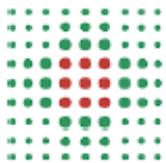


Azienda USL di Modena  
in collaborazione con  
Regione Emilia-Romagna  
Assessorato politiche per la salute



SERVIZIO SANITARIO REGIONALE  
EMILIA-ROMAGNA

**La sorveglianza epidemiologica  
dello screening dei tumori della mammella  
nella Regione Emilia-Romagna**

**Seminario di studio**

**Bologna, 8 marzo 2018**

Sala 20 maggio 2012  
Viale della Fiera 8 – Bologna

***Focus on: valutazione dello  
screening mammografico nella  
fascia di età 70-74 anni  
Fabio Falcini, Lauro Bucchi,  
Alessandra Ravaioli***

**Razionale:**

**70-74enni nella popolazione generale**

- ✓ **delibera 1035/2009: la senologia è un servizio globale**
- ✓ **il confine dei 75 anni**
- ✓ **la ricerca delle disuguaglianze**

# Menu

## ✓ FONTI

- Flusso informativo regionale “screening per la diagnosi precoce dei tumori della mammella
- Registro regionale del cancro della mammella
- Sistema informativo Assistenza Specialistica Ambulatoriale regionale.

## ✓ ENDPOINTS

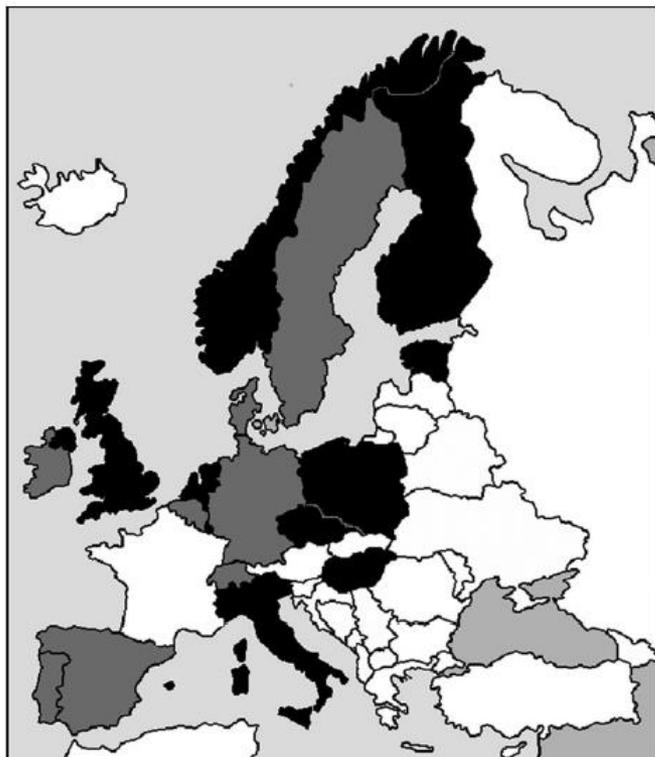
- regolarità inviti
- tassi di screening
- impatto sull'incidenza dei cancri avanzati
- profilo clinico sopra e sotto i 75 anni d'età

# Screening delle donne di 70-74 anni in EU (2007)

Mammographic screening programmes in Europe:  
organization, coverage and participation

Livia Giordano, Lawrence von Karsa, Mariano Tomatis, Ondrej Majek, Chris de Wolf,  
Lesz Lancucki, Solveig Hofvind, Lennarth Nyström, Nereo Segnan, Antonio Ponti and The  
Eunice Working Group (Eunice Working Group members are listed at the end of the paper)

*J Med Screen* 2012; **19** Suppl 1:72–82

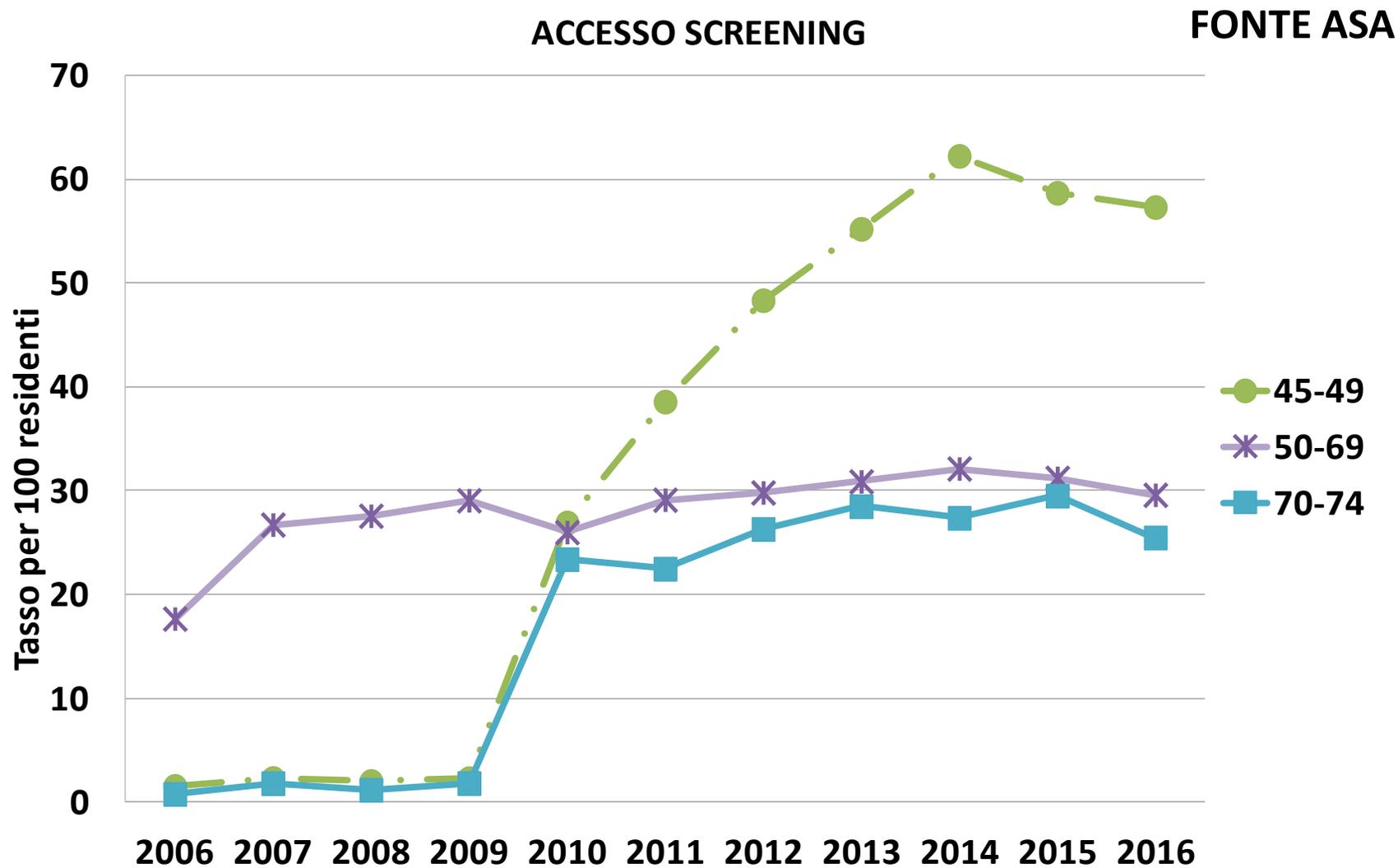


**Figure 1** Countries represented in EUNICE Breast Cancer Screening Monitoring survey by type of data provided. National data (black): Czech Republic, Estonia, Finland, Hungary, Italy, Luxembourg, Norway, Poland, The Netherlands, United Kingdom; Regional data (grey): Belgium (Flanders), Denmark (Copenhagen), Germany (pilot projects), Portugal (North, Centre), Republic of Ireland (East), Spain (Asturias, Baleares, Galicia, Navarra, Pais Vasco, Valencia), Sweden (Södermanland, Stockholm, Västmanland), Switzerland (Fribourg), Regional and national data: Hungary, Italy, United Kingdom

