	Hospital-based Hospital-based														
	NHO NCDA/MIA	DPC-RG	MID-NET	Tokushukai	LDI	DATuM IDEA	NGMIL	4DIN	MDV	JMDC	JMDC(EMR)	TXP Medical	MEI	Flatiron	JAMDAS
atabase administrator	NHO	DPC Research Group	Pharmaceuticals and Medical Devices	Information System	Life Data Initiative	TOPPAN Holdings Inc.	anonymized health	4DIN Ltd.	Medical Data Vision Co., Ltd.	JMDC.Inc	HCEI/JMDC.Inc	TXP	MEI	Flatiron Health K.K.	M3, Inc.
atabase name	NCDA/MIA	DPC database	Agency Medical Information	Inc. Tokushukai Medical	Millennial Medical	DATuM IDEA®	data of Japan NGMIL database	4DIN Research	EBM Provider®	IMDC Hespital	JMDC Electronic	TXP Medical	MEI Database	Flatiron Health	Japan Medical
valadase name	NCDA/ MIA	DPC database	Database Network (MID-NET)	Database	Record	DATUM IDEA®	NGMIL database	Network	EBINI Provider®	JMDC Hospital Database	medical record database	Database	MEI Dalabase	Research Database	Survey
ontact information		kfushimi.hci@tmd.ac			contact@ldi.or.jp	https://datumidea.i	query@fast-hdj.org	info@4din.com	ehm_sales@mdv_co	mdhheln@imdc co in	mdbhelp@jmdc.co.jp	medical-data-	rwd@meiz.co.jp	inquiry-	https://docs.go
Somet monitation		.jp	midnet@pmda.go.jp		Contact@idi.or.jp	p/contact/	query@iast-fluj.org	11110@40111.00111	ip	. Indune pagnido.co.jp	indbrieip@jindc.co.jp	service@txpmedical.	Twa@meiz.co.jp	japan@flatiron.com	.com/forms/d/e
		- JP	тиште цертиа. 90. јр			<u>prcontact/</u>			Эl			com		japan@ilatiion.com	AlpQLScoVyV. xK EVekfGW S1S8eudtc69, Ftvm5khp9Aw viewform
Veb site URL	https://nho.hosp.go	None	https://www.pmda.	https://www.tokush	https://www.ldi.or.j	https://datumidea.j	https://www.fast-	https://4din.com/	https://www.mdv.c	https://www.phm	https://www.phm-	https://modical	https://www.meiz.c	https://flatiron.co.jp	
Veb site ORL		None	go.jp/safety/mid-	ukaiis.com/service/				nups.//4um.com/				https://medical- dataservice.com/		rttps://liatiron.co.jp	https://corporate
	<u>.jp/cnt1-</u> 1 000070.html		net/0001.html	tmd.php	<u>р</u>	<u>p/</u>	<u>hdj.org</u>		<u>o.jp/</u>	<u>imdc.com/</u>	jmdc.com/		o.jp/rwd/	L	3.com/
Published article about the database DOI)			10.1002/pds.4777 10.1002/pds.4879		https://doi.org/10.3 820/jjpe.27.3	•				http://dx.doi.org/10 .1002/jgf2.367		https://doi.org/10.1 002/ams2.554		DOI: 10.1016/j.esmorw.	
