Comunidad de Madrid

AGERS Asociación Española de Gerencia de Riesgos y Seguros

MUTUALIDAD DE LA ABOGACIA

Foro Riesgos Personales

Mitigación y medida del Riesgo en Cáncer de Mama y de Ovario

Cáncer de mama y cáncer de ovario

Cristina Grávalos

Oficina Regional de Coordinación Oncológica

19 octubre 2016

Introducción

- El cáncer de mama supone un importante problema socio-sanitario
  - por su elevada incidencia y prevalencia
  - por las implicaciones que tiene para las mujeres y sus familias
  - por los recursos humanos y materiales que requiere
- El cáncer de ovario es menos frecuente y se asocia al riesgo de cáncer de mama en mujeres portadoras de mutaciones BRCA

Incidencia y mortalidad de cáncer de mama en España

Tendencia

INCIDENCIA	2012	2015	2030
< 65 años	15.6?5	16.09?	17.098
≥ 65 años	9.590	10.190	13.483
Total	?5.?15	**26.282**	**30.581**
Incremento respecto a ?01?	--	+1.067	+5.366

Tendencia

MORTALIDAD	2012	2015	2030
< 65 años	?.188	?.?70	?.5?7
≥ 65 años	3.887	4.111	5.381
Total	6.075	**6.381**	**7.908**
Incremento respecto a ?01?	--	+ 306	+1.833

http://globocan.iarc.fr/

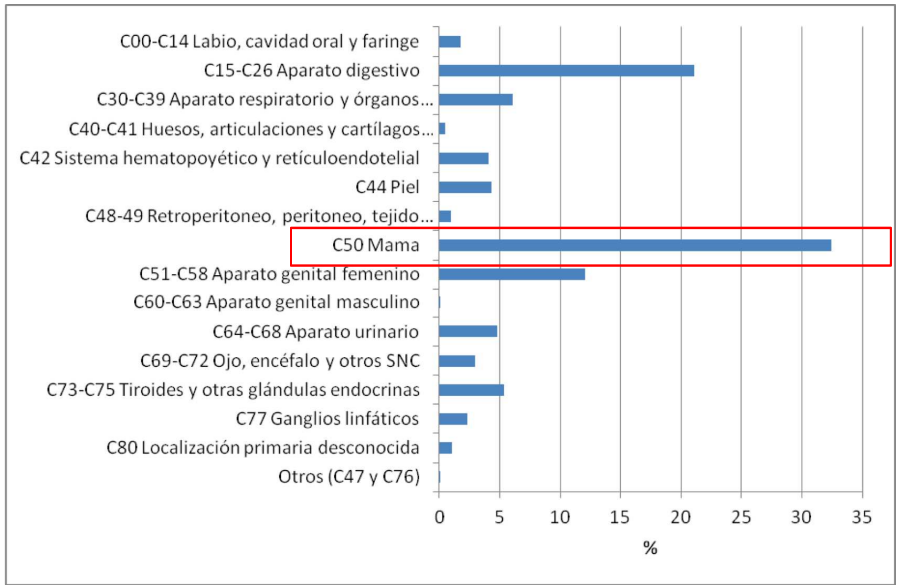
Cáncer de mama en la Comunidad de Madrid

Registro de Tumores de Madrid RTMAD*

Incidencia

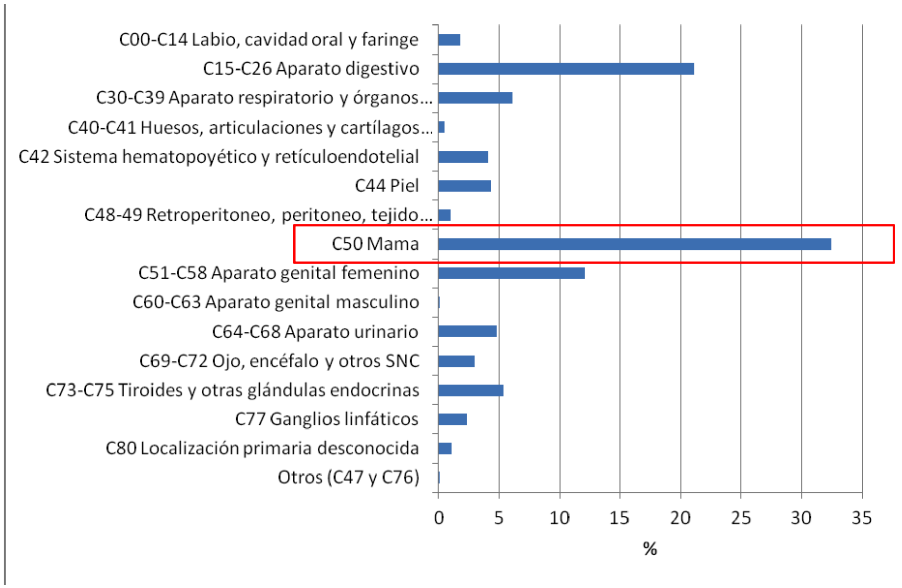
	2012	2013	2014	2015
Mujeres	3.313 (3?,?%)	3.577 (3?,5%)	3.911 (3?,?%)	3.871 (30,?%)
Hombres	64	39	35	?8
Total	3.383 (14,8%)	3.616 (14,7%)	3.946 (14,9%)	3.899 (13,6%)

*RTMAD: Registro de hospitales públicos



?01?

Incidencia en mujeres



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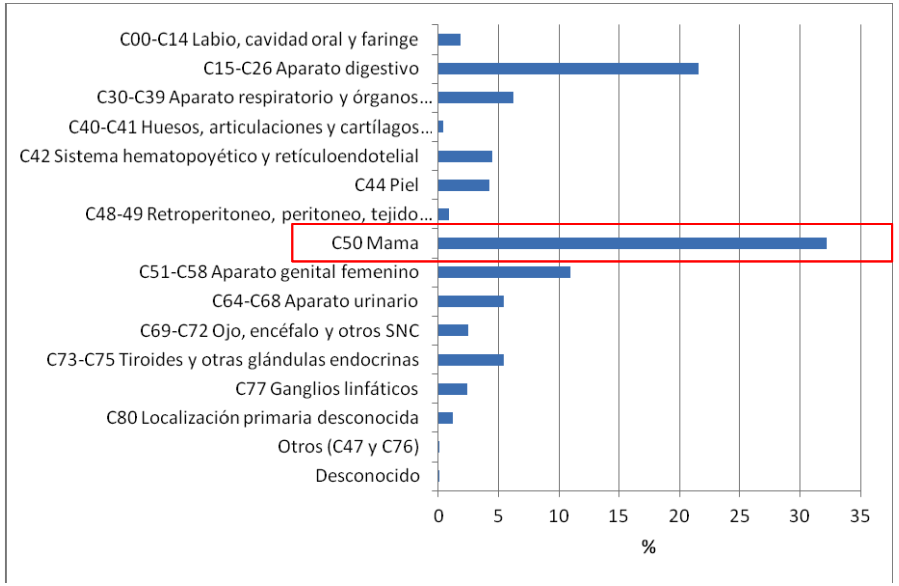

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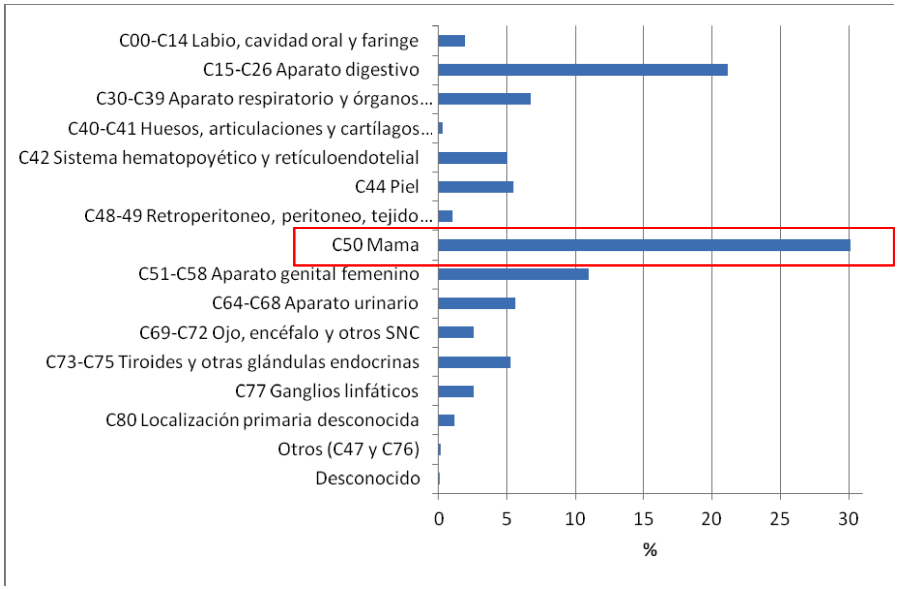

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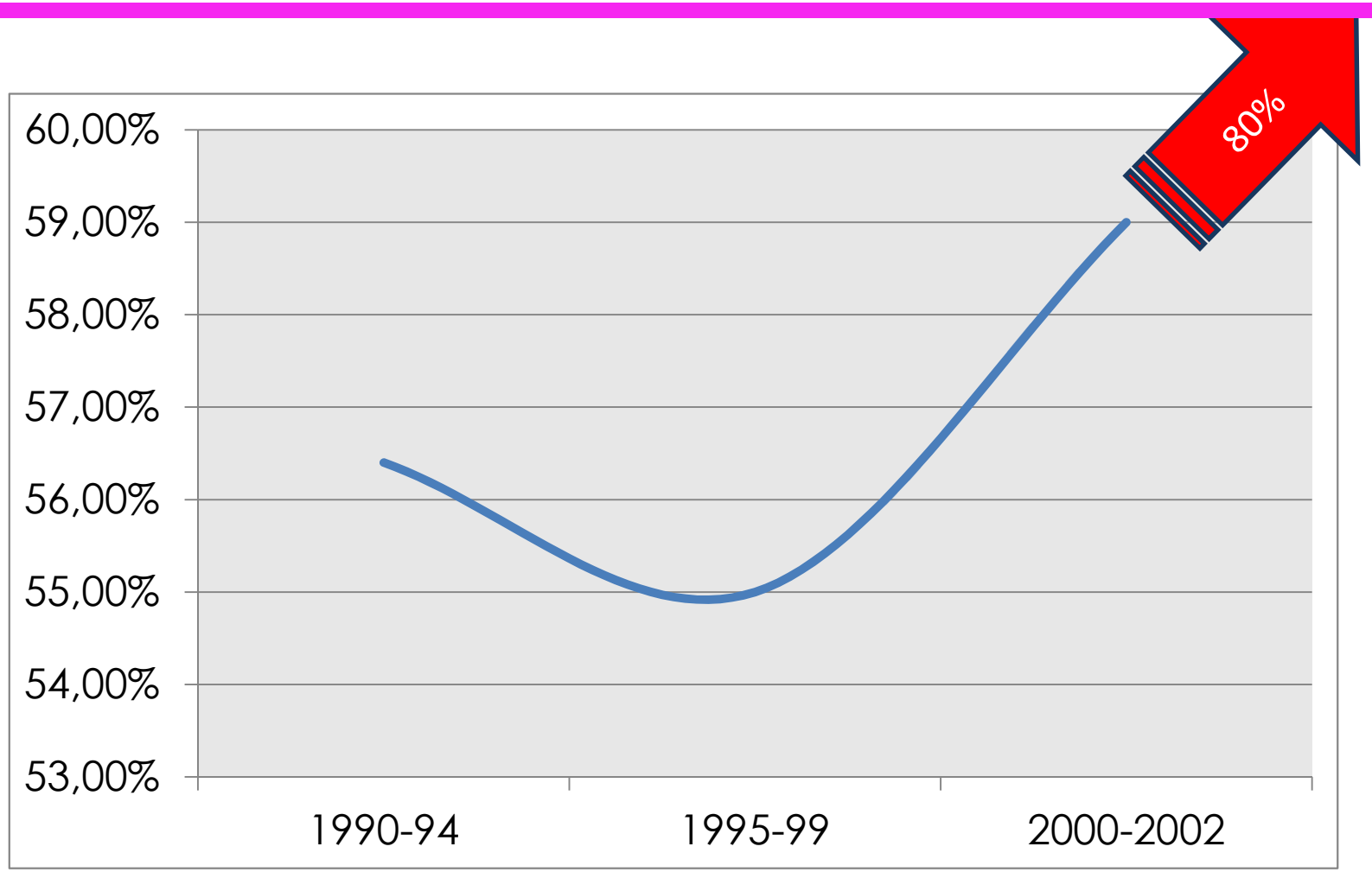
Evolución de la supervivencia del cáncer de mama