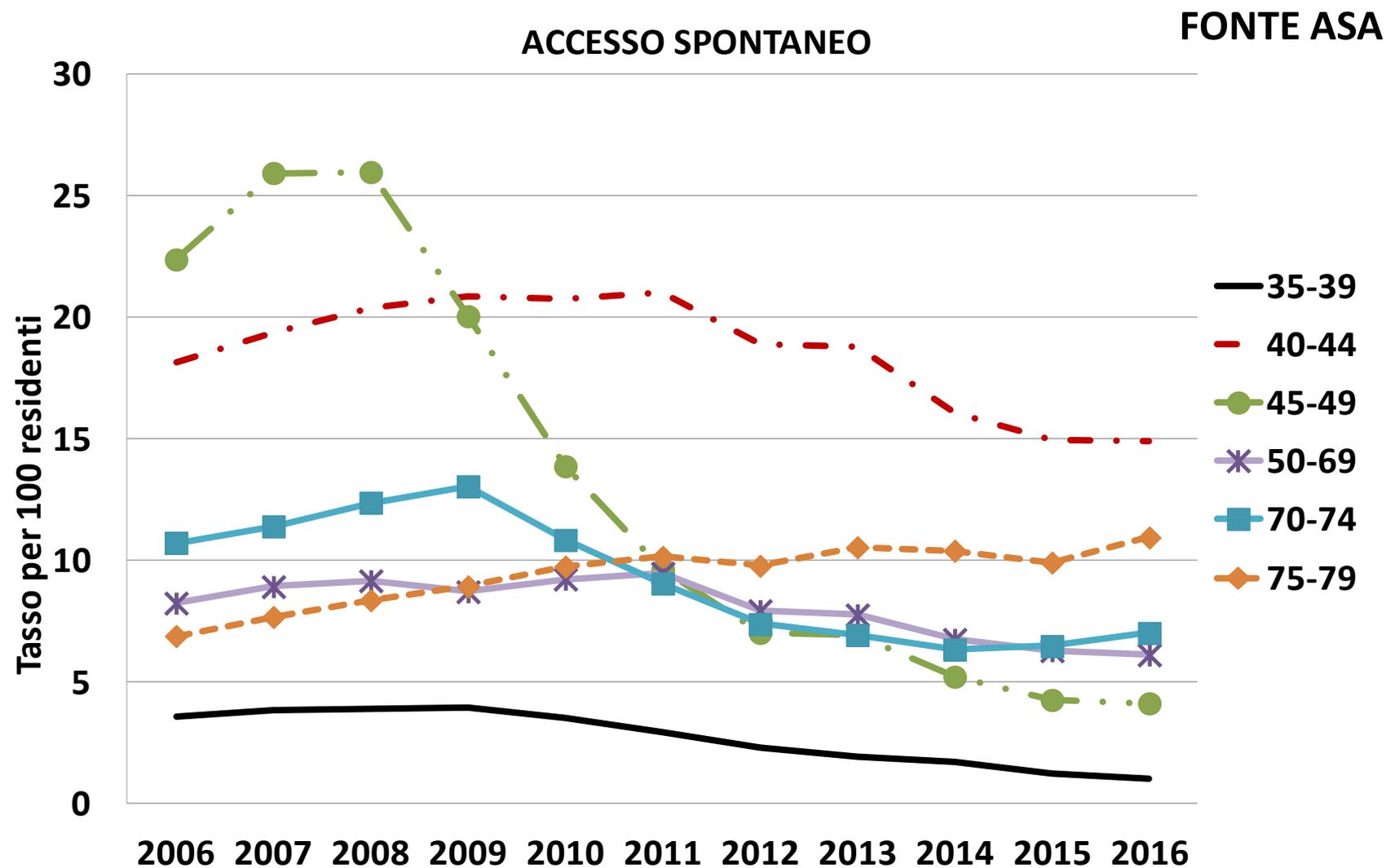
***“ ... 26.9 million women  
predominantly aged 50-69  
years ...” [1]***

