

Databases available for pharmacoepidemiology researches in Japan (Information obtained from responders)

English	MID-NET	National Hospital Organization(NHO)	Hamamatsu Med Univ	Osaka University	CISA-DB	CCT	Medical Data Vision	NDB	JMDC	JammNet	MinaCare	Medi-Trend	IMS NPA data	JMIRI	Japan Medical Research Institute Co.,Ltd. (a.k.a. Nihon-Chouzai)	PFR	RADAR	NHWS	NCD	
Database name	MHLW's Sentinel Initiative (DB-infra Development)	(NCDA)NHO Clinical Data Archives (MIA):Medical Information Analysis databank	D:ID: Analytical clinical information retrieval system, Hamamatsu University, School of Medicine	Osaka University	Platform for Clinical Information Statistical Analysis	ConvergenceCT Global Research Network (CGRN)	Medical Data Vision IBM Provider*	National Claims Database (no official name)	JMDC (Japan Medical Data Center) Claims Database	JammNet	MinaCare Database	Medi-Trend	IMS NPA data	JMIRI Pharmacy Claims DB	NHON CHOUZAI Pharmacy Claims DB	Convergence CT Japan K.K.	RADAR	National Health and Wellness Survey (NHWS) Database	National clinical database	
General description of the database	MHLW and MDA has selected collaborative hospitals and supported to implement standardized medical database for active pharmacovigilance.	Administrative database for inpatient and outpatient consists of 143 NHO hospitals in Japan. Clinical database based on 40 NHO hospital information systems.	Clinical database based on hospital information system in a university hospital	Clinical database (EMR) based on hospital information system consists of ordering, billing, and information on medical chart.	Clinical database based on hospital information system in 13 national universities hospital	Network to collect, de-identify and summarize various data from medical institutions	Administrative database for inpatient and outpatient consists of 270 large (mainly tertiary) hospitals in Japan	Claims and Health Check Exam Database for optimized national expenditure planning, implementation and evaluation	Claims database consists of subscribers of employees' plural insurance programs as complete	Claims database using employee's insurance programs	Insurance claims from several employees insurance programs and annual check-up data	Pharmacy claims database based on extramural prescription from 870 pharmacies. It contains 15.8 million prescriptions as of July 2016	Pharmacy claims database collecting extramural dispense claims from 3,500 pharmacies nationwide. 216 mil prescriptions annually.	Pharmacy claims database contains extramural dispense records	Claims database with extramural dispense claims and primary data (e.g. QoL) from patients visited one of the Nihon-chozai pharmacies. Nihon-chozai is the 2nd largest chain in Japan and has 545 pharmacies nationwide.	Analysis service of Pharmacy claims. Information listed in the Pharmacy claims is available. Reporting without the time lag is possible.	Post marketing surveillance (AE reporting) for antihypertensive & antihyperlipemia drugs provided by the RADAR Council member companies	NHWS collects data from patients. The data includes more than 165 disease areas and provides a variety of metrics, such as prevalence, diagnosis and treatment rates and more than 10,000 other variables not mentioned on this sheet.	Clinical database linked to the board-certificated surgeon system, which is managed by many clinical societies. Sub-specialties participated in NCD: surgery, respiratory surgery, gastroenterological surgery (including pancreas tumor registry), pediatric surgery.	
