IV Simposio Cáncer de Pulmón en Mujeres

Madrid, 25 de febrero de 2016

# Epidemiología del cáncer pulmón

Josep M Borras

- El cáncer de pulmón:
  - incidencia,
  - mortalidad y
  - supervivencia en España

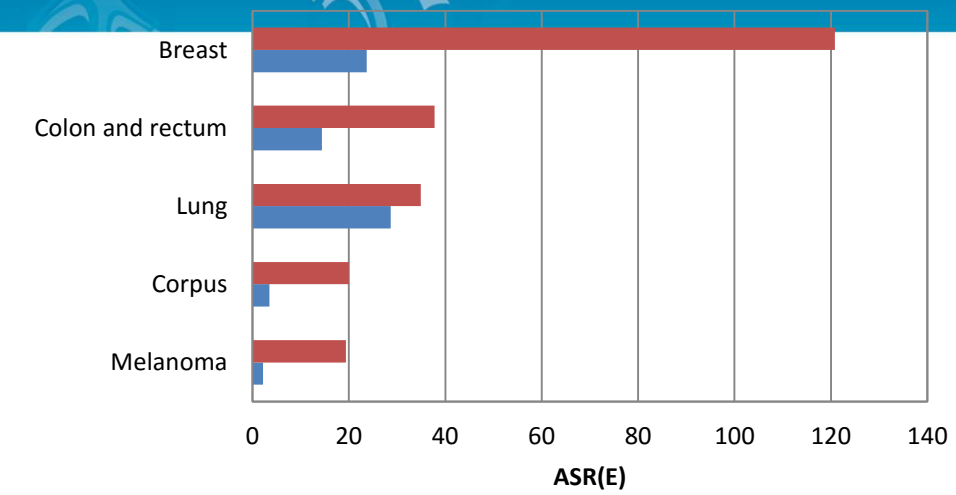
- Factores explicativos: la prevalencia del tabaquismo

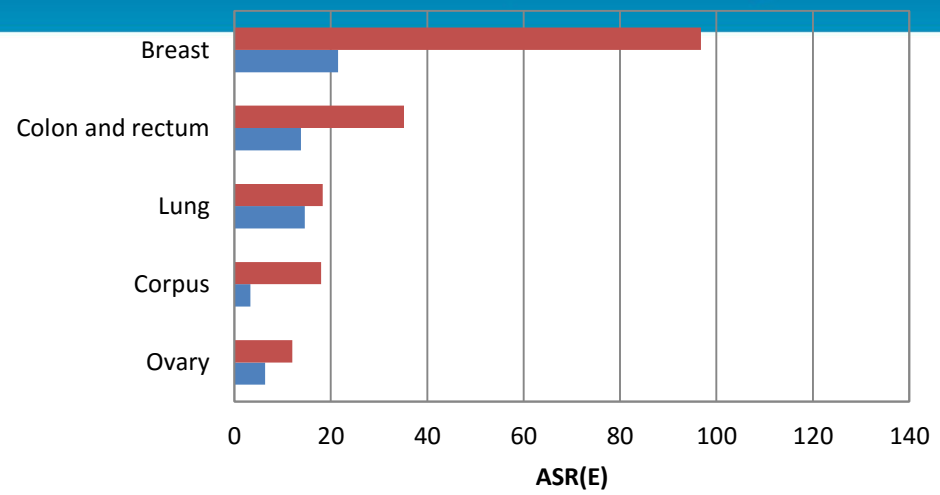
- Que futuro nos espera?

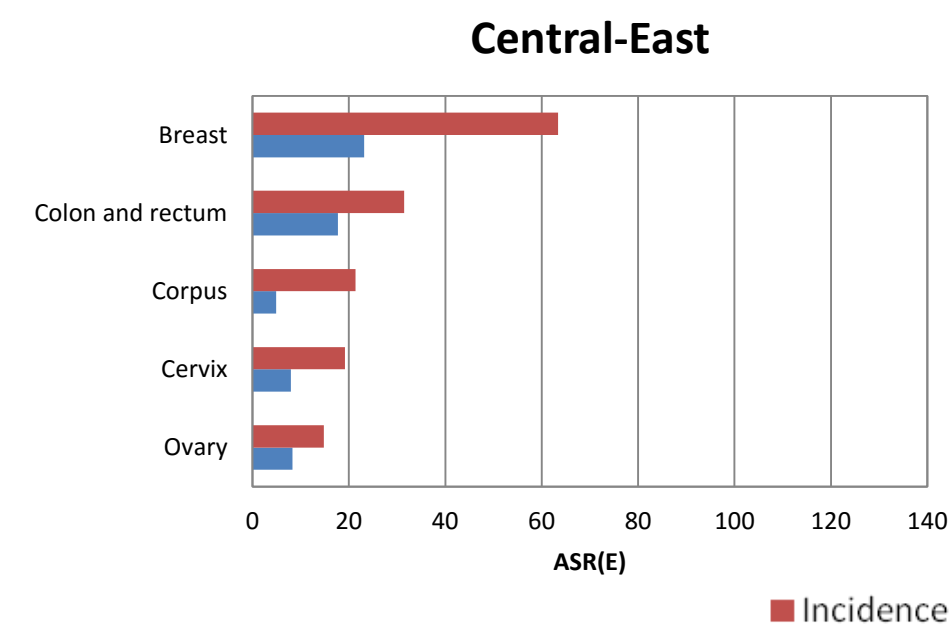
# Most frequent cancers in Europe by geographical area – 2012 Females

