, Ministero del Welfare, Roma
G.Grazzini - ISPO, Firenze
C.Hassan - Ospedale Nuovo Regina Margherita Roma
E.Kuipers - Erasmus University Medical Center,
Rotterdam, Netherlands
R.Sassatelli - Arcispedale S. Maria Nuova,
Reggio Emilia
N.Segnan - CPO Piemonte
C.Senore – CPO, Piemonte
M.Zappa - ISPO, Firenze - ONS
M.Zorzi - IOV, Padova



COME RAGGIUNGERE LA SEDE DEL SEMINARIO:

L'evento è accreditato presso l'ECM
Regione Piemonte; sono stati attribuiti 5 crediti
formativi.

In auto: la rete autostradale collega Torino a Milano, Venezia, Trieste (A4), a Bologna, Firenze, Roma, Napoli (A21 + A1), a Genova (A21 + A26). Tutte le autostrade si raccordano alla tangenziale di Torino; si consiglia di uscire in Corso Unità d'Italia e di seguire le indicazioni "Lingotto".

In treno: Dalle stazioni di Torino Porta Susa e Torino Porta Nuova prendere la metropolitana in direzione Lingotto, scendere alla fermata capolinea "Lingotto", uscire dal lato "Centro Polifunzionale Lingotto". Su Via Nizza, girare a sinistra e raggiungere il civico n° 230 interno (di fronte Ingresso Eatly).



LO SCREENING CON SIGMOIDOSCOPIA

EVIDENZE DI EFFICACIA E VALUTAZIONE DI POSSIBILI MODALITÀ DI IMPLEMENTAZIONE NEI PROGRAMMI DI POPOLAZIONE

Torino, Venerdì 2 marzo 2012

**Aula magna Dental School -
Lingotto Via Nizza, 230 interno
TORINO 3° piano**

Direttori: **M Zappa, N Segnan**

In collaborazione con:



AIM OF WORKSHOP

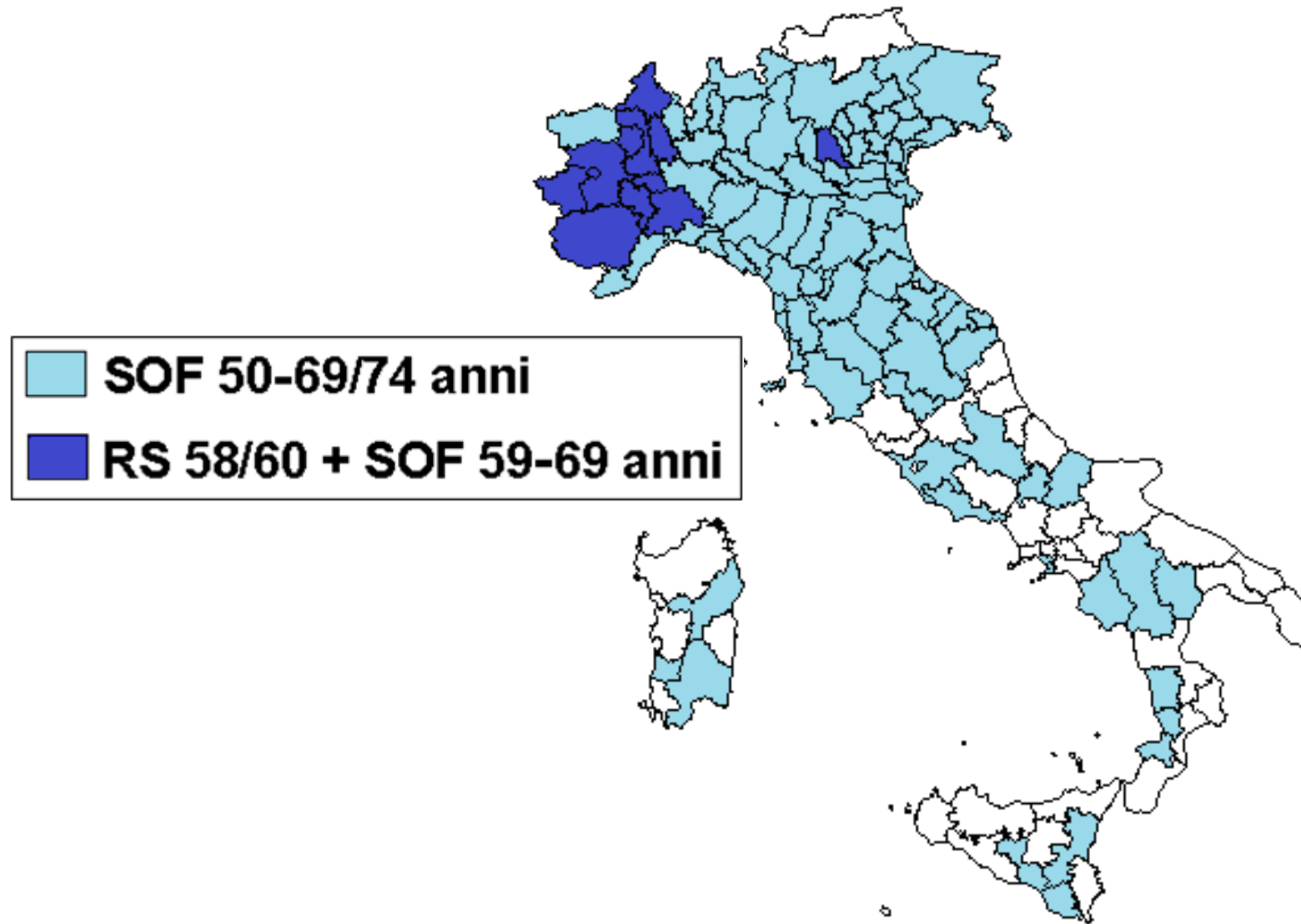
- To discuss the result of trials on the efficacy of Flexi – Sigmoidoscopy (FS)
- To discuss if and how to combine this modality of screening in the current CRC screening programmes in Italy
- To compare our screening programme with what is going to be implemented in UK and in the Netherlands

The state of art for CRC Screening programme in Italy

- Two modalities of screening have been proposed in 2006 by Italian Guidelines
- FIT (100 ng/ml, one sample) every two years from 50—69 (74)
- FS once in a life-time starting from 58-60 years
- Each Region could choose the type of programme
- Some years later, programmes who had adopted FS added FIT for people not attending FS invitation

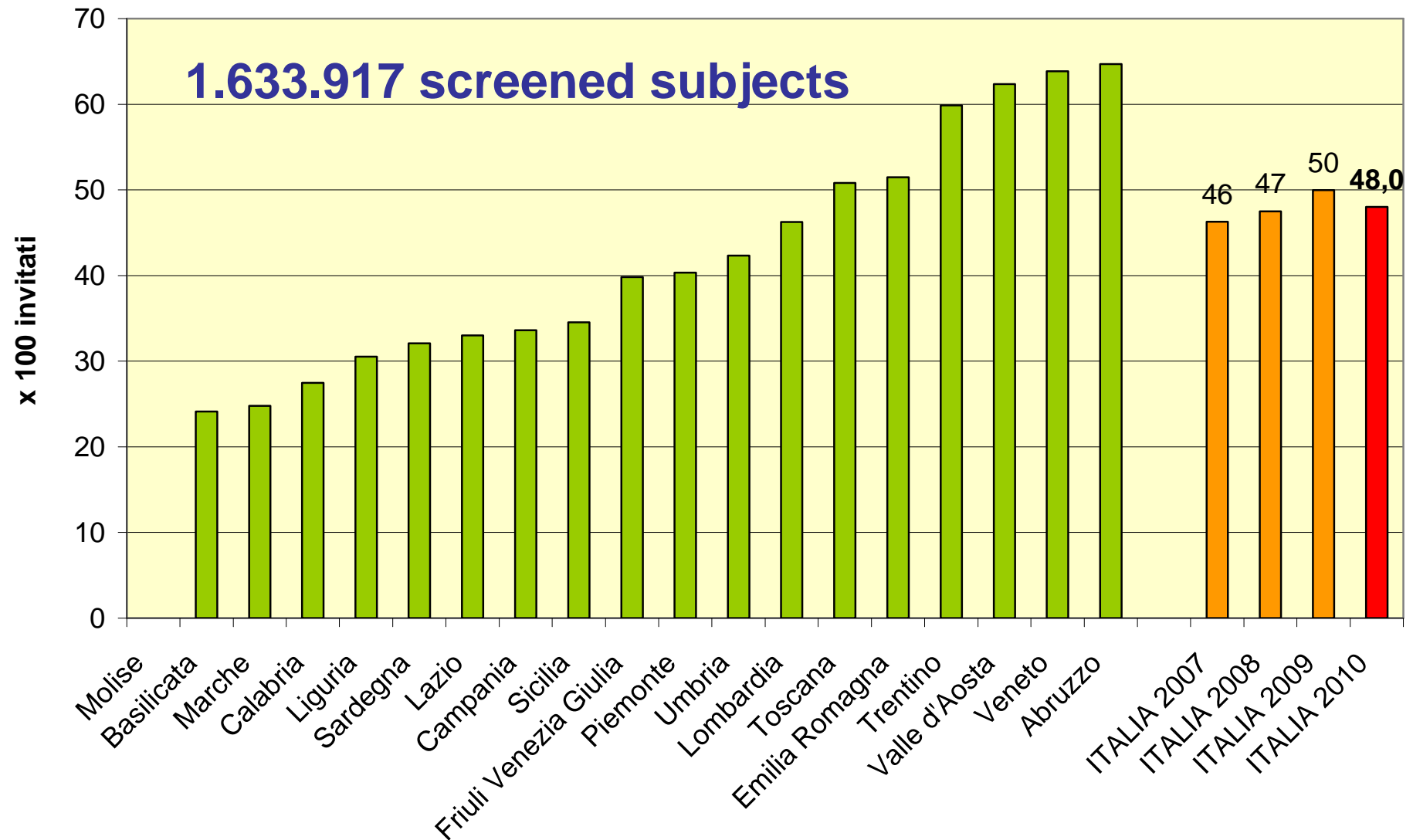
CRC Screening

Type y of screening test



2010. FIT Programmes

compliance (%) by Region



FS programmes

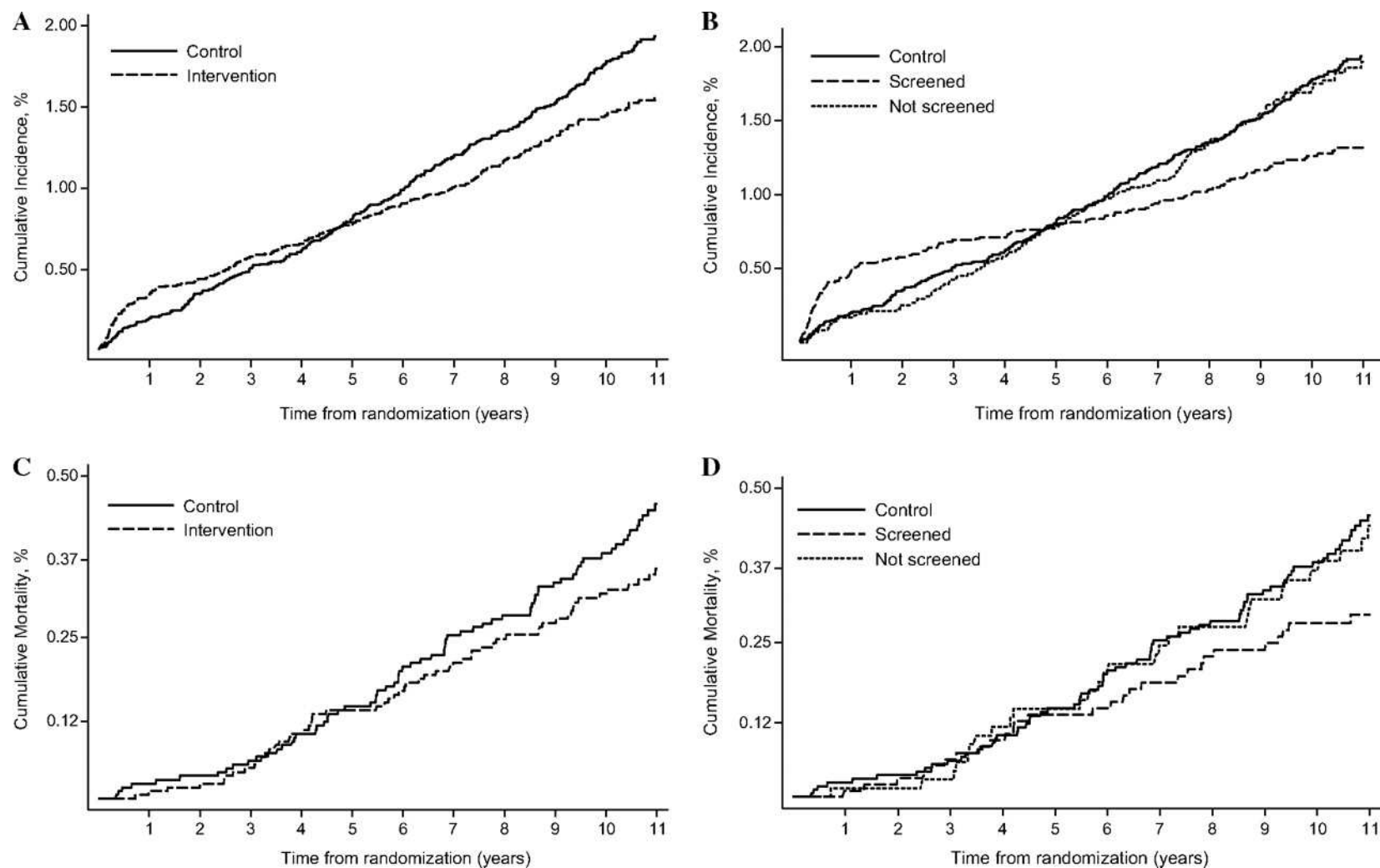
	2007	2008	2009	2010
N° programmi	7	7	9	9
Popolazione target	48.450	49.622	60.844	58.256
N° invitati	32.159	29.028	39.512	57.091
Estensione inviti (%)	66.5	58.8	64.8	97.9
N° screenati	8.678	8.135	9.511	13.752
Compliance (%)	27.7	27.2	24.3	24.0

+ 8/10%
considering
FIT compliance

- **Once-only flexible sigmoidoscopy screening in prevention of colorectal cancer: a multicentre randomised controlled trial.**
- [Atkin WS](#), [Edwards R](#), [Kralj-Hans I](#), [Wooldrage K](#), [Hart AR](#), [Northover JM](#), [Parkin DM](#), [Wardle J](#), [Duffy SW](#), [Cuzick J](#); [UK Flexible Sigmoidoscopy Trial Investigators](#).
- [Lancet](#). 2010 May 8;375(9726):1624-33

- **Once-Only Sigmoidoscopy in Colorectal Cancer Screening: Follow-up Findings of the Italian Randomized Controlled Trial—SCORE**
 - » Nereo Segnan, Paola Armaroli, Luigina Bonelli, Mauro Risio, Stefania Sciallero, Marco Zappa, Bruno Andreoni, Arrigo Arrigoni, Luigi Bisanti, Claudia Casella, Cristiano Crosta, Fabio Falcini, Franco Ferrero, Adriano Giacomini, Orietta Giuliani, Alessandra Santarelli, Carmen Beatriz Visioli, Roberto Zanetti, Wendy S. Atkin, Carlo Senore; and the SCORE Working Group
 - » [J Natl Cancer Inst.](#) 2011 Sep 7;103(17):1310-22

Nelson–Aalen cumulative incidence of colorectal cancer (CRC) and mortality by time from randomization.



Segnan N et al. JNCI J Natl Cancer Inst 2011;103:1310-1322

Per protocol analysis reduction
of CRC incidence of 31%-33%

- FS is effective in reducing CRC occurrence
- Great result in terms of quality of life and cost
- Is FIT effective in reducing CRC occurrence ?
- If the answer is probably NO → we should change our main policy
- If the answer is probably YES → we should continue the debate

Is FIT effective in reducing CRC occurrence ?