EUROCARE, Lancet Oncol ?007

European Journal of Cancer (2015) 51, 2191–2205

Available at www.sciencedirect.com

ScienceDirect

journal homepage: www.ejcancer.com

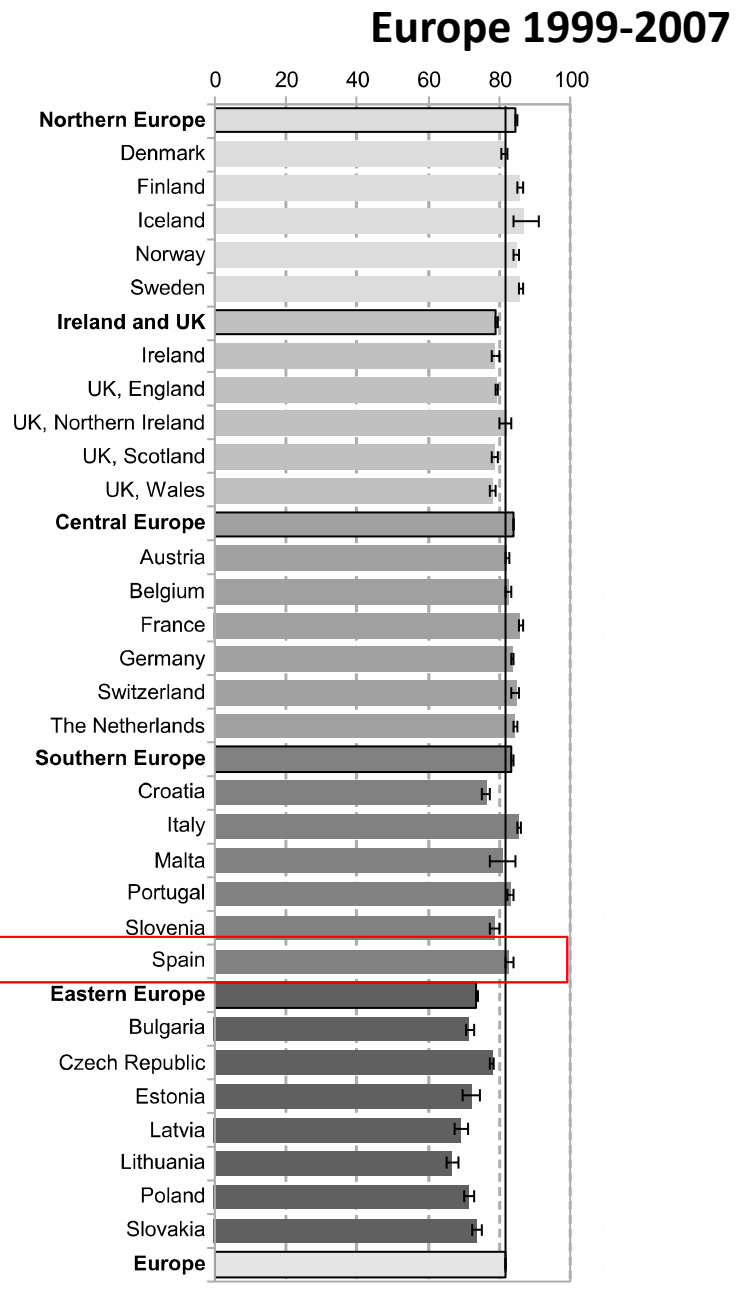
Survival of women with cancers of breast and genital organs in Europe 1999–2007: Results of the EUROCARE-5 study

Milena Sant [a,*], Maria Dolores Chirlaque Lopez [b,c], Roberto Agresti [d], Maria José Sánchez Pérez [e,c], Bernd Holleczek [f], Magdalena Bielska-Lasota [g], Nadya Dimitrova [h], Kaire Innos [i], Alexander Katalinic [j], Hilde Langseth [k], Nerea Larrañaga [l,c], Silvia Rossi [m], Sabine Siesling [n,o], Pamela Minicozzi [a], The EUROCARE-5 Working Group [1]

Age-standardised 1-year, 5-year relative survival, and 5-year relative survival conditional to surviving 1 year, with 95% confidence intervals in parentheses

	Number of cases	1-year			5-year			Conditional		
Northern Europe	**138,062**	**96.4**	**96.2**	**96.5**	**84.7**	**84.4**	**85.1**	**87.9**	**87.6**	**88.3**
Denmark	31,467	94.9	94.6	95.2	81.5	80.7	82.3	85.9	85.1	86.7
Finland	30,757	96.3	96.0	96.7	85.7	85.0	86.5	89.0	88.3	89.8
Iceland	1,380	96.7	95.3	98.2	87.2	83.7	90.9	90.2	86.8	93.7
Norway	22,172	96.4	96.0	96.8	84.7	83.9	85.6	87.9	87.1	88.8
Sweden	52,286	97.3	97.0	97.5	86.0	85.4	86.5	88.4	87.9	88.9
Ireland and UK	**364,027**	**93.4**	**93.3**	**93.6**	**79.2**	**79.0**	**79.4**	**84.7**	**84.5**	**85.0**
Ireland	17,542	93.7	93.2	94.3	79.0	77.8	80.1	84.3	83.1	85.4
UK, England	290,381	93.5	93.4	93.6	79.3	79.0	79.5	84.8	84.6	85.1
UK, Northern Ireland	8,101	94.4	93.7	95.1	81.9	80.4	83.5	86.8	85.3	88.4
UK, Scotland	30,121	93.8	93.4	94.1	78.5	77.7	79.3	83.7	82.9	84.5
UK, Wales	17,882	91.8	91.4	92.3	78.2	77.2	79.2	85.2	84.2	86.2
Central Europe	**318,766**	**95.7**	**95.6**	**95.8**	**83.9**	**83.6**	**84.1**	**87.7**	**87.5**	**87.9**
Austria	37,529	93.6	93.3	93.9	82.1	81.4	82.7	87.7	87.1	88.4
Belgium	43,136	95.7	95.4	96.0	82.7	82.0	83.3	86.4	85.7	87.0
France	29,904	96.6	96.2	96.9	86.1	85.5	86.8	89.2	88.6	89.8
Germany	96,107	95.3	95.1	95.5	83.6	83.2	84.0	87.7	87.3	88.1
Switzerland	12,450	96.8	96.4	97.3	84.6	83.5	85.7	87.3	86.3	88.4
The Netherlands	99,640	96.5	96.3	96.7	84.5	84.1	84.9	87.6	87.2	88.0
Southern Europe	**173,693**	**95.6**	**95.4**	**95.7**	**83.6**	**83.3**	**83.9**	**87.5**	**87.2**	**87.8**
Croatia	17,742	89.8	89.2	90.4	76.3	75.1	77.5	84.9	83.8	86.1
Italy	103,274	96.7	96.5	96.8	85.5	85.1	85.8	88.4	88.1	88.8
Malta	1,806	95.7	94.4	97.1	80.8	77.3	84.4	84.4	81.0	87.9
Portugal	23,927	95.3	94.9	95.7	83.3	82.4	84.2	87.4	86.5	88.2
Slovenia	8,467	93.9	93.2	94.6	78.7	77.2	80.2	83.8	82.4	85.3
Spain	18,477	95.1	94.7	95.6	82.8	81.9	83.6	87.0	86.2	87.8
Eastern Europe	**121,443**	**91.0**	**90.8**	**91.3**	**73.7**	**73.2**	**74.1**	**80.9**	**80.5**	**81.4**
Bulgaria	27,437	91.4	91.0	91.9	71.7	70.6	72.8	78.4	77.3	79.5
Czech Republic	43,810	92.0	91.7	92.3	78.0	77.3	78.7	84.8	84.1	85.5
Estonia	4,853	91.3	90.2	92.4	72.1	69.9	74.4	79.0	76.7	81.3
Latvia	7,488	88.3	87.3	89.2	69.3	67.5	71.2	78.5	76.6	80.5
Lithuania	9,064	87.2	86.3	88.1	66.7	65.2	68.3	76.5	74.9	78.1
Poland	15,264	90.9	90.2	91.6	71.6	70.3	72.9	78.8	77.5	80.1
Slovakia	13,527	91.5	90.8	92.1	73.9	72.6	75.3	80.8	79.5	82.2
Europe	**1,115,991**	**94.8**	**94.7**	**94.9**	**81.8**	**81.6**	**82.0**	**86.3**	**86.1**	**86.5**

Age-standardised 5-year relative survival (%)



Sant M et al. Eur J Cancer 2015; 51, 2191–2205

Principales factores de aumento de la supervivencia

- Diagnóstico precoz
  - Programas de cribado: Mamografía
  - Seguimiento específico en alto riesgo
- Clasificación de los subtipos de cáncer de mama
- Tratamiento neo/adyuvante
  - Quimioterapia
  - Hormonoterapia
  - Terapias dirigidas
  - Radioterapia

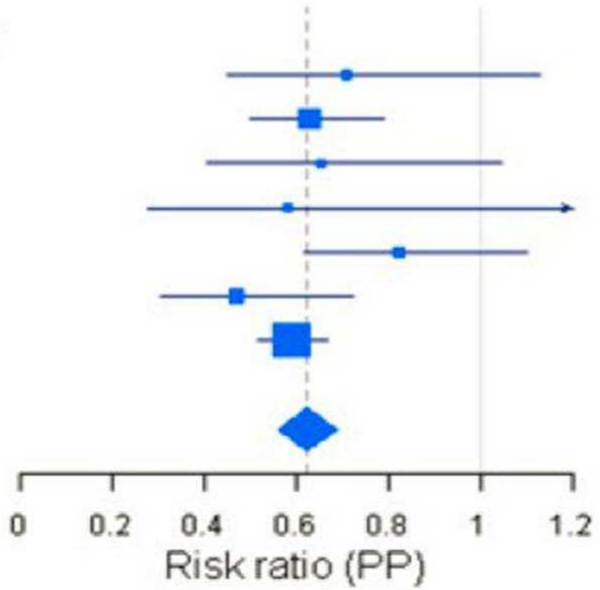
Nickson et al. Cancer Epid 2012; EBCTCG Lancet 2005; Slamon et al. NEJM 2007

