



DATA BOOK 2025

Japan Pharmaceutical
Manufactures Association

| Forewords |

DATA BOOK organizes the statistics on pharmaceutical industries both in Japan and around the world. Those contain such figures as yearly transition of a variety of data such as demographic changes, national healthcare expenditure, and social security payments. Japan Pharmaceutical Manufacturers Association (JPMA) has also summarized pharmaceutical industries' overall pictures including the outcome of our research to the member companies, delivering the data collected from a variety of different angles: environment of pharmaceutical industries or comparison with other industries, current situations of production of medicinal drugs, factors of expansion to non-Japanese countries, the latest situation of research and development, or trends in approval for new products. With the exception of some statistical data from government or other public agency sources, the latest data in this issue are for FY2023.

We would be grateful if this is utilized as a tool for promotion of understanding about pharmaceutical industries, making medical care policies, or planning strategies for pharmaceutical industries. In addition, a part of listed data has a limit on secondary use. Please refer to the contents of "Secondary Use of Data in DATA BOOK" when quoting data.

Issuance of the new edition of the DATA BOOK owes so much to cooperation offered by a wide variety of relevant organizations: a variety of ministries including Ministry of Health, Labour and Welfare at the top, non-Japanese pharmaceutical manufacturers' associations, research agencies, or member companies of JPMA. We here would like to appreciate all their effort and cooperation.

March 1st, 2025

Japan Pharmaceutical Manufacturers Association
Office of Pharmaceutical Industry Research

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A. Pharmaceutical Industry Outlook

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Number of Pharmaceutical Manufacturers (Japan)

A-1-1

(Unit: No. of Companies)

Fiscal Year	Total	Ethical Drug Manufacturers		OTC Drug Manufacturers	Other Manufacturers	Manufacturers with NHI Price listed Drugs	JPMA Members
			Generic Drug Manufacturers				
1975	1,359	330	—	666	363	410	71
1980	1,312	368	—	625	319	—	80
1985	1,369	435	—	622	312	439	81
1990	1,496	433	—	588	475	459	86
1995	1,512	465	—	524	523	475	89
1999	1,151	476	71	476	199	479	82
2000	1,123	478	66	449	196	420	80
2001	1,104	471	71	443	190	444	79
2002	1,068	474	75	418	176	434	79
2003	1,062	474	71	416	172	437	79
2004	1,026	488	69	411	127	—	79
2005	972	477	72	387	108	415	75
2006*	364	121	25	126	117	403	74
2007*	380	104	22	156	120	403	70
2008*	351	117	64	158	76	378	70
2009*	376	101	18	160	115	357	69
2010*	370	107	27	143	120	358	68
2011*	341	100	23	128	113	358	69
2012*	349	101	22	136	112	354	72
2013*	327	110	31	118	99	349	70
2014*	310	113	34	111	86	346	72
2015*	305	115	37	108	82	354	72
2016*	294	109	32	98	87	355	72
2017*	298	107	33	105	86	353	72
2018*	299	100	35	101	98	345	72
2019*	286	104	39	93	89	342	73
2020*	302	104	35	94	104	347	73
2021*	313	103	36	95	115	347	73
2022*	309	109	42	98	102	342	73

Note :

The survey results featured in the Report of the Pharmaceutical Industry Survey are cited for some data.

The surveys up to FY2005 targeted all the companies whose head offices (1) manufacture and sell pharmaceuticals, (2) manufacture drugs, and (3) import and sell drugs, as of the end of each business year (March 31), based on a license for the Manufacture and Sale of Drugs, the Manufacture of Drugs, and the Import and Sale of Drugs, under the Pharmaceutical Affairs Law.

Among the companies, having obtained a pharmaceutical manufacturing and marketing license under the Pharmaceutical Affairs Law as of the end of each business year (March 31) that has been partially revised as the Law on Securing Quality, Efficacy and Safety of Products including Pharmaceuticals and Medical Devices(November, 2013), the surveys since FY2006 (*) targeted the member companies under the fifteen industrial bodies affiliated with the Federation of Pharmaceutical Manufacturers' Associations of Japan.

Source :

Ministry of Health, Labour and Welfare, Statistics on Pharmaceutical and Medical Device Industry

<https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00450152&tstat=000001034412>

Manufacturers with NHI Price listed Drugs: Jiho, NHI Drug Price Directory by Therapeutic Category (April or August issues of each year)

Number of Pharmaceutical Manufacturers by Number of Employees (Japan) A-1-2

Fiscal Year	Number of Pharmaceutical Manufacturers								Share (%)							
	-10 employees	11-50	51-100	101-300	301-1000	1,001-3,000	Over 3,000	Total	-10 employees	11-50	51-100	101-300	301-1000	1,001-3,000	Over 3,000	Total
1990	460	507	167	215	105	79	34	1,567	29.4	32.4	10.7	13.7	6.7	5.0	2.2	100.0
1995	433	513	189	277	135	86	58	1,691	25.6	30.3	11.2	16.4	8.0	5.1	3.4	100.0
2000	299	460	171	219	120	78	49	1,396	21.4	33.0	12.2	15.7	8.6	5.6	3.5	100.0
2001	295	461	163	231	117	75	49	1,391	21.2	33.1	11.7	16.6	8.4	5.4	3.5	100.0
2002	307	433	163	211	111	80	42	1,347	22.8	32.1	12.1	15.7	8.2	5.9	3.1	100.0
2003	287	436	169	215	118	76	41	1,342	21.4	32.5	12.6	16.0	8.8	5.7	3.1	100.0
2004 †	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2005	252	399	155	202	119	64	40	1,231	20.5	32.4	12.6	16.4	9.7	5.2	3.2	100.0
2006*	18	77	48	91	57	49	31	371	4.9	20.8	12.9	24.5	15.4	13.2	8.4	100.0
2007*	41	90	43	82	58	45	30	389	10.5	23.1	11.1	21.1	14.9	11.6	7.7	100.0
2008*	37	85	34	79	56	43	27	361	10.2	23.5	9.4	21.9	15.5	11.9	7.5	100.0
2009*	32	100	37	95	57	41	30	392	8.2	25.5	9.4	24.2	14.5	10.5	7.7	100.0
2010*	38	83	34	84	65	46	27	377	10.1	22.0	9.0	22.3	17.2	12.2	7.2	100.0
2011*	30	80	31	74	61	47	30	353	8.5	22.7	8.8	21.0	17.3	13.3	8.5	100.0
2012*	32	76	34	73	60	50	29	354	9.0	21.5	9.6	20.6	16.9	14.1	8.2	100.0
2013*	28	72	33	70	59	46	29	337	8.3	21.4	9.8	20.8	17.5	13.6	8.6	100.0
2014*	23	67	28	72	70	44	32	336	6.8	19.9	8.3	21.4	20.8	13.1	9.5	100.0
2015*	24	61	28	72	70	44	29	328	7.3	18.6	8.5	22.0	21.3	13.4	8.8	100.0
2016*	19	55	31	72	68	41	30	316	6.0	17.4	9.8	22.8	21.5	13.0	9.5	100.0
2017*	22	60	33	68	65	45	28	321	6.9	18.7	10.3	21.2	20.2	14.0	8.7	100.0
2018*	20	51	29	74	73	45	26	318	6.3	16.0	9.1	23.3	23.0	14.2	8.2	100.0
2019*	24	46	33	64	68	42	29	306	7.8	15.0	10.8	20.9	22.2	13.7	9.5	100.0
2020*	26	51	35	72	68	41	28	321	8.1	15.9	10.9	22.4	21.2	12.8	8.7	100.0
2021*	19	64	31	69	73	45	29	330	5.8	19.4	9.4	20.9	22.1	13.6	8.8	100.0
2022*	21	58	30	70	72	46	30	327	6.4	17.7	9.2	21.4	22.0	14.1	9.2	100.0
2023 JPMA (48 Members)	—	—	—	2	14	22	10	48	—	—	—	4.2	29.2	45.8	20.8	100.0

Note :

1. The survey results featured in the Report of the Pharmaceutical Industry Survey are cited for some data.

The surveys up to FY2005 targeted all the companies whose head offices (1) manufacture and sell pharmaceuticals, (2) manufacture drugs, and (3) import and sell drugs, as of the end of each business year (March 31), based on a license for the Manufacture and Sale of Drugs, the Manufacture of Drugs, and the Import and Sale of Drugs, under the Pharmaceutical Affairs Law.

Among the companies, having obtained a pharmaceutical manufacturing and marketing license under the Pharmaceutical Affairs Law as of the end of each business year (March 31) that has been partially revised as the Law on Securing Quality, Efficacy and Safety of Products including Pharmaceuticals and Medical Devices(November, 2013), the surveys since FY2006 (*) targeted the member companies under the fifteen industrial bodies affiliated with the Federation of Pharmaceutical Manufacturers' Associations of Japan.

Moreover, various numerical values for FY2004(†), including drug sales, decreased by 15 to 20% from other years. This, however, was the result of a considerable number of corporations, including large-scale entities, not being incorporated as the compilation targets, causing the figures to deviate considerably from the actual status. Therefore, these figures were not reproduced or included.

2. The figures for JPMA are based on data from the JPMA Survey (questionnaire survey to member companies) , and cover the non-consolidated pharmaceutical sector.

Source :

Ministry of Health, Labour and Welfare, Statistics on Pharmaceutical and Medical Device Industry

<https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00450152&tstat=000001034412>

JPMA Survey

Employment in the Pharmaceutical Industry (Japan)

A-1-3

Fiscal Year	Number of surveyed companies	No. of Employees						Share (%)							
		Total	Administration	Production & Quality Control	Research & Development	Researchers	Marketing	Medical Representative	Total	Administration	Production & Quality Control	Research & Development	Researchers	Marketing	Medical Representative
1990	762	196,759	27,900	63,888	32,422	—	72,549	42,500	100.0	14.2	32.5	16.5	—	36.8	21.6
1995	600	244,774	36,403	72,869	42,495	24,593	93,007	51,878	100.0	14.9	29.8	17.4	10.0	38.0	21.2
2000	398	209,939	25,587	60,640	38,334	21,052	85,378	50,442	100.0	12.2	28.9	18.3	10.0	40.7	24.0
2001	408	195,781	23,605	55,724	34,310	18,681	82,142	48,417	100.0	12.1	28.5	17.5	9.5	42.0	24.7
2002	396	202,649	23,960	55,414	37,465	20,677	85,810	54,226	100.0	11.8	27.3	18.5	10.2	42.3	26.8
2003	395	203,138	26,232	54,933	36,625	19,211	85,348	54,103	100.0	12.9	27.0	18.0	9.5	42.0	26.6
2004†	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2005	355	188,954	25,828	52,439	31,454	13,745	79,233	49,467	100.0	13.7	27.8	16.6	7.3	41.9	26.2
2006*	366	165,386	20,915	43,712	30,302	—	70,457	43,938	100.0	12.6	26.4	18.3	—	42.6	26.6
2007*	375	158,663	17,937	36,618	27,362	—	76,746	42,648	100.0	11.3	23.1	17.2	—	48.4	26.9
2008*	351	160,532	19,957	42,404	26,741	—	71,429	40,531	100.0	12.4	26.4	16.7	—	44.5	25.2
2009*	378	174,060	21,922	44,519	34,448	—	73,171	52,961	100.0	12.6	25.6	19.8	—	42.0	30.4
2010*	366	165,756	20,688	41,568	30,027	—	73,473	53,748	100.0	12.5	25.1	18.1	—	44.3	32.4
2011*	334	191,651	23,585	47,901	33,918	—	86,247	56,098	100.0	12.3	25.0	17.7	—	45.0	29.3
2012*	341	167,514	21,486	42,805	29,406	—	73,817	55,705	100.0	12.8	25.6	17.6	—	44.1	33.3
2013*	337	173,114	22,737	40,304	31,361	—	78,712	59,455	100.0	13.1	23.3	18.1	—	45.5	34.3
2014*	336	168,056	22,473	42,675	29,459	—	73,449	52,670	100.0	13.4	25.4	17.5	—	43.7	31.3
2015*	318	172,687	24,194	45,409	30,311	—	72,773	45,880	100.0	14.0	26.3	17.6	—	42.1	26.6
2016*	301	151,282	22,132	39,839	26,171	—	63,140	42,552	100.0	14.6	26.3	17.3	—	41.7	28.1
2017*	306	146,238	23,001	42,872	22,393	—	57,972	37,920	100.0	15.7	29.3	15.3	—	39.6	25.9
2018*	304	149,282	22,675	41,301	25,272	—	60,034	38,241	100.0	15.2	27.7	16.9	—	40.2	25.6
2019*	289	140,404	21,975	40,608	23,132	—	54,689	33,372	100.0	15.7	28.9	16.5	—	39.0	23.8
2020*	307	141,697	22,872	39,437	23,087	—	56,301	33,270	100.0	16.1	27.8	16.3	—	39.7	23.5
2021*	317	146,824	24,260	41,833	24,838	—	55,893	34,600	100.0	16.5	28.5	16.9	—	38.1	23.6
2022*	312	143,664	25,263	40,385	24,545	—	53,471	34,886	100.0	17.6	28.1	17.1	—	37.2	24.3
2023	—	96,606	7,390	7,391	13,605	—	27,155	20,546	—	—	—	—	—	—	—
JPMA	—	47	37	36	38	—	39	39	—	—	—	—	—	—	—

Note :

- The survey results featured in the Report of the Pharmaceutical Industry Survey are cited for some data. The surveys up to FY2005 targeted all the companies whose head offices (1) manufacture and sell pharmaceuticals, (2) manufacture drugs, and (3) import and sell drugs, as of the end of each business year (March 31), based on a license for the Manufacture and Sale of Drugs, the Manufacture of Drugs, and the Import and Sale of Drugs, under the Pharmaceutical Affairs Law. Among the companies, having obtained a pharmaceutical manufacturing and marketing license under the Pharmaceutical Affairs Law as of the end of each business year (March 31) that has been partially revised as the Law on Securing Quality, Efficacy and Safety of Products including Pharmaceuticals and Medical Devices(November, 2013), the surveys since FY2006 (*) targeted the member companies under the fifteen industrial bodies affiliated with the Federation of Pharmaceutical Manufacturers' Associations of Japan. Moreover, various numerical values for FY2004(†), including drug sales, decreased by 15 to 20% from other years. This, however, was the result of a considerable number of corporations, including large-scale entities, not being incorporated as the compilation targets, causing the figures to deviate considerably from the actual status. Therefore, these figures were not reproduced or included.
- The number of employees counted in this figure belongs to the pharmaceutical divisions. Instructors are not included in 'Medical Representative'.
- The figures for JPMA are based on data from the JPMA Survey (questionnaire survey to member companies), and cover the non-consolidated pharmaceutical sector. The figures in the lower in this row show the number of companies responded, and the sum of the categories does not equal to JPMA total sum shown due to incomplete responses.

