Changes in esophageal cancer survival: a global review of survival analysis from cancer registration data over past three decades

Supplementary materials:

Supplementary Table S1 PRISMA checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Page 1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Page 3
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Page 3-4
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Page 4
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Page 4
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Page 3
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Page 4
Selection	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if	Page 4

Section and Topic	Item #	Checklist item	Location where item is reported
process		applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Page 4
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Page 5
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Page 5
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Not applicable
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Not applicable
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Not applicable
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Not applicable
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Not applicable
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis	Not applicable

Section and Topic	Item #	Checklist item	Location where item is reported
		was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Page 5
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Not applicable
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Not applicable
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Not applicable
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Page 4
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Supplementary materials: Table A.11
Study characteristics	17	Cite each included study and present its characteristics.	Supplementary materials: Table A.10
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Not applicable
Results of individual	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or	Table 1-3

Section and Topic	Item #	Checklist item	Location where item is reported
studies		plots.	
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Not applicable
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Not applicable
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Table 2-3, Supplementary file: Table A.2-7
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Not applicable
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Not applicable
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Not applicable
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Page 5-10
	23b	Discuss any limitations of the evidence included in the review.	Page 12
	23c	Discuss any limitations of the review processes used.	Page 12
	23d	Discuss implications of the results for practice, policy, and future research.	Page 10-12

Section and Topic	Item #	Checklist item	Location where item is reported
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	None
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	None
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	None
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Page 12
Competing interests	26	Declare any competing interests of review authors.	Page 12
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Page 12

Supplementary Table S2 Search strategy

Databases	Search terms
PubMed	(("Esophageal Neoplasms"[MeSH Terms]) OR ("Oesophageal Neoplasms"[MeSH Terms]) OR ("Esophageal Neoplasm"[Title/Abstract]) OR ("Oesophageal Neoplasm"[Title/Abstract]) OR ("Esophageal Cancers"[Title/Abstract]) OR ("Oesophageal Cancers"[Title/Abstract]) OR ("Esophageal Cancer"[Title/Abstract]) OR ("Oesophageal Cancer"[Title/Abstract]) OR ("Esophageal Carcinomas"[Title/Abstract]) OR ("Oesophageal Carcinomas"[Title/Abstract]) OR ("Esophageal Carcinoma"[Title/Abstract]) OR ("Oesophageal Carcinoma"[Title/Abstract])) AND (("Survival Rate"[MeSH Terms]) OR ("Survival Rates"[Title/Abstract])) AND (("cancer registry"[Title/Abstract]) OR ("cancer registries"[Title/Abstract]) OR ("population-based"[Title/Abstract]) OR ("population based"[Title/Abstract]))
Embase	('esophageal cancer'/exp OR 'oesophageal cancer'/exp OR 'esophageal neoplasms':ab,ti OR 'oesophageal neoplasms':ab,ti OR 'esophageal neoplasm':ab,ti OR 'oesophageal neoplasm':ab,ti OR 'esophageal cancers':ab,ti OR 'oesophageal cancers':ab,ti OR 'esophageal carcinoma':ab,ti OR 'oesophageal carcinoma':ab,ti OR 'esophageal carcinomas':ab,ti OR 'oesophageal carcinomas':ab,ti) AND ('survival rate'/exp OR 'survival rates':ab,ti) AND ('cancer registry':ab,ti OR 'cancer registries':ab,ti OR 'population-based':ab,ti OR 'population based':ab,ti)
Web of science	(TS=("Esophageal Neoplasms") OR TS=("Oesophageal Neoplasms") OR TS=("Esophageal Neoplasm") OR TS=("Oesophageal Neoplasm") OR TS=("Esophageal Cancers") OR TS=("Oesophageal Cancers") OR TS=("Esophageal Cancer") OR TS=("Oesophageal Cancer") OR TS=("Esophageal Carcinomas") OR TS=("Oesophageal Carcinomas") OR TS=("Esophageal Carcinoma") OR TS=("Oesophageal Carcinoma")) AND TS=("survival rate") AND (TS=("cancer registry") OR TS=("population-based"))
SinoMed	"esophageal Cancer" [Mesh/Title/Abstract: smart] AND "survival rate" [Mesh/Title/Abstract: smart] AND ("cancer registry" [Mesh/Title/Abstract: smart] OR "population-based" [Mesh/Title/Abstract: smart]) [in Chinese] Chinese version: "食管癌"[常用字段:智能] AND "生存率"[常用字段:智能] AND ("肿瘤登记"[常用字段:智能] OR "人群"[常用字段:智能])

Supplementary Table S3 Overall and age-standardized 1- and 5-year relative/net survival rates (%) of esophageal cancer in selected countries and regions

Continent	Country	Region		Period	Overall		Age-standardized	
					1-year	5-year	1-year	5-year
Africa								
	Algeria[1]			2005-2009	-	55.4	-	-
				2010-2014	-	-	-	37.3
	Mauritius[1]			2010-2014	-	28.1	-	-
	South Africa[1]			2000-2004	-	12.1	-	-
				2005-2009	-	-	-	19.2
				2010-2014	-	-	-	18.0
Asia								
East	China			2000-2004 [1]	-	-	-	22.9
				2003-2005 [2]	-	-	-	20.9
				2005-2009 [1]	-	-	-	27.1
				2010-2014 [1]	-	-	-	29.7
				2015-2017 [1]	-	-	-	33.4
		Jiangsu	Qidong[4]	1992-1996	17.2	5.4	18.0	5.3
				1997-2001	23.7	7.6	24.4	7.9
				2002-2006	26.7	10.5	28.0	10.5
				2007-2011	35.1	15.2	37.5	16.7
				2012-2016	45.0	17.9	49.9	20.5
			Huai'an[5]	2010	72.0	26.8	-	-
			Jiangyin[6]	2012-2013	-	42.0	-	-
		Shanghai	Nanhui[7]	2002-2004	18.7	10.2	-	-
			Pudong[8]	2002-2006	26.5	18.2	-	-
		Guangdong	Zhongshan[9]	2010-2013	-	-	-	11.7
			Guangzhou[10]	2007-2009	-	15.5	-	-
		Hebei	Cixian[11]	2000-2002	42.0	21.7	-	-
		Henan	Linzhou[12]	1990-1994	-	28.2	-	-
				1995-1999	-	35.2	-	-
				2000-2004	-	40.8	-	-
		Zhejiang	Haining and Jiashan[13]	2003-2006	-	15.7	-	17.3
				2007-2010	-	15.4	-	18.5
				2011-2014	-	18.1	-	18.5
		Fujian[14]		2012-2014	-	20.5	-	19.0
			Dalian[15]	2015	-	-	42.5	11.9