***[1] Eccezioni:  
Olanda, 50-75 anni  
Södermanland (Sve), 40-74 anni***

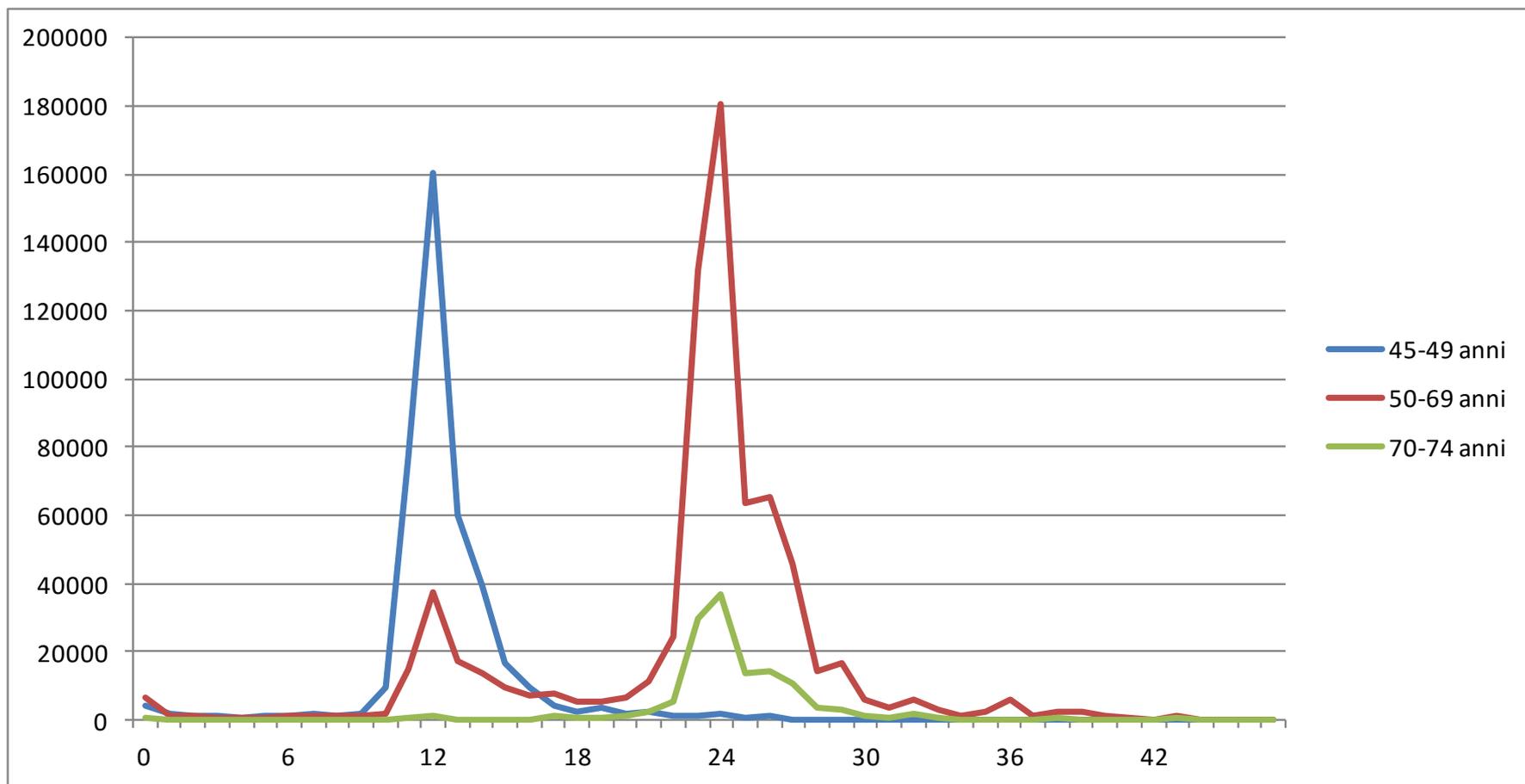
# Tassi di screening



# Tassi di screening



# Intervallo tra inviti (2012-2017)



**Primo invito con MX negativa**

**Età al secondo invito**

**Numero totale di coppie di inviti 1.280.359**

# Intervallo tra inviti (2012-2017)

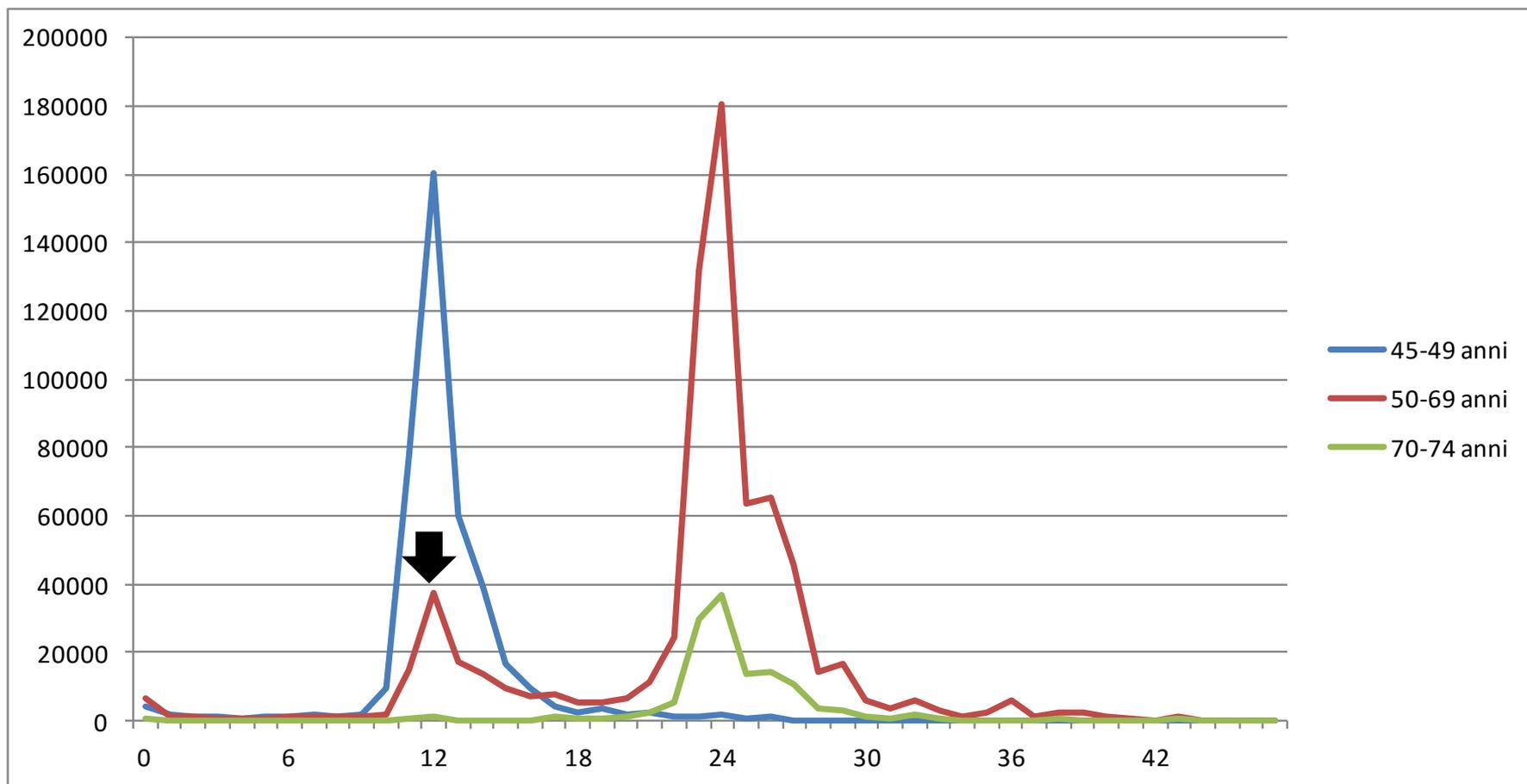
Differenza in mesi tra data invito	Classe di età all'invito					
	45-49 anni		50-69 anni		70-74 anni	
	N	%	N	%	N	%
0-3	8656	2.1	10089	1.4	1334	1.0
4-9	8248	2.0	5455	0.7	593	0.4
10-14	346338	84.1	85211	11.6	2296	1.7
15-21	41170	10.0	53312	7.2	6189	4.6
22-26	5635	1.4	466461	63.4	99956	75.1
27-31	909	0.2	87216	11.9	18321	13.8
32-36	385	0.1	18687	2.5	2760	2.1
>36	338	0.1	9087	1.2	1713	1.3
<b>TOTALE</b>	<b>411679</b>	<b>100</b>	<b>735518</b>	<b>100</b>	<b>133162</b>	<b>100</b>

Primo invito con MX negativa

Età al secondo invito

Numero totale di coppie di inviti **1.280.359**

# Intervallo tra inviti (2012-2017)



**Primo invito con MX negativa**

**Età al secondo invito**

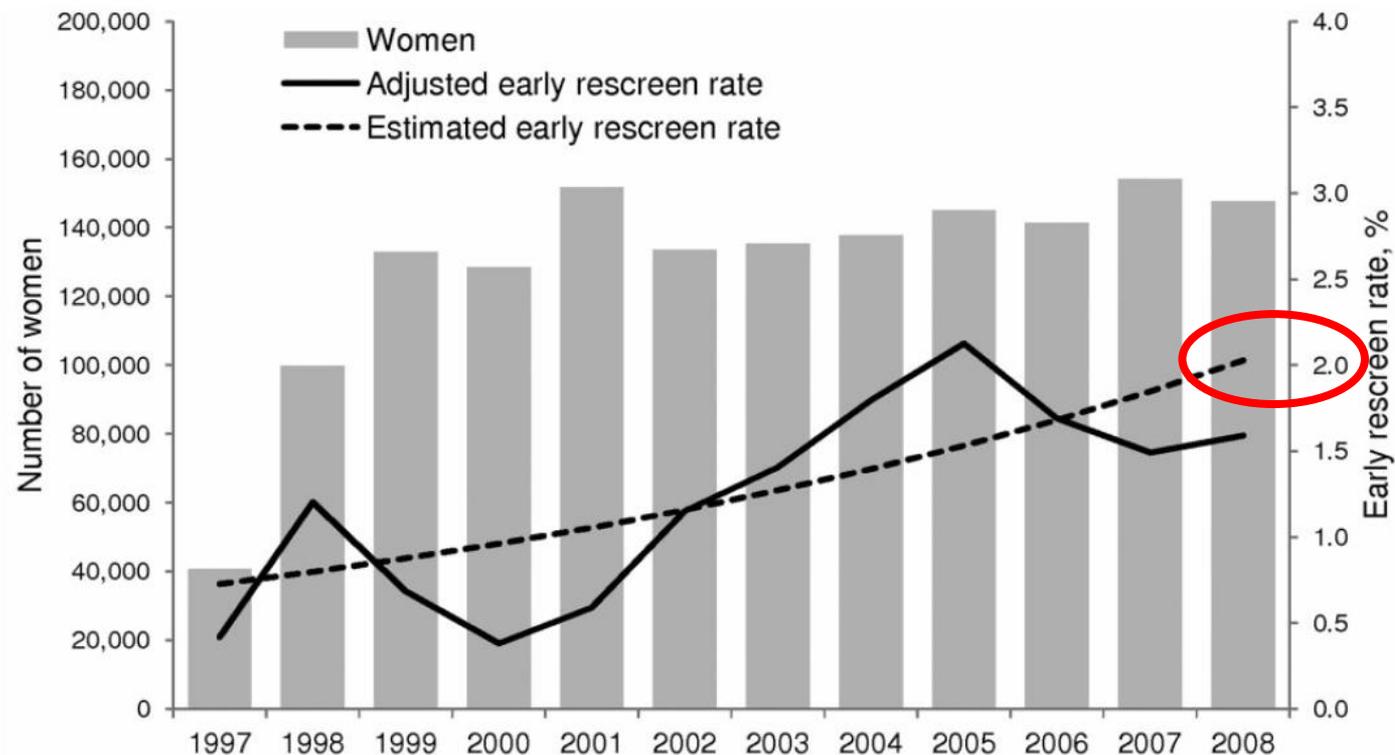
**Numero totale di coppie di inviti 1.280.359**