- We do not have direct proofs
- If the reduction in incidence is due to the detection of advanced adenomas (AA) also FIT is able to detect them

What is the best screening strategy to detect advanced colorectal adenomas?
Simulation from ongoing Italian screening experiences

Ventura et al Tumori. 2011 Sep-Oct;97(5):547-50

Equal compliance (50%)

Esame	Scenario	Round	Sesso	Adenomi	Cum Adenomi	Carcinomi	Cum Carcinomi
FOBT	Adesione 50%	1	M+F	582	582	138	138
FOBT	Adesione 50%	2	M+F	418	1000	93	231
FOBT	Adesione 50%	3	M+F	397	1397	96	327
FOBT	Adesione 50%	4	M+F	425	1822	98	425
FOBT	Adesione 50%	5	M+F	396	2218	89	514
RSS	Adesione 50%	1	M+F	2020	2020	228	228
RSS	Adesione 50%	2	M+F	113	2133	17	245
RSS	Adesione 50%	3	M+F	95	2228	9	254

What is the best screening strategy to detect advanced colorectal adenomas? Simulation from ongoing Italian screening experiences

Observed compliance (45% FIT and 30% FS)

Esame	Round	Anni	Sesso	Scenario	Adenomi	Cum Adenomi
FOBT	1	0	M+F	Adesione 45%	552	552
FOBT	2	2	M+F	Adesione 45%	380	932
FOBT	3	4	M+F	Adesione 45%	377	1309
FOBT	4	6	M+F	Adesione 45%	419	1728
FOBT	5	8	M+F	Adesione 45%	360	2088
RSS	1	0	M+F	Adesione 30%	1112	1112
RSS	2	1	M+F	Adesione 30%	138	1250
RSS	3	2	M+F	Adesione 30%	76	1326

Effect of Rising Chemotherapy Costs on the Cost Savings of Colorectal Cancer Screening

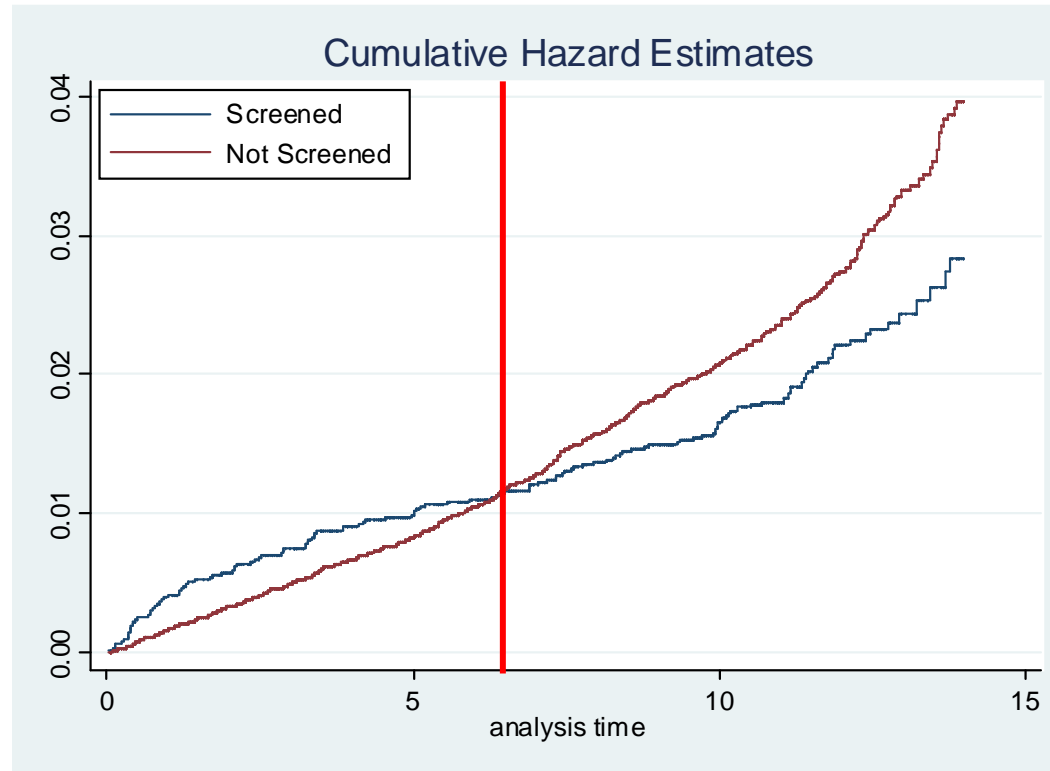
Iris Lansdorp-Vogelaar, Marjolein van Ballegooijen, Ann G. Zauber, J. Dik F. Habbema, Ernst J. Kuipers

Table 4. Simulated number of lifetime incident colorectal cancers per 1000 individuals by stage and screening strategy*

Strategy	Stage I	Stage II	Stage III	Stage IV	Total	% Reduction compared with no screening
No screening	12	23	15	16	66	NA
Hemoccult II	21	11	6	4	42	37
Immunochemical FOBT	20	8	4	3	35	47 ←
Flexible sigmoidoscopy	14	10	6	5	34	49 ←
Colonoscopy	14	8	5	3	30	56
Flexible sigmoidoscopy + Hemoccult II	16	8	4	3	31	53

* FOBT = fecal occult blood test; NA = not applicable.

*Effect on CRC incidence of a FIT Programme in the district of Florence.
Ventura et al submitted*



After an average time of 11 years of follow up overall 22% of CRC reduction for people attendind the first screening invitation as compared to not attending

What is the best strategy

- For the Individual
- For the Community

questions

- What strategy

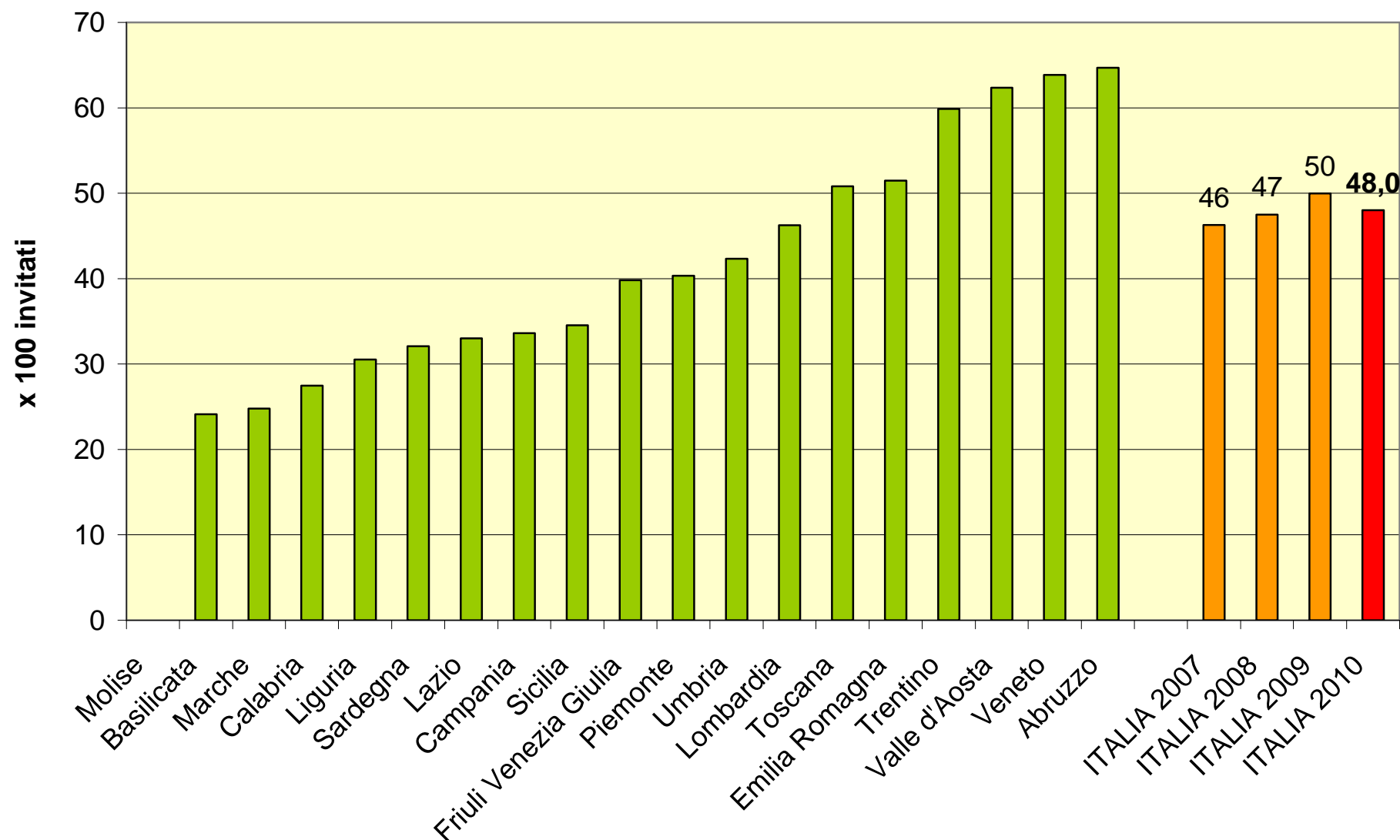
Evaluating for each strategy :

- Effectiveness
- Cost-effectiveness
- Budget impact
- Endoscopic Workload
- The problems (and the cost) of changing

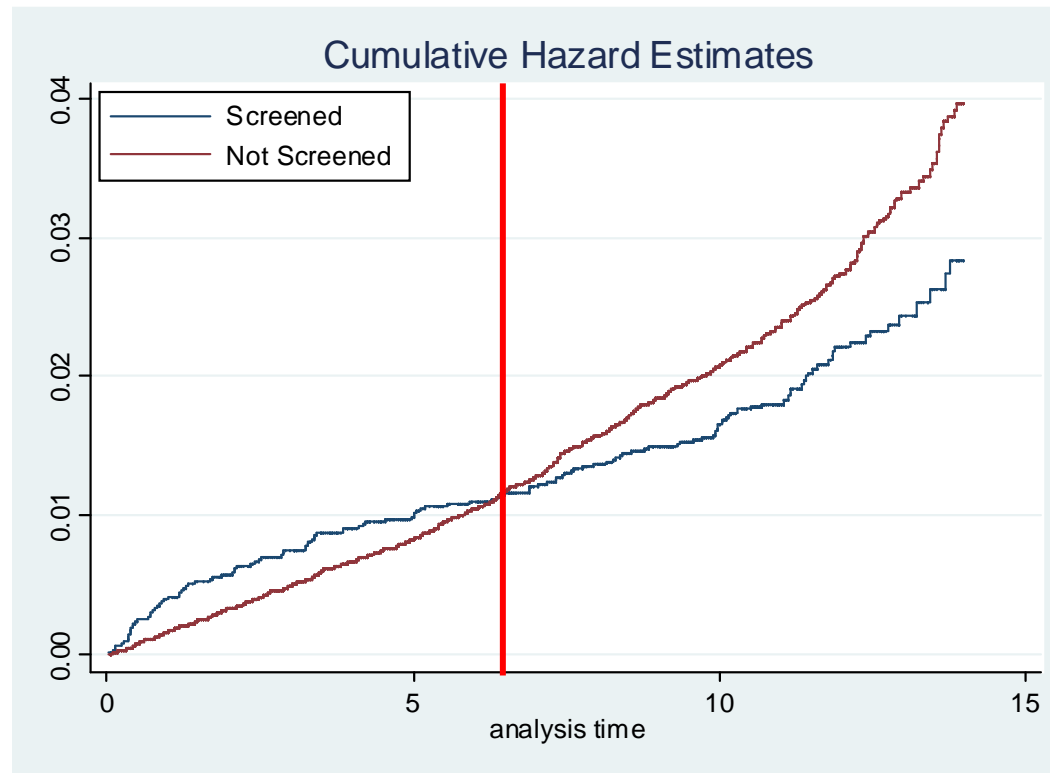
What is expected from this workshop

- We have not to decide at the moment. Decision will be taken in other context
- We should discuss on what materials can be useful for future decision
- ➔ Evaluation on the field, impact, cost and endoscopic workload of different combined strategies
- ➔ Planning Pilot studies