Source :

Ministry of Health, Labour and Welfare, Statistics on Pharmaceutical and Medical Device Industry
<https://www.mhlw.go.jp/toukei/list/87-1.html>
 JPMA Survey

Employment in the Pharmaceutical Industry (Europe)

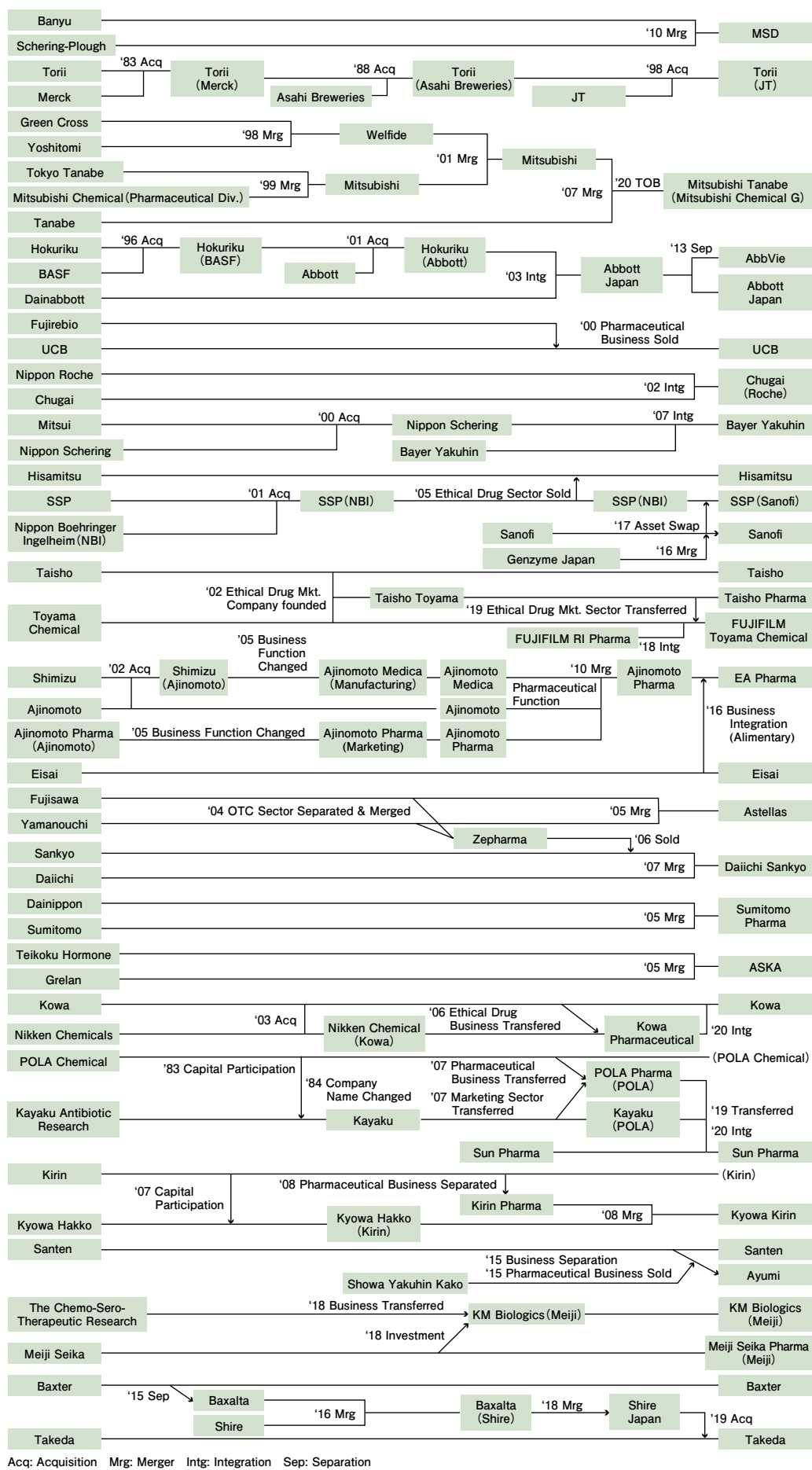
A-1-4

Year	(Unit: No. of Employees)																							
	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Austria	7,584	9,200	—	—	9,523	10,002	9,593	9,877	10,534	—	10,705	11,175	11,195	12,226	13,117	—	14,140	14,634	14,860	15,411	16,094	16,335	16,381	17,915
Belgium	19,038	22,713	24,137	25,408	26,390	27,185	28,605	29,155	29,405	29,600	31,966	31,536	32,167	32,718	33,701	34,075	34,617	35,250	35,711	37,073	38,489	40,464	42,062	43,501
Denmark	16,136	15,131	—	—	—	16,759	16,933	17,286	16,827	17,019	20,223	20,223	—	19,535	21,150	26,455	26,963	26,963	26,963	24,875	24,821	25,686	27,868	39,815
Finland	4,118	6,544	6,810	7,110	7,032	6,648	6,097	6,110	6,185	6,002	5,623	5,333	5,436	5,308	5,465	5,476	5,233	4,792	4,722	4,715	5,672	6,178	6,061	6,118
France	101,000	95,300	96,300	98,100	98,900	99,400	101,500	103,350	103,633	103,384	100,355	97,645	103,900	95,692	93,209	92,650	98,690	98,786	98,786	98,528	98,780	99,310	99,310	95,867
Germany	122,870	114,581	114,959	114,990	119,800	114,200	113,100	113,200	112,550	105,843	104,605	103,208	105,435	110,006	110,036	112,475	114,069	115,663	117,013	119,535	119,994	115,519	121,245	123,475
Greece	8,000	11,500	11,500	11,000	11,200	11,300	11,350	11,450	13,000	13,500	14,000	12,500	13,700	14,586	13,200	26,100	26,000	16,800	19,700	21,739	25,700	26,500	28,800	32,637
Ireland	10,500	16,000	18,000	20,000	21,000	22,500	24,000	24,500	24,500	24,500	24,500	25,000	24,000	—	25,441	26,373	26,373	26,373	29,766	29,766	37,000	42,000	40,204	45,000
Italy	63,194	72,559	78,770	83,670	84,088	73,266	74,000	74,726	72,000	69,500	67,500	66,700	65,000	63,500	62,300	63,000	63,500	64,400	65,400	66,500	65,800	66,400	67,300	68,600
Netherlands	13,000	13,200	15,100	15,800	15,500	16,000	16,200	—	16,900	16,000	16,900	—	15,000	13,000	—	12,000	12,000	17,900	17,900	15,000	20,000	20,000	20,000	20,000
Norway	3,630	4,402	4,447	4,572	4,603	4,571	4,564	4,691	4,670	4,630	4,630	4,200	4,000	3,800	3,800	—	3,800	3,800	3,800	4,000	4,000	4,500	4,500	4,500
Portugal	8,500	9,388	10,484	10,897	10,691	10,717	10,953	10,581	10,479	10,244	9,761	9,580	8,502	8,000	—	—	7,500	7,400	7,700	7,900	9,000	9,100	9,000	8,900
Spain	38,000	38,700	38,950	38,400	39,000	39,000	39,285	39,117	40,117	40,385	39,155	39,932	37,971	36,713	36,992	38,677	38,677	41,102	42,687	42,653	47,449	48,867	49,200	50,600
Sweden	15,344	18,700	19,100	21,200	21,600	20,100	20,974	18,434	16,830	15,725	14,766	13,773	13,185	12,867	11,482	11,012	11,012	11,012	11,012	11,012	11,012	13,156	13,156	15,000
Switzerland	27,500	26,000	29,613	—	—	31,000	32,038	34,000	34,440	35,400	35,280	36,680	38,561	40,070	40,913	41,876	43,848	44,232	46,503	46,800	46,652	47,000	46,800	47,600
UK	74,000	65,000	69,000	83,000	73,000	73,000	68,000	72,000	67,000	72,000	—	65,000	—	73,000	—	64,000	61,500	61,000	63,250	62,500	72,000	72,000	70,000	70,000

Source : EFPIA, The Pharmaceutical Industry in Figures
<https://www.efpia.eu/>

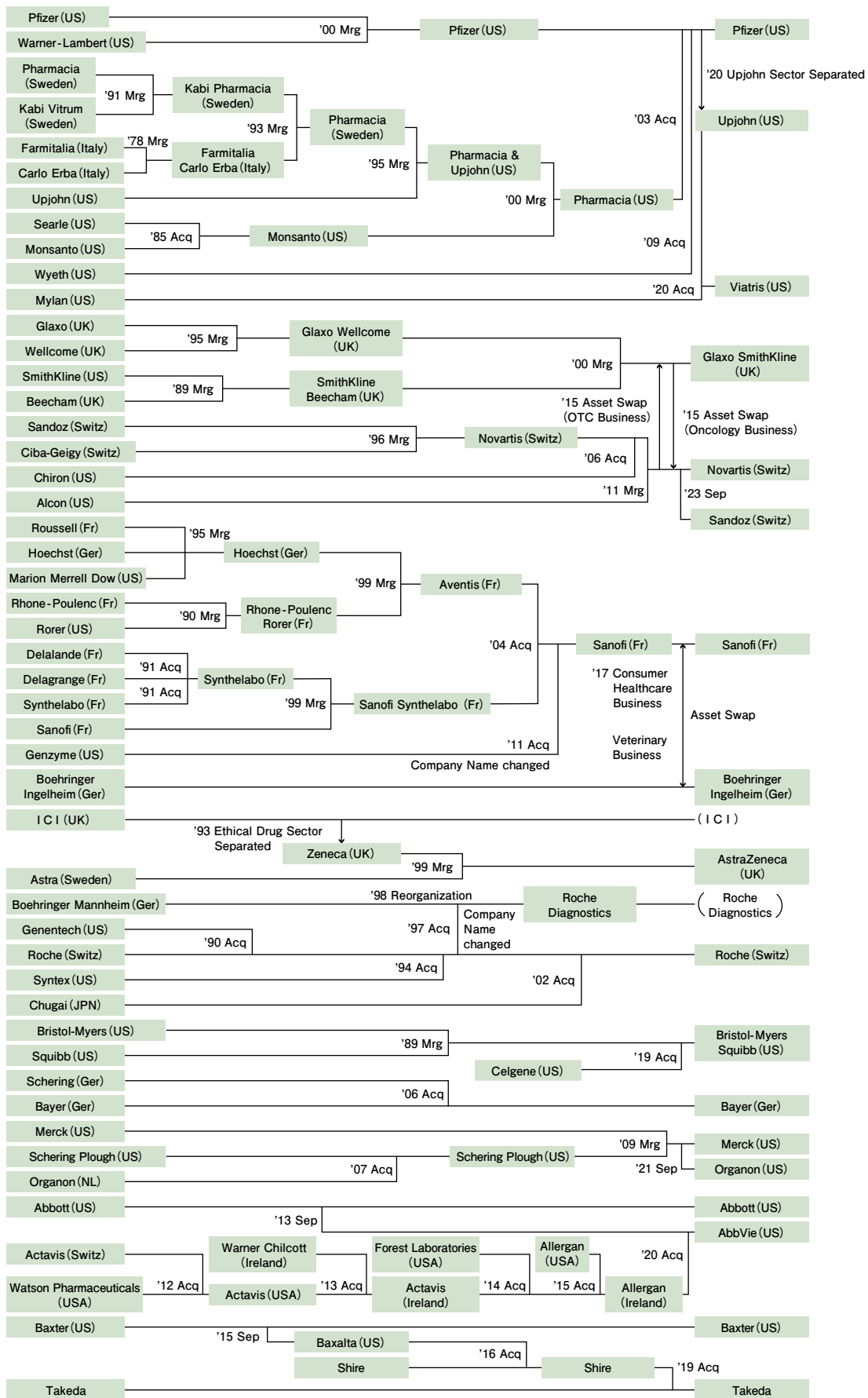
M&A in Pharmaceutical Industry (Japan)

A-1-5



M&A in Pharmaceutical Industry (Worldwide)

A-1-6



A. Pharmaceutical Industry Outlook

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Pharmaceutical Market -Manufacturers Sales- (Japanese Companies/ Japanese Subsidiaries)

A-2-1

(Unit: JPY 100 mil.)