		Taiwan[1]	2000-2004	-	-	-	13.0
			2005-2009	-	-	-	13.2
			2010-2014	-	-	-	15.5
	South Korea		1993-1995 [16]	-	12.8	-	-
			1996-2000 [16]	-	15.4	-	-
			2000-2004 [1]	-	-	-	18.6
			2001-2005 [16]	-	21.1	-	-
			2005-2009 [1]	-	-	-	26.9
			2006-2008 [16]	55.4	28.5	-	-
			2009-2013 [16]	60.6	33.4	-	-
			2010-2014 [1]	-	-	-	31.3
			2013-2017 [17]	-	38.0	-	-
	Japan[1]		2000-2004	-	-	-	27.7
			2005-2009	-	-	-	33.3
			2010-2014	-	-	-	36.0
South	India[1]		2000-2004	-	2.9	-	-
			2005-2009	-	-	-	3.4
			2010-2014	-	-	-	4.1
		Mumbai[18]	1992-1994	34.0	11.8	-	11.0
Southeast	Malaysia	Penang[1]	2005-2009	-	-	-	13.2
			2010-2014	-	13.7	-	-
	Singapore[1]		2000-2004	-	-	-	9.0
			2005-2009	-	-	-	10.5
			2010-2014	-	-	-	14.8
	Thailand[1]		2000-2004	-	-	-	8.8
			2005-2009	-	-	-	7.8
			2010-2014	-	-	-	7.1
West	Iran[1]		2005-2009	-	-	-	7.4
		Ardabil[19]	2004	-	-	17.0	-
	Turkey[1]		2000-2004	-	-	-	14.8
			2005-2009	-	-	-	14.7
			2010-2014	-	-	-	19.0
	Cyprus[1]		2005-2009	-	47.2	-	-
			2010-2014	-	39.0	-	-
	Israel[1]		2000-2004	-	-	-	17.9
			2005-2009	-	-	-	22.4
			2010-2014	-	-	-	25.8
	Jordan[1]		2000-2004	-	-	-	52.6
			2005-2009	-	-	-	53.9
			2010-2014	-	-	-	41.1
	Kuwait[1]		2000-2004	-	17.6	-	-
			2005-2009	-	9.5	-	-

			2010-2014	-	25.4	-	-
	Qatar[1]		2000-2004	-	36.1	-	-
			2005-2009	-	33.4	-	-
			2010-2014	-	42.2	-	-
America							
North	Canada		1995-1999[20]	-	-	38.4	13.5
			2000-2004	-	-	39.7 [20]	14.5 [1]
			2004-2006[21]	-	13.0	-	-
			2005-2009	-	-	40.7 [20]	14.7 [1]
			2010-2014	-	-	43.5 [20]	16.1 [1]
		British Columbia	2004[19]	-	-	33.0	-
			1995-1999[20]	-	-	37.3	12.1
			2000-2004[20]	-	-	37.6	13.2
			2005-2009[20]	-	-	42.3	16.2
			2010-2014[20]	-	-	46.5	19.1
		Alberta[20]	1995-1999	-	-	36.0	10.9
			2000-2004	-	-	36.7	13.4
			2005-2009	-	-	37.7	11.4
			2010-2014	-	-	41.1	16.6
		Manitoba[20]	1995-1999	-	-	38.9	12.9
			2000-2004	-	-	33.8	8.9
			2005-2009	-	-	39.2	9.5
			2010-2014	-	-	37.5	14.4
		New Brunswick[20]	1995-1999	-	-	32.8	9.7
			2000-2004	-	-	39.3	12.5
			2005-2009	-	-	38.6	12.5
			2010-2014	-	-	46.7	15.0
		Nova Scotia[20]	1995-1999	-	-	36.7	10.9
			2000-2004	-	-	30.5	8.7
			2005-2009	-	-	40.3	13.6
			2010-2014	-	-	41.5	13.7
		Ontario [20]	1995-1999	-	-	40.6	15.3
			2000-2004	-	-	43.0	16.2
			2005-2009	-	-	41.8	16.2
			2010-2014	-	-	44.3	16.5
		Prince Edward Isl.[20]	1995-1999	-	-	27.0	3.5
			2000-2004	-	-	30.1	16.9

			2005-2009	-	-	29.6	10.0
			2010-2014	-	-	36.8	19.1
		Saskatchewan[20]	1995-1999	-	-	27.4	8.7
			2000-2004	-	-	32.9	10.5
			2005-2009	-	-	32.7	10.6
			2010-2014	-	-	41.3	10.2
		Burgundy[22]	2004-2013	45.0	14.0	-	-
	United States		1975-1977[23]	-	5.0	-	-
			1997-2006[24]	-	-	-	17.3
			2000-2004[1]	-	-	-	16.5
			2005-2009[1]	-	-	-	18.7
			2006-2008[16]	55.4	28.5	-	-
			2009-2013[16]	60.6	33.4	-	-
			2010-2014[1]	-	-	-	20.0
			2014-2020[25]	-	21.6	-	-
Central	Costa Rica[1]		2000-2004	-	-	-	35.7
			2005-2009	-	-	-	19.2
			2010-2014	-	-	-	20.9
South	Brazil[1]		2000-2004	-	-	-	10.7
			2005-2009	-	-	-	12.5
			2010-2014	-	-	-	9.7
		S ao Paulo State[26]	2000-2018	-	-	26.3	5.6
	Argentina[1]		2000-2004	-	-	-	18.7
			2005-2009	-	-	-	15.0
			2010-2014	-	-	-	16.4
	Chile[1]		2000-2004	-	-	-	7.0
			2005-2009	-	-	-	10.8
			2010-2014	-	-	-	8.7
	Colombia[1]		2000-2004	-	-	-	10.7
			2005-2009	-	-	-	9.5
			2010-2014	-	-	-	10.5
	Puerto Rico[1]		2000-2004	-	-	-	10.9
			2005-2009	-	-	-	13.0
			2010-2014	-	-	-	20.4
	Uruguay[1]		2005-2009	-	-	-	12.0
			2010-2014	-	-	-	8.0
	Guadeloup		2005-2009	-	0.0	-	-

	e[1]						
	Martinique [1]		2000-2004	-	4.2	-	-
			2005-2009	-	-	-	4.9
			2010-2014	-	4.0	-	-
	Ecuador[1]		2000-2004	-	20.9	-	-
			2005-2009	-	-	-	7.7
			2010-2014	-	-	-	12.7
Oceania	Australia		1995-1999[20]	-	-	42.6	18.3
			2000-2004	-	-	43.7 [20]	18.0 [1]
			2005-2009	-	-	47.5 [20]	19.9 [1]
			2010-2014	-	-	52.0 [20]	23.7 [1]
		Western Australia[20]	1995-1999	-	-	40.5	16.2
			2000-2004	-	-	44.6	14.9
			2005-2009	-	-	51.7	18.3
			2010-2014	-	-	56.7	25.2
		New South Wales[20]	1995-1999	-	-	42.8	19.3
			2000-2004	-	-	41.6	18.1
			2005-2009	-	-	44.5	17.4
			2010-2014	-	-	46.5	19.1
		Victoria[20]	1995-1999	-	-	43.1	17.7
			2000-2004	-	-	46.3	18.6
			2005-2009	-	-	50.0	20.0
			2010-2014	-	-	53.4	26.4
	New Zealand		1995-1999[20]	-	-	29.5	13.6
			2000-2004	-	-	35.0 [20]	11.5 [1]
			2005-2009	-	-	40.1 [20]	14.5 [1]
			2010-2014	-	-	44.1 [20]	15.3 [1]
Europe							
East	Estonia[1]		2000-2004	-	-	-	5.7
			2005-2009	-	-	-	6.0
			2010-2014	-	-	-	5.4
	Lithuania[1]		2000-2004	-	-	-	4.7
			2005-2009	-	-	-	6.2