EUROSCREEN Incidence-based mortality estimates for breast cancer mortality reduction in women ages 50-69, exposed versus not-exposed to screening

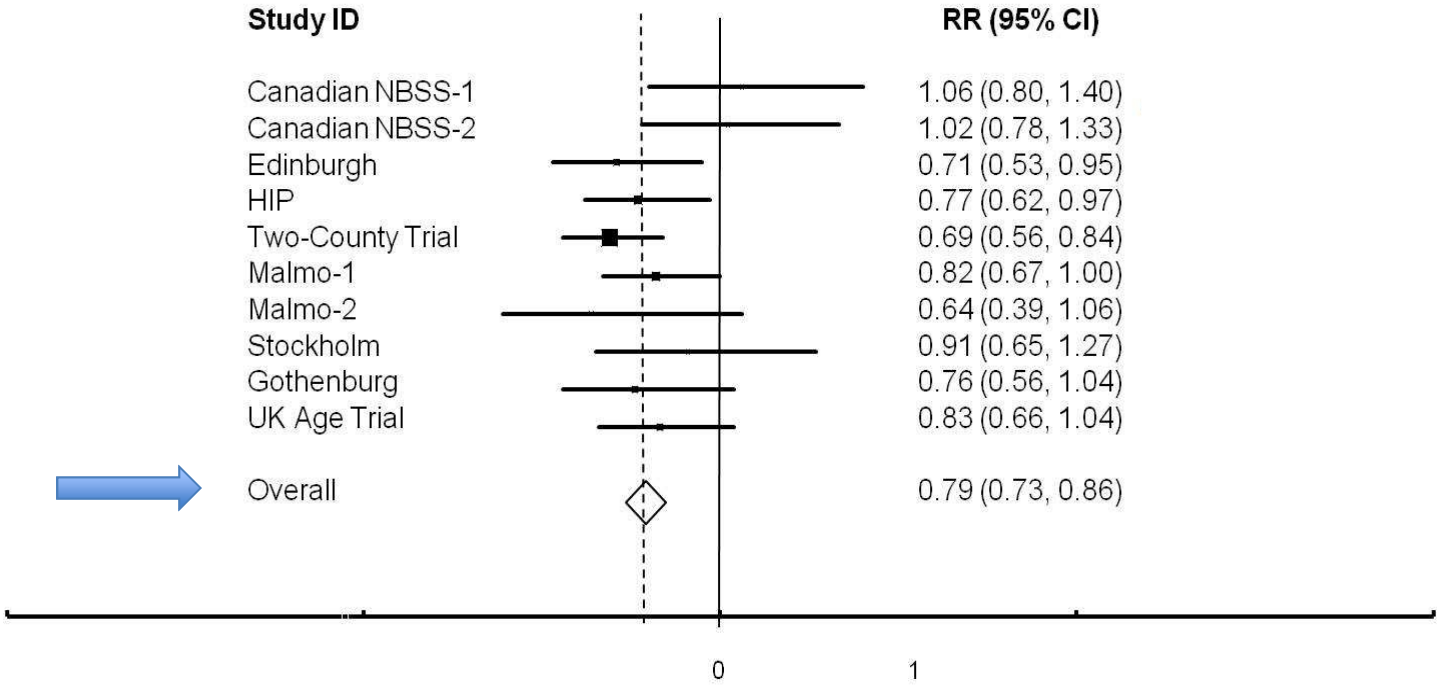
(b)

Study	RR	Lower	Upper
Hakama, (1997)[39]	0.71	0.45	1.13
Olsen, (2005)[32]	0.63	0.5	0.79
Sarkeala, (2008)[36]	0.65	0.41	1.05
Paci, (2002)[42]	0.58	0.28	1.22
Kalager, (2010)[51]	0.82	0.62	1.1
Ascunce, (2007)[53]	0.47	0.31	0.73
SOSSEG, (2006)[59]	0.59	0.52	0.67
Summary (random)	**0.62**	**0.56**	**0.69**

J Med Screen 2012;19 Suppl1:14–25



RCTs of screening mammography: Overall results in terms of breast cancer mortality

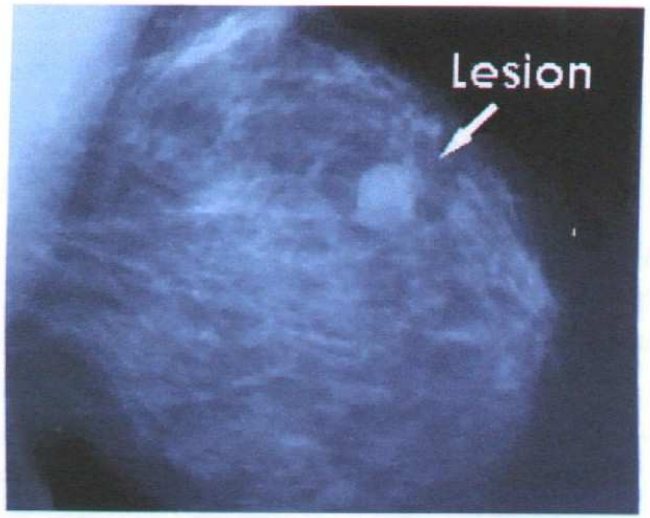


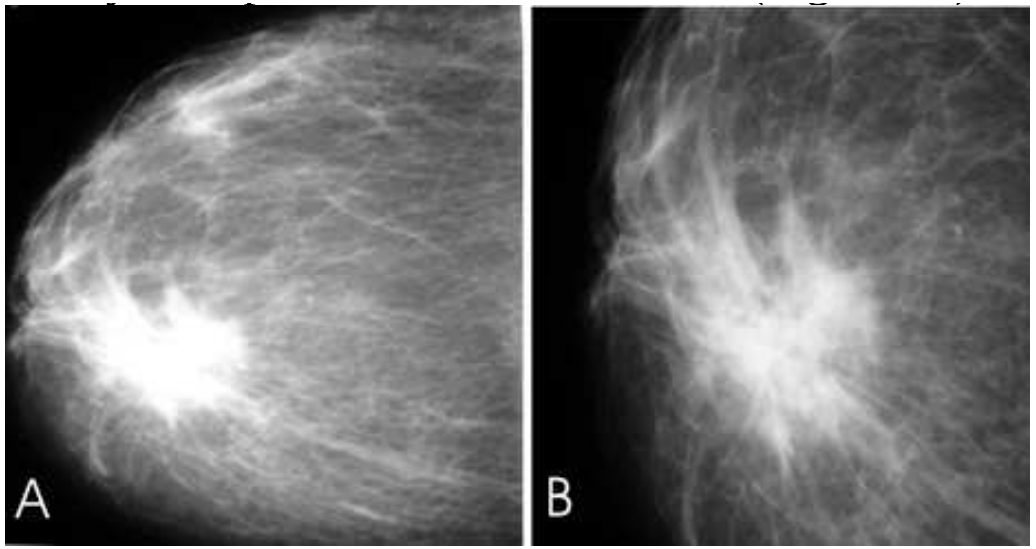
Overall RR = 0.79 (95% CI: 0.73, 0.86)

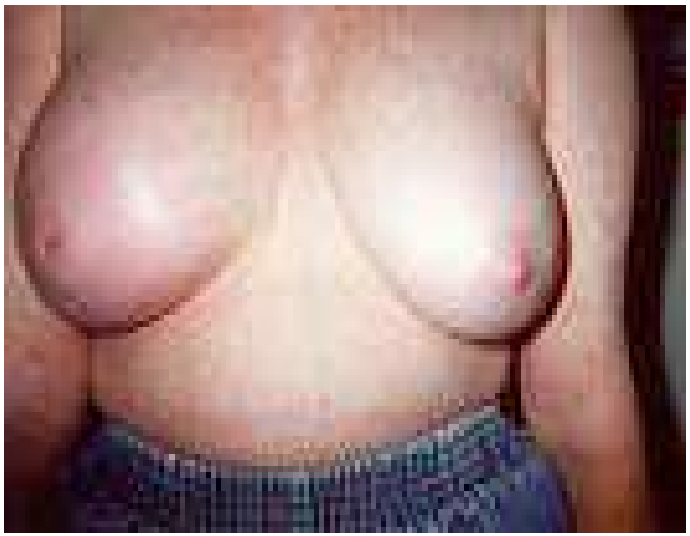
Tabar, et al. Breast J, 2014

Heterogeneity p = 0.3

Detección de lesiones en mamografía







Andreaa et al. Current Health Sciences Journal 2011

Programa de cribado de cáncer de mama en Comunidad de Madrid DEPRECAM

- El diagnóstico precoz permite aplicar tratamientos eficaces, antes de la aparición de síntomas, ofreciendo la posibidad de mejorar el pronóstico

- Población diana: mujeres de 50-69 años (aprox 780.000)

- Técnica: Mamografía digital
- Periodicidad: bienal

- Desde el inicio de DEPRECAM en 1998, se han estudiado más de dos millones de mujeres

Cribado/seguimiento de mujeres de alto riesgo

- Antecedentes de cáncer de mama y/o de ovario
- Mutaciones BRCA 1 o BRCA ?
- Otros síndromes hereditarios asociados a cáncer de mama
- Probabilidad ≥ ?0% de desarrollar un cáncer de mama a lo largo de la vida

- Diferencias con el cribado poblacional
  - Edad de inicio más temprana
  - Mamografía +/- Resonancia mamaria…
  - Unidades específicas

- Valoración de cirugía profiláctica

clinical practice guidelines

Annals of Oncology 27 (Supplement 5): v103–v110, 2016
doi:10.1093/annonc/mdw327

Prevention and screening in *BRCA* mutation carriers and other breast/ovarian hereditary cancer syndromes: ESMO Clinical Practice Guidelines for cancer prevention and screening†

S. Paluch-Shimon[1], F. Cardoso[2], C. Sessa[3], J. Balmana[4], M. J. Cardoso[2], F. Gilbert[5] & E. Senkus[6], on behalf of the ESMO Guidelines Committee*

[1]Division of Oncology and the Dr Pinchas Borenstein Talpiot Medical Leadership Program, Sheba Medical Center, Ramat Gan, Israel; [2]Breast Unit, Champalimaud Clinical Center, Lisbon, Portugal; [3]Oncology Institute of Southern Switzerland, Ospedale San Giovanni, Bellinzona, Switzerland; [4]Vall d'Hebron University Hospital Institut d'Oncologia, Barcelona, Spain; [5]School of Clinical Medicine, University of Cambridge, Cambridge, UK; [6]Department of Oncology and Radiotherapy, Medical University of Gdańsk, Gdańsk, Poland

