

**Table S1.** Number of predicted cancer deaths and mortality rates for the year 2017 and comparison figures for 2012 for France with 95% prediction intervals.

France		Observed number of deaths 2012	Predicted number of deaths 2017	Lower prediction limit (95%)	Upper prediction limit (95%)	Observed ASR* 2012	Predicted ASR* 2017	Lower prediction limit (95%)	Upper prediction limit (95%)
Men	STOMACH	2938	2900	2805	3066	4.56	4.08	3.86	4.30
	COLORECTUM	10194	10200	9883	10570	14.45	12.84	12.29	13.39
	PANCREAS	4839	5400	5170	5566	7.73	7.56	7.25	7.86
	LUNG	22311	22500	21825	23084	37.96	33.98	32.84	35.13
	PROSTATE	8574	8400	7975	8844	9.84	8.14	7.61	8.67
	LEUKEMIAS	3194	3500	3286	3630	4.66	4.25	3.97	4.53
	ALL CANCERS (malignant and benign)	92767	92900	90884	94865	144.00	127.26	123.85	130.68
Women	STOMACH	1654	1600	1477	1664	1.71	1.51	1.39	1.63
	COLORECTUM	9162	9200	8893	9565	8.45	7.66	7.36	7.96
	PANCREAS	4772	5500	5265	5653	5.00	5.18	4.88	5.47
	LUNG	8246	9100	8714	9442	12.05	12.01	11.41	12.62
	BREAST	11691	12100	11691	12436	15.23	13.90	13.39	14.41
	UTERUS (CERVIX AND CORPUS)	3402	3600	3424	3796	4.25	4.14	3.87	4.42
	LEUKEMIAS	2635	2900	2749	2978	2.66	2.35	2.16	2.54
ALL CANCERS (malignant and benign)	68171	70700	69388	71937	77.90	72.74	71.17	74.31	

\*ASR, age-standardised mortality rates using the World Standard Population

**Table S2.** Number of predicted cancer deaths and mortality rates for the year 2017 and comparison figures for 2012 for Germany with 95% prediction intervals.

Germany		Observed number of deaths 2012	Predicted number of deaths 2017	Lower prediction limit (95%)	Upper prediction limit (95%)	Observed ASR* 2012	Predicted ASR* 2017	Lower prediction limit (95%)	Upper prediction limit (95%)
Men	STOMACH	5770	5400	5158	5652	5.89	5.08	4.81	5.35
	COLORECTUM	14549	14100	13678	14575	14.50	12.52	12.06	12.99
	PANCREAS	7936	8600	8233	8912	8.34	8.31	7.95	8.67
	LUNG	29713	29100	28101	30171	32.08	29.21	28.08	30.34
	PROSTATE	12957	14500	13900	15182	11.07	10.67	10.24	11.10
	LEUKEMIAS	4155	4600	4372	4812	4.31	4.01	3.73	4.28
	ALL CANCERS (malignant and benign)	123322	127500	123965	130954	128.15	120.78	117.18	124.38
Women	STOMACH	4208	3700	3456	3868	3.14	2.57	2.39	2.75
	COLORECTUM	13004	12100	11596	12507	8.71	7.62	7.26	7.98
	PANCREAS	8184	8800	8405	9120	6.09	6.04	5.75	6.33
	LUNG	14752	17100	16631	17552	14.50	15.79	15.33	16.24
	BREAST	17748	17900	17411	18485	16.05	14.85	14.21	15.48
	UTERUS (CERVIX AND CORPUS)	4132	4100	3849	4338	3.82	3.57	3.31	3.83
	LEUKEMIAS	3445	3700	3537	3900	2.68	2.52	2.32	2.72
ALL CANCERS (malignant and benign)	105123	107200	104929	109391	85.78	81.88	79.55	84.21	

\*ASR, age-standardised mortality rates using the World Standard Population

**Table S3.** Number of predicted cancer deaths and mortality rates for the year 2017 and comparison figures for 2012 for Italy with 95% prediction intervals.

Italy		Observed number of deaths 2012	Predicted number of deaths 2017	Lower prediction limit (95%)	Upper prediction limit (95%)	Observed ASR* 2012	Predicted ASR* 2017	Lower prediction limit (95%)	Upper prediction limit (95%)
Men	STOMACH	5811	4900	4594	5168	7.81	5.47	5.02	5.92
	COLORECTUM	11995	12600	12283	12922	15.75	14.70	14.27	15.13
	PANCREAS	5154	5700	5487	5862	7.50	7.49	7.21	7.77
	LUNG	24885	23900	23248	24571	34.43	29.11	28.19	30.02
	PROSTATE	7282	7400	7137	7617	7.59	6.85	6.59	7.11
	LEUKEMIAS	3494	3500	3358	3697	5.13	4.42	4.11	4.74
	ALL CANCERS (malignant and benign)	99961	101500	99404	103691	136.21	123.03	120.14	125.91
Women	STOMACH	4189	4000	3729	4224	3.99	3.61	3.36	3.86
	COLORECTUM	10409	10500	10101	10813	9.65	8.92	8.56	9.28
	PANCREAS	5568	5900	5712	6175	5.41	5.39	5.18	5.59
	LUNG	8653	9800	9431	10164	10.30	11.08	10.62	11.55
	BREAST	12004	12400	12009	12788	14.87	13.78	13.24	14.33
	UTERUS (CERVIX AND CORPUS)	2882	2900	2754	3047	3.61	3.43	3.24	3.63
	LEUKEMIAS	2766	2900	2737	2989	3.13	2.74	2.48	3.01
ALL CANCERS (malignant and benign)	77596	82400	80807	83931	82.85	81.05	79.28	82.83	

\*ASR, age-standardised mortality rates using the World Standard Population

**Table S4.** Number of predicted cancer deaths and mortality rates for the year 2017 and comparison figures for 2012 for Poland with 95% prediction intervals.

