

医学信息速递

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2022年中国癌症发病率和死亡率分析

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传递最有价值的医学信息

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文献基本信息

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Cancer incidence and mortality in China, 2022[☆]

Bingfeng Han^{1,†}, Rongshou Zheng^{1,†}, Hongmei Zeng¹, Shaoming Wang¹, Kexin Sun¹, Ru Chen¹, Li Li¹, Wenjiang Wei^{1,*,†}, Jie He^{2,†}

¹Office for Cancer Registry, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China
²Department of Thoracic Surgery, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China

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ABSTRACT

Background: The National Cancer Center (NCC) of China regularly reports the nationwide statistics on cancer incidence and mortality in China. The International Agency for Research on Cancer (IARC) calculates and publishes the cancer burden of countries around the world every two years. To ensure consistency between the actual surveillance data in China and the data published by IARC, NCC has received approval from the National Health Commission and IARC to simultaneously release the cancer burden data for China in GLOBOCAN 2022.

Methods: There were a total of 700 registries reporting high-quality data on cancer incidence and mortality across China in 2018, of which 186 registries with continuous monitoring from 2010 to 2018 were used to establish an age-period-cohort model to simulate the trend of cancer incidence and mortality and to estimate the incidence and mortality in China in 2022. In addition, we analyzed the temporal trends of age-standardized cancer incidence and mortality from 2000 to 2018 using data from 22 continuous cancer registries.

Results: It was estimated about 4,824,700 new cancer cases and 2,574,200 new cancer deaths occurred in China in 2022. Cancers of the lung, colon-rectum, thyroid, liver and stomach were the top five cancer types, accounting for 57.42% of new cancer cases. Cancers of the lung, liver, stomach, colon-rectum and esophagus were the five leading causes of cancer deaths, accounting for 67.50% of total cancer deaths. The crude rate and age-standardized incidence rate (ASIR) were 341.75 per 100,000 and 201.61 per 100,000, respectively. The crude mortality rate was 182.34 per 100,000 and the age-standardized mortality rate (ASMR) was 96.47 per 100,000. The ASIR of all cancers combined increased by approximately 1.4% per year during 2000–2018, while the ASMR decreased by approximately 1.3% per year. We observed decreasing trends in ASIR and ASMR for cancer of the esophagus, stomach, and liver, whereas the ASIR increased significantly for cancer of the thyroid, prostate, and cervix.

Conclusions: Cancer remains a major public health concern in China, with a cancer profile that reflects the coexistence of developed and developing regions. Sustained implementation of prevention and control measures has resulted in significant reductions in the incidence and mortality rates of certain historically high incidence cancers, such as esophagus, stomach and liver cancers. Adherence to the guidelines of the Healthy China Action Plan and the Cancer Prevention and Control Action Plan, along with continued efforts in comprehensive risk factor control, cancer screening, early diagnosis and treatment, and standardization of diagnostic and therapeutic protocols, are key strategies to effectively mitigate the increasing cancer burden by 2030.

1. Introduction

Cancer has become a major public health problem in China, seriously affecting the health of Chinese residents, the national economy and the social development. Cancer registries can be used for continuous and dynamic monitoring of cancer incidence and mortality. Population-based cancer registries have been in operation in China for about 60 years.¹ Cancer incidence, mortality and survival data provide scientific evidence to develop cancer prevention and control strategies, and to evaluate the effectiveness of the quality of medical and health work.

[☆] Given his role as Editor in Chief, Jie He had no involvement in the peer-review of this article and has no access to information regarding its peer-review. Full responsibility for the editorial process for this article was delegated to Huan He.

* Correspondence authors.
E-mail addresses: weiwj@ccim.ac.cn (W. Wei), prof.hejie@263.net (J. He).

[†] These authors contributed equally to this work.

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Cancer incidence and mortality in China, 2022

2022年中国癌症发病率和死亡率分析



发表杂志：国家癌症中心杂志

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文献摘要

背景

- 为确保中国的实际监测数据与国际癌症研究机构（IARC）公布数据的一致性，国家癌症中心获国家卫健委批准，将在IARC发布2022年全球癌症负担（GLOBOCAN 2022）报告中同时发布中国的癌症负担数据。

方法

- 2018年中国共有700个登记处上报了高质量的癌症发病和死亡数据，其中2010年至2018年连续监测的106个登记处建立了年龄-时期-队列模型，模拟癌症发病率和死亡率的发展趋势，并对2022年中国的发病率和死亡率进行估计。此外，使用22个连续癌症登记的数据分析了2000至2018年间癌症**年龄标准化发病率（ASIR）和死亡率（ASMR）**的时间趋势。

结果

- 2022年中国新发癌症482.47万例，新增癌症死亡257.42万人。肺癌、结直肠癌、甲状腺癌、肝癌、胃癌位居发病率前五位。肺癌、肝癌、胃癌、结直肠癌和食道癌是前五位癌症死亡原因。在2000~2018年间，甲状腺癌、前列腺癌和**子宫颈癌的ASIR显著增加**。

结论

- 研究表明，癌症仍然是中国的一个主要公共卫生问题，中国的癌症负担一直在增加，部分原因是人口老龄化，公众癌症预防意识的提高，以及就医机会的改善。



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研究背景

癌症已成为中国的一大公共卫生问题，严重影响我国居民健康、国民经济和社会发展。以人口为基础的癌症登记处在中国已经运作了大约60年，可用于持续和动态监测癌症发病率和死亡率。

癌症登记极大地提高了中国的癌症防控水平。癌症发病率、死亡率和存活率数据为制定癌症预防和控制策略以及评估医疗卫生工作质量的有效性提供了科学依据。

国家癌症中心(NCC)负责数据收集和质量控制，包括根据《中国癌症登记指南》的标准和国际癌症研究机构/国际癌症登记协会(IARC/IACR)的标准评估所有癌症登记数据的有效性、完整性和可比性。

这项研究提供了中国2022年新发癌症发病率和死亡率的最新估计统计数据。同时，更新了2000~2018年癌症发病率和死亡率的趋势。这些结果可为中国的癌症防治提供科学依据。



数据源

发病率和死亡率相关数据提取自全国700个癌症登记机构。使用22个连续癌症登记机构的数据，分析了2000至2018年间所有癌症和特定癌症类型按世界标准人口年龄标化率的发病率和死亡率的时间趋势。此外，国家统计局提供了中国2022年的人口数据。

统计分析

基于2010年至2018年106个登记处的数据估算2022年按年龄段预测的发病率和死亡率。结合2022年的人口，计算出各年龄段的新发病例和死亡人数。此外，使用Segi人口权重来计算年龄标准化死亡率（ASMR）、年度百分比变化（APC）和平均年度百分比变化（AAPC）。



研究结果



2022年中国癌症总体发病情况

与2020年相比，2022年新发病例增长5.6%

Table 1
Estimated numbers of new cancer cases and incidence rates in China in 2022.