Anno 2010. Adesione corretta all'invito per Regione

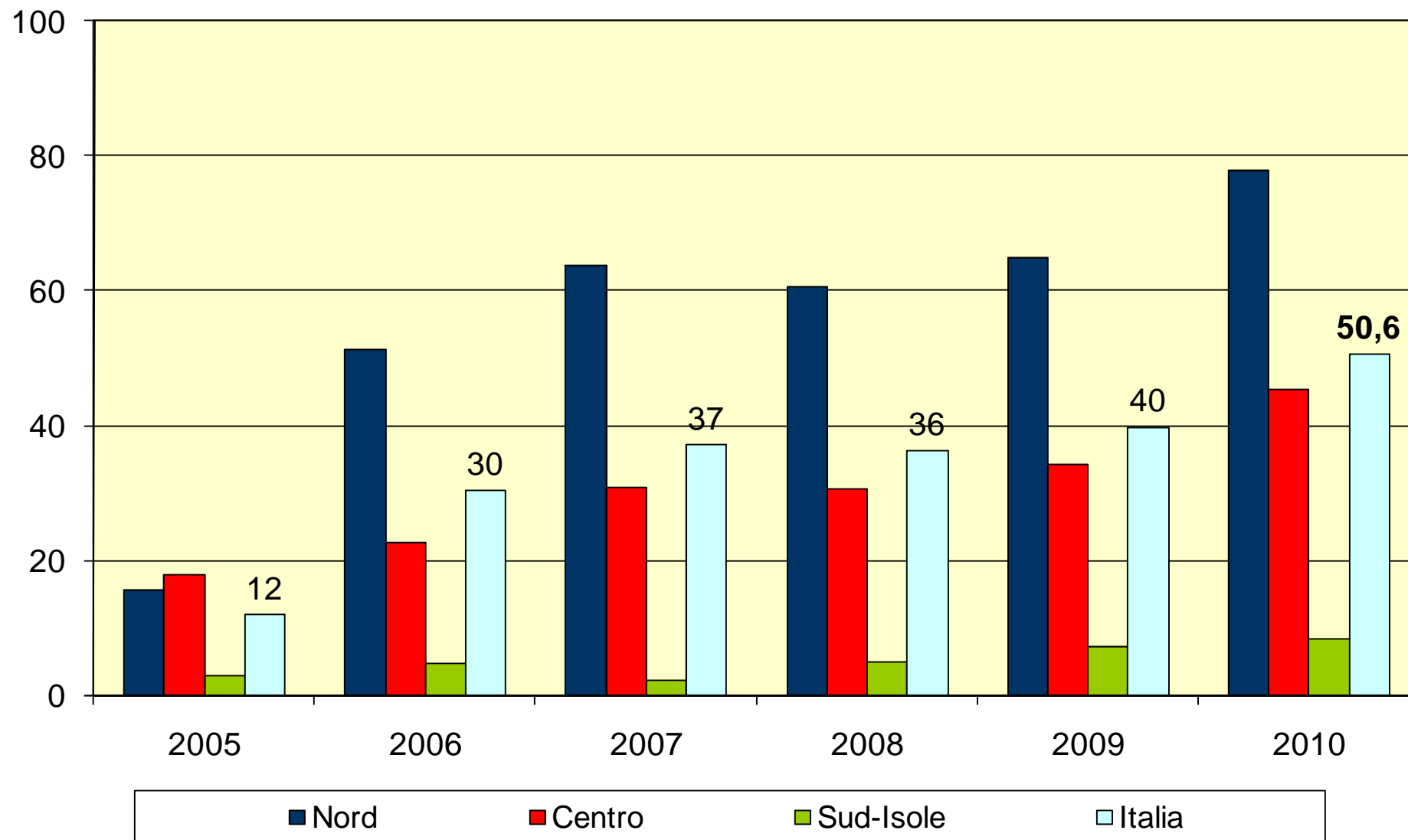


Kaplan-Maier

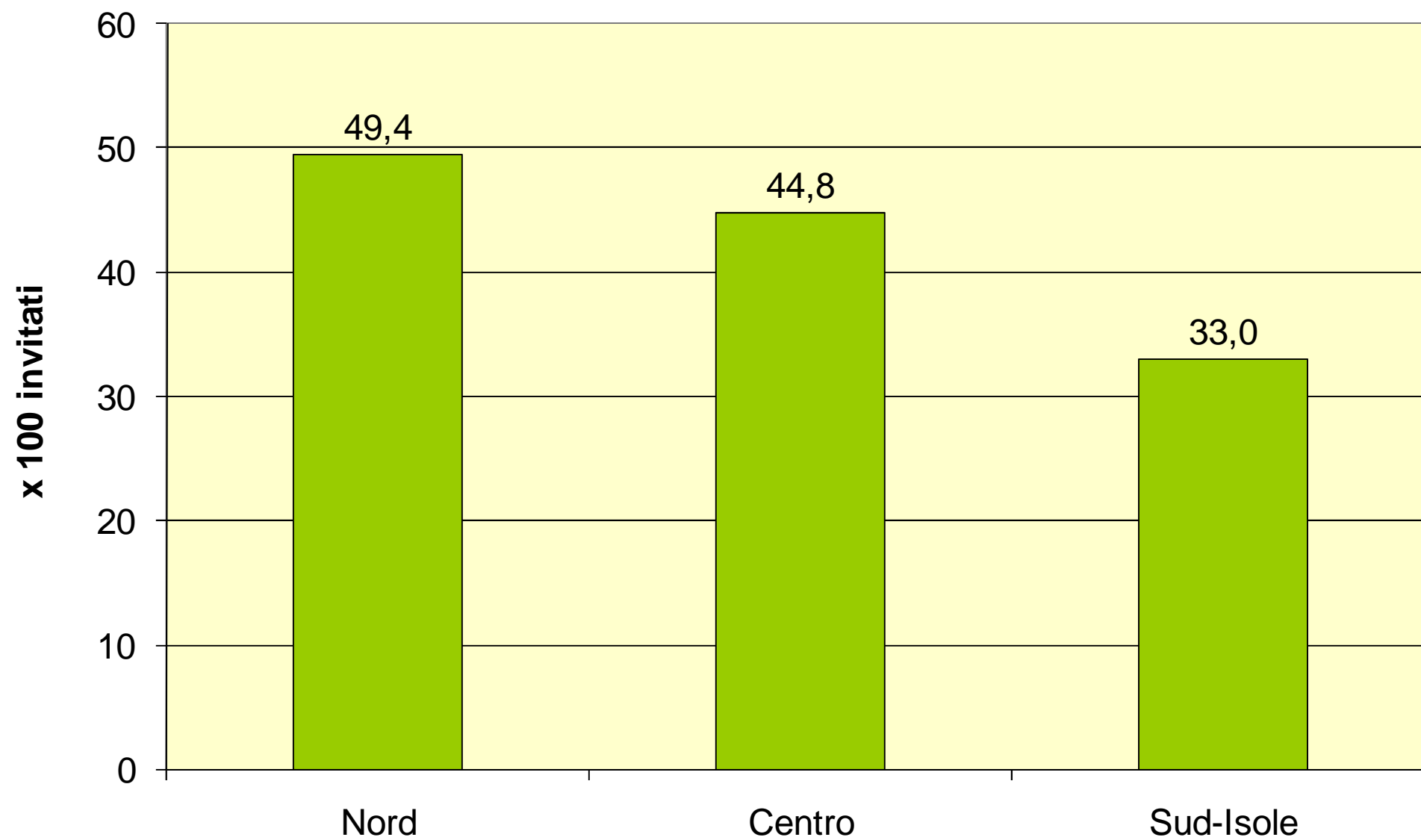


- Coorte degli screenati: 141 cancro, 78023 person-years, FUP medio 11.2 anni.
- Coorte dei non screenati: 661 cancro, 285945 person-years, FUP medio 10.6 anni.

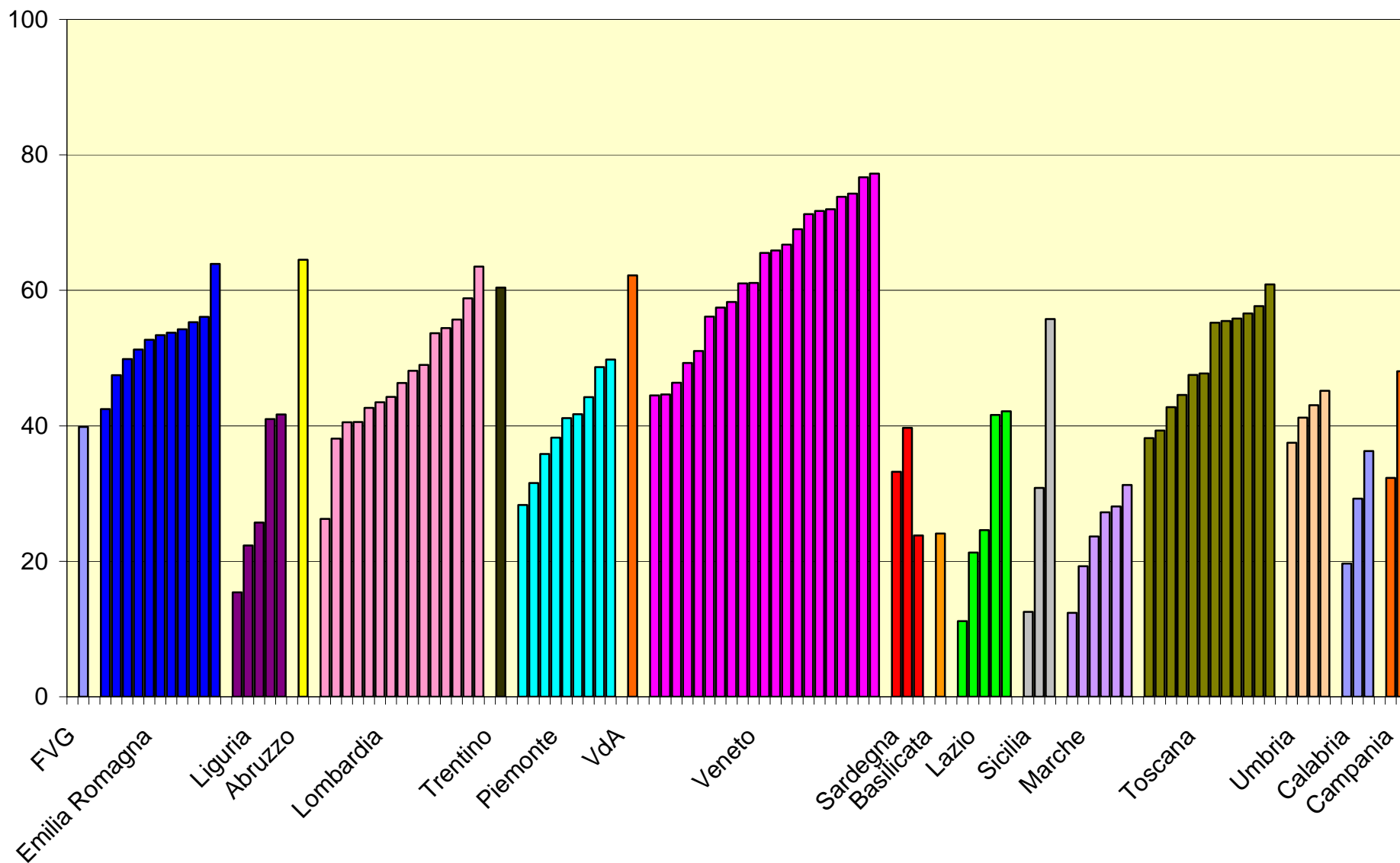
Estensione effettiva degli inviti al 31.12.2010