Poland		Observed number of deaths 2012	Predicted number of deaths 2017	Lower prediction limit (95%)	Upper prediction limit (95%)	Observed ASR* 2012	Predicted ASR* 2017	Lower prediction limit (95%)	Upper prediction limit (95%)
Men	STOMACH	3475	3400	3234	3535	11.36	9.92	9.47	10.38
	COLORECTUM	6578	7200	6899	7486	20.95	20.44	19.54	21.34
	PANCREAS	2375	2400	2241	2529	7.94	7.12	6.69	7.56
	LUNG	16206	16000	15401	16612	53.66	46.83	44.92	48.74
	PROSTATE	4199	4700	4535	4899	12.39	12.47	11.96	12.97
	LEUKEMIAS	1480	1600	1438	1703	5.11	4.68	4.20	5.15
	ALL CANCERS (malignant and benign)	54906	57400	55866	58962	180.18	167.55	162.75	172.35
Women	STOMACH	1842	1800	1700	1944	4.10	3.68	3.38	3.98
	COLORECTUM	5716	6100	5836	6275	11.81	11.27	10.76	11.79
	PANCREAS	2397	2700	2541	2810	5.21	5.40	5.10	5.70
	LUNG	6444	7800	7346	8219	16.49	18.04	16.95	19.13
	BREAST	5574	6400	6170	6549	14.18	14.91	14.33	15.49
	UTERUS (CERVIX AND CORPUS)	3044	3300	3086	3432	8.05	7.41	6.96	7.86
	LEUKEMIAS	1200	1200	1093	1303	2.74	2.41	2.10	2.72
ALL CANCERS (malignant and benign)	43982	47200	46023	48442	102.91	100.25	97.30	103.20	

\*ASR, age-standardised mortality rates using the World Standard Population

**Table S5.** Number of predicted cancer deaths and mortality rates for the year 2017 and comparison figures for 2012 for Spain with 95% prediction intervals.

Spain		Observed number of deaths 2012	Predicted number of deaths 2017	Lower prediction limit (95%)	Upper prediction limit (95%)	Observed ASR* 2012	Predicted ASR* 2017	Lower prediction limit (95%)	Upper prediction limit (95%)
Men	STOMACH	3482	3200	3024	3419	7.16	6.07	5.61	6.52
	COLORECTUM	9858	10400	10077	10765	19.32	18.47	17.81	19.13
	PANCREAS	3121	3400	3233	3534	7.04	7.08	6.78	7.38
	LUNG	17683	17800	17179	18359	39.72	36.31	35.15	37.47
	PROSTATE	6045	6200	5951	6488	9.42	8.59	8.20	8.99
	LEUKEMIAS	1959	2000	1885	2080	4.09	3.52	3.20	3.85
	ALL CANCERS (malignant and benign)	68449	69900	68248	71549	142.46	131.66	128.63	134.69
Women	STOMACH	2200	2200	2135	2361	3.23	3.06	2.86	3.26
	COLORECTUM	6674	7000	6735	7197	9.30	8.88	8.51	9.24
	PANCREAS	2855	3100	2992	3286	4.31	4.56	4.34	4.77
	LUNG	3828	4600	4414	4765	8.02	8.84	8.42	9.25
	BREAST	6282	6400	6103	6683	11.56	10.98	10.39	11.58
	UTERUS (CERVIX AND CORPUS)	2176	2300	2179	2432	3.89	3.98	3.76	4.20
	LEUKEMIAS	1572	1600	1467	1668	2.54	2.19	1.94	2.45
ALL CANCERS (malignant and benign)	42733	45400	44206	46504	69.39	67.92	66.09	69.76	

\*ASR, age-standardised mortality rates using the World Standard Population

**Table S6.** Number of predicted cancer deaths and mortality rates for the year 2017 and comparison figures for 2012 for United Kingdom with 95% prediction intervals.

UK		Observed number of deaths 2012	Predicted number of deaths 2017	Lower prediction limit (95%)	Upper prediction limit (95%)	Observed ASR* 2012	Predicted ASR* 2017	Lower prediction limit (95%)	Upper prediction limit (95%)
Men	STOMACH	3022	2600	2442	2799	4.34	3.44	3.17	3.71
	COLORECTUM	10684	10600	10257	10866	15.59	13.75	13.28	14.23
	PANCREAS	4279	4600	4419	4747	6.63	6.53	6.27	6.80
	LUNG	19327	18900	18481	19358	29.12	25.69	25.06	26.33
	PROSTATE	10845	11000	10598	11357	13.11	11.85	11.39	12.30
	LEUKEMIAS	2741	2800	2650	2909	4.16	3.66	3.42	3.91
	ALL CANCERS (malignant and benign)	87134	90200	89035	91455	128.98	120.05	118.23	121.87
Women	STOMACH	1740	1200	1031	1372	1.90	1.28	1.06	1.50
	COLORECTUM	9362	9600	9244	9860	10.31	10.00	9.59	10.41
	PANCREAS	4389	4500	4341	4677	5.29	5.10	4.89	5.31
	LUNG	16076	16600	16003	17123	20.45	19.13	18.35	19.91
	BREAST	11662	10900	10511	11203	16.37	14.07	13.48	14.66
	UTERUS (CERVIX AND CORPUS)	2951	3200	3111	3382	4.26	4.47	4.25	4.69
	LEUKEMIAS	2094	2000	1867	2082	2.55	2.07	1.86	2.28
ALL CANCERS (malignant and benign)	78792	81000	79531	82466	98.40	93.74	91.60	95.87	