Cancer sites	ICD-10	Cases (×10 ⁴)	All		Male		Female	
			Crude rate (1/10 ⁵)	ASIR (1/10 ⁵)	Cases (×10 ⁴)	Crude rate (1/10 ⁵)	ASIR (1/10 ⁵)	Cases (×10 ⁴)
		6.51						
		5.10						
		22.40						
Lip, oral cavity & pharynx	C00-10, 12-13	4.61	2.72	4.56	6.33	3.87	1.95	2.82
Nasopharynx	C11	3.61	2.36	3.67	5.08	3.39	1.44	2.08
Esophagus	C15	15.87	8.32	16.75	23.23	13.09	5.65	8.19
Stomach	C16	36.77	25.41	13.72	24.66	34.20	19.47	11.21
Colon-rectum	C18-21	3.11	36.63	20.10	30.77	42.67	24.74	20.94
Liver	C22	11.87	26.04	15.03	26.79	37.16	22.72	9.98
Gallbladder	C23	2.95	2.21	1.14	1.27	1.76	1.85	2.67
Pancreas	C25	8.41	8.41	4.44	6.71	9.31	5.29	5.15
Larynx	C32	106.06	2.09	1.16	2.72	3.77	2.19	0.23
Lung	C33-34	0.88	75.13	40.78	65.87	91.36	52.03	40.19
Melanoma of skin	C43	35.72	0.62	0.37	0.44	0.61	0.37	0.44
Female breast	C50	15.07	51.71	33.04	-	-	35.72	51.71
Cervix	C53	7.77	21.81	13.83	-	-	15.07	21.81
Uterus	C54	6.11	11.25	6.84	-	-	7.77	11.25
Ovary	C56	13.42	8.84	5.68	-	-	6.11	8.84
Prostate	C61	0.35	18.61	9.68	13.42	18.61	9.68	-
Testis	C62	0.48	0.48	0.41	0.35	0.48	0.41	-
Kidney	C64	7.37	5.22	3.13	4.73	6.56	4.08	2.64
Bladder	C67	9.29	6.58	3.44	7.32	10.15	5.67	1.97
Brain, CNS	C70-72	8.75	6.20	4.17	4.24	5.88	4.13	4.51
Thyroid	C73	46.61	33.02	24.64	12.49	17.32	13.25	34.12
Lymphoma	C81-86, 88	8.52	6.03	3.77	4.81	6.68	4.34	3.71
Leukemia	C91-95	8.19	5.80	4.54	4.70	6.52	5.14	3.50
All other sites*	Other	22.45	13.31	16.73	23.20	14.42	14.96	21.66
All sites*	All	482.47	341.75	201.61	253.39	351.44	209.61	229.08

Abbreviations: ASIR, age-standardized incidence rate by world standard population (Segi's population); CNS, central nervous system; ICD-10, International Statistical Classification of Diseases and Related Health Problems 10th Revision.

* Non-melanoma skin cancer (C44) was included.

表1 预计2022年中国新发癌症病例数和癌症发病率

✓ 新发病例

4,824,700例

男性2,533,900例，女性2,290,800例

✓ 世标发病率

201.61/10万

男性世标发病率高于女性

(209.61/10万 vs 197.03/10万)

✓ 新发病例增长

5.6%

与2020年死亡人数3,002,899例相比

- ✓ 从发病率看，2022年中国最常见的癌症是肺癌（106.06万例）
- ✓ 其次是结直肠癌、甲状腺癌、肝癌、胃癌、乳腺癌、食管癌、**子宫颈癌**、前列腺癌、胰腺癌。



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中国男女性TOP10癌症发病率及顺位

- ✓ 男性前五位癌症依次为肺癌、结直肠癌、肝癌、胃癌和食道癌。

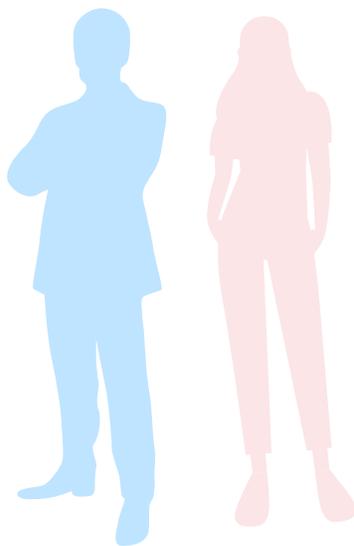
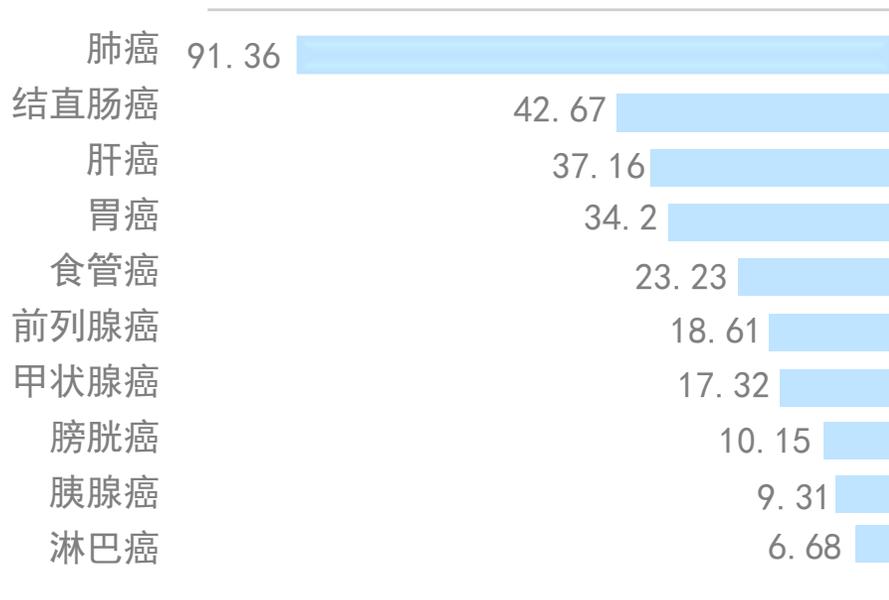
65.5%

