Supplementary table 1 Number of assisted suicides of Swiss residents in the annual reports of the right-to-die organisations Exit Deutschschweiz (Exit_DS), Exit Suisse Romande (Exit_SR) and Dignitas and number of assisted suicides identified in the SNC by year

Year	Annual Reports of Right-to-Die Organisations				Identified in SNC	%
	Exit_DS	Exit_SR	Dignitas	Total		
2003	131	48	9	**188**	180	95.7
2004	154	42	14	**210**	198	94.3
2005	162	54	12	**228**	209	91.7
2006	150	65	15	**230**	218	94.8
2007	179	66	6	**251**	231	92.0
2008	167	75	10	**252**	239	94.8
2009	217	69	4	**290**	278	95.9
2010	257	91	6	**354**	330	93.2
2011	305	111	11	**427**	386	90.4
2012	356	144	13	**513**	446	86.9
2013	459	155	8	**622**	538	86.5
2014	583	175	6	**764**	688	90.1
Total	**3120**	**1095**	**114**	**4329**	**3941**	91.0

Supplementary table 2 Categories of underlying diseases and corresponding ICD-10 codes

Category	ICD-10 codes
All cancer	C00-C97
Colon and other digestive organs	C15-C26
Lung and other respiratory organs	C30-C39
Breast	C50
Prostate and other male genital	C60-C63
Others	C00-C14, C40-C49, C51-C58, C64-C97
Mental and behavioural disorders	F00-F99
Dementia	F00-F03
Mood disorders	F30-F39
Other mental and behave. disorders	F04-F29, F40-F99
Diseases of the nervous system	G00-G99
Huntington disease	G10
Motor neuron disease (incl. ALS)	G12.2
Parkinson's disease	G20
Alzheimer	G30
Multiple sclerosis	G35
Paralytic syndromes	G80-G83
Other diseases of the nervous system	G00-G09, G11-G12.1, G12.8-G14, G21-G26, G31-G32, G36-G73, G90-G99
Diseases of the circulatory system	I00-I99
Ischaemic heart diseases	I20-I25
Heart failure	I50
Cerebrovascular disease	I60-I69
Other diseases of the circulatory system	I00-I15, I26-I49,I51-I52, I70-I99
Diseases of the respiratory system	J00-J99
Chronic obstructive pulmonary disease (COPD)	J44
Other diseases of the respiratory system	J00-J43, J45-J99
Diseases of the musculoskeletal system	M00-M99
Arthropathies	M00-M25
Dorsopathies	M40-M54
Osteoporosis	M80-M82
Other diseases of the musculoskeletal system	M30-M36, M60-M79, M83-M99
Other diseases	A00-B99, D00-D89, E00-E90, H00-H95, K00-K93, L00-L99, N00-N99,O00-O99, P00-P96, Q00-Q99, R00-R68, R70-R98
No/Unknown cause of death	R69, R99

Supplementary table 3 Underlying diagnoses: Number and percentage of assisted suicides, per age group and time period