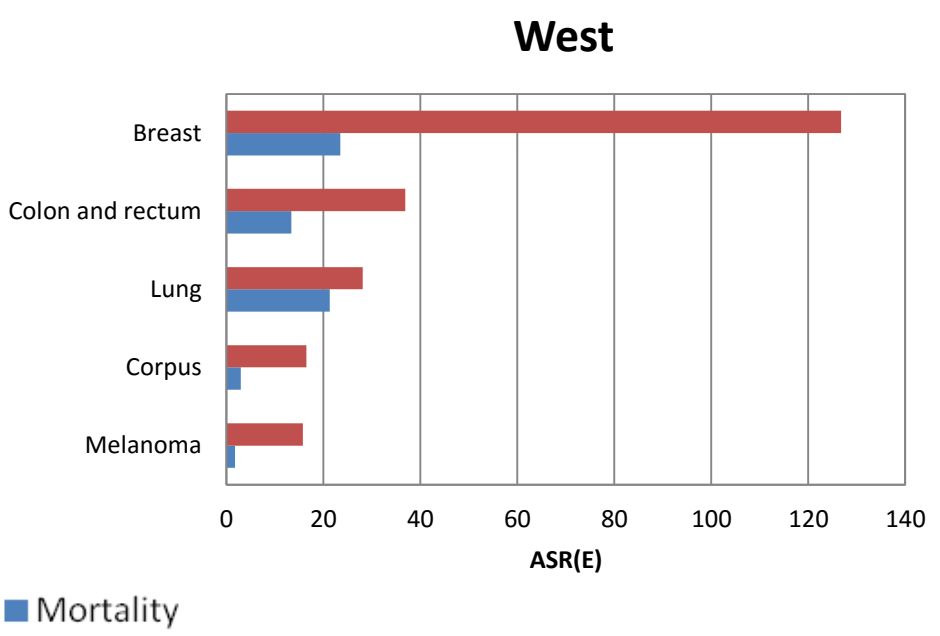
1.6 M New cases





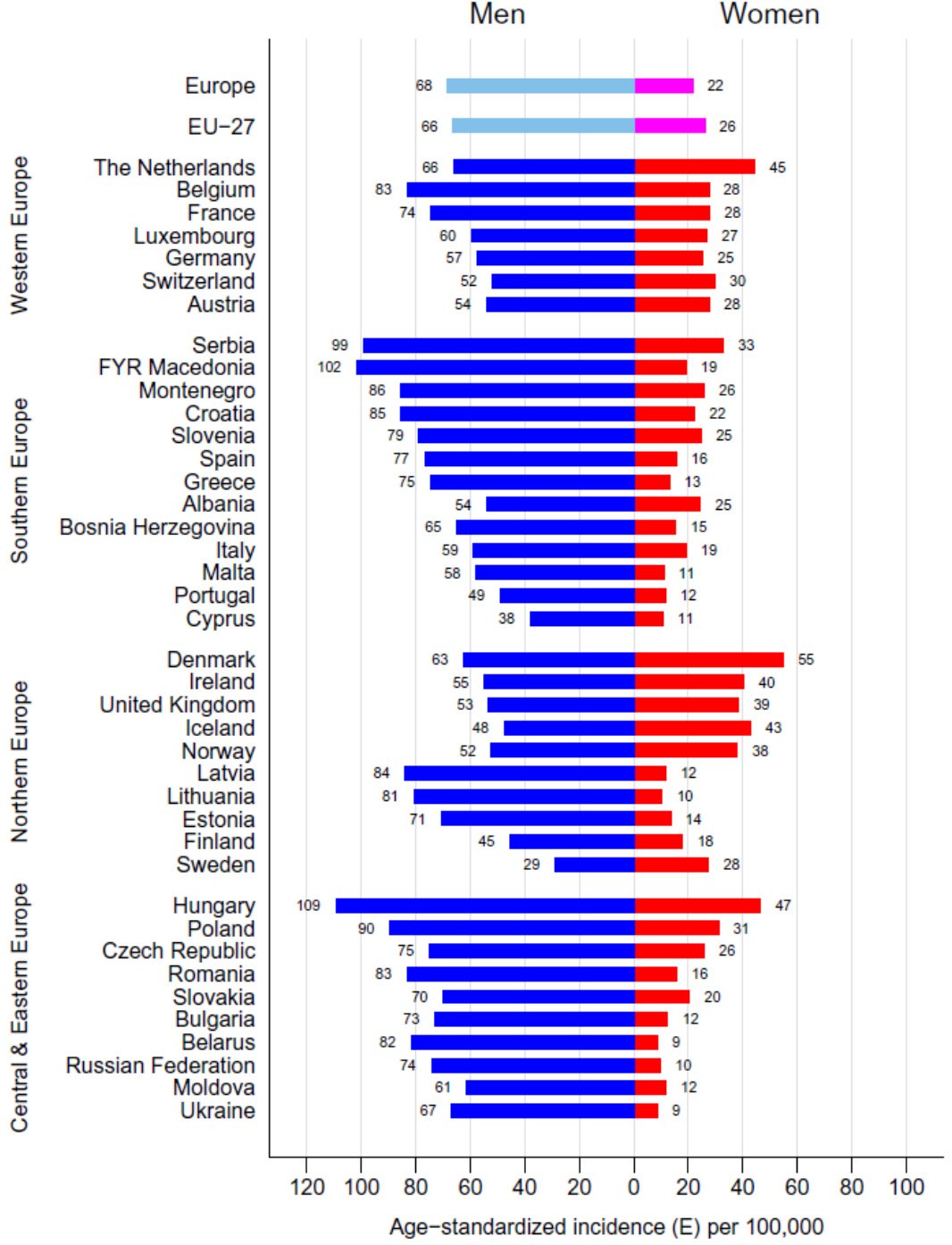




Incidence Mortality

*Data: J.Ferlay et al. European Journal of Cancer 49 (2013) 1374-1403*

# LUNG CANCER

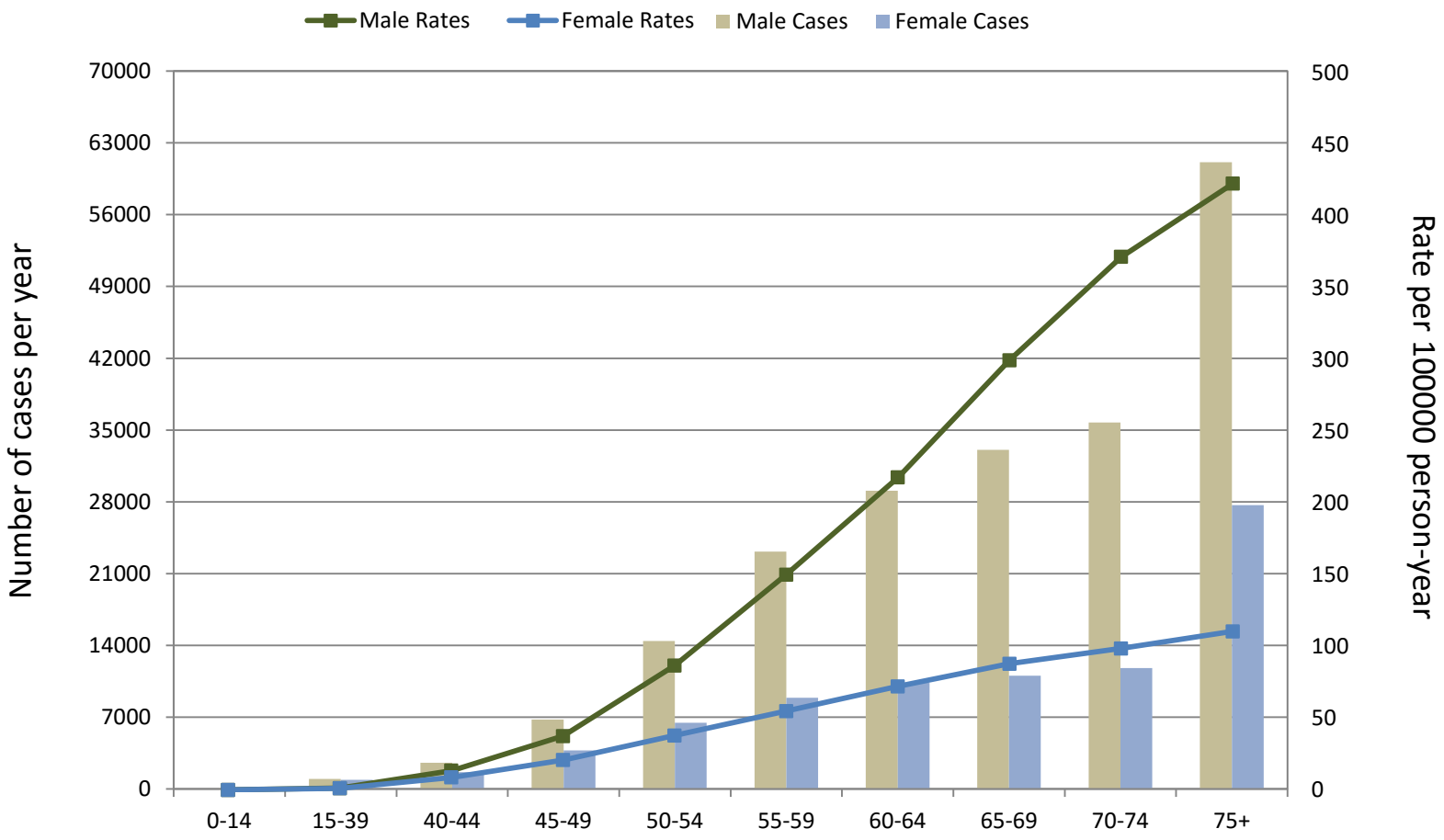
Incidence
Ferlay et al EJC 2013



# Lung Cancer. 2008

## Number of cases and Age-specific rates per 100000 person-year in EU27






IARC, Globocan, 2008

**Tabla 1. Los cinco tipos tumorales más frecuentes en España. Estimaciones 2014**

| | Hombre | | Mujer | | Ambos sexos | |
|---|---|---|---|---|---|---|
| **1º** | Próstata | **22%** | Mama | **28%** | Colorrectal | **16%** |
| **2º** | Colorrectal | **16%** | Colorrectal | **17%** | Próstata | **14%** |
| **3º** | Pulmón | **15%** | Cuerpo uterino | **6%** | Pulmón | **12%** |
| **4º** | Vejiga | **12%** | Pulmón | **6%** | Mama | **11%** |
| **5º** | Estómago | **4%** | Vejiga | **4%** | Vejiga | **8%** |

Fuente: Red Española de Registros de Cáncer (REDECAN). Galceran J et al. *Estimaciones de la supervivencia del cáncer en España y su situación en Europa. Informe 2014.*

# Tendencias de la incidencia de cáncer de pulmón España



| Cáncer | 1993-97 | 1998-2002 | 2003-2007 | 2014 | variación |
|---|---|---|---|---|---|
| Cáncer pulmón hombres | 81,5 | 82,7 | 80,7 | 75,8 | -6,1% |
| Cáncer Pulmón Mujeres | 7,0 | 8,6 | 11,2 | 16,6 | 48,2% |

REDECAN, informe 2015
(tasas ajustadas por edad)

**Figura 1. Tasas de incidencia de cáncer ajustadas por edad a la población estándar europea para 10 tipos tumorales en 2012 en los países de la Unión Europea (UE-27). Mujeres**

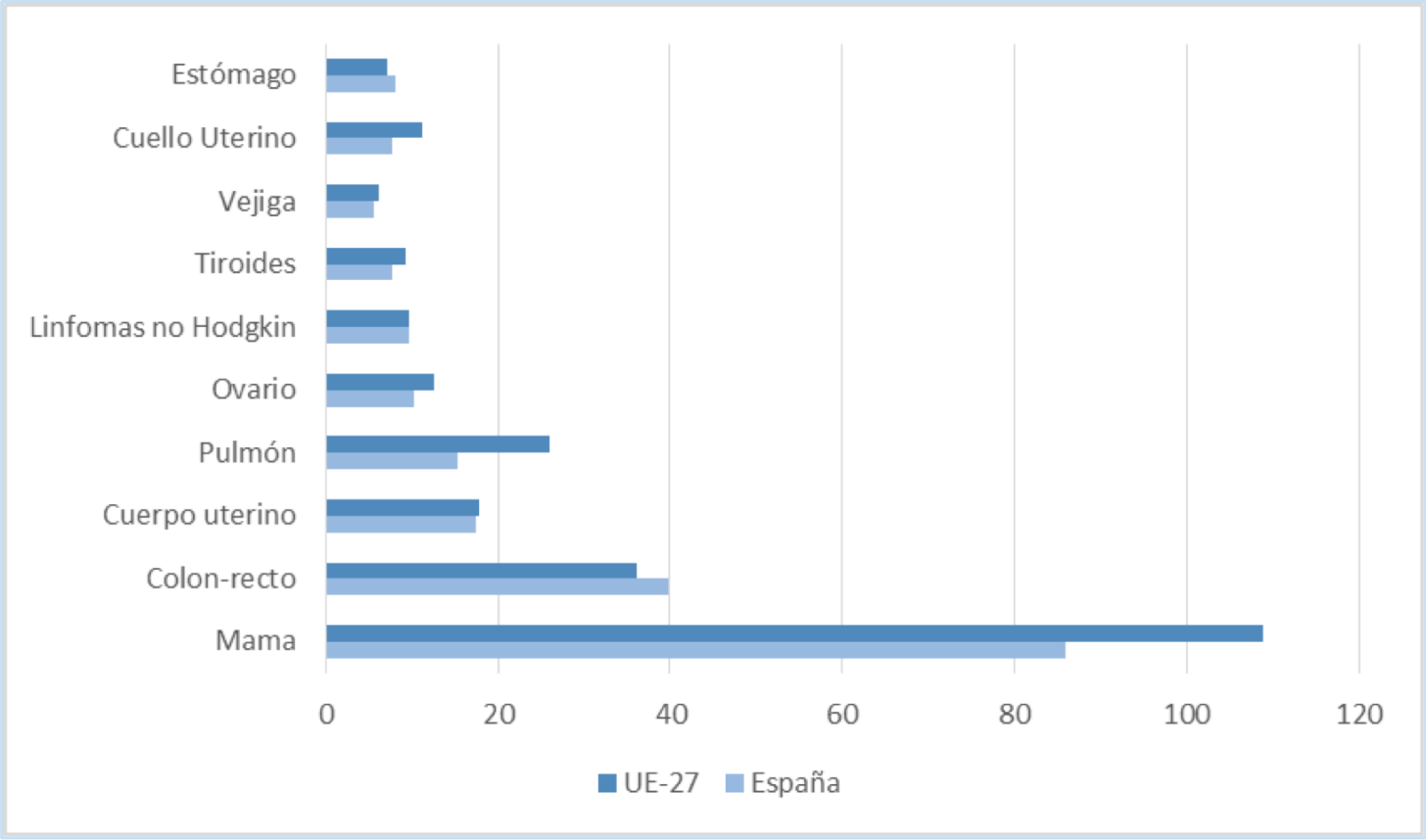
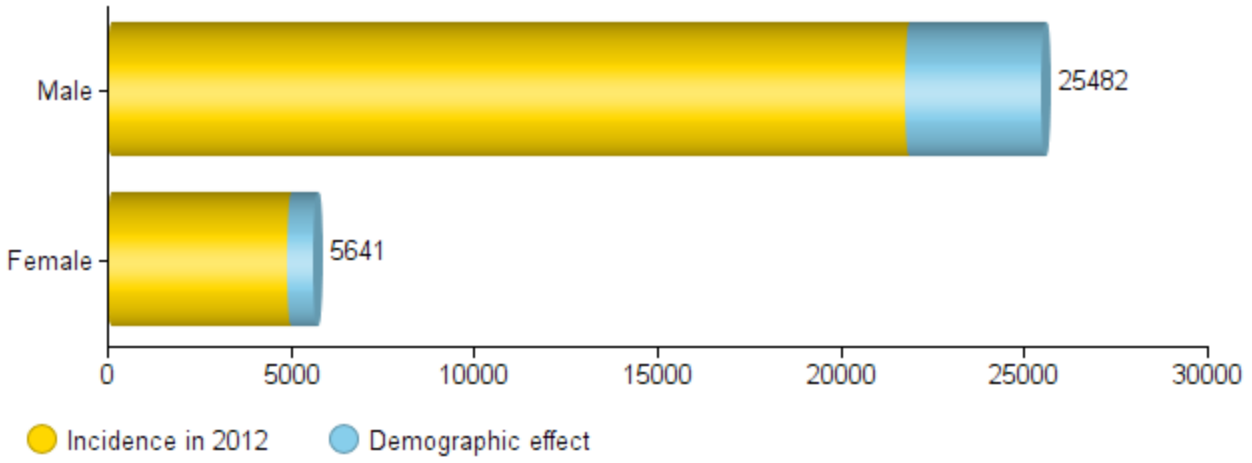