Fiscal Year	Number of surveyed companies	Total	Ethical drugs		OTC drugs	Raw materials and Others
				Generic drugs		
1990	1,565	52,821	41,903	—	7,478	3,441
1995	1,564	73,104	59,407	—	9,195	4,501
2000	1,396	81,126	68,848	3,124	7,820	4,458
2001	1,391	88,271	74,593	2,356	8,407	5,271
2002	1,347	92,585	79,560	2,819	8,331	4,694
2003	1,342	94,467	81,763	2,663	7,479	5,225
2004 [†]	—	—	—	—	—	—
2005	1,231	97,232	85,328	3,130	7,040	4,864
2006*	364	89,586	79,139	4,074	6,360	4,087
2007*	380	88,820	77,309	4,249	7,492	4,018
2008*	351	94,980	84,219	3,944	6,518	4,243
2009*	380	113,432	101,383	4,429	7,022	5,027
2010*	370	106,516	94,462	7,970	7,259	4,795
2011*	341	116,137	103,901	8,010	7,473	4,763
2012*	349	118,567	106,718	8,372	7,239	4,610
2013*	329	132,948	121,749	9,959	7,476	3,723
2014*	313	123,339	113,098	9,490	7,194	3,047
2015*	288	106,578	97,281	9,757	5,381	3,916
2016*	287	107,132	97,537	7,412	6,527	3,069
2017*	268	110,151	100,565	4,744	6,548	3,037
2018 [†]	—	—	—	—	—	—
2019*	259	109,557	100,412	8,635	6,741	2,404
2020*	290	116,922	108,588	8,148	5,795	2,539
2021*	302	136,925	126,957	12,904	6,746	3,222
2022*	306	165,305	155,150	13,505	7,330	2,825

Note :

- The survey results featured in the Report of the Pharmaceutical Industry Survey are cited for some data.
The surveys up to FY2005 targeted all the companies whose head offices (1) manufacture and sell pharmaceuticals, (2) manufacture drugs, and (3) import and sell drugs, as of the end of each business year (March 31), based on a license for the Manufacture and Sale of Drugs, the Manufacture of Drugs, and the Import and Sale of Drugs, under the Pharmaceutical Affairs Law.
Among the companies, having obtained a pharmaceutical manufacturing and marketing license under the Pharmaceutical Affairs Law as of the end of each business year (March 31) that has been partially revised as the Law on Securing Quality, Efficacy and Safety of Products including Pharmaceuticals and Medical Devices(November, 2013), the surveys since FY2006 (*) targeted the member companies under the fifteen industrial bodies affiliated with the Federation of Pharmaceutical Manufacturers' Associations of Japan.
Moreover, various numerical values for FY2004 and FY2018(†), including drug sales, significantly decreased from other years. This, however, was the result of a considerable number of corporations, including large-scale entities, not being incorporated as the compilation targets, causing the figures to deviate considerably from the actual status. Therefore, these figures were not reproduced or included.
- Sales figures are based on consolidated accounts for companies that use consolidated accounting and on non-consolidated accounts for companies that do not use consolidated accounting.
- Sales figure includes overseas sales.
- 'Ethical drugs' includes in vitro diagnostics.
- 'Raw materials and Others' includes bulk products and medical supplies such as hygiene products.
The figures from 2006 include products sold by distributors.

Source :

Ministry of Health, Labour and Welfare, Statistics on Pharmaceutical and Medical Device Industry
<https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00450152&tstat=000001034412>

Sales of Pharmaceutical Manufacturers by Capital Scale (Japanese Companies/Japanese Subsidiaries)

A-2-2

FY2022

(Unit: JPY mil.)

Product Category		Capital Scale							Total
		Less than JPY 10 mil.	JPY 10-50 mil.	JPY 50-100 mil.	JPY 100-300 mil.	JPY 300 mil.- 1 bil.	JPY 1-5 bil.	Over JPY 5 bil.	
Specialized Pharmaceutical Companies	Ethical Drug	73,072	67,874	184,882	1,627,114	426,407	2,395,363	11,350,244	16,124,956
	Generic	0	38,582	46,463	349,953	7,840	424,511	407,252	1,274,601
	OTC	3	46,829	69,243	146,362	8,020	61,293	318,492	650,242
	Raw materials and Others	994	1,711	20,031	36,011	20,530	62,607	125,765	267,649
	Total	74,069	116,414	274,156	1,809,487	454,957	2,519,263	11,794,501	17,042,847
Diversified Companies	Ethical Drug	20	3,486	1,899	26,665	19,569	88,858	409,231	549,728
	Generic	0	139	97	3,015	5,629	1,304	161,065	171,249
	OTC	28	6,620	8,085	5,355	3,835	84,716	81,216	189,855
	Raw materials and Others	3	114	0	126	0	11	15,844	16,098
	Total	51	10,220	9,984	32,146	23,404	173,585	506,291	755,681
Total	Ethical Drug	73,092	71,360	186,781	1,653,779	445,976	2,484,221	11,759,475	16,674,684
	Generic	0	38,721	46,560	352,968	13,469	425,815	568,317	1,445,850
	OTC	31	53,449	77,328	151,717	11,855	146,009	399,708	840,097
	Raw materials and Others	997	1,825	20,031	36,137	20,530	62,618	141,609	283,747
	Total	74,120	126,634	284,140	1,841,633	478,361	2,692,848	12,300,792	17,798,528

Note :

- The number of surveyed companies is 303.
Among the companies, having obtained a pharmaceutical manufacturing and marketing license under the Pharmaceutical Affairs Law as of the end of FY2022 (March 31), the surveys targeted the member companies under the fifteen industrial bodies affiliated with the Federation of Pharmaceutical Manufacturers' Associations of Japan.
- Sales figures are based on consolidated accounts for companies that use consolidated accounting and on non-consolidated accounts for companies that do not use consolidated accounting.
- 'Ethical drug' includes in vitro diagnostics.
- 'Raw materials and Others' includes bulk products, medical supplies (e.g. hygiene products) and in-house products sold by distributors.

Source :

Ministry of Health, Labour and Welfare, Statistics on Pharmaceutical and Medical Device Industry
<https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00450152&tstat=000001034412>

Comparison of Pharmaceutical Sales between Domestic and Foreign Companies (Japanese Companies/Japanese Subsidiaries)

A-2-3

Fiscal Year	Domestic			Foreign			Total		
	Counted Companies	Total Sales (JPY mil.)	Ratio (%)	Counted Companies	Total Sales (JPY mil.)	Ratio (%)	Counted Companies	Total Sales (JPY mil.)	Ratio (%)
2001	1,320	5,623,298	78.8	71	1,517,102	21.2	1,391	7,140,400	100.0
2002	1,273	5,742,721	75.3	74	1,881,953	24.7	1,347	7,624,674	100.0
2003	1,277	5,855,057	75.0	65	1,954,923	25.0	1,342	7,809,980	100.0
2004†	—	—	—	—	—	—	—	—	—
2005	1,172	6,346,103	77.1	59	1,883,314	22.9	1,231	8,229,417	100.0
2006*	334	5,811,684	76.9	30	1,746,920	23.1	364	7,558,604	100.0
2007*	351	5,489,431	74.5	29	1,883,767	25.5	380	7,373,198	100.0
2008*	312	6,669,209	82.3	25	1,438,489	17.7	337	8,107,698	100.0
2009*	347	7,415,118	75.9	29	2,349,289	24.1	376	9,764,407	100.0
2010*	336	7,283,023	80.0	34	1,816,488	20.0	370	9,099,511	100.0
2011*	303	7,635,227	76.9	38	2,293,654	23.1	341	9,928,881	100.0
2012*	308	7,775,190	76.1	41	2,445,665	23.9	349	10,220,855	100.0
2013*	286	8,519,805	72.4	44	3,249,857	27.6	330	11,769,662	100.0
2014*	272	8,328,460	77.1	41	2,474,386	22.9	313	10,802,846	100.0
2015*	275	8,663,995	81.5	32	1,965,488	18.5	307	10,629,483	100.0
2016*	260	8,516,661	82.8	34	1,766,618	17.2	294	10,283,279	100.0
2017*	265	7,836,373	80.0	33	1,962,093	20.0	298	9,798,466	100.0
2018†	—	—	—	—	—	—	—	—	—
2019*	258	10,264,359	89.8	28	1,168,141	10.2	286	11,432,500	100.0
2020*	272	10,241,863	89.3	30	1,230,064	10.7	302	11,471,927	100.0
2021*	278	11,465,340	89.5	35	1,339,072	10.5	313	12,804,412	100.0
2022*	281	13,147,271	84.6	28	2,390,308	15.4	309	15,537,579	100.0

Note :

- The survey results featured in the Report of the Pharmaceutical Industry Survey are cited for some data.
The surveys up to FY2005 targeted all the companies whose head offices (1) manufacture and sell pharmaceuticals, (2) manufacture drugs, and (3) import and sell drugs, as of the end of each business year (March 31), based on a license for the Manufacture and Sale of Drugs, the Manufacture of Drugs, and the Import and Sale of Drugs, under the Pharmaceutical Affairs Law.
Among the companies, having obtained a pharmaceutical manufacturing and marketing license under the Pharmaceutical Affairs Law as of the end of each business year (March 31) that has been partially revised as the Law on Securing Quality, Efficacy and Safety of Products including Pharmaceuticals and Medical Devices(November, 2013), the surveys since FY2006 (*) targeted the member companies under the fifteen industrial bodies affiliated with the Federation of Pharmaceutical Manufacturers' Associations of Japan.
Moreover, various numerical values for FY2004 and FY2018(†), including drug sales, significantly decreased from other years. This, however, was the result of a considerable number of corporations, including large-scale entities, not being incorporated as the compilation targets, causing the figures to deviate considerably from the actual status. Therefore, these figures were not reproduced or included.
- Sales figures are based on consolidated accounts for companies that use consolidated accounting and on non-consolidated accounts for companies that do not use consolidated accounting.
- Sales figure includes overseas sales.

Source :

Ministry of Health, Labour and Welfare, Statistics on Pharmaceutical and Medical Device Industry
<https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00450152&tstat=000001034412>

Concentration on Pharmaceutical Sales to Leading Companies (Japanese Companies/Japanese Subsidiaries)

A-2-4

Fiscal Year	Total No. of Companies	Sales Share of 5 Leading Companies	Sales Share of 10 Leading Companies	Sales Share of 30 Leading Companies	Sales Share of 50 Leading Companies	Sales Share of 100 Leading Companies
1994	1,788	18.3 %	30.9 %	55.7 %	68.9 %	83.8 %
1995	1,691	19.3 %	31.4 %	56.3 %	69.6 %	84.2 %
1996	1,596	22.2 %	34.6 %	59.2 %	72.2 %	85.3 %
1997	1,562	23.6 %	36.0 %	62.9 %	75.9 %	87.4 %
1998	1,627	20.3 %	32.2 %	60.1 %	73.0 %	85.8 %
1999	1,427	23.6 %	36.6 %	65.6 %	78.8 %	90.7 %
2000	1,396	26.7 %	40.6 %	68.0 %	80.6 %	92.3 %
2001	1,391	27.4 %	41.5 %	69.3 %	81.5 %	92.2 %
2002	1,347	28.3 %	42.3 %	69.7 %	82.0 %	92.8 %
2003	1,342	28.6 %	42.5 %	70.8 %	82.3 %	92.7 %
2004 [†]	—	—	—	—	—	—
2005	1,231	35.5 %	49.8 %	74.9 %	85.1 %	94.3 %
2006*	371	37.6 %	50.8 %	73.5 %	83.9 %	94.7 %
2007*	381	40.2 %	54.2 %	76.8 %	86.6 %	95.9 %
2008*	351	43.5 %	58.0 %	78.9 %	87.9 %	96.7 %
2009*	378	40.3 %	55.3 %	80.0 %	88.7 %	96.4 %
2010*	374	37.9 %	52.9 %	77.8 %	87.0 %	96.0 %
2011*	344	37.1 %	51.6 %	76.9 %	86.3 %	96.1 %
2012*	352	36.1 %	51.1 %	76.7 %	86.5 %	96.0 %
2013*	330	36.4 %	51.2 %	77.1 %	87.4 %	96.6 %
2014*	318	37.1 %	51.9 %	76.9 %	86.4 %	96.3 %
2015*	314	39.2 %	51.8 %	76.6 %	86.5 %	96.3 %
2016*	299	39.3 %	52.7 %	78.8 %	88.2 %	96.9 %
2017*	303	38.2 %	53.0 %	79.2 %	88.4 %	97.0 %
2018 [†]	—	—	—	—	—	—
2019*	292	47.6 %	60.7 %	83.1 %	90.0 %	97.6 %
2020*	309	47.8 %	60.8 %	83.1 %	90.3 %	97.6 %
2021*	319	45.2 %	58.5 %	81.1 %	89.6 %	97.3 %
2022*	313	46.2 %	60.3 %	83.3 %	90.9 %	97.6 %

Note :

1. The survey results featured in the Report of the Pharmaceutical Industry Survey are cited for some data.

The surveys up to FY2005 targeted all the companies whose head offices (1) manufacture and sell pharmaceuticals, (2) manufacture drugs, and (3) import and sell drugs, as of the end of each business year (March 31), based on a license for the Manufacture and Sale of Drugs, the Manufacture of Drugs, and the Import and Sale of Drugs, under the Pharmaceutical Affairs Law.

Among the companies, having obtained a pharmaceutical manufacturing and marketing license under the Pharmaceutical Affairs Law as of the end of each business year (March 31) that has been partially revised as the Law on Securing Quality, Efficacy and Safety of Products including Pharmaceuticals and Medical Devices(November, 2013), the surveys since FY2006 (*) targeted the member companies under the fifteen industrial bodies affiliated with the Federation of Pharmaceutical Manufacturers' Associations of Japan.

Moreover, various numerical values for FY2004 and FY2018(†), including drug sales, significantly decreased from other years. This, however, was the result of a considerable number of corporations, including large-scale entities, not being incorporated as the compilation targets, causing the figures to deviate considerably from the actual status. Therefore, these figures were not reproduced or included.

2. Sales figures are based on consolidated accounts for companies that use consolidated accounting and on non-consolidated accounts for companies that do not use consolidated accounting.