Table 1. Prevention and screening strategies for specific mutations

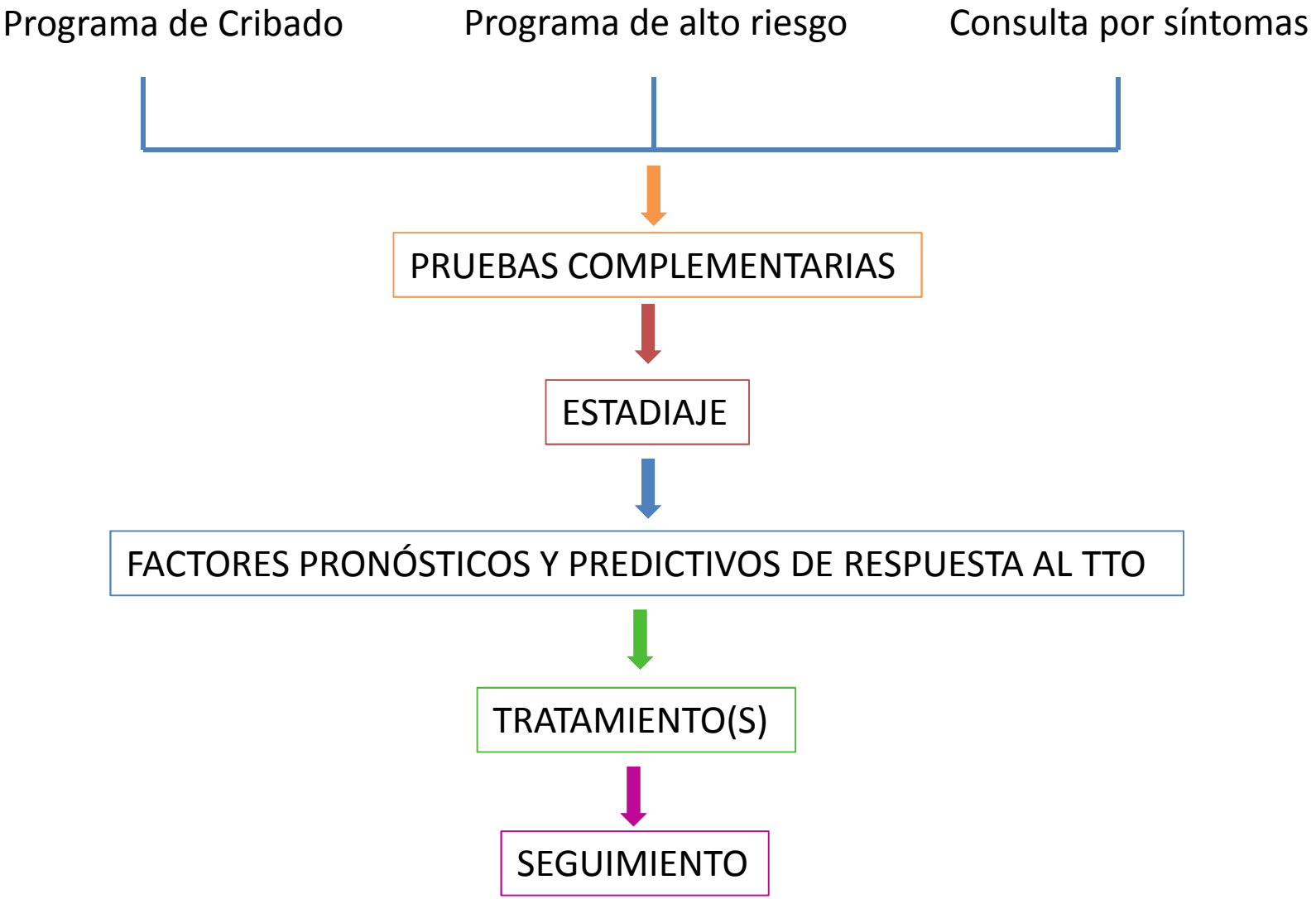
	Screening	Prevention/risk reduction
Li Fraumeni Syndrome - *p53* mutation	1) Clinical breast examination every 6–12 months starting from age 20–25 [V] 2) Annual breast MRI at age 20–75. If MRI is not available, mammography may be considered [V] 3) Colonoscopy every 5 years from the age of 25 or as clinically indicated 4) Annual dermatological and neurological examination 5) Consider annual whole-body MRI and 6-monthly complete blood count	1) Avoid ionising radiation, e.g. CT 2) Consider offering PGD before pregnancies 3) Consider risk-reducing mastectomy
PTEN/Cowden Syndrome	1) Clinical breast examination every 6–12 months starting from age 20–25 [V] 2) Annual breast MRI and/or mammogram at age 30–75 [V] 3) Annual endometrial ultrasound ± biopsies from age 30–35	1) Consider risk-reducing mastectomy 2) Consider risk-reducing hysterectomy 3) Consider offering PGD before pregnancies
ATM mutation	1) Consider annual breast MRI (no evidence regarding the age of onset)	
Lynch Syndrome - *MLH1, MSH2,MSH6, EPCAM* and *PMS2* mutations	1) Annual colonoscopy from age 20–25 2) Annual neurological examination for screening of CNS tumours may be considered 3) Annual endometrial ultrasound ± biopsies from age 30–35 may be considered	1) Consider risk-reducing hysterectomy and RRSO after completion of childbearing
RAD51 mutation		1) Consider RRSO after the age of 45
BRIP1 mutation		1) Consider RRSO after the age of 45
PALB2 mutation	1) Clinical breast examination every 6–12 months starting from age 20–25 [V] 2) Annual breast MRI from age 20–29 3) Annual breast MRI and/or mammogram at age 30–75 [V]	1) Consider risk-reducing mastectomy
CHEK2 mutation	1) Clinical breast examination every 6–12 months starting from age 20–25 [V] 2) Annual breast MRI from age 20–29 3) Annual breast MRI and/or mammogram at age 30–75 [V]	
STK11 mutation (Peutz–Jeghers Syndrome)	1) Clinical breast examination every 6–12 months starting from age 20–25 [V] 2) Annual breast MRI from age 20–29 3) Annual breast MRI and/or mammogram at age 30–75 [V] 4) Upper endoscopy and colonoscopy every 2–3 years from late teens 5) Screening for pancreatic cancer with EUS or MRI from the age of 30 6) Annual testicular examination from childhood 7) Routine annual gynaecological surveillance 8) Counselling to reduce lung cancer risk	1) Consider risk-reducing mastectomy
CDH1 mutation	1) Clinical breast examination every 6–12 months starting from age 20–25 [V] 2) Annual breast MRI from age 20–29 3) Annual breast MRI and/or mammogram at age 30–75 [V]	1) Consider risk-reducing mastectomy

MRI, magnetic resonance imaging; CT, computed tomography; PGD, pre-implantation genetic diagnosis; CNS, central nervous system; RRSO, risk-reducing salopingo-oophorectomy; EUS, endoscopic ultrasound.

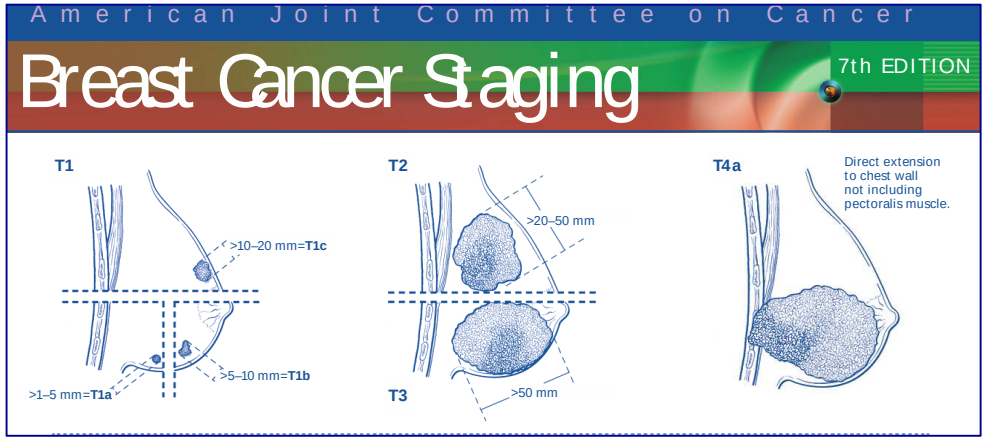
Table 2. Summary of recommendations

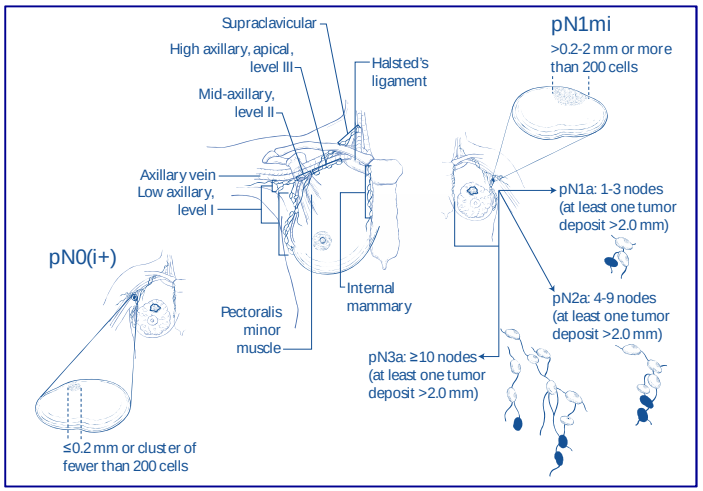
Recommendations	LOE, GOR
Initial counselling and follow-up of *BRCA* mutation carriers	
Follow-up counselling outlining options for screening for early detection, risk-reducing measures and issues pertaining to fertility in women who have not completed their family is fundamental	V, B
Discussion with individuals should address issues of quality of life and the psychosocial impact of risk-reducing interventions	V, B
For individuals above the age of 25 years from a family known to harbour a *BRCA1/2* mutation, until mutation status has been assessed or in women declining genetic testing or risk-reduction measures, screening recommendations as for known mutation carriers should be followed	V, B
If available, carriers should be encouraged to participate in dedicated high-risk follow-up clinics that specifically focus on follow-up and screening of individuals with a known hereditary cancer syndrome	V, B
Breast cancer risk reduction	
Lifestyle modifications	
Breastfeeding should be encouraged	IV, B
Regular exercise, maintaining healthy body weight and limiting alcohol consumption should be encouraged and HRT should be avoided	V, B
Screening	
Clinical breast examination every 6–12 months is recommended from the age of 25 or 10 years before the youngest breast cancer diagnosis in the family, whichever is earlier	V, B
All carriers should be encouraged to be 'breast-aware' and to seek immediate medical attention if they perceive any changes in their breast or lumps in the axilla	V, B
Annual screening MRI should be commenced from the age of 25 with the addition of annual mammography from the age of 30	II, A
If MRI screening is not available, annual mammography should be utilised from age 30	III, B
Breast ultrasonography can be considered if MRI is unavailable and may also be used as an adjunct to mammography	IV, B
Risk-reducing agents	
Tamoxifen as primary prevention may be considered, although the level of evidence is weak	IV, C
Risk-reducing surgery	
Bilateral RRM is the most effective method for reducing breast cancer risk among *BRCA*1/2 mutation carriers	III, B
SSM and NSM are accepted alternatives to total mastectomy	III, C
Immediate breast reconstruction should be offered	V, C
CRRM among patients with a previous breast cancer diagnosis can be considered	III, B
Ovarian cancer risk reduction	
Lifestyle modifications/exposures	
The use of the OCP may be considered as a risk-reducing measure for ovarian cancer	II, C
Screening	
Before RRSO, 6-monthly, trans-vaginal ultrasound and measures of serum Ca125 may be considered from the age of 30; however, the limited value of these tools as an effective screening measure should be communicated to individuals	V, C
Risk-reducing surgery	
The most effective measure for reducing the risk of ovarian cancer is RRSO (combined removal of ovaries and the fallopian tubes)	I, A
RRSO should be carried out at age 35–40	II, B
Risk-reducing salpingectomy alone is not recommended, outside the setting of a clinical trial	V, C
Screening recommendations following risk-reducing surgery	
There is no currently recommended routine surveillance schedule following RRS	V, C
Reproductive considerations in *BRCA* mutation carriers	
BRCA1/2 carriers can be reassured that there is no convincing evidence that mutation carriers have reduced ovarian reserve or fertility	IV, C
All women harbouring a *BRCA1/2* mutation should be encouraged to complete childbearing before planned RRSO	V, C
For women who wish to undergo RRSO and have not yet completed childbearing fertility preservation options should be discussed	V, C
BRCA1/2 mutation carriers (male and female) planning to conceive should be made aware of the options of prenatal diagnosis (via chorio-villous or amniotic fluid sampling in week 11–20 of gestation) and PGD	V, C
Women harbouring a *BRCA*1/2 mutation who have been diagnosed with a malignancy should be counselled about options for fertility preservation before the commencement of oncology treatment	V, B
Appropriate counselling should be available and vaginal moisturisers and lubricants should be prescribed to all women following RRS	V, C
Short-term use of HRT to alleviate menopausal symptoms following RRSO is safe among healthy *BRCA1/2* mutation carriers	III, B
No safety data are available about the use of HRT among *BRCA1/2* carriers with a previous diagnosis of breast cancer. The relationship between hormonal influences and the development of different breast cancer subtypes, including triple negative breast cancers, has not been fully elucidated, thus HRT in the setting of a past breast cancer diagnosis should be strongly discouraged—irrespective of endocrine status of the initial tumour	V, B

