

Supplementary Materials for

Key performance indicators of breast cancer screening programmes in Italy, 2011-2019

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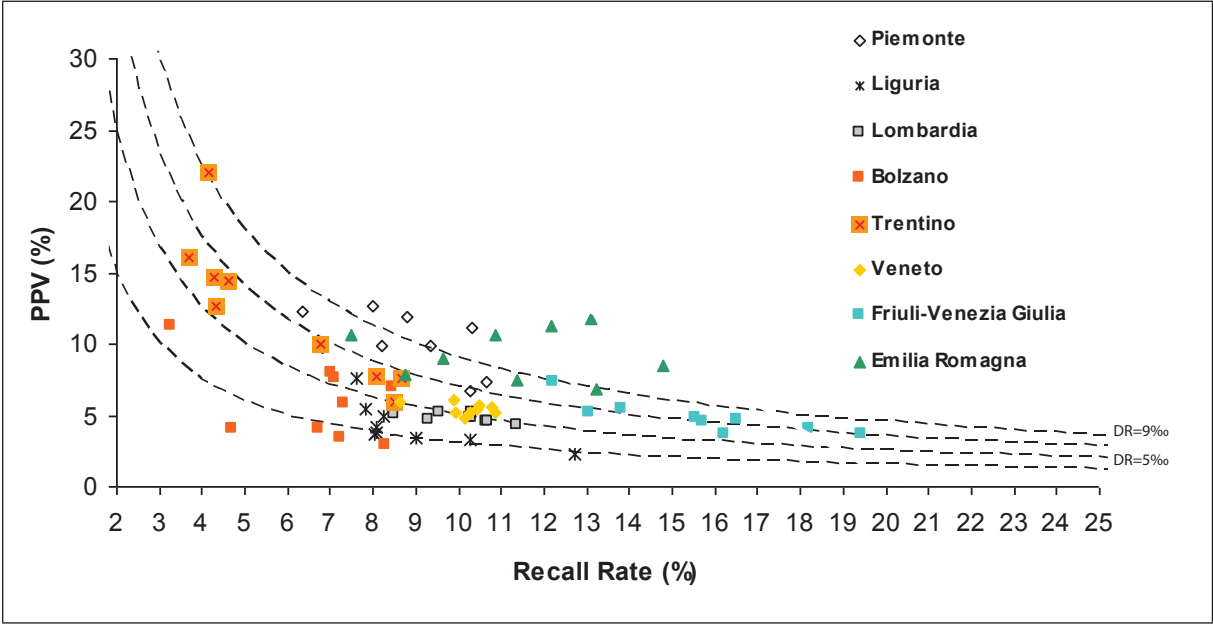


Figure 15
Recall rate (RR) versus positive predictive value (PPV); detection rate (DR) shown as isobars. First round. Northern regions.

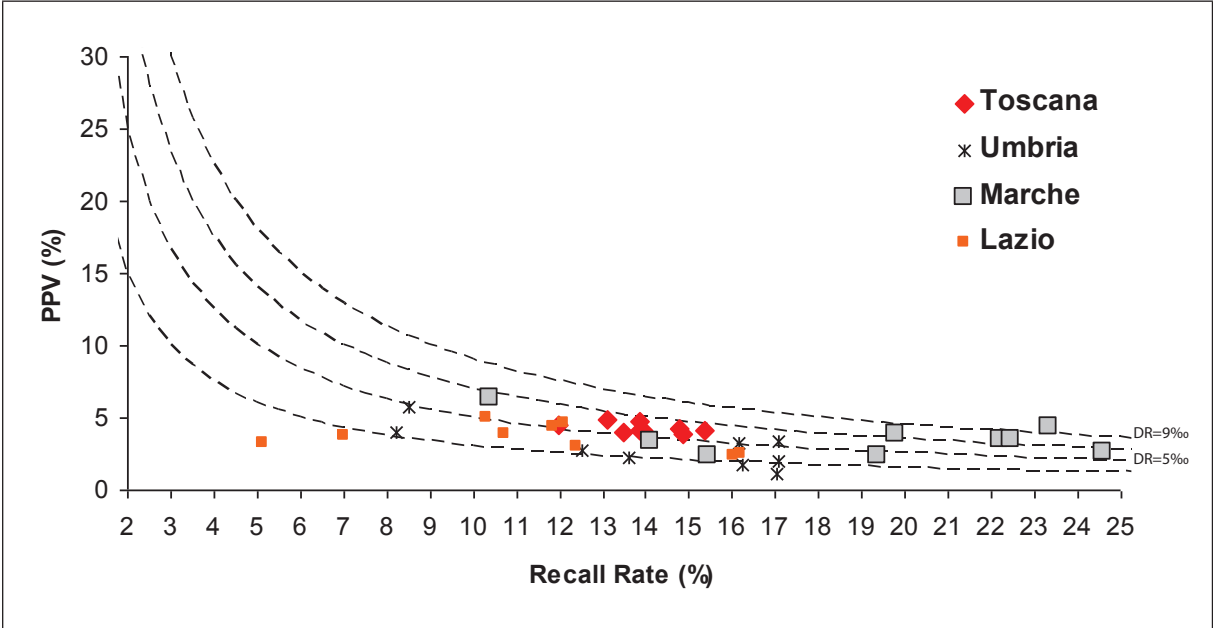


Figure 25
Recall rate (RR) versus positive predictive value (PPV); detection rate (DR) shown as isobars. First round. Central Regions.