占男性癌症新发病例总数

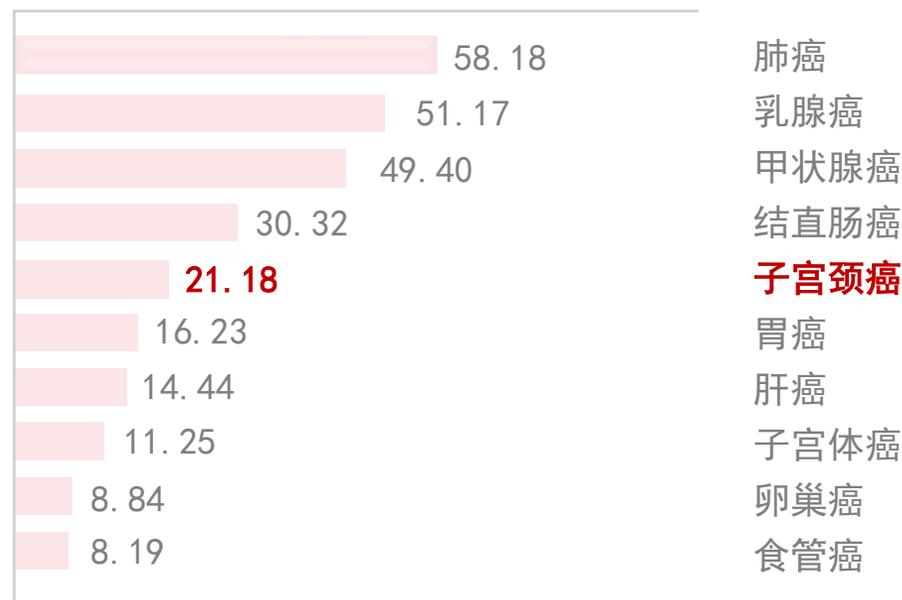
- ✓ 女性前五位癌症依次为肺癌、乳腺癌、甲状腺癌、结直肠癌和**宫颈癌**。其中，**宫颈癌发病率居第五位，相比2020年上升一位。**

63.65%

占女性癌症新发病例总数



发病率 (1/10万)



癌症发病率年龄分布

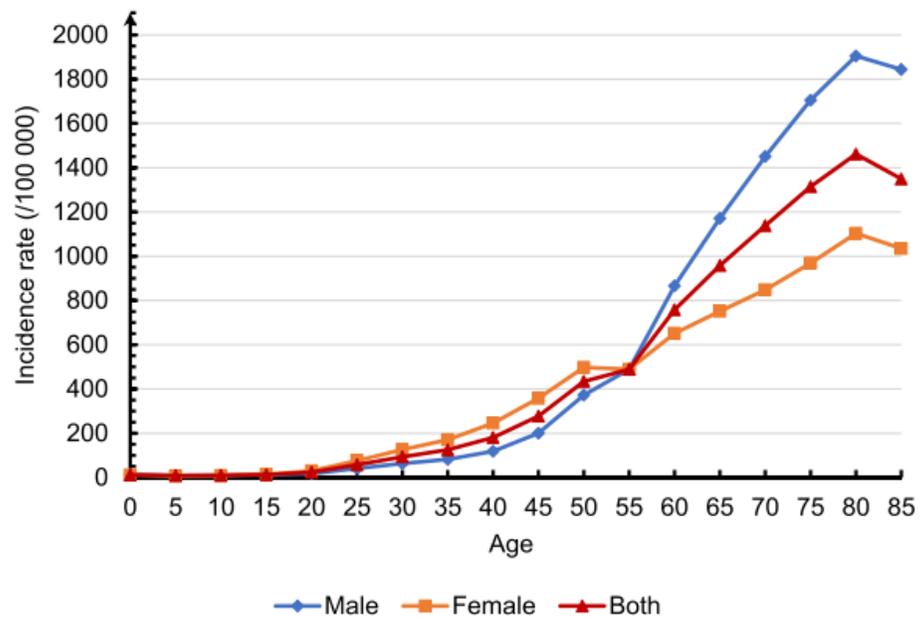


Fig. 1. Estimated age-specific incidence rates for all cancers combined in China in 2022.

- ✓ 发病率整体随年龄增加而逐渐上升，全癌种的发病率在0 ~ 34岁年龄组相对较低，从35 ~ 39岁年龄组开始显著升高，在80 ~ 84岁年龄组达到高峰。
- ✓ 男性总体发病率低于在25 ~ 54岁年龄组女性，而在60岁以上，则高于女性。

研究结果



2022年中国癌症总体死亡情况

与2020年相比，2022年死亡人数下降14.3%

Table 2
Estimated numbers of cancer deaths and cancer mortality rates in China in 2022.