PROCESO DE DIAGNÓSTICO Y TRATAMIENTO DEL CÁNCER DE MAMA



Estadiaje: Clasificación TNM





ANATOMIC STAGE/ PROGNOSTIC GROUPS			
Stage0	Tis	N0	M0
StageIA	T1*	N0	M0
StageIB	T0	N1mi	M0
	T1*	N1mi	M0
StageIIA	T0	N1**	M0
	T1*	N1**	M0
	T2	N0	M0
StageIIB	T2	N1	M0
	T3	N0	M0
StageIIIA	T0	N2	M0
	T1*	N2	M0
	T2	N2	M0
	T3	N1	M0
	T3	N2	M0
StageIIIB	T4	N0	M0
	T4	N1	M0
	T4	N2	M0
StageIIIC	Any T	N3	M0
StageIV	Any T	Any N	M1

Factores pronósticos y predictivos

Factores pronósticos

¿Que tratamiento es necesario?

Factores predictivos

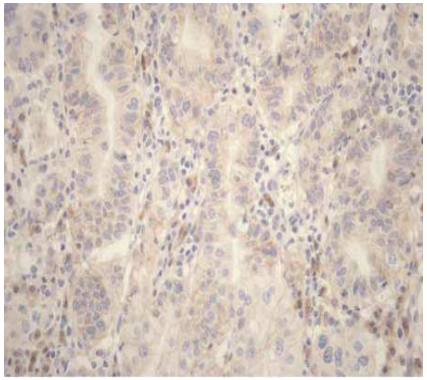
¿Qué tratamiento es el mejor?

Factores pronósticos y predictivos (II)

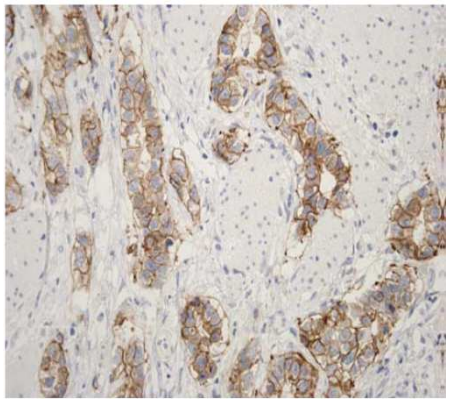
- Tumor
  - TNM
  - Grado
  - Tipo histológico
    - Ca ductal
    - Ca lobulillar
  - Estado HER2*
  - RE* y RP*
  - Perfil genómico
- Paciente
  - Edad
  - Estado menopáusico

* Son factores pronósticos y predictivos al mismo tiempo

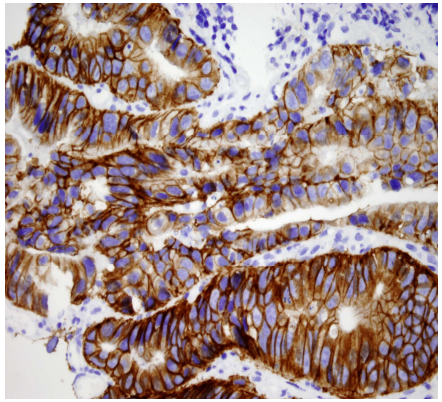
Positividad de HER2



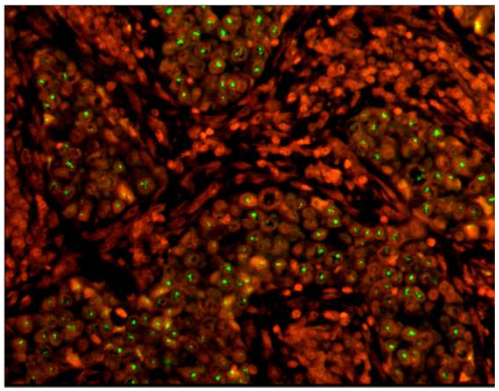
IHQ Tinción débil 1+

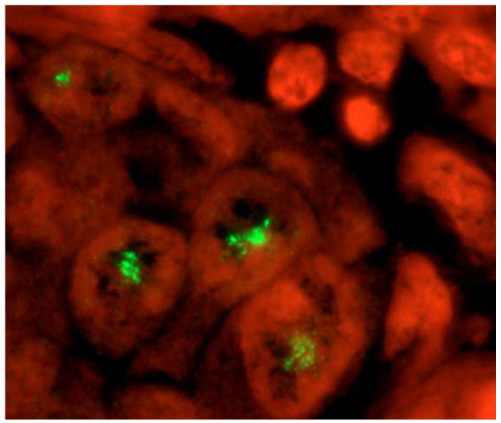


Tinción moderada 2+



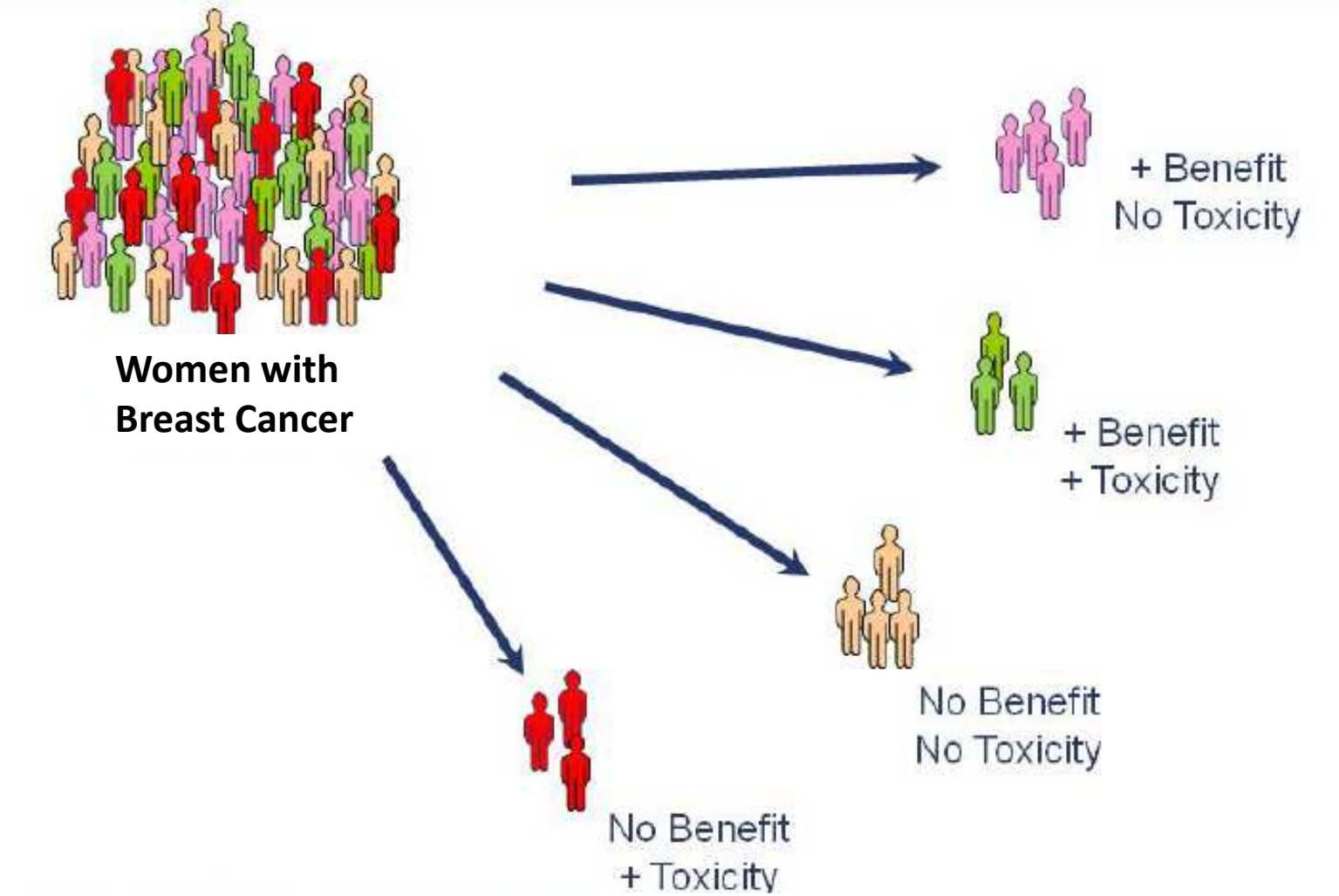
Tinción intensa 3+





FISH amplification of HER2

¿Podemos identificar pacientes de bajo riesgo que no se beneficien de quimioterapia?