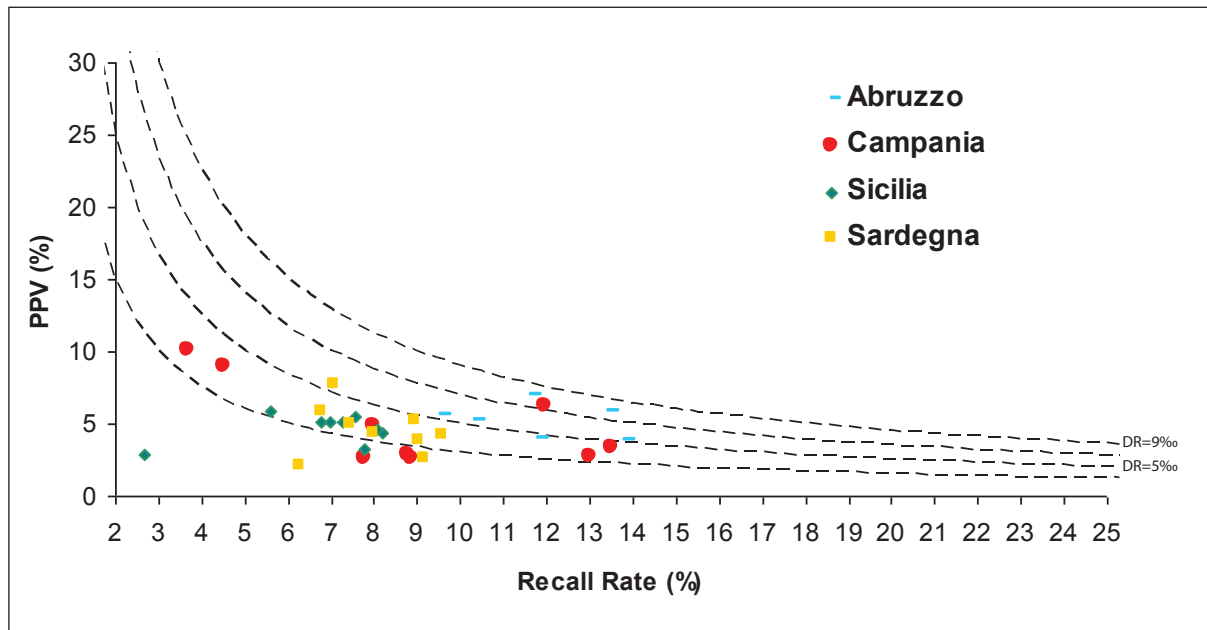


Figure 3S
Recall rate (RR) versus positive predictive value (PPV); detection rate (DR) shown as isobars. First round. Southern Regions.

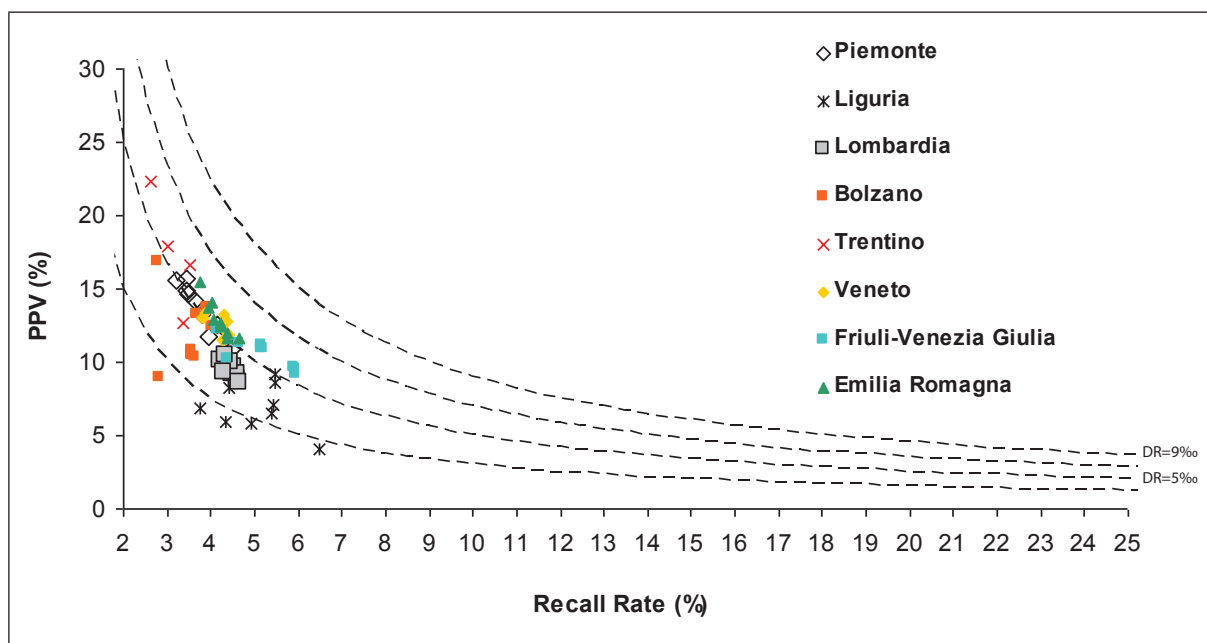


Figure 4S
Recall rate (RR) versus positive predictive value (PPV); detection rate (DR) shown as isobars. Subsequent rounds. Northern Regions.