Cancer sites	ICD-10	Deaths (x10 ⁴)	Deaths in China in 2022.								
			All			Male			Female		
			Deaths (x10 ⁴)	Crude rate (1/10 ⁵)	ASMR (1/10 ⁵)	Deaths (x10 ⁴)	Crude rate (1/10 ⁵)	ASMR (1/10 ⁵)	Deaths (x10 ⁴)	Crude rate (1/10 ⁵)	ASMR (1/10 ⁵)
Lip, oral cavity & pharynx	C00-10, 12-13	3.52	1.49	1.33	2.58	3.58	2.06	0.94	1.35	0.63	
Nasopharynx	C11	2.84	1.01	1.18	2.13	2.95	1.81	0.71	1.03	0.56	
Esophagus	C15	24.00	3.28	6.68	14.04	19.47	10.70	4.71	6.82	2.92	
Stomach	C16	26.04	8.44	9.39	18.16	25.18	13.77	7.88	11.41	5.34	
Colon-rectum	C18-21	31.65	7.00	8.56	14.26	19.78	10.85	9.74	14.10	6.48	
Liver	C22	2.45	2.42	12.59	22.98	31.87	19.14	8.68	12.56	6.15	
Gallbladder	C23	2.10	0.74	0.87	0.98	1.36	0.74	1.47	2.13	0.99	
Pancreas	C25	1.69	0.53	3.88	6.11	8.47	4.73	4.52	6.55	3.06	
Larynx	C32	1.19	0.62	1.50	2.08	1.16	0.18	0.26	0.12		
Lung	C33-34	73.33	1.94	26.66	51.59	71.55	39.51	21.74	31.47	14.71	
Melanoma of skin	C43	0.54	0.38	0.20	0.29	0.40	0.23	0.25	0.36	0.18	
Female breast	C50	7.50	0.86	6.10	-	-	-	7.50	10.86	6.10	
Cervix	C53	5.57	1.06	4.54	-	-	-	5.57	8.06	4.54	
Uterus	C54	1.16	0.96	1.05	-	-	-	1.35	1.96	1.05	
Ovary	C56	3.13	0.73	2.64	-	-	-	3.26	4.73	2.64	
Prostate	C61	4.32	0.59	3.26	4.75	6.59	3.26	-	-	-	
Testis	C62	0.47	0.11	0.07	0.08	0.11	0.07	-	-	-	
Kidney	C64	2.08	0.70	0.91	1.64	2.27	1.30	0.76	1.10	0.54	
Bladder	C67	4.19	1.34	3.25	4.51	2.31	0.88	1.28	0.52		
Brain, CNS	C70-72	2.40	1.01	2.51	3.16	4.38	2.88	2.51	3.63	2.15	
Thyroid	C73	1.41	0.82	0.45	0.43	0.60	0.35	0.72	1.05	0.55	
Lymphoma	C81-86, 88	4.56	1.95	1.64	2.51	3.48	2.06	1.65	2.39	1.24	
Leukemia	C91-95	5.16	1.55	2.37	2.92	4.04	2.78	2.09	3.03	1.97	
All other sites*	Other	1.16	1.89	6.47	9.42	13.07	7.64	7.36	10.66	5.37	
All sites*	All	4.16	82.34	96.47	162.93	225.97	127.49	94.49	136.79	67.81	
All sites*	All	5.01	257.42	182.34	96.47	162.93	225.97	127.49	94.49	136.79	

Abbreviations: ASMR, age-standardized mortality rate; Crude rate, crude rate; ASMR, age-standardized mortality rate; CNS, central nervous system; ICD-10, International Classification of Diseases, 10th Revision; All sites*, all sites including non-melanoma skin cancer (C44) was included.

表2 预计2022年中国的癌症死亡人数和癌症死亡率

✓ 新发死亡人数

2,574,200人

男性1,629,300人，女性944,900人

✓ 世标死亡率

96.47/10万

男性世标死亡率高于女性

127.49/10万 vs 67.81/10万

✓ 死亡人数下降

14.3%

与2020年死亡人数3,002,899人相比

- ✓ 从死亡人数看，2022年中国最主要的癌症死因是肺癌（733,300人死亡）
- ✓ 其次是肝癌、胃癌、结直肠癌和食道癌、胰腺癌、乳腺癌、脑瘤、**子宫颈癌**，白血病。



中国男女性TOP10癌症死亡率及顺位

✓ 男性癌症死亡的前5位死因依次为肺癌、肝癌、胃癌、结直肠癌和食道癌。

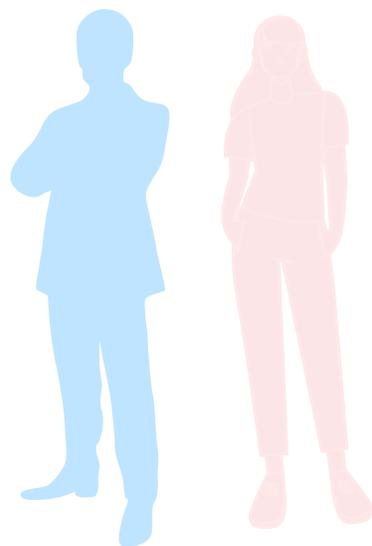
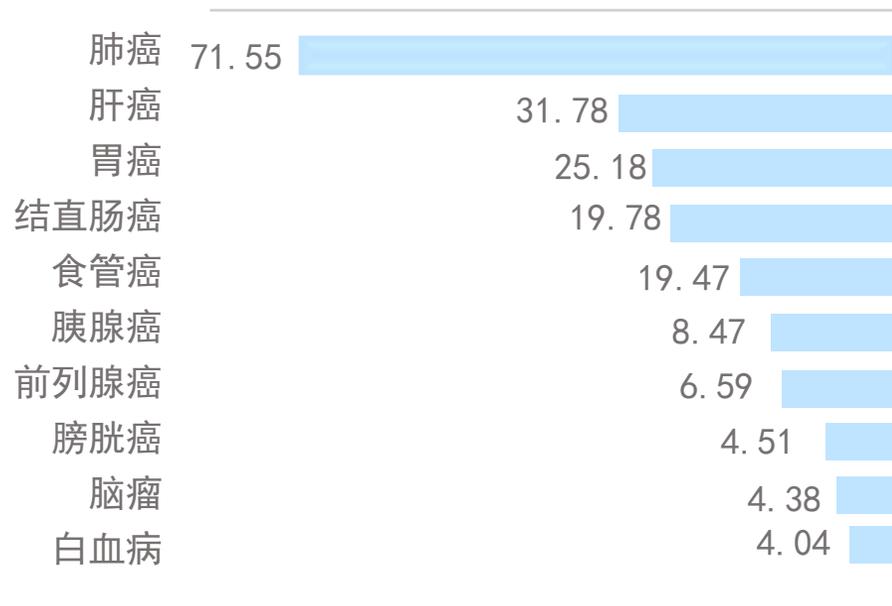
74.28%