					2.									2025.100113	
Database Overview												•			
General description of the database	A database	This database is	The medical	The Tokushukai	Millennial Medical	We handle	Based on the Next-	Network to collect,	Administrative	A case database	ntegrated database	A comprehensive,	Real-world data	A patient-level	The Japan Med
	containing electronic	made up of DPC	information	Group operates	Record is a certified	1 ' '	Generation Medical	deidentify and	database for	sourced from	of medical	hospital-based	generated from	longitudinal oncology	Data Survey i
	medical record	data collected	Database network	approximately 77	project under The	processed medical		summarize various	inpatient and	receipts, electronic	information such as	database including	electronic medical	real-world database	real-world data
	information from 84	voluntarily from	system for utilizing in		Next Generation	information obtained	1	data from medical	outpatient consists	medical records	electronic medical	university and	records and medical	containing clinical	that provides
	hospitals of the	approximately 1,500	safety assessment	Japan and currently	Medical	from certified	collects medical	institutions	of 572 acute (mainly	'	records, DPC data,	tertiary care	accounting	information critical	accurate and r
	National Hospital	DPC hospitals. It	managed by PMDA		Infrastructure Act in	nextgeneration	information from		considered as	values), and DPC	and claims	hospitals.	information, primarily	for cancer research	time overview
	Organization and	includes Form 1, EF	under the Act on the		Japan. Our database	1	cooperating medical		"advanced treatment	,		It includes DPC data	collected from large	(e.g. stage,	what is happening
	DPC / invoice data	files, D files, etc.	Pharmaceuticals and	million patients	sources are	infrastructure	institutions, focusing	비	hospitals") hospitals	l .		and provides data	acute care hospitals	histology, genetic	the healthcare f
	from all hospitals		Medical Devices	through its database	electronic medical	providers. As	on objective data		in Japan	than 1,000		access to	such as university	mutations, lines of	throughout Jap
	has been collected		Agency	(TMD: Tokushukai	records, claims data	, approximately half of				DPC/non-DPC		approximately 900	hospitals, public	therapy, and clinical	
	and stored at the			Medical Database).	and DPC survey	the facilities covered	1			hospitals nationwide.	·	laboratory data for	hospitals, and core	outcomes including	
	headquarters.			Tokushukai also	data, primarily from	are regional cancer	I			Includes abundant information on		all inpatients,	institutions in	death and disease	
				collaborates with companies on	Advanced Treatment	t center hospitals, our electronic medical	related files and information related to			1		structured	secondary medical service areas. The	progression), curated with Flatiron	
				research and Al	Hospitals (tokutei kino byoin) and other		insurance claims.	1		elderly and hospitalized patients.		emergency department/intensive	data, which is either	Health's proprietary	
				development. In	large-scale medical	contains a large	insurance ciains.			nospitalized patients.	·	care unit data, vital	anonymized or	data processing	
				such collaborations,	institutions.	amount of treatment						signs, medical	pseudonymized,	methodology, based	
				it is possible to	Unstructured text	data for cancer and	I					records, bacterial	offers high continuity	on structured and	
				extract not only	data from electronic	rare diseases.						culture test data,	and is available with	unstructured	
				medical data from	medical records	Tare discusses.						and blood product	a latency of	information extracted	
				hospitals, but also	enables in-depth							usage data.	approximately one	and de-identified	
				management and	research, including							It supports acute	month.	from electronic	
				clinical data.	clinical outcome							diseases, cancer,		medical records and	
					studies and							and rare diseases.		other healthcare	
					advanced patient							TXP requests		information systems	
					stratification. In							statistical data from		at domestic cancer	
					addition to							medical institutions		centers and	
					anonymized medical	ı						and provides such		university hospitals	
					data, including							statistical data as a		in Japan	
					medical images, we							service.			
					also provide										
					pseudonymized										
					medical data.										

								Hospital-based							
Determine	NHO NCDA/MIA	DPC-RG	MID-NET	Tokushukai	LDI	DATuM IDEA	NGMIL	4DIN	MDV	JMDC	JMDC(EMR)	TXP Medical	MEI	Flatiron	JAMDAS
Data source  DPC data (except for DPC claim)	Yes	Limited	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Medical/DPC claim	Yes	No	Yes	Yes	Yes	Yes	Yes	Limited	Yes	Yes	Yes	Yes	Yes	No	No
Dental claim	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No
Pharmacy claim	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No
Electronic medical chart	Yes	No	Yes	Yes	Yes	Yes	Limited	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Lab test results	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Limited	Yes	Yes	Yes	Yes	Yes	Yes
Ordering		No	Yes	Yes	Yes	Yes	Yes	Limited	No	No	Yes	Yes	Yes	Yes	Yes