# Intervallo tra inviti

## Early (short-interval) rescreen in mammography screening

*J Med Screen*  
2017, Vol. 24(1) 54–55

Alessandra Ravaioli<sup>1</sup>, Silvia Mancini<sup>1</sup>, Orietta Giuliani<sup>1</sup>,  
Rosa Vattiato<sup>1</sup>, Fabio Falcini<sup>1</sup>, Stefano Ferretti<sup>2</sup> and  
Lauro Bucchi<sup>1</sup>



Annual percent change, +9.8%; 95% confidence interval, +2.4% to +17.7%

# Intervallo tra inviti

*European Commission Initiative on Breast Cancer (ECIBC)*  
2017 Guidelines

<http://ecibc.jrc.ec.europa.eu/recommendations/details/4>

# Intervallo tra inviti

## Breast Cancer Screening for Women at Average Risk 2015 Guideline Update From the American Cancer Society

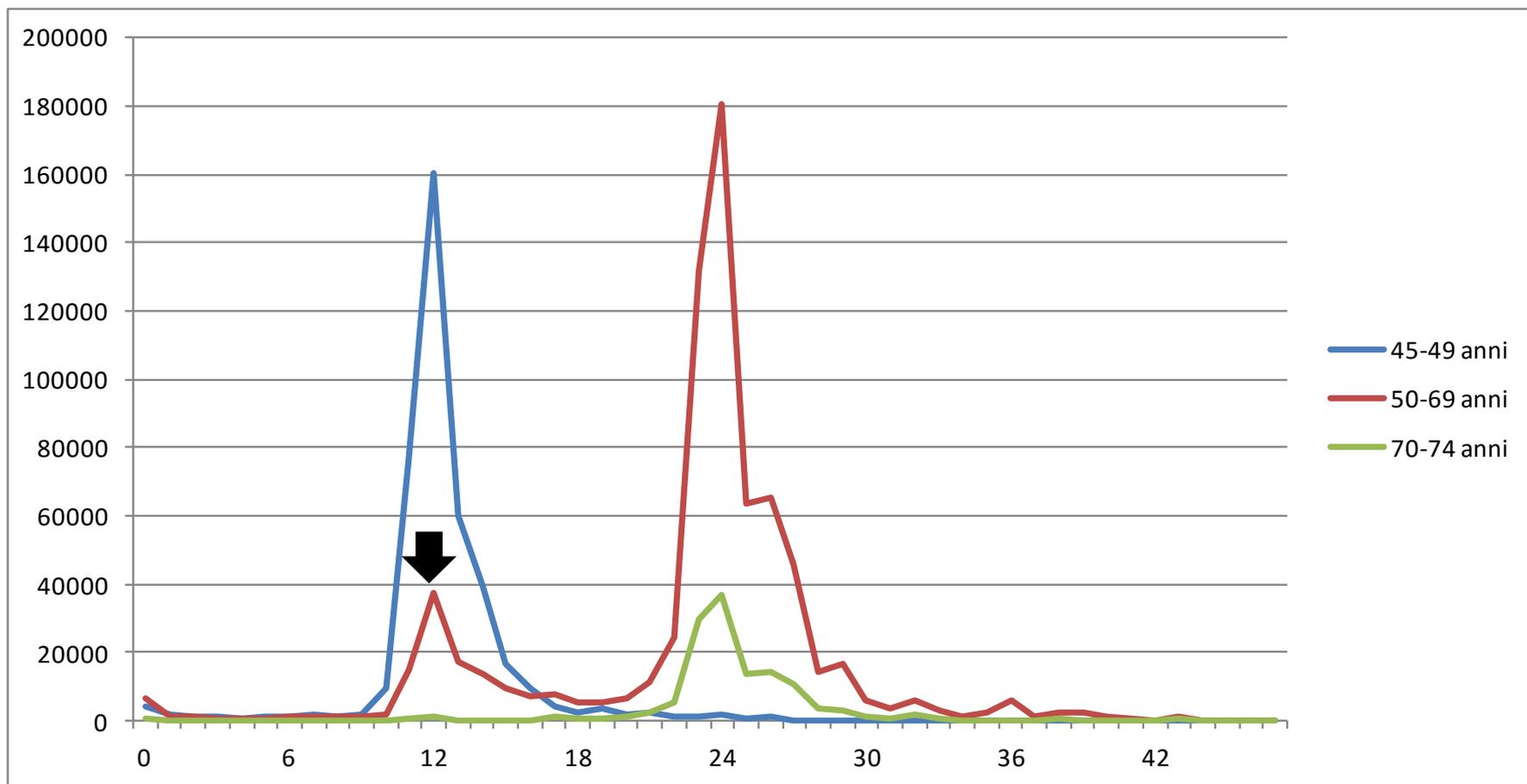
Kevin C. Oeffinger, MD; Elizabeth T. H. Fontham, MPH, DrPH; Ruth Etzioni, PhD; Abbe Herzig, PhD; James S. Michaelson, PhD; Ya-Chen Tina Shih, PhD; Louise C. Walter, MD; Timothy R. Church, PhD; Christopher R. Flowers, MD, MS; Samuel J. LaMonte, MD; Andrew M. D. Wolf, MD; Carol DeSantis, MPH; Joannie Lortet-Tieulent, MSc; Kimberly Andrews; Deana Manassaram-Baptiste, PhD; Debbie Saslow, PhD; Robert A. Smith, PhD; Otis W. Brawley, MD; Richard Wender, MD

JAMA. 2015;314(15):1599-1614.

### Recommendations<sup>a</sup>

1. Women with an average risk of breast cancer should undergo regular screening mammography starting at age 45 years. (*Strong Recommendation*)
  - 1a. Women aged 45 to 54 years should be screened annually. (*Qualified Recommendation*)
  - 1b. Women 55 years and older should transition to biennial screening or have the opportunity to continue screening annually. (*Qualified Recommendation*)

