

A Comprehensive Mapping of Real-World Studies and Data Sources for Oncology in China: Insights into Landscape, Challenges, and Future Direction

Yaqi Jia¹, Yanbing Li^{2,3}, Siyan Zhan^{4,5}, Jeff Jianfei Guo⁶, Yan-Jun Zhang¹, Ziheng Guo¹, Xian Cao^{1*}

¹Medical Affairs, Takeda (China) International Trading Company, Beijing, China.

²Department of Epidemiology and Biostatistics, Institute of Basic Medical Sciences Chinese Academy of Medical Sciences, School of Basic Medicine Peking Union Medical College, Beijing, China

³Center of Environmental and Health Sciences, Chinese Academy of Medical Sciences, Peking Union Medical College, Beijing, China

⁴Department of Epidemiology and Biostatistics, School of Public Health, Peking University, Beijing, China

⁵Research Center of Clinical Epidemiology, Peking University Third Hospital, Beijing, China

⁶James L. Winkle College of Pharmacy, University of Cincinnati Academic Health Center, Cincinnati, OH, United States.

*Corresponding author with contact details:

Xian Cao,

Email: xian.cao@takeda.com,

Contact No. +86 18614090828

Supplementary Table 1. Detailed search strings used in the PubMed and the CNKI for oncology studies.

Search Terms	
English database	
Pubmed	Diseases and therapeutics
	("oncolog*" [Title/Abstract] OR "cancer" [Title/Abstract] OR "carcinoma" [Title/Abstract] OR "tumor" [Title/Abstract] OR "tumour" [Title/Abstract] OR "lymphoma" [Title/Abstract] OR "sarcoma" [Title/Abstract] OR "neoplas*" [Title/Abstract] OR "melanoma" [Title/Abstract] OR "leukemia" [Title/Abstract] OR "neuroblastoma" [Title/Abstract] OR "retinoblastoma" [Title/Abstract] OR "myeloma" [Title/Abstract] OR "metastasis" [Title/Abstract] OR "metastatic" [Title/Abstract] OR "myelodysplastic syndrome" [Title/Abstract] OR "myelodysplastic syndromes" [Title/Abstract] OR "MDS" [Title/Abstract] OR "polycythemia vera" [Title/Abstract])
	Study designs
	AND ("observation*" [Title/Abstract] OR "retrospectiv*" [Title/Abstract] OR "prospectiv*" [Title/Abstract] OR "real world data" [Title/Abstract] OR "real world evidence" [Title/Abstract] OR "real world study" [Title/Abstract] OR "cohort" [Title/Abstract] OR "case control" [Title/Abstract] OR "case-control" [Title/Abstract] OR "epidemiolog*" [Title/Abstract] OR "non-intervention*" [Title/Abstract] OR "incidence" [Title/Abstract] OR "prevalence" [Title/Abstract] OR "survival" [Title/Abstract] OR "health economics*" [Title/Abstract] OR "pharmacoeconomics" [Title/Abstract] OR "treatment pattern" [Title/Abstract] OR "clinical outcome" [Title/Abstract] OR "effectiveness" [Title/Abstract] OR "safety" [Title/Abstract])
	Data sources
	AND ("database*" [Title/Abstract] OR "claims" [Title/Abstract] OR "insurance" [Title/Abstract] OR "multicenter" [Title/Abstract] OR "multi-center" [Title/Abstract] OR "regist*" [Title/Abstract])
	Countries of study populations
	AND ("Chinese" [Title/Abstract] OR "China" [Title/Abstract])
	Publication dates
Exclusion criteria	Publication dates
	AND 2015/01/01:2025/07/01 [Date - Publication]
	Exclusion criteria
	NOT ("RCT" [Title/Abstract] OR "trial" [Title/Abstract] OR "survey" [Title/Abstract] OR "questionnaire" [Title/Abstract] OR "clinical trial protocol" [Title/Abstract] OR "systematic review" [Title/Abstract] OR "meta analysis" [Title/Abstract] OR "interview" [Title/Abstract] OR "Delphi" [Title/Abstract] OR "scoping review" [Title/Abstract] OR "comprehensive review" [Title/Abstract] OR "case report" [Title/Abstract] OR "case