	25-64 years old						65-94 years old					
	2003-2008		2009-2014		Total		2003-2008		2009-2014		Total	
Diagnosis	Nr	%	Nr	%	Nr	%	Nr	%	Nr	%	Nr	%
Cancer	**159**	**51.3**	**243**	**52.7**	**402**	**52.1**	**385**	**39.9**	**862**	**39.1**	**1,247**	**39.3**
Colon and other digestive organs	*44*	*14.2*	*73*	*15.9*	*117*	*15.1*	*104*	*10.8*	*236*	*10.7*	*340*	*10.7*
Lung and other respiratory organs	*28*	*9.0*	*40*	*8.7*	*68*	*8.9*	*43*	*4.5*	*135*	*6.1*	*178*	*5.6*
Breast	*21*	*6.8*	*32*	*6.9*	*53*	*6.9*	*47*	*4.9*	*90*	*4.1*	*137*	*4.3*
Prostate and other male genital	*6*	*1.9*	*8*	*1.7*	*14*	*1.8*	*57*	*5.9*	*102*	*4.6*	*159*	*5.0*
Others	*60*	*19.4*	*90*	*19.5*	*150*	*19.4*	*134*	*13.9*	*299*	*13.6*	*433*	*13.7*
Mental and behavioural	**14**	**4.5**	**31**	**6.7**	**45**	**5.8**	**36**	**3.7**	**98**	**4.4**	**134**	**4.2**
Mood disorders	*11*	*3.5*	*12*	*2.6*	*23*	*2.9*	*28*	*2.9*	*64*	*2.9*	*92*	*2.9*
Dementia	*0*		*2*	*0.4*	*2*	*0.2*	*5*	*0.5*	*22*	*1.0*	*27*	*0.8*
Other	*3*	*1.0*	*17*	*3.7*	*20*	*2.6*	*3*	*0.3*	*12*	*0.5*	*15*	*0.5*
Nervous system	**62**	**20.0**	**110**	**23.9**	**172**	**22.3**	**105**	**10.9**	**268**	**12.2**	**373**	**11.8**
Motor neuron disease	*17*	*5.5*	*18*	*3.9*	*35*	*4.5*	*27*	*2.8*	*47*	*2.1*	*74*	*2.3*
Parkinon's	*1*	*0.3*	*3*	*0.7*	*4*	*0.5*	*32*	*3.3*	*74*	*3.4*	*106*	*3.3*
Multiple sclerosis	*29*	*9.4*	*43*	*9.3*	*72*	*9.4*	*13*	*1.4*	*22*	*1.0*	*35*	*1.1*
Huntington	*1*	*0.3*	*9*	*1.9*	*10*	*1.3*	*0*	*0*	*3*	*0.1*	*3*	*0.1*
Paralytic syndromes	*3*	*1.0*	*10*	*2.2*	*13*	*1.7*	*8*	*0.8*	*12*	*0.6*	*20*	*0.6*
Alzheimer	*0*	*0*	*3*	*0.7*	*3*	*0.4*	*5*	*0.5*	*20*	*0.9*	*25*	*0.8*
Other	*11*	*3.5*	*24*	*5.2*	*35*	*4.5*	*20*	*2.1*	*90*	*4.1*	*110*	*3.5*
Circulatory system	**2**	**0.7**	**12**	**2.6**	**14**	**1.8**	**112**	**11.6**	**268**	**12.2**	**380**	**12.0**
Ischaemic	*0*	*0*	*1*	*0.2*	*1*	*0.1*	*2*	*0.2*	*61*	*2.8*	*63*	*2.0*
Heart failure							*1*	*0.1*	*26*	*1.2*	*27*	*0.8*
Cerebrovascular	*2*	*0.7*	*7*	*1.5*	*9*	*1.2*	*109*	*11.3*	*99*	*4.5*	*208*	*6.6*
Other	*-*		*4*	*0.8*	*4*	*0.5*	*0*	*0*	*82*	*3.7*	*219*	*2.6*
Respiratory system	**10**	**3.2**	**16**	**3.5**	**26**	**3.4**	**31**	**3.2**	**118**	**5.4**	**149**	**4.7**
COPD	*9*	*2.9*	*10*	*2.2*	*19*	*2.5*	*27*	*2.8*	*87*	*4.0*	*114*	*3.6*
Other	*1*	*0.3*	*6*	*1.3*	*7*	*0.9*	*4*	*0.4*	*31*	*1.4*	*35*	*1.1*
Musculoskeletal	**6**	**1.9**	**13**	**2.8**	**19**	**2.5**	**62**	**6.4**	**255**	**11. 6**	**317**	**10.0**
Arthropathies	*2*	*0.6*	*-*	*-*	*2*	*0.3*	*16*	*1.7*	*88*	*4.0*	*104*	*3.3*
Dorsopathies	*1*	*0.3*	*6*	*1.3*	*7*	*0.9*	*23*	*2.3*	*90*	*4.1*	*113*	*3.5*
Osteoporosis	*-*	*-*	*1*	*0.2*	*1*	*0.1*	*17*	*1.8*	*46*	*2.1*	*63*	*2.0*
Other	*3*	*1.0*	*6*	*1.3*	*9*	*1.2*	*6*	*0.6*	*31*	*1.4*	*37*	*1.2*
Other	**32**	**10.3**	**24**	**5.2**	**56**	**7.3**	**83**	**8.6**	**239**	**10.8**	**322**	**10.2**
No condition listed	**25**	**8.1**	**12**	**2.6**	**37**	**4.8**	**151**	**15.7**	**97**	**4.4**	**248**	**7.8**
Total	**310**		**461**		**771**		**965**		**2,205**		**3,170**	