# Intervallo tra inviti (2012-2017)

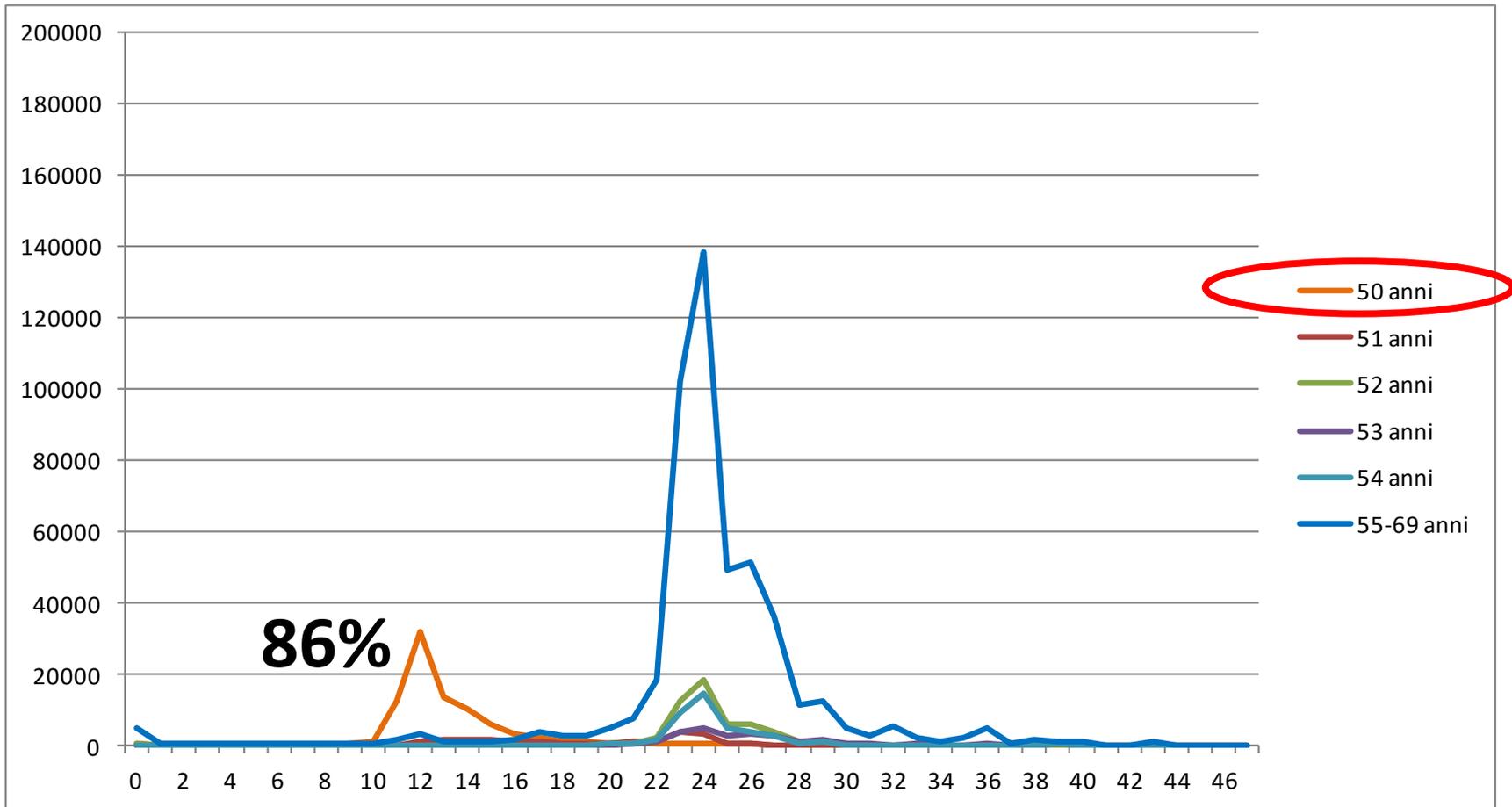


**Primo invito con MX negativa**

**Età al secondo invito**

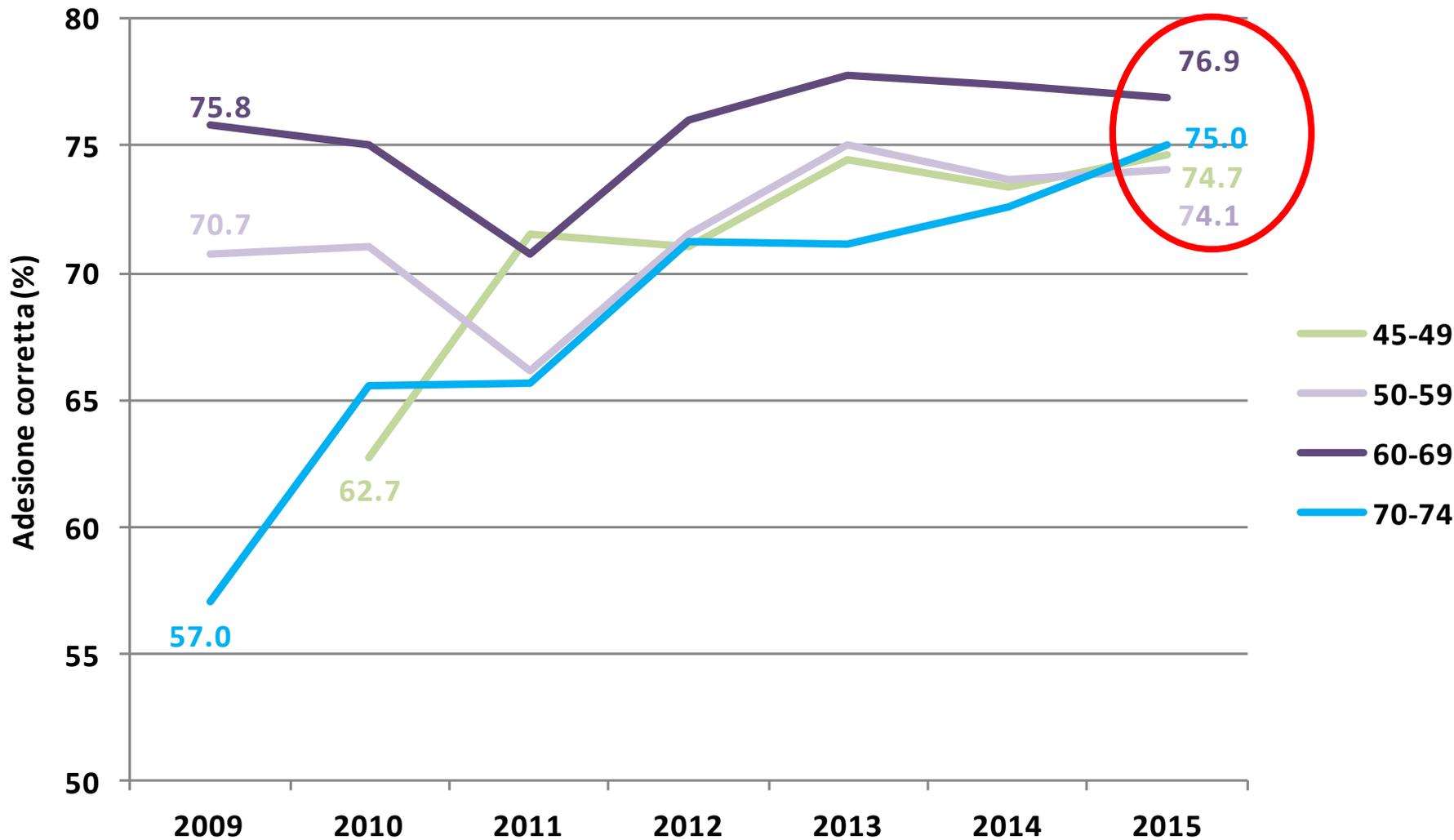
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# Intervallo tra inviti (2012-2017)