Table 1
Percentage (%) distribution of lung cancer cases by gender, region and morphology group. Cases diagnosed in the period 1995–2007 from the 31 cancer registries included in trend analysis by morphology group, region and gender.

| Region | Squamous ca | Adenocarcinoma | SC ca | Large ca | Nos | Sarcoma | Carcinoid | Other |
|---|---|---|---|---|---|---|---|---|
| *Men* | | | | | | | | |
| Northern Europe | 26.9 | 28.1 | 15.3 | 4.3 | 7.7 | 0.3 | 1.5 | 15.8 |
| UK/Ireland | 26.8 | 13.5 | 11.7 | 2.8 | 8.7 | 0.3 | 0.7 | 35.4 |
| Central Europe | 30.1 | 24.0 | 15.2 | 10.9 | 7.0 | 0.5 | 1.4 | 10.8 |
| Eastern Europe | 40.3 | 11.3 | 12.3 | 1.8 | 22.4 | 0.3 | 0.6 | 10.8 |
| Southern Europe | 27.6 | 22.5 | 12.0 | 3.8 | 19.9 | 0.5 | 0.8 | 12.9 |
| European pool | 28.5 | 17.9 | 12.9 | 5.0 | 10.1 | 0.4 | 1.0 | 24.4[a] |
| *Women* | | | | | | | | |
| Northern Europe | 16.0 | 37.3 | 17.0 | 4.1 | 7.7 | 0.3 | 2.8 | 14.8 |
| UK/Ireland | 17.3 | 16.5 | 14.3 | 2.6 | 10.2 | 0.3 | 1.2 | 37.7 |
| Central Europe | 15.2 | 33.8 | 18.0 | 11.0 | 7.0 | 0.5 | 2.7 | 11.8 |
| Eastern Europe | 21.7 | 22.2 | 12.0 | 1.6 | 28.2 | 0.6 | 1.9 | 11.9 |
| Southern Europe | 12.5 | 33.6 | 11.1 | 2.9 | 23.7 | 0.7 | 2.2 | 13.4 |
| European pool | 16.6 | 22.6 | 15.0 | 4.3 | 10.4 | 0.4% | 1.7 | 28.9[b] |

International Agency for Research on Cancer
World Health Organization

**Spain**
**Lung**
**Number of new cancers in 2020 (all ages)**



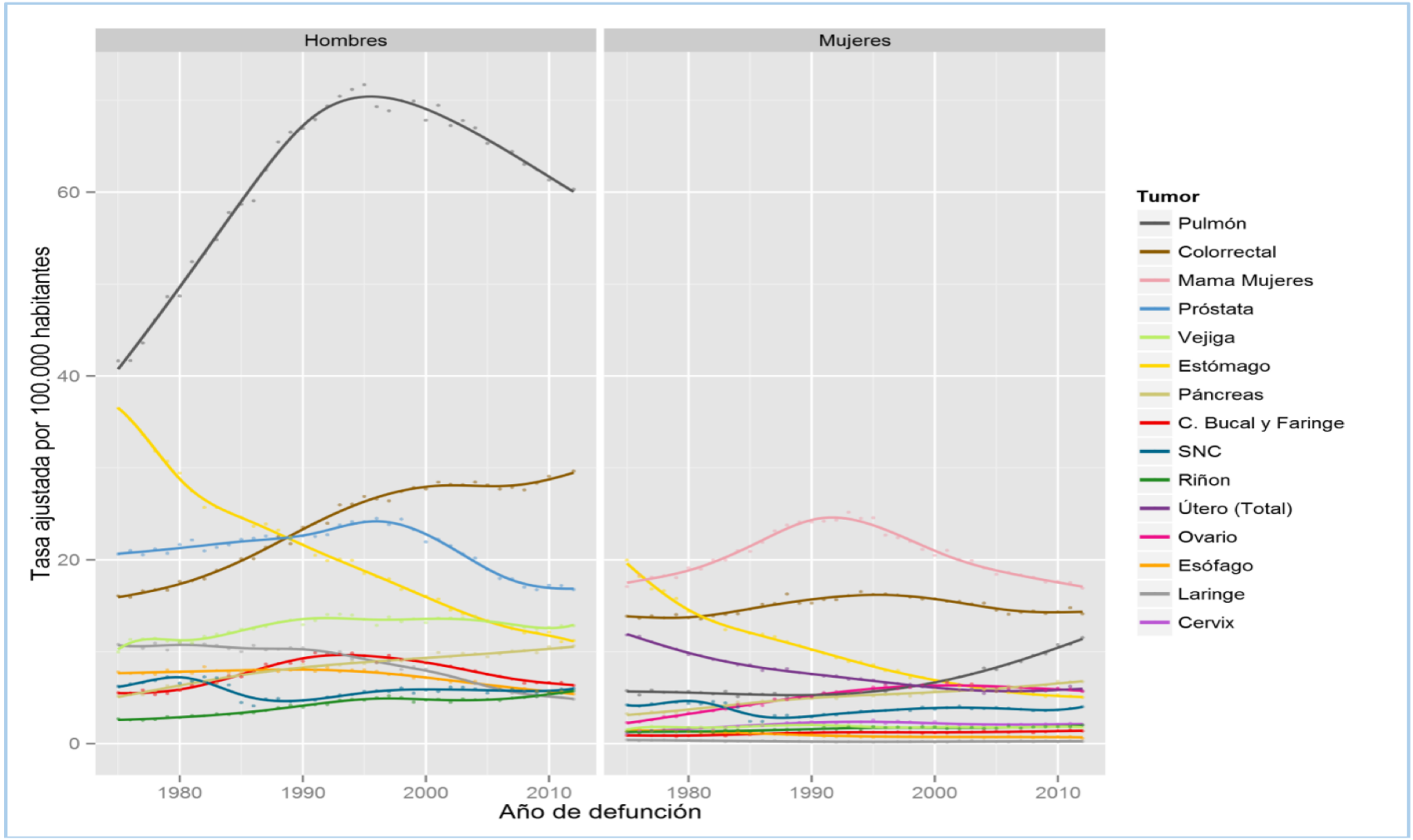

GLOBOCAN 2012 (IARC) (10.2.2016)

**Tabla 1. Nº de defunciones causadas por los 5 tipos tumorales con mayor mortalidad en España en el año 2013**

| | Hombre | | Mujer | | Ambos sexos | |
|---|---|---|---|---|---|---|
| **1º** | Pulmón | **17.577(27%)** | Mama | **6.477(16%)** | Pulmón | **21.689(20%)** |
| **2º** | Colorrectal | **9.236(14%)** | Colorrectal | **6.364(16%)** | Colorrectal | **15.600(15%)** |
| **3º** | Próstata | **5.787(9%)** | Pulmón | **4.112(10%)** | Mama | **6.589(6%)** |
| **4º** | Vejiga | **4.191(6%)** | Páncreas | **2.870(7%)** | Páncreas | **6.039(6%)** |
| **5º** | Estómago | **3.443(5%)** | T. mal definidos | **2.291(6%)** | Próstata | **5.787(5%)** |
| **Totales** | **Todos** | **66.000** | **Todos** | **41.000** | **Todos** | **107.000** |