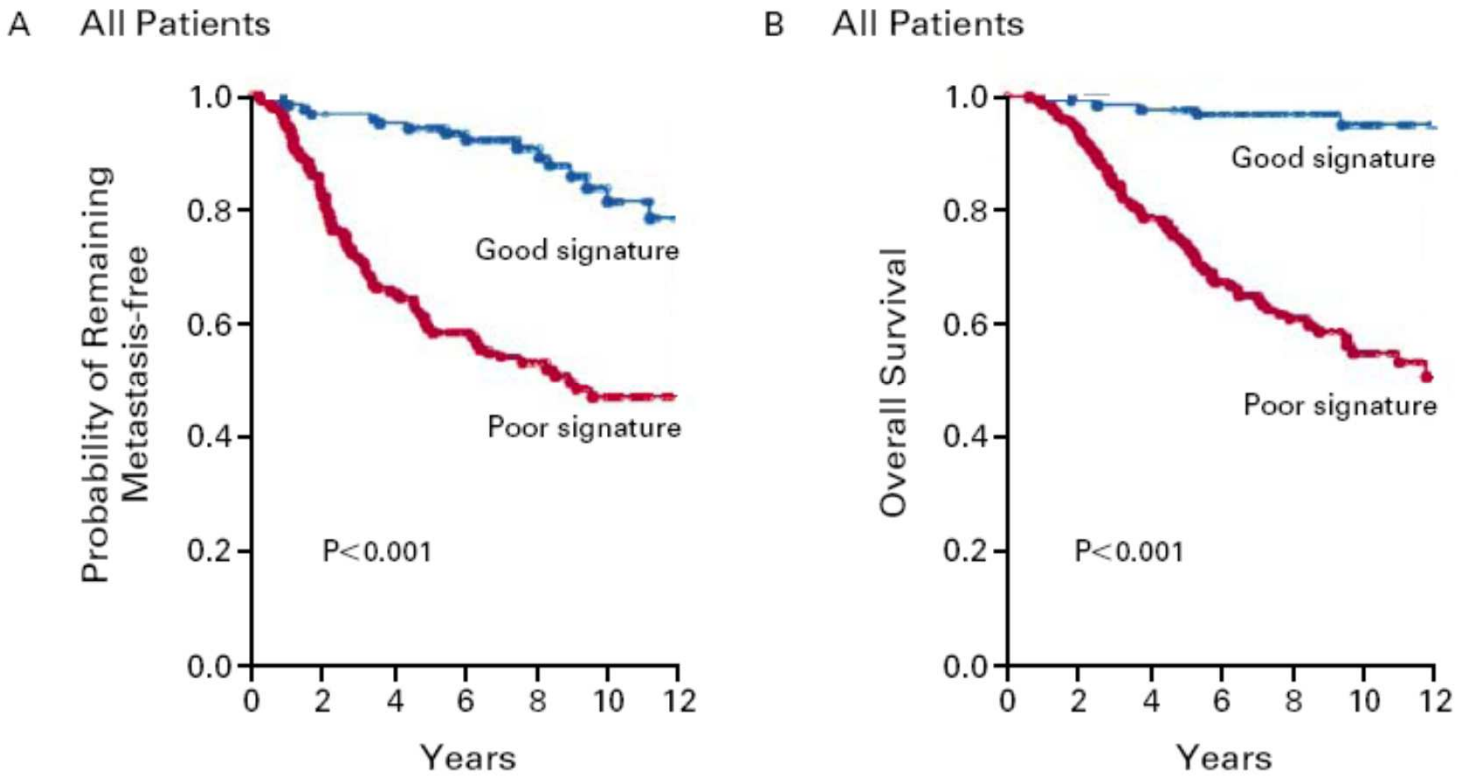
¿De que test genómicos disponemos?

- Test genómicos de expresión que clasifican pacientes en alto, intermedio o bajo riesgo de recaída
- Según ello se aplica tratamiento adyuvante: quimioterapia seguido de hormonoterapia, o hormonoterapia sola

- Mamaprint (70-gene)
- Oncotype DX (21-gene)
- PAM50 (50-gene)
- **No sustituyen a los factores pronósticos clásicos**

Un perfil de expresión génica como factor pronóstico de la supervivencia en cáncer de mama

- Total de pacientes (295)
  - ✓ Probabilidad de no desarrollar metástasis
  - ✓ Sobrevida total



van de Vijver et al. N Engl J Med. 2002; 347:1999-2009

Principales factores de aumento de la supervivencia

- Diagnóstico precoz
  - Programas de cribado: Mamografía
  - Seguimiento específico en alto riesgo

- Clasificación de los subtipos de cáncer de mama

- Tratamiento neo/adyuvante
  - Quimioterapia
  - Hormonoterapia
  - Terapias dirigidas
  - Radioterapia

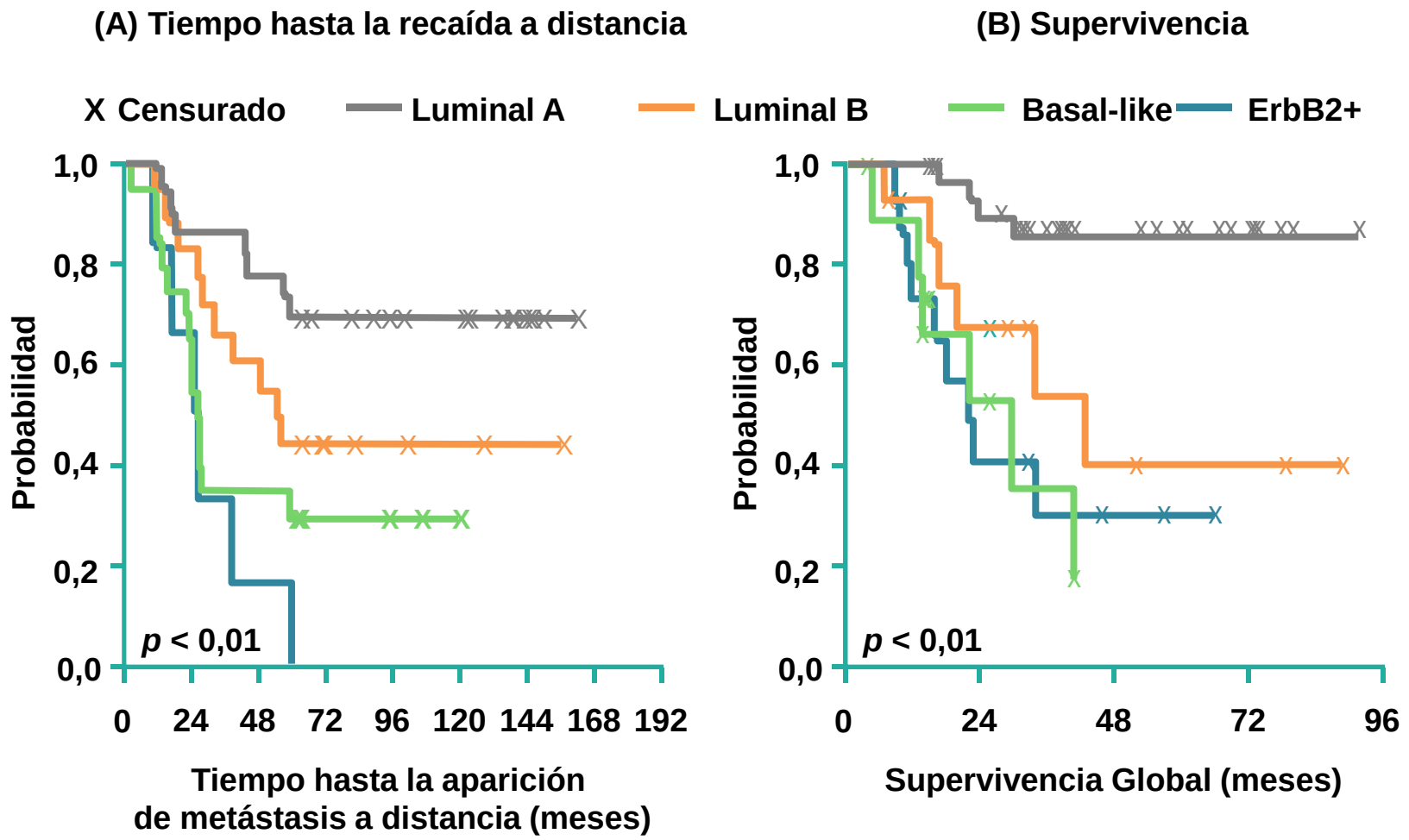
Nickson et al. Cancer Epid 2012; EBCTCG Lancet 2005; Slamon et al. NEJM 2007

Fenotipos en cáncer de mama

Fenotipo	Receptor de estrógenos	Receptor de progresterona	HER2	MIB1 otros
Luminal A	+	+	-	< 14%
Luminal B	+	+/-	+/-	>13%
HER2	-	-	+	
Triple negativo (basal)	-	-	-	

Perou CM, Sorlie T, et al. Nature 2000

Supervivencia libre de recaída y supervivencia global



Sorlie et al. Proc Natl Acad Sci USA 2003;100:8418–8423

special article

Annals of Oncology 00: 1–16, 2013
doi:10.1093/annonc/mdt303

Personalizing the treatment of women with early breast cancer: highlights of the St Gallen International Expert Consensus on the Primary Therapy of Early Breast Cancer 2013

A. Goldhirsch[1*], E. P. Winer[2], A. S. Coates[3], R. D. Gelber[4], M. Piccart-Gebhart[5], B. Thürlimann[6] & H.-J. Senn[7] Panel members[1]

Category	IHQ	Therapy
Luminal A	RE and RP +ve HER2 –ve Ki-67 < 20 %	Hormonal therapy and CT if: RS high, Grade 3 or ≥ 4 +ve nodes
Luminal B (HER2 –ve)	RE+ve and HER2-ve and: RP –ve and/or Ki-67 ≥ 20%	Hormonal therapy Chemotherapy for most
Luminal B (HER2 +ve)	RE+ve and any RP HER2 +ve Ki-67 any	Hormonal therapy Anti-HER2 therapy Chemotherapy
HER2 "enriched"	RE and RP -ve HER2 +ve	Anti-HER2 therapy Chemotherapy
Triple negative	RE and RP -ve HER2 -ve	Chemotherapy