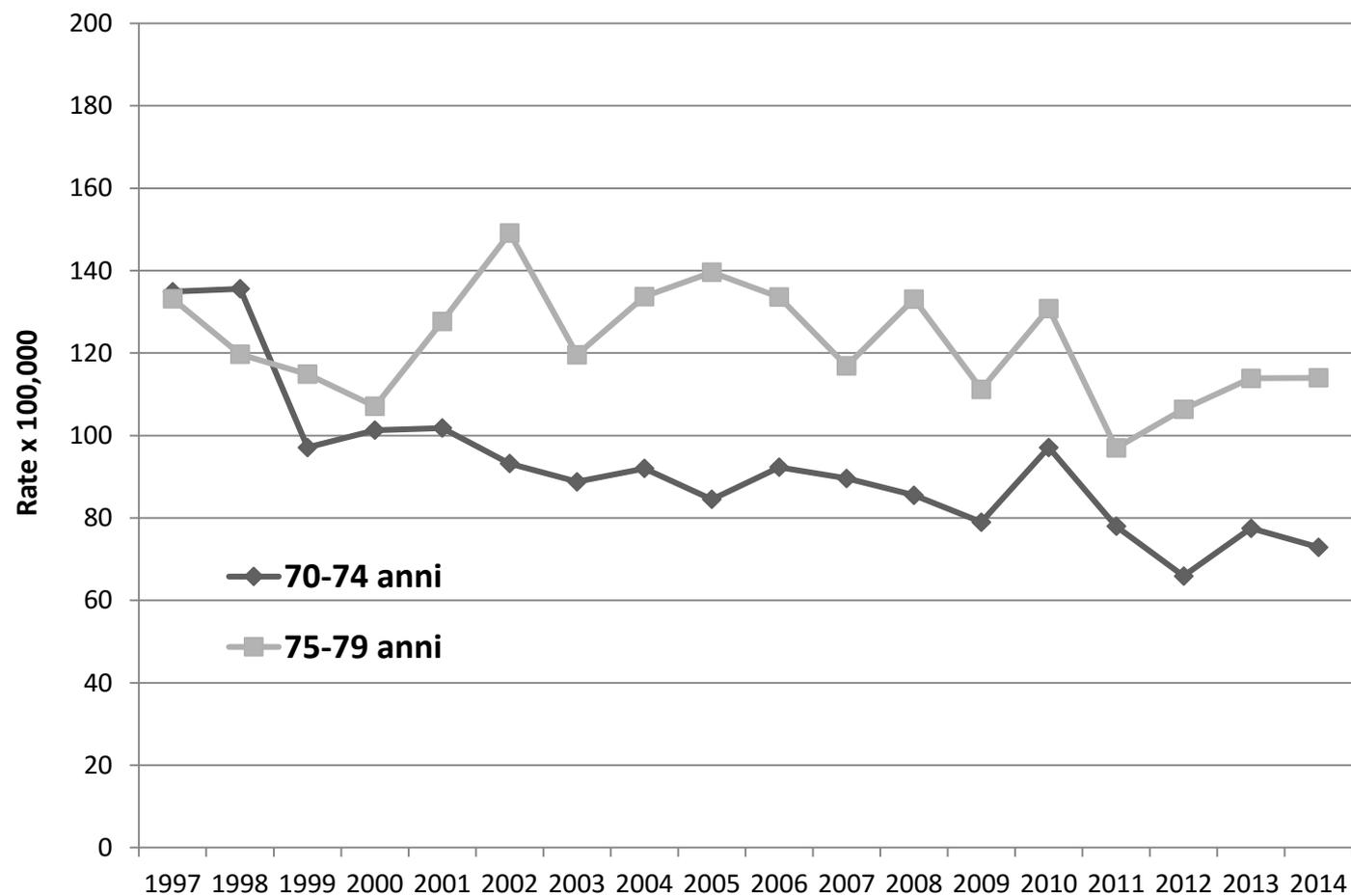


Primo invito con MX negativa  
Età al secondo invito

# Risposta all'invito



# Incidenza dei tumori pT2+



70-74	1997-1999	APC, -15.0%	95% CI, da -28.4 a 0.8
70-74	1999-2014	APC, -2.1%	95% CI, da -3.1 a -1.2
75-79	1997-2014	APC, -0.85	95% CI, da -1.9 a 0.3

# Il confine dei 75 anni

Distribuzione % per pT e pN del cancro della mammella in Emilia-Romagna per età, 2010-2014

Età (anni)	pT1	pT2	pT3-4	pTX	pN0	N1+	pNX
<45	54	20	3	22	43	34	23
45-49	70	15	1	13	58	28	15
50-59	67	17	2	15	57	27	16
60-69	71	16	3	10	64	24	13
70-74	73	16	2	9	64	23	13
≥75	35	27	7	31	31	22	47

Fonte: RER

# Il confine dei 75 anni

## Pathological, biological and clinical characteristics, and surgical management, of elderly women with breast cancer

Annamaria Molino <sup>a,\*</sup>, Monica Giovannini <sup>a</sup>, Alessandra Auriemma <sup>a</sup>, Elena Fiorio <sup>a</sup>, Anna Mercanti <sup>a</sup>, Marta Mandarà <sup>a</sup>, Alessia Caldara <sup>a</sup>, Rocco Micciolo <sup>b</sup>, Michele Pavarana <sup>a</sup>, Gian Luigi Cetto <sup>a</sup>

Critical Reviews in Oncology/Hematology 59 (2006) 226–233

Table 2

Biological characteristics of breast cancer patients

Age group	<45 years Number (%)	45–54 years Number (%)	55–64 years Number (%)	65–74 years Number (%)	≥75years Number (%)	$\chi^2$	<i>p</i>
ER							
Negative	134 (27.46)	165 (19.37)	141 (15.97)	108 (13.14)	64 (12.14)	58.96	<0.001
Positive	354 (72.54)	687 (80.63)	742 (84.03)	714 (86.86)	463 (87.86)		
Ki-67							
0–30	395 (83.51)	744 (89.86)	775 (90.86)	717 (90.30)	463 (92.05)	24.09	<0.001
31–100	78 (16.49)	84 (10.14)	78 (9.14)	77 (9.70)	40 (7.95)		

# Il confine dei 75 anni

Distribuzione % per caratteristiche molecolari del cancro della mammella in Romagna per età, 2010-2012

Età (anni)	ER+	PR+	HER2-	KI67-	Triplo-negativo
<45	81	66	79	48	89
45-49	86	78	82	63	91
50-59	83	61	82	61	90
60-69	88	67	90	64	91
70-74	93	75	95	75	95
<b>≥75</b>	<b>89</b>	<b>71</b>	<b>89</b>	<b>60</b>	<b>93</b>

Fonte: RER

# Il confine dei 75 anni

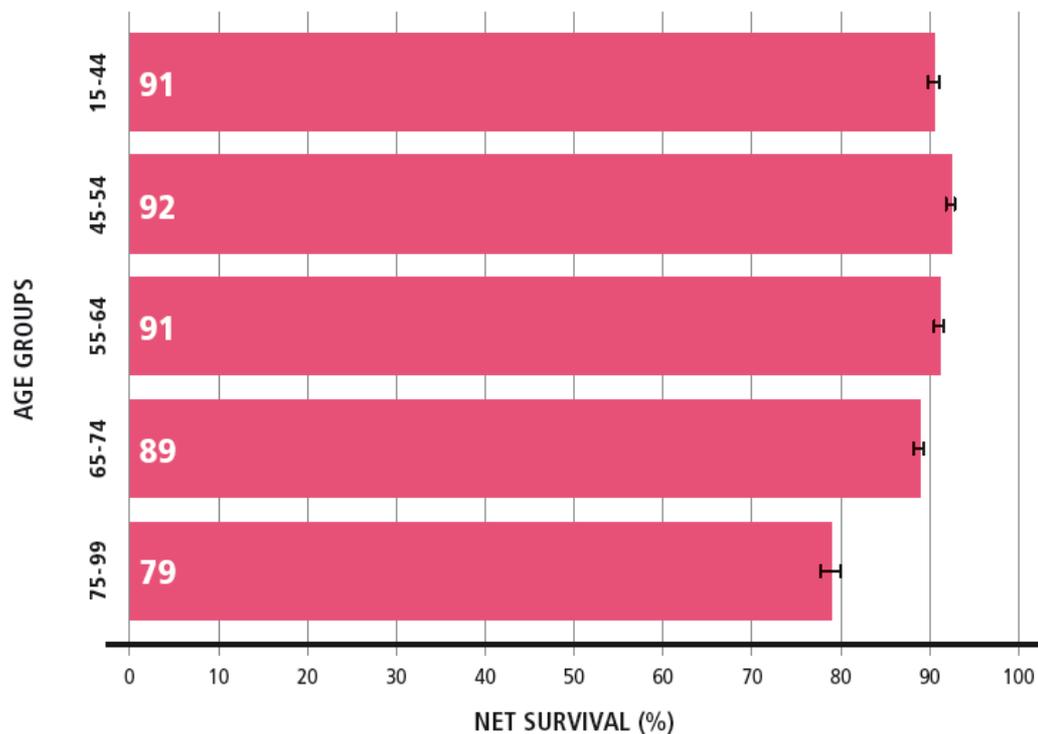
## I TUMORI IN ITALIA RAPPORTO AIRTUM 2016 SOPRAVVIVENZA

*Epidemiol Prev* 2017; 41 (2) suppl1.