Data source	Order-entry data, Lab results, DPC, Claim data of collaborative hospitals (Tohoku-Univ., Chiba-Univ., Univ-Tokyo, Hamamatsu-Med., Kagawa-Univ., Kyushu-Univ., Saga-Univ., Kitazato-Univ., NTT-Group, Tokushukai-Group)	Receipt data, DPC data, EMR data(Lab results, drugs and so on)	EMR	Ordering (e.g. prescription, injection, lab test, transfusion, surgical operations), lab results, claims, medical chart (includes e.g. radiology report, pathology report, physiological test report)	Order-entry data of collaborative hospitals	Receipt data, DPC data, order data, EMR data, and other clinical data from medical institutions in the Network	Billing data, DPC claims, and lab data (partial)	Electronic claims, Special health check program	Claims and annual exam data from Employees' Insurance Program	Medical, dispense, hospitalization, DPC and dentistry claims from several employee's insurance programs	claims (inpatients, outpatients, dispensing, dental, DPC) and annual health check-up data	Pharmacy claims	Extramural dispense claims	Dispense claim from pharmacies	Extramural dispense claims from Nihon-chozai pharmacy chain, primary data from patients collected by pharmacist	Pharmacy claims	Post marketing surveillance	Primary survey research with panel members and additional patients covering US, 5 big EU, Japan, China, Brazil and Russia.	Medical records including medical charts, operation records, summary, lab data and others)	
Starting year	Jan-09 (Jan-07 in Kyushu-Univ.)	MIA(Apr 2010) NCDA (Jan 2016)	1999	Jan-96	Oct-05	Varies from institution to institution.	From Apr 2008 (mainly from Apr,2010)	Apr-09	Jan-05	Apr-08	Apr-08	Oct-07	Apr-08	Jan-06	Apr 2001	Most recent 2 years	anthypertensive198 1-1996 antihyperlipemia198 3-2006	1998 2008 (Japan)	Aug 2008(Japan Cardiovascular Surgery Database Organization), Jan 2011(surgery), Jan 2015- (neurosurgery), Sep 2016 (oncology)	
Size	Currently about 3,000,000. But the goal is over 10,000,000.	MIA approx. 20,000,000 NCDA approx. 1,000,000	500,000	1,070,000	About 2,600,000	About 3,30,000	About15,560,000	About 120 mil	approx 3.8 million (based on subscribers)	approx 730,000	approx 3.5 million		Unknown	12900000	About 3,000,000	anthypertensive146, 225 antihyperlipemia321 57	30,000/year *Both projected and non projected numbers are available.	About 7 million cases		
Annual number of patients (latest)		approx. 2,500,000	40,000	86,000	About 740,000	About 500,000	About 7,360,000 (2015/04-2016/03)		approx 2.36 million (Jan to Dec 2015)	approx 660,000	approx 1.4 mil (2015/4-2016/3)	3370000	13520000	8200000	2840000	About 1,600,000	N/A	Appearance ratio depends on disease areas	About 1.7 million cases	
Annual N of outpatients (latest)		approx. 2,000,000	about 580,000	about 740,000	About 740,000	About 400,000	About 7,100,000 (2015/04-2016/03)		approx 7.33 million (Jan to Dec 2015)	approx 620,000	approx 1.4 mil					About 1,600,000		Vary depending on each sub-specialty	Vary depending on each sub-specialty	
Annual N of inpatients (latest)		approx. 500,000	about 340,000	about 140,000	About 100,000	About 100,000	About 1,350,000 (2015/04-2016/03)		approx 130,000 (Jan to Dec 2015)	approx 60,000	approx 70,000							Vary depending on each sub-specialty	Vary depending on each sub-specialty	
Annual N of treated diabetes patients (latest)				about 17,000	About 40,000	About 40,000	About 64,000 (Jan-Dec, 2015) The number of patients with the disease of ICD10 E10-E14. The number of patients that a diabetes medicine was prescribed.)		approx 940,000 (Jan to Dec 2015) ICD10: E10-E14	approx 90,000 (2015, E10-E14)	approx 80,000				151,365 (Apr 2015- Mar 2016)			Vary depending on each sub-specialty	Vary depending on each sub-specialty	
Annual n of influenza (diagnosed) patients (latest)			429	About 9,000	About 9,000	About 110,000 (2015/04-2016/03) ICD10: J10, J11. The number of patients that a influenza medicine was prescribed.)			approx 210,000 (Jan to Dec 2015) ICD10: J10, J11	approx 90,000 (2015, J10, J11)	approx 120,000				46,100 (Apr 2015- Mar 2016)			Vary depending on each sub-specialty	Vary depending on each sub-specialty	