占男性癌症死亡人数总数

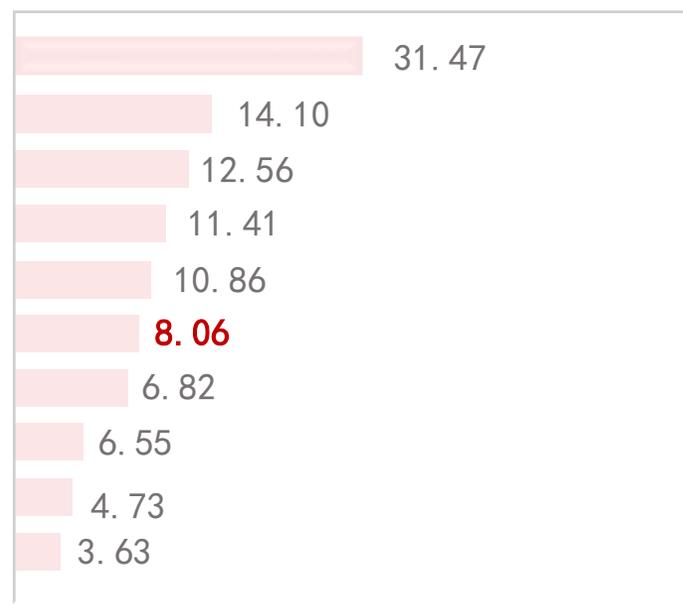
✓ 女性癌症死亡的前5位死因是肺癌、结直肠癌、肝癌、胃癌和乳腺癌。其中，**子宫颈癌死亡率居第六位，相比2020年上升一位。**

58.78%

占女性癌症死亡人数总数



发病率 (1/10万)



肺癌
结直肠癌
肝癌
胃癌
乳腺癌
子宫颈癌
食管癌
胰腺癌
卵巢癌
脑瘤



癌症死亡率年龄分布

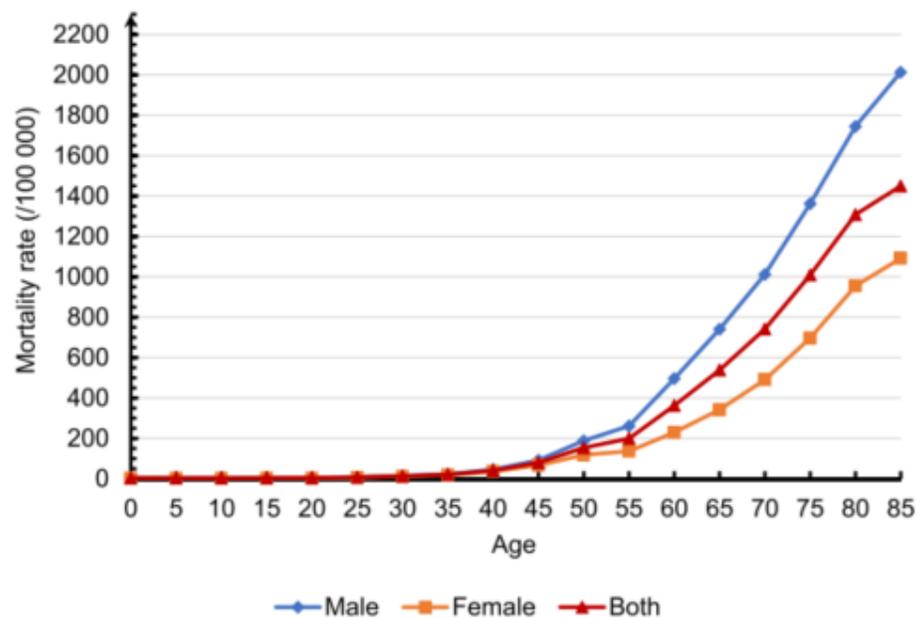


Fig. 2. Estimated age-specific mortality rates for all cancers combined in China in 2022.

- ✓ 死亡率随年龄增加而逐渐上升，在40~44岁开始显著上升，85岁及以上达到高峰。
- ✓ 在40岁以后的人群中，男性的死亡率高于女性。

研究结果



2000~2018年间部分癌症发病率趋势

Table 3
Trends in age-standardized incidence rates for selected cancers by sex in China, 2000 to 2018.