### FEMALE BREAST CANCER

#### **B** 5-YEAR NET SURVIVAL (%) BY AGE, 2005-2009

POOL OF 42 CANCER REGISTRIES (114451 OBSERVED CASES)

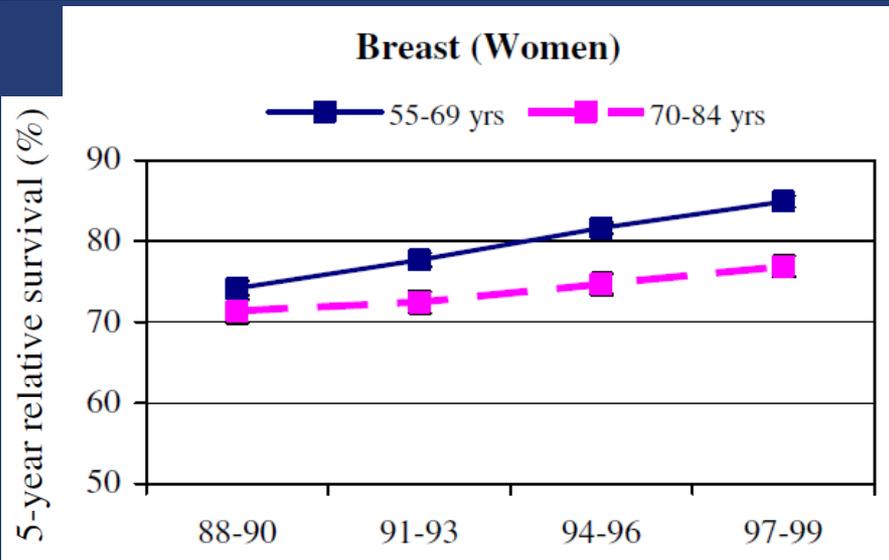


# Età e tendenze della sopravvivenza

## The cancer survival gap between elderly and middle-aged patients in Europe is widening

Alberto Quaglia<sup>a,\*</sup>, Andrea Tavilla<sup>b</sup>, Lorraine Shack<sup>c,d</sup>, Hermann Brenner<sup>e</sup>,  
 Maryska Janssen-Heijnen<sup>f</sup>, Claudia Allemani<sup>g</sup>, Marc Colonna<sup>h</sup>, Enrico Grande<sup>b</sup>,  
 Pascale Grosclaude<sup>i</sup>, Marina Vercelli<sup>a,j</sup>, the EURO CARE Working Group

EUROPEAN JOURNAL OF CANCER 45 (2009) 1006–1016



	55–69 yrs	70–84 yrs
EAPC	+1.42	+0.82
95% CI	+1.16/+1.69	+0.65/+0.98

# Età e tendenze della sopravvivenza

Survival of women with cancers of breast and genital organs in Europe 1999–2007: Results of the EUROCARE-5 study

The EUROCARE-5 Working Group<sup>1</sup>

[European Journal of Cancer \(2015\) 51, 2191–2205](#)

# Il confine dei 75 anni

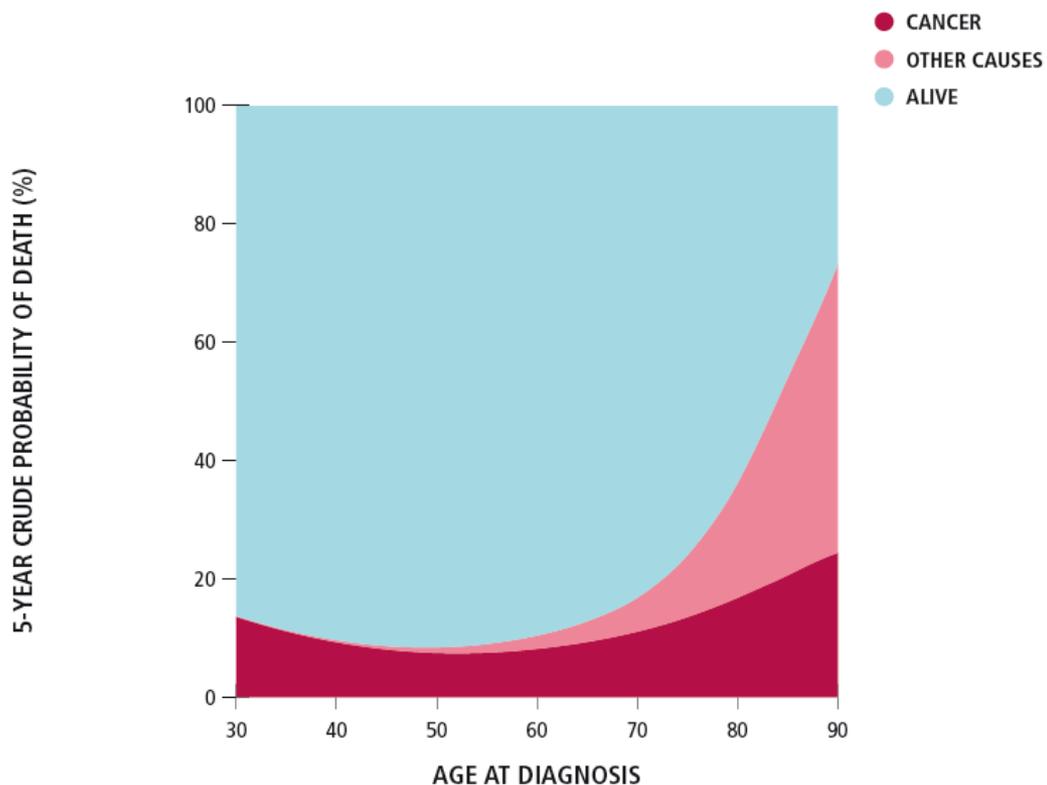
## I TUMORI IN ITALIA RAPPORTO AIRTUM 2016 SOPRAVVIVENZA

*Epidemiol Prev* 2017; 41 (2) suppl1.