		series"[Title/Abstract] OR "editorial"[Title/Abstract] OR "comment"[Title/Abstract] OR "expert consensus"[Title/Abstract] OR "guideline"[Title/Abstract] OR "education program"[Title/Abstract] OR "basic medical science"[Title/Abstract])
EMBASE	Diseases and therapies	("oncolog*":ti,ab OR "cancer":ti,ab OR "carcinoma":ti,ab OR "tumor":ti,ab OR "tumour":ti,ab OR "lymphoma":ti,ab OR "sarcoma":ti,ab OR "neoplas*":ti,ab OR "melanoma":ti,ab OR "leukemia":ti,ab OR "neuroblastoma":ti,ab OR "retinoblastoma":ti,ab OR "myeloma":ti,ab OR "metastasis":ti,ab OR "metastatic":ti,ab OR "myelodysplastic syndrome":ti,ab OR "myelodysplastic syndromes":ti,ab OR "MDS":ti,ab OR "polycythemia vera":ti,ab)
	Study designs	AND ("observation*":ti,ab OR "retrospectiv*":ti,ab OR "prospectiv*":ti,ab OR "real world data":ti,ab OR "real world evidence":ti,ab OR "real world study":ti,ab OR "cohort":ti,ab OR "case control":ti,ab OR "case-control":ti,ab OR "epidemiolog*":ti,ab OR "non intervention*":ti,ab OR "incidence":ti,ab OR "prevalence":ti,ab OR "survival":ti,ab OR "health economics*":ti,ab OR "pharmacoeconomics":ti,ab OR "treatment pattern":ti,ab OR "clinical outcome":ti,ab OR "effectiveness":ti,ab OR "safety":ti,ab)
	Data sources	AND ("database*":ti,ab OR "claims":ti,ab OR "insurance":ti,ab OR "multi center":ti,ab OR "multi-center":ti,ab OR "regist*":ti,ab)
	Geographic restriction	AND ("Chinese":ti,ab OR "China":ti,ab)
	Publication dates	AND [2015-01-01]/[2025-07-01]
	Exclusion criteria	NOT (("RCT":ti,ab OR "trial":ti,ab OR "survey":ti,ab OR "questionnaire":ti,ab OR "clinical trial protocol":ti,ab OR "systematic review":ti,ab OR "meta analysis":ti,ab OR "interview":ti,ab OR "Delphi":ti,ab OR "scoping review":ti,ab OR "comprehensive review":ti,ab OR "case report":ti,ab OR "case series":ti,ab OR "editorial":ti,ab OR "comment":ti,ab OR "expert consensus":ti,ab OR "guideline":ti,ab) OR "education program":ti,ab OR "basic medical science":ti,ab OR 'conference abstract':it)
Chinese database		
CNKI	Diseases and therapeutics	(TKA=('癌'+ '瘤'+ '白血病'+ '真性红细胞增多症'+ '骨髓增生异常综合征'))

	Study designs	AND (TKA=('观察性'+ '回顾性'+ '前瞻性'+ '真实世界研究'+ '真实世界数据'+ '真实世界证据'+ '队列'+ '病例对照'+ '流行'+ '非干预'+ '患病率'+ '发病率'+ '卫生经济'+ '药物经济'+ '治疗模式'+ '临床结局'+ '有效性'+ '安全性'+ '预后分析'+ '辅助治疗'+ '生存率'))
	Data sources	AND (TKA=('数据库'+ '数据集'+ '登记数据'+ '登记系统'+ '注册数据'+ '注册系统'+ '医保'+ '医疗保险'+ '医疗报销'))
	Publication dates	AND 发表时间： 从 2015/01/01 到 2025/07/01
	Exclusion criteria	NOT (TKA=(('RCT'+ '随机临床试验'+ '随机对照试验'+ '问卷'+ '临床试验方案'+ 'meta 分析'+ '荟萃分析'+ '系统评价'+ '综述'+ '文献复习'+ '社论'+ '专家共识'+ '指南'+ '医生教育'+ '患者教育'+ '基础医学'+ '文献回顾'+ 'SEER'+ 'PubMed'+ 'Web of Science'+ '知网'+ '万方')+('单中心'* '病历')+('表达'* '意义'))))
		NOT (TI=('解读'+ '规范'+ '进展'+ '工作')+('某'* '院'))
Wanfang data	Diseases and therapies	(癌 OR 瘤 OR 白血病 OR 真性红细胞增多症 OR 骨髓增生异常综合征)
	Study designs	AND (观察性 OR 回顾性 OR 前瞻性 OR 真实世界研究 OR 真实世界数据 OR 真实世界证据 OR 队列 OR 病例对照 OR 流行 OR 非干预 OR 患病率 OR 发病率 OR 卫生经济 OR 药物经济 OR 治疗模式 OR 临床结局 OR 有效性 OR 安全性 OR 预后分析 OR 辅助治疗 OR 生存率)
	Data sources	AND (数据库 OR 数据集 OR 登记 OR 注册 OR 医保 OR 医疗保险 OR 医疗报销)
	Publication dates	AND 出版时间:[2015-01-01 TO 2025-07-01}
	Exclusion criteria	NOT (RCT OR 随机临床试验 OR 随机对照试验 OR 问卷 OR 临床试验方案 OR meta 分析 OR 荟萃分析 OR 系统评价 OR 综述 OR 文献复习 OR 社论 OR 专家共识 OR 指南 OR 医生教育 OR 患者教育 OR 基础医学 OR 文献回顾 OR SEER OR PubMed OR Web of Science OR 知网 OR 万方) OR (单中心 AND 病历) OR (表达 AND 意义) OR 题名:(解读 OR 规范 OR 进展 OR 工作 OR (某 AND 院))