Supplementary table 4 Results of the Cox regression models by age group and time period

Characteristics		Age group 25-64 years				Age group 65-94 years			
		2003-2008		2009-2014		2003-2008		2009-2014	
		HR	95%CI	HR	95%CI	HR	95% CI	HR	95% CI
Gender	Male	0.78	0.62-0.99	0.77	0.64-0.93	1.12	0.96-1.29	1.01	0.92-1.12
	Female	1		1		1		1	
	Wald test, 1df	χ^2=4.20, p=0.04		χ^2=7.08, p=0.008		χ^2=2.10, p=0.15		χ^2=0.08, p=0.7751	
Religious affiliation	Protestant	1.38	1.03-1.86	1.30	1.02-1.65	1.83	1.54-2.49	1.87	1.66-2.10
	Catholic	1		1		1		1	
	No Affiliation	2.86	2.08-3.90	2.77	2.16-3.56	5.68	4.64-6.94	5.12	4.49-5.83
	Other/unknown	1.61	0.96-2.71	0.90	0.55-1.47	2.07	1.53-2.80	1.93	1.56-2.39
	Wald test, 3 df	χ^2=46.44, p<0.001		χ^2=77.60, p<0.001		χ^2=314.58, p<0.001		χ^2=645.78, p<0.001	
Education	Compulsory	0.83	0.58-1.19	0.68	0.49-0.95	0.58	0.49-0.69	0.56	0.50-0.64
	Secondary	1		1		1		1	
	Tertiary	0.88	0.67-1.16	1.02	0.82-1.27	1.36	1.15-1.60	1.27	1.14-1.41
	Unknown	1.25	0.51-3.07	0.51	0.19-1.35	0.55	0.28-1.08	0.57	0.35-0.93
	Wald test, 3 df	χ^2=2.03, p=0.57		χ^2=6.70, p=0.08		χ^2=64.07, p<0.001		χ^2=126.96, p<0.001	
Marital status	Single	0.85	0.57-1.26	1.33	0.99-1.79	1.21	0.89-1.65	0.94	0.77-1.15
	Married	1		1		1		1	
	Widowed	1.39	0.82-2.36	0.96	0.52-1.79	1.33	1.09-1.62	1.40	1.24-1.58
	Divorced	1.27	0.90-1.79	1.70	1.32-2.19	2.03	1.59-2.58	1.95	1.69-2.26
	Wald test, 3 df	χ^2=5.48, p=0.14		χ^2=17.71, p<0.001		χ^2=34.57, p<0.001		χ^2=105.03, p<0.001	
Type of household	1 person	1.91	1.40-2.62	1.56	1.22-2.00	1.16	0.97-1.40	1.11	0.99-1.24
	≥ 2 persons	1		1		1		1	
	Institutions	2.74	1.09-6.86	1.59	0.65-3.92	1.17	0.74-1.84	1.42	0.93-2.16
	Wald test, 2 df	χ^2=18.20, p<0.001		χ^2=12.74, p=0.002		χ2=2.57, p=0.28		χ^2=5.33, p=0.07	
Children	**No**	1		1		1		1	
	Yes	0.53	0.40-0.71	0.61	0.48-0.78	0.81	0.67-0.97	0.63	0.56-0.71
	Unknown	0.84	0.46-1.53	1.09	0.66-1.79	0.64	0.45-0.91	0.70	0.55-0.89
	Wald test, 1 df	χ^2= 18.94, p<0.001		χ^2= 15.51, p<0.001		χ2=5.45, p=0.02		χ^2=63.09, p<0.001	
Urbanicity	Urban	1.17	0.90-1.51	0.99	0.80-1.23	1.28	1.11-1.47	1.06	0.97-1.17
	Peri-urban	1		1		1		1	
	Rural	0.8	0.59-1.17	0.87	0.66-1.14	0.76	0.61-0.95	0.69	0.60-0.80
	Wald test, 2 df	χ^2= 18.94, p<0.001		χ2= 1.10, p=0.58			χ2= 25.72, p<0.001	χ^2=34.26, p<0.001	
Neighbourhood index of SEP	**Lowest quintile**	1		1		1		1	
	Second quintile	1.16	0.77-1.75	1.30	0.93-1.82	1.20	0.92-1.55	1.00	0.84-1.18
	Third quintile	1.20	0.79-1.80	1.29	0.92-1.81	1.46	1.13-1.87	1.12	0.96-1.34
	Fourth quintile	1.30	0.87-1.95	1.48	1.06-2.06	1.64	1.28-2.10	1.35	1.16-1.58
	Highest quintile	1.81	1.21-2.69	1.53	1.09-2.15	2.34	1.83-2.98	1.79	1.53-2.08
	Wald test, 4 df	χ^2= 18.94, p<0.001		χ2= 6.95, p=0.14			χ2= 65.39, p<0.001	χ^2=97.24, p<0.001	
Language Region	**German**	1		1		1		1	
	French	1.28	0.99-1.67	1.43	1.16-1.77	1.25	1.07-1.45	1.18	1.06-1.30
	Italian	0.94	0.47-1.86	0.35	0.14-0.85	0.96	0.65-1.41	0.48	0.34-0.68
	Wald test, 2 df	χ^2= 3.61, p=0.16		χ2= 17.72, p<0.001		χ2= 8.46, p=0.01		χ^2=30.58, p<0.001	
Nationality	**Swiss**	1				1		1	
	Foreigner	0.39	0.25-0.62	0.57	0.41-0.80	0.70	0.53-0.92	0.67	0.56-0.80
	Wald test, 1 df		χ^2= 16.81, p<0.001	χ2= 10.93, p<0.001		χ2= 6.58, p=0.01		χ^2=20.54, p<0.001	