Source :

Ministry of Health, Labour and Welfare, Statistics on Pharmaceutical and Medical Device Industry
<https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00450152&tstat=000001034412>

Ethical Drug Market (Japan Market)

A-2-5

Year	Hospitals		General Practitioners		Others		Total	
	NHI price basis (JPY mil.)	Change (%)	NHI price basis (JPY mil.)	Change (%)	NHI price basis (JPY mil.)	Change (%)	NHI price basis (JPY mil.)	Change (%)
2003	3,132,568	△ 0.3	2,025,286	0.8	1,898,352	16.9	7,056,206	4.1
2004	3,104,605	△ 0.9	2,018,984	△ 0.3	2,079,721	9.6	7,203,310	2.1
2005	3,256,718	4.9	2,145,407	6.3	2,343,384	12.7	7,745,509	7.5
2006	3,182,478	△ 2.3	2,064,241	△ 3.8	2,450,252	4.6	7,696,972	△ 0.6
2007	3,223,745	1.3	2,120,352	2.7	2,703,762	10.3	8,047,859	4.6
2008	3,231,198	0.2	2,109,205	△ 0.5	2,913,886	7.8	8,254,290	2.6
2009	3,397,615	5.2	2,238,302	6.1	3,215,730	10.4	8,851,647	7.2
2010	3,493,355	2.8	2,152,187	△ 3.8	3,228,082	0.4	8,873,623	0.2
2011	3,701,742	6.0	2,294,007	6.6	3,485,830	8.0	9,481,578	6.9
2012	3,765,659	1.7	2,238,767	△ 2.4	3,542,888	1.6	9,547,314	0.7
2013	3,871,769	2.8	2,217,331	△ 1.0	3,757,540	6.1	9,846,641	3.1
2014	3,927,171	1.4	2,176,245	△ 1.9	3,880,010	3.3	9,983,426	1.4
2015	4,354,617	10.9	2,226,461	2.3	4,016,857	3.5	10,597,934	6.2
2016	4,575,350	5.1	2,175,395	△ 2.3	3,873,892	△ 3.6	10,624,636	0.3
2017	4,509,256	△ 1.4	2,166,171	△ 0.4	3,839,451	△ 0.9	10,514,878	△ 1.0
2018	4,540,310	0.7	2,115,549	△ 2.3	3,681,611	△ 4.1	10,337,471	△ 1.7
2019	4,747,150	4.6	2,137,887	1.1	3,740,593	1.6	10,625,631	2.8
2020	4,710,346	△ 0.8	2,014,663	△ 5.8	3,646,724	△ 2.5	10,371,733	△ 2.4
2021	4,910,021	4.2	1,986,029	△ 1.4	3,702,980	1.5	10,599,031	2.2
2022	5,079,095	3.4	2,069,125	4.2	3,791,261	2.4	10,939,481	3.2
2023	5,287,168	4.1	2,102,249	1.6	3,891,214	2.6	11,280,631	3.1

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Source : IQVIA Japan, Topline, Calculated based on Japan Pharmaceutical Market Sales 2003-2023 by Office of Pharmaceutical Industry Research (Reprinted with permission)

Ethical Drug Sales -20 Leader Companies- (Japan Market)

A-2-6

(1) Promotion Company Level [NHI price basis]

	2023 (Jan.-Dec.)	2022 (Jan.-Dec.)	2021 (Jan.-Dec.)	2020 (Jan.-Dec.)	(Unit: JPY mil.)		
1	Chugai	546,095	526,456	Chugai	516,801	Takeda	512,259
2	AstraZeneca	496,060	503,135	Takeda	493,562	Chugai	481,730
3	Daiichi Sankyo	470,620	458,353	AstraZeneca	419,858	Daiichi Sankyo	401,220
4	MSD	466,868	420,187	Daiichi Sankyo	396,995	AstraZeneca	374,597
5	Takeda	460,888	397,567	Janssen Pharmaceutical	362,264	MSD	348,137
6	Janssen Pharmaceutical	414,522	373,517	MSD	325,753	Janssen Pharmaceutical	325,254
7	Novartis Pharma	338,093	330,653	Otsuka	320,808	Novartis Pharma	321,491
8	Otsuka	307,921	316,864	Novartis Pharma	320,547	Otsuka	309,333
9	Bayer	289,336	295,553	Bayer	297,498	Eli Lilly Japan	309,298
10	Bristol-Myers Squibb	270,168	274,008	Pfizer	289,596	Bayer	299,249
11	Ono	259,360	252,239	Eli Lilly Japan	287,243	Pfizer	269,817
12	Pfizer	247,088	247,714	Bristol-Myers Squibb	274,259	Mitsubishi Tanabe	254,714
13	Glaxo Smith Kline	246,619	238,826	Mitsubishi Tanabe	235,917	Viartis	252,332
14	Eli Lilly Japan	238,504	227,661	Glaxo Smith Kline	230,938	Glaxo Smith Kline	252,111
15	Nippon Boehringer Ingelheim	231,890	226,669	Astellas	228,816	Astellas	229,681
16	Sanofi	225,920	217,327	Ono	216,624	Ono	199,985
17	Astellas	221,491	216,778	Nippon Boehringer Ingelheim	208,215	Nippon Boehringer Ingelheim	195,217
18	Sawai	205,068	201,833	Sawai	205,793	Sanofi	189,086
19	Mitsubishi Tanabe	193,476	194,738	Sanofi	196,258	Nichi-Iko	187,283
20	Gilead Sciences	170,249	185,388	Nichi-Iko	163,904	Bristol-Myers Squibb	182,926

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(2) Distributor Level [NHI price basis]

	2023 (Jan.-Dec.)	2022 (Jan.-Dec.)	2021 (Jan.-Dec.)	2020 (Jan.-Dec.)	(Unit: JPY mil.)		
1	Takeda	723,174	746,460	Takeda	750,593	Takeda	721,503
2	Daiichi Sankyo	632,495	579,900	Daiichi Sankyo	627,994	Daiichi Sankyo	632,292
3	Chugai	546,095	526,456	Chugai	516,801	Pfizer	513,048
4	MSD	463,803	398,556	Pfizer	430,071	Chugai	481,125
5	AstraZeneca	413,883	355,470	Astellas	348,322	Astellas	385,962
6	Ono	370,292	348,430	Mitsubishi Tanabe	343,546	Otsuka	364,346
7	Otsuka	339,025	339,759	Otsuka	332,916	Mitsubishi Tanabe	343,774
8	Astellas	335,222	334,857	MSD	315,967	MSD	343,449
9	Mitsubishi Tanabe	327,994	329,272	AstraZeneca	310,586	Eli Lilly Japan	272,318
10	Pfizer	301,032	313,865	Ono	278,707	Glaxo Smith Kline	271,454
11	Novartis Pharma	290,185	262,945	Glaxo Smith Kline	253,073	AstraZeneca	256,539
12	Janssen Pharmaceutical	273,285	262,829	Novartis Pharma	250,168	Ono	248,408
13	Glaxo Smith Kline	268,112	249,255	Eli Lilly Japan	249,804	Novartis Pharma	247,136
14	Nippon Boehringer Ingelheim	231,890	216,778	Janssen Pharmaceutical	243,326	Bayer	213,519
15	Eli Lilly Japan	224,101	200,447	Nippon Boehringer Ingelheim	208,215	Janssen Pharmaceutical	205,412
16	Sawai	205,068	198,483	Sawai	205,793	Eisai	199,549
17	Sanofi	204,632	197,786	Bayer	203,365	Kyowa Kirin	197,072
18	Santen	203,115	194,738	Santen	199,567	Sumitomo Dainippon	196,441
19	Bayer	189,480	191,693	Kyowa Kirin	198,724	Nippon Boehringer Ingelheim	190,729
20	Kyowa Kirin	183,758	187,359	Eisai	194,139	Nichi-Iko	189,947

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Pharmaceutical Market (Worldwide Market) (1/2)

(1) Sales by Geographic Region

Year	North America		Africa / Asia / Australasia		Europe		Latin America		World Total	
	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)
2004	252.5	45.1	120.6	21.6	160.6	28.7	26.2	4.7	559.9	100.0
2005	261.1	43.4	133.5	22.2	174.4	29.0	32.2	5.4	601.2	100.0
2006	285.7	44.0	139.3	21.5	187.8	28.9	35.9	5.5	648.7	100.0
2007	298.6	41.1	155.5	21.4	229.1	31.4	43.3	6.0	726.4	100.0
2008	304.5	38.1	186.2	23.3	256.1	32.1	52.0	6.5	799.0	100.0
2009	320.2	38.6	211.0	25.4	246.1	29.7	53.3	6.4	830.6	100.0
2010	340.9	38.4	239.0	26.9	245.9	27.6	62.4	7.0	888.2	100.0
2011	355.6	36.9	277.4	28.8	263.2	27.2	67.2	7.0	963.4	100.0
2012	351.1	36.4	296.2	30.7	245.8	25.5	71.1	7.4	964.2	100.0
2013	367.1	36.9	296.1	29.8	258.1	26.0	72.5	7.3	993.8	100.0
2014	414.2	39.2	310.4	29.4	266.2	25.2	65.1	6.2	1,055.9	100.0
2015	453.8	41.1	337.0	30.5	238.5	21.6	74.7	6.8	1,104.0	100.0
2016	479.0	42.0	330.9	29.0	244.5	21.4	86.9	7.6	1,141.3	100.0
2017	489.7	41.5	333.2	28.2	258.5	21.9	97.9	8.3	1,179.3	100.0
2018	519.1	43.1	350.6	29.1	273.7	22.7	59.8	5.0	1,203.2	100.0
2019	548.8	43.4	373.8	29.6	281.8	22.3	60.5	4.8	1,265.0	100.0
2020	573.7	44.1	371.8	28.6	298.4	23.0	56.3	4.3	1,300.1	100.0
2021	621.9	43.2	414.0	28.8	334.7	23.3	68.7	4.8	1,439.2	100.0
2022	681.0	46.0	394.5	26.7	327.9	22.2	76.5	5.2	1,480.0	100.0
2023	765.1	47.8	390.9	24.4	360.1	22.5	83.5	5.2	1,599.6	100.0

Note: Numerical data may differ from those of past DATA BOOK due to revision in accordance with changes in data in the quoted sources.

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Pharmaceutical Market (Worldwide Market) (2/2)

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(2) Sales of Top 10 Countries

Year	USA		China		Japan		Germany		France		Italy		UK		Brazil		Canada		Spain		Others		World Total	
	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)
2004	240.8	43.0	9.6	1.7	64.7	11.6	29.0	5.2	30.1	5.4	19.2	3.4	20.0	3.6	7.8	1.4	13.1	2.3	11.8	2.1	113.9	20.3	559.9	100.0
2005	247.7	41.2	11.6	1.9	67.7	11.3	31.1	5.2	32.0	5.3	19.9	3.3	19.4	3.2	9.7	1.6	15.1	2.5	13.5	2.2	133.4	22.2	601.2	100.0
2006	270.1	41.6	13.4	2.1	63.7	9.8	32.1	4.9	33.2	5.1	21.5	3.3	20.5	3.2	10.7	1.7	16.5	2.5	15.6	2.4	151.4	23.3	648.7	100.0
2007	281.0	38.7	24.8	3.4	65.7	9.0	37.3	5.1	38.5	5.3	24.2	3.3	23.4	3.2	13.2	1.8	19.6	2.7	17.6	2.4	181.2	24.9	726.4	100.0
2008	285.3	35.7	36.5	4.6	77.0	9.6	41.9	5.2	42.5	5.3	27.3	3.4	22.2	2.8	18.1	2.3	22.6	2.8	19.2	2.4	206.2	25.8	799.0	100.0
2009	301.1	36.3	45.3	5.4	89.9	10.8	41.3	5.0	40.4	4.9	27.1	3.3	19.8	2.4	19.1	2.3	22.7	2.7	19.1	2.3	204.8	24.7	830.6	100.0
2010	319.2	35.9	54.8	6.2	96.2	10.8	42.2	4.7	38.5	4.3	26.6	3.0	20.3	2.3	25.8	2.9	22.2	2.5	21.6	2.4	220.8	24.9	888.2	100.0
2011	330.6	34.3	66.7	6.9	112.1	11.6	44.7	4.6	40.0	4.1	28.7	3.0	23.1	2.4	31.7	3.3	22.7	2.4	22.3	2.3	240.8	25.0	963.4	100.0
2012	326.1	33.8	85.0	8.8	108.6	11.3	42.1	4.4	36.9	3.8	31.4	3.3	23.2	2.4	26.3	2.7	20.0	2.1	22.0	2.3	242.4	25.1	964.2	100.0
2013	342.8	34.5	97.3	9.8	90.7	9.1	45.9	4.6	37.5	3.8	28.1	2.8	24.3	2.4	31.0	3.1	20.8	2.1	21.4	2.2	254.1	25.6	993.8	100.0
2014	389.4	36.9	111.4	10.6	85.4	8.1	48.4	4.6	38.3	3.6	28.9	2.7	27.9	2.6	32.5	3.1	21.2	2.0	21.3	2.0	251.1	23.8	1,055.9	100.0
2015	430.6	39.0	120.5	10.9	78.8	7.1	42.3	3.8	32.2	2.9	27.1	2.5	28.5	2.6	26.0	2.4	20.5	1.9	19.4	1.8	278.1	25.2	1,104.0	100.0
2016	455.4	39.9	122.6	10.7	89.1	7.8	43.8	3.8	33.2	2.9	29.0	2.5	26.7	2.3	27.6	2.4	21.1	1.9	19.7	1.7	273.2	23.9	1,141.3	100.0
2017	464.7	39.4	127.7	10.8	84.8	7.2	46.4	3.9	34.3	2.9	30.9	2.6	25.6	2.2	35.9	3.0	22.4	1.9	21.2	1.8	285.5	24.2	1,179.3	100.0
2018	492.8	41.0	136.7	11.4	84.2	7.0	51.5	4.3	36.3	3.0	33.9	2.8	27.8	2.3	25.7	2.1	24.6	2.0	22.2	1.8	267.6	22.2	1,203.2	100.0
2019	521.0	41.2	150.5	11.9	87.9	7.0	52.0	4.1	35.9	2.8	33.2	2.6	29.1	2.3	26.9	2.1	24.8	2.0	23.4	1.8	280.4	22.2	1,265.0	100.0
2020	544.6	41.9	148.5	11.4	87.4	6.7	57.1	4.4	37.8	2.9	33.8	2.6	31.5	2.4	22.7	1.7	26.7	2.1	24.3	1.9	285.6	22.0	1,300.1	100.0
2021	588.9	40.9	171.4	11.9	86.7	6.0	63.5	4.4	42.6	3.0	37.4	2.6	37.6	2.6	27.6	1.9	30.3	2.1	27.9	1.9	325.2	22.6	1,439.2	100.0
2022	645.9	43.6	162.8	11.0	74.8	5.1	59.6	4.0	41.8	2.8	36.8	2.5	36.5	2.5	30.8	2.1	29.0	2.0	29.4	2.0	332.5	22.5	1,480.0	100.0
2023	727.4	45.5	160.8	10.1	72.3	4.5	64.7	4.0	46.5	2.9	41.1	2.6	40.8	2.5	34.6	2.2	32.3	2.0	31.2	1.9	348.0	21.8	1,599.6	100.0

Note: Numerical data may differ from those of past DATA BOOK due to revision in accordance with changes in data in the quoted sources.