Fuente: INE 2013

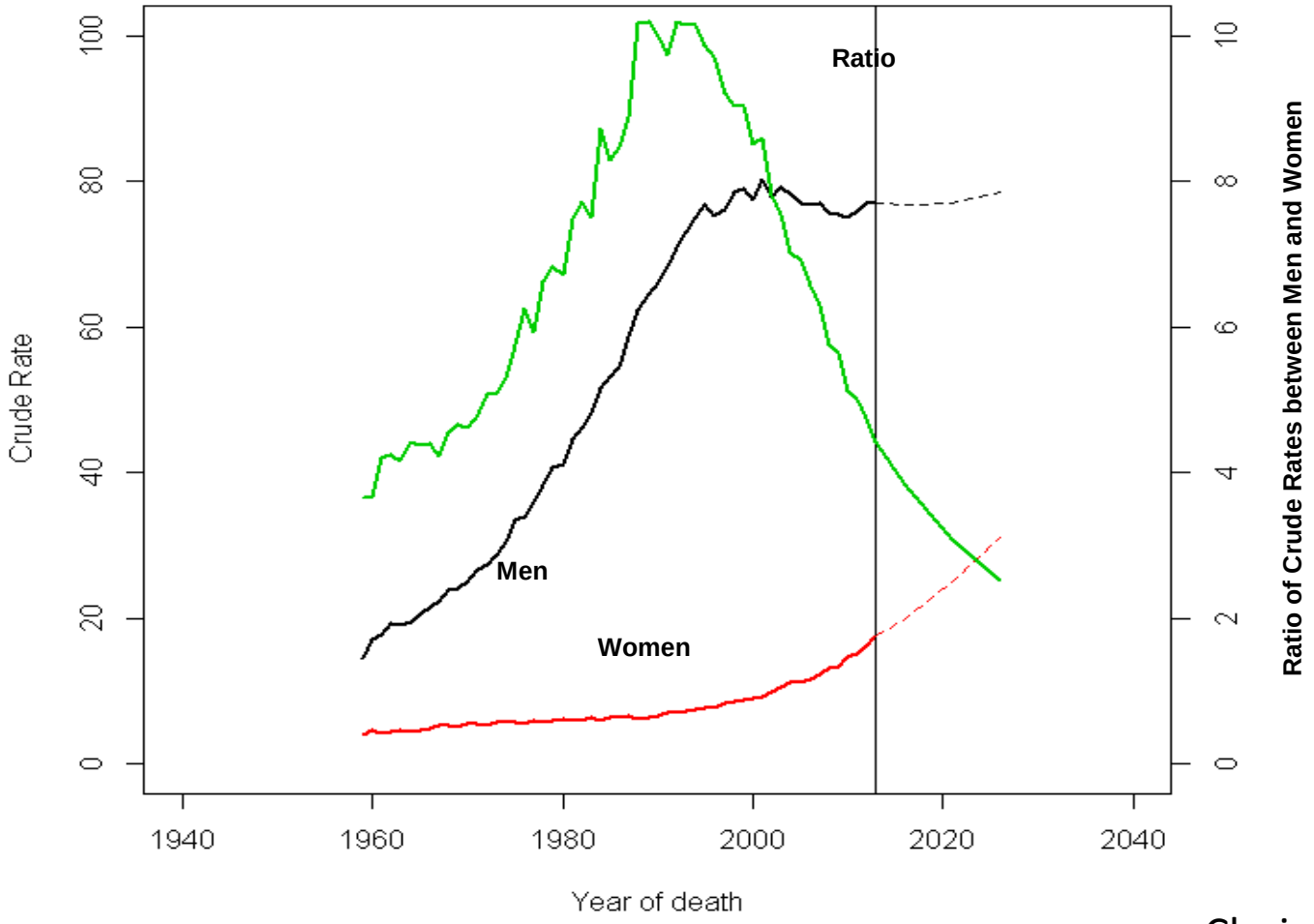
**Figura 1. Tendencia de la mortalidad por cáncer en España (1975-2012) (población estándar europea)**




Fuente: López-Abente et al. *La situación del cáncer en España. Informe 2015*. Madrid: ISCIII, 2015

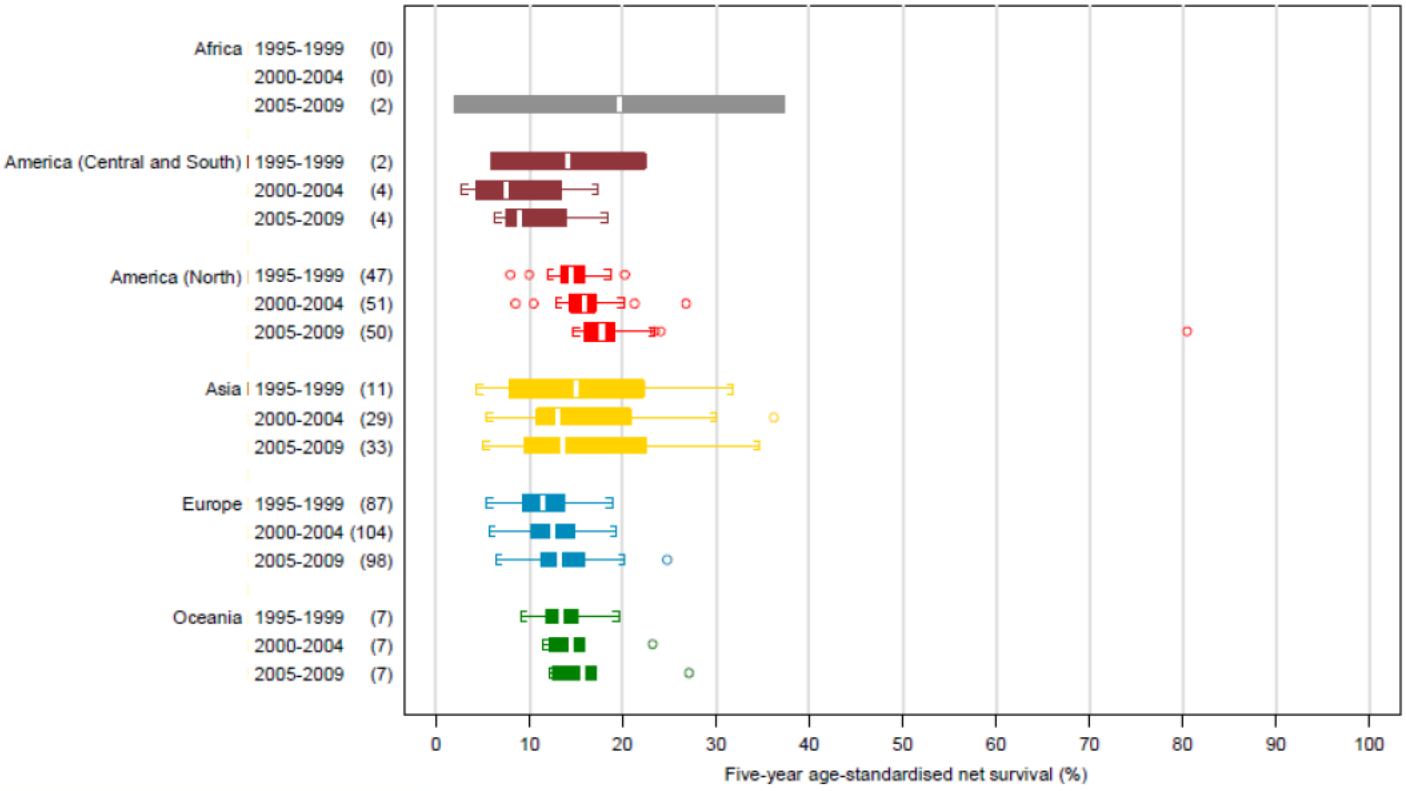
# Lung Cancer Mortality, Spain
# Ratio of Crude Rates (Men/Women) 1959-2026

IV Simposio Cáncer de Pulmón en Mujeres




Cleries R et al, 2016

**Web-figure 4: Lung cancer** – Global range of age-standardised five-year net survival (%) estimates among 204 cancer registry populations in 48 countries, by continent and calendar period of diagnosis (1995-1999, 2000-2004, 2005-2009): adults (15-99 years) [Survival estimates considered less reliable are not included: see text]




Global surveillance of cancer survival 1995–2009: analysis of individual data for 25 676 887 patients from 279 population-based registries in 67 countries (CONCORD-2)

Claudia Allemani, Hannah K Weir, Helena Carreira, Rhea Harewood, Devon Spika, Xiao-Si Wang, Finian Bannon, Jane V Ahn, Christopher J Johnson, Audrey Bonaventure, Rafael Marcos-Gragera, Charles Stiller, Gulnar Azevedo e Silva, Wan-Qing Chen, Olufemi J Ogunbiyi, Bernard Rachet, Matthew J Soeberg, Hui You, Tomohiro Matsuda, Magdalena Bielska-Lasota, Hans Storm, Thomas C Tucker, Michel P Coleman, and the CONCORD Working Group*

Summary

Background Worldwide data for cancer survival are scarce. We aimed to initiate worldwide surveillance of cancer survival by central analysis of population-based registry data, as a metric of the effectiveness of health systems, and to inform global policy on cancer control.

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European Journal of Cancer (2015) 51, 2242–2253

Available at www.sciencedirect.com

ScienceDirect

journal homepage: www.ejcancer.com

IV Simposio Cáncer de Pulmón en Mujeres

# Survival patterns in lung and pleural cancer in Europe 1999–2007: Results from the EUROCARE-5 study

Silvia Francisci[a,*], Pamela Minicozzi[b], Daniela Pierannunzio[a], Eva Ardanaz[c,d], Andrea Eberle[e], Tom K. Grimsrud[f], Arnold Knijn[g], Ugo Pastorino[h], Diego Salmerón[i,j,k], Annalisa Trama[l], Milena Sant[b], and the EUROCARE-5 Working Group[1]