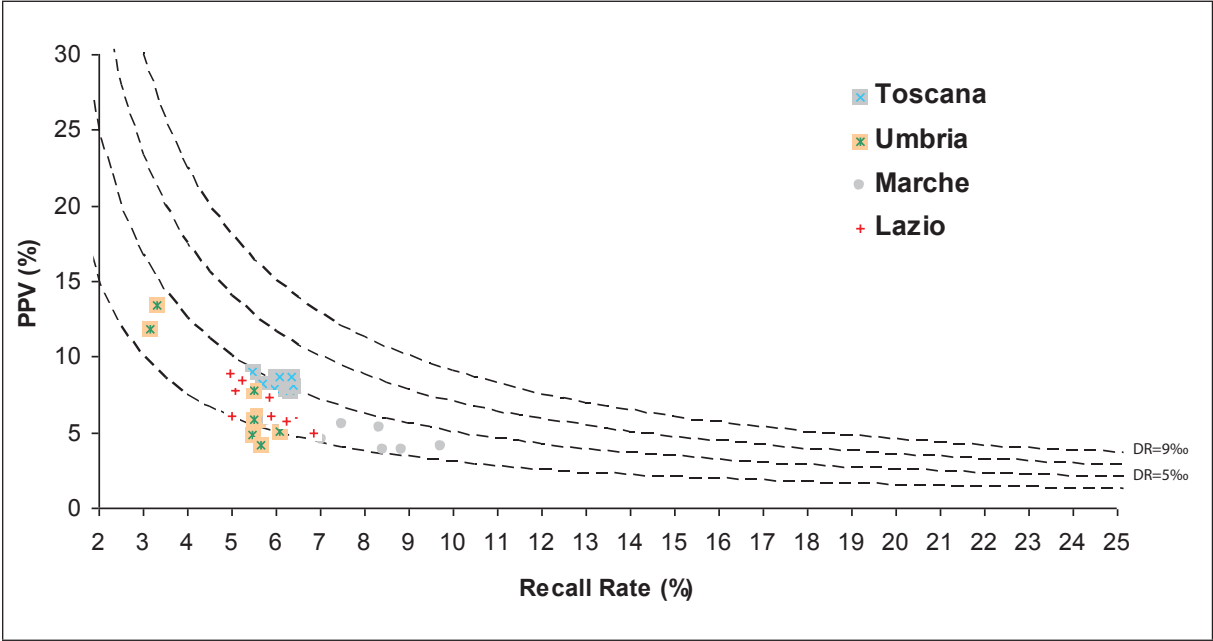


Figure 5S
Recall rate (RR) versus positive predictive value (PPV); detection rate (DR) shown as isobars. Subsequent rounds. Central regions.

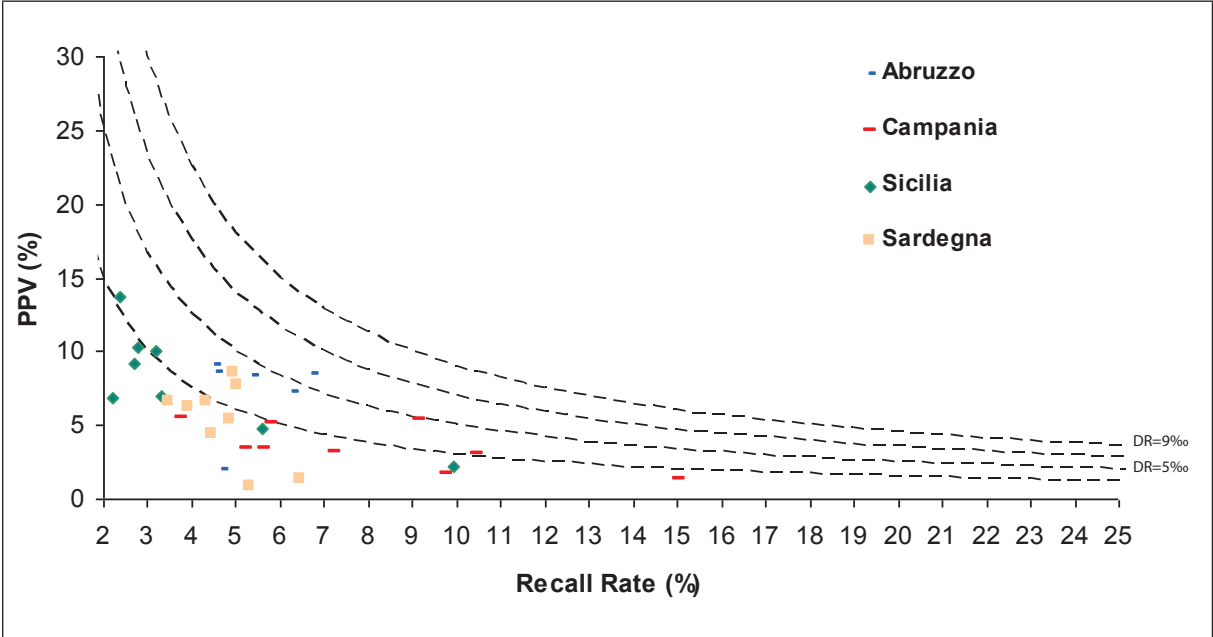


Figure 6S
Recall rate (RR) versus positive predictive value (PPV); detection rate (DR) shown as isobars. Subsequent rounds. Southern regions.

Table 1S

Adjusted invitation coverage with average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by region, 2011-2019