Supplementary Table 2. Characteristics of Identified Oncology Real-World Data (RWD) Databases in China (n = 126)

Data Source type	Data Source Name	Geographical distribution	Sample size range	Disease area
Registry	National Central Cancer Registry (NCCR)	Many provinces and cities	>1 m	All neoplasms
Claims	Taiwanese National Health Insurance Research Database (NHIRD)	Taiwan, China	>1 m	All neoplasms
EHR	Database from Colorectal Cancer (DACCA)	Sichuan Province	10k-0.1m	Digestive System Neoplasms; Gastrointestinal Neoplasms
SDPAN	China Cervical Cancer Clinical Diagnosis and Treatment Project Big Data Database: Project 1538, ChiCTR1817778, Project C4	Many provinces and cities	/	Urogenital Neoplasms; Uterine Cervical Neoplasms
SDPAN	Chinese Alliance of Research for Thymomas (ChART)	Many provinces and cities	1-5k	Thoracic Neoplasms; Thymus Neoplasms
Registry	China Liver Transplant Registry (CLTR)	Many provinces and cities	10k-0.1m	Digestive System Neoplasms; Liver Neoplasms
EHR	Western China Lung Cancer Database (WCLCD)	Sichuan Province	/	Lung Neoplasms; Thoracic Neoplasms
SDPAN	Early Diagnosis and Early Treatment Project of Esophageal Cancer	Many provinces and cities	/	Digestive System Neoplasms; Esophageal Neoplasms; Gastrointestinal Neoplasms; Head and Neck Neoplasms; Liver

				Neoplasms; Lung Neoplasms; Otorhinolaryngologic Neoplasms; Stomach Neoplasms; Thoracic Neoplasms; Urinary Bladder Neoplasms; Urogenital Neoplasms; Uterine Cervical Neoplasms
Claims	Urban Employee Basic Medical Insurance (UEBMI)	Many provinces and cities	/	All neoplasms
Registry	China taTME Registry Collaborative (CTRC)	Many provinces and cities	1-5k	Digestive System Neoplasms; Gastrointestinal Neoplasms
SDPAN	China Lymphoma Collaborative Group Database (CLCG)	Many provinces and cities	1-5k	Lymphoma
HCDA	LinkDoc database	Many provinces and cities	>1 m	Digestive System Neoplasms; Gastrointestinal Neoplasms; Lung Neoplasms; Pancreatic Neoplasms; Thoracic Neoplasms
Claims	Urban Basic Medical Insurance Database (UBMI)	Many provinces and cities	/	All neoplasms
Registry	Database of Kailuan Cohort	Hebei Province	/	All neoplasms
Registry	Chongqing Malignant Tumor Special Disease Management System	Many provinces and cities	/	Digestive System Neoplasms; Esophageal Neoplasms; Gastrointestinal Neoplasms; Liver Neoplasms; Lung Neoplasms; Prostatic Neoplasms; Thoracic Neoplasms; Urogenital Neoplasms