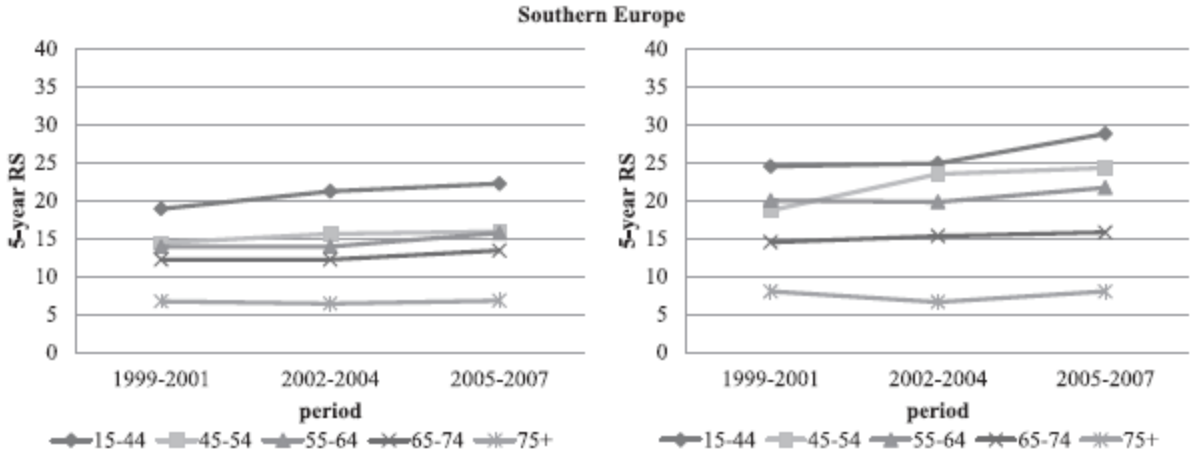


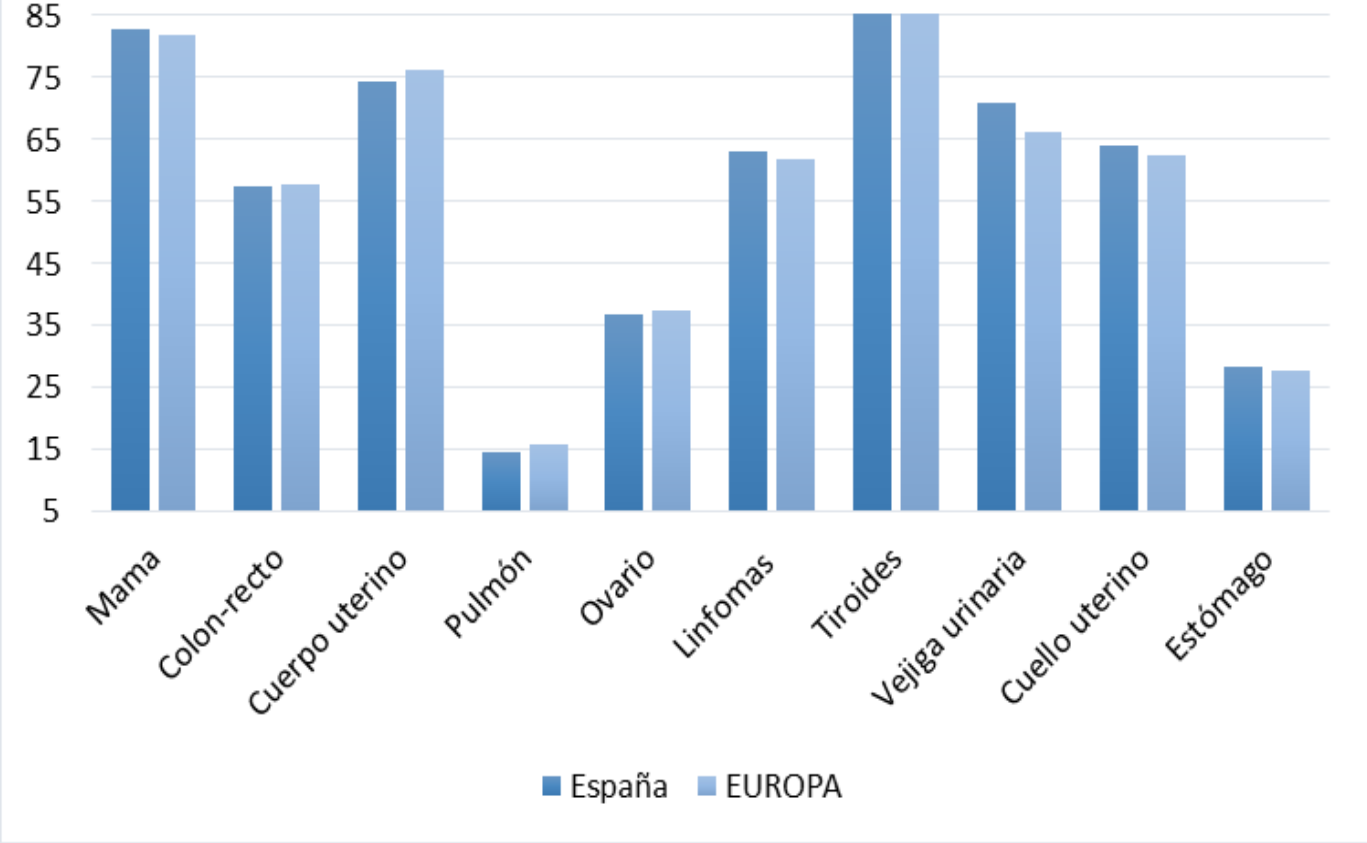
**Tabla 1. Supervivencia relativa de cáncer en España por tipo de cáncer, 2000- 2007 (EUROCARE-5). Mujeres**

| MUJERES (15-99 años) | Casos | % 1 Año | % 3 Años | % 5 Años |
|---|---|---|---|---|
| Cavidad oral y Faringe | 701 | 77,53 | 59,79 | 53,56 |
| Esófago | 225 | 40,73 | 15,08 | 12,16 |
| Estómago | 2.266 | 47,37 | 29,43 | 25,42 |
| Colon | 5.934 | 74,96 | 61,35 | 55,52 |
| Recto | 2.852 | 78,62 | 61,99 | 54,24 |
| Colorrectal | 8.768 | 76,02 | 61,45 | 55,01 |
| Hígado | 923 | 32,18 | 16,83 | 10,61 |
| Vesícula y vías biliares | 1.148 | 28,02 | 14,15 | 11,70 |
| Páncreas | 1.623 | 20,03 | 7,49 | 5,39 |
| Laringe | 127 | 88,01 | 78,48 | 71,79 |
| Pulmón | 1.997 | 43,06 | 20,80 | 15,29 |
| Melanoma cutáneo | 1.766 | 97,24 | 92,08 | 88,68 |
| Mama | 18.474 | 96,28 | 90,27 | 85,18 |
| Cuello uterino | 1.347 | 86,81 | 72,04 | 66,06 |
| Cuerpo uterino | 3.733 | 89,86 | 79,95 | 76,05 |
| Ovario | 2.211 | 73,90 | 51,45 | 42,57 |
| Riñón | 1.232 | 74,08 | 63,48 | 57,83 |
| Vejiga urinaria | 1.618 | 81,88 | 70,62 | 66,83 |
| Encéfalo y SNC | 1.110 | 30,68 | 15,86 | 11,69 |
| Tiroides | 1.369 | 95,6 | 94,07 | 92,52 |
| Linfoma de Hodgkin | 348 | 95,90 | 90,71 | 88,09 |
| Linfomas no hodgkinianos | 2.663 | 77,53 | 67,16 | 62,37 |
| Mieloma | 839 | 70,49 | 44,60 | 32,71 |
| Leucemia linfática crónica (LLC) | 560 | 91,83 | 81,12 | 72,94 |
| Leucemia linfática aguda (LLA) | 111 | 42,84 | 30,39 | 25,27 |
| Leucemia mieloide crónica (LMC) | 140 | 80,35 | 70,68 | 65,19 |
| Leucemia mieloide aguda (LMA) | 445 | 39,29 | 26,32 | 24,56 |
| Todos | 56.296 | 75,77 | 64,42 | 59,42 |

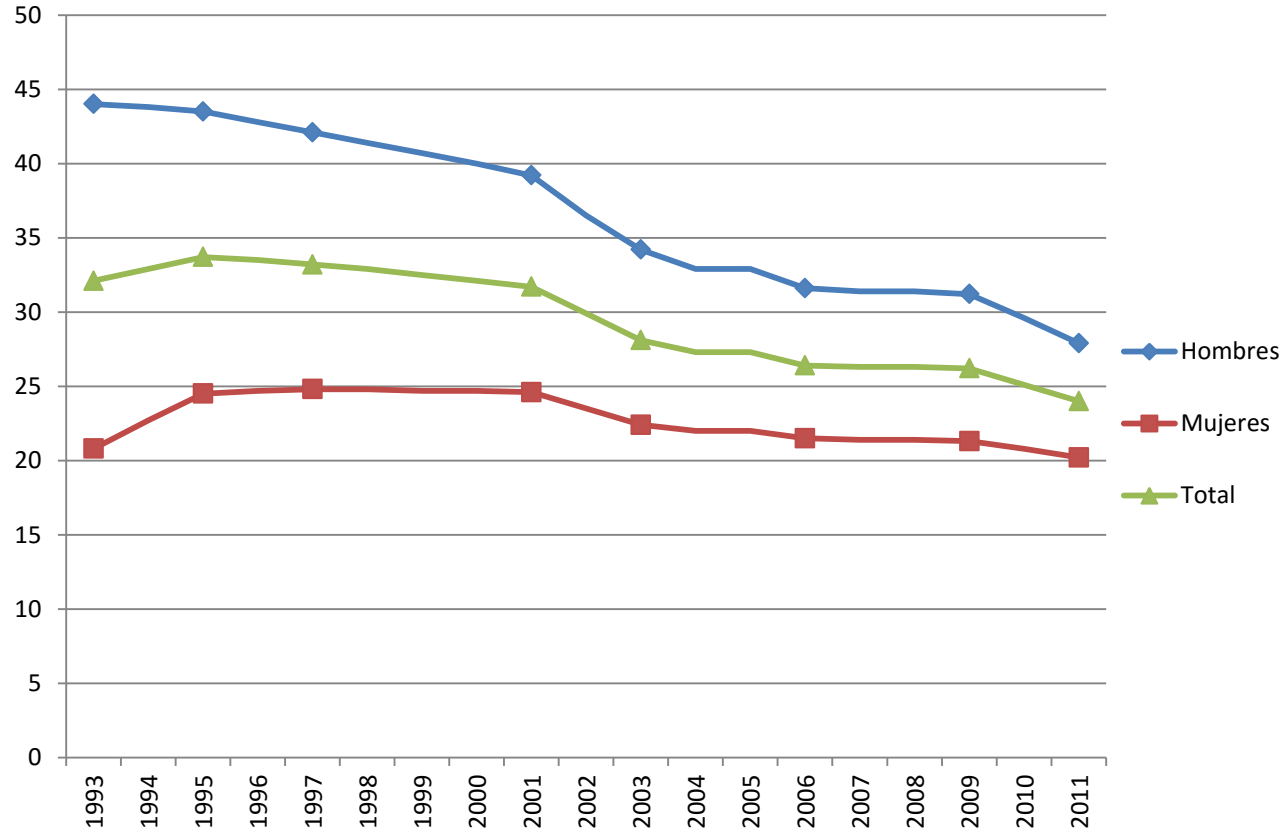
**Tabla 1. Tasas de supervivencia de cáncer a 5 años, ajustada por edad, en España por tipo de cáncer y periodo (EUROCARE-4 y EUROCARE-5). Mujeres**