Health checkup	Yes	No	No	No	No	No	Limited	No	No	No	Limited	No	Limited	No	No
Others	No	No	No	Yes	Yes		Yes	Limited	Yes	No	No	Yes	No	Yes	Yes
Others, notes					DPC data includes Form 1, Form 3, D- file, EF-file, Outpatient EF-file, H-file, and K-file. Electronic medeical records also include unstrucured text data such as Progress notes, Clinical summary /Discharge summary and Medical reference letter etc. In addition, medical images are available.		Prescription, Medical Image data		DPC (Dfile) /DPC claims/blood and urine test data *Blood and urine test data is limited to some hospitals			Next Stage ER, Next Stage ICU.  A multicenter integrated standard database that accumulates clinical data while performing clinical tasks in emergency and ICU services. DPC data can be provided in Form 1, EF file, and outpatient EF file formats.		Flatiron Health extracts the following data from electronic health record (EHR) and related hospital information systems: - Structured data (patient demographic characteristics, visit dates, test values etc., which are stored in table format or similar within the EHR) - Unstructured data (progress notes, pathology reports, referral letters, etc., which are stored in text or report format within the EHR or departmental systems)	Medical questionain
Data collected from	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution	Medical institution		Medical institution
Others, notes	440		24	77	00	F7	40		F70	4444	000	40	20		Non-bed clinics
Number of organizations	140		31	77	68	57	12		572	1141	230	40	32	5	8000
Data period	0040	0040	0000	0040	0045	0040	0040	D. f 0000	0000	D. f 0000	D - f 0000	0047	0045	0044	0047
Starting year Latest year	2016 2025	2010 2023	2009 2025	2010 2025	2015 2025	2019 2024	2016 2025	Before 2000 2025	2008 2025	Before 2000 2025	Before 2000 2025	2017 2025	2015 2025	2011 2025	2017 2025
Notes	2025	2023	2025	The starting year	The dataset includes	2024	It varies depending	By participating	*Mainly from April	2025	2025	NEXT Stage ER	The start year varies	Patients with a	2023
Laws and regulations related to the data	Act on the Protection	Ethical Quidelines	Others	varies by facility.	all patients who visited the facility after July 2020, excluding those who have requested to opt out. It is possible to collect previous medical data once a patient has visited the hospital.	The Next Generation	on the medical institution	hospitals  Act on the Protection	2010 Others	Act on the Protection	Act on the Protection	data is from the year of introduction onward, so there are a few facilities with data prior to 2017.	by participating medical institution. The most recent year will continue to be updated on an ongoing basis.  Act on the Protection	confirmed diagnosis of the tumor type of interest (diagnosis date: 1 Jan 2011 onwards) and from whom appropriate consent has been obtained will be included in the database. As the database is refreshed on a quarterly basis, data recency is maintained at 90 days (e.g. datasets delivered in June 2025 have a data cutoff date of 31 March 2025).	
provision to third parties	of Personal Information, Ethical Guidelines for Medical Research, The Next Generation Medical Infrastructure Act	for Medical Research	ouleis		Medical Infrastructure Act	Medical Infrastructure Act	of Personal Information, The Next Generation Medical Infrastructure Act	of Personal Information	Others	of Personal Information	of Personal Information	of Personal Information, Ethical Guidelines for Medical Research, Others	of Personal Information	of Personal Information, Ethical Guidelines for Medical Research	
Notes	activotate Aut		We collect data and						We do not provide or	r		Provision to third			
			provide it to third parties based on Act on Pharmaceuticals and Medical Devices Agency, also with attention to the persons whose electronic medical records was acquired.						receive special care- required personal information to or from third parties.	1		parties as statistical data that does not include personal information			
Handling anonymously processed	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes
information															
Compliance with the laws and regulations on third-party data provision	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

								Hospital-based							
0'	NHO NCDA/MIA	DPC-RG	MID-NET	Tokushukai	LDI	DATuM IDEA	NGMIL	4DIN	MDV	JMDC	JMDC(EMR)	TXP Medical	MEI	Flatiron	JAMDAS
Size Number of unique identifiers [approx 10K people]	460	7000	830	1595	295	146	10	1340	5293	4765	2070	2800	420	1	6400
[approx., 10K people] Notes			As of December,2024		Number of patients from facilities where data is available for secondary use, among the 68 institutions with agreements for secondary use.							Based on the number of patients at the 17 facilities where data were obtained, the number of patients at the 40 facilities with data use agreements was estimated.	As of August,2025	As of 2025 Q4, the standard dataset will include approximately 10,000 patients in total for the target tumor types provided (breast cancer, colorectal cancer, gastric cancer, and non-small cell lung cancer). Other tumor types can also be provided as custom datasets. Flatiron Health is actively expanding both cohort counts and the range of tumor types available.	