EHR	State Key Laboratory of Esophageal Cancer Prevention and Treatment (SKLEPT), the First Affiliated Hospital of Zhengzhou University	Henan Province	0.1-1 m	Digestive System Neoplasms; Esophageal Neoplasms
HCDA	the Western China Clinical Cooperation Group (WCCCG) database	Many provinces and cities	10k-0.1m	Breast Neoplasms
HCDA	the Fudan University Shanghai Cancer Center (FUSCC) database	Shanghai	/	All neoplasms; Breast Neoplasms
Registry	Registry for Catastrophic Illness Patients database of Taiwan	Taiwan, China	/	Digestive System Neoplasms; Endocrine Gland Neoplasms; Head and Neck Neoplasms; Otorhinolaryngologic Neoplasms; Ovarian Neoplasms; Stomach Neoplasms; Urogenital Neoplasms; Uterine Cervical Neoplasms
SDPAN	Chinese Children's Cancer Group (CCCCG) database	Many provinces and cities	/	Blastic Plasmacytoid Dendritic Cell Neoplasm; Digestive System Neoplasms; Hematologic Neoplasms; Liver Neoplasms
Registry	National Brain Tumor Registry of China (NBTRC)	Many provinces and cities	10k-0.1m	Central Nervous System Neoplasms; Cranial Nerve Neoplasms; Hematologic Neoplasms; Nervous System Neoplasms

HCDA	the Chinese Watch-and-Wait Database (CWWD)	Many provinces and cities	/	Digestive System Neoplasms; Gastrointestinal Neoplasms
SDPAN	China Endometrial Cancer Consortium	Many provinces and cities	/	Endometrial Neoplasms; Urogenital Neoplasms
Registry	Hong Kong Breast Cancer Registry(HKBCR)	Hong Kong, China	10k-0.1m	Breast Neoplasms
HCDA	the Pathology Database of Jinan KingMed Diagnostics (JKD)	Shandong Province	1-5k	Urogenital Neoplasms; Uterine Cervical Neoplasms
EHR	Shanghai Jiao Tong University Breast Cancer Database (SJTU-BCDB)	Many provinces and cities	10k-0.1m	Breast Neoplasms
Registry	China Kadoorie Biobank (CKB)	Many provinces and cities	>1 m	All neoplasms
Claims	Urban Employee Basic Medical Insurance (UEBMI); Urban Residence Basic Medical Insurance (URBMI)	Many provinces and cities	/	Digestive System Neoplasms; Gastrointestinal Neoplasms; Liver Neoplasms; Lung Neoplasms; Thoracic Neoplasms
Claims	National Medical Insurance Database	Many provinces and cities	/	All neoplasms
Claims	National health insurance claims data (China)	Many provinces and cities	/	All neoplasms
Claims	China Health Insurance Research Association (CHIRA)	Many provinces and cities	/	All neoplasms
Registry	Chinese National Breast Cancer Screening Program	Many provinces and cities	/	Breast Neoplasms
Registry	Jinchang Cohort	Gansu Province	0.1-1 m	All neoplasms

Registry	Gastric Cancer Liver Metastasis Multicenter Retrospective Cohort Research Database (GCLM-RECORD)	Many provinces and cities	1-5k	Digestive System Neoplasms; Gastrointestinal Neoplasms
Registry	Cancer Screening Program in Urban China (CanSPUC)	Many provinces and cities	/	Breast Neoplasms; Digestive System Neoplasms; Stomach Neoplasms
Registry	China Health and Retirement Longitudinal Study (CHARLS)	Many provinces and cities	10k-0.1m	All neoplasms
HCDA	the Yinzhou Regional Health Care Database	Zhejiang Province	/	All neoplasms; Lung Neoplasms; Thoracic Neoplasms
EHR	Sichuan Provincial Population Health Information Platform Health Statistics and Inpatient Medical Record Front Pages Database	Sichuan Province	/	All neoplasms
HCDA	Information Management System for Chronic Diseases in Zhejiang Province	Zhejiang Province	/	Urogenital Neoplasms; Uterine Cervical Neoplasms
Registry	Prospective Esophageal Cancer Database of Thoracic Surgery Department I, Peking University Cancer Hospital & Institute	Beijing	/	Digestive System Neoplasms; Esophageal Neoplasms
SDPAN	Chinese Society of Clinical Oncology Breast Cancer database	Beijing	/	Breast Neoplasms