\*ASR, age-standardised mortality rates using the World Standard Population

**Table S7a.** Joinpoint analysis of cancer mortality rates in men at all ages, in selected European countries and the EU as a whole, in 1970-2014, whenever available.

<i>Cancer</i>	<i>Country</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>AAPC</i>
STOMACH	France	1970-1996	-3.6*	1996-2013	-2.7*							-3.2*
	Germany	1973-1985	-4*	1985-1994	-3.3*	1994-2007	-4.7*	2007-2014	-2.8*			-3.9*
	Italy	1970-1976	-4.2*	1976-1984	-1.8*	1984-2012	-3.6*					-3.4*
	Poland	1970-1987	-2.6*	1987-1996	-3.7*	1996-2014	-3*					-3*
	Spain	1970-1976	-2.4*	1976-1982	-5.7*	1982-1989	-1.9*	1989-2014	-3.2*			-3.2*
	UK	1970-1988	-2.6*	1988-2013	-4.8*							-3.9*
	EU	1970-1973	-1.7*	1973-1993	-3.1*	1993-2007	-3.7*	2007-2012	-3*			-3.2*
INTESTINE (COLON AND RECTUM)	France	1970-1977	0.8*	1977-1992	-1*	1992-2013	-1.8*					-1.1*
	Germany	1973-1995	0.1	1995-2014	-2.6*							-1.2*
	Italy	1970-1993	0.8*	1993-2012	-1.3*							-0.2*
	Poland	1970-1973	-4.4	1973-2002	2.4*	2002-2014	0.3					1.3*
	Spain	1970-1974	4.7*	1974-1982	0.9	1982-1995	3.1*	1995-2012	0.2*	2012-2014	-2.4	1.5*
	UK	1970-1991	-0.2*	1991-2013	-1.5*							-0.9*
	EU	1970-1990	0.3*	1990-1993	1.3	1993-2002	-0.7*	2002-2012	-1.2*			-0.2*
PANCREAS	France	1970-1976	3.1*	1976-2013	0.4*							0.8*
	Germany	1973-1982	4.9*	1982-2014	0.2*							1.2*
	Italy	1970-1987	2.3*	1987-2012	0.1*							1*
	Poland	1970-1987	3*	1987-2014	-0.2*							1*
	Spain	1970-1989	3.3*	1989-2014	0.9*							1.9*
	UK	1970-1979	0.3	1979-1998	-1.5*	1998-2013	0.3*					-0.5*
	EU	1970-1985	1.5*	1985-2000	0	2000-2012	0.4*					0.7*
LUNG	France	1970-1978	3.7*	1978-1989	1.3*	1989-1998	-0.2	1998-2007	-1.1*	2007-2013	-1.9*	0.5*
	Germany	1973-1978	1.3*	1978-1993	-0.3*	1993-2009	-2.3*	2009-2014	-1.1*			-1*
	Italy	1970-1982	3.3*	1982-1988	0.8*	1988-1994	-1.3*	1994-2012	-2.6*			-0.2*
	Poland	1970-1984	3.9*	1984-1991	1.9*	1991-2005	-0.7*	2005-2014	-3*			0.7*
	Spain	1970-1975	5.5*	1975-1989	3.3*	1989-1995	1.1*	1995-2007	-1*	2007-2014	-2*	1.2*
	UK	1970-1978	-0.2	1978-1985	-1.6*	1985-1991	-2.5*	1991-2000	-4*	2000-2013	-2.3*	-2.2*
	EU	1970-1978	1.7*	1978-1985	0.8*	1985-1993	-0.1	1993-2012	-1.8*			-0.4*
PROSTATE	France	1970-1980	0.4	1980-1988	1.7*	1988-2003	-1.3*	2003-2013	-4*			-1*
	Germany	1973-1995	0.9*	1995-2007	-2.9*	2007-2014	-0.6					-0.5*
	Italy	1970-1980	0.1	1980-1986	1.6*	1986-1994	-0.2	1994-2003	-1.4*	2003-2012	-3*	-0.7*
	Poland	1970-1974	-2.6	1974-1992	1.3*	1992-2001	3.2*	2001-2014	-0.5*			0.8*
	Spain	1970-1984	0.1	1984-1998	0.8*	1998-2008	-3.7*	2008-2011	0.3	2011-2014	-4.3*	-0.8*
	UK	1970-1982	0.7*	1982-1985	5.6	1985-1992	2.3*	1992-2013	-1.4*			0.3
	EU	1970-1981	0.5*	1981-1994	1.1*	1994-2003	-1.2*	2003-2006	-3.1*	2006-2012	-1.8*	-0.3*
LEUKEMIAS	France	1970-1977	1.2*	1977-1985	-0.8*	1985-1996	-1.9*	1996-2001	0.7	2001-2013	-1.7*	-0.9*
	Germany	1973-1992	-0.3*	1992-2014	-1.6*							-1*
	Italy	1970-1988	-0.1	1988-2012	-1.3*							-0.8*