Principales factores de aumento de la supervivencia

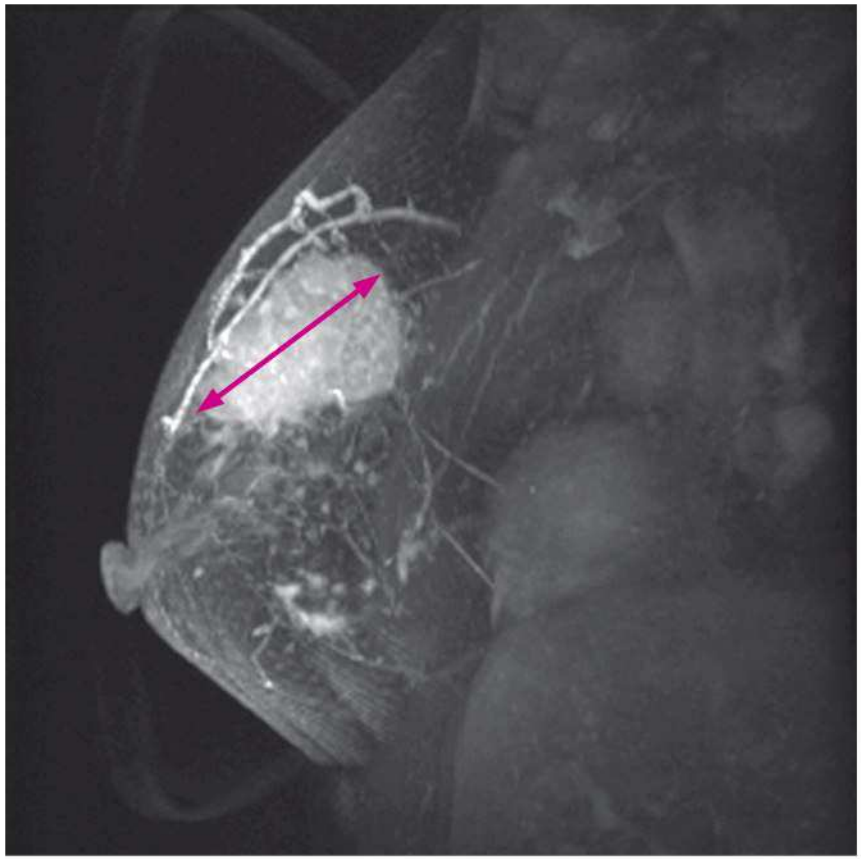
- Diagnóstico precoz
  - Programas de cribado: Mamografía
  - Seguimiento específico en alto riesgo

- Clasificación de los subtipos de cáncer de mama

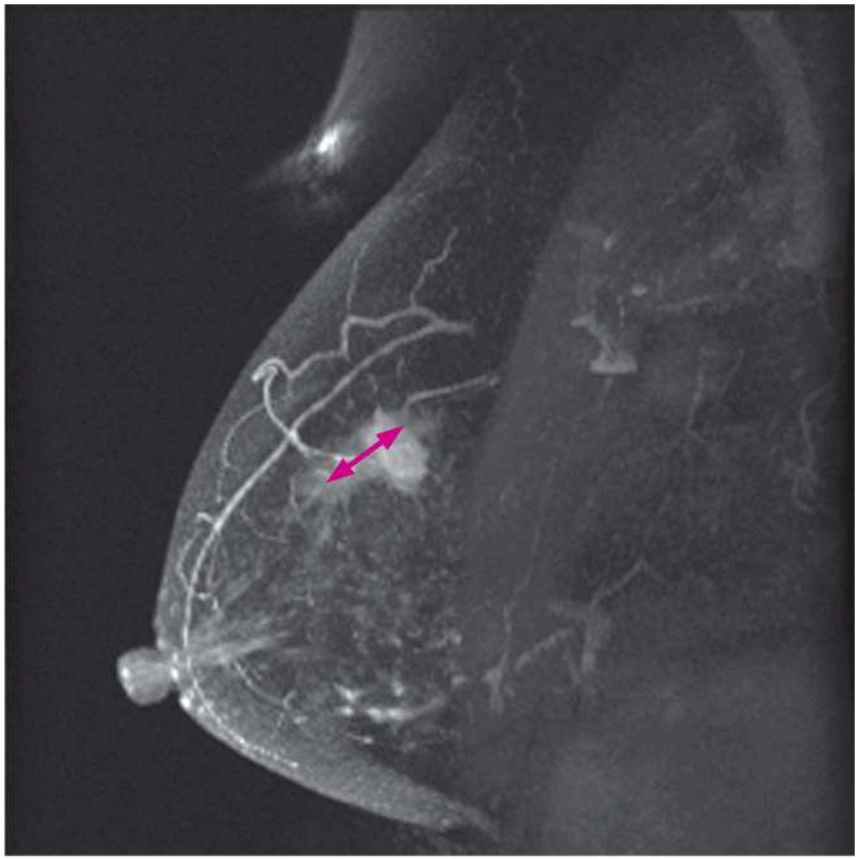
- Tratamiento neo/adyuvante
  - Quimioterapia
  - Hormonoterapia
  - Terapias dirigidas
  - Radioterapia

Nickson et al. Cancer Epid 2012; EBCTCG Lancet 2005; Slamon et al. NEJM 2007

Quimioterapia neoadyuvante (preoperatoria)



pre-chemotherapy
longest dimension = 47 mm

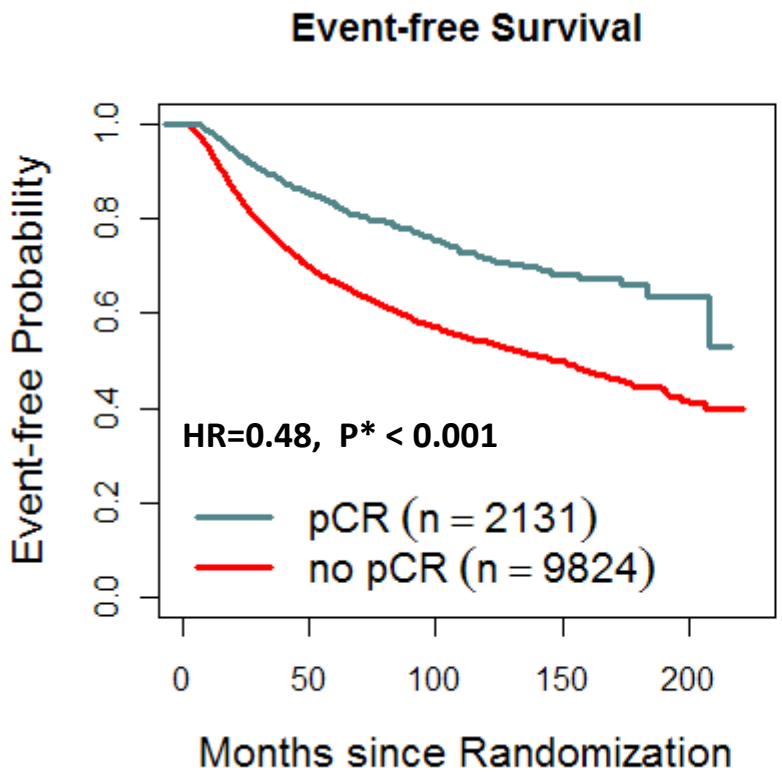


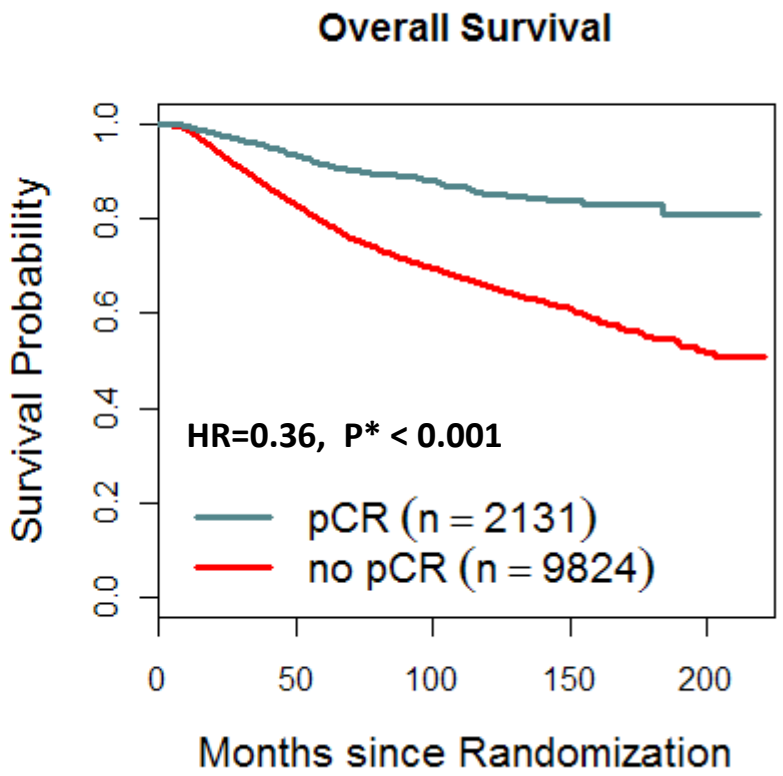
post-chemotherapy
longest dimension = 16 mm

Taken from Biology of Cancer

Asociación de pCR con supervivencia libre de enfermedad y supervivencia global

pCR: respuesta completa patológica





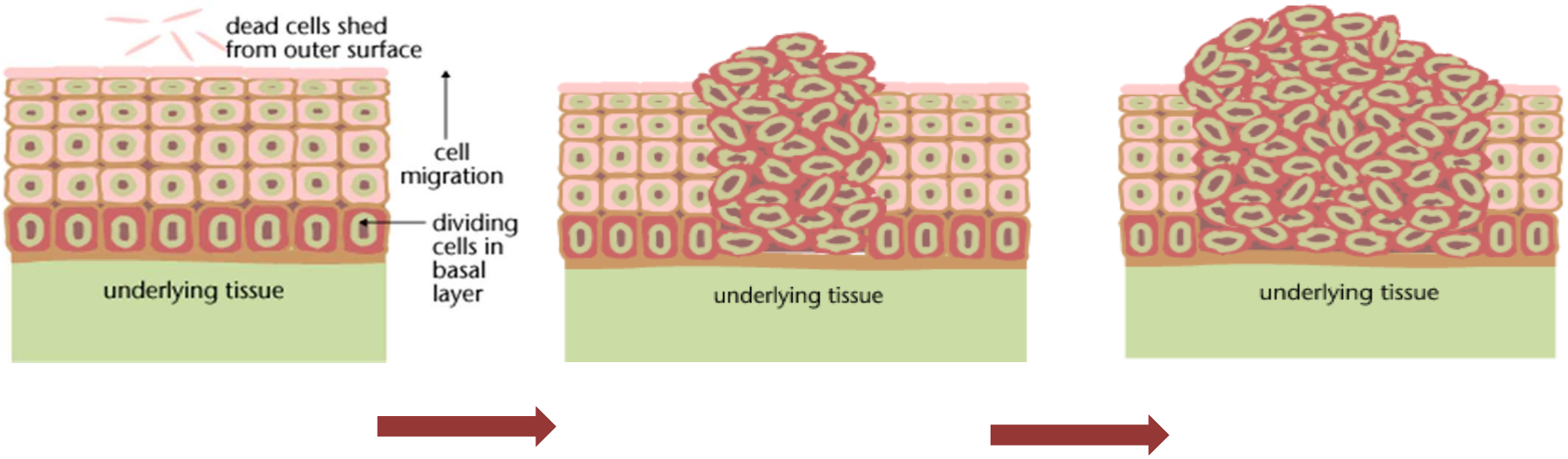
pCR=ypT0/is ypN0

*** Nominal p-value**

FDA, SABCS 2012

Terapias dirigidas: Proceso del cáncer
(conocimiento antiguo)