| MUJERES (15-99 años) | EUROCARE-4 (1995-1999) | EUROCARE-5 (2000-2007) | % variación entre periodos |
|---|---|---|---|
| | SR | SR | |
| Cavidad oral y Faringe | 51,91 | 53,10 | 1,19 |
| Esófago | - | - | - |
| Estómago | 30,42 | 28,29 | -2,13 |
| Colon | 56,32 | 58,13 | 1,81 |
| Recto | 52,27 | 56,85 | 4,58 |
| Colorrectal | 54,82 | 57,62 | 2,80 |
| Hígado | 13,92 | 14,97 | 1,05 |
| Vesícula y vías biliares | 15,50 | - | - |
| Páncreas | 5,32 | 6,96 | 1,64 |
| Laringe | 70,38 | 69,18 | -1,20 |
| Pulmón | 13,38 | 14,72 | 1,34 |
| Melanoma cutáneo | 87,74 | 88,92 | 1,18 |
| Mama | 80,33 | 82,76 | 2,43 |
| Cuello uterino | 62,74 | 63,91 | 1,17 |
| Cuerpo uterino | 73,12 | 74,42 | 1,30 |
| Ovario | 36,90 | 36,80 | -0,10 |
| Riñón | 58,16 | 59,42 | 1,26 |
| Vejiga urinaria | 75,20 | 70,82 | -4,38 |
| Encéfalo y SNC | - | 17,82 | - |
| Tiroides | 85,49 | 86,81 | 1,32 |
| Linfoma de Hodgkin | 80,19 | 86,10 | 5,91 |
| Linfomas no hodgkinianos | 54,24 | 63,26 | 9,02 |
| Mieloma | 37,20 | 38,70 | 1,50 |
| Leucemia linfática crónica (LCL) | 81,20 | 75,55 | -5,65 |
| Leucemia linfática aguda (LLA) | - | 27,61 | - |
| Leucemia mieloide crónica (LMC) | 43,33 | 59,64 | 16,31 |
| Leucemia mieloide aguda (LMA) | 14,43 | 21,37 | 6,94 |
| Todos | 56,31 | 57,96 | 1,65 |

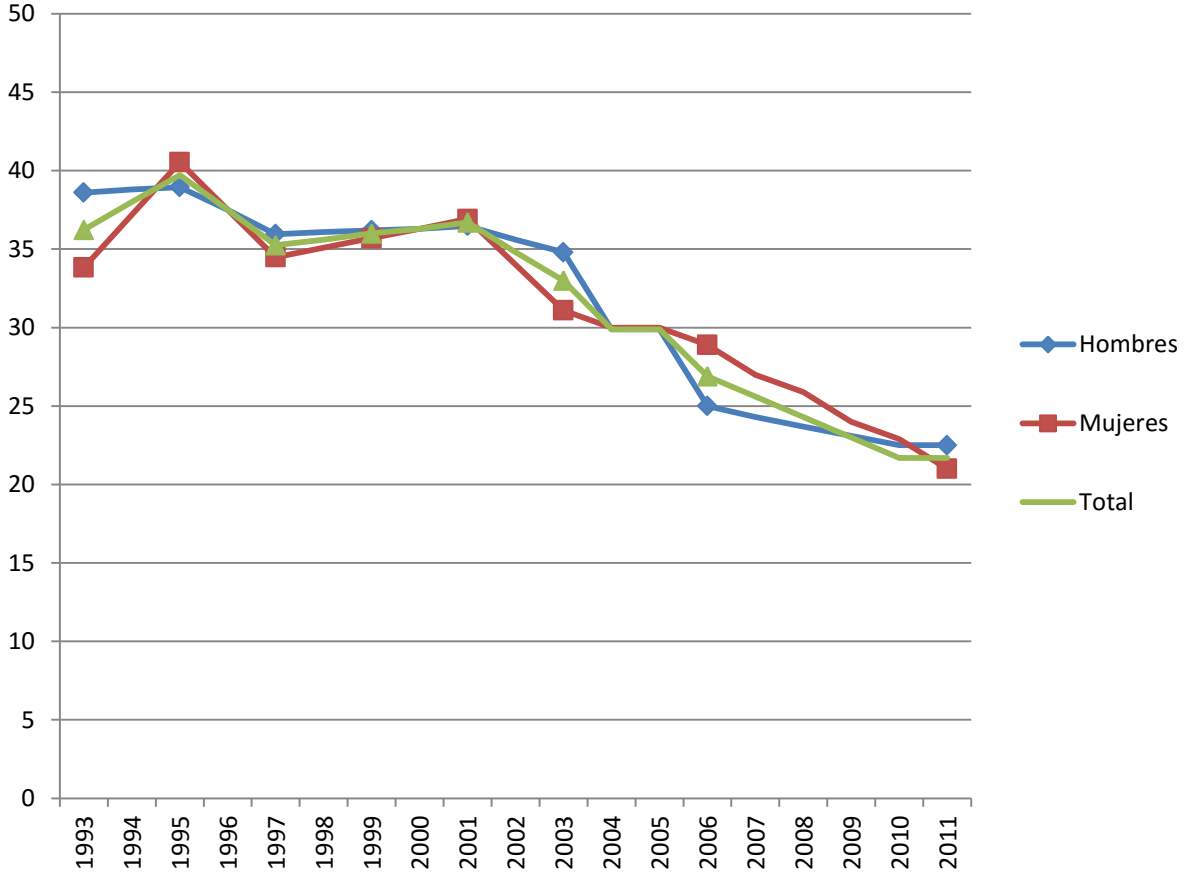
**Tasas de supervivencia relativa a 5 años de cáncer ajustadas por edad para 10 tipos tumorales en 2000-2007 en los países de la Unión Europea (UE-27) frente a España. Mujeres**



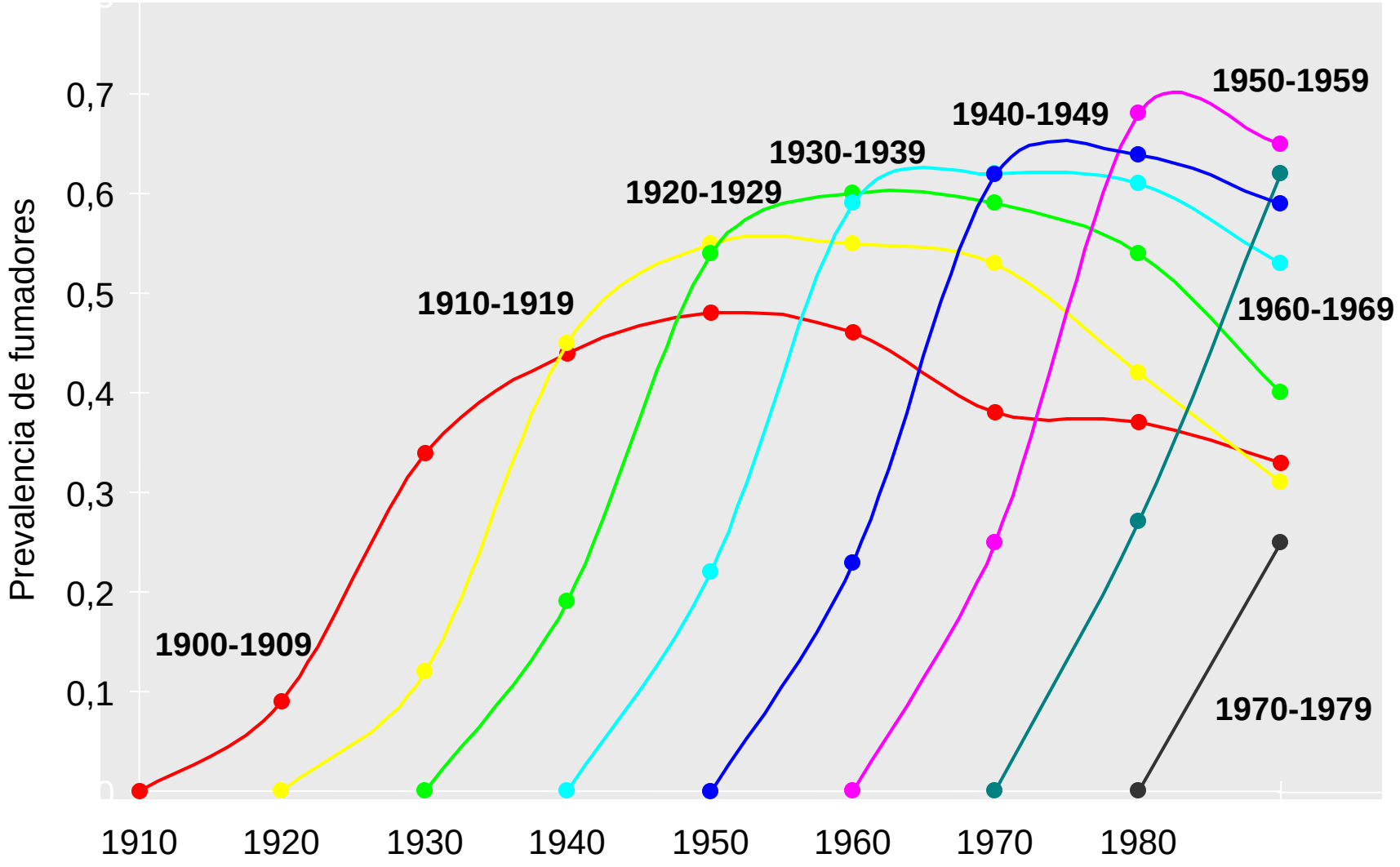
# Prevalencia fumadores mayores de 16 años. Encuesta Nacional de Salud