<i>Cancer</i>	<i>Country</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>AAPC</i>
ALL CANCERS (malignant and benign)	Poland	1970-2006	-0.1	2006-2014	-1.4*							-0.3*
	Spain	1970-1983	1.4*	1983-1998	-0.2	1998-2014	-1.7*					-0.3*
	UK	1970-1985	-0.2	1985-1997	-1.5*	1997-2002	0.4	2002-2013	-1.3*			-0.8*
	EU	1970-1979	0.3*	1979-2001	-0.7*	2001-2012	-1.5*					-0.7*
	France	1970-1974	1.8*	1974-1986	0.5*	1986-2002	-1*	2002-2013	-2.2*			-0.6*
	Germany	1973-1993	0	1993-2007	-2*	2007-2014	-1.1*					-0.9*
	Italy	1970-1972	2.2	1972-1975	-0.9	1975-1987	1*	1987-1994	-0.9*	1994-2012	-1.8*	-0.6*
	Poland	1970-1974	0.6	1974-1988	1.5*	1988-2002	0.2*	2002-2007	-1.2*	2007-2014	-1.9*	0.1*
	Spain	1970-1975	1.8*	1975-1981	0.3	1981-1990	1.7*	1990-1999	-0.1	1999-2014	-1.7*	0
	UK	1970-1991	-0.3*	1991-1997	-2.1*	1997-2013	-1.5*					-1*
	EU	1970-1987	0.4*	1987-1993	-0.1	1993-2002	-1.2*	2002-2012	-1.5*			-0.5*

\* significantly different from 0 ( $p < 0.05$ )

APC, estimated annual percent change

AAPC, estimated average annual percent change



**Table S7b.** Joinpoint analysis of cancer mortality rates in women at all ages, in selected European countries and the EU as a whole, in 1970-2014, whenever available.

<i>Cancer</i>	<i>Country</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>AAPC</i>
STOMACH	France	1970-1996	-4.4*	1996-2013	-2.7*							-3.7*
	Germany	1973-1986	-3.9*	1986-1994	-3*	1994-2007	-4.5*	2007-2014	-3.2*			-3.8*
	Italy	1970-1977	-3.9*	1977-1988	-2.5*	1988-2001	-3.9*	2001-2012	-2.6*			-3.2*
	Poland	1970-1999	-3.6*	1999-2014	-2.7*							-3.3*
	Spain	1970-1975	-2.9*	1975-1983	-6.2*	1983-1986	-1.1	1986-2005	-3.8*	2005-2014	-1.9*	-3.6*
	UK	1970-1979	-2.9*	1979-2013	-4.3*							-4*
	EU	1970-1974	-2.4*	1974-1983	-3.7*	1983-1992	-3.3*	1992-2007	-3.6*	2007-2012	-2.6*	-3.3*
INTESTINE (COLON AND RECTUM)	France	1970-1975	0.5	1975-2013	-1.7*							-1.4*
	Germany	1973-1978	0.6	1978-1993	-0.6*	1993-2009	-3.3*	2009-2014	-2.2*			-1.7*
	Italy	1970-1977	1.1*	1977-1992	-0.1	1992-2012	-1.6*					-0.6*
	Poland	1970-1972	-11*	1972-1984	1.9*	1984-2001	1.1*	2001-2014	-0.6*			0.2
	Spain	1970-1983	0.1	1983-1994	1.3*	1994-2014	-1.1*					-0.1
	UK	1970-1991	-1*	1991-2000	-2.7*	2000-2013	-1*					-1.3*
	EU	1970-1976	0	1976-1994	-0.5*	1994-2009	-1.7*	2009-2012	-0.7			-0.9*
PANCREAS	France	1970-2013	1.3*									1.3*
	Germany	1973-1982	5.6*	1982-2014	0.7*							1.8*
	Italy	1970-1989	2.7*	1989-2012	0.8*							1.6*
	Poland	1970-1987	2.3*	1987-2014	0.2*							1*
	Spain	1970-1979	0.7	1979-1986	3.9*	1986-2014	1.4*					1.7*
	UK	1970-1989	0.3*	1989-1997	-1.5*	1997-2013	0.7*					0.1
	EU	1970-1987	1.7*	1987-1998	0.4*	1998-2012	0.9*					1.1*
LUNG	France	1970-1980	1.3*	1980-1993	3.1*	1993-2008	4.4*	2008-2013	1.8*			3*
	Germany	1973-1980	2.3*	1980-1993	3.6*	1993-2014	2.6*					2.9*
	Italy	1970-1987	2.5*	1987-2003	1.2*	2003-2012	1.9*					1.9*
	Poland	1970-1990	3.7*	1990-2014	2.5*							3.1*
	Spain	1970-1989	-1*	1989-1996	1.8*	1996-2014	4.4*					1.6*
	UK	1970-1979	3.6*	1979-1988	2.3*	1988-2003	-0.6*	2003-2008	1.3*	2008-2013	-0.8*	1.1*
	EU	1970-1988	2.4*	1988-2001	1.6*	2001-2012	2.1*					2.1*
BREAST	France	1970-1975	2*	1975-1978	-1.6	1978-1982	2	1982-1999	0	1999-2013	-1.8*	-0.3
	Germany	1973-1993	0.9*	1993-2007	-2.1*	2007-2014	-1.1*					-0.5*
	Italy	1970-1989	0.9*	1989-1995	-0.7	1995-1998	-3	1998-2012	-1.4*			-0.4*
	Poland	1970-1980	2.4*	1980-1994	0.6*	1994-2010	-0.8*	2010-2014	1.2			0.5*
	Spain	1970-1993	2.2*	1993-2000	-3.3*	2000-2014	-1.8*					0
	UK	1970-1989	0.5*	1989-1999	-2.8*	1999-2013	-2.3*					-1.2*
	EU	1970-1979	0.7*	1979-1988	1*	1988-1995	-0.4*	1995-1998	-2.3*	1998-2012	-1.7*	-0.4*
UTERUS (CERVIX AND CORPUS)	France	1970-1975	-0.8	1975-1981	-4*	1981-1996	-2.9*	1996-2013	-0.9*			-2*
	Germany	1973-1987	-3.5*	1987-1992	-2.2*	1992-2006	-3.6*	2006-2014	-0.3			-2.8*