## FEMALE BREAST CANCER

### D CRUDE PROBABILITY OF DEATH (%), 2005-2009

POOL OF 42 CANCER REGISTRIES (112280 OBSERVED CASES)



# Il confine dei 75 anni

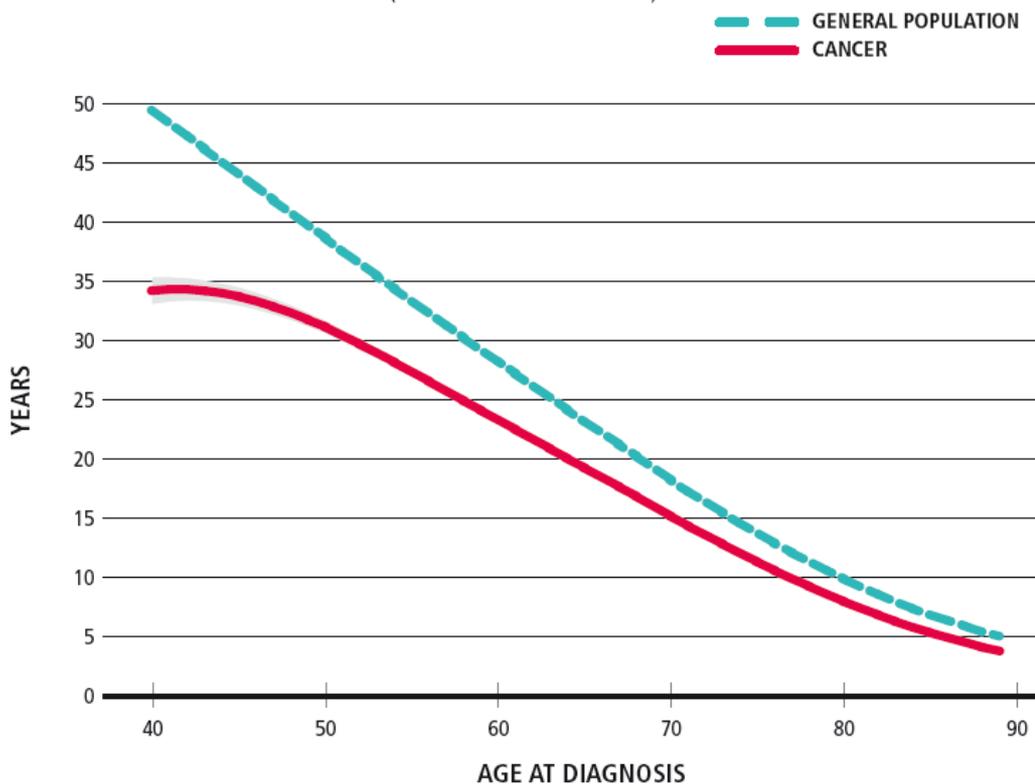
## I TUMORI IN ITALIA RAPPORTO AIRTUM 2016 SOPRAVVIVENZA

*Epidemiol Prev* 2017; 41 (2) suppl1.

### FEMALE BREAST CANCER

#### G LIFE EXPECTANCY

POOL OF 18 CANCER REGISTRIES (127037 OBSERVED CASES)



# Screening oltre i 75 anni?

## *European Commission Initiative on Breast Cancer (ECIBC)* 2017 Guidelines

For asymptomatic women **aged 70 to 74** with an average risk of breast cancer, the ECIBC's Guideline Development Group (GDG) **suggests mammography screening** over no mammography screening, in the context of an organised screening programme (conditional recommendation, moderate certainty in the evidence).

<http://ecibc.jrc.ec.europa.eu/recommendations/details/4>

### **NOTA:**

**lo screening mammografico delle donne di 75 anni o più non è stato preso in considerazione dal GDG**

# Screening oltre i 75 anni?

## Breast-Cancer Screening — Viewpoint of the IARC Working Group

Béatrice Lauby-Secretan, Ph.D., Chiara Scocciati, Ph.D., Dana Loomis, Ph.D., Lamia Benbrahim-Tallaa, Ph.D., Véronique Bouvard, Ph.D., Franca Bianchini, Ph.D., and Kurt Straif, M.P.H., M.D., Ph.D., for the International Agency for Research on Cancer Handbook Working Group

N ENGL J MED 372;24 NEJM.ORG JUNE 11, 2015

Method	Strength of Evidence <sup>‡</sup>
<b>Mammography</b>	
Reduces breast-cancer mortality in women 50–69 yr of age	Sufficient
Reduces breast-cancer mortality in women 70–74 yr of age <sup>‡</sup>	Sufficient
Reduces breast-cancer mortality in women 40–44 yr of age <sup>§</sup>	Limited
Reduces breast-cancer mortality in women 45–49 yr of age <sup>§</sup>	Limited <sup>¶</sup>

<sup>‡</sup> The evidence for a reduction in breast-cancer mortality from mammography screening in women in this age group was considered to be sufficient. However, published data for this age category did not allow for the evaluation of the net benefit.

# Screening oltre i 75 anni?

## Screening for Breast Cancer: U.S. Preventive Services Task Force Recommendation Statement

U.S. Preventive Services Task Force\*

17 November 2009 | [Annals of Internal Medicine](#) | Volume 151 • Number 10

The USPSTF concludes that the current evidence is insufficient to assess the additional benefits and harms of screening mammography in women 75 years or older.

# Screening oltre i 75 anni?

## Breast Cancer Screening for Women at Average Risk 2015 Guideline Update From the American Cancer Society

Kevin C. Oeffinger, MD; Elizabeth T. H. Fontham, MPH, DrPH; Ruth Etzioni, PhD; Abbe Herzig, PhD;  
James S. Michaelson, PhD; Ya-Chen Tina Shih, PhD; Louise C. Walter, MD; Timothy R. Church, PhD;  
Christopher R. Flowers, MD, MS; Samuel J. LaMonte, MD; Andrew M. D. Wolf, MD; Carol DeSantis, MPH;  
Joannie Lortet-Tieulent, MSc; Kimberly Andrews; Deana Manassaram-Baptiste, PhD; Debbie Saslow, PhD;  
Robert A. Smith, PhD; Otis W. Brawley, MD; Richard Wender, MD

*JAMA*. 2015;314(15):1599-1614.

### Recommendation 2

Women should continue screening mammography as long as their overall health is good and they have a life expectancy of 10 years or longer.

# Oltre i 75 anni: che fare?

## Effects of multidisciplinary team working on breast cancer survival: retrospective, comparative, interventional cohort study of 13 722 women

Eileen M Kesson *project manager*<sup>1,4</sup>, Gwen M Allardice *statistician*<sup>1,4</sup>, W David George *school of medicine honorary professor*<sup>2</sup>, Harry J G Burns *chief medical officer for Scotland*<sup>3</sup>, David S Morrison *director*<sup>4</sup>

BMJ 2012;344:e2718

**Conclusion** Introduction of multidisciplinary care was associated with improved survival and reduced variation in survival among hospitals. Further analysis of clinical audit data for multidisciplinary care could identify which aspects of care are most associated with survival benefits.

# La soluzione Breast Units

## The requirements of a specialist Breast Centre

A.R.M. Wilson<sup>a,\*</sup>, L. Marotti<sup>b</sup>, S. Bianchi<sup>c</sup>, L. Biganzoli<sup>d</sup>, S. Claassen<sup>e</sup>, T. Decker<sup>f</sup>,  
A. Frigerio<sup>g</sup>, A. Goldhirsch<sup>h</sup>, E.G. Gustafsson<sup>i</sup>, R.E. Mansel<sup>j</sup>, R. Orecchia<sup>k</sup>, A. Ponti<sup>g</sup>,  
P. Poortmans<sup>l</sup>, P. Regitnig<sup>m</sup>, M. Rosselli Del Turco<sup>n</sup>, E.J.Th. Rutgers<sup>o</sup>,  
C. van Asperen<sup>p</sup>, C.A. Wells<sup>q</sup>, Y. Wengström<sup>i</sup>, L. Cataliotti<sup>r</sup>

*European Journal of Cancer* 49 (2013) 3579–3587

- ✓ Breast Units (o Centri di senologia): **protocolli, responsabilità, appropriatezza, valutazione, trasparenza**
- ✓ Di questo si gioverebbero soprattutto i gruppi di donne più svantaggiati, **come le pazienti anziane** e particolarmente quelle **di 75 anni o più**

# Conclusioni

## Donne di 70-74 anni

- reclutamento rapido
- inviti regolari
- tassi di risposta elevati
- early rescreen marginale
- incidenza dei tumori T2+ decrescente dal 2007

## Donne di 75 anni o più

- forte aumento del pT
- forte aumento dei tumori pNx
- nessun apprezzabile vantaggio molecolare
- nessun evidente riduzione dell'incidenza dei tumori pT2+
- screening mammografico: non raccomandato
- unico approccio possibile al controllo della malattia: migliore controllo clinico multidisciplinare