Adjusted invitation coverage (%)	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Piemonte	74.43	74.72	70.22	70.93	77.79	83.78	98.91	90.51	101.44	4.2	1.6; 6.9
Valle d'Aosta	94.75	83.66	95.23	97.12	95.21	99.20	103.27	88.09	87.21	1.1	-0.9; 3.2
Liguria	51.70	70.98	117.47	96.56	104.76	102.01	99.34	101.08	100.40	-2.1	-4.4; 0.4
Lombardia	94.17	99.55	95.38	95.99	99.26	99.33	100.51	105.83	100.28	0.6	-0.2; 1.3
Bolzano	84.41	119.62	97.47	111.70	97.85	99.48	86.43	83.12	101.65	0.1	-2.7; 3.0
Trentino	102.61	110.45	103.77	101.04	107.31	99.40	108.43	94.44	100.14	-0.6	1.9; 0.8
Veneto	96.15	104.26	116.36	111.97	96.77	96.83	91.29	90.11	100.74	-1.3	-3.4; 0.9
Friuli Venezia Giulia	105.49	100.37	104.73	103.37	109.49	105.04	97.27	96.82	102.89	-0.2	1.3; 0.9
Emilia-Romagna	117.11	108.47	103.45	105.07	107.41	100.04	102.36	101.66	107.01	-1.1	-2.3; 0.2
Toscana	93.36	101.63	93.03	95.76	93.67	95.70	95.22	96.50	96.87	-0.6	-1.5; 0.4
Umbria	112.33	92.77	122.08	98.26	103.65	87.76	108.90	94.69	101.80	-1.5	-3.7; 0.8
Marche	93.02	85.62	94.79	91.28	94.01	96.14	96.31	96.74	100.45	1.3	0.6; 1.9
Lazio	67.80	83.10	67.64	62.38	78.35	90.63	91.28	96.07	98.71	4.3	2.3; 6.4
Abruzzo	3.75	8.94	51.57	63.96	82.88	92.56	83.58	76.30	70.19	3.8	-8.9; 18.4
Molise	97.55	70.12	102.45	95.38	111.63	90.43	100.20	153.62	91.62	6.3	0.3; 12.6
Campania	40.45	21.93	31.99	35.05	63.00	35.28	52.28	55.60	70.66	9.1	1.2; 17.7
Puglia	55.33	41.80	26.33	30.35	38.74	26.78	38.46	46.36	53.23	0.5	-6.5; 8.0
Basilicata	97.13	81.92	84.78	107.67	97.58	112.40	93.48	102.16	94.54	0.1	-2.7; 3.0
Calabria	35.81	22.49	23.24	7.61	15.43	17.13	33.69	19.83	16.34	-4.2	-14.5; 7.3
Sicilia	44.85	41.25	44.68	52.35	68.66	89.69	87.47	74.71	92.10	8.5	2.4; 15.0
Sardegna	40.96	55.63	65.03	62.85	67.23	48.54	48.85	50.91	55.35	-1.0	-6.1; 4.4

Table 2S

Examination coverage with average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by region, 2011-2019

Examination coverage (%)	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Piemonte	45.55	48.17	47.40	47.01	49.96	54.28	52.70	55.35	53.55	2.4	1.4; 3.4
Valle d'Aosta	60.92	64.03	65.15	68.97	62.25	65.16	68.27	68.90	64.52	0.8	-0.4; 2.1
Liguria	29.06	36.63	56.02	47.96	55.60	54.25	58.98	62.00	59.85	8.1	-3.2; 13.3
Lombardia	55.93	59.57	57.36	58.54	60.47	59.18	60.85	60.19	58.17	0.5	-0.2; 1.3
Bolzano	54.61	61.53	59.14	56.04	53.40	49.03	50.33	52.62	66.11	-0.3	-3.4; 2.9
Trentino	72.69	84.20	76.65	75.62	78.64	77.41	83.60	74.60	74.97	-0.1	-1.7; 1.6
Veneto	63.46	68.63	76.82	73.12	63.24	64.39	62.72	61.31	64.83	-1.3	-3.5; 0.9
Friuli Venezia Giulia	60.80	58.98	61.37	60.66	62.46	63.60	69.59	60.83	64.04	1.0	-0.3; 2.3
Emilia-Romagna	72.37	74.39	75.11	74.19	76.14	72.27	73.11	70.56	72.47	-0.4	-1.1; 0.3
Toscana	63.98	69.13	64.38	65.52	65.28	65.62	63.68	65.69	63.75	-0.3	-1.1; 0.5
Umbria	64.99	70.64	70.49	72.88	67.55	62.53	72.14	69.09	71.36	0.3	-1.3; 2.0
Marche	45.41	43.82	48.51	46.87	49.88	51.06	52.31	51.31	53.95	2.4	1.5; 3.2
Lazio	27.41	32.75	30.21	26.20	35.04	35.29	37.57	38.37	41.89	5.0	2.1; 7.9
Abruzzo	1.97	4.11	20.70	17.89	42.38	49.08	46.99	45.50	42.42	44.6	18.2; 77.0
Molise	46.10	34.75	53.74	48.34	40.32	29.25	53.20	29.52	30.59	-4.3	-11.0; 2.1
Campania	10.87	6.92	8.55	9.50	14.14	13.97	20.87	16.44	22.14	-0.6	-4.4; 3.3
Puglia	27.18	24.44	18.08	18.55	21.55	14.96	19.94	22.81	25.83	-0.7	-6.7; 5.7
Basilicata	50.14	45.60	51.31	64.10	63.54	72.15	59.38	65.44	65.53	4.4	1.1; 7.8
Calabria	12.28	10.97	10.01	2.89	5.87	7.07	12.20	7.24	7.31	-3.3	-16.5; 11.9
Sicilia	16.49	13.43	13.64	17.56	21.26	28.71	25.95	21.97	30.96	10.1	4.5; 16.0
Sardegna	17.67	24.18	25.30	23.95	27.13	21.97	22.72	21.32	25.87	1.4	-2.5; 5.5

Table 3S

Adjusted participation rate with average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by region, 2011-2019