<i>Cancer</i>	<i>Country</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>Years</i>	<i>APC</i>	<i>AAPC</i>
	Italy	1970-2001	-3.8*	2001-2012	-0.5							-3*
	Poland	1970-1979	-1.9*	1979-1987	0	1987-2014	-1.8*					-1.5*
	Spain	1970-1976	-1.8*	1976-1982	-4.7*	1982-2004	-2.2*	2004-2014	0.3			-1.9*
	UK	1970-1988	-1.3*	1988-1997	-4.6*	1997-2006	-1.7*	2006-2013	0.5			-1.8*
	EU	1970-1973	-1.1	1973-1982	-2.7*	1982-2006	-2.1*	2006-2012	-0.7*			-2*
LEUKEMIAS	France	1970-1981	0.3	1981-1994	-2.2*	1994-2001	-0.2	2001-2013	-2*			-1.2*
	Germany	1973-1998	-0.9*	1998-2014	-1.6*							-1.2*
	Italy	1970-1992	-0.8*	1992-2007	-1.8*	2007-2012	0.2					-1*
	Poland	1970-2006	-0.5*	2006-2014	-2.3*							-0.8*
	Spain	1970-1990	0.1	1990-2014	-1.6*							-0.9*
	UK	1970-1985	-0.4	1985-2013	-1.3*							-1*
	EU	1970-1982	-0.4*	1982-2002	-1.1*	2002-2012	-1.7*					-1*
ALL CANCERS (malignant and benign)	France	1970-1972	0.7	1972-1996	-0.7*	1996-2002	0.1	2002-2013	-1.1*			-0.6*
	Germany	1973-1985	-0.7*	1985-1993	-0.4*	1993-2006	-1.6*	2006-2014	-0.5*			-0.9*
	Italy	1970-1980	-0.8*	1980-1983	0.9	1983-1993	-0.2	1993-1999	-1.4*	1999-2012	-0.8*	-0.6*
	Poland	1970-1976	-0.5*	1976-1984	0.4*	1984-2003	0.1	2003-2014	-0.7*			-0.1*
	Spain	1970-1975	0.2	1975-1981	-1.6*	1981-1991	0.5*	1991-2007	-1.1*	2007-2014	-0.6*	-0.6*
	UK	1970-1989	0.3*	1989-1998	-1.5*	1998-2013	-1.1*					-0.5*
	EU	1970-1981	-0.4*	1981-1993	-0.2*	1993-2010	-1*	2010-2012	-0.3			-0.6*

\* significantly different from 0 ( $p < 0.05$ )

APC, estimated annual percent change

AAPC, estimated average annual percent change

**Table S8** Number of predicted deaths and mortality rates from lung cancer , for all-ages, truncated 25-44, truncated 45-64 years, truncated 65-74 years and truncated 75+ years, for the year 2017 and comparison figures for most recent data, for select European Countries and the EU as a whole, with 95% prediction intervals.