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Concentration on Pharmaceutical Sales to Leading Companies (Worldwide Market) (1/2)

A-2-8

(1) Total Sales

Value (USD mil.)												
Year (Jan.-Dec.)	1st- 10th Companies	11th- 20th Companies	21st- 30th Companies	31st- 40th Companies	41st- 50th Companies	51st- 60th Companies	61st- 70th Companies	71st- 80th Companies	81st- 90th Companies	91st- 100th Companies	101st- Companies	Total
2006	281,663	104,951	40,204	24,860	17,323	12,889	10,175	8,301	6,921	5,726	93,759	606,776
2007	300,896	118,740	47,386	30,591	18,973	14,235	11,259	8,597	7,352	6,213	107,445	671,687
2008	308,869	133,668	54,798	34,145	21,616	16,246	11,642	9,417	7,807	6,916	119,666	724,790
2009	338,529	123,532	52,493	33,420	22,235	15,781	11,811	9,397	7,942	7,051	128,836	751,027
2010	351,057	131,763	55,085	32,949	22,690	15,590	11,284	9,903	9,062	7,690	143,754	790,827
2011	370,323	147,174	59,943	35,199	24,400	16,906	12,423	11,021	9,947	8,548	157,615	853,499
2012	354,531	147,487	63,833	36+,000	25,864	17,129	13,107	11,250	10,214	8,495	168,880	856,790
2013	346,224	145,018	70,584	39,774	27,433	18,430	13,597	11,474	10,017	8,922	183,369	874,842
2014	361,801	166,275	75,658	41,201	28,747	19,681	14,419	12,309	10,819	9,755	197,669	938,334
2015	368,964	181,811	74,889	38,362	26,584	18,614	14,513	11,845	10,617	9,657	196,138	951,994
2016	381,106	197,425	82,405	42,011	28,974	19,840	15,438	13,234	11,822	10,408	211,007	1,013,670
2017	391,369	200,862	82,105	43,002	28,572	20,757	16,997	14,765	12,956	11,390	222,027	1,044,802
2018	409,961	206,253	85,454	42,775	29,193	21,706	18,112	15,188	12,495	10,566	220,080	1,071,783
2019	434,198	226,862	76,728	38,586	26,880	21,630	17,935	16,276	13,006	11,216	231,926	1,115,243
2020	462,561	243,626	72,064	38,649	28,091	22,716	17,896	15,933	13,411	11,556	235,429	1,161,932
2021	498,206	269,429	76,765	44,346	29,903	23,573	19,216	17,047	14,748	12,890	274,351	1,280,474
2022	531,141	276,918	76,982	45,192	30,447	23,582	19,189	16,448	14,276	12,637	284,354	1,331,166
2023	589,455	298,636	90,028	48,353	32,468	26,301	21,611	18,511	16,424	14,235	308,076	1,464,098
Share												
Year (Jan.-Dec.)	1st- 10th Companies	11th- 20th Companies	21st- 30th Companies	31st- 40th Companies	41st- 50th Companies	51st- 60th Companies	61st- 70th Companies	71st- 80th Companies	81st- 90th Companies	91st- 100th Companies	101st- Companies	Total
2006	46.4%	17.3%	6.6%	4.1%	2.9%	2.1%	1.7%	1.4%	1.1%	0.9%	15.5%	100.0%
2007	44.8%	17.7%	7.0%	4.6%	2.8%	2.1%	1.7%	1.3%	1.1%	0.9%	16.0%	100.0%
2008	42.6%	18.4%	7.6%	4.7%	3.0%	2.2%	1.6%	1.3%	1.1%	1.0%	16.5%	100.0%
2009	45.1%	16.4%	7.0%	4.4%	3.0%	2.1%	1.6%	1.3%	1.1%	0.9%	17.2%	100.0%
2010	44.4%	16.7%	7.0%	4.2%	2.9%	2.0%	1.4%	1.3%	1.1%	1.0%	18.2%	100.0%
2011	43.4%	17.2%	7.0%	4.1%	2.9%	2.0%	1.5%	1.3%	1.2%	1.0%	18.4%	100.0%
2012	41.4%	17.2%	7.5%	4.2%	3.0%	2.0%	1.5%	1.3%	1.2%	1.0%	19.7%	100.0%
2013	39.6%	16.6%	8.1%	4.5%	3.1%	2.1%	1.6%	1.3%	1.1%	1.0%	21.0%	100.0%
2014	38.6%	17.7%	8.1%	4.4%	3.1%	2.1%	1.5%	1.3%	1.2%	1.0%	21.1%	100.0%
2015	38.8%	19.1%	7.9%	4.0%	2.8%	2.0%	1.5%	1.2%	1.1%	1.0%	20.6%	100.0%
2016	37.6%	19.5%	8.1%	4.1%	2.9%	2.0%	1.5%	1.3%	1.2%	1.0%	20.8%	100.0%
2017	37.7%	19.3%	7.9%	4.1%	2.8%	2.0%	1.6%	1.4%	1.2%	1.1%	20.8%	100.0%
2018	38.5%	19.4%	8.0%	4.0%	2.7%	2.0%	1.7%	1.4%	1.2%	1.0%	20.1%	100.0%
2019	39.2%	20.5%	6.9%	3.5%	2.4%	2.0%	1.6%	1.5%	1.2%	1.0%	20.3%	100.0%
2020	40.0%	21.1%	6.2%	3.3%	2.4%	2.0%	1.5%	1.4%	1.2%	1.0%	19.8%	100.0%
2021	39.1%	21.2%	6.0%	3.5%	2.3%	1.9%	1.5%	1.3%	1.2%	1.0%	21.0%	100.0%
2022	39.9%	20.8%	5.8%	3.4%	2.3%	1.8%	1.4%	1.2%	1.1%	0.9%	21.4%	100.0%
2023	40.3%	20.4%	6.1%	3.3%	2.2%	1.8%	1.5%	1.3%	1.1%	1.0%	21.0%	100.0%

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Concentration on Pharmaceutical Sales to Leading Companies (Worldwide Market) (2/2)

A-2-8

(2) Cumulative Total Sales

Cumulative Total Sales (USD mil.)											
Year (Jan.-Dec.)	Top10 Companies	Top20 Companies	Top30 Companies	Top40 Companies	Top50 Companies	Top60 Companies	Top70 Companies	Top80 Companies	Top90 Companies	Top100 Companies	Total
2006	281,663	386,615	426,819	451,679	469,002	481,892	492,069	500,368	507,289	513,017	606,776
2007	300,896	419,636	467,022	497,613	516,586	530,821	542,080	550,677	558,029	564,242	671,687
2008	308,869	442,537	497,335	531,480	553,096	569,342	580,984	590,401	598,208	605,124	724,790
2009	338,529	462,061	514,554	547,974	570,209	585,990	597,801	607,198	615,140	622,191	751,027
2010	351,057	482,820	537,905	570,854	593,544	609,134	620,418	630,321	639,383	647,073	790,827
2011	370,323	517,497	577,440	612,639	637,039	653,945	666,368	677,389	687,336	695,884	853,499
2012	354,531	502,018	565,851	601,851	627,715	644,844	657,951	669,201	679,415	687,910	856,790
2013	346,224	491,242	561,826	601,600	629,033	647,463	661,060	672,534	682,551	691,473	874,842
2014	361,801	528,076	603,734	644,935	673,682	693,363	707,782	720,091	730,910	740,665	938,334
2015	368,964	550,775	625,664	664,026	690,610	709,224	723,737	735,582	746,199	755,856	951,994
2016	381,106	578,531	660,936	702,947	731,921	751,761	767,199	780,433	792,255	802,663	1,013,670
2017	391,369	592,231	674,336	717,338	745,910	766,667	783,664	798,429	811,385	822,775	1,044,802
2018	409,961	616,214	701,668	744,443	773,636	795,342	813,454	828,642	841,137	851,703	1,071,783
2019	434,198	661,060	737,788	776,374	803,254	824,884	842,819	859,095	872,101	883,317	1,115,243
2020	462,561	706,187	778,251	816,900	844,991	867,707	885,603	901,536	914,947	926,503	1,161,932
2021	498,206	767,635	844,400	888,746	918,649	942,222	961,438	978,485	993,233	1,006,123	1,280,474
2022	531,141	808,059	885,041	930,233	960,680	984,262	1,003,451	1,019,899	1,034,175	1,046,812	1,331,166
2023	589,455	888,091	978,119	1,026,472	1,058,940	1,085,241	1,106,852	1,125,363	1,141,787	1,156,022	1,464,098
Share											
Year (Jan.-Dec.)	Top10 Companies	Top20 Companies	Top30 Companies	Top40 Companies	Top50 Companies	Top60 Companies	Top70 Companies	Top80 Companies	Top90 Companies	Top100 Companies	Total
2006	46.4%	63.7%	70.3%	74.4%	77.3%	79.4%	81.1%	82.5%	83.6%	84.5%	100.0%
2007	44.8%	62.5%	69.5%	74.1%	76.9%	79.0%	80.7%	82.0%	83.1%	84.0%	100.0%
2008	42.6%	61.1%	68.6%	73.3%	76.3%	78.6%	80.2%	81.5%	82.5%	83.5%	100.0%
2009	45.1%	61.5%	68.5%	73.0%	75.9%	78.0%	79.6%	80.8%	81.9%	82.8%	100.0%
2010	44.4%	61.1%	68.0%	72.2%	75.1%	77.0%	78.5%	79.7%	80.8%	81.8%	100.0%
2011	43.4%	60.6%	67.6%	71.7%	74.6%	76.6%	78.1%	79.4%	80.6%	81.6%	100.0%
2012	41.4%	58.6%	66.0%	70.2%	73.3%	75.3%	76.8%	78.1%	79.3%	80.3%	100.0%
2013	39.6%	56.2%	64.2%	68.8%	71.9%	74.0%	75.6%	76.9%	78.0%	79.0%	100.0%
2014	38.6%	56.3%	64.3%	68.7%	71.8%	73.9%	75.4%	76.7%	77.9%	78.9%	100.0%
2015	38.8%	57.9%	65.7%	69.8%	72.5%	74.5%	76.0%	77.3%	78.4%	79.4%	100.0%
2016	37.6%	57.1%	65.2%	69.3%	72.2%	74.2%	75.7%	77.0%	78.2%	79.2%	100.0%
2017	37.7%	57.0%	64.9%	69.1%	71.8%	73.8%	75.4%	76.9%	78.1%	79.2%	100.0%
2018	38.5%	57.8%	65.8%	69.9%	72.6%	74.6%	76.3%	77.8%	78.9%	79.9%	100.0%
2019	39.2%	59.6%	66.5%	70.0%	72.4%	74.4%	76.0%	77.5%	78.6%	79.7%	100.0%
2020	40.0%	61.1%	67.4%	70.7%	73.1%	75.1%	76.7%	78.0%	79.2%	80.2%	100.0%
2021	39.1%	60.3%	66.3%	69.8%	72.2%	74.0%	75.5%	76.9%	78.0%	79.0%	100.0%
2022	39.9%	60.7%	66.5%	69.9%	72.2%	73.9%	75.4%	76.6%	77.7%	78.6%	100.0%
2023	40.3%	60.7%	66.8%	70.1%	72.3%	74.1%	75.6%	76.9%	78.0%	79.0%	100.0%

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A. Pharmaceutical Industry Outlook

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Financial Results of JPMA Member Companies (1/2)

A-3-1

FY2023 (vs. FY2022)

Company	Total Sales (JPY mil.)		Pharmaceutical Sales (JPY mil.)		Operating Income (JPY mil.)		Ordinary Income (JPY mil.)		Net Income (JPY mil.)		No. of Employees	
	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023
Alfresa Pharma	*	36,447	46,531	—	25	273	276	548	△ 256	266	—	—
Amgen	*	68,619	87,991	—	3,207	4,098	3,157	4,068	2,126	2,731	ca.700	ca.700
Asahi Kasei Pharma	*	82,966	81,044	80,173	14,285	10,719	13,760	10,312	9,899	6,531	1,629	1,600
ASKA Pharma.	*	54,567	57,303	53,762	4,739	6,468	4,962	6,628	4,084	7,697	829	838
Astellas	*	1,518,619	1,603,672	1,469,906	133,029	25,518	338,241	373,257	98,714	17,045	14,484	14,754
AstraZeneca	*	443,491	421,527	443,491	29,861	32,350	31,816	34,351	22,049	23,789	3,163	3,274
Bayer	*	229,648	223,877	227,308	16,607	21,794	15,238	20,931	△ 11,917	24,325	2,129	1,590
Biogen	*	19,340	18,078	19,340	675	639	787	768	428	503	—	197
Boehringer Ingelheim	*	186,800	200,159	—	10,824	4,098	11,361	3,712	5,787	2,226	—	—
Bristol-Myers Squibb	*	209,307	206,594	—	19,721	21,152	20,964	22,239	14,839	12,947	—	—
Chugai		1,259,946	1,111,367	1,039,247	533,309	439,174	—	—	374,429	325,472	7,771	7,604
Daiichi Sankyo		1,278,478	1,601,688	1,278,478	120,580	211,588	—	—	109,188	201,016	17,435	18,726
EA Pharma	*	56,411	56,622	—	6,873	5,454	7,059	5,385	4,755	3,902	940	—
Eisai		744,402	741,751	684,434	40,040	53,408	—	—	55,432	43,784	11,076	11,067
Eli Lilly	*	—	195,427	—	15,332	—	—	15,718	—	10,642	—	2,745
Fujimoto Pharma.	*	—	—	—	—	—	—	—	—	—	479	441
Fuji Pharma		35,426	40,889	35,426	3,777	3,858	3,725	4,519	2,696	3,435	1,560	1,621
Fuso Pharma.		51,015	55,407	—	2,206	1,964	2,215	1,868	1,605	1,377	1,314	1,307
GlaxoSmithKline	*	302,693	214,030	—	25,478	19,046	24,900	18,903	16,978	13,134	2,500	2,500
Hisamitsu Pharma.		128,330	141,706	125,202	11,599	13,167	16,051	19,649	11,742	13,969	2,769	2,759
Janssen	*	311,742	320,840	—	30,986	32,866	276,153	323,796	258,476	308,258	—	—
JCR Pharma		34,343	42,871	—	4,975	7,531	5,418	7,264	3,772	5,507	879	934
Kaken Pharma.		72,984	72,044	—	7,998	9,513	8,727	9,951	5,440	8,025	1,130	1,135
Kissei Pharma.		67,493	75,579	56,243	△ 1,129	4,017	598	6,142	10,528	11,160	1,795	1,779
Kowa		743,197	573,930	159,674	9,415	20,097	17,956	22,030	23,156	14,220	7,865	7,974
Kracie		32,632	88,731	31,725	4,657	6,436	5,191	7,260	3,494	5,397	1,124	1,980
Kyorin Pharma.		113,270	119,532	109,699	5,123	6,013	5,827	6,602	4,723	5,322	2,138	2,042
Kyoto Pharma.	*	7,319	8,068	3,327	573	949	759	1,113	334	680	312	324
Kyowa Kirin		398,371	442,233	398,371	86,697	96,785	—	—	53,573	81,188	5,982	5,974
Maruho		95,390	96,184	85,031	16,431	6,227	15,035	6,967	7,972	3,866	2,213	2,241
Maruishi Pharma.	*	38,809	42,378	38,143	163	1,015	1,053	3,000	1,193	2,204	473	481
Meiji Holdings, Pharmaceuticals Seg.	†	197,200	206,100	197,200	21,700	22,700	22,300	23,100	23,100	10,000	6,685	6,753

Note :

1. Only includes JPMA members who responded to the survey. "*" represents companies which adopt Non-consolidated Financial Statements.
2. "—" represents invalid answers or not-public.
3. † : Amounts are rounded down to the nearest 100 million yen.