Adjusted participation rate (%)	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Piemonte	63.19	66.41	69.29	67.80	65.91	65.97	54.00	62.07	53.52	-2.2	-4.5; 0.1
Valle d'Aosta	64.87	77.26	69.28	71.64	65.80	66.13	68.27	79.04	74.18	0.9	-1.4; 3.1
Liguria	64.73	62.92	57.58	56.03	56.96	57.52	64.38	66.59	64.86	1.2	-0.8; 3.3
Lombardia	68.55	68.59	67.81	69.06	68.29	67.17	67.23	63.66	66.99	-0.6	-1.2; -0.1
Bolzano	65.88	52.24	61.71	50.93	55.38	49.71	58.67	63.90	65.59	1.0	-2.2; 4.3
Trentino	74.53	79.49	77.33	79.00	76.39	83.55	82.09	83.91	80.29	1.0	0.1; 2.0
Veneto	76.21	74.16	74.54	74.05	74.07	76.09	78.55	77.35	77.81	0.6	0.1; 1.1
Friuli Venezia Giulia	57.64	58.76	58.60	66.68	64.55	69.00	82.37	71.37	70.14	3.7	0.9; 6.7
Emilia-Romagna	68.47	73.75	76.38	75.38	75.30	76.42	75.65	74.01	72.59	0.3	-0.8; 1.3
Toscana	72.48	72.65	73.42	72.49	74.16	72.87	70.69	72.23	70.24	-0.3	-0.8; 0.1
Umbria	61.02	79.74	62.01	76.84	67.85	75.75	69.39	76.55	72.03	0.6	-2.3; 3.5
Marche	49.33	52.26	51.85	51.90	53.91	54.12	55.27	53.94	59.84	1.8	0.9; 2.7
Lazio	44.25	43.33	49.16	44.73	48.95	42.82	45.44	43.36	45.67	-0.2	-1.8; 1.5
Abruzzo	52.66	46.33	40.22	34.17	54.23	58.63	63.10	62.04	63.01	6.8	2.0; 11.9
Molise	47.76	49.63	53.39	51.37	36.13	33.18	53.53	20.02	33.39	-5.1	-12.5; 3.0
Campania	27.84	37.19	28.69	28.24	23.21	40.07	45.80	30.35	31.74	-0.6	-4.4; 3.3
Puglia	51.61	61.51	70.78	63.04	58.15	55.86	53.30	55.86	53.30	-2.7	-5.9; 0.7
Basilicata	51.85	55.95	61.19	60.91	69.54	67.70	67.55	66.51	71.77	3.2	1.5; 5.0
Calabria	35.06	49.91	43.55	38.39	38.00	41.33	36.75	36.52	44.95	-0.6	-4.4; 3.3
Sicilia	37.23	32.85	35.04	34.71	31.90	34.05	30.61	30.48	34.50	-1.2	-3.0; 0.8
Sardegna	46.23	46.45	44.13	41.46	43.09	48.15	49.69	45.53	49.37	1.2	-0.6; 3.0

Table 4S

Adjusted participation rate, recall rate, detection rate and positive predictive value with average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by 5-year age-group, 2011-2019

	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Adjusted participation rate (%)											
50-54	57.84	60.31	59.97	59.22	58.84	58.88	57.80	57.04	57.31	-0.5	-1.0;-0.1
55-59	62.07	63.24	62.08	61.94	60.50	60.70	59.86	57.87	61.01	-0.8	-1.3;-0.3
60-64	64.24	64.80	63.72	63.89	61.77	62.16	61.03	59.34	59.29	-1.2	-1.5;-0.8
65-69	61.40	62.41	62.97	63.16	61.22	61.63	60.69	58.33	59.76	-0.8	-1.3;-0.2
Recall rate (%)											
First screening											
50-54	9.08	10.19	10.47	11.48	10.54	11.90	12.05	12.42	12.90	3.8	2.5; 5.1
55-59	8.24	8.83	9.12	9.19	8.59	9.82	9.87	11.30	11.46	4.0	2.3; 5.1
60-64	7.44	8.73	8.20	8.95	7.65	9.49	9.31	10.96	11.08	4.5	1.8; 7.2
65-69	7.40	8.88	8.72	9.11	7.41	9.51	9.20	11.01	11.19	5.8	1.3; 10.4
Subsequent screenings											
50-54	5.27	5.48	5.47	5.38	5.23	5.46	5.70	5.58	5.67	0.8	0.1; 1.5
55-59	4.40	4.48	4.59	4.56	4.50	4.63	4.74	4.79	4.79	1.0	0.7; 1.4
60-64	4.17	4.32	4.34	4.24	4.37	4.39	4.51	4.46	4.54	0.9	0.5; 1.3
65-69	4.02	4.42	4.29	4.27	4.39	4.39	4.70	4.59	4.64	1.5	0.6; 2.9
Detection rate (‰)											
First screening											
50-54	4.02	4.19	4.30	4.45	4.32	4.47	4.44	4.03	4.21	0.1	-1.2; 1.4
55-59	5.05	4.60	4.90	5.97	5.02	5.23	5.68	4.95	6.04	2.0	-0.7; 4.7
60-64	6.55	6.26	6.59	7.70	5.76	6.86	7.09	7.40	8.16	2.5	-0.5; 5.5
65-69	7.09	8.84	8.94	8.69	7.84	9.29	7.53	9.84	11.00	3.1	-0.5; 6.9
Subsequent screenings											
50-54	3.10	2.97	3.36	3.12	3.01	3.03	3.14	3.14	3.12	0.0	-1.1; 1.1
55-59	3.75	3.54	3.73	3.86	3.65	3.85	3.85	3.71	3.61	0.0	-1.0; 1.0
60-64	4.94	4.99	5.17	4.84	5.18	4.90	4.98	4.95	4.55	-0.7	-1.8; 0.4
65-69	6.03	6.21	6.48	6.26	6.63	6.19	6.36	6.21	5.83	-0.4	-1.6; 0.8
Positive predictive value (%)											
First screening											
50-54	4.43	4.12	4.10	3.88	4.10	3.76	3.68	3.25	3.26	-3.6	-4.8; -2.4
55-59	6.13	5.21	5.37	6.50	5.84	5.32	5.75	4.38	5.27	-1.9	-5.1; 1.4
60-64	8.80	7.17	8.04	8.60	7.53	7.24	7.62	6.75	7.37	-1.9	-4.1; 0.3
65-69	9.58	9.96	10.25	9.55	10.59	9.77	8.18	8.94	9.83	-1.0	-3.3; 1.3
Subsequent screenings											
50-54	5.88	5.43	6.13	5.80	5.75	5.54	5.50	5.64	5.50	-0.8	-1.8; 0.3
55-59	8.50	7.92	8.12	8.47	8.12	8.32	8.12	7.74	7.53	-1.0	-2.0; -0.1
60-64	11.85	11.56	11.91	11.40	11.86	11.16	11.04	11.11	10.03	-1.6	-2.6; -0.6
65-69	14.98	14.05	15.11	14.66	15.10	14.10	13.55	13.52	12.54	-1.9	-3.1; -0.6