% coverage of population		100% of NHO Hosp.	100% of patients visited/hospitalized Hamamatsu University HP	100% of patients visited/hospitalized Osaka University HP	about 1/3 of national university hospital (about 1/6 university hospital)	about 1.5% of Japanese population	~about 5% of Japanese population about ~16% of total number or beds for large hospitals		2% of Japanese population	2.4% of total number of claims (medical-dispense) from 1500 employee's insurance programs in Japan	1.2% of population < 75 yrs	2.0% of total extramural dispense claims (Survey by Japan Pharmaceutical Association)	7.9% of total extramural dispense claims (based on Survey by Japan Pharmaceutical Association)	5.1% of annual prescription (Survey by Japan Pharmaceutical Association)	1.6% of total extramural dispense claims (Survey by Ministry of Health)	0.7% of total extramural dispense claims (Survey by Ministry of Health)	N/A	0.03% of total adult population of Japan 1% of LightSpeed Research Panelists (Global)	95% of patients who had operated for main surgery in Japan (based on survey by Ministry of Health, Labour and Welfare)	
Average follow-up		N/A		About 843 days	838 days	Average:414 days			≥ 8 years: 280,000 ≥ 5 years: 900,000 ≥ 3 years: 1.5 million ≥ 1 year: 3.2million	around 8 years	≥ 3 years: 31% ≥ 2 years: 53% ≥ 1 years: 75%	2 years	Unknown	3-5 years	3-5years	2 years	N/A	Annual update	Vary depending on each sub-specialty, e.g. 90 days after operation for assessment of health-care quality or long-term follow-up in each sub-specialty.	
Age distribution			discharged in 2013	discharged in 2013																
0-14 year-old			11%	13%	0.102	13.7% (Jan-Dec, 2015)	0.142		24% subscribers	0.21	0.148	0.148	0.162123913	0.151	0.114					Vary depending on each sub-specialty
15-64 year-old			51%	37%	0.485	50.2% (Jan-Dec, 2015)	0.516		74% subscribers	0.64	0.786	0.51	0.53923408	0.513	0.53					Vary depending on each sub-specialty
65 year-old or older			38%	50%	0.413	36.1% (Jan-Dec, 2015)	0.342		2% subscribers	0.15	0.066	0.342	0.298642008	0.333	0.356			43.1%/42.3%	0.263	Vary depending on each sub-specialty
Prescriptions	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Limited
Dispensing	Limited	Yes	Limited	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Unique product	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Date of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Limited	Date of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Dosage of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Duration of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Injection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Limited	Limited	Limited	Limited	No	Yes	Yes	Yes	No
Vaccine	Limited	Limited	Limited	No	No	Yes	No	Limited	No	Limited	No	No	No	No	No	No	No	No	No	No
Procedures, surgical operations																				
Procedure codes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
Procedure name	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	Yes
Date of procedure	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	Limited	Yes
Time of procedure	No	Limited	No	No	No	Yes	No	No	Limited	No	No	No	No	No	No	No	No	No	Limited	Yes
Hospitalization																				
Hospital admission/discharge date	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	Yes
Medication while hospitalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Limited	No	No	No	No	No	Limited
Hospital discharge summary	Limited	Limited	No	Limited	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	Limited
Outcomes																				
Diagnosis	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Limited	No	No	Yes	Yes	Yes	Yes
Diagnosis code (ICD-10)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
Lab test (order)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
Lab codes (e.g. JAC10/LOINC)	Yes	Limited	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No
Laboratory values	Yes	Limited	Yes	No	Yes	Yes	Limited	No	No	No	No	No	No	No	No	No	No	No	No	Limited
Diagnostic data (e.g. X-ray, MRI)	No	No	No	Limited	No	Limited	Limited	No	No	No	No	No	No	No	No	No	No	No	No	Limited