Source : JPMA Survey (member companies as of Nov.2024), Financial statements.

Financial Results of JPMA Member Companies (2/2)

A-3-1

Company	Total Sales (JPY mil.)		Pharmaceutical Sales (JPY mil.)		Operating Income (JPY mil.)		Ordinary Income (JPY mil.)		Net Income (JPY mil.)		No. of Employees	
	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023
Mitsubishi Tanabe	535,449	437,364	535,449	437,364	91,579	68,935	92,562	78,564	83,596	56,403	6,370	5,569
Mochida Pharma.	103,261	102,885	95,360	94,850	8,507	5,802	9,085	6,037	6,649	4,547	1,529	1,522
MSD	423,586	395,277	—	—	33,243	32,272	32,568	31,914	22,379	21,855	—	—
Nippon Chemiphar	31,559	30,748	26,148	24,093	△ 241	△ 494	58	△ 219	339	△ 180	872	887
Nippon Kayaku	198,380	201,791	51,711	52,765	21,505	7,337	23,025	12,562	15,042	4,179	5,782	5,902
Nippon Shinyaku	144,175	148,255	121,988	125,105	30,049	33,295	30,489	33,616	22,812	25,851	2,186	2,213
Nippon Zoki Pharma.	22,685	23,272	22,630	22,767	△ 1,081	1,047	△ 214	1,744	45	11,599	573	515
Novartis	245,131	269,504	—	—	24,748	8,588	24,630	8,435	8,291	4,847	—	—
Novo Nordisk	119,593	129,764	119,593	126,450	7,158	6,477	7,869	7,240	4,472	4,845	1,068	1,135
Ono Pharma.	447,187	502,672	447,187	306,711	141,963	159,935	143,532	163,734	112,913	127,977	3,761	3,853
Otsuka Pharma.	597,093	716,504	—	—	139,468	220,664	169,838	236,728	124,254	186,602	5,877	5,940
Sanofi	183,700	205,800	—	—	15,200	10,700	15,100	18,400	9,400	13,700	—	1,513
Santen Pharma.	279,037	301,965	270,863	292,267	△ 3,090	38,541	—	—	△ 14,983	26,703	4,144	3,744
Sanwa Kagaku	44,382	46,399	—	—	1,221	976	1,244	995	712	665	—	—
Seikagaku	33,456	36,213	22,723	25,942	2,114	433	3,069	1,691	2,236	2,186	976	988
Senju Pharma.	46,407	48,969	46,317	36,802	7,427	7,157	8,759	9,146	6,689	7,504	969	1,002
Shionogi	426,684	435,081	235,300	435,081	149,003	153,310	—	—	184,496	162,030	5,680	4,959
Sumitomo Pharma	555,544	314,558	510,722	313,194	△ 76,979	△ 354,859	—	—	△ 96,714	△ 314,929	6,250	4,980
Sun Pharma	—	—	—	—	—	—	—	—	—	—	278	250
Taiho Pharma.	139,390	167,351	132,164	156,912	3,057	22,532	13,960	26,041	5,136	21,404	2,170	2,159
Takeda	4,027,478	4,263,762	4,027,478	4,263,762	490,505	214,075	—	—	317,038	144,197	49,095	49,281
Teijin Pharma	150,634	144,763	—	—	27,036	7,327	26,137	6,871	17,825	4,844	—	—
Teikoku Seiyaku	35,629	39,516	33,900	36,285	4,086	5,763	7,910	8,133	7,109	4,608	739	797
Toa Eiyo	12,954	12,958	12,819	12,770	98	322	731	999	982	286	488	422
Toray	2,489,330	2,464,596	3,570	2,824	109,001	57,651	—	—	80,839	30,455	48,682	48,140
Torii Pharma.	48,896	54,638	48,563	54,339	5,540	5,035	5,537	5,307	3,944	4,119	563	583
Tsumura	140,043	150,845	140,043	150,845	20,916	20,017	23,453	23,493	17,386	18,046	4,032	4,138
Wakamoto Pharma.	8,660	7,738	8,480	7,654	141	△ 196	242	△ 162	138	109	292	274
Zeria Pharma.	68,383	75,725	68,231	75,570	9,014	9,621	7,579	8,513	6,195	7,731	1,729	1,777

Note :

1. Only includes JPMA members who responded to the survey. "*" represents companies which adopt Non-consolidated Financial Statements.
2. '—' represents invalid answers or not-public.

Source : JPMA Survey (member companies as of Nov.2024), Financial statements.

Financial Results of the Leading Pharmaceutical Manufacturers (20 companies / Consolidated)(Japan)

A-3-2

FY2023

Company	Accounting Standards	Total Sales (JPY mil.)	Pharma Segment Sales (JPY mil.)	% of Total Sales	Income before tax (JPY mil.)	% of Total Sales	Net Income (JPY mil.)	% of Total Sales	Total Assets (JPY mil.)	Equity (JPY mil.)	Equity Ratio (%)	ROA (%)	ROE (%)	Overseas sales (JPY mil.)	% of Total Sales	No. of Employees
Takeda	IFRS	4,263,762	4,263,762	100.0	52,791	1.2	144,067	3.4	15,108,792	7,273,264	48.1	1.0	2.1	3,812,369	89.4	49,281
Otsuka Holdings	IFRS	2,018,568	1,364,358	67.6	142,655	7.1	121,616	6.0	3,361,244	2,393,683	71.2	3.8	5.3	1,347,716	66.8	34,388
Astellas	IFRS	1,603,672	1,603,672	100.0	24,969	1.6	17,045	1.1	3,569,603	1,595,988	44.7	0.6	1.1	1,317,454	82.2	14,754
Daiichi Sankyo	IFRS	1,601,688	1,601,688	100.0	237,234	14.8	200,731	12.5	3,461,135	1,688,173	48.8	6.7	12.8	1,001,710	62.5	18,726
Chugai	IFRS	1,111,367	1,111,367	100.0	443,821	39.9	325,472	29.3	1,932,547	1,625,580	84.1	17.1	21.3	552,133	49.7	7,604
Eisai	IFRS	741,751	691,458	93.2	61,823	8.3	42,406	5.7	1,393,799	875,614	62.8	3.2	5.1	515,306	69.5	11,067
Ono Pharma.	IFRS	502,672	502,672	100.0	163,734	32.6	127,977	25.5	913,668	792,961	86.8	14.3	16.7	194,444	38.7	3,853
Kyowa Kirin	IFRS	442,233	442,233	100.0	97,246	22.0	81,188	18.4	1,025,942	836,418	81.5	8.3	10.2	288,772	65.3	5,974
Mitsubishi Tanabe	IFRS	437,400	437,400	100.0	-	-	56,400	12.9	-	-	-	-	-	127,200	29.1	-
Shionogi	IFRS	410,073	410,073	100.0	198,283	48.4	162,030	39.5	1,416,918	1,235,325	87.2	11.9	13.9	254,792	62.1	4,959
Sumitomo Pharma	IFRS	314,558	314,558	100.0	△ 323,114	△ 102.7	△ 314,969	△ 100.1	907,506	156,063	17.2	△ 30.8	△ 111.9	207,215	65.9	4,980
Santen Pharma.	IFRS	301,965	301,965	100.0	29,874	9.9	26,642	8.8	435,699	306,055	70.2	6.2	8.9	126,358	41.8	3,744
Tsumura	J-GAAP	150,845	150,845	100.0	23,736	15.7	16,707	11.1	428,254	270,802	63.2	4.0	6.4	17,472	11.6	4,138
Nippon Shinyaku	IFRS	148,255	125,105	84.4	33,616	22.7	25,851	17.4	263,404	220,224	83.6	10.3	12.4	63,207	42.6	2,213
Hisamitsu Pharma.	J-GAAP	141,706	141,706	100.0	19,186	13.5	13,969	9.9	328,779	264,877	80.6	4.3	5.4	60,679	42.8	2,759
Kyorin Pharma.	J-GAAP	119,532	119,532	100.0	7,019	5.9	5,322	4.5	177,679	130,783	73.6	3.0	4.2	-	< 10	2,042
Mochida Pharma.	J-GAAP	102,885	102,885	100.0	6,160	6.0	4,547	4.4	158,800	127,967	80.6	2.9	3.6	-	< 10	1,522
Zeria Pharma.	J-GAAP	75,725	75,570	99.8	9,508	12.6	7,731	10.2	150,534	79,623	52.9	5.4	10.7	38,973	51.5	1,777
Kissei Pharma.	J-GAAP	75,579	63,348	83.8	14,449	19.1	11,160	14.8	260,929	220,029	84.3	4.6	5.4	-	< 10	1,779
Kaken Pharma.	J-GAAP	72,044	69,613	96.6	9,796	13.6	8,025	11.1	171,623	143,755	83.8	4.7	5.7	-	< 10	1,135

Note :

1. Except when published data is not available (unlisted companies etc.).

2. Overseas sales values are not noted if the values are less than 10% of total sales, and if there are no overseas sales information in the annual reports.

3. IFRS: International Financial Reporting Standards, J-GAAP: Japan Generally Accepted Accounting Principles

ROA (Return on Asset), ROE (Return on Equity)

Source: SPEEDA (UZABASE Inc.), Annual reports, Financial Information

Financial Results of the Leading Pharmaceutical Manufacturers (25 companies / Consolidated)(Worldwide)

A-3-3

FY2023

Company	Accounting Standards	Period	Currency	Total Sales	Pharma Segment Sales	Pharma Segment Sales by USD mil.	% of Total Sales	Income before tax	% of Total Sales	Net Income	% of Total Sales	Total Assets	Equity	Equity Ratio (%)	ROA (%)	ROE (%)	No. of Employees	Income before tax/ No. of Employees (USD 1,000)
Pfizer	US-GAAP	2023/12	USD mil.	58,496	57,186	57,186	97.8	1,058	1.8	2,119	3.6	226,501	89,014	39.3	1.0	2.3	88,000	12.0
Johnson & Johnson	US-GAAP	2023/12	USD mil.	85,159	54,759	54,759	64.3	15,062	17.7	35,153	41.3	167,558	68,774	41.0	19.8	48.3	131,900	114.2
AbbVie	US-GAAP	2023/12	USD mil.	54,318	54,318	54,318	100.0	6,250	11.5	4,820	8.9	134,711	10,360	7.7	3.5	34.9	50,000	125.0
Merck (USA)	US-GAAP	2023/12	USD mil.	60,115	53,583	53,583	89.1	1,889	3.1	365	0.6	106,675	37,581	35.2	0.3	0.9	72,000	26.2
Roche	IFRS	2023/12	CHF mil.	58,716	44,612	49,652	76.0	14,079	24.0	11,498	19.6	90,468	29,315	32.4	12.9	40.1	103,605	151.2
AstraZeneca	IFRS	2023/12	USD mil.	45,811	45,811	45,811	100.0	6,899	15.1	5,955	13.0	101,119	39,143	38.7	6.0	15.6	89,900	76.7
Novartis	IFRS	2023/12	USD mil.	45,440	45,440	45,440	100.0	9,123	20.1	14,854	32.7	99,945	46,667	46.7	13.7	28.0	76,057	119.9
Bristol-Myers Squibb	US-GAAP	2023/12	USD mil.	45,006	45,006	45,006	100.0	8,440	18.8	8,025	17.8	95,159	29,430	30.9	8.4	26.5	34,100	247.5
Sanofi	IFRS	2023/12	EUR mil.	43,070	37,890	41,185	88.0	7,153	16.6	5,400	12.5	126,464	74,040	58.5	4.3	7.3	86,088	90.3
GlaxoSmithKline	IFRS	2023/12	GBP mil.	30,328	30,328	37,696	100.0	6,064	20.0	4,928	16.2	59,005	13,347	22.6	8.3	41.2	70,212	107.3
Eli Lilly	US-GAAP	2023/12	USD mil.	34,124	34,124	34,124	100.0	6,555	19.2	5,240	15.4	64,006	10,772	16.8	9.2	48.9	43,000	152.4
Novo Nordisk	IFRS	2023/12	DKK mil.	232,261	232,261	33,711	100.0	104,674	45.1	83,683	36.0	314,486	106,561	33.9	30.1	88.1	63,370	239.7
Takeda	IFRS	2024/03	JPY mil.	4,263,762	4,263,762	30,349	100.0	52,791	1.2	144,067	3.4	15,108,792	7,273,264	48.1	1.0	2.1	49,281	7.6
Amgen	US-GAAP	2023/12	USD mil.	28,190	28,190	28,190	100.0	7,855	27.9	6,717	23.8	97,154	6,232	6.4	8.3	135.8	26,700	294.2
Gilead Sciences	US-GAAP	2023/12	USD mil.	27,116	27,116	27,116	100.0	6,859	25.3	5,665	20.9	62,125	22,833	36.8	9.0	25.7	18,000	381.1
Boehringer Ingelheim	HGB	2023/12	EUR mil.	25,611	20,774	22,580	81.1	-	-	-	-	-	-	-	-	-	53,565	-
Bayer	IFRS	2023/12	EUR mil.	47,637	18,081	19,653	38.0	△ 1,621	△ 3.4	△ 2,941	△ 6.2	116,259	32,927	28.3	△ 2.4	△ 8.2	99,723	△ 17.7
Teva	US-GAAP	2023/12	USD mil.	15,846	15,846	15,846	100.0	△ 624	△ 3.9	△ 559	△ 3.5	43,479	7,506	17.3	△ 1.3	△ 7.3	37,226	△ 16.8
Viatris Inc	US-GAAP	2023/12	USD mil.	15,427	15,427	15,427	100.0	203	1.3	55	0.4	47,686	20,719	43.4	0.1	0.3	38,000	5.3
CSL	IFRS	2024/06	USD mil.	14,800	14,800	14,800	100.0	3,375	22.8	2,642	17.9	38,022	17,363	45.7	7.1	15.9	32,000	105.5
Astellas	IFRS	2024/03	JPY mil.	1,603,672	1,603,672	11,415	100.0	24,969	1.6	17,045	1.1	3,569,603	1,595,988	44.7	0.6	1.1	14,754	12.0
Daiichi Sankyo	IFRS	2024/03	JPY mil.	1,601,688	1,601,688	11,401	100.0	237,234	14.8	200,731	12.5	3,461,135	1,688,173	48.8	6.7	12.8	18,726	90.2
Bigen	US-GAAP	2023/12	USD mil.	9,836	9,836	9,836	100.0	1,297	13.2	1,161	11.8	26,845	14,799	55.1	4.5	8.2	7,570	171.3
Otsuka Holdings	IFRS	2023/12	JPY mil.	2,018,568	1,364,358	9,711	67.6	142,655	7.1	121,616	6.0	3,361,244	2,393,683	71.2	3.8	5.3	34,388	29.5
Merck (Germany)	IFRS	2023/12	EUR mil.	20,993	8,053	8,753	38.4	3,484	16.6	2,824	13.5	48,495	26,680	55.0	5.8	10.7	62,908	60.2

