



CENTRO
PER LO STUDIO
E LA PREVENZIONE
ONCOLOGICA

Istituto Scientifico
della Regione Toscana

UPDATE OF RESULTS FROM THE TUSCANY REGIONAL PROGRAM

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COLORECTAL CANCER SCREENING FLORENTINE PROGRAMME

- ✓ **Start** **1982**
- ✓ **Age range** **1982-1996 → 40-70**
1996 → 50-70
- ✓ **Population involved** **approx. 50,000 subjects**
- ✓ **Frequency** **2 years**
- ✓ **Tests** **1982-1991 unhydrated guaiac**
1992-1996 rehydrated guaiac
1996-2000 RPHA (Hemeselect)
2000 → latex agglutination

HISTORICAL COMPARISONS IN THE FLORENTINE PROGRAMME

	Sensitivity 2 years int.	Sensitivity 1 year int.	Specificity for cancer
Unhydrated guaiac	62 % *	69 % *	98 % *
Rehydrated guaiac	50 % #	64 % #	94 % ☒
Reversed Passive Hemagglutination	82 % #	89 % #	97 % ☒
Latex agglutination (100 ng/ml)	tbd	tbd	97 % ⚡
Latex agglutination (200 ng/ml)	tbd	tbd	98 % ⚡

• Castiglione, Tumori; 77:243-5, 1991 # Zappa, Int J Cancer; 92:151-4, 2001

☐ Castiglione, Br J Cancer; 74:141-4, 1996 ⚡ Castiglione, J Med Screen; 7:35-7, 2000.

SCREENING COSTS (in Euros)

Age 50-70 – Compliance = 39%

	REHYDRATED HEMOCCULT	RPHA + & +/-	RPHA + only
Per screened subject	25	28	20
Per subject with cancer	10,360	8,067	7,031
Per subject with adenoma/s > 9 mm	3,625	3,500	3,167