Annual number of unique identifiers		700		51	27	25	8	85	1294	1085	366	120	60	1	2200
(latest year) [approx., 10K people] The latest year	2024	2023		2024	2024	2024	2024	2024	2024	2024	2024	2024	2024	2024	2024
Notes				Patients with basic medical fees (Ministry of Health code A) recorded in accounting, excluding dental care.	0.704				April 2024 - March 2025	2025	2025	Based on the number of patients at the 17 facilities where data were obtained, the number of patients at the 40 facilities with data use agreements was estimated.		Curation of the Flatiron Health Research Database began in 2023. Data from new patients and the latest data for enrolled patients are being added to the database every three months. As of 2025, the database contains data from approximately 10,000 patients accumulated over the past 2 years, with plans to further accelerate expansion in the future.	
% coverage of target population					400 DPC hospitals with 400 beds or more nationwide.(accordin g to the estimated figures for the size of DPC hospitals and preparatory hospitals	It covers 1.18% of Japan's population (according to the Population Estimates, December 2024 report by the Statistics Bureau of the Ministry of Internal Affairs and Communications). It covers 38 out of 735 hospitals in Japan with more than 400 beds (5.2%) (according to the Hospital Report from the 2023 Survey of Medical Facilities [Static and Dynamic] by the Ministry of Health, Labour and Welfare).			About 10.5% of Japanese population     About 32.0% of total number for acute hospitals	about 9% of Japanese population	about 3% of Japanese population				18% of the population of Japan

								Hospital-based					1		
unnual N of outnotionts (latest year)	NHO NCDA/MIA	DPC-RG	MID-NET	Tokushukai 158	<b>LDI</b> 93.6	DATUM IDEA	NGMIL 8	4DIN	MDV 12/1	JMDC 1024	JMDC(EMR)	TXP Medical	<b>MEI</b> 50	Flatiron	JAMDAS
nnual N of outpatients (latest year)				158	93.6	50.8	ď	85	1241	1024	350	35	50		2200
approx., 10K people] Innual N of inpatients (latest year)				28	92.7	10	2	15	258	213	70	110	10		0
pprox., 10K people]				20	32.1	10	_	15	230	213	70	110	10		U
nnual N of medicated diabetes patients				7	5.2	4.2		6	89	75	24	0.1	4.6		
atest year) [approx., 10K people]															
Definition				Patients with	The number of	The number of		The number of	Target disease:	Number of patients	Number of patients	<ul> <li>Calculated from</li> </ul>	Number of patients	As this is an	
				diabetes	patients diagnosed	patients with		patients with the	ICD10: E10-E14	with ICD-10:E10-	with ICD-10:E10-	ICD-10 codes: E10-	diagnosed with	oncology database,	
				medications in their	with ICD-10: E10-	registered diabetes		disease of ICD10	(exclude suspected	E14 disease	E14 disease	E14	diabetes (ICD-10	detailed information	
				outpatient	E14 (excluding	(E10-E-14) who will		E10-E14 (Exclude	cases)	(excluding	(excluding	<ul> <li>Based on the</li> </ul>	codes E10-E14) or	on diabetes	
				accounting records	suspected cases)	be prescribed ATC		suspected cases)	<ul> <li>Target medication:</li> </ul>		suspected) and	number of patients	prescribed diabetes	treatment are not	
				in 2024 (no	and prescribed ATC:	(EphMRA): A10		and ATC:A10 drugs	ATC (EphMRA): A10	prescribed ATC:A10	prescribed ATC:A10	at the 10 facilities	medications	provided.	
				duplicates).	A10 medications	diabetes medication		prescribed	<ul> <li>Condition for</li> </ul>	drugs	drugs	where data were	(excluding suspected	ı	
						by 2024.			target patients:			obtained, the	cases).		