Note : ROA (Return on Asset), ROE (Return on Equity)

IFRS: International Financial Reporting Standards, US-GAAP: Generally Accepted Accounting Principles(USA), HGB: Handelsgesetzbuch(Commercial Code of Germany)

Source: SPEEDA (UZABASE Inc.), Annual reports

Overseas Sales of Pharmaceuticals (Japan / USA / Europe) (1/2)

A-3-4

Japan

Company	Target	Overseas Sales	Unit	Fiscal Year																					
				2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Takeda	Outside of Japan	Value	JPY mil.	409,834	461,920	478,433	537,124	643,600	694,202	843,129	777,044	698,059	775,494	822,757	957,803	1,065,010	1,119,288	1,076,706	1,190,182	1,526,208	2,698,402	2,638,064	2,910,022	3,515,435	3,812,369
	Japan	Share	%	39.2	34.7	42.6	44.3	49.3	50.5	54.8	53.0	49.2	51.4	52.8	56.6	59.9	61.9	62.2	67.2	72.8	82.0	82.5	81.5	87.3	89.4
Astellas	Outside of Japan	Value	JPY mil.	-	-	-	398,261	450,062	489,570	468,979	460,712	422,531	421,592	464,039	622,400	758,896	882,736	847,584	893,901	930,191	925,669	952,298	1,027,223	1,233,775	1,317,454
	Japan	Share	%	-	-	-	45.3	48.9	50.3	48.6	47.3	44.3	43.5	46.1	53.4	60.8	64.3	64.6	68.7	71.2	71.2	76.2	79.3	81.2	82.2
Otsuka Holdings	Outside of Japan	Value	JPY mil.	-	-	-	-	-	-	395,014	482,337	515,487	579,704	622,747	824,440	756,969	805,752	571,545	601,300	646,460	706,506	762,555	851,055	1,083,333	1,347,716
	Japan	Share	%	-	-	-	-	-	-	41.3	50.7	47.3	50.2	51.1	56.7	61.8	55.8	47.8	48.5	50.0	50.6	53.6	56.8	62.3	66.8
Daiichi Sankyo	Outside of Japan	Value	JPY mil.	-	-	-	-	356,700	358,639	373,254	525,516	489,735	469,085	486,658	584,485	392,389	430,675	375,240	341,885	333,816	374,080	401,789	486,637	744,969	1,001,710
	Japan	Share	%	-	-	-	-	38.4	40.8	44.3	48.5	50.6	50.0	48.8	52.3	42.7	39.3	39.3	35.6	35.9	38.1	41.7	46.6	58.3	62.5
Eisai	Outside of Japan	Value	JPY mil.	233,458	262,264	288,147	343,898	410,765	454,551	475,257	465,535	401,383	259,328	231,571	243,729	240,660	251,770	243,515	257,063	346,035	415,925	382,422	512,840	494,076	515,306
	Japan	Share	%	50.0	52.4	54.1	57.2	60.9	61.9	60.8	58.0	52.2	39.9	40.4	40.6	43.9	45.9	45.2	42.8	53.8	59.8	59.2	67.8	66.4	69.5
Sumitomo Pharma	Outside of Japan	Value	JPY mil.	-	-	-	-	-	24,520	22,051	53,015	152,226	130,242	128,187	172,990	172,809	213,049	225,284	280,703	288,351	302,054	323,344	337,151	384,932	207,215
	Japan	Share	%	-	-	-	-	-	9.3	8.4	17.9	40.1	37.2	36.9	44.6	46.5	52.8	54.7	60.1	62.8	62.6	62.7	60.2	69.3	65.9
Mitsubishi Tanabe	Outside of Japan	Value	JPY mil.	-	-	-	-	-	37,283	35,208	26,862	-	-	-	47,735	59,375	77,944	116,937	103,608	117,044	65,800	64,800	76,100	216,400	127,200
	Japan	Share	%	-	-	-	-	-	9.1	8.5	6.6	-	-	-	11.4	14.4	18.8	27.1	24.4	26.0	27.6	17.3	17.1	19.7	40.4
Shionogi	Outside of Japan	Value	JPY mil.	-	-	-	-	26,063	37,658	54,486	99,842	104,436	83,190	97,676	101,951	88,619	134,438	148,458	185,177	216,591	207,535	178,587	221,546	218,905	254,792
	Japan	Share	%	-	-	-	-	13.0	17.6	23.9	35.8	37.0	31.1	34.5	35.2	32.3	43.4	43.8	53.7	59.5	62.3	60.1	66.1	61.3	62.1

USA

Company	Target	Overseas Sales	Unit	Fiscal Year																						
				2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Pfizer	Outside of USA	Value	USD mil.	11,611	18,344	22,977	24,634	22,549	25,265	27,861	28,260	38,763	40,492	35,900	31,310	28,544	26,868	26,455	26,519	28,318	27,899	20,196	51,543	57,857	31,408	
	USA	Share	%	35.9	40.6	43.8	48.0	46.6	52.2	57.7	56.5	57.2	60.1	60.9	60.7	57.5	55.0	50.1	50.5	52.8	53.9	48.2	63.4	57.7	53.7	
Johnson & Johnson	Outside of USA	Value	USD mil.	13,843	16,588	19,578	22,137	23,549	28,651	31,438	31,008	32,137	36,122	37,394	39,402	39,549	34,387	34,079	36,587	39,697	39,962	39,451	46,619	46,363	38,715	
	USA	Share	%	38.1	39.6	41.3	43.8	44.2	46.9	49.3	50.1	52.2	55.5	55.6	55.3	53.2	49.1	47.4	47.9	48.7	48.7	47.8	49.7	48.8	45.5	
Merck (USA)	Outside of USA	Value	USD mil.	-*	9,165	9,467	9,245	8,859	9,507	10,480	13,027	25,761	27,552	26,875	25,787	25,166	21,979	21,329	22,698	24,082	26,515	26,967	26,279	32,077	31,635	
	USA	Share	%	39.0	40.8	41.3	42.0	39.1	39.3	43.9	47.5	56.0	57.3	56.9	58.6	59.6	55.6	53.6	56.6	56.9	56.6	56.2	54.0	54.1	52.6	
AbbVie (2001-2010; Abbott)	Outside of USA	Value	USD mil.	6,687	7,703	8,438	9,631	10,481	12,662	15,033	16,312	19,973	7,732	7,945	8,609	9,115	9,298	9,691	9,965	11,229	9,359	10,925	12,687	12,341	12,435	
	USA	Share	%	37.8	39.1	42.9	43.1	46.6	48.9	50.9	53.0	56.8	44.3	43.2	45.8	45.7	40.7	37.8	35.3	34.3	28.1	23.9	22.6	21.3	22.9	
Gilead Sciences	Outside of USA	Value	USD mil.	-	-	-	-	-	-	-	-	3,412	3,725	3,777	4,111	4,507	6,708	11,405	11,036	7,913	5,858	5,804	6,472	8,038	8,397	7,678
	USA	Share	%	-	-	-	-	-	-	-	-	48.7	46.9	45.0	42.4	40.2	27.0	34.9	36.3	30.3	26.5	25.9	26.2	29.4	30.8	28.3
Amgen	Outside of USA	Value	USD mil.	495	1,104	1,698	2,130	2,461	2,868	3,227	3,216	3,417	3,597	3,850	4,196	4,667	4,421	4,567	4,820	5,104	6,138	6,928	7,785	7,728	8,384	
	USA	Share	%	9.0	13.2	16.1	17.1	17.2	19.4	21.5	22.0	22.7	23.1	22.3	22.5	23.3	20.4	19.9	21.1	22.7	26.3	27.2	30.0	29.4	29.7	
Eli Lilly	Outside of USA	Value	USD mil.	4,541	5,407	6,189	6,847	7,091	8,488	9,444	9,542	10,210	11,309	10,290	10,223	10,482	9,861	9,716	10,086	10,681	9,597	10,310	11,507	10,351	12,333	
	USA	Share	%	41.0	43.0	44.7	46.8	45.2	45.6	46.3	43.7	44.2	46.6	45.5	44.2	53.4	49.4	45.8	44.1	43.5	43.0	42.0	40.6	36.3	36.1	
Bristol-Myers Squibb	Outside of USA	Value	USD mil.	6,758	7,997	8,767	8,746	8,185	8,540	8,555	6,899	6,871	7,399	7,237	8,067	8,163	8,372	8,707	9,418	9,975	10,803	15,941	17,171	14,331	13,451	
	USA	Share	%	37.3	38.3	45.2	45.5	45.7	44.1	41.5	36.7	35.3	34.8	41.1	49.2	51.4	50.6	44.8	45.3	44.2	41.3	37.5	37.0	31.0	29.9	

Note :

Overseas sales includes the sales figure of pharmaceuticals and non-pharmaceuticals. ** represents only shares (%) are public.

Source: SPEEDA (UZABASE Inc.), Annual reports

Overseas Sales of Pharmaceuticals (Japan / USA / Europe) (2/2)