Supplementary table 5 Results of the logistic regression models by age group and time period

Characteristics		Age group 25-64 years				Age group 65-94 years			
		2003-2008		2009-2014		2003-2008		2009-2014	
		OR	95%CI	OR	95%CI	OR	95% CI	OR	95% CI
Gender	Male	0.52	0.41-0.66	0.54	0.44-0.65	0.64	0.55-0.75	0.65	0.59-0.72
	Female	1		1		1		1	
	Wald test, 1 df	χ2=28.80, p<0.01		χ2=37.92, p<0.01		χ2=33.65, p<0.01		χ2=69.95, p<0.01	
Age at death	**25-34**	1		1					
	35-44	1.36	0.59-3.12	0.66	0.33-1.332				
	45-54	1.25	0.56-2.78	0.55	0.29-1.07				
	55-64	1.33	0.60-2.94	0.67	0.35-1.28				
	65-74					1		1	
	75-84					0.94	0.80-1.10	0.92	0.82-1.03
	85-94					0.77	0.64-0.94	0.73	0.64-0.83
	Wald test	3df: χ2=0.72, p=0.87		χ2=4.74, p=0.19		2df: χ2=7.74, p=0.02		χ2=27.07, p<0.01	
Underlying disease	**Cancer**	1		1		1		1	
	Mental	1.38	0.78-2.44	2.19	1.45-3.30	0.61	0.43-0.87	0.42	0.34-0.53
	Nervous system	6.91	5.06-9.42	6.76	5.29-8.65	1.53	1.23-1.92	1.47	1.27-1.60
	Circulatory	0.04	0.01-0.14	0.13	0.07-0.25	0.21	0.17-0.27	0.26	0.22-0.30
	Respiratory	1.08	0.57-2.06	1.06	0.63-1.77	0.35	0.24-0.51	0.57	0.47-0.70
	Musculoskeletal	3.81	1.64-8.84	4.63	2.51-8.52	4.92	3.70-6.54	9.45	8.08-11.06
	Other diseases	0.79	0.53-1.18	0.44	0.29-0.68	0.52	0.41-0.66	0.68	0.58-0.78
	No disease	1.57	1.01-2.43	0.45	0.25-0.81	4.05	3.32-4.95	1.06	0.85-1.32
	Wald test, 7 df	χ2=198.53, p<0.01		χ2=374.96, p<0.01		χ2=741.59, p<0.01		χ2=1684.34, p<0.01	
Religious affiliation	Protestant	1.29	0.96-1.74	1.27	0.99-1.62	1.81	1.52-2.17	1.85	1.64-2.08
	Catholic	1		1		1		1	
	No Affiliation	2.76	2.01-3.79	2.75	2.14-3.55	5.49	4.48-6.72	5.00	4.37-5.70
	Other/unknown	1.52	0.91-2.55	0.94	0.57-1.54	1.86	1.37-2.53	1.81	1.46-2.25
	Wald test, 3 df	χ2=44.75, p<0.01		χ2=73.00, p<0.01		χ2=294.46, p<0.01		χ2=600.21, p<0.01	
Education	Compulsory	0.64	0.45-0.91	0.50	0.36-0.70	0.54	0.45-0.64	0.51	0.45-0.57
	Secondary	1		1		1		1	
	Tertiary	1.20	0.91-1.59	1.45	1.16-1.81	1.52	1.29-1.80	1.49	1.34-1.66
	Unknown	0.94	0.38-2.29	0.38	0.15-0.97	0.53	0.27-1.04	0.59	0.36-0.97