EHR	Dedicated Gastric Cancer Database of Zhongshan Hospital, Fudan University	Shanghai	/	Digestive System Neoplasms; Stomach Neoplasms
EHR	Esophageal Cancer Case Management Database of Sichuan Cancer Hospital (SCCH-ECCM)	Sichuan Province	/	Digestive System Neoplasms; Esophageal Neoplasms
Registry	Prospective Registry Clinical Database of the Colorectal Specialty Group, Department of General Surgery, Peking Union Medical College Hospital	Beijing	1-5k	Digestive System Neoplasms; Gastrointestinal Neoplasms
HCDA	Chang Gung Research Database (CGRD)	Taiwan, China	0.1-1 m	Digestive System Neoplasms; Esophageal Neoplasms; Liver Neoplasms
SDPAN	Multicenter Retrospective Clinical Database of the Chinese Research Group of Gallbladder Cancer (CRGGC)	Many provinces and cities	5k-10k	Biliary Tract Neoplasms; Digestive System Neoplasms
HCDA	National Center for Pediatric Cancer Surveillance	Many provinces and cities	/	Cranial Nerve Neoplasms; Nervous System Neoplasms
Registry	Yunnan Cancer Center database	Yunnan Province	/	Lung Neoplasms; Thoracic Neoplasms; Urogenital Neoplasms; Uterine Cervical Neoplasms
Registry	National Clinical Treatment Registry Database for Esophageal Cancer	Many provinces and cities	10k-0.1m	Digestive System Neoplasms; Esophageal Neoplasms

	of the Eleventh Five-Year Plan			
HCDA	South China Children's Cancer Group	Guangdong Province	/	Blastic Plasmacytoid Dendritic Cell Neoplasm; Hematologic Neoplasms
EHR	Chongqing University Cancer Hospital database	Chongqing City	>1 m	Endocrine Gland Neoplasms; Ovarian Neoplasms; Urogenital Neoplasms; Uterine Cervical Neoplasms
HCDA	The Shanghai Link Healthcare Database, SLHD	Shanghai	/	All neoplasms
Claims	Urban Employee and Resident Basic Medical Insurance Database (UERBMI)	Many provinces and cities	/	Lung Neoplasms; Thoracic Neoplasms
Claims	Shantou's Medical Security Bureau	Many provinces and cities	/	Breast Neoplasms
Claims	database of China Health Insurance Bureau	Many provinces and cities	/	All neoplasms; Lung Neoplasms; Thoracic Neoplasms
Registry	National Lung Cancer Screening program	Many provinces and cities	/	Lung Neoplasms; Thoracic Neoplasms
Registry	China Cardiometabolic Disease and Cancer Cohort (4C) Study	Many provinces and cities	0.1-1 m	All neoplasms
Registry	National Upper Gastrointestinal Cancer Early Detection Program	Many provinces and cities	>1 m	Digestive System Neoplasms; Stomach Neoplasms
Registry	Qidong Hepatitis B Intervention Study (QHBIS)	Jiangsu Province	1-5k	Digestive System Neoplasms; Liver Neoplasms
Registry	The CRAFT study conducted by the	Henan Province	/	Digestive System Neoplasms;

	Department of General Surgery, The Affiliated Cancer Hospital of Zhengzhou University			Gastrointestinal Neoplasms
Registry	National Clinical Center for Skin and Immune Diseases (PCL cohort)	Many provinces and cities	/	Skin Neoplasms
Registry	Peking University People's Hospital breast disease cohort (225-228)	Beijing	/	Breast Neoplasms
Registry	Shandong Lung Cancer High-Precision Survey and Follow-up Database	Shandong Province	/	Lung Neoplasms; Thoracic Neoplasms
HCDA	Zhangjiagang Public Health Information Platform	Jiangsu Province	/	All neoplasms
Registry	Beijing Municipal Health Commission Information Center	Beijing	/	Central Nervous System Neoplasms; Nervous System Neoplasms
HCDA	Inner Mongolia Regional Health Information Platform	Inner Mongolia	/	All neoplasms
EHR	hospitalization record front pages (HRFPs)	Shandong Province	10k-0.1m	Lung Neoplasms; Thoracic Neoplasms
HCDA	Health Information Network of the Information Center of Shanghai Municipal Health and Family Planning Commission	Shanghai	/	All neoplasms
Registry	Sichuan Provincial Health Information Center Database	Sichuan Province	/	Digestive System Neoplasms;