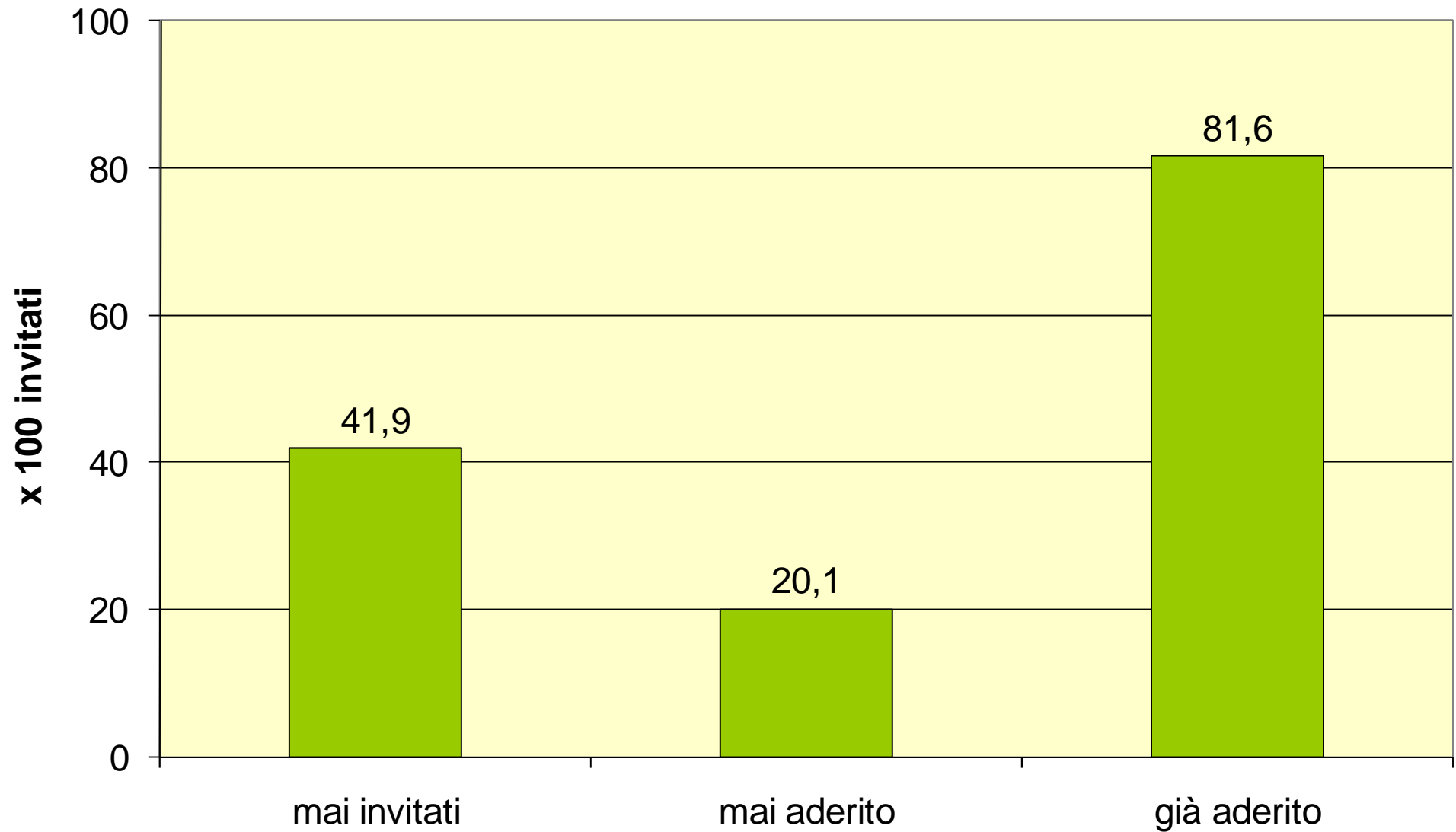
Adesione corretta per macroarea



Adesione all'invito per Regione e programma

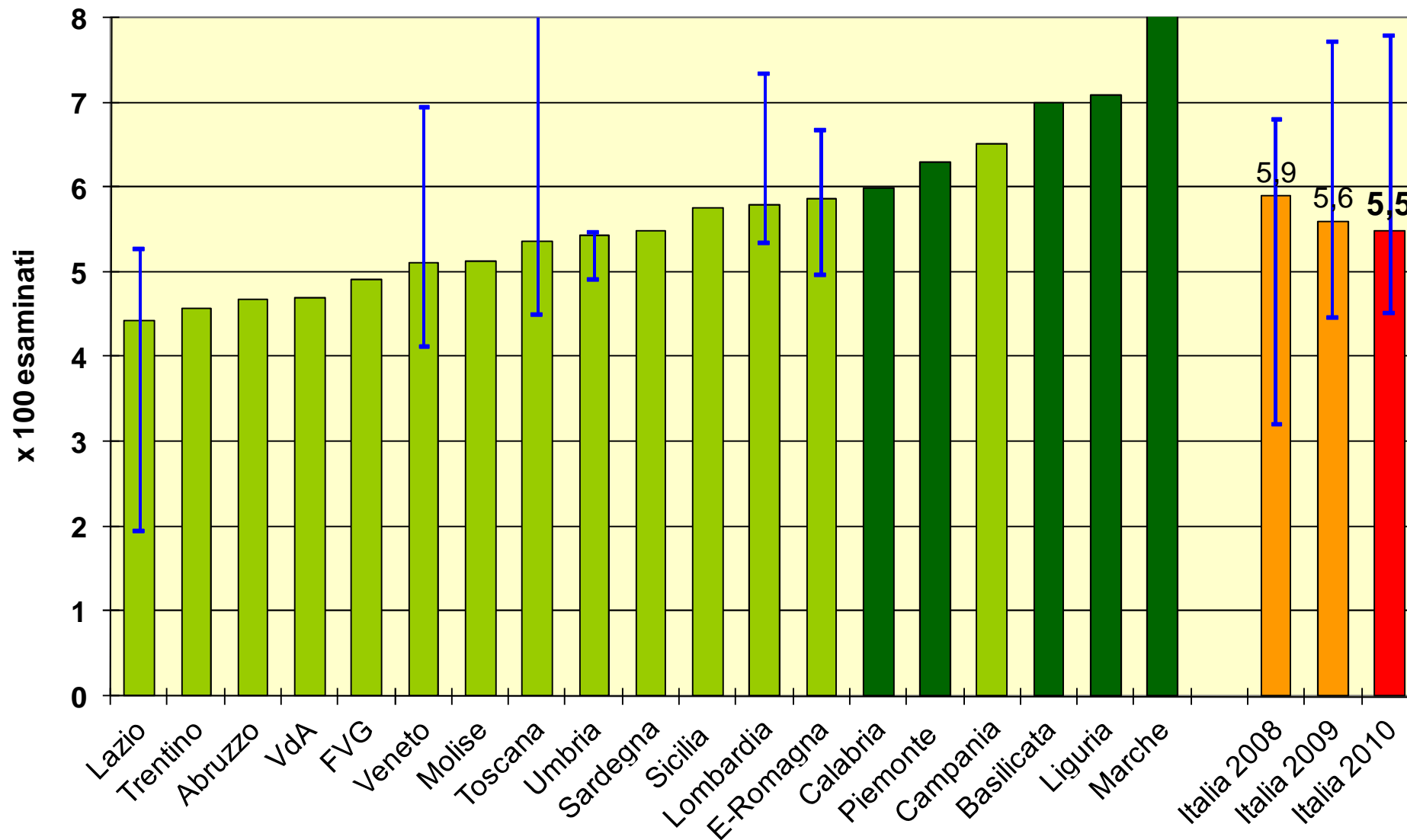


Adesione corretta per storia di screening



Primi esami – Test positivi standardizzati per Regione

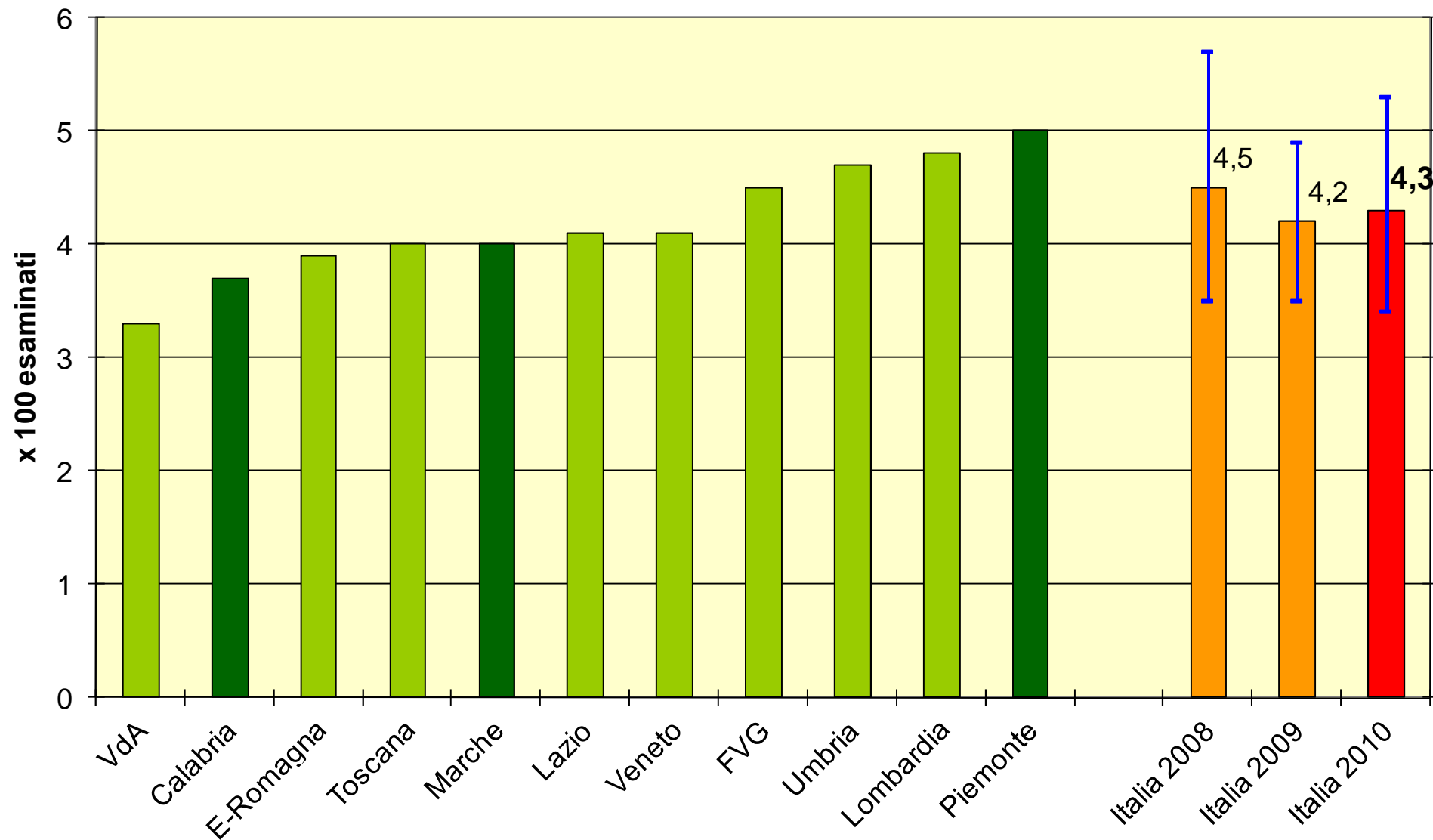
(media, 10° e 90° percentile)



Standard accettabile < 6%, desiderabile < 5%

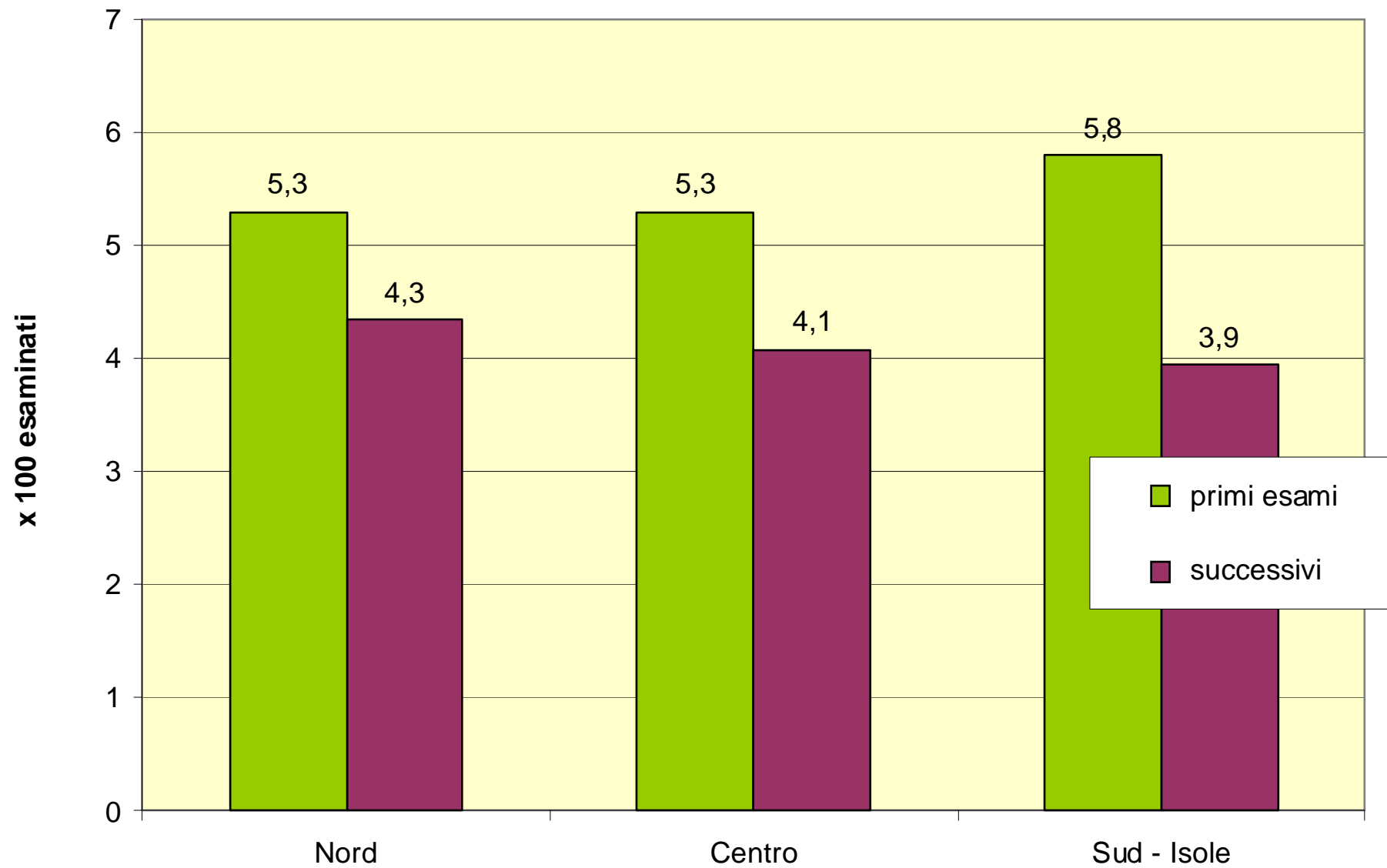
Esami successivi – Test positivi stand. per Regione

(media, 10° e 90° percentile)



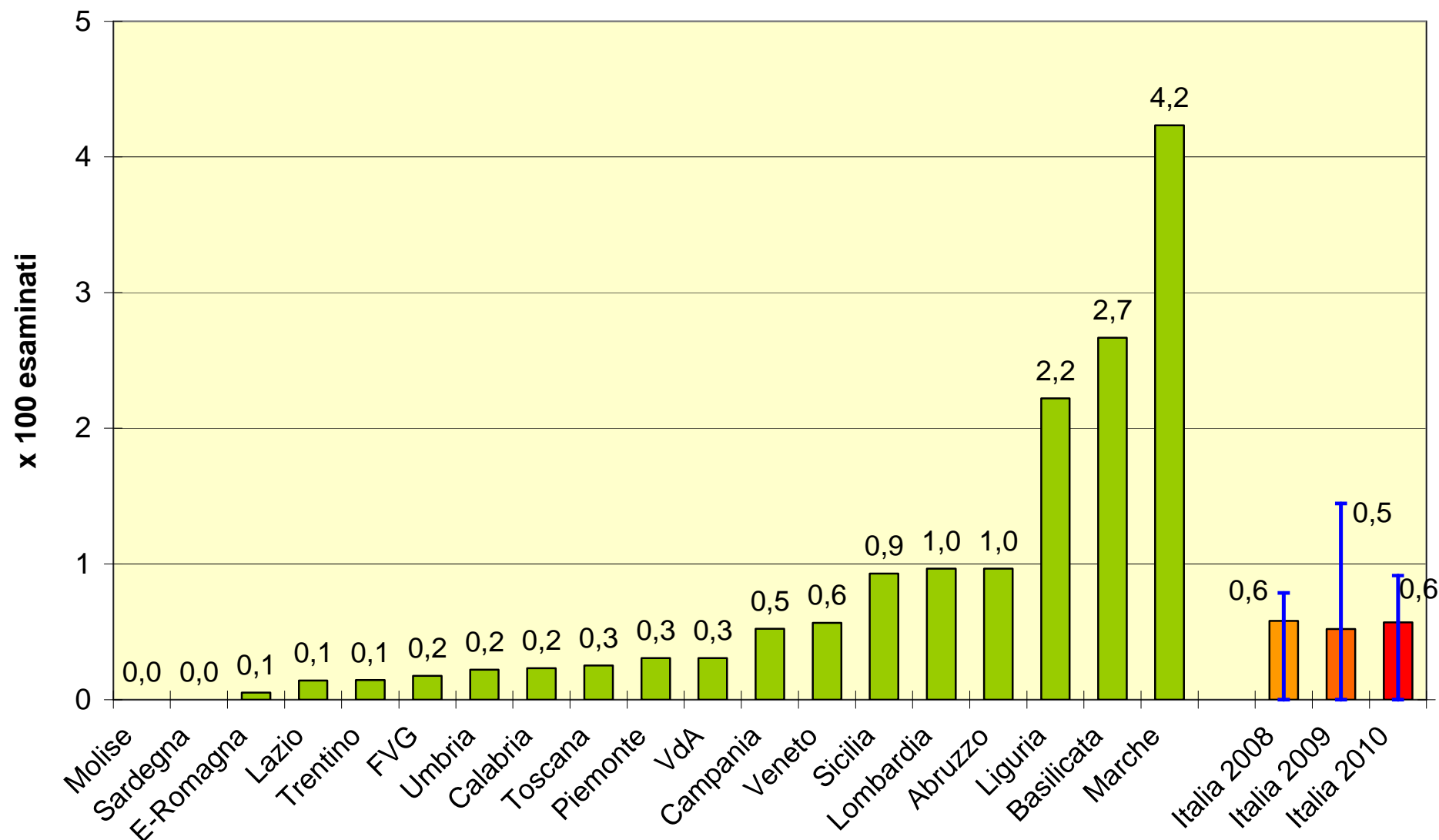
Standard accettabile < 4.5%, desiderabile < 3.5%

Test positivi per Macroarea



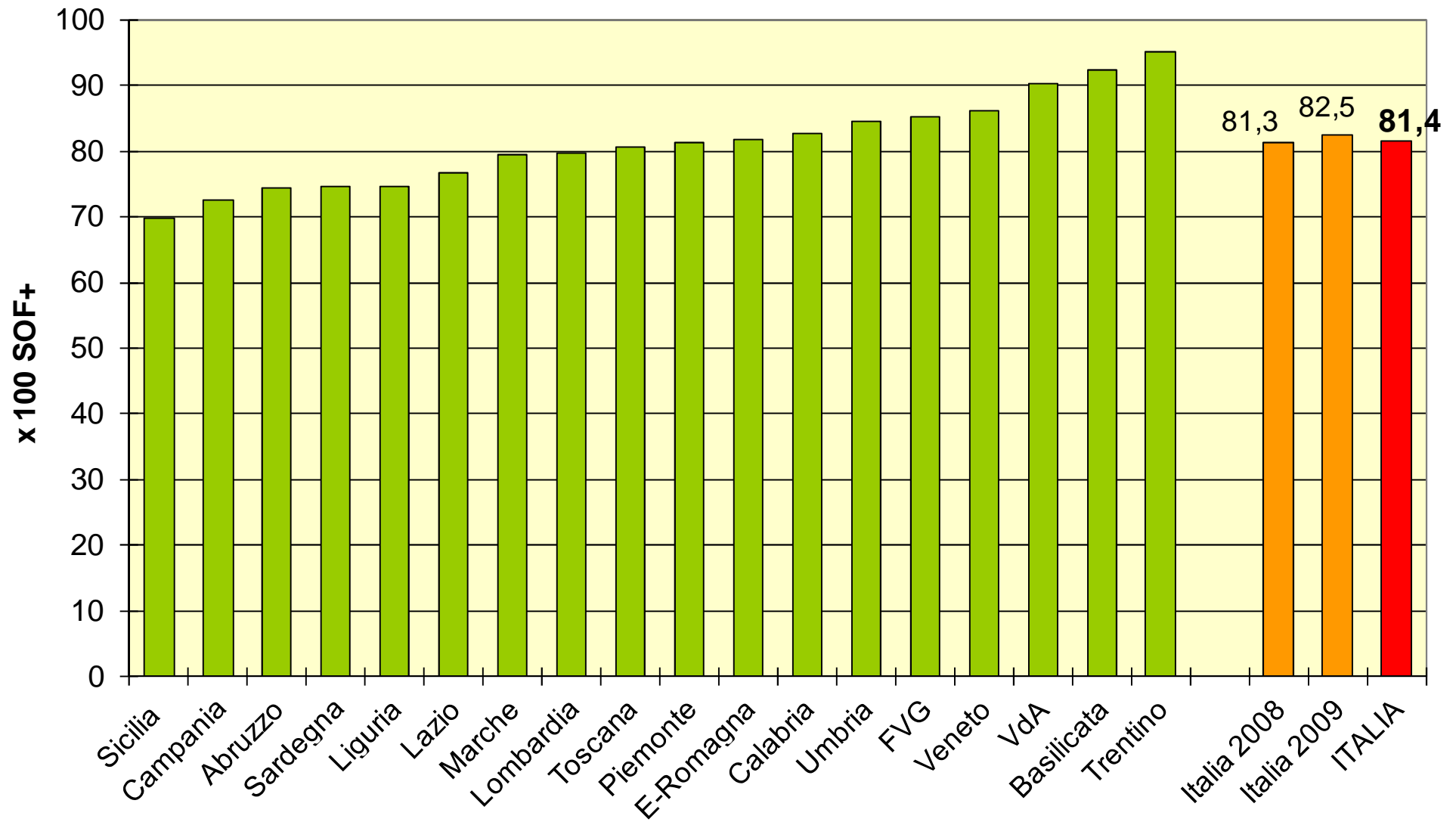
Test inadeguati

(media, 10° e 90° percentile)