			2010-2014	-	-	-	5.6
	Russia[1]		2000-2004	-	-	-	10.9
			2005-2009	-	-	-	8.6
			2010-2014	-	-	-	8.6
	Romania	Cluj[1]	2005-2009	-	-	-	10.2
			2010-2014	-	0.0	-	-
North	Finland		1993-1997[27]	-	9.4	-	-
			2000-2004[1]	-	-	-	11.8
			2005-2009[1]	-	-	-	12.8
			2010-2014[1]	-	-	-	12.4
	Norway		1995-1999[20]	-	-	27.9	8.7
			2000-2004	-	-	33.5 [20]	9.0 [1]
			2005-2009	-	-	41.0 [20]	13.3 [1]
			2010-2014	-	-	47.3 [20]	16.5 [1]
	Denmark		1995-1999 [20]	-	-	27.1	5.1
			2000-2004	-	-	29.6 [20]	8.4 [1]
			2005-2009	-	-	33.6 [20]	10.4 [1]
			2010-2014	-	-	44.4 [20]	13.7 [1]
	Sweden [1]		2000-2004	-	-	-	11.4
			2005-2009	-	-	-	13.1
			2010-2014	-	-	-	14.8
	Iceland [1]		2000-2004	-	13.1	-	-
			2005-2009	-	19.1	-	-
			2010-2014	-	17.7	-	-
West	Netherlands		2000-2004	-	12.0 [28]	-	12.1 [1]
			2005-2009	-	16.0 [28]	-	16.8 [1]
			2010-2014	-	22.0 [28]	-	21.0 [1]
	Ireland		1995-1999[20]	-	-	30.8	10.9
			2000-2004	-	-	36.6 [20]	12.9 [1]
			2005-2009	-	-	43.5 [20]	17.2 [1]
			2010-2014	-	-	49.9 [20]	20.3 [1]
	France		1992[29]	-	-	39.0	9.0

		1996[29]	-	-	41.0	10.0
		2000-2004	-	-	45.0 [29]	13.0 [1]
		2005-2009	-	-	-	14.9 [1]
		2010-2014	-	-	-	12.9 [1]
	Belgium	2000-2004	-	-	50.0 [29]	16.6 [1]
		2005-2009[1]	-	-	-	23.2
		2010-2014[1]	-	-	-	23.6
	Latvia[1]	2000-2004	-	-	-	6.9
		2005-2009	-	-	-	10.8
		2010-2014	-	-	-	6.1
	United Kingdom	1995-1999[20]	-	-	29.8	8.6
		2000-2004	-	-	36.5 [20]	11.5 [1]
		2005-2009	-	-	41.4 [20]	14.0 [1]
		2010-2014	-	-	46.4 [20]	15.7 [1]
	England[20]	1995-1999	-	-	29.6	8.2
		2000-2004	-	-	36.4	11.5
		2005-2009	-	-	41.5	14.0
		2010-2014	-	-	46.6	16.5
	Scotland[20]	1995-1999	-	-	31.4	9.5
		2000-2004	-	-	37.2	10.1
		2005-2009	-	-	40.3	12.2
		2010-2014	-	-	44.9	13.7
	Northern Ireland[20]	1995-1999	-	-	35.2	11.2
		2000-2004	-	-	33.3	12.5
		2005-2009	-	-	41.6	17.3
		2010-2014	-	-	48.5	19.1
	Wales[20]	1995-1999	-	-	29.2	11.4
		2000-2004	-	-	38.0	12.6
		2005-2009	-	-	41.2	12.2
		2010-2014	-	-	46.4	14.9
South	Spain	1992 [29]	-	-	32.0	7.0
		1996 [29]	-	-	34.0	8.0
		2000-2004	-	-	36.0 [29]	8.9 [1]
		2005-2009	-	-	-	11.6

						[1]
		2010-2014	-	-	-	13.0 [1]
	Italy	1992[29]	-	-	32.0	8.0
		1996[29]	-	-	38.0	11.0
		2000-2004	-	-	39.0 [29]	11.5 [1]
		2005-2009[1]	-	-	-	12.9
		2010-2014[1]	-	-	-	13.8
	Portugal	2000-2004	-	-	33.0 [29]	10.2 [1]
		2005-2009[1]	-	-	-	12.5
		2010-2014[1]	-	-	-	16.1
	Malta [1]	2000-2004	-	7.8	-	-
		2005-2009	-	6.1	-	-
		2010-2014	-	11.2	-	-
Central	Poland	2000-2004[1]	-	-	-	7.2
		2005-2009[1]	-	-	-	8.9
		2010-2014[1]	-	-	-	9.1
		2015-2019[30]	-	-	-	11.4
	Switzerland	1996[29]	-	-	42.0	-
		2000-2004	-	-	48.0 [29]	16.1 [1]
		2005-2009	-	-	-	20.6 [1]
		2010-2014	-	-	-	23.9 [1]
	Slovakia [1]	2000-2004	-	-	-	5.8
		2005-2009	-	-	-	6.4
		2010-2014	-	-	-	6.4
	Czech Republic	2000-2004	-	8.0 [31]	-	7.3 [1]
		2005-2008[31]	-	11.5	-	-
		2005-2009[1]	-	-	-	9.0
		2010-2014[1]	-	-	-	9.8
	Germany	1997-2006[32]	-	23.2	-	18.3
		2000-2004[1]	-	-	-	16.6
		2005-2009[1]	-	-	-	19.7
		2010-2014[1]	-	-	-	20.8
	Saarland[33]	1990-1992	-	8.7	-	-
		2000-2002	-	24.3	-	-
	Munich[34]	1998-2014	-	24.0	-	-
	East[35]	1997-2006	-	-	-	16.3

	West[35]	1997-2006	-	-	-	19.3
Austria[1]		2000-2004	-	-	-	16.2
		2005-2009	-	-	-	16.8
		2010-2014	-	-	-	18.6
Croatia[1]		2000-2004	-	-	-	6.8
		2005-2009	-	-	-	9.1
		2010-2014	-	-	-	8.7
Slovenia[1]		2000-2004	-	-	-	8.2
		2005-2009	-	-	-	9.3
		2010-2014	-	-	-	8.6

Note. - no figures or reports in original publications

Supplementary Table S4 Age-specific 5-year relative/net survival rates (%) of esophageal cancer in selected countries and regions

Continent	Country	Region	Period	15-44	45-54	55-64	65-74	≥ 75
Asia								
East	China	Jiangsu, Qidong[36]	2001-2007	-	19.1	19.4	11.1	12.0
	India	Mumbai[18]	1992-1994	-	14.1	6.1	6.9	8.3
America								
North	United States		1997-2006 [24, 32]	21.5	18.0	18.2	20.2	12.6
			2014-2020 [25]	-	-	-	23.1	16.5
	Canada[21]		2004-2006	18.0	16.0	16.0	14.0	10.0
Europe								
West	Netherlands[37]		2004-2008	-	-	-	-	8.0
			2009-2013	-	-	-	-	12.0
			2014-2018	-	-	-	-	15.0
Central	Germany[24,32]		1997-2006	21.8	19.8	19.7	19.6	14.5