El cáncer es un proceso que tiene múltiples etapas

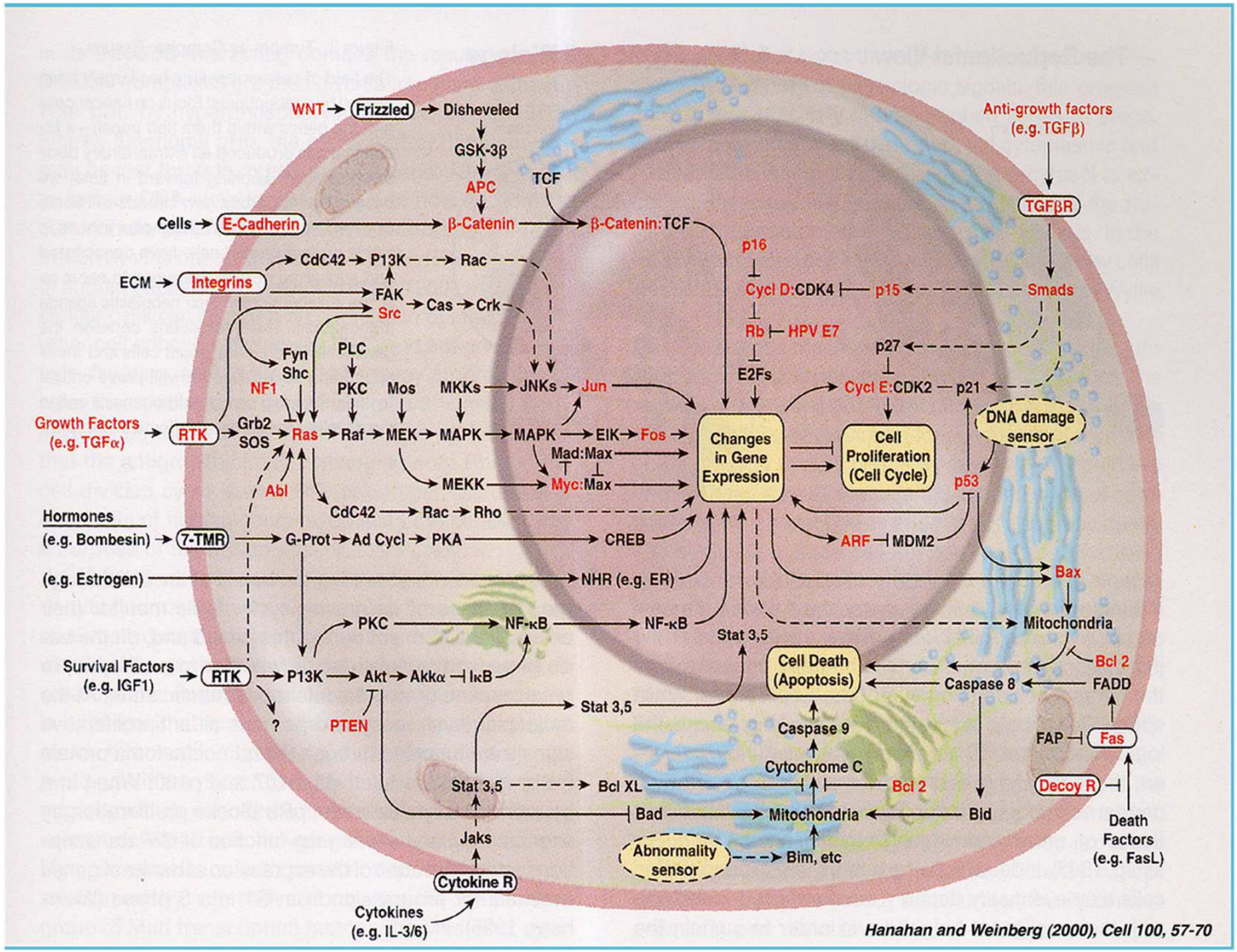


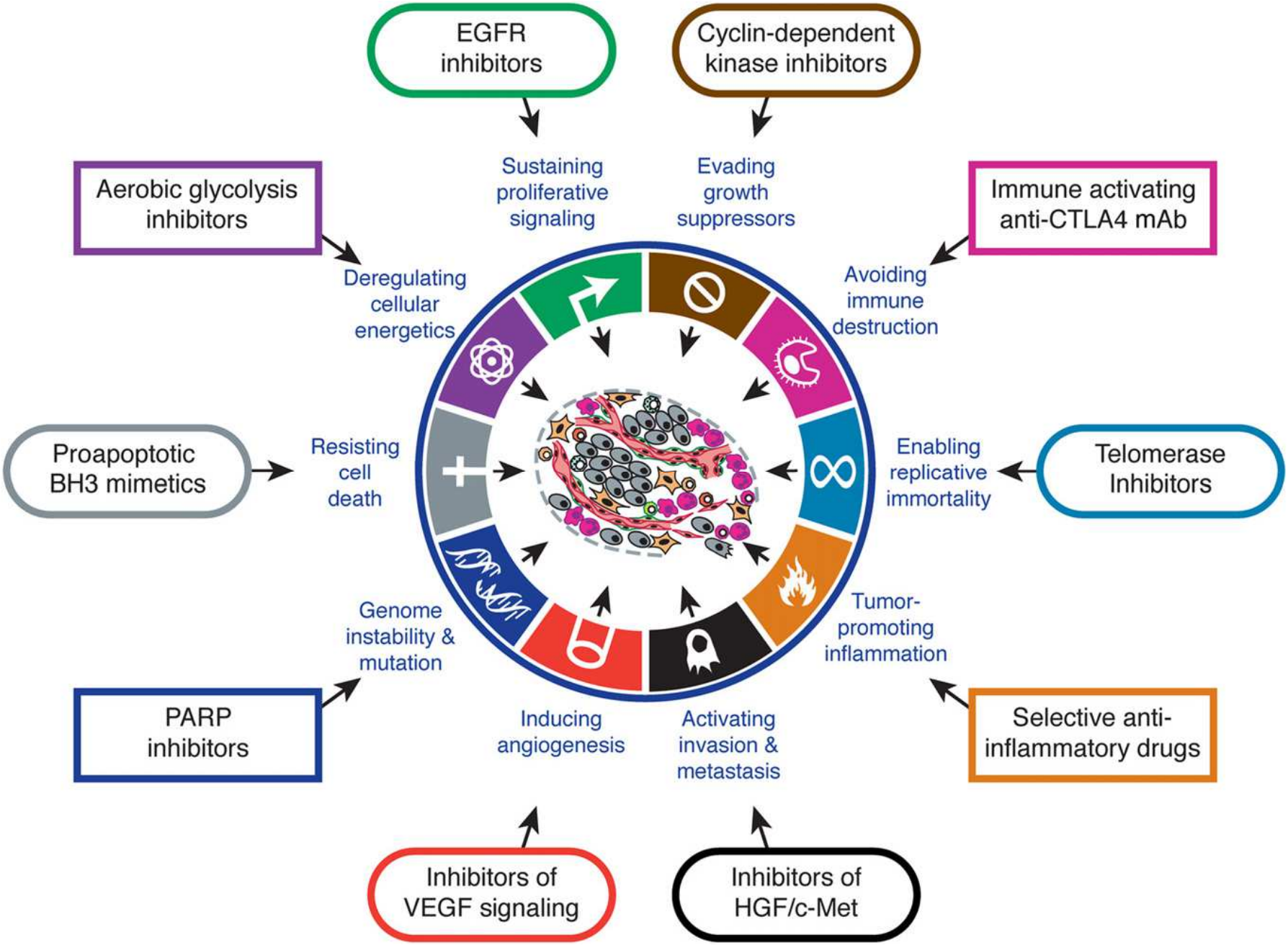
Se produce cuando existe un crecimiento descontrolado de células (por mayor multiplicación y/o menor muerte celular)

Proceso del cáncer (conocimiento actual)

- Producción de factores de crecimiento
- Insensible a las señales antiproliferativas
- Mecanismos de evasión de la apoptosis
- Capacidad de replicación no controlada
- Angiogénesis
- Invasión de tejidos y formación de metástasis
- Resistencia primaria o adquirida a fármacos
- Inestabilidad genómica, alteraciones genéticas
- Inmunidad

Vías de señalización intracelular





Hanahan & Weinberg, Cell 144, 2011

Conclusiones sobre cáncer de mama

- Existen distintos tipos de cáncer de mama

- Disminución de riesgo de aparición: Prevención primaria
  - Dieta, ejercicio
  - Mastectomía profiláctica bilateral en mujeres de alto riesgo
  - Quimioprevención de cáncer de mama contralateral

- Disminución de riesgo de recaída/mortalidad
  - Cribado poblacional y de mujeres de alto riesgo
  - Tratamiento adyuvante/neoadyuvante con terapias dirigidas si indicado
  - Terapias dirigidas (si diana celular)
  - Seguimiento de mujeres con cáncer de mama

Cáncer de ovario

- Los estadios iniciales son poco frecuentes porque no suele producir síntomas hasta que no está avanzado
- Tratamiento:
  - Cirugía y/o quimioterapia
  - Terapias dirigidas

Incidencia y mortalidad de cáncer de ovario en España

Tendencia

INCIDENCIA	2012	2015	2030
< 65 años	1.613	1.671	1.859
≥ 65 años	1.623	1.724	2.280
Total	3.236	**3.395**	**4.139**
Incremento respecto a 2012	--	+159	+902

Tendencia

MORTALIDAD	2012	2015	2030
< 65 años	663	661	777
≥ 65 años	1.245	1.320	1.739
Total	1.878	**1.981**	**2.516**
Incremento respecto a 2012	--	+ 103	+638

http://globocan.iarc.fr/

Cáncer de ovario en la Comunidad de Madrid

Registro de Tumores de Madrid RTMAD*

INCIDENCIA	2012	2013	2014	2015
Mujeres (% sobre total casos registrados en RTMAD)	345 (3,3%)	370 (3,3%)	333 (2,7%)	410 (3,2%)
Total (hombres y mujeres) (% sobre total casos registrados en RTMAD)	345 (1,5%)	370 (1,5%)	333 (1,2%)	410 (1,3%)

Aproximadamente el 12% del total de casos diagnosticados en España

*RTMAD: Registro de hospitales públicos

Conclusiones sobre reducción de riesgo de cáncer de ovario

- Población riesgo estándar: No existe cribado

clinical practice guidelines

Annals of Oncology 27 (Supplement 5): v103–v110, 2016
doi:10.1093/annonc/mdw327

Prevention and screening in *BRCA* mutation carriers and other breast/ovarian hereditary cancer syndromes: ESMO Clinical Practice Guidelines for cancer prevention and screening†

S. Paluch-Shimon[1], F. Cardoso[2], C. Sessa[3], J. Balmana[4], M. J. Cardoso[2], F. Gilbert[5] & E. Senkus[6], on behalf of the ESMO Guidelines Committee*

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- Población alto riesgo:
  - Modificar estilo de vida/exposición: anticonceptivos
  - Cribado: Ecografía transvaginal + CEA 125 c/6 meses desde los 30 años (valor limitado)
  - Cirugía de reducción de riesgo: Anexectomía bilateral a partir de 35-40 años

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