Sex	Site	Trend 1		Trend 2		Trend 3		2000-2018		AAPC, % (95% CI)	
		Years	APC, % (95% CI)	Years	APC, % (95% CI)	Years	APC, % (95% CI)	2009-2018	2014-2018	2009-2018	2014-2018
Both	All sites	2000-2014	1.1* (0.8~1.3)	2014-2018	2.5* (0.8~4.1)	-	-	1.4* (1.0~1.8)	-	1.7* (1.0~2.4)	2.5* (0.8~4.1)
Males	All sites	2000-2018	0.3* (0.1~0.4)	-	-	-	-	0.3* (0.1~0.4)	-	0.3* (0.1~0.4)	0.3* (0.1~0.4)
	Esophagus	2000-2018	-3.5* (-3.8~-3.3)	-	-	-	-	2.7* (2.2~3.1)	-	-3.5* (-3.8~-3.3)	-3.5* (-3.8~-3.3)
	Stomach	2000-2004	-4.6* (-6.0~-3.1)	2004-2009	-1.3 (-2.8~0.3)	2009-2018	-3.1* (-3.6~-2.7)	-2.3* (-2.7~-1.9)	-	-3.1* (-3.6~-2.7)	-3.1* (-3.6~-2.7)
	Colon-rectum	2000-2006	4.3* (3.5~5.1)	2006-2014	1.1* (0.5~1.7)	2014-2018	3.5* (2.0~5.0)	1.0* (0.8~1.2)	-	2.2* (1.5~2.8)	3.5* (2.0~5.0)
	Liver	2000-2006	-0.9 (-2.0~0.2)	2006-2018	-2.9* (-3.3~-2.6)	-	-	0.5* (0.1~0.9)	-	-2.9* (-3.3~-2.6)	-2.9* (-3.3~-2.6)
	Pancreas	2000-2018	1.0* (0.8~1.2)	-	-	-	-	7.0* (6.5~7.6)	-	1.0* (0.8~1.2)	1.0* (0.8~1.2)
	Lung	2000-2014	-0.2 (-0.4~0.1)	2014-2018	2.7* (0.9~4.6)	-	-	0.8* (0.3~1.4)	-	1.1* (0.4~1.8)	2.7* (0.9~4.6)
	Prostate	2000-2005	12.2* (10.3~14.2)	2005-2018	5.1* (4.6~5.5)	-	-	16.9* (14.7~19.1)	-	5.1* (4.6~5.5)	5.1* (4.6~5.5)
	Bladder	2000-2005	4.3* (2.4~6.3)	2005-2018	-0.5* (-1.0~-0.1)	-	-	2.2* (1.0~3.3)	-	-0.5* (-1.0~-0.1)	-0.5* (-1.0~-0.1)
	Thyroid	2000-2007	11.8* (9.0~14.7)	2007-2014	27.0* (23.0~31.2)	2014-2018	9.2* (2.8~16.6)	18.8* (15.4~22.3)	9.2* (2.8~16.6)	18.8* (15.4~22.3)	9.2* (2.8~16.6)
	Lymphoma	2000-2004	6.8* (2.9~10.8)	2004-2012	-0.3 (-1.9~1.2)	2012-2018	2.5* (0.5~4.6)	2.6* (1.9~3.2)	2.5* (0.5~4.6)	1.6* (0.3~2.9)	2.5* (0.5~4.6)
Females	All sites	2000-2006	2.8* (1.8~3.8)	2006-2011	1.4 (-0.4~3.2)	2011-2018	3.2* (2.4~4.0)	2.6* (1.9~3.2)	-	2.8* (2.1~3.4)	3.2* (2.4~4.0)
	Esophagus	2000-2004	-8.0* (-11.3~-4.6)	2004-2009	-3.9* (-7.4~-0.3)	2009-2018	-7.0* (-7.9~-6.0)	-6.4* (-7.5~-5.2)	-	-7.0* (-7.9~-6.0)	-7.0* (-7.9~-6.0)
	Stomach	2000-2018	-2.8* (-3.0~-2.6)	-	-	-	-	-2.8* (-3.0~-2.6)	-	-2.8* (-3.0~-2.6)	-2.8* (-3.0~-2.6)
	Colon-rectum	2000-2006	3.1* (2.1~4.1)	2006-2018	0.2 (-0.1~0.5)	-	-	-2.8* (-3.0~-2.6)	-	0.2 (-0.1~0.5)	0.2 (-0.1~0.5)
	Liver	2000-2009	-1.7* (-2.5~-1.0)	2009-2014	-4.3* (-6.8~-1.6)	2014-2018	-1.5 (-4.1~1.1)	1.1* (0.8~1.5)	-	-3.0* (-4.7~-1.4)	-1.5 (-4.1~1.2)
	Lung	2000-2013	1.1* (0.6~1.7)	2013-2018	8.3* (6.0~10.7)	-	-	-2.4* (-3.3~-1.5)	-	5.1* (3.9~6.2)	8.3* (6.0~10.7)
	Breast	2000-2006	5.2* (3.6~6.8)	2006-2018	2.1* (1.6~2.7)	-	-	3.1* (2.4~3.8)	-	2.1* (1.6~2.7)	2.1* (1.6~2.7)
	Cervix	2000-2008	14.8* (12.5~17.0)	2008-2018	1.7* (0.3~3.1)	-	-	3.1* (2.6~3.7)	-	1.7* (0.3~3.1)	1.7* (0.3~3.1)
	Uterus	2000-2005	5.5* (3.2~7.9)	2005-2018	2.6* (2.0~3.1)	-	-	7.3* (6.2~8.4)	-	2.6* (2.0~3.1)	2.6* (2.0~3.1)
	Ovary	2000-2006	6.3* (4.8~7.9)	2006-2011	-2.8* (-5.4~-0.2)	2011-2018	0.7 (-0.4~1.4)	3.4* (2.7~4.1)	-	-0.1 (-1.0~0.9)	0.7 (-0.4~1.9)
	Thyroid	2000-2004	8.3* (1.9~15.2)	2004-2014	21.8* (19.7~24.0)	2014-2018	8.5* (2.1~15.3)	1.5* (0.6~2.4)	-	15.7* (12.8~18.7)	8.5* (2.1~15.3)

Abbreviations: AAPC, average annual percentage change; APC, annual percentage change; CI, confidence interval.
* The APC or AAPC is significantly different from zero ($P < 0.05$).

发病趋势



宫颈癌发病率呈一直上升趋势

但自2008年以来上升趋势明显放缓

- ✓ 男性所有癌症的ASIR保持稳定，但女性的ASIR以每年2.6%的速度显著增加，主要是由于更多的甲状腺癌和子宫颈癌的诊断。

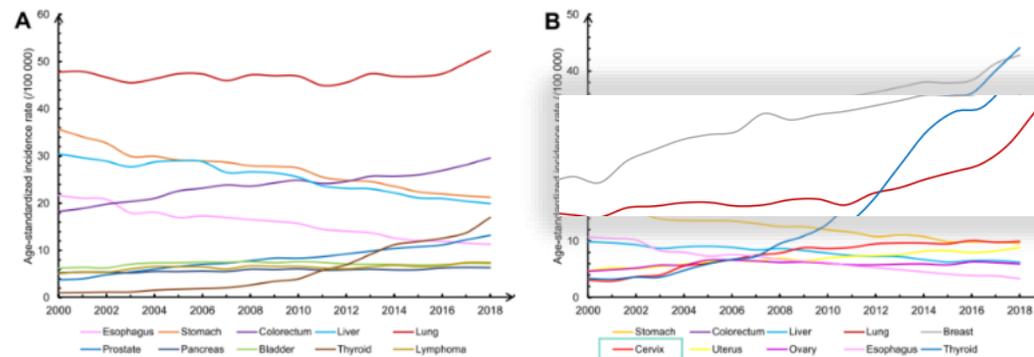


Table 3
Trends in age-standardized incidence rates for selected cancers by sex in China, 2000 to 2018.