Note. - no figures or reports in original publications

Supplementary Table S5 Age-specific 1- and 5-year relative/net survival rates (%) of esophageal cancer in European countries

Continent	Country	Period	1-year			5-year		
			15-54	55-74	75-84	15-54	55-74	75-84
Europe								
West	France[29]	2000-2004	54	48	36	20	15	8
	Belgium[29]	2000-2004	65	53	39	27	23	14
South	Italy[29]	2000-2004	52	43	25	19	13	4
	Spain[29]	2000-2004	39	41	26	11	11	4
	Portugal[29]	2000-2004	37	35	27	11	11	8
Central	Switzerland[29]	2000-2004	54	52	40	25	19	14

Table A6 Age-specific 1- and 5-year age-standardized relative/net survival rates (%) of esophageal cancer in in selected countries and regions

Continent	Country	Period	1-year		5-year	
			< 75	≥ 75	< 75	≥ 75
Oceania						
	Australia[20]	1995-1999	47.5	30.6	21.4	10.9
		2000-2004	48.1	33.1	21.1	9.8
		2005-2009	52.4	35.8	21.5	11.1
		2010-2014	56.5	40.7	26.9	14.8
	New Zealand[20]	1995-1999	32.5	22.1	15.6	8.5
		2000-2004	40.4	21.9	15.0	3.4
		2005-2009	44.9	28.3	17.8	5.7
		2010-2014	48.9	32.1	20.9	6.7
America						
	Canada[20]	1995-1999	42.3	28.7	15.4	8.8
		2000-2004	44.1	28.8	16.5	8.6
		2005-2009	44.7	30.9	16.9	9.6
		2010-2014	48.5	31.4	18.4	10.9
Europe						
North	Denmark[20]	1995-1999	29.7	20.6	6.6	1.5
		2000-2004	33.2	20.8	10.4	4.1
		2005-2009	38.7	21.2	13.2	3.8
		2010-2014	49.2	32.8	17.3	8.4
	Norway[20]	1995-1999	30.7	21.0	10.0	5.4
		2000-2004	37.6	23.4	11.3	3.4
		2005-2009	46.5	27.6	17.0	3.7
		2010-2014	53.3	32.2	24.4	6.0
West	Ireland[20]	1995-1999	35.6	18.9	12.9	6.0
		2000-2004	42.3	22.6	15.7	5.7
		2005-2009	49.7	28.3	20.8	8.4
		2010-2014	57.2	32.5	27.0	9.4
	United Kingdom[20]	1995-1999	34.6	18.2	10.7	3.4
		2000-2004	42.0	23.0	14.2	4.4
		2005-2009	47.1	27.3	17.1	5.6
		2010-2014	52.4	31.7	19.6	7.5

Supplementary Table S7 Pathology-specific overall and age-standardized 5-year relative/net survival rates (%) of esophageal cancer in selected countries and regions

Continent	Country	Region	Period	Squamous cell carcinoma	Adenocarcinoma	Other specified	Unspecific
Asia							
	China[1]		2008-2009*	29.9	29.6	26.9	25.4
			2010-2011*	31.8	35.2	30.8	26.9
			2012-2014*	36.7	34.5	28.3	27.8
			2015-2017*	36.9	34.9	28.3	26.7
		Hebei, Cixian[11]	2000-2002	23.5	5.6	-	9.7
	South Korea[16]		1993-1995	12.1	15.7	14.7	14.7
			1996-2000	15.8	18.7	11.9	1.9
			2001-2005	22.0	19.3	14.4	14.4
			2006-2010	30.9	26.0	11.8	11.8
			2009-2013	34.6	29.6	10.9	10.9
America							
	United States		2008-2009*[1]	13.7	19.5	13.2	12.4
			2010-2011*[1]	17.9	20.7	14.3	11.9
			2012-2014*[1]	17.5	20.9	19.7	4.1
			2015-2017*[1]	18.5	22.3	17.1	7.0
			2014-2020[25]	20.5	22.6	-	-
Europe							
North	Sweden[38]		1990-1999	10.5	12.5	-	-
			2000-2008	10.3	14.6	-	-
West	France	Calvados[39]	1997-2004	13.7	8.4	-	-

	Burgundy[22]	2004-2013	19.0	22.0	-	-
Netherlands[28]		1995-1999*	10.0	11.0	-	-
		2000-2004*	11.0	13.0	-	-
		2005-2009*	15.0	18.0	-	-
		2010-2014*	20.0	23.0	-	-

Note. *Age-standardized 5-year relative/net survival rates; - no figures or reports in original publications.

Supplementary Table S8 Stage-specific overall and age-standardized 5-year relative/net survival rates (%) of esophageal cancer in selected countries and regions

Continent	Country	Period	Local	Regional	Distant	Unknown
Asia	South Korea[16]	2006-2008	49.5	25.3	7.3	20.1
		2009-2013	58.8	29.2	7.3	20.8
America	United States[40]	2006-2012	41.0	23.0	5.0	-
Europe	Germany[32]	1997-2006*	44.4	16.7	6.3	17.6

Note. *Age-standardized 5-year relative/net survival rates; - no figures or reports in original publications.

Supplementary Table S9 Sex-specific overall 1-, 3-, and 5-year observed survival rates (%) of esophageal cancer in some areas of China

Continent	Country	Region		Period	Male			Female		
					1-year	3-year	5-year	1-year	3-year	5-year
Asia										
East	China[2]			2003-2005	52.8	24.7	17.5	56.4	27.3	20.3
		Jiangsu	Qidong[4]	1992-1996	-	-	3.8	-	-	4.1
				1997-2001	-	-	5.5	-	-	5.8
				2002-2006	-	-	7.7	-	-	7.6
				2007-2011	-	-	10.7	-	-	11.7
				2012-2016	-	-	13.6	-	-	13.6
			Huai'an[5]	2010	57.5	28.3	21.7	58.3	32.5	24.1
			Jiangyin[6]	2012-2013	-	-	19.0	-	-	24.0
		Shanghai	Nanhui[7]	2002-2004	17.2	7.1	6.6	13.9	12.3	10.8
			Yangpu[41]	2002-2012	44.3	21.8	16.8	48.0	23.8	20.4
			Jiading[42]	1998-2007	35.2	13.0	7.4	-	-	-
		Guangzhou	Sihui[10]	1997-2006	-	-	2.6	-	-	9.8
				2007-2009	-	-	9.0	-	-	29.4
		Hebei	Cixian[11]	2000-2002	37.4	21.9	15.1	35.7	28.8	21.9
		Henan	Linzhou[12]	1990-1994	-	-	13.7	-	-	15.6
				1995-1999	-	-	18.1	-	-	19.3
				2000-2004	-	-	22.5	-	-	28.0
		Taiwan[43]		2008-2014	-	-	16.4	-	-	23.1
		Hubei	Wuhan[44]	2006-2011	57.9	38.7	36.5	63.5	47.0	45.2

Note. - no figures or reports in original publications.

