

Databases available for pharmacoepidemiology researches in Japan (information obtained from request)

English	MID-NET	National Hospital Organization(NHO)	Hamamatsu Med Univ	Osaka University	CISA-OB	CCY	Medical Data Vision	JMDC	HCI/RWD	AS	NDB	JMDC	JammiNet	MinaCare	Medi-Trend	IMS NPA data	JMRI	Japan Medical Research Institute Co., Ltd. (a.k.a. Nihon-Chouzai)	PPR	RADAR	NHWS	NCD
Database name	Medical Information Database Network	NCDA/NHO Clinical Data Archives (NMAI) Medical Information Analysis databank	D/D: 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 EBM Provider*	JMDC (Japan Medical Data Center) Claims Database HP	RWD database	Medical Claims Database based on ICD, including hospital data	National Claims Database (no official name)	JMDC (Japan Medical Data Center) Claims Database	JammiNet	MinaCare Database	Medi-Trend	IMS NPA data	JMRI Pharmacy Claims DB	NHON CHOUZAI Pharmacy Claims DB	Convergence CT Japan K.K.	RADAR	National Health and Wellness Survey (NHWS) Database	Nation clinical database
General description of the database	MHLW and PMDA 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 (EMR) based on hospital information system consisting of ordering, billing, and information on medical chart.	Clinical database based on hospital information system in 12 national universities hospital	Clinical database based on hospital information system in 12 national universities hospital	Network to collect, de-identify and summarize various data from medical institutions	Administrative database for inpatient and outpatient consists of 314 large (mainly tertiary) hospitals in Japan	Claims database consists of inpatients and outpatients from multiple DPC/non DPC hospitals	Integrated database of health claim, DPC data, and data from electronic records (EMR)	Medical electric claims database based on ICD, including Out-of-hospital prescription	Claims and Health Check Exam Database for optimized national medical expenditure planning, implementation and evaluation	Claims database consists of subscribers of employees' health insurance programs as complete	Claims database using employee's insurance programs	Insurance claims from several insurance programs and annual check-up data	Pharmacy claims database based on extramural prescription from 870 pharmacies. It contains 16 million prescriptions as of July 2017	Pharmacy claims database collecting extramural dispense claims from 3,600 pharmacies nationwide. 225 ml prescriptions annually.	Pharmacy claims database contains extramural dispense records	Claims database with extramural dispense claims and primary data (e.g. Oxi) 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 & antihyperlipemic 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-certified surgeon system, which is managed by many clinical societies. Sub-specialties participated in NCD: surgery, respiratory surgery, gastroenterological surgery (including pancreas tumor and liver tumor registry), pediatric surgery, cardiovascular surgery and intervention, endocrine and thyroid surgery, breast surgery (including breast cancer registry), plastic 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., Kitano-Group, 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)	Claims and DPC survey data	Various clinical data including electronic medical records, health claims and DPC data derived from medical institutions	Medical electric claims database based on ICD including Out-of-hospital prescription	Electronic claims, Special health check program	Medical dispense, hospitalization, DPC and dentistry claims from several employees' 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-17	MIA (Apr 2010) NCDA (Jan 2016)	1999	Jan-96	Oct-05	Varies from institution to institution.	From Apr 2008 (mainly from Apr 2010)	Apr-14	Depending on the introduction of the electronic medical records (latest year: 2005)	From Apr. 2015	Apr-09	Jan-05	Apr-08	Apr-08	Oct-07	Apr-08	Jan-06	Apr 2001	Most recent 2 years	antihypertensive19 81-1996 antihyperlipemic19 83-2006	1998 2008 (Japan)	Aug 2008 (Japan Cardiovascular Surgery Database Organization), Jan 2011 (surgery), Jan 2015 (neurosurgery), Sep 2016 (pathology), Jan 2017 (urology), Apr 2017 (plastic surgery, urology).