Demographic/Vital																				
Birth year	Limited	Yes	Yes	Yes	Yes	Yes	Limited	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Birth month	Limited	Yes	Yes	Yes	Yes	Yes	Limited	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Birth day	Limited	Yes	Yes	Yes	No	Yes	Limited	No	No	No	Limited	No	No	No	Yes	No	Yes	Yes	No	Yes
Height	Limited	Limited	No	No	Yes	Limited	Limited	Limited	Limited	No	Limited	No	No	Limited	No	No	No	Yes	Yes	Limited
Weight	Limited	Limited	No	No	Yes	Limited	Limited	Limited	Limited	No	Limited	No	No	Limited	No	No	Yes	Yes	Yes	Limited
Blood Pressure	No	Limited	No	No	Yes	No	No	Limited	Limited	No	Limited	No	No	Limited	Limited	No	Yes	Yes	Yes	Limited
Insurance Program																				
National Health Insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	N/A	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes
Government-managed Health Insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	N/A	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes
Society-managed Health Insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes
Mutual Society of Health Insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	N/A	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes
Elderly Person's Medical Program	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	N/A	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes
Data access																				
Access to raw data via web	Limited	No	Limited (intranet only)	No	No	Limited	Limited	No	Yes	Limited	No	Yes	Limited	Limited	Limited	No	No	No	Yes	No
Access to original medical charts	Limited	Yes	Yes	Yes	No	Limited	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Timing of data update	Every week	Every day	real time	Every day	every month	Monthly	Every month	Every month	Every month	Every month	Irregularly	Every month	Every month	Every month	Every day	Every day	Irregularly	Every year	Real time	
Latest data	now	yesterday	now	10 days ago	1 month before	Previous month	2 months before	Few months before	Five months	three months before	a few months ago	Last month	last month	Last month	Previous day	Previous day	1996	2012	Now	
Publication																				
Presentation	Japanese Society for Pharmacoepidemiology, Japan Association for Medical Informatics, etc.	a few	Many	25	Many	Presentations at the Japan Association for Medical Informatics, the Japan Society for Health Care Management, and The Japanese Society of Clinical Pharmacology and Therapeutics, etc.	Many	A few	147 (August, 2016)		13 (as of Sep. 2016)	Many	Many	Many	Many			ICPE 2006 (poster presentation) ICPE2011 (poster presentation)	Many presentations have been done at academic meetings such as ISPOR, EPhMRA, etc.	Many
Publication to peer review journal		a few	1	11	4	3	24		84 (August, 2016)		3 (as of Sep. 2016)	1	3 (as of Sep. 2016)	Many	12			5	Global: 600+ Japan: 20+ *Global includes the US, 5 big EU, Japan, China, Russia and Brazil	more than 50 articles
Contact information	<a href="http://www.pmda.go.jp/safety/surveillance/analysis/0018.html">http://www.pmda.go.jp/safety/surveillance/analysis/0018.html</a>	<a href="http://www.hosp.go.jp/index.html">http://www.hosp.go.jp/index.html</a>		<a href="mailto:matsumura@bmc.mio.medic.osaka-u.ac.jp">matsumura@bmc.mio.medic.osaka-u.ac.jp</a>	<a href="http://www.cisa.jp/">http://www.cisa.jp/</a>	<a href="http://cct-japan.co.jp/">http://cct-japan.co.jp/</a>	WEB <a href="http://www.mdv.co.jp/">http://www.mdv.co.jp/</a>	<a href="http://www.mhwg.o.jp/stf/seisakunetsu/bunya/kenkou_iryuu/ryouhoken/reseputo/index.html">http://www.mhwg.o.jp/stf/seisakunetsu/bunya/kenkou_iryuu/ryouhoken/reseputo/index.html</a>	WEB <a href="http://www.jmdc.co.jp/">http://www.jmdc.co.jp/</a> E-Mail <a href="mailto:mdbhelp@jmdc.co.jp">mdbhelp@jmdc.co.jp</a>	<a href="http://www.jamm-net.co.jp/">http://www.jamm-net.co.jp/</a>	<a href="http://minicare.co.jp/">http://minicare.co.jp/</a>	<a href="http://www.kkkyowa.co.jp/">http://www.kkkyowa.co.jp/</a>	<a href="http://www.imshealth.com/japan">www.imshealth.com/japan</a>	<a href="http://www.jmiri.jp/">http://www.jmiri.jp/</a>	<a href="http://www.jmedri.co.jp/">http</a>					