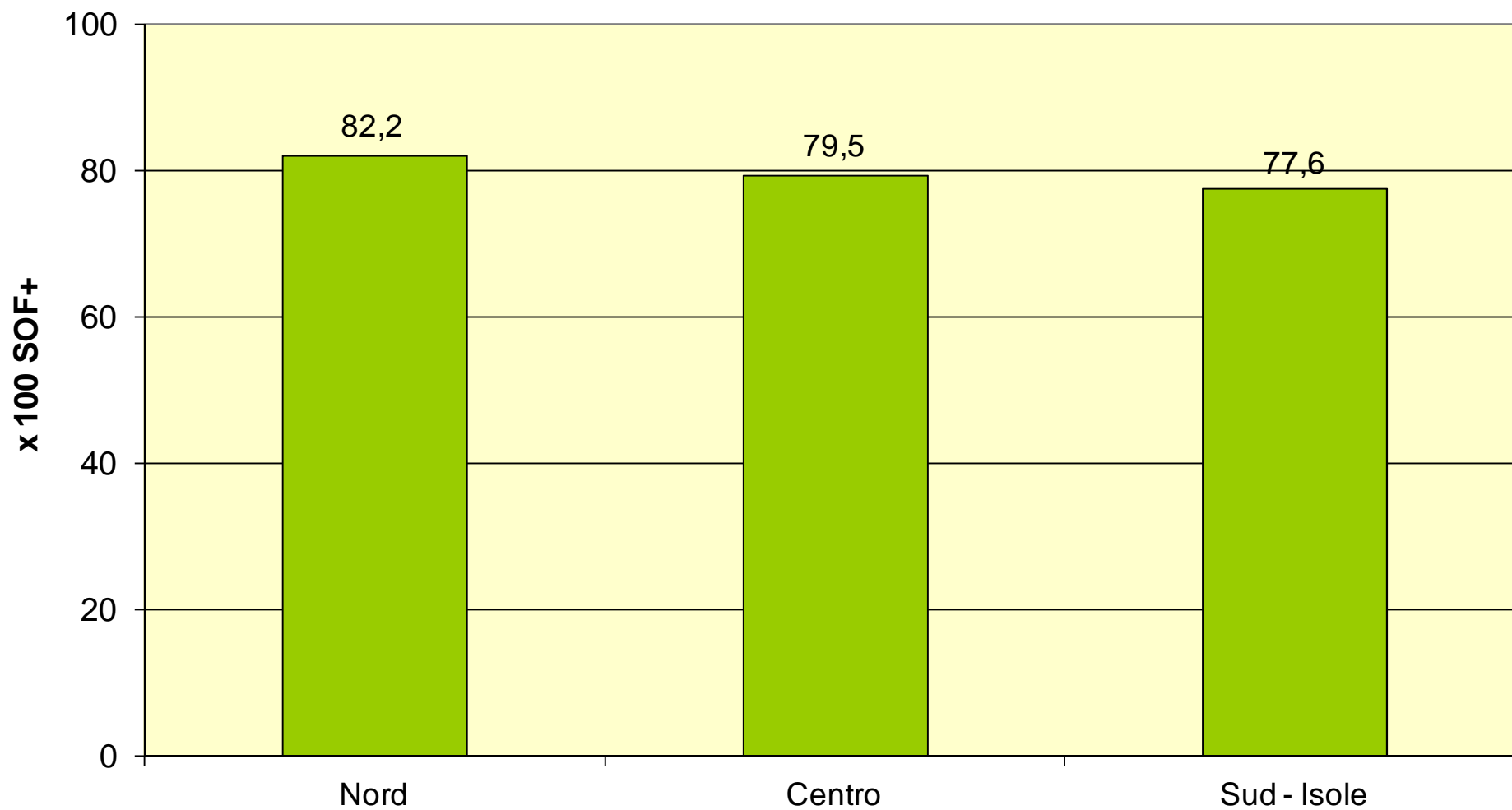
Standard accettabile <1%

Adesione alla colonscopia



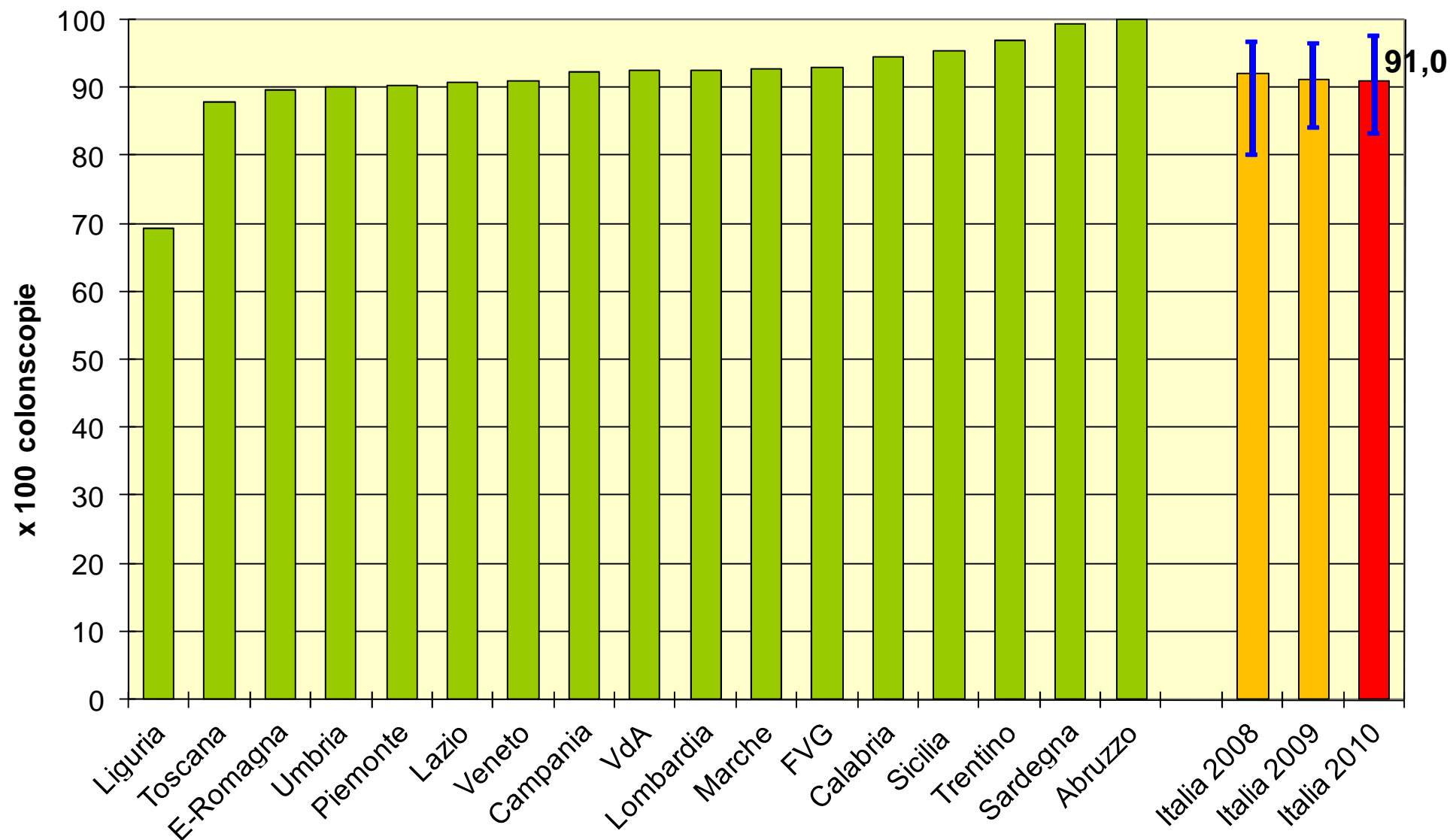
Standard accettabile > 85%, desiderabile > 90%

Adesione alla colonscopia per macroarea



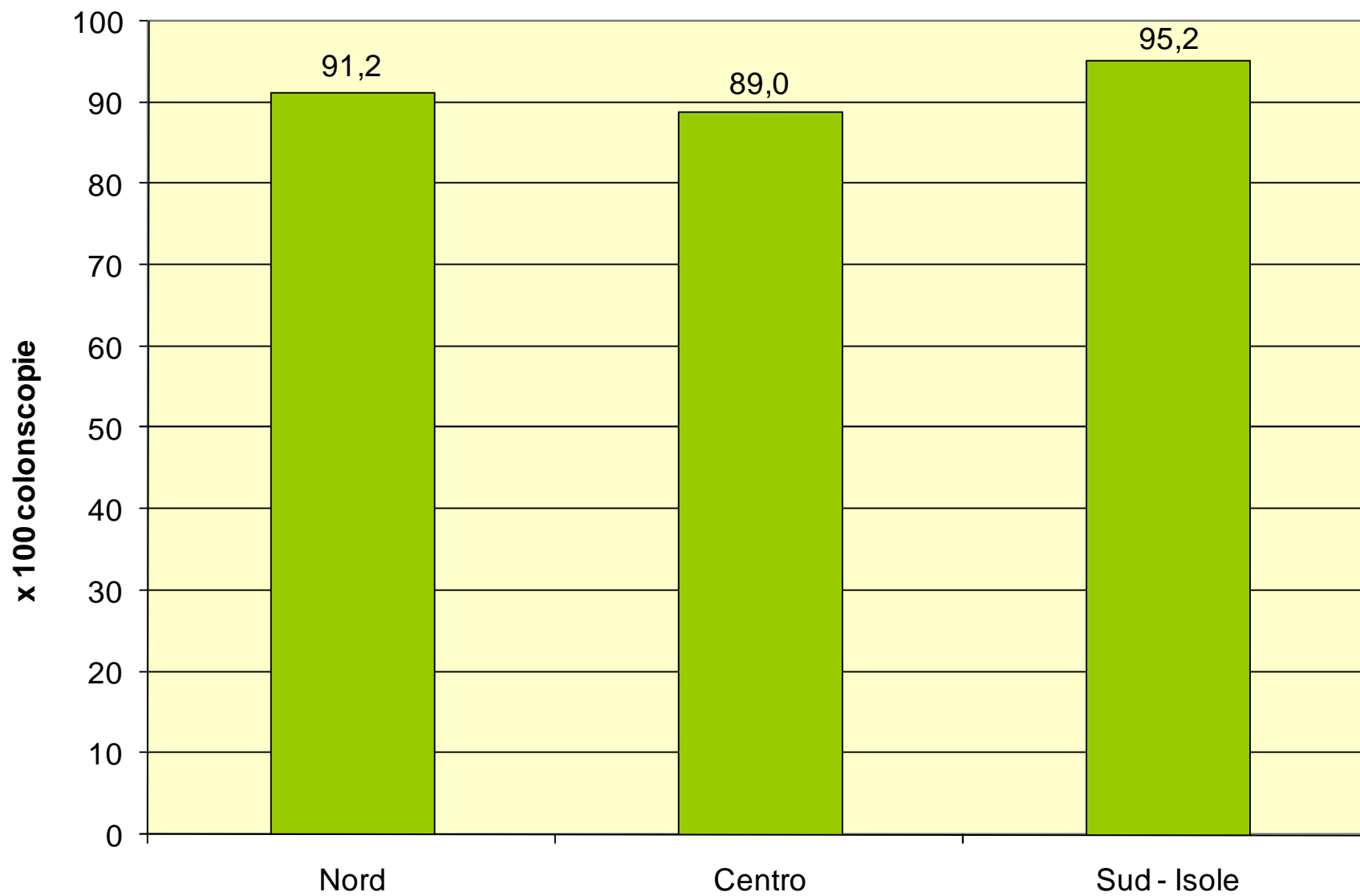
Colonscopie complete

(media, 10° e 90° percentile)