Sex	Site	Trend 1		Trend 2		Trend 3		AAPC, % (95% CI)			
		Years	APC, % (95% CI)	Years	APC, % (95% CI)	Years	APC, % (95% CI)	2000-2018	2009-2018	2014-2018	
Both	All sites	2000-2014	1.1* (0.8-1.3)	2014-2018	2.5* (0.8-4.1)	-	-	1.4* (1.0-1.8)	1.7* (1.0-2.4)	2.5* (0.8-4.1)	
	Males	All sites	2000-2018	0.3* (0.1-0.4)	-	-	-	-	0.3* (0.1-0.4)	0.3* (0.1-0.4)	0.3* (0.1-0.4)
		Esophagus	2000-2018	-3.5* (-3.8--3.3)	-	-	-	-	-3.5* (-3.8--3.3)	-3.5* (-3.8--3.3)	-3.5* (-3.8--3.3)
		Stomach	2000-2004	-4.6* (-6.0--3.1)	2004-2009	-1.3 (-2.8-0.3)	2009-2018	-3.1* (-3.6--2.7)	-2.9* (-3.5--2.4)	-3.1* (-3.6--2.7)	-3.1* (-3.6--2.7)
		Colon-rectum	2000-2006	4.3* (3.5-5.1)	2006-2014	1.1* (0.5-1.7)	2014-2018	3.5* (2.0-5.0)	2.7* (2.2-3.1)	2.2* (1.5-2.8)	3.5* (2.0-5.0)
		Liver	2000-2006	-0.9 (-2.0-0.2)	2006-2018	-2.9* (-3.3--2.6)	-	-	-2.3* (-2.7--1.9)	-2.9* (-3.3--2.6)	-2.9* (-3.3--2.6)
		Pancreas	2000-2018	1.0* (0.8-1.2)	-	-	-	-	1.0* (0.8-1.2)	1.0* (0.8-1.2)	1.0* (0.8-1.2)
		Lung	2000-2014	-0.2 (-0.4-0.1)	2014-2018	2.7* (0.9-4.6)	-	-	0.5* (0.1-0.9)	1.1* (0.4-1.8)	2.7* (0.9-4.6)
		Prostate	2000-2005	12.2* (10.3-14.2)	2005-2018	5.1* (4.6-5.5)	-	-	7.0* (6.5-7.6)	5.1* (4.6-5.5)	5.1* (4.6-5.5)
		Bladder	2000-2005	4.3* (2.4-6.3)	2005-2018	-0.5* (-1.0--0.1)	-	-	0.8* (0.3-1.4)	-0.5* (-1.0--0.1)	-0.5* (-1.0--0.1)
		Thyroid	2000-2007	11.8* (9.0-14.7)	2007-2014	27.0* (23.0-31.2)	2014-2018	9.2* (2.8-16.1)	16.9* (14.7-19.1)	18.8* (15.4-22.3)	9.2* (2.8-16.1)
		Lymphoma	2000-2004	6.8* (2.9-10.8)	2004-2012	-0.3 (-1.9-1.2)	2012-2018	2.5* (0.5-4.6)	2.2* (1.0-3.3)	1.6* (0.3-2.9)	2.5* (0.5-4.6)
		Females	All sites	2000-2006	2.8* (1.8-3.8)	2006-2011	1.4 (-0.4-3.2)	2011-2018	3.2* (2.4-4.0)	2.6* (1.9-3.2)	2.8* (2.1-3.4)
Esophagus	2000-2004		-8.0* (-11.3--4.6)	2004-2009	-3.9* (-7.4--0.3)	2009-2018	-7.0* (-7.9--6.0)	-6.4* (-7.5--5.2)	-7.0* (-7.9--6.0)	-7.0* (-7.9--6.0)	
Stomach	2000-2018		-2.8* (-3.0--2.6)	-	-	-	-	-2.8* (-3.0--2.6)	-2.8* (-3.0--2.6)	-2.8* (-3.0--2.6)	
Colon-rectum	2000-2006		3.1* (2.1-4.1)	2006-2018	0.2 (-0.1-0.5)	-	-	1.1* (0.8-1.5)	0.2 (-0.1-0.5)	0.2 (-0.1-0.5)	
Liver	2000-2009		-1.7* (-2.5--1.0)	2009-2014	-4.3* (-6.8--1.6)	2014-2018	-1.5 (-4.1-1.2)	-2.4* (-3.3--1.5)	-3.0* (-4.7--1.4)	-1.5 (-4.1-1.2)	
Lung	2000-2013		1.1* (0.6-1.7)	2013-2018	8.3* (6.0-10.7)	-	-	3.1* (2.4-3.8)	5.1* (3.9-6.2)	8.3* (6.0-10.7)	
Breast	2000-2006		5.2* (3.6-6.8)	2006-2018	2.1* (1.6-2.7)	-	-	3.1* (2.6-3.7)	2.1* (1.6-2.7)	2.1* (1.6-2.7)	
Cervix	2000-2008		14.8* (12.5~17.0)	2008-2018	1.7* (0.3~3.1)	-	-	-	-	7.3* (6.2~8.4)	
Ovary	2000-2006		6.3* (4.8-7.9)	2006-2011	-2.8* (-5.4--0.2)	2011-2018	0.7 (-0.4-1.9)	1.5* (0.6-2.4)	-0.1 (-1.0-0.9)	0.7 (-0.4-1.9)	
Thyroid	2000-2004		8.3* (1.9-15.2)	2004-2014	21.8* (19.7-24.0)	2014-2018	8.5* (2.1-15.3)	15.7* (13.5-17.9)	15.7* (12.8-18.7)	8.5* (2.1-15.3)	

Abbreviations: AAPC, average annual percentage change; APC, annual percentage change; CI, confidence interval.
* The APC or AAPC is significantly different from zero ($P < 0.05$).

- ✓ 子宫颈癌ASIR的年均增长率从2008年前的14.8%下降到现在的1.7%。
- ✓ 中国的子宫颈癌发病率始终呈上升趋势，但自2008年以来上升趋势明显放缓。这一下降在年轻一代中尤为明显，表明中国近年来子宫颈癌预防和控制策略是有效的。



研究结果



2000~2018年中国部分癌症死亡率趋势

死亡趋势

Table 4
Trends in age-standardized mortality rates for selected cancers by sex in China, 2000 to 2018.