Size	Currently about 4,000,000. 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 3,300,000	About 1,790,000	Approx 3 million	About 3.7 million cases (12.7 million cases on contract basis)	approx. 500,000	About 120 ml	approx 4.2 million (based on subscribers)	approx 730,000	approx 5.0 million	Unknown	1290000	About 3,000,000	antihypertensive14 81-1996 antihyperlipemic32 137	30,000/year *Both projected and non projected numbers are available.	About 9 million cases (2011-2016)		
Annual number of patients (latest)	approx. 2,500,000	40,000	86,000	About 700,000	About 500,000	About 8,510,000 (2016/04-2017/03)	Approx 1.5 million (Aug-16 to Jul-17)	Under investigation	approx. 400,000	approx 3 million (Jan to Dec 2016)	approx 660,000	approx 1.6 ml (2016/4-2017/3)	340000	14,330,000	11000000	2840000	About 1,600,000	N/A	Appearance ratio depends on disease areas	About 1.8 million cases		
Annual N of outpatients (latest)	approx. 2,000,000	about 580,000	About 700,000	About 400,000	About 1,610,000 (2016/04-2017/03)	Approx 200,000 (Aug-16 to Jul-17)	Total of 101.5 million visits	approx. 380,000	approx 2.5 million (Jan to Dec 2016)	approx 620,000	approx 1.6 ml	approx 140,000 (Jan to Dec 2016)	approx 60,000	approx 80,000							Vary depending on each sub-specialty	
Annual N of inpatients (latest)	approx. 500,000	about 340,000	About 140,000	About 100,000	About 1,610,000 (2016/04-2017/03)	Approx 200,000 (Aug-16 to Jul-17)	Total of 107 thousand admission	approx. 20,000	approx 140,000 (Jan to Dec 2016)	approx 60,000	approx 80,000										Vary depending on each sub-specialty	
Annual N of treated diabetes patients (latest)			about 17,000	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.)	About 1,140,000 (2016/04-2017/03) ICD10:E10-E14	Approx 220,000 (Aug-16 to Jul-17) ICD10:E10-E14	About 78000 patients	approx. 126,000	approx 140,000 (Jan to Dec 2016) ICD10: E10-E14	approx 90,000 (2015, E10-E14)	approx 90,000						151,305 (Apr 2015-Mar 2016)			Vary depending on each sub-specialty	
Annual n of influenza (diagnosed) patients (latest)		429	About 9,000	About 1,500 (Jan-Dec 2015) The number of patients with the disease of ICD10 J10,J11. The number of patients that a influenza medicine was prescribed.)	About 160,000 (2016/04-2017/03) ICD10:J10,J11	Approx 30,000 (Aug-16 to Jul-17) ICD10:J10,J11	About 7900 (excluding suspected cases)	approx. 40,000	approx 330,000 (Jan to Dec 2016) ICD10: J10, J11	approx 90,000 (2015, J10, J11)	approx 130,000							46,100 (Apr 2015-Mar 2016)			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 30% of national university hospital (about 1/6 university hospital)	about 1.5% of Japanese population	about 7% of Japanese population about 19% of total number of beds for large hospitals	0.8% of DPC/non-DPC hospitals in Japan	3% of population of Japan	about 0.4% of Japanese population	2% of Japanese population	2.4% of total number of claims (medical-dispense) from 1500 employee's insurance programs in Japan	1.4% of population < 75 yrs	2.0% of total extramural dispense claims (Survey by Japan Pharmaceutical Association)	8.3% of total extramural dispense claims (Survey by Japan Pharmaceutical Association)	6.9% of annual prescription (Survey by Ministry of Health)	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 877 days	838 days	464 days	2-2 years:400,000 >=1 year:700,000	Maximum 11 years	Max 19 months	>= 8 years:360,000 >= 5 years:1.2 million >= 3 years:2.5 million >= 1 year:3.5million	around 8 years	>= 3 years: 29% >= 2 years: 47% >= 1 year: 63%	2-3 years	Unknown	3-5 years	3-5 years	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%	10.2%	13.7% (Jan-Dec-2015)	14.3%	10%	4.9%	10%	20% subscribers	0.21	12.2%	0.148	16.4%	0.151	0.114						Vary depending on each sub-specialty	
15-64 year-old	51%	37%	48.0%	50.7% (Jan-Dec-2015)	51.3%	43%	54.7%	40%	77% subscribers	0.64	78.8%	0.51	54.0%	0.506	0.53						Vary depending on each sub-specialty	
65 year-old or older	38%	50%	41.8%	36.1% (Jan-Dec-2015)	34.4%	47%	40.4%	50%	3% subscribers	0.15	9.0%	0.342	29.6%	0.343	0.356						Vary depending on each sub-specialty	