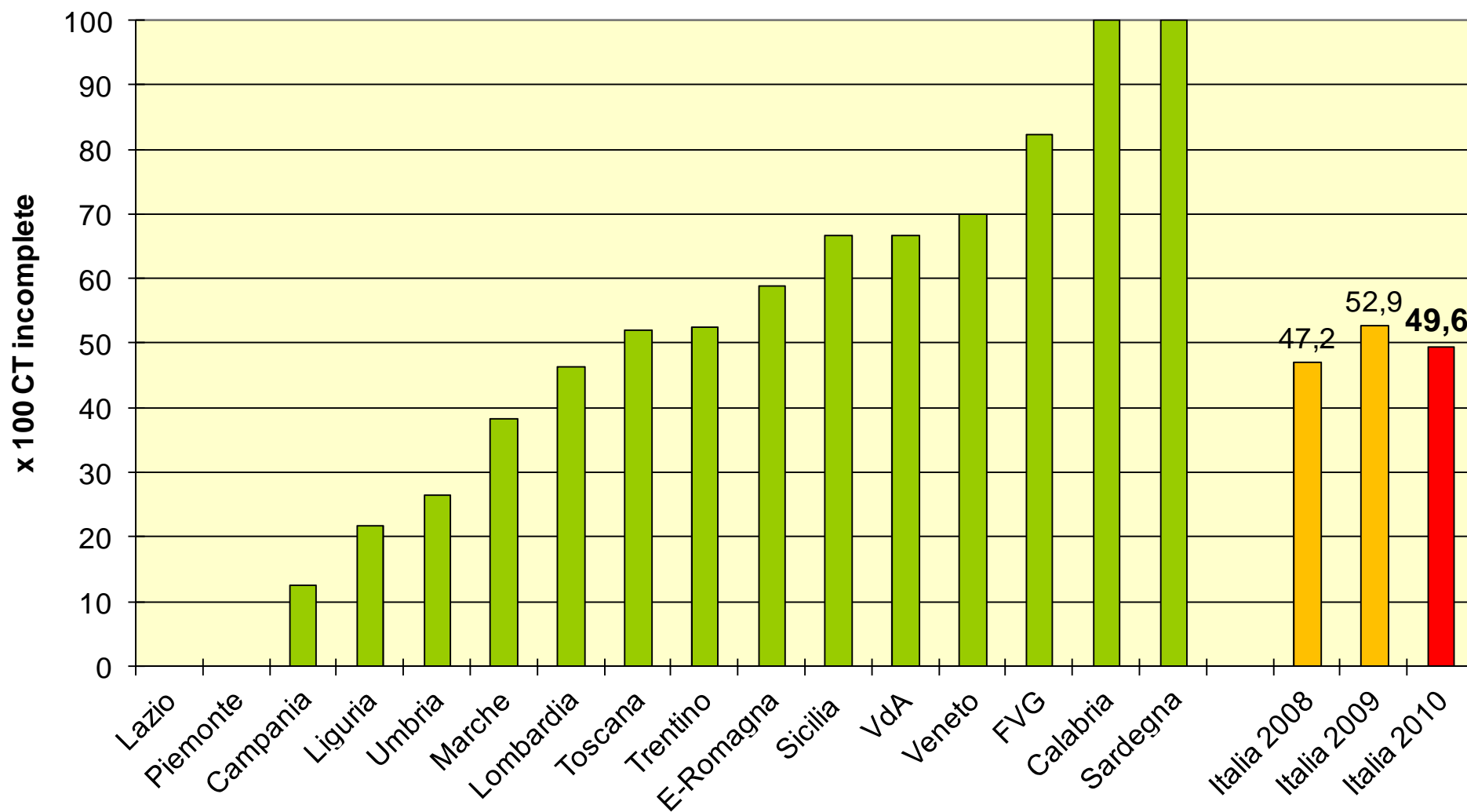


Standard accettabile > 85%, desiderabile > 90%

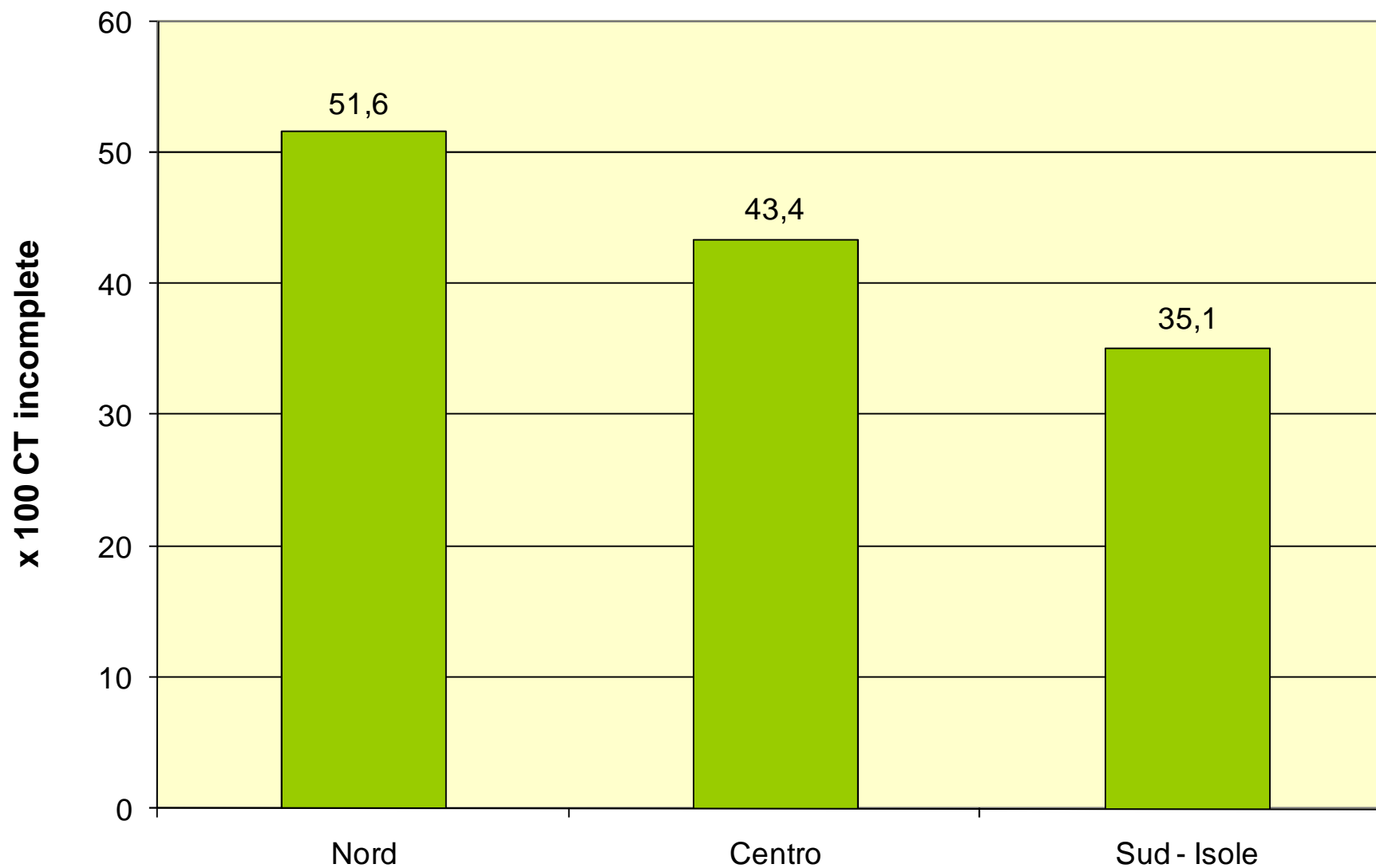
Colonscopie complete per macroarea



Colonscopie incomplete che vengono completate



Colonscopie incomplete che vengono completate per macroarea

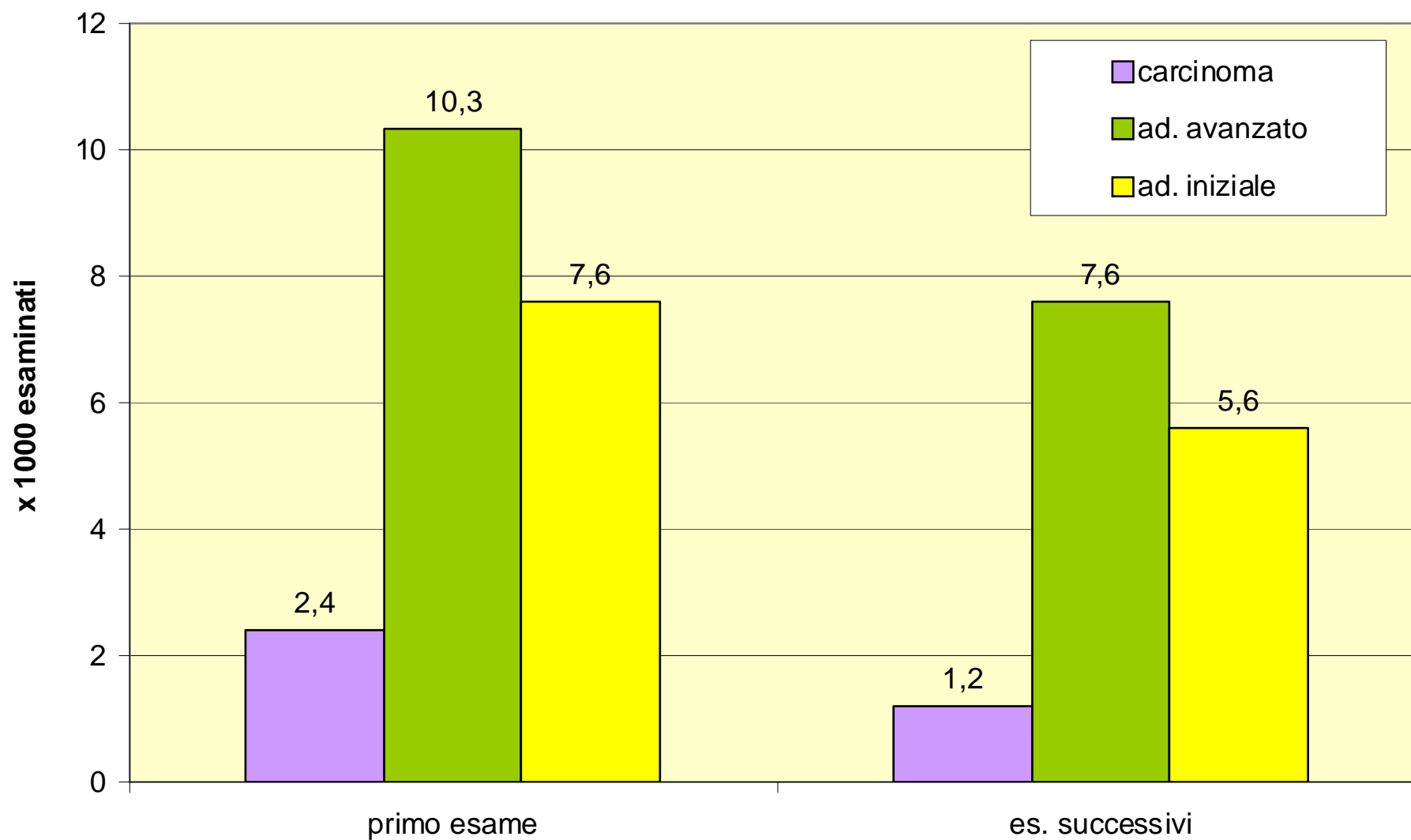


Complicanze all'endoscopia

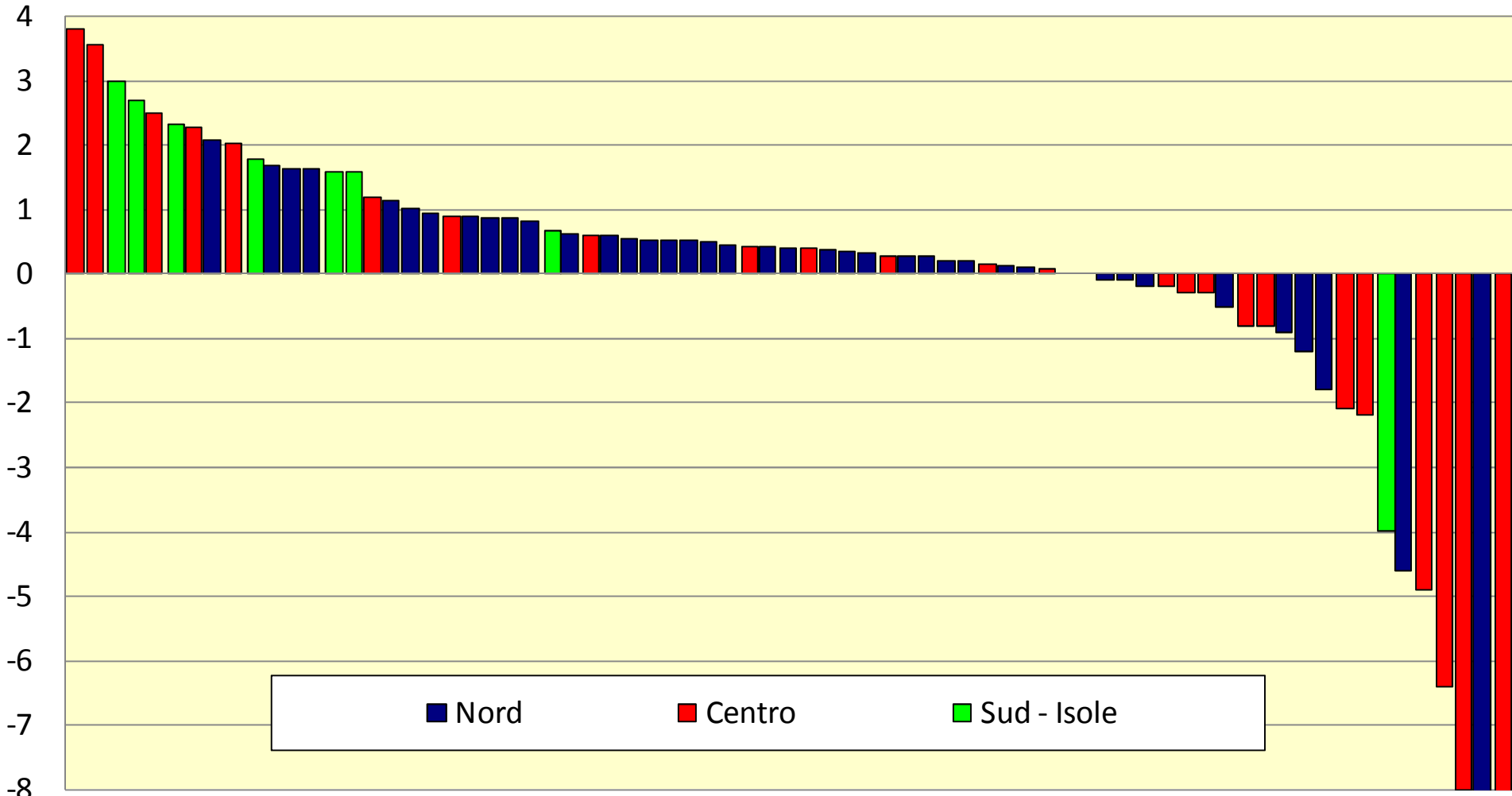
CT OPERATIVE	Media 2010	Range	Standard
Sanguinamenti	3,7‰	0 – 42,8‰	<25‰
Perforazioni	0,4‰	0 – 19,2‰	<25‰

CT NON OPERATIVE	Media 2010	Range	Standard
Sanguinamenti	0,4‰	0 – 5,3‰	<5‰
Perforazioni	0,3‰	0 – 19,6‰	<5‰