Supplementary Table S10 Characteristics of esophageal cancer survival analyses from population-based cancer registries included in the systematic review

Author	Year	Country	Cancer registry	Study period	Coding criteria	Cases, n	Age range	DCO excluded	Year at end of follow-up	Calculation of OSR	Calculation of RSR	Age standardization method
Allemani et al.[1]	2018	60 countries	290 cancer registries in CONCORD-3	2000-2014	ICD-O-3	734428	15-99	Yes	2014	Life table	Pohar-Perme	International Cancer Survival Standard, Age Group 1 (ICSS-1)
Zhang et al[2]	2016	China	17 cancer registries	2003-2005	ICD-10	16019	No limit	Yes	2010	Life table	Ederer II	ICSS-1
An et al.[1]	2022	China	64 cancer registries	2008-2015	ICD-O-3	129962	15-99	Yes	2017	Life table	Ederer II	ICSS-1
		United States	18-SEER cancer registries	2008-2015		-	15-99	Yes	2017	Life table	Ederer II	
Wang et al.[4]	2022	China	Qidong cancer registry	1972-2016	ICD-10	5112	No limit	No	2021	Life table	Hakulinen	ICSS-1
Sun et al.[5]	2017	China	Huai'an cancer registry	2010	ICD-10	3018	No limit	Yes	2015	Life table	Ederer II	-
Li et al.[6]	2020	China	Jiangyin cancer registry	2012-2013	ICD-O-3	571	No limit	No	2018	Life table	Ederer II	-
Fu et al.[7]	2009	China	Nanhui cancer registry	2002-2004	ICD-10	263	No limit	No	2007	Life table and KM	-	-
Li et al.[8]	201	China	Pudong New	2002-200	-	1608	35-7	No	2012	Life table	Ederer II	-

	3		Area cancer registry	6			4			and KM		
Wei et al.[9]	202 0	China	Zhongshan cancer registry	2003-201 3	ICD-O-3	3622	0-99	Yes	2014	-	Pohar-Perme	ICSS-1
Li et al.[10]	201 7	China	Sihui cancer registry	1987-200 9	ICD-O-3/ICD-10	-	No limit	No	2014	Life table	-	-
He et al.[11]	201 1	China	Cixian cancer registry	2000-200 2	-	2042	No limit	No	2010	KM	-	-
Ma et al.[12]	200 9	China	Linzhou cancer registry	1988-200 4	ICD-9/ ICD-10	12409	No limit	Yes	2007	Life table	Ederer II	-
Li et al.[13]	202 0	China	Haining and Jiashan cancer registry	2013	ICD-O-3/ICD-10	1500	No limit	Yes	2016	Life table	Ederer II	ICSS-1
Zhou et al.[14]	202 1	China	8 population-based registries in Fujian Province	2012-201 4	ICD-O-3/ICD-10	31989	No limit	Yes	2019	Life table	Ederer II	ICSS-1
Fu et al.[15]	202 3	China	Dalian Cancer Registry	2015	ICD-O-3/ICD-10	188	No limit	Yes	2020	Life table	Ederer II	ICSS-1
		United States	17 cancer registries from SEER	2014		2929		No	2019			
Shin et al.[16]	201 8	Korea	Korea Central cancer registry	1993-201 3	ICD-O-3	34905	No limit	No	2013	Life table	Ederer II	-

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Hong et al.[17]	2020	Korea	Korea Central cancer registry	2013-2017	ICD-O-3/ICD-10	-	No limit	No	2018	Life table	Ederer II	-
Yeole et al.[18]	2004	India	Mumbai cancer registry	1992-1994	-	2018	No limit	Yes	1996	Life table	Hakulinen	Direct standardization (1985 global cancer incidence, Sankaranarayanan et al., 1998)
Bashash et al.[19]	2011	Canada	British Columbia cancer registry	2004	ICD-O-3	232	No limit	No	2005	Life table	-	-
		Iran	Ardabil cancer registry			124						-
Arnold et al.[20]	2019	7 countries	19 cancer registries in SURVMARK-2	1995-2014	ICD-10	215492	15-99	Yes	2015	-	Pohar-Perme	ICSS-1
Otterstatter et al.[21]	2012	Canada	Canadian cancer registry	1986-2006	ICD-O-3	4388	15-99	Yes	2016	Life table	Ederer II	-
Jooste et al.[22]	2018	France	Digestive cancer registry of Burgundy	2004-2013	ICD-10	723	No limit	No	2017	-	Pohar-Perme	-
Jemal et al.[23]	2017	United States	9-SEER cancer registries	2006-2012	ICD-O-3	-	0-99	Yes	2013	-	-	-
Hiripi et al.[24]	2019	Germany	11 cancer	1997-2006	ICD-O-3/ICD-10	14532	≥15	Yes	2006	Life table	Ederer II	ICSS-1

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	2		registries	6								
Mafra et al.[26]	202	Brazil	Barretos	2000-201	ICD-10	375	15-9	Yes	2019	-	Pohar-Perme	ICSS-1
	3		cancer registry	8			9					
Brenner et	200	Finland	Nationwide	1993-199	-	-	≥15	No	2002	-	Hakulinen	-
al.[27]	6		Finnish cancer	7								
			registry									
van Putten et	201	Netherlan	Netherlands	1989-201	ICD-O	35670	No	No	2017	KM	Ederer II	-
al [28]	8	ds	cancer registry	4			limit					
Launoy et al.[29]	201	6	51 cancer	1992-200	ICD-O-3	26266	≥15	Yes	2009,	-	Pohar-Perme	ICSS-1
	7	countries	registries	4					except in			
									France			
									(2008)			
Caetano et	202	Poland	Polish national	2000-201	ICD-10	24043	≥15	No	2019	KM	Pohar-Perme	ICSS-1
al.[30]	3		cancer registry	9								
Pavlík et al.[31]	201	The Czech	Czech national	1995-200	ICD-O-3	3370	≥15	Yes	2008	-	Hakulinen	ICSS-1
	4	Republic	cancer registry	8								
Hiripi et al.[32]	201	Germany	11 cancer	1997-200	ICD-10	14532	≥15	Yes	2006	Life table	Ederer II	-
	2		registries	6								
		United	13-SEER cancer	1997-200		16000						-
		States	registries	6								
Brenner et	200	Germany	Saarland cancer	1990–200	ICD-9	777	≥15	Yes	2002	-	Hakulinen	-
al.[33]	5		registry	2								
Schlesinger-Ra	201	Germany	Munich cancer	1998-201	-	3186	No	Yes	2014	KM	-	-
ab et al.[34]	7		registry	4			limit					
Jansen et al.[35]	201	Germany	11 cancer	1997–200	ICD-10	14532	≥15	No	2006	Life table	Ederer II	ICSS-1