				Gastrointestinal Neoplasms
SDPAN	Chinese Rheumatism Data Center (CRDC)	Many provinces and cities	1-5k	Skin Neoplasms
Registry	National Population Health Data Center (NPHDC)	Many provinces and cities	/	Endocrine Gland Neoplasms; Thyroid Neoplasms
Registry	Health Statistical Information Center under National Health Commission	Many provinces and cities	/	Lung Neoplasms; Thoracic Neoplasms
Registry	Henan Provincial Center for Tumor and Vital Statistics Database	Henan Province	/	Breast Neoplasms
EHR	Inpatient Medical Record Front Pages Database Assembled by the Information Center of Hunan Provincial Health Department	Hunan Province	/	All neoplasms
Registry	National Blood Purification Case Information Registration System	Many provinces and cities	/	All neoplasms
HCDA	Wuxi Chronic Disease Information Management System	Jiangsu Province	/	All neoplasms
Registry	Chongqing Malignant Tumor Treatment System	Chongqing City	/	Digestive System Neoplasms; Esophageal Neoplasms
Registry	Shanghai Diabetes Registry (SDR)	Shanghai	/	Lung Neoplasms; Thoracic Neoplasms
HCDA	Hong Kong Hospital Authority database	Hong Kong, China	/	All neoplasms
SDPAN	the Chinese Lateral Node Collaborative Group	Many provinces and cities	/	Digestive System Neoplasms;

				Gastrointestinal Neoplasms
HCDA	China Primary Healthcare Foundation (PAP clinical database)	Many provinces and cities	/	Lung Neoplasms; Thoracic Neoplasms
SDPAN	China NOSES Database (CNDB, 28-222)	Many provinces and cities	/	Digestive System Neoplasms; Gastrointestinal Neoplasms
SDPAN	Chinese Hematologist and Oncologist Innovation Cooperation (CHOICE) network	Many provinces and cities	/	Hematologic Malignancies
SDPAN	Chinese Prostate Cancer Consortium	Many provinces and cities	/	Prostatic Neoplasms; Urogenital Neoplasms
SDPAN	the Major Surgical Complications of Cervical Cancer in China (MSCCCC) database	Many provinces and cities	/	Urogenital Neoplasms; Uterine Cervical Neoplasms
SDPAN	State Key Laboratory for Esophageal Cancer Prevention and Treatment database (1973-22)	Henan Province	0.1-1 m	Digestive System Neoplasms; Esophageal Neoplasms
EHR	Huaxi Hospital Breast Cancer Information Management System	Sichuan Province	10k-0.1m	Breast Neoplasms
HCDA	Clinical Data Analysis and Reporting System database, Hong Kong	Hong Kong, China	0.1-1 m	Digestive System Neoplasms; Gastrointestinal Neoplasms
EHR	"HemaTank" Chinese Multiple Myeloma Database	Sichuan Province	/	Multiple Myeloma

	(HCMMD), West China Hospital Sichuan University			
SDPAN	multicenter database of the Biliary Surgery Branch of Elite Group of Chinese Digestive Surgery (EGCDS)	Many provinces and cities	/	Biliary Tract Neoplasms; Digestive System Neoplasms
HCDA	Shanghai Children's Medical Center	Shanghai	/	Blastic Plasmacytoid Dendritic Cell Neoplasm; Hematologic Neoplasms
EHR	Obstetrics and Gynecology Hospital of Fudan University database	Shanghai	/	Urogenital Neoplasms; Uterine Cervical Neoplasms
HCDA	Database of the Hospital Prescription Analysis Cooperative Project	Many provinces and cities	/	All neoplasms
EHR	General Hospital of Ningxia Medical University database	Ningxia	/	Digestive System Neoplasms; Gastrointestinal Neoplasms
EHR	Shandong Cancer Hospital database	Shanghai	/	Lung Neoplasms; Thoracic Neoplasms
HCDA	Shanghai Shenkang Medical Alliance Information System	Shanghai	>1 m	Digestive System Neoplasms; Liver Neoplasms
HCDA	SuValue [®] Database	Many provinces and cities	/	All neoplasms
HCDA	the Shanghai Municipal Health Commission database	Shanghai	/	All neoplasms
EHR	Head & Neck Cancer Center of Tianjin Medical	Tianjin	/	Head and Neck Neoplasms;