Table 5S

Recall rate, first screening, with average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by region, 2011-2019

Recall rate (%)											
First screening	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Piemonte	6.35	6.81	8.22	8.81	8.00	10.30	10.64	9.34	10.25	5.9	2.8; 9.1
Valle d'Aosta	8.50	9.25	9.25	9.09	11.30	8.58	6.73	8.06	11.15	-0.7	-6.1; 5.1
Liguria	12.71	9.00	8.07	10.28	7.63	8.23	8.04	8.09	7.80	-3.8	-7.8; 0.4
Lombardia	8.51	9.30	9.54	10.29	10.26	11.39	10.67	10.31	10.70	2.5	0.8; 4.3
Bolzano	7.10	8.47	8.31	7.00	6.73	7.33	7.23	3.27	4.69	-7.0	-12.5; -1.3
Trentino	8.07	8.49	8.69	6.77	4.17	3.69	4.64	4.32	4.28	-10.4	-15.4; -5.2
Veneto	10.26	8.64	9.90	10.45	10.84	10.78	10.15	9.92	10.49	0.8	-1.1; 2.8
Friuli Venezia Giulia	12.22	18.21	13.82	13.05	15.53	16.53	19.45	16.23	15.72	2.4	-2.1; 7.0
Emilia-Romagna	8.75	9.65	7.47	12.17	10.88	11.36	13.12	13.22	14.77	6.8	3.1; 10.6
Toscana	13.47	11.99	13.09	13.85	13.95	14.76	14.87	15.36	13.86	2.0	0.2; 3.7
Umbria	8.52	8.23	12.50	16.23	16.13	17.07	17.09	13.60	17.02	6.9	0.7; 13.6
Marche	10.40	19.35	15.44	14.11	24.58	19.77	22.20	22.46	23.32	5.8	0.1; 11.7
Lazio	5.15	10.29	12.38	10.72	6.99	11.87	12.11	16.20	16.02	9.5	2.1; 17.5
Abruzzo*	--	--	--	11.62	9.54	11.78	10.30	13.81	13.43	5.6	-3.7; 15.8
Campania	11.94	4.49	3.66	8.77	8.85	7.79	7.97	12.99	13.51	10.5	1.8; 20.0
Basilicata*	--	--	--	14.92	10.75	15.96	15.53	14.58	14.46	1.6	-7.8; 11.9
Sicilia	2.69	8.19	6.77	5.58	7.27	7.55	7.76	8.06	6.98	1.9	-3.5; 7.6
Sardegna	9.14	8.96	9.04	7.06	6.75	7.44	7.99	6.25	9.59	-2.2	-6.5; 2.2

*From 2014; Data from Molise, Puglia, and Calabria regions are not available for every year.

Table 6S

Detection rate, first screening, with average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by region, 2011-2019

Detection rate (‰)											
First screening	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Piemonte	7.77	6.61	8.07	10.44	10.14	11.52	7.81	9.19	6.85	1.10	-5.1; 7.6
Valle d'Aosta	4.85	2.57	12.85	7.58	2.82	5.36	10.15	4.74	7.43	1.70	-14.1; 20.3
Liguria	2.91	3.06	3.35	3.38	5.76	4.04	2.93	3.08	4.21	1.90	-7.1; 11.8
Lombardia	4.32	4.30	4.92	5.32	5.00	4.90	4.91	5.01	4.83	1.30	-0.6; 3.3
Bolzano	5.35	5.90	2.46	5.57	2.72	4.25	2.46	3.70	1.91	-9.20	-17.1; -0.5
Trentino	6.22	5.08	6.61	6.79	9.20	5.92	6.72	5.47	6.29	0.30	-5.6; 6.7
Veneto	5.36	5.17	5.99	5.62	5.57	6.05	4.83	5.17	5.98	0.20	-2.3; 2.8
Friuli Venezia Giulia	8.96	7.29	7.50	6.84	7.45	7.82	7.25	5.96	7.15	-2.40	-5.1; 0.4
Emilia-Romagna	6.90	8.63	7.95	13.65	11.60	8.43	15.42	9.09	12.50	7.20	-0.1; 15.1
Toscana	5.36	5.43	6.32	6.50	5.82	6.35	5.84	6.34	5.69	0.80	-1.5; 3.1
Umbria	4.87	3.26	3.46	2.86	5.34	5.77	3.45	3.09	1.85	-3.70	-13.6; 7.3
Marche	6.64	4.57	3.71	4.81	6.54	7.60	7.75	7.80	10.15	11.80	5.7; 18.3
Lazio	1.71	5.09	3.66	4.12	2.59	5.20	5.56	3.96	3.79	3.40	-7.0; 15.0
Abruzzo*	--	--	--	8.09	5.40	4.68	5.47	5.36	7.90	-0.70	-16.9; 18.6
Campania	7.44	4.03	3.68	2.53	2.27	2.00	3.91	3.63	4.64	2.60	-9.2; 15.8
Basilicata*	--	--	--	3.58	4.93	4.12	6.34	4.00	7.35	11.10	-4.9; 29.9
Sicilia	7.43	3.63	3.50	3.30	3.71	4.17	2.52	3.71	3.62	-3.10	-10.0; 4.4
Sardegna	2.44	4.66	3.56	5.48	3.98	3.72	3.53	1.35	4.13	-2.40	-12.5; 8.9

*From 2014; Data from Molise, Puglia, and Calabria regions are not available for every year.