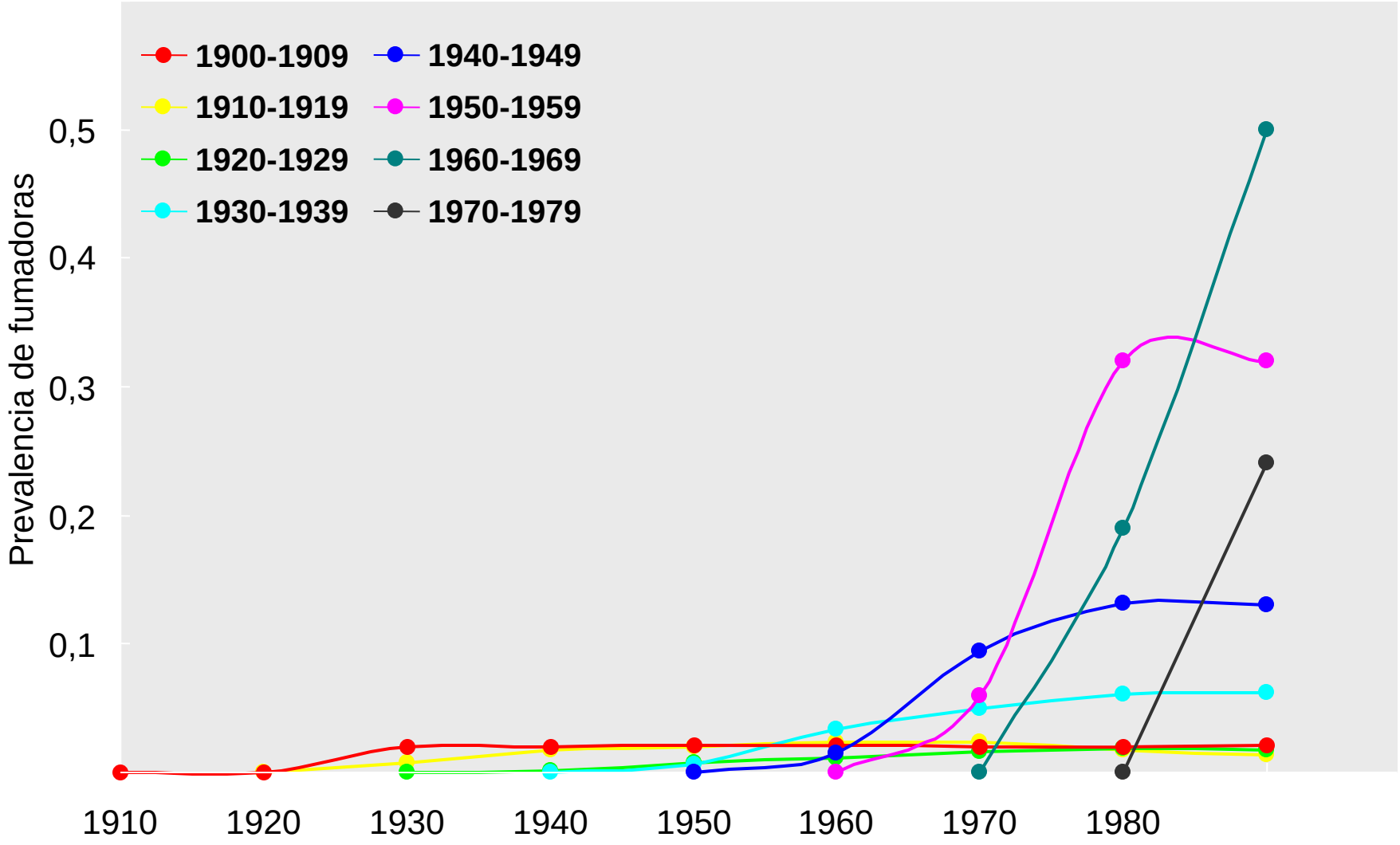
# Prevalencia de fumadores 16-24 años
## Encuesta Nacional de Salud



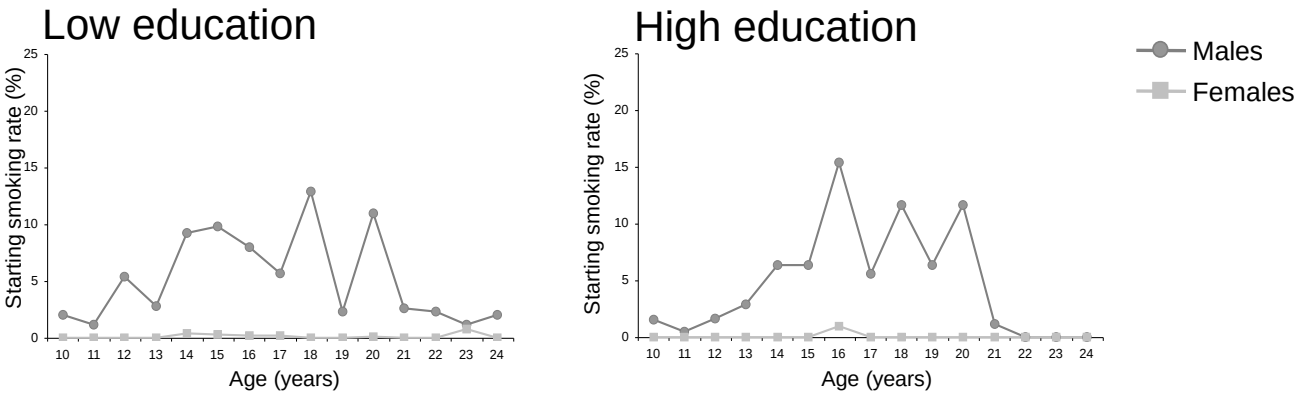
# Prevalencia de tabaquismo en sucesivas cohortes de nacimientoHombres, 1910-1990



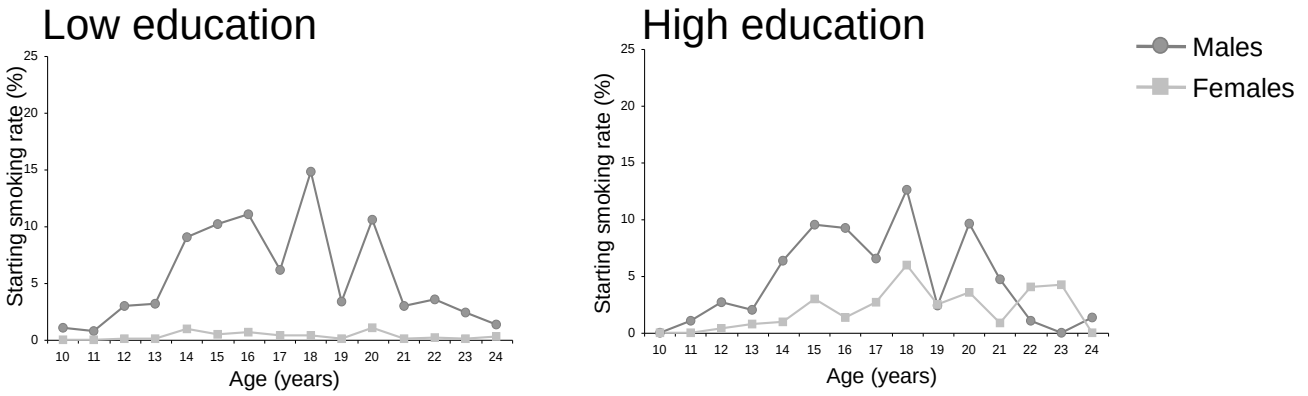
# Prevalencia de tabaquismo en sucesivas cohortes de nacimiento. Mujeres, 1910-1990