Drug master				Yes (URL: http://www.jr.yohoken.go.jp/shir_yohochu/) (Only available in Japanese)	Yes	Yes	Using master data of medical claims information service of Ministry of Health, Labor and Welfare Insurance Bureau	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Limited
Prescriptions	Yes	Yes	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	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Limited
Date of prescription	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Limited	Yes	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	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	Yes	Yes	No
Injection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Medicine	Limited	Limited	Limited	No	No	No	Limited	No	No	Limited	No	Limited	No	Limited	Limited	Limited	Limited	Limited	No	Yes	Yes	No
Procedures, surgical operations																						
Procedure codes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Limited
Procedure name	Yes	Yes	Yes	Yes	Yes	Yes	Yes	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	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time of procedure	No	Limited	No	No	No	No	No	No	No	No	Limited	No	No	No	No	No	No	No	No	No	Limited	Limited
Hospital admission/discharge date	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Medication while hospitalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Limited	No	No	No	Limited
Hospital discharge summary	Limited	Limited	No	Limited	Yes	Yes	Yes	Limited	No	No	No	No	No	No	No	No	No	No	No	No	No	Limited
Outcomes																						
Diagnosis master				Yes (URL: http://www.jr.yohoken.go.jp/shir_yohochu/) (Only available in Japanese)	Yes	Yes	Using master data of medical claims information service of Ministry of Health, Labor and Welfare Insurance Bureau ICD 10 based on 2003 version.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Diagnosis code (ICD-10)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lab test master				Yes (URL: http://www.jr.yohoken.go.jp/shir_yohochu/) (Only available in Japanese)	Yes	Yes	Using master data of medical claims information service of Ministry of Health, Labor and Welfare Insurance Bureau	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lab test (order)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lab codes (e.g. IAC101/ONC)	Yes	Limited	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Laboratory values	Yes	Limited	Yes	Yes	Yes	Yes	Limited	No	Yes	No	No	No	No	No	No	No	No	No	No	No	Limited	Limited
Diagnostic data (e.g. X-ray, MRI, CT)	No	No	No	Limited	No	Limited	No	Limited	No	No	Limited	No	No	No	No	No	No	No	No	No	Limited	Limited
Demographic data																						
Birth year	Limited	Yes	Yes	Yes	Yes	Yes	Limited	Yes	Yes	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	Yes	Yes
Birthday	Limited	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes
Height	Limited	Limited	No	No	No	Yes	Limited	Limited	Limited	No	Limited	Limited	Limited	No	No	No	No	No	No	No	Yes	Yes
Weight	Limited	Limited	No	No	No	Yes	Limited	Limited	Limited	No	Limited	Limited	Limited	No	No	No	Limited	No	No	No	Yes	Yes
Blood Pressure	No	Limited	No	No	No	Yes	Limited	No	Limited	No	Limited	No	Limited	No	No	No	Limited	No	No	No	Yes	Yes
Insurance Program																						
National Health Insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
Government-managed Health Insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
Society-managed Health Insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
Mutual Society of Health Insurance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
Elderly Person's Medical Program	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes
Data access																						
Access to raw data via web	Limited	No	Limited (intranet only)	No	No	Limited	Limited	Yes	Limited	No	No	Yes	Limited	No	Yes	Limited	Limited	Limited	No	No	No	Yes
Access to original medical charts	Limited	Yes	Yes	Yes	No	Limited	No	No														