Table 7S

Positive predictive value, first screening, with average average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by region, 2011-2019

Positive predictive value (%)											
First screening	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Piemonte	12.23	9.72	9.81	11.85	12.67	11.18	7.34	9.84	6.68	-0.8	-2.0; 0.5
Valle d'Aosta	5.71	2.78	13.89	8.33	2.50	6.25	15.09	5.88	6.67	-5.1	-11.1; 1.3
Liguria	2.29	3.40	4.15	3.29	7.55	4.90	3.65	3.80	5.40	-3.9	-11.8; 4.7
Lombardia	5.07	4.62	5.16	5.17	4.87	4.30	4.60	4.86	4.52	0.1	-1.5; 1.6
Bolzano	7.54	6.97	2.97	7.96	4.04	5.80	3.40	11.30	4.08	0.6	-6.9; 8.6
Trentino	7.71	5.98	7.61	10.04	22.04	16.03	14.49	12.67	14.69	2.0	-4.1; 8.6
Veneto	5.23	5.98	6.05	5.38	5.14	5.62	4.76	5.21	5.70	1.6	0.6; 2.7
Friuli Venezia Giulia	7.34	4.00	5.43	5.24	4.80	4.73	3.73	3.67	4.55	0.2	-2.4; 2.8
Emilia-Romagna	7.89	8.95	10.66	11.22	10.66	7.42	11.76	6.87	8.46	-1.0	-1.9; 0.0
Toscana	3.98	4.52	4.83	4.69	4.17	4.30	3.93	4.13	4.10	1.0	-0.5; 2.5
Umbria	5.72	3.96	2.77	1.76	3.31	3.38	2.02	2.27	1.09	-5.3	-9.6; -0.7
Marche	6.38	2.36	2.40	3.41	2.66	3.84	3.49	3.47	4.35	-1.3	-5.0; 2.7
Lazio	3.31	4.95	2.96	3.84	3.71	4.38	4.59	2.44	2.37	-0.5	-4.3; 3.4
Abruzzo*	--	--	--	6.96	5.66	3.97	5.31	3.88	5.88	-4.8	-17.2; 9.4
Campania	6.23	8.97	10.06	2.88	2.56	2.57	4.91	2.79	3.44	-4.3	-13.2; 5.5
Basilicata*	--	--	--	2.40	4.59	2.58	4.08	2.74	5.08	-1.4	-11.5; 9.8
Sicilia	27.61	4.43	5.17	5.92	5.09	5.52	3.25	4.60	5.18	0.2	-6.1; 7.8
Sardegna	2.67	5.20	3.94	7.76	5.90	5.00	4.42	2.16	4.31	5.9	-8.9; 23.1

*From 2014; Data from Molise, Puglia, and Calabria regions are not available for every year.

Table 8S

Recall rate, subsequent screenings, with average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by region, 2011-2019

Recall rate (%)											
Subsequent screenings	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Piemonte	3.20	3.46	3.43	3.44	3.62	3.79	4.15	4.51	3.95	3.7	1.8; 5.6
Valle d'Aosta	4.43	5.30	4.14	4.23	4.89	4.48	3.47	8.67	3.61	4.4	-5.9; 15.8
Liguria	6.50	5.47	5.39	5.41	5.48	4.33	4.91	4.43	3.75	-5.3	-7.6; -2.9
Lombardia	4.49	4.61	4.54	4.60	4.45	4.65	4.22	4.34	4.29	-0.8	-1.7; 0.1
Bolzano	3.57	3.58	3.57	3.65	4.03	3.91	3.68	2.79	2.83	-2.4	-6.0; 1.3
Trentino	3.36	3.00	3.53	2.62	2.32	2.00	1.76	1.67	1.62	-10.1	-13.0; -7.1
Veneto	4.26	3.79	3.88	3.83	4.31	4.33	4.29	4.43	4.40	1.5	0.0; 3.0
Friuli Venezia Giulia	4.36	5.95	5.15	5.15	5.18	5.92	5.92	4.66	4.15	-0.8	-5.1; 3.7
Emilia-Romagna	3.76	3.96	4.04	4.22	4.39	4.24	4.67	4.07	4.37	1.6	-0.1; 3.2
Toscana	6.29	5.99	5.99	5.48	5.97	5.71	6.06	6.37	6.36	0.5	-1.0; 2.0
Umbria	3.30	3.14	5.58	5.58	5.49	5.48	6.07	5.47	5.64	5.1	-0.4; 10.9
Marche	8.42	8.86	9.74	8.34	7.52	6.87	5.81	6.03	7.06	-4.8	-7.9; -1.5
Lazio	5.02	5.08	5.24	5.87	4.96	5.86	6.40	6.85	6.24	3.7	1.6; 6.0
Abruzzo*	--	--	--	4.68	6.75	6.27	5.37	4.57	4.53	-9.1	-15.9; -1.9
Campania	10.46	5.23	5.80	5.65	3.75	9.15	7.25	9.77	15.04	8.5	-1.7; 19.9
Basilicata*	--	--	--	5.68	3.63	4.16	5.05	4.51	4.44	-2.2	-11.6; 8.2
Sicilia	0.64	9.93	2.19	2.77	2.37	2.67	5.58	3.20	3.31	-6.4	-22.0; 12.0
Sardegna	4.44	6.44	5.32	3.48	4.31	4.95	5.04	3.93	4.85	-0.7	-5.7; 4.5

*From 2014; Data from Molise, Puglia, and Calabria regions are not available for every year.