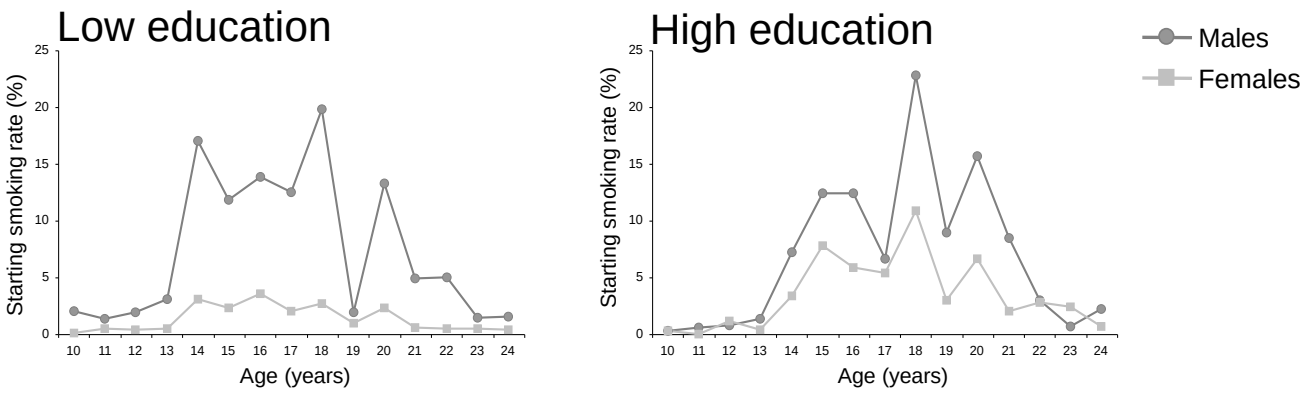
**1948-1952**



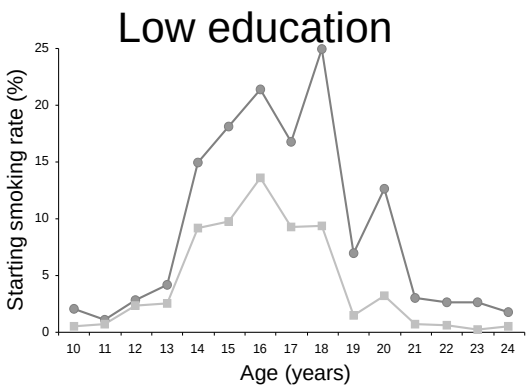

**1958-1962**

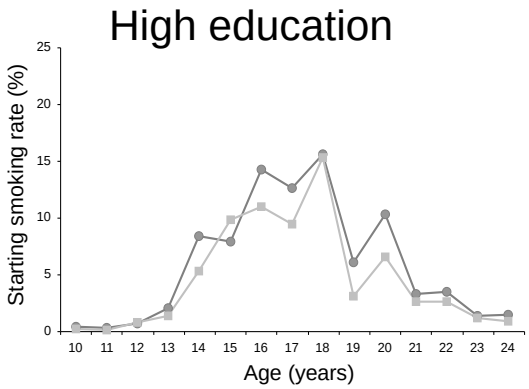



**1968-1972**

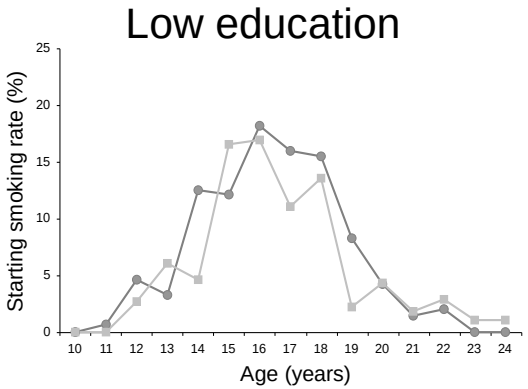


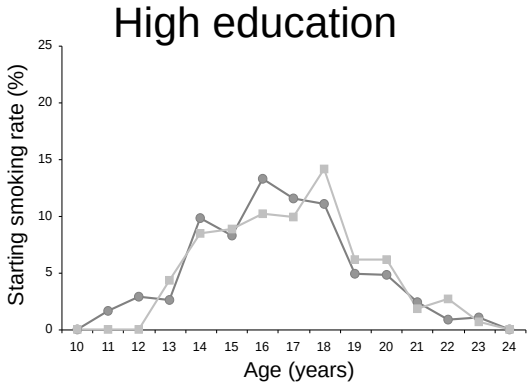
**1978-1982**



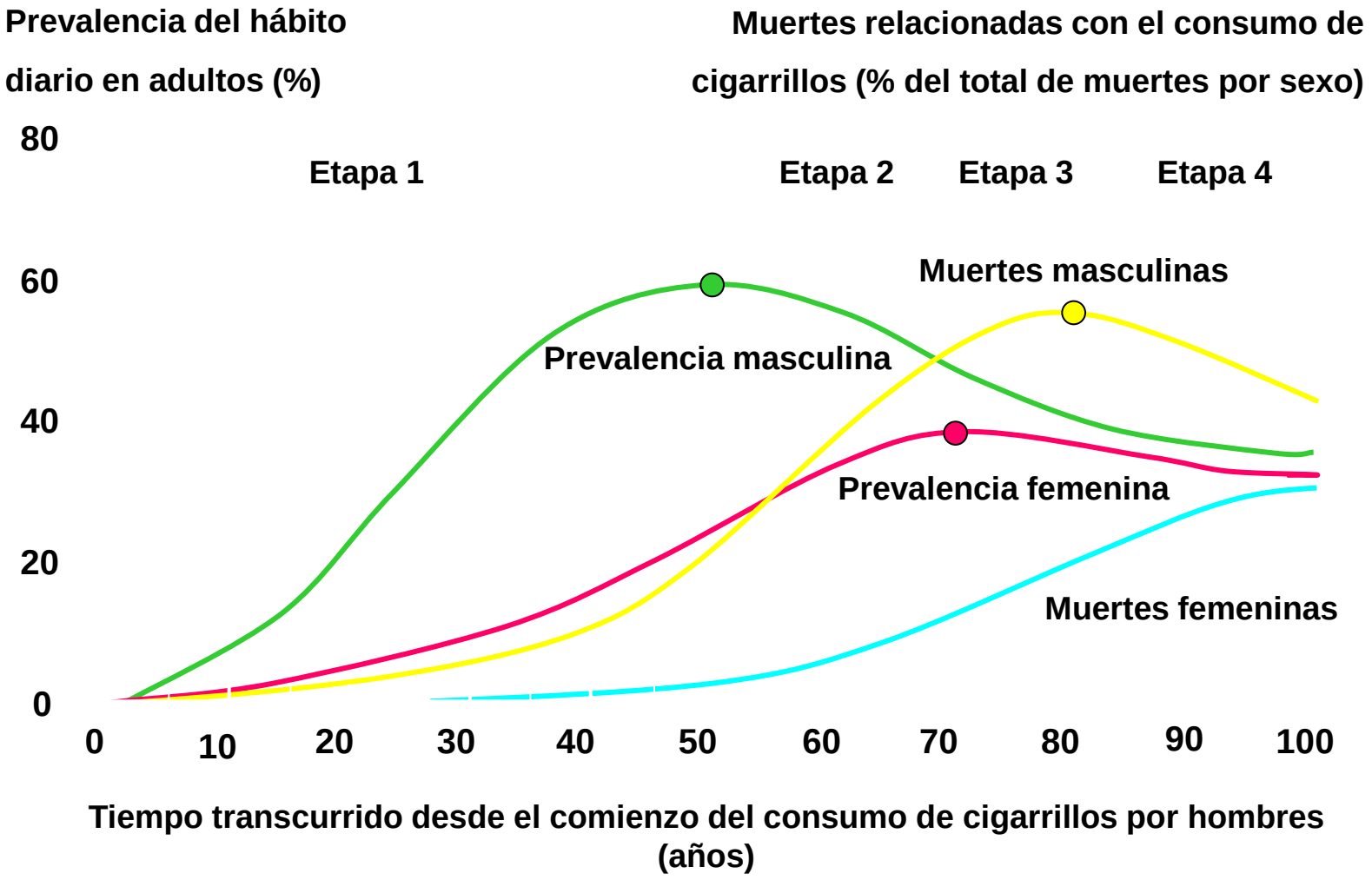

**1988-1992**



# Modelo de difusión del hábito de fumar y su efecto sobre la mortalidad






López et al. 1994

# Lung Cancer Mortality, Spain
# Ratio of Crude Rates (Men/Women) 1959-2026

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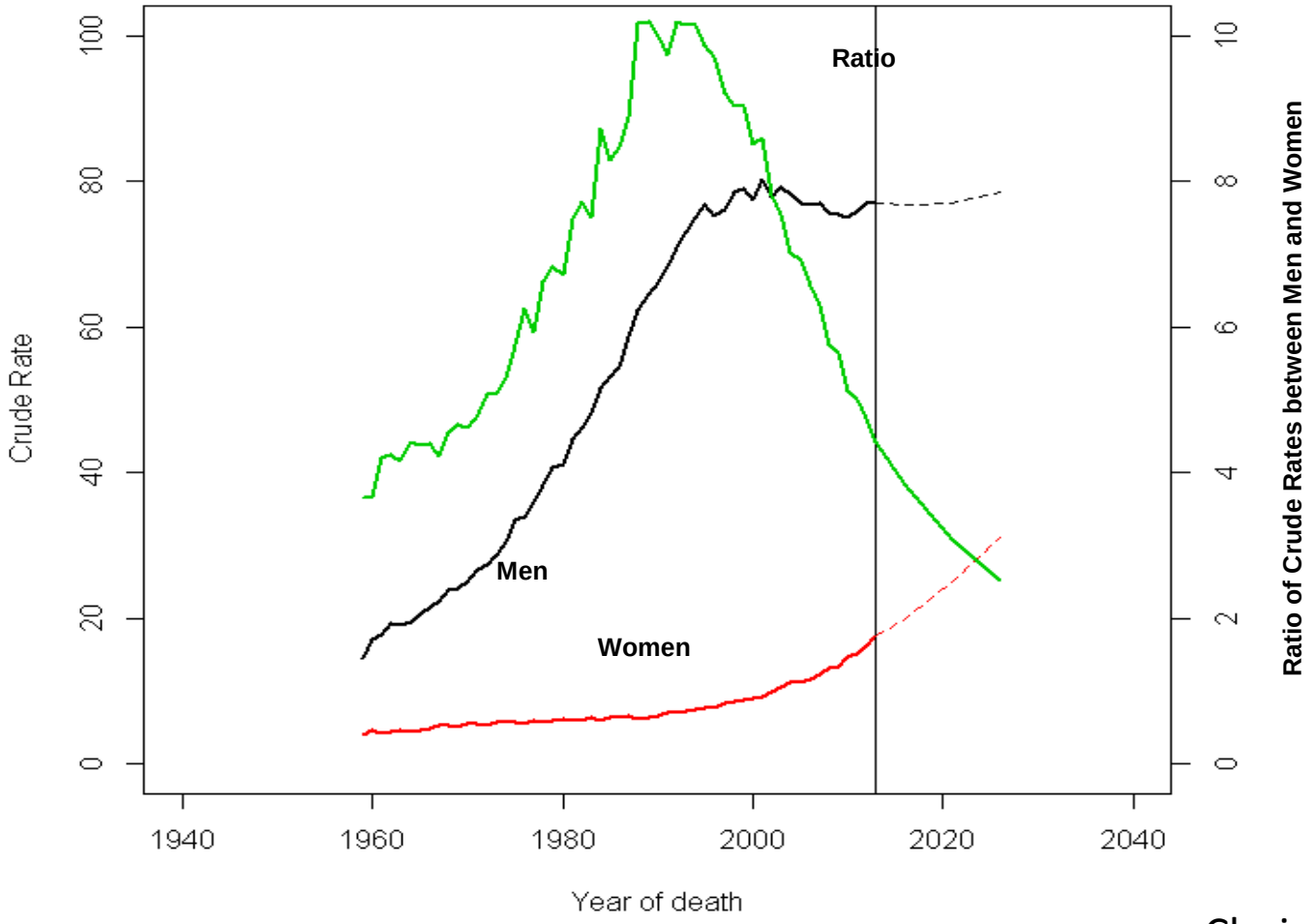


Cleries R et al, 2016

## COMENTARIOS FINALES

- EL CANCER DE PULMON CONTINUA Y CONTINUARA SIENDO UN PROBLEMA EPIDEMIOLOGICO MUY RELEVANTE, CON MAYOR IMPACTO PROGRESIVO EN MUJERES
- - EXISTEN DIFERENCIAS RELEVANTES ENTRE CCAA EN INCIDENCIA DEL CANCER Y PREVALENCIA DEL TABAQUISMO
- DIFERENCIAS SOCIO-ECONOMICAS SIGNIFCATIVAS EN LA EDAD DE INICIO DEL CONSUMO DE TABACO SE TRADUCEN EN DIFERENCIAS EN NIVEL SOCIO-ECONOMICO DE LA INCIDENCIA
- PREVENIR EL TABQUISMO CONTINUA SIENDO LA MEJOR ESTRATEGIA PARA ESTE Y OTROS TUMORES RELACIONADOS CON EL TABAQUISMO

THE
END