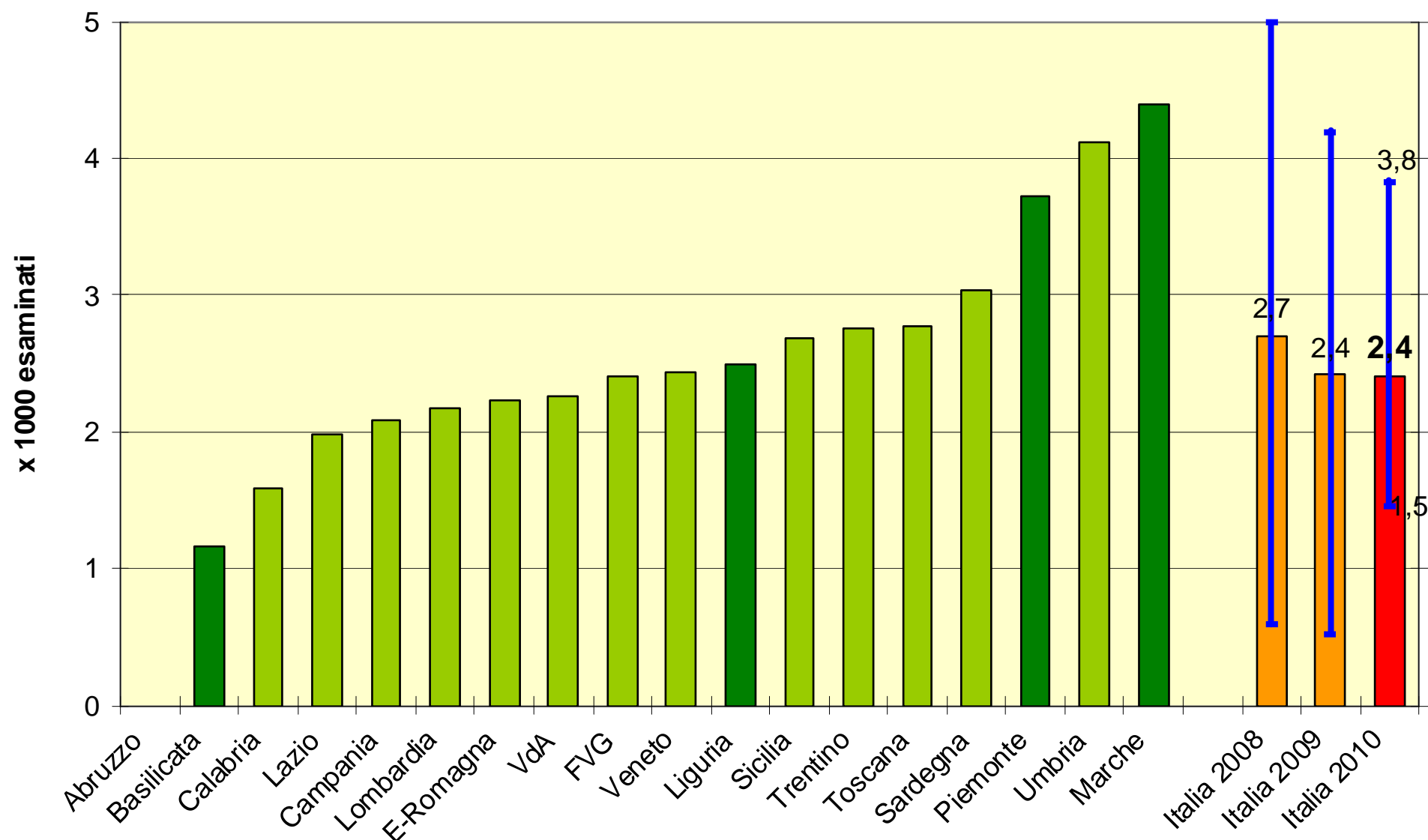
Tassi di identificazione



Rapporto tra adenomi avanzati / iniziali, per macroarea

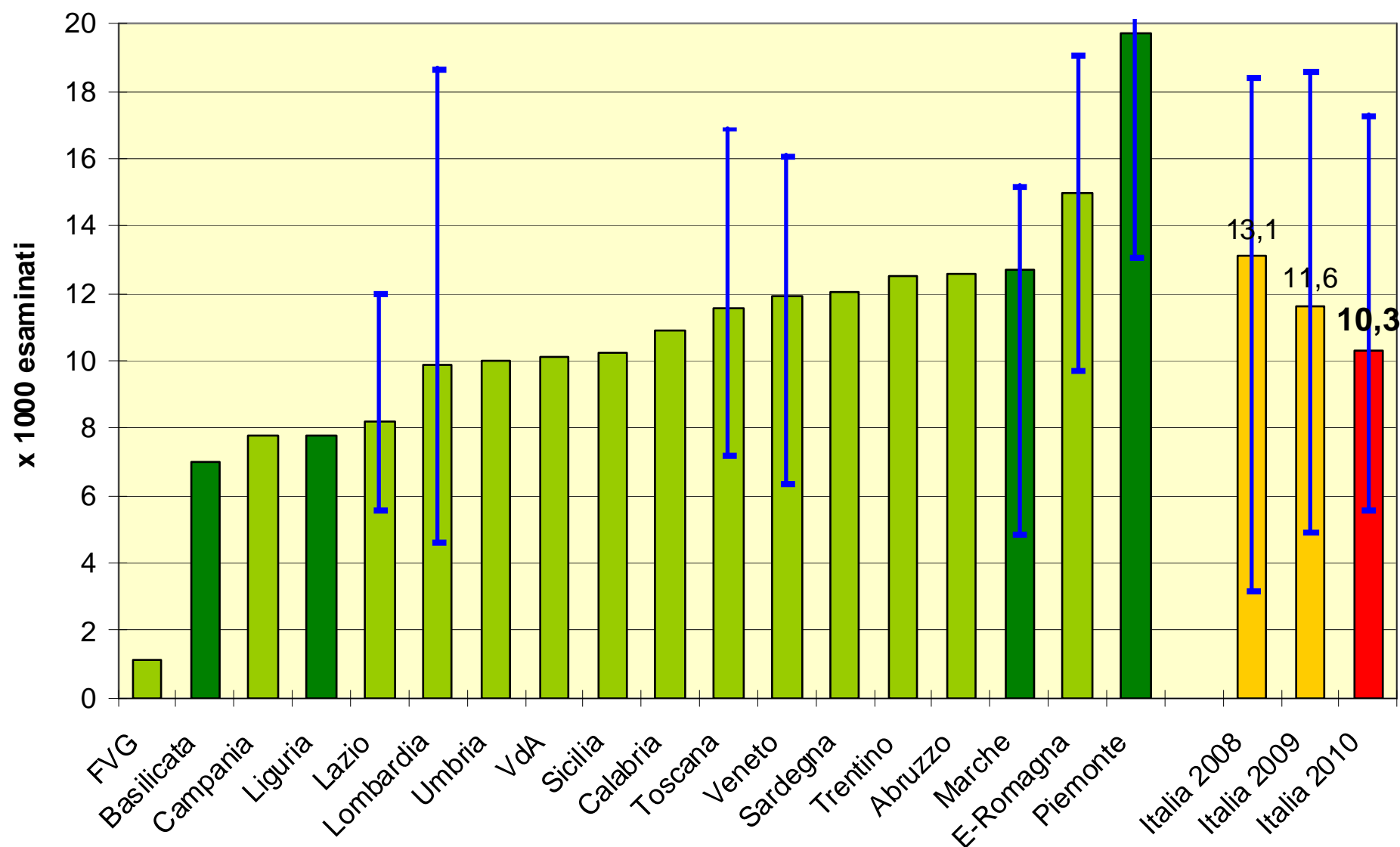


Primi esami - Tassi st. di identificazione per carcinoma



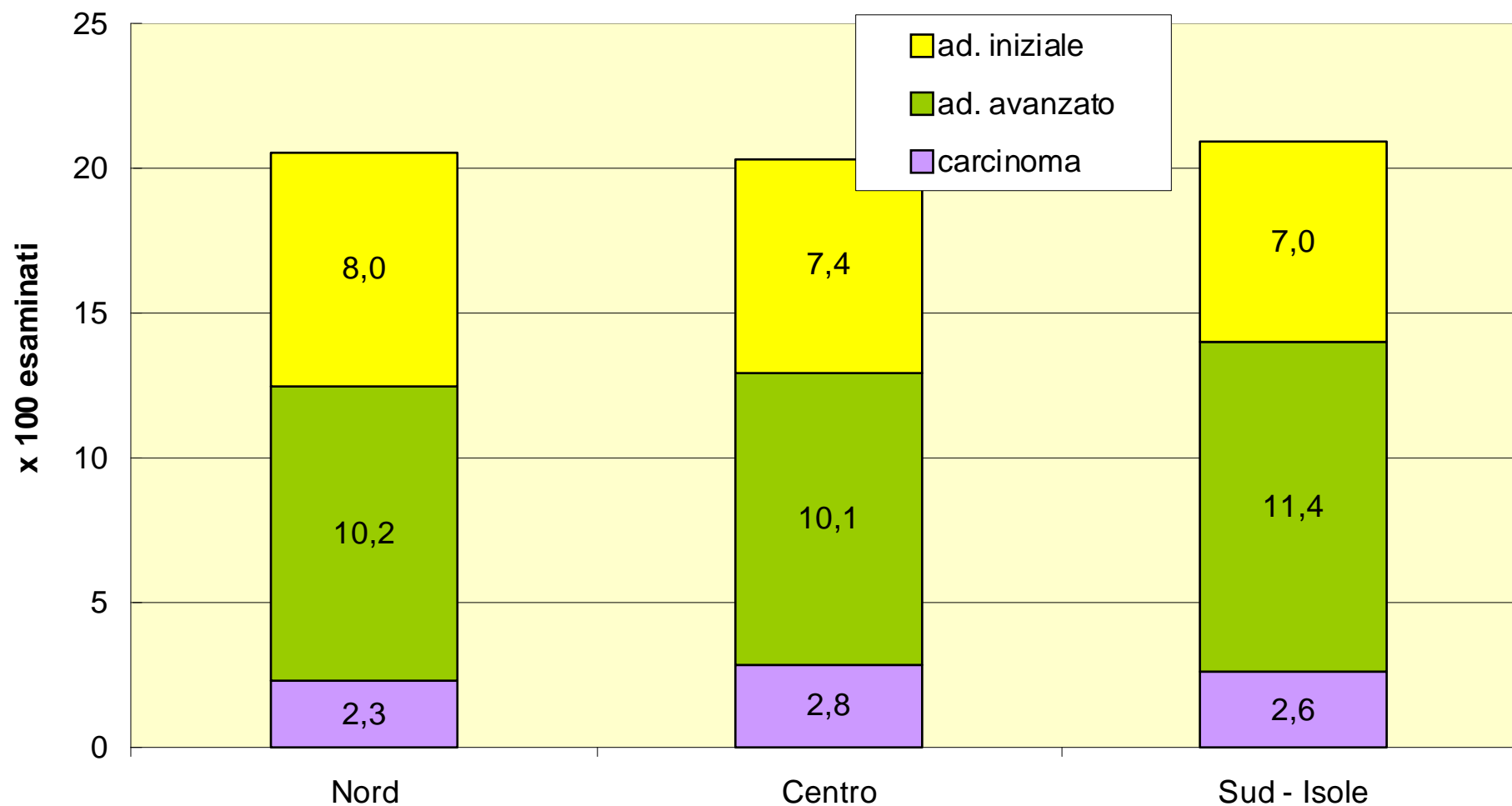
Standard accettabile >2.0‰, desiderabile >2.5‰

Primi esami - Tassi st. di identificazione per ad. avanzato

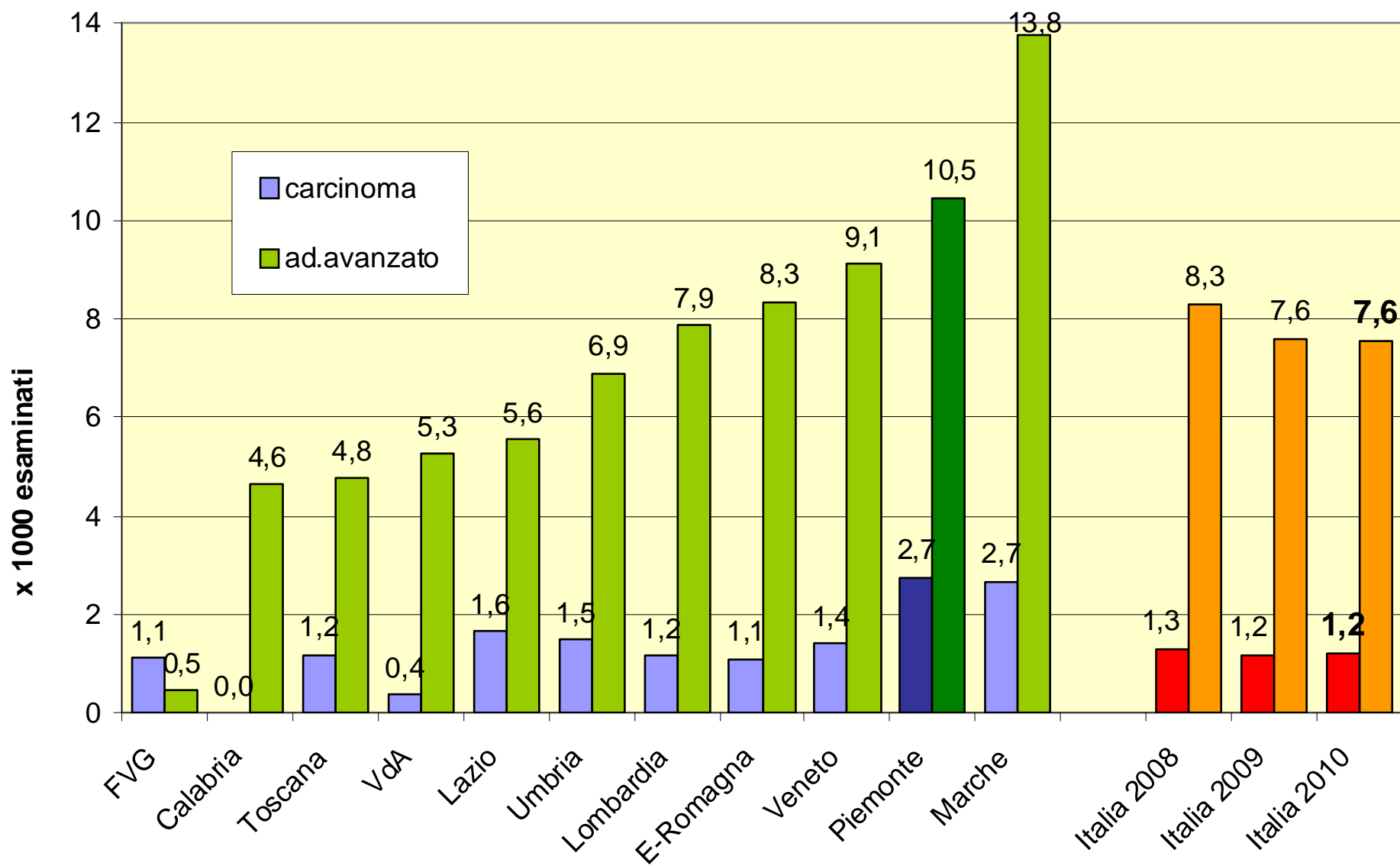


Standard accettabile >7.5‰, desiderabile >10‰

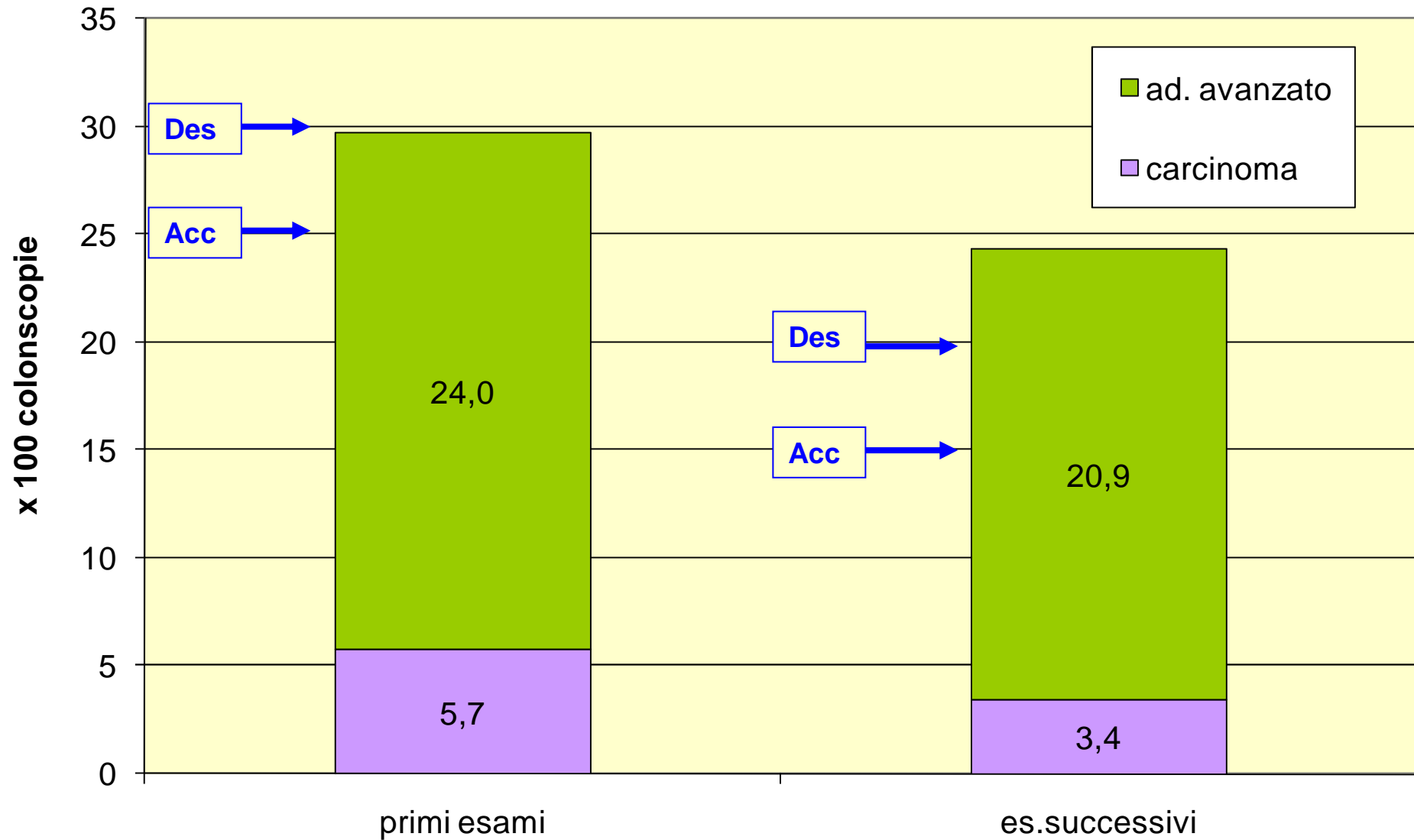
Primi esami - Tassi st. di identificazione per macroarea