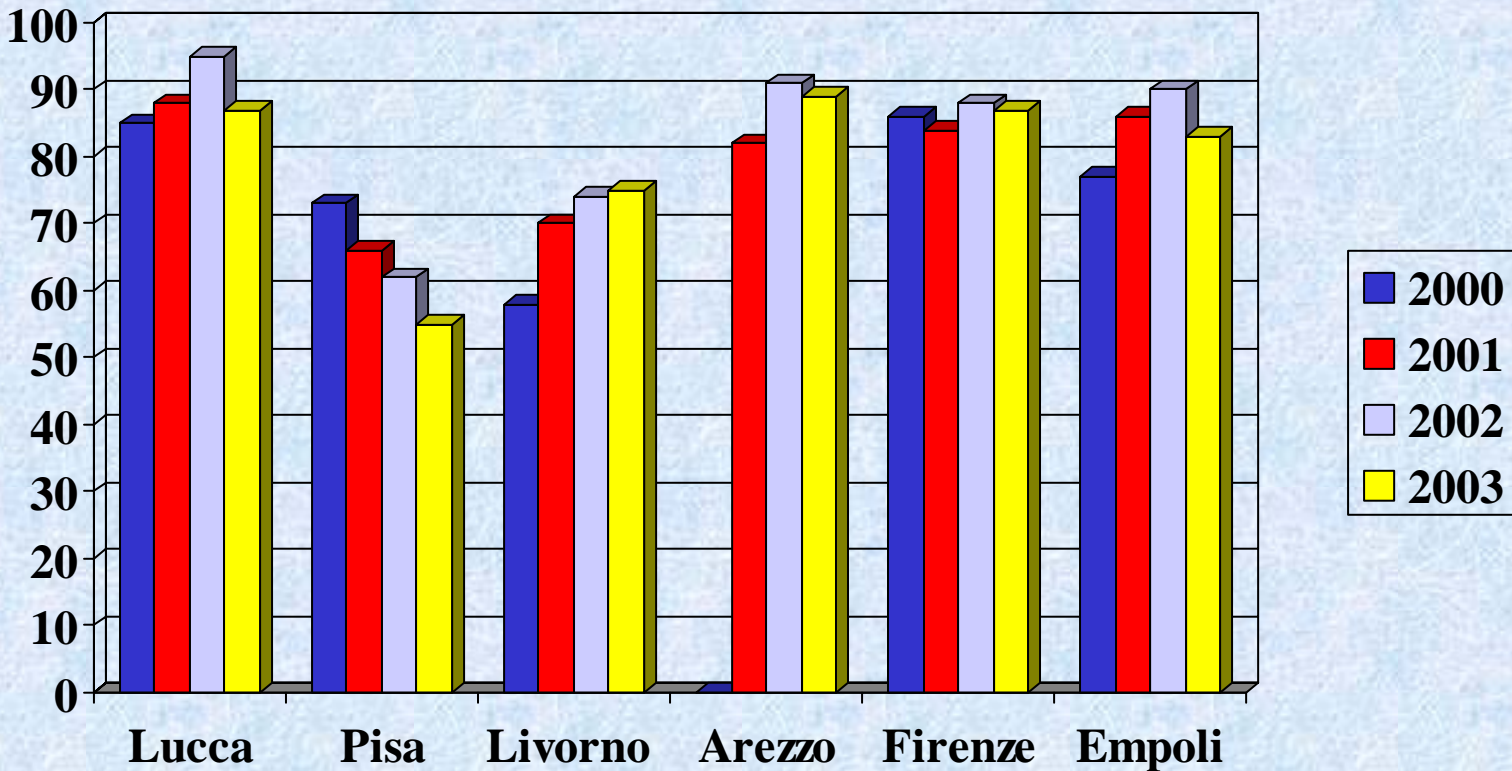
TUSCANY REGIONAL PROGRAM

(970,000 subjects aged 50-69 yrs)

	2000	2001	2002	2003
INVITED (n)	102,261	107,131	178,175	194,569
(Extension %)	(21)	(22)	(37)	(40)
ATTENDANCE %	39	41	48	49
POSITIVITY RATE %	5.5	5.8	5.0	4.4
COMPLIANCE WITH COLONOSCOPY %	73	78	79	76
DR FOR CANCER ‰	3.5	3.1	3.3	2.3
DR FOR HR ADENOMAS ‰	10.0	13.0	11.1	9.0
PPV FOR CANCER %	6.2	5.4	6.7	5.3
PPV FOR HR ADENOMAS %	8.0	22.3	22.2	20.3

TUSCANY REGIONAL PROGRAM

Compliance of FOBT-positives with colonoscopy in single LHU



ANALYSIS OF NON-COMPLIERS WITH DIAGNOSTIC WORK-UP

Period 1985-1997 4,283 FOBT-positive subjects Age 50-75

Gender	MALE	FEMALE	TOTAL
Diagnostic Work-up performed	1,933 (52%)	1,786 (48%)	3,719 (100%)
Diagnostic Work-up not performed	280 (49.6%)	284 (50.4%)	564 (100%)

ANALYSIS OF NON-COMPLIERS WITH DIAGNOSTIC WORK-UP

Age at the time of the test	50-54	55-59	60-64	65-69	70-75	TOTAL
Diagnostic Work-up performed	711 (19.2 %)	858 (23.0 %)	973 (26.2 %)	933 (25.1 %)	244 (6.6 %)	3,719 (100 %)
Diagnostic Work-up not performed	88 (15.6 %)	133 (23.6 %)	122 (21.6 %)	167 (29.7 %)	54 (9.6 %)	564 (100 %)

ANALYSIS OF NON-COMPLIERS WITH DIAGNOSTIC WORK-UP

Distribution of CRC between compliers and non-compliers

	Diagnostic work-up performed	Diagnostic work-up not performed	TOTAL
No colorectal cancer	3,433 (92.3 %)	520 (92.2 %)	3,953 (92.3 %)
Colorectal cancer	286 (7.7 %)	44 (7.8 %)	330 (7.7 %)
TOTAL	3,719 (100 %)	564 (100 %)	4,283 (100 %)

ANALYSIS OF NON-COMPLIERS WITH DIAGNOSTIC WORK-UP

Incidence rate or CRC according to the time of diagnosis (since the positive FOBT) in compliers and non-compliers (per 1000) (*CRC in brackets*).

TIME SINCE POSITIVE FOBT	<12 mths	12-23 mths	24-59 mths	> 59 mths	
Diagnostic Work-up performed	69.9 (246)	2.0 (7)	1,6 (17)	1,4 (16)	(286)
Diagnostic Work-up not performed	30.8 (17)	5.5 (3)	4.9 (8)	8.6 (16)	(44)

ANALYSIS OF NON-COMPLIERS WITH DIAGNOSTIC WORK-UP

Mean and median of interval time between positive FOBT and diagnosis in compliers and non-compliers

	FREQUENCY	MEAN	MEDIAN
Diagnostic Work-up performed	286	0.8	0.2
Diagnostic Work-up not performed	44	3.6	2.75

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