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	2		registries	6								
Ding et al.[36]	201	China	Qidong cancer	2001-200	-	916	≥15	Yes	2009	Life table	Hakulinen	-
	1		registry	7								
Al-Kaabi et	202	Netherlan	National	1989-201	ICD-O	59584	No	No	2018	-	Pohar-Perme	-
al.[37]	2	ds	Netherlands	8			limit					
			cancer registry									
Lagergren et	201	Swedish	Swedish cancer	1961-200	ICD-7	13338	No	No	2009	Life table	-	-
al.[38]	2		registry	9			limit					
Launay et al.[39]	201	France	Calvados	1997-200	ICD-O-3	629	No	No cases	2007	-	-	-
	2		digestive cancer	4			limit	are				
			registry					registere				
								d				
								through				
								death				
								certificat				
								e alone.				
Siegel et al.[40]	201	United	18-SEER cancer	2006-201	ICD/ICD-O	-	No	No	2013	-	-	-
	7	States	registries	2			limit					
Han et al.[41]	201	China	Yangpu cancer	2002-201	ICD-O-2	1184	No	No	2012	KM	-	-
	6		registry	2			limit					
Chen et al.[42]	201	China	Shanghai cancer	1998-200	ICD-O-3/ICD-10	-	No	No	2012	-	-	-
	4		registry	7			limit					
Cheng et al.[43]	201	China	Taiwan society	2008-201	ICD-10	14394	No	No	2015	KM	-	-
	8		of cancer	4			limit					

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			registry									
Cheng et al.[44]	2019	China	cancer registry of Jiang'an district in Wuhan	2006-2011	ICD-10	-	No limit	No	2016	-	-	-
		United States	9-SEER cancer registries						-			-
Faivre et al.[45]	1998	17 countries	EUROCARE	1978-1989	ICD-9	20231	≥15	Yes	-	-	Hakulinen	Direct standardization to the age distribution of the European sample
Sun et al. [46]	2014	China	Lianyungang cancer registry	2011	-	-	No limit	No	2013	-	-	-
Hua et al.[47]	2017	China	Yangzhong cancer registry	1991-2013	ICD-10	6493	No limit	No	2015	KM	-	-
Liu et al.[48]	2017	China	Linzhou cancer registry	2003-2012	ICD-10	8229	No limit	No	-	KM	-	-
He et al.[49]	2023	China	China cancer registry platform	2014-2016	ICD-O-3/ICD-10	323	No limit	No	2020	Life table	-	-
Liu et al.[50]	2023	China	China cancer registry platform	2016-2020	-	446	No limit	No	2021	Life table	-	-

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Swaminathan et al.[51]	2009	India	Dindigul Ambilikkai cancer registry	2003-2006	ICD-10	53	No limit	Yes	2008	Life table	-	-
Wang et al.[52]	2022	United States	18-SEER cancer registries	2010-2016	ICD-O-3	8916	No limit	Yes	2016	KM	-	-
Bashash et al.[53]	2008	Canada	British Columbia cancer registry	1990-1999	ICD-O-2	1741	No limit	Yes	Five years of follow-up information was available for each patient.	KM	-	-
Zhang et al.[54]	2015	China	Shanghai cancer registries	2002-2006	ICD-O-3	1718	No limit	No	2009	Life table	-	-
		United States	SEER limited-use database			1624						-
Zeng et al.[55]	2018	China	The National Central cancer registry (17 cancer registries)	2003-2013	ICD-O-3/ICD-10	63506	0-99	Yes	2015	Life table	Ederer II	-

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Afshar et al.[56]	2018	Australia	Victorian cancer registry	1982-2015	ICD-10	8070	15-99	Yes	2015	-	Pohar-Perme	-
Gavin et al.[57]	2012	23 European countries	EUROCARE-4 (66 cancer registries)	1995-1999	ICD-9/ICD-10/ICD-O	51499	15-99	Yes	2003	-	Hakulinen	-
Chen et al.[58]	1998	China	Qidong cancer registry	1982-1991	ICD-9	150	No limit	Yes	1994	KM	-	-
Hemminki et al.[59]	2023	4 European countries	Nordic cancer registries	1970-2019	ICD-10	-	<90	Yes	2019	Life table	Pohar-Perme	-

Note. DCO, death certificate only; OSR, observed survival rate; RSR, relative survival rate; KM, Kaplan-meier; SEER, Surveillance, Epidemiology, and End Results. -, no report or non-available in the original articles.

Supplementary Table S11 Studies reviewed in full text for eligibility (excluded reasons for systematic review)

No.	Results from full text review	Reasons for exclusion
1	Cancer survival in urban Beijing	Study period not within the focus timeframe (before 1990)
2	Analysis of malignant neoplasm survival rates in Yuexiu district, Guangzhou City, 1996-1999	Data not from cancer registries
3	Investigation of epidemic characteristics and treatment status of esophageal cancer in Huai'an area	Lack of specific survival rates
4	Long-term trend of survival rate of malignant tumors in the elderly over sixty years old	Includes only data on individuals aged 60 and above
5	Analysis survival of screening and non-screening patients of esophageal cancer in Linzhou city	Unsatisfactory subgroups
6	Construction and analysis of prognostic model for esophageal cancer specific survival rate	Unsatisfactory survival indicators
7	Survival status of patients with esophageal squamous cell carcinoma in Yangzhong City and the prognostic significance of protein expressions of XRCC1 and MGMT	Highly pre-selected patients
8	Performance evaluation on screening and early detection and treatment project for esophageal cancer in Yanting, Sichuan province	Highly pre-selected patients
9	Conditional survival in patients with esophageal or gastroesophageal junction cancer after receiving various treatment modalities	Highly pre-selected patients

10	Early esophageal cancer specific survival is unaffected by anatomical location of tumor: a population-based study	Highly pre-selected patients; unsatisfactory survival indicators
11	Education, survival, and avoidable deaths in Lithuanian cancer patients, 2001–2009	Unsatisfactory subgroups
12	Effects of life table models on the evaluation of excess mortality	Lack of 5-year relative survival rates
13	Effects of socioeconomic status on esophageal adenocarcinoma stage at diagnosis, receipt of treatment, and survival: a population-based cohort study	Focus only on EAC; unsatisfactory subgroups
14	Epidemiology of esophageal cancer	Review
15	Esophageal cancer in Iran; a population-based study regarding adequacy of cancer surgery and overall survival	Randomly selected sample
16	Esophageal cancer incidence and survival in the province of Zaragoza (Spain): a population-based study	Spanish language
17	Estimation of survival rate of esophageal cancer and some of its determinants in Golestan province, North of Iran	Iranian Language
18	Fate of patients with adenocarcinoma of the esophagus and the esophagogastric junction: a population-based analysis	Data not from cancer registries
19	Gastro-oesophageal malignancy in New Zealand: 1995-97	Unavailable article
20	Hospital volume does not influence long-term survival of patients undergoing surgery for oesophageal or gastric cancer	Highly pre-selected patients
21	Impact of a non-university clinical cancer registry on regional quality assurance	Abstract
22	Improvement in survival of cancer patients in Poland: analysis of survival of patients diagnosed 2003-2005	Polish language
23	Incidence, survival and prognostic factors of oesophagogastric cancer	Focus only on oesophagogastric cancer