	Wald test, 3 df	χ2=9.36, p=0.02		χ2=36.32, p<0.01		χ2=94.71, p<0.01		χ2=210.35, p<0.01	
Marital status	Single	0.68	0.46-1.01	0.92	0.68-1.26	1.18	0.87-1.61	0.92	0.75-1.13
	Married	1		1		1		1	
	Widowed	1.00	0.59-1.71	0.90	0.52-1.56	1.22	0.99-1.49	1.43	1.26-1.61
	Divorced	1.06	0.75-1.49	1.19	0.92-1.53	1.81	1.42-2.31	1.83	1.58-2.13
	Wald test, 3 df	χ2=5.27, p=0.15		χ2=3.39, p=0.34		χ2=23.72, p<0.01		χ2=92.22, p<0.01	
Type of household	1 person	1.48	1.08-2.02	1.36	1.06-1.74	1.06	0.88-1.27	0.97	0.86-1.08
	≥ 2 persons	1		1		1		1	
	Institutions	0.76	0.30-1.93	0.63	0.25-1.57	0.52	0.33-0.81	0.86	0.56-1.33
	Wald test, 2 df	χ2=7.15, p=0.03		χ2=7.48, p=0.02		χ2=10.35, p<0.01		χ2=0.66, p=0.72	
Children	**No**	1		1		1		1	
	Yes	0.73	0.55-0.97	0.80	0.63-1.02	0.91	0.76-1.09	0.74	0.66-0.83
	Unknown	0.75	0.41-1.38	0.95	0.57-1.57	0.60	0.42-0.85	0.70	0.55-0.89
	Wald test, 1 df	χ2=4.62, p=0.03		χ2=3.28, p=0.07		χ2=12.37, p<0.01		χ2=25.85, p<0.01	
Urbanicity	Urban	1.02	0.79-1.32	0.93	0.74-1.16	1.17	1.02-1.35	1.02	0.93-1.13
	Peri-urban	1		1		1		1	
	Rural	0.96	0.68-1.35	0.95	0.72-1.25	0.81	0.65-1.01	0.71	0.61-0.82
	Wald test, 2 df	χ2=0.13, p=0.94		χ2=0.46, p=0.80		χ2=0.99, p=0.32		χ2=25.27, p<0.01	
Neighbourhood index of SEP	**Lowest quintile**	1		1		1		1	
	Second quintile	1.22	0.81-1.86	1.32	0.94-1.86	1.27	0.97-1.65	1.04	0.88-1.23
	Third quintile	1.32	0.87-1.98	1.46	1.03-2.05	1.57	1.22-2.02	1.25	1.06-1.48
	Fourth quintile	1.64	1.09-2.47	1.78	1.27-2.50	1.82	1.42-2.33	1.56	1.33-1.84
	Highest quintile	2.49	1.67-3.72	2.11	1.49-2.98	2.75	2.16-3.52	2.26	1.93-2.65
	Wald test, 4 df	χ2=26.13, p<0.01		χ2=20.65, p<0.01		χ2=89.86, p<0.01		χ2=170.28, p<0.01	
Language Region	**German**	1		1		1		1	
	French	1.25	0.96-1.63	1.39	1.12-1.73	1.14	0.97-1.33	1.24	1.12-1.37
	Italian	1.00	0.50-1.99	0.36	0.15-0.88	1.05	0.71-1.56	0.53	0.38-0.75
	Wald test, 2 df	χ2=2.72, p=0.26		χ2=15.20, p<0.01		χ2=0.07, p=0.79		χ2=12.83, p<0.01	
Nationality	**Swiss**	1		1		1		1	
	Foreigner	0.59	0.38-0.91	0.73	0.53-1.02	0.82	0.62-1.08	0.88	0.73-1.04
	Wald test, 1 df	χ2=5.60, p=0.02		χ2=3.40, p=0.07		χ2=1.98, p=0.16		χ2=2.18, p=0.14	