									Target medication			number of patients			
									was prescribed in			at the 40 facilities			
									the same month as			with data use			
									the diagnosis of the			agreements was			
									target disease.			estimated.			
nnual N of influenza diagnosed patients	+			7	0.6	0.57		0.1	22	22	9	0.5	0.7	+	
test year) [approx., 10K people]				'	0.0	0.57		0.1	44	44	9	0.5	0.7		
Definition				In 2024, the number	The number of	The data was		The number of	ICD10 : J10, J11	Number of patients	Number of patients	Calculated from	Patients diagnosed	As this is an	
Deminion				of unique patients	patients diagnosed	compiled for cases		patients with the	10010.310,311	assigned ICD-	assigned ICD-	ICD-10 codes: J09–	with influenza (ICD-	oncology database,	
				newly assigned ICD-		registered in 2024		disease of ICD10		10:J09-J11 disease	10:J09-J11 disease	J11	10 codes J09–J11)	detailed information	
				10 codes .I00_ I11 in	(excluding suspected	with ICD-10 codes		J10, J11 (Exclude				Based on the	and with	on influenza	
				their insurance	cases)	J09 to J11.		suspected cases) or		1		number of patients	corresponding	diagnoses are not	
				claims (excluding	04303)	000 10 011.		the number of		1		at the 10 facilities	clinical data	provided.	
				suspected				patients that a		1		where data were	available (excluding		
				diagnoses).				Influenza medicine				obtained, the	suspected cases).		
				diagnoscs).				was prescribed				number of patients	Suspected cases).		
								was presented				at the 40 facilities			
												with data use			
												agreements was			
												estimated.			
umber of patients followed												Committee.			
≥1 year [approx., 10K people]				61	171.6	70.6			2262	2015	954		100	0.3309	
≥3 year [approx., 10K people]					118.3	43.1			1484	1226	673		70	0.2003	
≥5 year [approx., 10K people]					71.9	15.7			997	754	481		50	0.1273	
Median [approx., year]					1.7	0.9			2.27	0.41	0.6		2	3	
Notes				Patients who had					Average	The above median	The above median		The median	The median	
				basic medical fees						represents all	represents all		excludes patients	observation period	
				(Ministry of Health						patients. When	patients. When		with only a single	varies by tumor type.	
				code A) recorded in						patients with only	patients with only		visit.	Also, for reference,	
				their accounting						one visit are	one visit are			as this item is	
				records in both 2024						excluded, the	excluded, the			labelled as "Average	
				and 2022.						median is 0.72.	median is 1.8.			observation period"	
														in English, in	
														addition to the	
														median follow-up	
														period shared above,	
														the average	
														observation period is	
														3.99 years. This	
										1			1	follow-up period will	
										1			1	continue to be	
										1			1	extended to enable	
										1			1	longer follow-up as	
										1			1	the data is regularly	
										1			1	refreshed going	
										1			1	forward.	
ge Distribution				1	<u> </u>					<u> </u>	<u> </u>	<u> </u>	1		
ge Distribution  14 years old [approx., %]	Т			11	13.2	9		9.3	14.1	8	8	10	13	0 1	15.2
i-64 years old [approx., %]				47	45	36		54.9	50.1	40	41	42	59	60.4	64.3
5-74 years old [approx., %]				16	16.3	34		13.2	16	17	17	20	13	26.5	9.1
5 years old [approx., %]				26	25.5	20		22.6	19.8	35	34	28	15	13.1	11.3
otes				Using data from	Patient age was	Data collected from			10.0		Ŭ,	Distribution of 10	Calculated based on		11.0
				January to	calculated as the	January to						facilities that have	the number of	only includes	
				December 2024	difference between	December 2024						already acquired	patients by age at	patients aged 18 and	
				20001111001 2024	each patient's latest	2000111001 2024						data out of 40	the time of	above, there are no	
					observation month							contracted facilities	consultation.	patients aged <18 in	
					and their birth year-							with available data.	oorisuitation.	the 15-64 years	
	ı			1	month.			1		I		mili available uala.	I	category.	

								Hospital-based							
Prescriptions (data availability)	NHO NCDA/MIA	DPC-RG	MID-NET	Tokushukai	LDI	DATuM IDEA	NGMIL	4DIN	MDV	JMDC	JMDC(EMR)	TXP Medical	MEI	Flatiron	JAMDAS
Dispensing (in-hospital)	Yes	Yes		Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dispensing (out-of-hospital)	Yes	No		Yes	Limited	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date of dispending	Yes	No	No		Limited	No	No	Limited	Yes	Limited	Limited	Limited	Yes	Yes	Yes
Dosage of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Days of supply	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Administration	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Limited	Limited	Yes	Yes	Yes	Yes
Injection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vaccine	Limited	No	Limited	Yes	Yes	Limited	Yes	Limited	No	Limited	Limited	Yes	Yes	No	Yes
Drug master	V.		V			V.		Y		V	Y.		V		V.