24	Individual- And area-level socioeconomic inequalities in esophageal cancer survival in Shandong Province, China: A multilevel analysis	Lack of 5-year relative survival rates
25	Inequity of upper gastrointestinal cancer distribution and survival with socioeconomic deprivation: a population-based study	Paper retracted
26	Life expectancy in survivors of esophageal cancer compared with the background population	Highly pre-selected patients
27	Lower socioeconomic status is associated with higher mortality in T1a esophageal cancer	Highly pre-selected patients
28	Malignant tumors of the esophagus in the Czech Republic	Czech language
29	Morbidity and mortality rates following gastric cancer surgery and contiguous organ removal, a population based study	Unavailable article
30	Outcomes of esophageal cancer from Singapore's national registry	Abstract
31	Persistence of increasing trends of esophageal squamous carcinoma, but not adenocarcinoma, in Taiwan during 2002-2017	Abstract
32	The prognostic effect of ethnicity for gastric and esophageal cancer: the population-based experience in British Columbia, Canada	Unsatisfactory subgroups
33	Racial differences in surgical evaluation, treatment, and outcome of locoregional esophageal cancer: a population-based analysis of elderly patients	Unsatisfactory subgroups
34	Stage-specific survival of epithelial cancers in North-Holland/Flevoland, The Netherlands	Lack of 5-year relative survival rates
35	Statistics of esophageal cancer registry	Unavailable article
36	Survival analysis of cancer patients of differing payer type in South West Virginia, between 2000 and 2013	Lack of 5-year relative survival rates
37	Survival rates of malignancies and nasopharyngeal carcinoma during 2003-2005 in Sihui city	Unavailable article
38	Survival trends and conditional survival in primary non-metastatic esophageal cancer: a SEER population-based study and external validation	Lack of 5-year relative survival rates
39	Temporal trends in long-term survival and cure rates in esophageal cancer: a SEER database	Lack of 5-year relative

	analysis	survival rates
40	To determine the prognostic factors in esophageal cancer using log-logistic regression model in Iran	Unavailable article
41	Trends in incidence and survival of esophageal cancer in Korea: a population-based epidemiologic study	Unavailable article
42	Trends in treatment and overall survival among patients with proximal esophageal cancer	Highly pre-selected patients
43	Trends in upper gastro-intestinal cancer among the elderly in Denmark, 1980-2012	Lack of 5-year relative survival rates
44	Under-utilization of endoscopic ultrasonography (EUS) in esophageal cancer (EC) despite leading to improved survival rates: results from a population-based study	Unsatisfactory subgroups
45	The volume-outcome effect calls for centralization of care in esophageal adenocarcinoma (EAC): results from a large national cancer registry	Abstract
46	Efficacy of chemoradiotherapy versus surgery in cervical esophageal cancer: a population based competing risk analysis	Highly pre-selected patients
47	Analysis of the incidence and mortality characteristics of malignant tumorsin Anzhou, Mianyang City from 2016 to 2021	Cancer incidence and mortality as outcome
48	Analysis of the progress of surgical treatment of esophageal cancer in Yangcheng County, a high-incidence area of esophageal cancer	Data not from cancer registries
49	Adenocarcinoma of the oesophagus: incidence and survival rates in New South Wales, 1972-2005	Lack of 5-year relative survival rates
50	Endoscopic therapy replaces surgery for clinical T1 oesophageal cancer in the Netherlands: a nationwide population-based study	Highly pre-selected patients
51	Endoscopic ultrasonography in esophageal cancer leads to improved survival rates: Results from a population-based study	Includes only data on individuals aged above 66
52	The first year counts: cancer survival among Indigenous and non-Indigenous Queenslanders, 1997-2006	Unsatisfactory subgroups

53	Impact of treatment modalities on survival of patients with locoregional esophageal squamous-cell carcinoma in Taiwan	Highly pre-selected patients
54	The influence of marital status on the survival of patients with esophageal cancer: a population-based, propensity-matched study	Lack of 5-year relative survival rates
55	Neoadjuvant chemoradiotherapy or chemotherapy alone for oesophageal cancer: population-based cohort study	Unsatisfactory subgroups
56	The prognosis of the different esophageal neuroendocrine carcinoma subtypes: a population-based study	Lack of 5-year relative survival rates
57	Survival of men with upper aerodigestive cancer in Umbria, Italy	Italian language
58	Survival of patients with distal esophageal and gastric cardia tumors: a population-based analysis of gastroesophageal junction carcinomas	Lack of 5-year relative survival rates
59	Survival of US black and white patients with squamous cell cancer of the esophagus	Unsatisfactory subgroups
60	Treatment and prognosis for young patients with esophageal cancer	Unavailable article
61	Trends in survival based on treatment modality for esophageal cancer: a population-based study	Lack of 5-year relative survival rates; Unsatisfactory subgroups
62	Epidemiology of adenocarcinomas of the esophagus and esophagogastric junction	German language
63	An Asian population-based survival analysis of patients with distal esophageal and gastric cardia adenocarcinomas	Data not from cancer registries
64	Clinicopathological characteristics and survival predictions for adenocarcinoma of the esophagogastric junction: a SEER population-based retrospective study	Highly pre-selected patients
65	Oesophageal intraepithelial and invasive neoplasia of squamous cell type: epidemiology and outcome in Luxembourg, 1980-2001	focus only on invasive oesophageal squamous cell carcinoma
66	Survival predictors associated with signet ring cell carcinoma of the esophagus (SRCCE): a	Lack of 5-year relative

	population-based retrospective cohort study	survival rates
67	A 10-year population-based study of the differences between NECs and carcinomas of the esophagus in terms of clinicopathology and survival	Unsatisfactory subgroups
68	Cancer statistics in China, 2015	Lack of 5-year relative survival rates
69	Comparison of endoscopic therapies and surgical resection in patients with early esophageal cancer: a population-based study	Unsatisfactory subgroups
70	A comparison of endoscopic treatment and surgery in early esophageal cancer: an analysis of surveillance epidemiology and end results data	Unsatisfactory subgroups
71	Development and validation of a deep learning model to predict survival of patients with esophageal cancer	Prediction data
72	The effect of individual and neighborhood socioeconomic status on esophageal cancer survival in working-age patients in Taiwan	Unsatisfactory subgroups
73	Effect of low-dose aspirin use on survival of patients with gastrointestinal malignancies; an observational study	Unsatisfactory subgroups
74	Effect of marital status on the survival of patients with adenocarcinoma of the esophagogastric junction: a population-based, propensity-matched study	Focus only on esophagogastric junction adenocarcinoma
75	Factors affecting survival of patients with oesophageal cancer: a study using inverse gaussian frailty models	Lack of 5-year relative survival rates
76	Impact of age and comorbidity on choice and outcome of two different treatment options for patients with potentially curable esophageal cancer	Highly pre-selected patients
77	Improved outcomes in the management of esophageal cancer with the addition of surgical resection to chemoradiation therapy	Highly pre-selected patients
78	A new machine learning-based model is more accurate than traditional models in predicting survival of patients with esophageal adenocarcinoma	Abstract