			Observed number of deaths	Predicted number of deaths 2017	Lower prediction limit (95%)	Upper prediction limit (95%)	Observed ASR*	Predicted ASR* 2017	Lower prediction limit (95%)	Upper prediction limit (95%)
All Ages	Men	France	22190	22454	21825	23084	37.26	33.98	32.84	35.13
		Germany	29560	29136	28101	30171	31.55	29.21	28.08	30.34
		Italy	24885	23909	23248	24571	34.43	29.11	28.19	30.02
		Poland	15847	16006	15401	16612	49.93	46.83	44.92	48.74
		Spain	17212	17769	17179	18359	37.12	36.31	35.15	37.47
		United Kingdom	19511	18920	18481	19358	28.73	25.69	25.06	26.33
		European Union (28)	185621	183447	181144	185751	37.27	33.27	32.82	33.72
	Women	France	8021	9078	8714	9442	11.54	12.01	11.41	12.62
		Germany	15524	17092	16631	17552	14.87	15.79	15.33	16.24
		Italy	8653	9798	9431	10164	10.30	11.08	10.62	11.55
		Poland	7363	7783	7346	8219	18.10	18.04	16.95	19.13
		Spain	4058	4590	4414	4765	8.19	8.84	8.42	9.25
		United Kingdom	16011	16563	16003	17123	20.00	19.13	18.35	19.91
		European Union (28)	82076	92268	90875	93662	13.84	14.55	14.29	14.81
Truncated 25-44 years	Men	France	298	157	78	237	3.24	1.74	0.87	2.61
		Germany	186	74	20	129	1.66	0.72	0.21	1.24
		Italy	185	84	34	135	1.89	0.89	0.36	1.41
		Poland	110	0	0	56	1.86	0.00	0.00	0.89
		Spain	157	100	63	138	1.84	1.24	0.76	1.71
		United Kingdom	120	68	21	115	1.29	0.76	0.23	1.30
		European Union (28)	1870	916	722	1111	2.36	1.21	0.96	1.47
	Women	France	186	150	105	195	1.99	1.63	1.15	2.12
		Germany	144	52	0	106	1.32	0.52	0.00	1.04
		Italy	144	138	108	168	1.48	1.50	1.18	1.82
		Poland	53	24	4	44	0.93	0.38	0.05	0.70
		Spain	91	88	63	114	1.13	1.10	0.78	1.43
		United Kingdom	97	63	34	93	1.03	0.69	0.36	1.02
		European Union (28)	1267	1022	890	1154	1.62	1.38	1.20	1.55
Truncated 45-64 years	Men	France	8041	7934	7515	8354	91.50	86.99	82.19	91.80
		Germany	8108	8357	7940	8773	65.10	63.32	60.06	66.58
		Italy	4717	3829	3581	4077	56.67	44.33	41.44	47.21
		Poland	5946	5920	5559	6281	103.71	100.10	93.76	106.45
		Spain	4911	4771	4524	5019	79.30	73.18	69.30	77.05
		United Kingdom	3830	3360	3173	3548	46.06	39.15	36.97	41.34

		Observed number of deaths	Predicted number of deaths 2017	Lower prediction limit (95%)	Upper prediction limit (95%)	Observed ASR*	Predicted ASR* 2017	Lower prediction limit (95%)	Upper prediction limit (95%)	
Truncated 65-74 years	Women	European Union (28)	55815	53605	52605	54605	79.23	72.88	71.49	74.27
		France	3128	3559	3301	3818	34.32	37.38	34.50	40.27
		Germany	4790	5304	5078	5529	37.51	40.18	38.45	41.90
		Italy	2047	2322	2217	2428	23.41	25.08	23.94	26.22
		Poland	2960	3088	2896	3281	47.01	47.54	44.42	50.66
		Spain	1589	1754	1618	1890	24.82	26.13	24.13	28.12
		United Kingdom	3074	2828	2513	3142	35.87	31.97	28.50	35.44
	Men	European Union (28)	25392	28239	27437	29042	34.57	36.92	35.85	37.99
		France	6588	6703	6315	7091	250.24	213.42	200.99	225.85
		Germany	9736	8950	8219	9681	233.93	216.12	198.42	233.83
		Italy	7911	6818	6400	7236	262.94	216.68	203.88	229.49
		Poland	5278	5557	5130	5984	395.74	361.54	334.28	388.80
		Spain	5456	5711	5429	5992	273.21	276.48	264.07	288.89
		United Kingdom	6386	6450	6209	6692	218.66	202.37	195.14	209.61
Truncated 75+ years	Women	European Union (28)	59337	54950	53306	56593	266.73	225.26	218.61	231.91
		France	1740	1977	1864	2090	58.28	55.84	52.65	59.04
		Germany	4620	5110	4894	5326	101.75	113.14	108.07	118.20
		Italy	2274	2664	2379	2949	66.93	74.89	67.05	82.73
		Poland	2369	2690	2313	3067	133.44	133.06	115.01	151.11
		Spain	940	1068	1008	1127	42.21	46.69	44.10	49.27
		United Kingdom	4905	5243	5062	5424	155.06	153.56	148.05	159.06
	Men	European Union (28)	22975	26394	25625	27164	89.43	94.39	91.59	97.18
		France	7262	7658	7408	7909	325.87	316.22	306.48	325.96
		Germany	11528	11750	11149	12350	352.38	308.20	293.32	323.09
		Italy	12069	13176	12730	13621	500.38	480.37	463.97	496.77
		Poland	4511	4529	4304	4754	497.21	486.67	460.70	512.65
		Spain	6687	7186	6732	7639	395.45	413.05	381.46	444.64
		United Kingdom	9175	9039	8728	9351	435.44	396.69	382.42	410.96
Women	European Union (28)	68547	73965	72714	75217	411.66	391.89	385.20	398.57	
	France	2966	3391	3165	3617	79.00	84.68	76.79	92.56	
	Germany	5966	6621	6286	6955	114.72	116.76	110.26	123.27	
	Italy	4186	4671	4469	4874	105.53	108.83	104.58	113.07	
	Poland	1981	1980	1876	2083	112.75	112.70	106.89	118.52	
	Spain	1438	1679	1588	1769	53.34	62.22	58.91	65.54	
	United Kingdom	7934	8429	8003	8854	258.07	259.56	244.41	274.72	
	European Union (28)	32414	36600	35771	37429	118.10	122.73	119.25	126.20	

\*ASR, age-standardised mortality rates using the World Standard Population

**Table S9.** Joinpoint analysis for lung cancer mortality rates in men and women at all ages, truncated 25-44, truncated 45-64, truncated 65-74 and 75+ years, in selected countries and in the EU as a whole, in 1970-2014, whenever available.