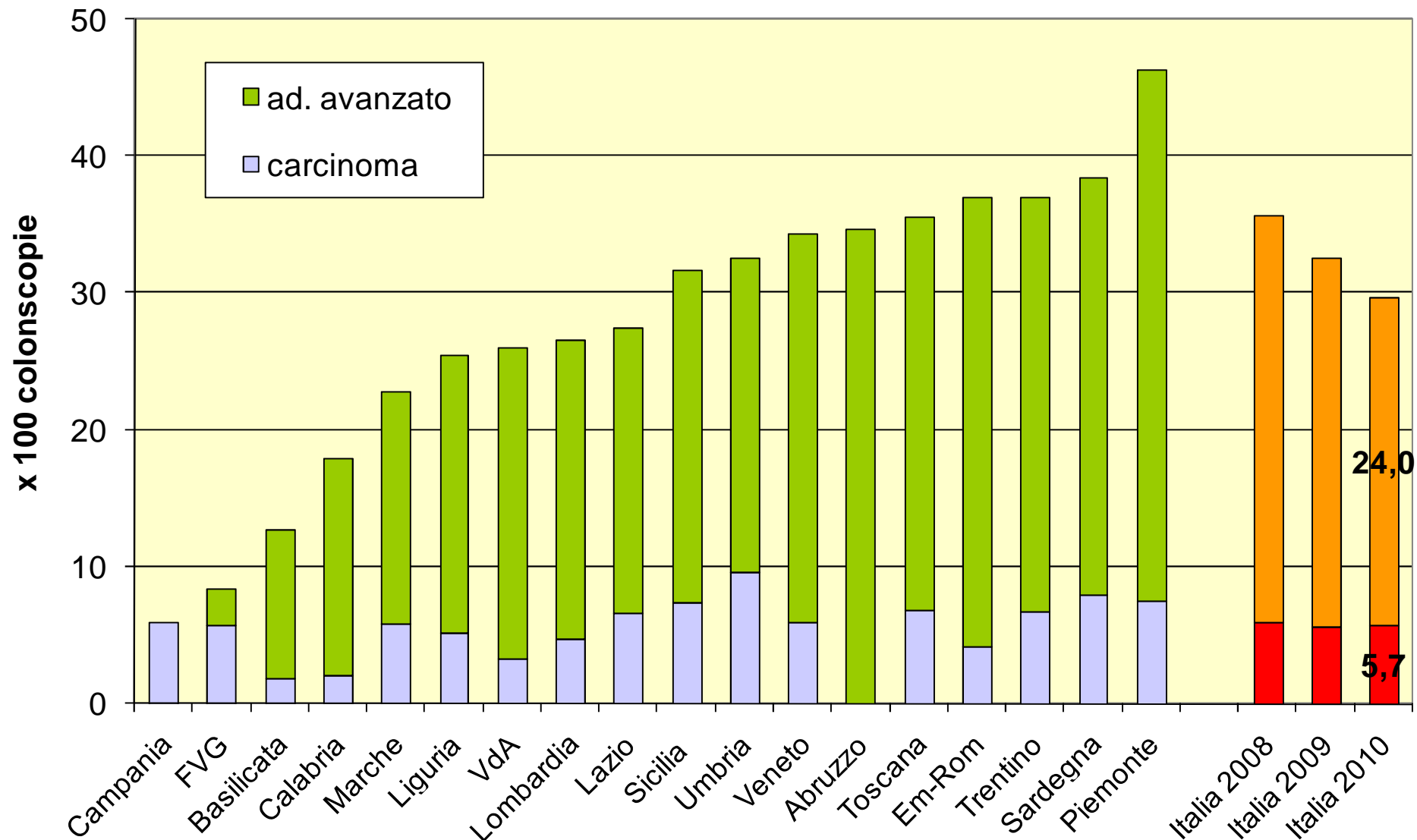
Es. successivi - Tassi st. di identificazione per carcinoma ed adenoma avanzato



Valore Predittivo Positivo del SOF+ alla colonscopia

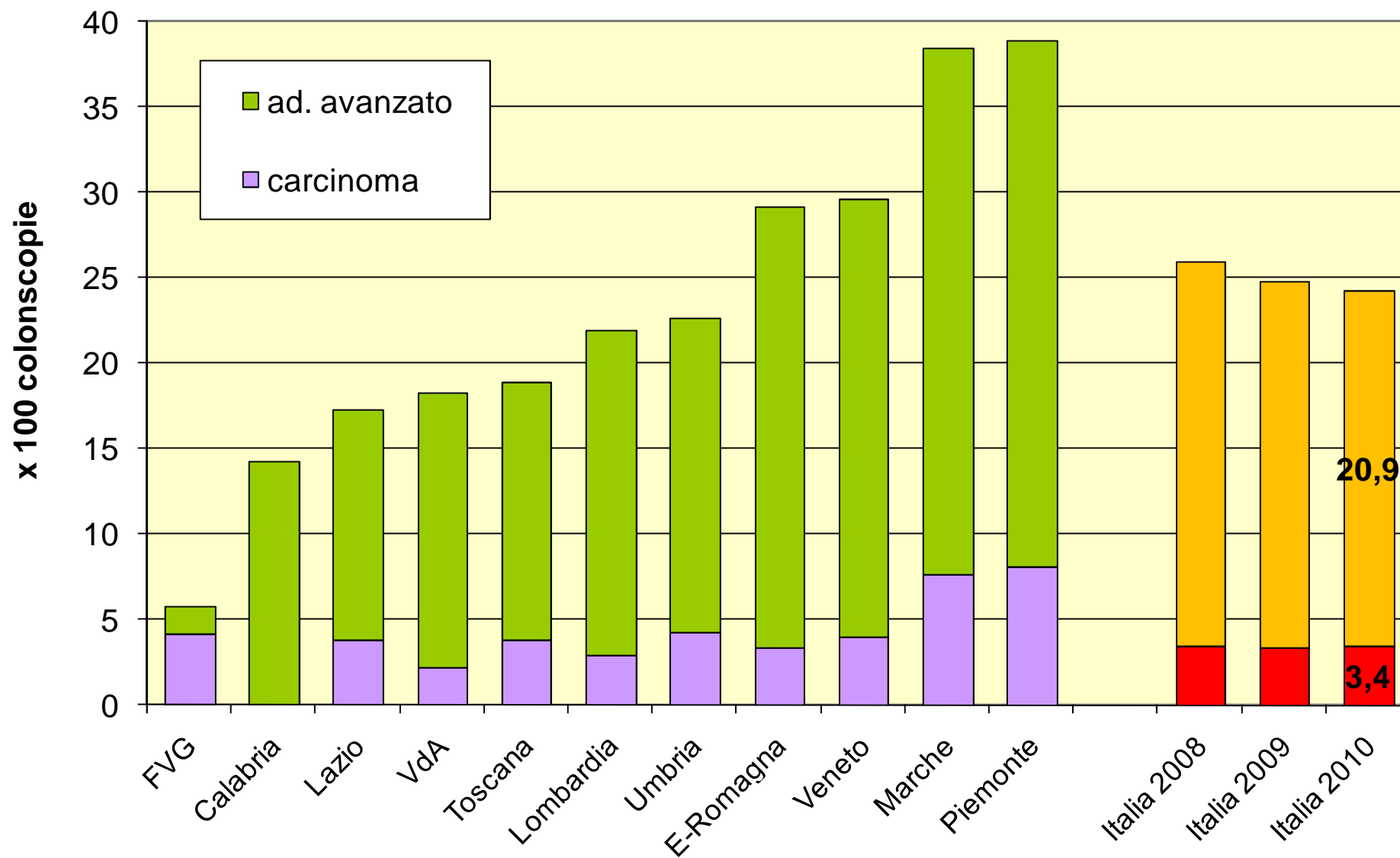


Primi esami. VPP del SOF+ alla colonscopia, per Regione



Standard accettabile >25%, desiderabile >30%

Esami successivi. VPP del SOF+ alla colonscopia, per Regione



Standard accettabile >15%, desiderabile >20%

Lesioni diagnosticate

	Primi esami	Es. successivi
Screenati	766.108	866.989
Carcinomi	1.971	1.070
di cui adenomi cancerizzati	28,4%	20,6%
Adenomi avanzati	8.314	6.642
Carcinomi stadiati	63%	76%

Distribuzione per stadio alla diagnosi

(solo casi con stadio noto = 67%)

Stadio	Programmi SOF		Programmi RS (n=25)
	Primi esami (n=1281)	Es. successivi (n=834)	
I	30,1	41,4	28,0
I*	24,1	10,6	32,0
II	18,7	22,7	4,0
III-IV	27,1	25,4	36,0

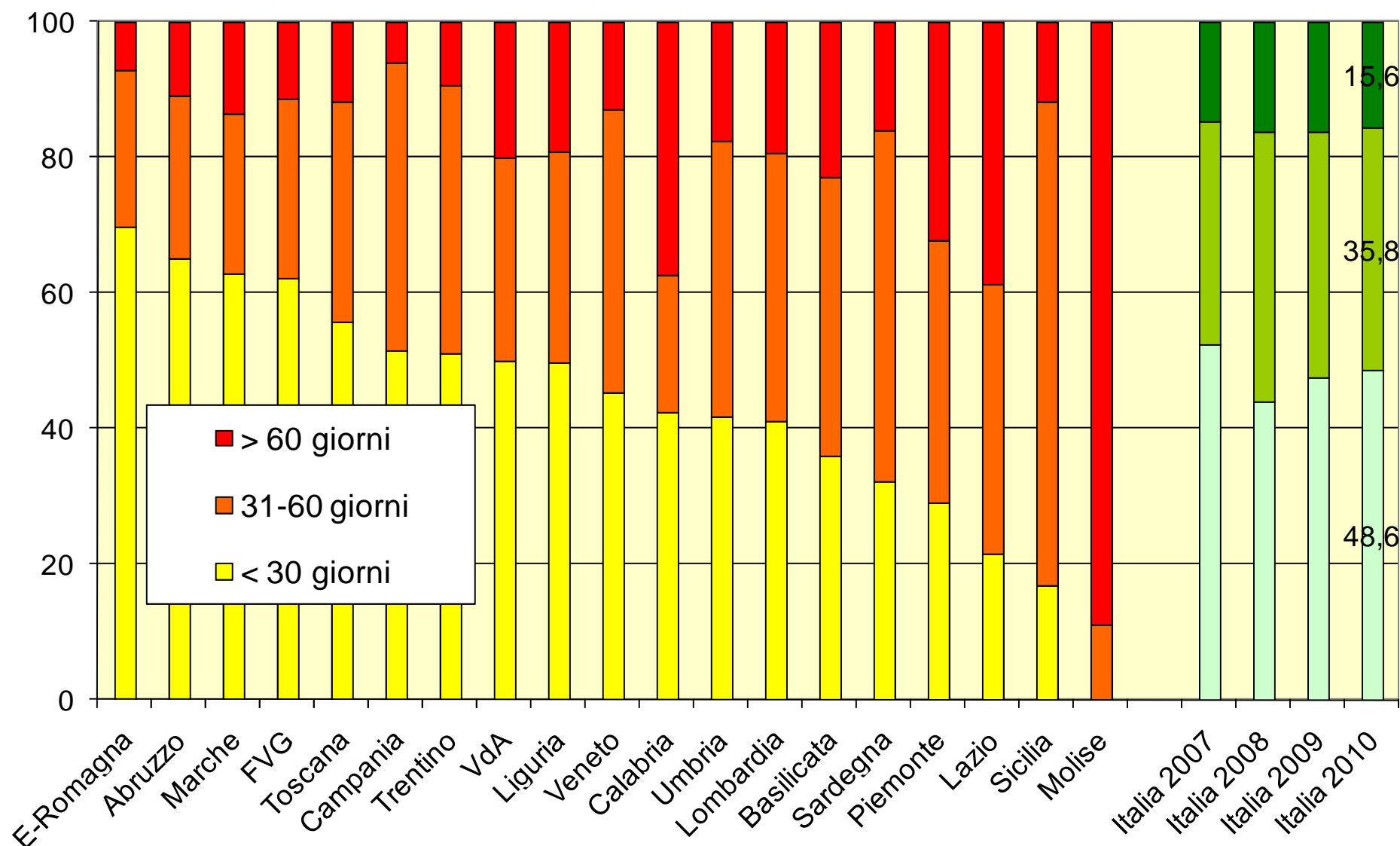
* adenomi cancerizzati trattati con sola resezione endoscopica

Quota di lesioni con trattamento esclusivamente endoscopico

	Media 2010	10°-90°percentile*
Tutti i carcinomi	14,3%	0 – 30%
Carcinomi pT1	37,3%	0 – 87%
Adenomi avanzati	95,5%	88 - 100%

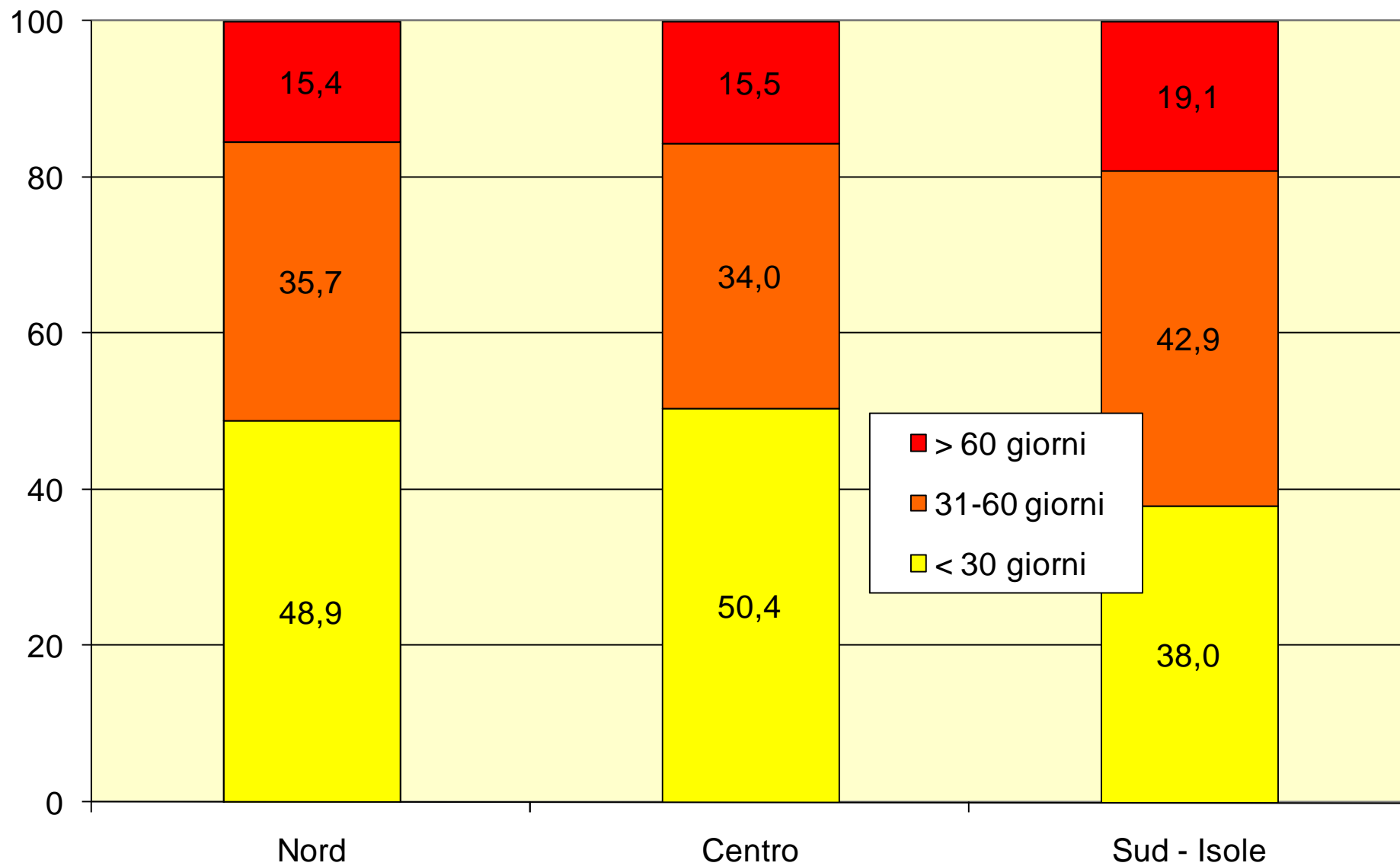
* Solo programmi con almeno 5 lesioni e con il dato sul trattamento presente per almeno il 75% dei casi

Tempo per l'esecuzione della colonscopia di approfondimento



Standard accettabile >90% entro 30 gg, desiderabile >95% entro 30 gg

Tempo per l'esecuzione della colonscopia di approfondimento



Programmi RS

	2007	2008	2009	2010
N° programmi	7	7	9	9
Popolazione target	48.450	49.622	60.844	58.256
N° invitati	32.159	29.028	39.512	57.091
Estensione inviti (%)	66.5	58.8	64.8	97.9
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Adesione all'invito (%)	27.7	27.2	24.3	24.0

adesione a SOF
+ 8/10%

Programmi RS

	2008	2009	2010	standard
RS positive (%)				
ad. avanzato	5.1	4.6	4.1	<6-8%
altro	8.4	6.4	3.1	
DR adenomi alla RS (%)	13.8	19.6	18.7	>7.5-12.5%
DR (‰)				
carcinoma	4.7	2.6	3.3	>3-4‰
ad. avanzato	47.5	43.7	43.3	>35-40‰
VPP di RS+ per neoplasia prossimale (%)	7.9	10.3	7.0	>7-10%

Conclusioni 2009

- prosegue l'estensione
- problemi “di tenuta”
- problemi di adesione
- sostenibilità e qualità dei programmi del Sud
- qualità dei dati
- aree di approfondimento per GISCoR