79	Presentation, treatment, and prognosis of esophageal carcinoma in a nationwide comparison of Sweden and the Netherlands	Highly pre-selected patients
80	Receipt of previous diagnoses and endoscopy and outcome from esophageal adenocarcinoma: a population-based study with temporal trends	Includes only data on individuals aged 68 and above
81	Selection for oesophagectomy and postoperative outcome in a defined population	Unsatisfactory subgroups
82	Survival after neoadjuvant therapy compared with surgery alone for resectable esophageal cancer in a population-based study	Highly pre-selected patients
83	Survival expressed in best-case, typical and worst-case scenarios for patients with nonmetastatic esophagogastric cancer: a population-based study	Unavailable article
84	Trends in esophageal and gastric cancer in Hamburg, Germany, from 1995-2015	Abstract
85	Tumor size as a critical prognostic factor in T1-2 stage esophageal cancer	Lack of 5-year relative survival rates
86	Variation in diagnosis, treatment, and outcome of esophageal cancer in a regionalized care system in Ontario, Canada	Lack of 5-year relative survival rates
87	The influence of prediagnostic demographic and lifestyle factors on esophageal squamous cell carcinoma survival	Data not from cancer registries
88	Widening health care disparity in patients with esophageal cancer (EC): a population-based study	Abstract
89	Survival analysis of patients with esophageal cancer using parametric cure model	Highly pre-selected patients
90	Long-term survival improvement in oesophageal cancer in the Netherlands	Abstract
91	A population-based study using Belgian cancer registry data supports centralization of esophageal cancer surgery in Belgium	Highly pre-selected patients
92	Propensity score analysis comparing survival between definitive chemoradiotherapy and esophagectomy with adjuvant chemoradiotherapy in patients with esophageal squamous cell carcinoma	Highly pre-selected patients
93	The role of radiation therapy in resected T2 N0 esophageal cancer: a population-based analysis	Highly pre-selected patients

94	Survival after definitive (chemo) radiotherapy in esophageal cancer patients: a population-based study in the north-East Netherlands	Data not from cancer registries
95	Survival benefit of neoadjuvant versus adjuvant radiotherapy in lymph node positive esophageal cancer: a population based analysis	Highly pre-selected patients
96	Survival comparison among neoadjuvant chemoradiotherapy followed by esophagectomy, definitive chemoradiotherapy, and esophagectomy alone for esophageal squamous cell Carcinoma	Highly pre-selected patients
97	Survival, mortality and morbidity outcomes after oesophagogastric cancer surgery in New South Wales, 2001-2008	Highly pre-selected patients
98	Differences in esophageal cancer characteristics and survival between Chinese and Caucasian patients in the SEER database	Unsatisfactory subgroups
99	Survival trends in patients with gastric and esophageal adenocarcinomas: a population-based study	Data not from cancer registries
100	Advances in cancer epidemiology in Japan	Lack of 5-year relative survival rates; Unsatisfactory subgroups
101	Clinical characteristics, prognostic factors, and survival trends in esophageal neuroendocrine carcinomas: a population-based study	Focus only on esophageal neuroendocrine carcinomas
102	Association of antihistamine use with increased risk of esophageal squamous cell carcinoma: a nationwide, long-term follow-up study using propensity score matching	Highly pre-selected patients
103	An audit of the treatment of cancer of the oesophagus	Data not from cancer registries
104	Long-term survival improvement in oesophageal cancer in the Netherlands	Abstract
105	Impact of hospital volume on long-term survival after resection for oesophageal cancer: a population-based study in Taiwan	Highly pre-selected patients

106	Justification of regional programs for the control and prevention of malignant neoplasms of the digestive system based on an international comparison of morbidity, mortality and survival rates (research based on materials from CI5 and Concord 3)	Russian language
107	Outcome of esophageal carcinoma in the veteran affairs population: a comparative analysis from the Veteran Affairs Central Cancer Registry	Focus only on veteran affairs population
108	Trend in incidence of adenocarcinoma of the esophagus in Japan, 1993-2001	Cancer incidence and mortality as outcome
109	Comparison of LNM and survival in T1 stage esophageal cancer patients based on histological classification: A large population-based study	Highly pre-selected patients
110	Trends and socioeconomic inequalities in cancer survival in England and Wales up to 2001	Unsatisfactory subgroups
111	A population-based examination of the surgical outcomes for patients with esophageal sarcoma	Lack of 5-year relative survival rates; Unsatisfactory subgroups
112	Increased resection rates and survival among patients aged 75 years and older with esophageal cancer: a Dutch nationwide population-based study	Includes only data on individuals aged 75 and above
113	Implementation of a regional video multidisciplinary team meeting is associated with an improved prognosis for patients with oesophageal cancer a mixed methods approach	Lack of 5-year relative survival rates
114	Impact of age and co-morbidity on surgical resection rate and survival in patients with oesophageal and gastric cancer	Lack of 5-year relative survival rates; Unsatisfactory subgroups
115	Higher long-term cancer survival rates in southeastern Netherlands using up-to-date period analysis	Study period not within the focus timeframe (before 1990)
116	Survival analysis of 10 409 cases with malignant cancers during 1989 to 1998 in Changle city	Lack of 5-year relative survival rates
117	Validity of cancer diagnosis in the National Health Insurance database compared with the linked	Unsatisfactory subgroups

	National Cancer Registry in Taiwan	
118	Trends in incidence and management of esophageal adenocarcinoma in a well-defined population	Focus only on EAC
119	Treatment and outcome of young patients with esophageal cancer in the Netherlands	Unsatisfactory subgroups
120	Survival of cancer patients in Northeast China: analysis of sampled cancers from population-based cancer registries	Randomly selected sample
121	Efficacy of endoscopic treatment on patients with severe dysplasia/carcinoma in situ of esophageal squamous cell carcinoma: a prospective cohort study	Unsatisfactory subgroups
122	Esophageal squamous cell carcinoma and prognosis in Taiwan	Unsatisfactory subgroups
123	Incidence, survival and prevalence of esophageal and gastric cancer in Linzhou city from 2003 to 2009	Lack of 5-year relative survival rates
124	The improved cure fraction for esophageal cancer in Linzhou city	Unsatisfactory subgroups
125	An Analysis of survival in major malignancies during 1972~2000 in Qidong, China	Overlapping calendar periods
126	Improvement in survival of cancer patients in Poland: analysis of survival of patients diagnosed 2003-2005	Polish language
127	The application and evaluation of period survival analysis	Overlapping calendar periods
128	Survival of patients with oesophageal and gastric cancers in Europe	Study period not within the focus timeframe (before 1990)
129	Reliable information for cancer control in Cali, Colombia	Lack of 5-year relative survival rates
130	Prognostic factors for the survival of patients with esophageal cancer in Northern Iran	Overlapping calendar periods
131	The increase in cancer patient survival in Estonia continued in 2010-2014	Estonian language
132	Recent trends of cancer in Europe: A combined approach of incidence, survival and mortality for 17 cancer sites since the 1990s	Non-original data
133	Epidemiology of esophageal malignancies in Germany with regard to histological subtypes	German language

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