Table 9S

Detection rate, subsequent screenings, with average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by region, 2011-2019

Detection rate (‰)											
Subsequent screenings	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Piemonte	4.97	5.09	5.12	5.39	5.13	5.00	5.24	4.93	4.62	-4.7	-10.2; 1.2
Valle d'Aosta	5.71	5.28	3.73	5.99	5.24	3.47	5.06	4.20	2.78	3.9	-14.6; 26.7
Liguria	2.64	4.68	3.50	3.87	5.02	2.58	2.86	3.68	2.58	5.1	-6.8; 18.4
Lombardia	4.13	4.08	4.41	4.24	4.45	4.00	4.25	4.52	3.99	-1.2	-3.0; 0.6
Bolzano	3.73	3.86	3.79	3.79	5.00	5.35	4.88	4.70	2.54	-0.6	-12.6; 12.9
Trentino	4.25	5.36	5.87	5.86	8.51	6.55	5.90	5.53	6.11	11.4	-0.7; 25.0
Veneto	4.91	4.93	5.20	5.00	4.97	5.24	5.67	5.27	5.60	-0.7	-3.0; 1.7
Friuli Venezia Giulia	4.48	5.69	5.73	5.62	5.63	5.43	5.72	5.27	5.06	-5.3	-10.1; -0.2
Emilia-Romagna	5.81	5.44	5.66	5.25	5.13	5.36	5.41	5.25	5.24	0.3	-5.6; 6.4
Toscana	4.90	5.04	5.20	4.97	4.73	4.71	5.23	5.20	5.56	-1.2	-3.3; 0.9
Umbria	4.44	3.73	3.40	3.29	3.24	4.29	3.11	2.68	2.33	-12.3	-20.9; -2.8
Marche	3.22	3.37	4.00	4.39	4.17	3.49	3.34	3.44	3.16	4.6	-3.1; 12.9
Lazio	3.05	3.97	4.43	3.60	4.44	4.27	3.85	3.43	3.60	-5.0	-13.1; 3.8
Abruzzo*	--	--	--	0.95	5.73	4.56	4.44	3.89	4.10	-5.4	-18.9; 10.4
Campania	3.22	1.80	2.97	1.94	2.06	4.92	2.31	1.71	2.06	-7.8	-18.5; 4.3
Basilicata*	--	--	--	3.53	2.87	4.28	3.72	3.62	3.04	8.2	-12.4; 33.6
Sicilia	2.91	2.18	1.51	2.84	3.25	2.45	2.67	3.19	2.30	-9.1	-21.2; 4.7
Sardegna	1.97	0.86	0.43	2.31	2.86	4.27	3.86	2.43	2.61	-0.6	-12.0; 12.4

*From 2014; Data from Molise, Puglia, and Calabria regions are not available for every year.

Table 10S

Positive predictive value, subsequent screenings, with average annual percent change (AAPC) and 95% Confidence Intervals (95% CI) by region, 2011-2019

Positive predictive value (%)											
Subsequent screenings	2011	2012	2013	2014	2015	2016	2017	2018	2019	AAPC	95% CI
Piemonte	15.53	14.68	14.93	15.66	14.16	13.21	12.61	10.93	11.69	-4.2	-6.0; -2.4
Valle d'Aosta	12.87	9.96	9.00	14.16	10.71	7.76	14.59	4.85	7.69	-6.3	-15.9; 4.4
Liguria	4.05	8.56	6.49	7.15	9.16	5.97	5.82	8.31	6.88	1.2	-6.2; 9.3
Lombardia	9.19	8.85	9.70	9.22	10.01	8.62	10.08	10.41	9.28	0.9	-1.0; 2.9
Bolzano	10.45	10.78	10.62	10.38	12.41	13.67	13.27	16.84	8.98	3.4	-2.6; 9.7
Trentino	12.64	17.85	16.62	22.34	36.76	32.80	33.49	33.16	37.77	12.9	5.4; 20.9
Veneto	11.51	13.01	13.40	13.05	11.55	12.10	13.23	11.90	12.74	0.0	-1.8; 2.8
Friuli Venezia Giulia	10.26	9.55	11.14	10.92	10.88	9.17	9.68	11.29	12.21	1.2	-1.7; 4.2
Emilia-Romagna	15.45	13.74	14.02	12.44	11.68	12.65	11.59	12.88	12.00	-2.5	-4.5; -0.5
Toscana	7.79	8.41	8.67	9.07	7.93	8.25	8.63	8.17	8.74	0.4	-1.1; 2.0
Umbria	13.43	11.86	6.10	5.90	5.91	7.83	5.12	4.90	4.13	-12.0	-18.1; -5.4
Marche	3.82	3.80	4.11	5.27	5.55	5.08	5.76	5.71	4.49	4.0	-0.4; 8.5
Lazio	6.08	7.81	8.46	6.14	8.95	7.28	6.02	5.01	5.78	-4.1	-9.2; 1.3
Abruzzo*	--	--	--	2.02	8.49	7.28	8.27	8.51	9.05	5.8	-4.5; 17.1
Campania	3.08	3.44	5.12	3.44	5.49	5.37	3.18	1.75	1.37	-10.7	-21.7; 1.8
Basilicata*	--	--	--	6.21	7.92	10.26	7.38	8.02	6.84	0.0	-29.2; 6.1
Sicilia	45.65	2.20	6.90	10.25	13.74	9.16	4.78	9.99	6.95	-13.3	-29.2; 6.1
Sardegna	4.43	1.34	0.80	6.64	6.63	8.61	7.67	6.20	5.39	4.3	-10.2; 21.0

*From 2014; Data from Molise, Puglia, and Calabria regions are not available for every year.