Any available master	Yes No	No	Yes No	Yes	Yes No	Yes Yes	Yes No	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes	Yes Yes
ATC (EphMRA) ATC (WHO)	No	No No	Yes	No No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No No	Yes
YJ code	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
NHI drug price list code	No	Yes	163	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No
HOT code	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	No	No	Yes	Yes	No	No
Reimbursement code	100	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Hospital-original code	Yes	No	Yes	Yes	No	No	No	Yes	No	No	Yes	1.00	Yes	No	No
Others	No	No	100		Yes		No	No	Yes	No	No		No	Yes	
Others, notes					ingredient quantity				Titer					Drug codes are	
					master									harmonized using RxNorm across the Japan/US/German/U K Flatiron Health Research Databases to unlock multinational evidence generation.	
Procedures (data availability)															
Procedure name	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Date of procedure	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Procedure master															
Any available master	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Reimbursement category	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes		No
Reimbursement code	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes
Others Others, notes	No	Yes			Limited In addition to		No	No	No	No	No	Yes Minute-by-minute		In line with Flatiron	
					information obtainable from claims data, detailed procedure information documented in electronic medical record text is also available.							time series of procedures performed in the emergency room / ICU (limited facilities)		Health's data model customized for each tumor type, details specific to surgery in the oncology setting are provided (e.g. surgical approach, date of surgery, reasons for not conducting surgery)	
Hospitalization (data availability)											\	·			
Date of hospital admission	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Date of hospital discharge	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Medication while hospitalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Diagnosis (data availability)				1			<u> </u>	<u> </u>	1	1	<u> </u>				
Diagnosis name	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Suspicions diagnosis or not	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Diagnosis master									1	1	1		<del>-</del>		
Any available master	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Standard diagnosis code	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
(Reimbursement code)	<u> </u>						<u>                                     </u>		<u>                                     </u>	<u>                                     </u>					
ICD10 code (2013)	Limited	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ICD10 code (other than 2013)	Yes	Yes	Yes		No	Limited		No	Yes	Yes	Yes		Yes	Yes	No
Others		No			Limited			No	No	No	No	Yes		No	<del></del>
Others, notes					Detailed disease subtypes and classifications that cannot be defined by diagnosis codes in claims data can be extracted and defined from electronic medical record text.							The "Clinical Diagnosis" and "History and Underlying Medical Conditions" information determined by the physician in the emergency room/ICU is automatically corrected based on ICD-10 codes.		In addition to ICD-10 codes, the Flatiron Health Research Database contains granular information regarding cancer diagnosis, such as date of initial diagnosis, clinical / pathological group stage and TNM classification, histology, locoregional/distant recurrence, date of metastatic diagnosis.	

	AULO NOTA TEL	DD0 D0	MD VIEW	T = 1	1 15:	DAT 11:000	No.	Hospital-based	1 1000	11.75	IMP C (TIME)	TVD IC ''		Fire I	141.5
	NHO NCDA/MIA	DPC-RG	MID-NET	Tokushukai	LDI	DATuM IDEA	NGMIL	4DIN	MDV	JMDC	JMDC(EMR)	TXP Medical	MEI	Flatiron	JAMDAS
aboratory test (data availability)	.,	.,		T	1 7						T V	1 7/			.,
ab test (ordering)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
ab test results	Vaa	No	V	V	V	V	V	Vaa	Yes	Yes	Vaa	Yes	Yes	V	V
Any available test results	Yes Yes	No	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Limited	Yes		Yes	Yes	Yes	Yes Yes	Yes Yes
Lab test for sample (e.g., blood, urine, microbe				res						Yes	Yes				
Physiological test (e.g., respiratory function, brain waves, supersonic waves)	No	No	No		Limited	No	Limited	Limited	No	Limited	Limited	Limited	No	Yes	Limited
Results of diagnostic imaging (e.g., report of imaging interpretation)	No	No	No		Limited	No	Limited	Limited	No	Limited	Limited	Limited	No	Yes	No
Genetic test (pathological tissue)	No	No	No		Limited	No	Limited	Limited	No	Limited	Limited	Limited	No	Yes	No
Others	No	No			Limited		No	No	No	No	No			No	
Others, notes					The following test result information can be obtained from electronic medical record: e.g.) *Genetic mutations, chromosomal abnormalities *Qualitative assessment for antibody, antigen and PCR test. *Biopsy Information Anonymized medical images are also available.									Detailed information on laboratory tests (date of test, test name, test results date, test results, units) as well as biomarker tests (biomarker name, date of specimen collection, date of result reporting, sample type, type of test (IHC, NGS etc.), results (positive, negative etc.), detailed results (protein expression, amplification, rearrangement, mutation etc.)	