Sex	Site	Trend 1		Trend 2		Trend 3		AAPC, % (95% CI)		
		Years	APC, % (95% CI)	Years	APC, % (95% CI)	Years	APC, % (95% CI)	2000-2018	2009-2018	2014-2018
Both	All sites	2000-2004	-2.2* (-3.4~-1.0)	2004-2009	-0.1 (-1.3~1.2)	2009-2018	-1.6* (-2.0~-1.3)	-1.3* (-1.7~-0.9)	-1.6* (-2.0~-1.3)	-1.6* (-2.0~-1.3)
Males	All sites	2000-2018	-1.2* (-1.4~-1.0)	-	-	-	-	-1.2* (-1.4~-1.0)	-1.2* (-1.4~-1.0)	-1.2* (-1.4~-1.0)
	Esophagus	2000-2004	-5.6* (-8.1~-3.0)	2004-2018	-3.3* (-3.7~-2.9)	-	-	-3.8* (-4.4~-3.2)	-3.3* (-3.7~-2.9)	-3.3* (-3.7~-2.9)
	Stomach	2000-2004	-6.0* (-7.9~-3.9)	2004-2010	-1.9* (-3.4~-0.4)	2010-2018	-3.8* (-4.5~-3.1)	-3.7* (-4.3~-3.0)	-3.6* (-4.1~-3.0)	-3.8* (-4.5~-3.1)
	Colon-rectum	2000-2018	1.2* (0.9~1.6)	-	-	-	-	1.2* (0.9~1.6)	1.2* (0.9~1.6)	1.2* (0.9~1.6)
	Liver	2000-2007	-1.6* (-2.9~-0.2)	2007-2018	-3.5* (-4.2~-2.8)	-	-	-2.8* (-3.4~-2.2)	-3.5* (-4.2~-2.8)	-3.5* (-4.2~-2.8)
	Pancreas	2000-2018	1.1* (0.8~1.4)	-	-	-	-	1.1* (0.8~1.4)	1.1* (0.8~1.4)	1.1* (0.8~1.4)
	Lung	2000-2018	-0.6* (-0.9~-0.4)	-	-	-	-	-0.6* (-0.9~-0.4)	-0.6* (-0.9~-0.4)	-0.6* (-0.9~-0.4)
	Prostate	2000-2010	5.7* (4.5~6.9)	2010-2018	2.0* (0.4~3.7)	-	-	4.1* (3.1~5.0)	2.4* (1.1~3.8)	2.0* (0.4~3.7)
	Bladder	2000-2018	-0.1 (-0.5~0.3)	-	-	-	-	-0.1 (-0.5~0.3)	-0.1 (-0.5~0.3)	-0.1 (-0.5~0.3)
	Brain, CNS	2000-2018	-0.3 (-0.8~0.3)	-	-	-	-	-0.3 (-0.8~0.3)	-0.3 (-0.8~0.3)	-0.3 (-0.8~0.3)
Females	Leukemia	2000-2010	2.0* (0.9~3.1)	2010-2018	-2.0* (-3.5~-0.5)	-	-	0.2 (-0.6~1.0)	-1.6* (-2.8~-0.3)	-2.0* (-3.5~-0.5)
	All sites	2000-2004	-1.7* (-2.8~-0.6)	2004-2010	-0.3 (-1.0~-0.5)	2010-2018	-1.9* (-2.3~-1.5)	-1.3* (-1.7~-1.0)	-1.7* (-2.0~-1.4)	-1.9* (-2.3~-1.5)
	Esophagus	2000-2018	-6.2* (-6.5~-5.9)	-	-	-	-	-6.2* (-6.5~-5.9)	-6.2* (-6.5~-5.9)	-6.2* (-6.5~-5.9)
	Stomach	2000-2004	-6.0* (-7.9~-4.2)	2004-2010	-2.2* (-3.6~-0.9)	2010-2018	-4.9* (-5.6~-4.3)	-4.3* (-4.9~-3.7)	-4.6* (-5.2~-4.1)	-4.9* (-5.6~-4.3)
	Colon-rectum	2000-2004	-0.9 (-2.9~1.2)	2004-2009	1.6 (-0.5~3.7)	2009-2018	-1.0* (-1.6~-0.4)	-0.3 (-1.0~-0.4)	-1.0* (-1.6~-0.4)	-1.0* (-1.6~-0.4)
	Liver	2000-2007	-1.9* (-2.9~-0.8)	2007-2018	-4.2* (-4.7~-3.7)	-	-	-3.3* (-3.8~-2.8)	-4.2* (-4.7~-3.7)	-4.2* (-4.7~-3.7)
	Pancreas	2000-2018	1.1* (0.7~1.5)	-	-	-	-	1.1* (0.7~1.5)	1.1* (0.7~1.5)	1.1* (0.7~1.5)
	Lung	2000-2012	-0.3 (-0.7~0.1)	2012-2018	-3.0* (-4.1~-1.8)	-	-	-1.2* (-1.6~-0.8)	-2.1* (-2.8~-1.4)	-3.0* (-4.1~-1.8)
	Breast	2000-2018	0.8* (0.5~1.1)	-	-	-	-	0.8* (0.5~1.1)	0.8* (0.5~1.1)	0.8* (0.5~1.1)
	Cervix	2000-2018	5.1* (4.6~5.6)	-	-	-	-	-	-	5.1* (4.6~5.6)
	Brain, CNS	2000-2018	-0.6* (-1.2~-0.1)	-	-	-	-	-0.6* (-1.2~-0.1)	-0.6* (-1.2~-0.1)	-0.6* (-1.2~-0.1)

Abbreviations: APC, annual percentage change; AAPC, average annual percentage change; CNS, central nervous system; CI, confidence interval.

* The APC or AAPC is significantly different from zero ($P < 0.05$).

女性

男性

上升

卵巢
子宫颈癌

前列腺癌
结直肠癌
胰腺癌

下降

食道癌、胃癌和肝癌

✓ 在2000~2018年间，全癌种的平均死亡率每年大幅下降约1.3%



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03 文献提示





癌症仍然是中国的一个主要公共卫生问题。2022年中国新发癌症482.47万例，新增癌症死亡人数257.42万人。与2020年相比，新发病例增长5.6%，死亡人数下降14.3%。

中国排名前十的癌症分别是肺癌、结直肠癌、甲状腺癌、肝癌、胃癌、乳腺癌、食道癌、宫颈癌、前列腺癌和胰腺癌。其中，宫颈癌在女性人群发病率居第五位，相比2020年上升一位，发病率21.18/10万；死亡率居第六位，相比2020年上升一位，死亡率8.06/10万。

中国的宫颈癌发病率一直呈上升趋势，但自2008年以来上升趋势明显放缓。这一下降在年轻一代中尤为明显，表明中国近年的宫颈癌预防和控制策略是有效的。



谢谢关注!

thanks for your attention.