<u>Supplementary table 6</u> Degrees of freedom (df), chi square (chi2) and p-values for likelihood ratio tests for interactions with time period (2003-2008 vs 2009-2014) in multivariable Cox respectively logistic regression models

		Cox regression		Logistic regression	
Variable	**df**	**chi2**	**p-value**	**chi2**	**p-value**
Age group 25-64 years					
Sex	1	0.07	0.7922	0.26	0.6124
Diagnosis	7			22.92	0.0018
Religion	3	3.71	0.2949	3.08	0.3790
Education	3	3.78	0.2868	3.66	0.3001
Marital status	3	2.45	0.4837	2.61	0.4555
Household	2	0.88	0.6454	0.08	0.9629
Parenthood	1	0.50	0.4785	0.00	0.9578
Urbanicity	2	1.31	0.5205	0.38	0.8276
SSEP	4	2.10	0.7169	1.58	0.8120
Language region	2	0.98	0.6133	3.79	0.1505
Nationality	1	0.32	0.5721	0.11	0.7387
Age group 65-94 years					
Sex	1	0.10	0.7524	0.44	0.5060
Diagnosis	7			134.80	<0.001
Religion	3	3.42	0.3308	3.23	0.3581
Education	3	1.33	0.7220	1.52	0.6776
Marital status	3	2.13	0.5453	3.86	0.2768
Household	2	1.27	0.5292	4.66	0.0972
Parenthood	1	1.67	0.1959	0.45	0.5015
Urbanicity	2	3.16	0.2055	3.30	0.1923
SSEP	4	3.29	0.5100	2.27	0.6854
Language region	2	5.39	0.0676	5.58	0.0613
Nationality	1	0.94	0.3310	0.01	0.9200

Supplementary table 7 Odds ratios and 95% Confidence Intervals (CI) for interactions between time period and diagnosis in multivariable logistic regression models (corrected for sex, age, religion, education, marital status, type of household, urbanization, the neighborhood index of socioeconomic position, language region and nationality)

	Age group 25-64		**Age group 65-94**	
	OR	**95%CI**	**OR**	**95%CI**
Diagnosis				
Cancer	**1** (Ref)		**1** (Ref)	
Mental and behavioural	1.67	0.84-3.31	0.71	0.48-1.07
Nervous System	0.98	0.66-1.45	0.99	0.76-1.29
Circulatory System	3.92	0.86-17.93	1.22	0.94-1.57
Respiratory System	0.99	0.43-2.25	1.67	1.10-2.53
Musculoskeletal System	1.19	0.42-3.37	1.97	1.43-2.71
Other diseases	0.56	0.32-1.00	1.32	0.99-1.76
No disease	0.30	0.15-0.62	0.27	0.20-0.36