	University Cancer Institute & Hospital			Otorhinolaryngologic Neoplasms
SDPAN	China Net Childhood Lymphoma (CNCL) group	Many provinces and cities	/	Lymphoma
SDPAN	the China Gastrointestinal Cancer Surgery Union Database	Many provinces and cities	/	Digestive System Neoplasms
SDPAN	South China Hematology Alliance database	Many provinces and cities	/	Bone Marrow Neoplasms; Hematologic Neoplasms
SDPAN	China's National Cancer Information Database (NCID)	Many provinces and cities	/	Digestive System Neoplasms; Stomach Neoplasms
Registry	Chinese Colorectal Cancer Database	Many provinces and cities	10k-0.1m	Digestive System Neoplasms; Gastrointestinal Neoplasms
SDPAN	member hospitals of Chinese Society of Breast Surgery	Many provinces and cities	/	Breast Neoplasms
EHR	Shanghai Chest Hospital database	Shanghai	/	Lung Neoplasms; Thoracic Neoplasms
SDPAN	Southwest China Colorectal (SCC) database	Sichuan Province	5k-10k	Digestive System Neoplasms; Gastrointestinal Neoplasms
SDPAN	Database of the Project for Tumor Immunotherapy Progress and Practice Enhancement	Shanghai	/	Urogenital Neoplasms; Urologic Neoplasms
EHR	Peking University Cancer Hospital Breast Cancer Center database	Beijing	/	Breast Neoplasms

Claims	Baoyuan New Rural Cooperative Medical Scheme (NCMS) Database & Urban Resident Basic Medical Insurance (URBMI) database	Many provinces and cities	/	All neoplasms
Claims	Medical Reimbursement Data for Malignant Tumors from Dezhou Social Security Bureau	Many provinces and cities	/	All neoplasms
Claims	Fujian 9 Cities Medical Insurance Management Center Information System	Many provinces and cities	/	Breast Neoplasms
Claims	Fuzhou city health insurance claim database	Many provinces and cities	/	All neoplasms
Claims	Fuzhou Basic Medical Insurance Settlement database	Many provinces and cities	/	Breast Neoplasms
Claims	the Hubei Provincial Healthcare Insurance database	Many provinces and cities	/	All neoplasms
Claims	Hunan Urban Employee Basic Medical Insurance Information System database	Many provinces and cities	/	All neoplasms
Claims	Jinan city Urban Employee Basic Medical Insurance Information System	Many provinces and cities	/	Digestive System Neoplasms; Gastrointestinal Neoplasms
Claims	Jiangsu province critical disease insurance database	Many provinces and cities	/	Bone Marrow Neoplasms; Hematologic Neoplasms

Claims	Yueqing Rural Cooperative Medical Insurance and Social Medical Insurance database	Many provinces and cities	/	Endocrine Gland Neoplasms; Thyroid Neoplasms
Claims	Shijiazhuang Medical Insurance Center	Many provinces and cities	/	All neoplasms
Claims	Taiwan's National Health Insurance claim data	Taiwan, China	/	Breast Neoplasms
Claims	Xixia County New Rural Cooperative Medical Scheme database	Many provinces and cities	/	All neoplasms
Claims	Yulin Regional New Rural Cooperative Medical Scheme database	Many provinces and cities	/	Digestive System Neoplasms; Stomach Neoplasms
Claims	Resident Basic Medical Insurance (RBMI)	Many provinces and cities	/	Hematologic Neoplasms
Claims	China Reinsurance Company database	Many provinces and cities	/	Endocrine Gland Neoplasms; Thyroid Neoplasms
Claims	Jining Medical Insurance Management Center Information System	Many provinces and cities	/	All neoplasms

Note: EHR, electronic health record; SDPAN, specialty data providers and networks; HCDA, healthcare data aggregators

Databases were identified through the included oncology real-world studies and supplementary database searches. Data source type, geographic distribution, sample size, and disease area were extracted from publicly available sources and published literature whenever available.