Country	Age group	Years	Men										Women											
			APC 1	Years	APC 2	Years	APC 3	Years	APC 4	Years	APC 4	AAPC	Years	APC 1	Years	APC 2	Years	APC 3	Years	APC 4	Years	APC 5	AAPC	
France	All ages	1970-1978	3.7*	1978-1989	1.3*	1989-1998	-0.2	1998-2007	-1.1*	2007-2013	-1.9*	0.5*	1970-1980	1.3*	1980-1993	3.1*	1993-2008	4.4*	2008-2013	1.8*			3*	
	Truncated 25-44 y	1970-1996	2*	1996-2013	-5.1*							-0.9*	1970-1983	-0.2	1983-1998	8.9*	1998-2006	0.9	2006-2013	-4.8*			2.3*	
	Truncated 45-64 y	1970-1978	3.7*	1978-1989	1.4*	1989-2006	-0.4*	2006-2013	-2.4*			0.5*	1970-1995	2.8*	1995-2006	7.1*	2006-2013	2.9*						3.9*
	Truncated 65-74 y	1970-1979	2.9*	1979-1998	0.4*	1998-2004	-2.3*	2004-2013	-1.1*			0.2*	1970-1977	-0.1	1977-2013	2.9*								2.4*
	Truncated 75+ yea	1970-1978	6.2*	1978-1987	2.6*	1987-2010	-0.4*	2010-2013	-2.6*			1.2*	1970-1994	1.9*	1994-2013	2.7*								
Germany	All ages	1973-1978	1.3*	1978-1993	-0.3*	1993-2009	-2.3*	2009-2014	-1.1*			-1*	1973-1980	2.3*	1980-1993	3.6*	1993-2014	2.6*						2.9*
	Truncated 25-44 y	1973-1986	0.4	1986-1999	-2.7*	1999-2014	-5.2*					-2.6*	1973-1981	1	1981-1986	9.5*	1986-1998	2.5*	1998-2009	-1.5*	2009-2014	-7.8*	0.6	
	Truncated 45-64 y	1973-1990	0.6*	1990-2001	-2.6*	2001-2014	-1.9*					-1.1*	1973-1988	2.9*	1988-2007	4*	2007-2014	1.3*						3.2*
	Truncated 65-74 y	1973-1977	0.1	1977-1986	-1.1*	1986-1997	-0.1	1997-2007	-3.3*	2007-2014	-0.8*	-1.2*	1973-1980	1.9*	1980-1994	3.8*	1994-2006	0.9*	2006-2014	5.5*				3*
	Truncated 75+ yea	1973-1978	4.5*	1978-1985	0.9	1985-2014	-1.2*					-0.1	1973-1980	4.7*	1980-1985	0.9	1985-1998	3.2*	1998-2014	1.7*				2.6*
Italy	All ages	1970-1982	3.3*	1982-1988	0.8*	1988-1994	-1.3*	1994-2012	-2.6*			-0.2*	1970-1987	2.5*	1987-2003	1.2*	2003-2012	1.9*						1.9*
	Truncated 25-44 y	1970-1984	-0.2	1984-2012	-4.7*							-3.2*	1970-2002	0.9*	2002-2012	-2								0.2
	Truncated 45-64 y	1970-1980	3.6*	1980-1987	0.5	1987-2012	-3.7*					-1.3*	1970-1986	2.1*	1986-1997	0.4	1997-2012	2.6*						1.9*
	Truncated 65-74 y	1970-1984	2.6*	1984-1992	1.5*	1992-1998	-1.7*	1998-2007	-3.7*	2007-2012	-1.9*	-0.2	1970-1992	2.8*	1992-2009	0.3	2009-2012	6.4*						2*
	Truncated 75+ yea	1970-1984	7*	1984-2001	1.3*	2001-2012	-0.7*					2.6*	1970-1992	3.4*	1992-2012	1.6*								2.5*
Poland	All ages	1970-1984	3.9*	1984-1991	1.9*	1991-2005	-0.7*	2005-2014	-3*			0.7*	1970-1990	3.7*	1990-2014	2.5*								3.1*
	Truncated 25-44 y	1970-1980	3.8*	1980-1996	-0.8*	1996-2014	-7.1*					-2.4*	1970-1996	3.5*	1996-2014	-4.8*								0
	Truncated 45-64 y	1970-1985	4.6*	1985-1991	1.3*	1991-2006	-2.1*	2006-2014	-3.9*			0.3*	1970-1980	5.2*	1980-2008	3.4*	2008-2014	0.5						3.4*
	Truncated 65-74 y	1970-1993	2.6*	1993-2004	0.1	2004-2014	-2.7*					0.8*	1970-1993	3.3*	1993-2005	1.4*	2005-2014	5.3*						3.2*
	Truncated 75+ yea	1970-1984	4.3*	1984-1994	1.1*	1994-2002	3.3*	2002-2008	0.5	2008-2014	-1.6*	2*	1970-2003	3.1*	2003-2014	1*								2.6*
Spain	All ages	1970-1975	5.5*	1975-1989	3.3*	1989-1995	1.1*	1995-2007	-1*	2007-2014	-2*	1.2*	1970-1989	-1*	1989-1996	1.8*	1996-2014	4.4*						1.6*
	Truncated 25-44 y	1970-1992	4.8*	1992-2003	-3.9*	2003-2014	-8.9*					-1*	1970-1985	-2.8*	1985-2002	5.6*	2002-2014	-4.5*						-0.1
	Truncated 45-64 y	1970-1989	3.4*	1989-1999	0.4	1999-2009	-1.1*	2009-2014	-3.6*			0.9*	1970-1986	-2.4*	1986-1995	1.4	1995-2010	7.4*	2010-2014	2.9*				2.1*
	Truncated 65-74 y	1970-1974	7.4*	1974-1992	2.7*	1992-2014	-1.2*					1.2*	1970-1975	2.5*	1975-1989	-1.5*	1989-2000	0.8*	2000-2007	2.9*	2007-2014	6.5*	1.5*	
	Truncated 75+ yea	1970-1981	6.6*	1981-1995	3*	1995-2011	-0.5*	2011-2014	-2.4*			2.2*	1970-1979	3.9*	1979-2002	0	2002-2014	2.3*						1.4*
UK	All ages	1970-1978	-0.2	1978-1985	-1.6*	1985-1991	-2.5*	1991-2000	-4*	2000-2013	-2.3*	-2.2*	1970-1979	3.6*	1979-1988	2.3*	1988-2003	-0.6*	2003-2008	1.3*	2008-2013	-0.8*	1.1*	
	Truncated 25-44 y	1970-1996	-4*	1996-1999	-9.4	1999-2013	-1.6*					-3.6*	1970-2013	-1.9*										-1.9*
	Truncated 45-64 y	1970-1976	-1.4*	1976-1985	-2.5*	1985-1999	-4.2*	1999-2013	-2.8*			-3*	1970-1978	3.5*	1978-1988	0.4	1988-1997	-2.7*	1997-2008	0.4	2008-2013	-1.7*	0.1	
	Truncated 65-74 y	1970-1978	-0.4*	1978-1991	-1.7*	1991-2005	-4.2*	2005-2008	0.2	2008-2013	-2.9*	-2.3*	1970-1984	5.1*	1984-1991	2.6*	1991-1996	0.2	1996-2003	-2.4*	2003-2013	0.8*	1.9*	