ab test master															
Any available master	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Loinc code	No	No	No		No	No	No	No	No	No	No	No	No	Yes	No
JLAC code	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No	No	Limited
Reimbursement code	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Hospital-original code	Yes	No	Yes	Yes	Limited	No	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes
Others	1.00	No		100	No		No	No	No	No	No	100		No	
Others, notes														Test codes are harmonized using LOINC; this global standard is applied across the US, Germany and UK Flatiron Health Research Databases as well, thereby unlocking critical multinational evidence generation.	
Demographic, Vital (data availability)															
rth year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
rth month	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Limited	No	Yes
rth date	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	Yes	No	No	Yes
ge	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
eight	Yes	Yes	Yes	Limited	Yes	Yes	Yes	Yes	Limited	Limited	Limited	Yes	Yes	Yes	Yes
eight	Yes	Yes	Yes	Limited	Yes	Yes	Yes	Yes	Limited	Limited	Limited	Yes	Yes	Yes	Yes
ood pressure	Yes	No	No	Limited	Yes	No	Limited	Limited	Limited	No	Limited	Yes	Limited	Yes	Yes
surers for patients			<u> </u>												
ational health insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Limited	Yes
pan health insurance association	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Limited	Yes
ealth insurance society	Yes	Yes	Yes	Yes	Yes	Limited	Yes	Yes	Yes	Yes	Yes		Yes	Limited	Yes
lutual society of health insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Limited	Yes
ate-stage medical care system for the	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Limited	Yes
elderly	. 50	. 50		100	. 55	. 50			. 55		100		700	2/1100	

								Hospital-based							
	NHO NCDA/MIA	DPC-RG	MID-NET	Tokushukai	LDI	DATuM IDEA	NGMIL	4DIN	MDV	JMDC	JMDC(EMR)	TXP Medical	MEI	Flatiron	JAMDAS
Data Access, Others															
Access to raw data via web	No	No	No		No	Yes	No	Yes	Limited	Yes	Yes	No	Yes	Yes	No
Access to original source data such as	Yes	No	No	Yes	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Limited	Yes	Yes	Yes
medical charts (e.g., outcome validation,															
additional data collection)															
Timing of data update	Daily	Annually		Daily	Monthly		Daily	Monthly	Monthly	Monthly			Monthly	Quarterly	Daily
Others, notes			every week at the earliest			Update every quarter					3 months	Retrieve the most recent information maintained in the electronic medical record at the time of access.		The database is refreshed on a quarterly basis; as such, data recency is maintained at 90 days (e.g. datasets delivered in June 2025 have a data cutoff date of 31 March 2025).	
Latest data	Previous day		No lag time	No lag time	2 months ago		2 months ago	1 month ago	2 months ago	2 months ago	1 month ago	Generally 3 months ago for DPC data; for blood test and medical records, retrieve the most recent information maintained in the electronic medical record at the time of access.	1 month ago	90 days ago	2 days ago
Publication	1		<u> </u>			<u> </u>		1			<u> </u>	<u> </u>			
Number of past scientific presentations	More than one	5	122	Many	11	3	4	17	Many	Many	19	46	Yes	4	More than one
using database															
Number of publication to peer review journal	More than one	90	Therapeutic Innovation & Regulatory Science, PLOS ONE, Frontiers in Medicine.	Many	8	2	2	44	723 (total number of publications, including those not requiring peer review.)	42	68	33 (as TXP Research / Collaboration)	No	1	9