		<i>Men</i>											<i>Women</i>											
<i>Country</i>	<i>Age group</i>	<i>Years</i>	<i>APC</i> <i>1</i>	<i>Years</i>	<i>APC</i> <i>2</i>	<i>Years</i>	<i>APC</i> <i>3</i>	<i>Years</i>	<i>APC</i> <i>4</i>	<i>Years</i>	<i>APC</i> <i>4</i>	<i>AAPC</i>	<i>Years</i>	<i>APC</i> <i>1</i>	<i>Years</i>	<i>APC</i> <i>2</i>	<i>Years</i>	<i>APC</i> <i>3</i>	<i>Years</i>	<i>APC</i> <i>4</i>	<i>Years</i>	<i>APC</i> <i>5</i>	<i>AAPC</i>	
	Truncated 75+ yea	1970-1979	3.7*	1979-1985	0.1	1985-1992	-1.7*	1992-1997	-3.4*	1997-2013	-1.7*	-0.6*	1970-1987	4.5*	1987-2008	2.3*	2008-2013	-0.1						2.9*
EU	All ages	1970-1978	1.7*	1978-1985	0.8*	1985-1993	-0.1	1993-2012	-1.8*			-0.4*	1970-1988	2.4*	1988-2001	1.6*	2001-2012	2.1*						2.1*
	Truncated 25-44 y	1970-1979	1.1*	1979-1994	0.1	1994-1998	-4*	1998-2008	-5.9*	2008-2012	-3.7*	-1.9*	1970-1979	-0.8	1979-1998	2.9*	1998-2012	-2.6*						0.3
	Truncated 45-64 y	1970-1985	1.2*	1985-1993	-0.6*	1993-2000	-2.4*	2000-2006	-1.4*	2006-2012	-2.5*	-0.6*	1970-1979	2.5*	1979-1997	1.4*	1997-2007	3.5*	2007-2012	1.1*				2.1*
	Truncated 65-74 y	1970-1977	1.1*	1977-1993	0.2*	1993-1998	-1.2*	1998-2006	-2.5*	2006-2012	-1.6*	-0.6*	1970-1977	2.4*	1977-1988	3.6*	1988-1994	1.3*	1994-2005	0.2*	2005-2012	3.5*	2.2*	
	Truncated 75+ yea	1970-1978	4.3*	1978-1985	2.1*	1985-2008	-0.4*	2008-2012	-1.6*			0.8*	1970-1985	3*	1985-1995	2.5*	1995-2008	1.8*	2008-2012	1.1*			2.3*	

\*significantly different from 0 (p < 0.05)

APC, estimated annual percent change

AAPC, estimated average annual percent change

**Figure S1.** Age-standardized (World Population) cancer mortality rate trends for men and women in quinquennia from 1970-74 to 2012 and predicted rates for 2017 with 95% PIs for stomach, colorectum, pancreas, lung, breast, uterus, prostate, leukemias, and all cancers in studied countries and the EU as a whole.