A-3-4

Company	Target	Overseas Sales	Unit	Fiscal Year																					
				2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Novartis	Outside of Europe	Value	USD mil.	21,810	16,076	17,958	20,212	23,429	23,692	23,425	25,905	32,066	37,059	36,965	36,842	33,490	32,942	31,439	31,439	32,836	29,512	29,944	31,429	32,078	30,443
		Share	%	67.3	64.7	63.6	62.7	63.3	59.5	56.5	58.5	63.3	65.3	65.2	63.6	64.2	66.7	64.8	64.4	63.3	62.2	61.5	60.9	63.5	67.0
Novartis	Outside of Switzerland	Value	USD mil.	31,920	24,545	27,917	31,846	36,608	39,352	40,928	43,663	50,040	57,840	55,967	57,185	51,522	48,640	47,688	47,688	51,048	46,597	47,859	50,753	49,575	44,132
		Share	%	98.5	98.7	98.8	98.9	98.9	98.9	98.7	98.6	98.8	98.8	98.8	98.7	98.7	98.4	98.3	98.3	98.4	98.2	98.4	98.3	98.3	97.1
Sanofi	Outside of Europe	Value	EUR mil.	3,151	3,355	7,692	15,177	16,154	15,868	15,472	17,247	20,169	21,593	23,891	22,447	23,364	24,681	24,052	24,052	25,029	27,274	26,890	28,002	32,998	32,678
		Share	%	42.3	41.7	51.1	55.6	56.9	56.6	56.1	58.9	62.3	64.7	68.4	68.1	69.2	71.5	71.1	71.1	72.6	75.5	74.6	74.2	76.7	75.9
Sanofi	Outside of France	Value	EUR mil.	-	-	-	-	-	24,442	24,121	26,100	29,275	30,283	32,101	30,380	31,296	32,294	31,615	31,615	32,144	33,865	33,818	35,505	40,701	40,691
		Share	%	-	-	-	-	-	87.1	87.5	89.1	90.4	90.7	91.9	92.2	92.7	93.5	93.5	93.3	93.3	93.7	93.8	94.0	94.7	94.5
Roche	Outside of Europe	Value	CHF mil.	18,474	19,490	18,259	22,234	26,440	28,559	27,986	30,765	30,783	28,184	31,152	32,184	32,917	34,868	36,731	36,731	43,244	48,172	44,550	46,403	48,977	45,467
		Share	%	62.7	62.4	61.8	62.6	62.9	61.9	61.3	62.7	64.8	66.3	68.5	68.8	69.4	72.4	72.6	72.6	76.1	78.4	76.4	73.9	77.4	77.4
Roche	Outside of Switzerland	Value	CHF mil.	28,924	30,691	29,137	35,010	41,570	45,644	45,108	48,552	47,009	42,024	44,994	46,254	46,936	47,648	49,999	49,999	56,219	60,876	57,653	62,070	62,598	58,037
		Share	%	98.2	98.3	98.7	98.6	98.9	98.9	98.9	99.0	99.0	98.8	98.9	98.9	98.9	98.9	99.0	98.9	98.9	99.0	98.9	98.9	98.8	98.9
GlaxoSmithKline	Outside of Europe	Value	GBP mil.	15,148	14,830	13,591	14,768	16,215	15,477	16,090	-	-	-	19,111	18,994	16,714	17,473	20,413	22,243	22,848	25,685	25,935	26,276	22,976	23,764
		Share	%	71.4	69.2	68.0	68.2	69.8	68.1	66.1	-	-	-	72.3	71.7	72.7	73.0	73.2	73.7	74.1	76.1	76.1	77.0	78.4	78.4
GlaxoSmithKline	Outside of UK	Value	GBP mil.	19,846	20,037	18,604	20,229	21,724	21,163	22,710	26,504	26,572	25,781	24,906	24,964	21,906	22,817	26,833	29,246	29,898	32,812	33,119	33,139	28,629	29,635
		Share	%	93.6	93.5	93.1	93.4	93.5	93.2	93.3	93.4	93.6	94.1	94.2	94.2	95.2	95.4	96.2	96.9	97.0	97.2	97.1	97.1	97.6	97.7
AstraZeneca	Outside of Europe	Value	USD mil.	12,146	12,140	13,776	15,487	17,572	19,418	20,670	22,461	22,921	23,829	20,263	18,505	18,928	17,873	15,845	14,951	16,192	20,222	20,040	26,345	32,325	32,718
		Share	%	68.1	64.4	64.3	64.7	66.4	65.7	65.4	68.5	68.9	70.9	72.4	72.0	72.5	75.6	74.3	74.2	76.9	82.9	75.3	70.4	72.9	71.4
AstraZeneca	Outside of UK	Value	USD mil.	17,218	18,317	20,836	23,193	25,625	28,556	30,607	31,747	32,236	32,725	27,305	25,026	25,322	23,053	20,832	19,663	20,580	22,562	24,876	34,172	41,234	42,443
		Share	%	96.5	97.2	97.2	96.8	96.8	96.6	96.9	96.8	96.9	97.4	97.6	97.3	97.0	97.5	97.7	97.6	97.8	92.5	93.5	91.3	93.0	92.6
Bayer	Outside of Europe	Value	EUR mil.	17,654	16,405	16,843	15,453	16,304	18,032	18,369	18,200	21,337	22,087	25,030	25,071	26,027	30,375	27,961	21,627	25,443	30,361	28,519	30,433	36,310	33,551
		Share	%	59.6	57.4	56.6	56.4	56.3	55.7	55.8	58.4	60.8	60.5	63.0	62.4	63.0	65.6	59.8	61.8	64.3	69.7	68.9	69.0	71.6	70.4
Bayer	Outside of Germany	Value	EUR mil.	-*	-*	-*	-*	-*	-*	28,121	27,021	30,656	31,880	35,101	35,295	37,258	41,160	41,960	31,623	35,767	41,181	39,039	41,536	48,262	45,189
		Share	%	86.0	85.8	86.3	84.7	84.4	85.1	85.4	86.7	87.4	87.3	88.3	87.9	88.2	89.3	88.3	90.3	90.4	94.6	94.3	94.2	95.1	94.9
Novo Nordisk	Outside of Europe	Value	DKK mil.	14,307	14,798	16,620	20,313	24,035	25,481	28,334	33,538	42,112	47,178	58,319	63,509	68,656	87,129	91,098	95,629	95,165	98,759	92,649	103,094	132,718	181,394
		Share	%	56.8	55.8	57.2	60.2	62.0	60.9	62.2	65.7	69.3	71.1	74.7	76.0	77.3	80.7	81.5	85.6	85.1	80.9	73.0	73.2	75.0	78.1
Boehringer Ingelheim	Outside of Europe	Value	EUR mil.	5,333	4,939	5,535	6,418	7,279	7,374	7,718	8,741	8,497	9,134	10,497	9,798	9,236	10,671	10,768	10,768	12,182	13,308	13,687	14,064	16,606	17,415
		Share	%	70.4	66.9	67.9	67.3	68.8	67.3	66.6	68.7	67.5	69.3	71.5	69.7	69.4	72.1	67.9	67.9	69.6	70.1	70.0	68.2	68.8	68.0
Boehringer Ingelheim	Outside of Germany	Value	EUR mil.	6,968	6,739	-	8,719	9,752	10,099	10,615	11,670	-	-	13,658	13,047	12,405	13,896	14,894	14,155	16,610	17,273	17,803	18,751	22,057	-
		Share	%	91.9	91.3	-	91.4	92.2	92.2	91.5	91.7	-	-	93.0	92.8	93.2	93.9	94.0	94.6	94.9	90.9	91.0	90.9	91.3	-

Note :

Overseas sales includes the sales figure of pharmaceuticals and non-pharmaceuticals. ** represents only shares (%) are public.

Source: SPEEDA (UZABASE Inc.), Annual reports

Comparison of Profitability by company for research-based industries (Worldwide) (1/2)

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FY2023

Industry	Company	Accounting Standards	Currency	Period	Total Sales	Net Income		ROA (%)	ROE (%)	Liquidity Ratio (%)	Aggregate Market	
						in USD mil.	in USD mil.				Value of stock	in USD mil.
Pharmaceuticals	Takeda	IFRS	JPY mil.	2024/03	4,263,762	30,349	144,067	1.0	2.1	110.6	6,564,752	46,727
	Otsuka Holdings	IFRS	JPY mil.	2023/12	2,018,568	14,368	121,616	3.8	5.3	198.9	2,870,266	20,430
	Astellas	IFRS	JPY mil.	2024/03	1,603,672	11,415	17,045	0.6	1.1	92.9	2,946,962	20,976
	Daiichi Sankyo	IFRS	JPY mil.	2024/03	1,601,688	11,401	200,731	12.5	12.8	300.5	9,159,910	65,199
	Chugai	IFRS	JPY mil.	2023/12	1,111,367	7,911	325,472	29.3	21.3	474.1	8,789,267	62,561
	Eisai	IFRS	JPY mil.	2024/03	741,751	5,280	42,406	5.7	5.1	237.5	1,782,782	12,690
	Ono pharma.	IFRS	JPY mil.	2024/03	502,672	3,578	127,977	25.5	16.7	399.1	1,198,728	8,532
	Kyowa Kirin	IFRS	JPY mil.	2023/12	442,233	3,148	81,188	18.4	10.2	458.7	1,274,134	9,069
	Mitsubishi Tanabe	IFRS	JPY mil.	2024/03	437,400	3,113	56,400	12.9	-	-	-	-
	Shionogi	IFRS	JPY mil.	2024/03	410,073	2,919	162,030	39.5	13.9	585.6	2,197,060	15,638
	Toyota	IFRS	JPY mil.	2024/03	45,095,325	320,983	4,944,933	11.0	15.8	119.0	51,094,060	363,682
	Automobiles	Honda	IFRS	JPY mil.	2024/03	20,428,802	145,410	1,107,174	5.4	4.1	142.6	9,131,464
Nissan		J-GAAP	JPY mil.	2024/03	12,685,716	90,296	426,649	3.4	2.3	186.0	2,275,166	16,194
Sony		IFRS	JPY mil.	2024/03	13,020,768	92,680	970,573	7.5	2.9	66.5	15,860,514	112,893
Electric Machinery	Hitachi	IFRS	JPY mil.	2024/03	9,728,716	69,248	589,896	6.1	4.8	121.9	12,884,675	91,712
	Panasonic	IFRS	JPY mil.	2024/03	8,496,420	60,477	443,994	5.2	5.1	133.0	3,374,297	24,018
	Mitsubishi	IFRS	JPY mil.	2024/03	5,257,914	37,425	284,949	5.4	4.9	197.1	5,245,743	37,339
	Canon	US-GAAP	JPY mil.	2023/12	4,180,972	29,760	264,513	6.3	5.0	154.5	3,575,831	25,452
	Fujitsu	IFRS	JPY mil.	2024/03	3,756,059	26,735	254,478	6.8	7.5	144.6	5,099,336	36,297
	NEC	IFRS	JPY mil.	2024/03	3,477,262	24,751	149,521	4.3	3.6	145.8	2,928,338	20,844
	Ricoh	IFRS	JPY mil.	2024/03	2,348,987	16,720	44,176	1.9	2.0	136.9	815,201	5,803
	Johnson & Johnson	US-GAAP	USD mil.	2023/12	85,159	85,159	35,153	41.3	19.8	48.3	377,317	377,317
	Merck (USA)	US-GAAP	USD mil.	2023/12	60,115	60,115	365	0.6	0.3	0.9	276,259	276,259
	Pfizer	US-GAAP	USD mil.	2023/12	58,496	58,496	2,119	3.6	1.0	2.3	162,560	162,560
Pharmaceuticals	AbbVie	US-GAAP	USD mil.	2023/12	54,318	54,318	4,820	8.9	3.5	87.2	273,605	273,605
	Bristol-Myers Squibb	US-GAAP	USD mil.	2023/12	45,006	45,006	8,025	17.8	8.4	26.5	104,403	104,403
	Eli Lilly	US-GAAP	USD mil.	2023/12	34,124	34,124	5,240	15.4	9.2	48.9	553,370	553,370
	Amgen	US-GAAP	USD mil.	2023/12	28,190	28,190	6,717	23.8	8.3	135.8	154,142	154,142
	Gilead Sciences	US-GAAP	USD mil.	2023/12	27,116	27,116	5,665	20.9	9.0	25.7	100,942	100,942

Note : ROA (Return on Asset), ROE (Return on Equity)

1. IFRS: International Financial Reporting Standards, US-GAAP: Generally Accepted Accounting Principles(USA), J-GAAP: Japan Generally Accepted Accounting Principles

2. Aggregate Market Values of stock were at the applicable last business day of FY2023 for each company.

3. '-' represents that published data is not available.

Source: SPEEDA (UZABASE Inc.), Annual reports

Comparison of Profitability by company for research-based industries (Worldwide) (2/2)

A-3-5

Industry	Company	Accounting Standards	Currency	Period	Total Sales	Net Income		ROA (%)	ROE (%)	Liquidity Ratio (%)	Aggregate Market Value of stock	in USD mil.
						in USD mil.	in USD mil.					
USA	Amazon	US-GAAP	USD mil.	2023/12	574,785	30,425	30,425	5.3	6.1	104.5	1,570,153	1,570,153
	Apple	US-GAAP	USD mil.	2024/09	391,035	93,736	93,736	24.0	26.1	86.7	3,542,564	3,542,564
	Alphabet Inc	US-GAAP	USD mil.	2023/12	307,394	73,795	73,795	24.0	19.2	209.7	1,755,459	1,755,459
	Microsoft	US-GAAP	USD mil.	2024/06	245,122	88,136	88,136	36.0	19.1	127.5	3,321,869	3,321,869
	Meta(Facebook)	US-GAAP	USD mil.	2023/12	134,902	39,098	39,098	29.0	18.8	267.1	909,629	909,629
	Ford Motor	US-GAAP	USD mil.	2023/12	176,191	4,347	4,347	2.5	1.6	119.6	48,796	48,796
	General Motors Co	US-GAAP	USD mil.	2023/12	171,842	10,022	10,022	5.8	3.7	107.6	49,192	49,192
	GE	US-GAAP	USD mil.	2023/12	67,954	9,186	9,186	13.5	5.2	117.5	138,911	138,911
	IBM	US-GAAP	USD mil.	2023/12	61,860	7,502	7,502	12.1	5.7	96.4	149,341	149,341
	Intel	US-GAAP	USD mil.	2023/12	54,228	1,689	1,689	3.1	0.9	154.2	211,854	211,854
	Roche	IFRS	CHF mil.	2023/12	58,716	11,498	12,797	19.6	12.9	134.7	197,073	219,338
	Bayer	IFRS	EUR mil.	2023/12	47,637	△ 2,941	△ 3,197	△ 6.2	△ 2.4	△ 8.2	33,039	35,912
Pharmaceuticals	Sanofi	IFRS	EUR mil.	2023/12	43,070	46,815	5,400	12.5	4.3	126.7	112,552	122,339
	AstraZeneca	IFRS	USD mil.	2023/12	45,811	45,811	5,955	13.0	6.0	82.0	209,177	209,177
	Novartis	IFRS	USD mil.	2023/12	45,440	14,854	14,854	32.7	13.7	115.5	206,794	206,794
	GlaxoSmithKline	IFRS	GBP mil.	2023/12	30,328	4,928	4,928	16.2	8.3	88.5	59,112	73,473
	Novo Nordisk	IFRS	DKK mil.	2023/12	232,261	83,683	12,146	36.0	30.1	82.3	3,112,331	451,737
	Volkswagen	IFRS	EUR mil.	2023/12	322,284	16,013	17,405	5.0	2.8	116.4	57,668	62,682
Other Industries	Mercedes-Benz	IFRS	EUR mil.	2023/12	153,218	14,261	15,501	9.3	5.5	126.2	66,918	72,737
	Siemens	IFRS	EUR mil.	2024/09	75,930	8,301	9,023	10.9	5.7	139.7	143,244	155,700
	BASF	IFRS	EUR mil.	2023/12	68,902	225	245	0.3	0.3	198.3	43,537	47,323

Note :

1. IFRS: International Financial Reporting Standards, US-GAAP: Generally Accepted Accounting Principles(USA), J-GAAP: Japan Generally Accepted Accounting Principles

2. Aggregate Market Values of stock were at the applicable last business day of FY2023 for each company.

3. ' - ' represents that published data is not available.

Source: SPEEDA (UZABASE Inc.), Annual reports

ROA (Return on Asset), ROE (Return on Equity)

Comparison of Profitability by industry sectors for research-based industries (Japan) A-3-6

(Unit: %)

	Fiscal Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Pharmaceuticals (31 companies)	Net Income(Loss) after Taxes	8.4	9.1	9.4	10.2	11.3	11.2	10.7	12.5	10.7	10.4	7.2
	Business Income to Total Assets	8.3	7.5	8.0	7.5	8.2	6.5	6.7	7.2	7.3	7.8	6.7
	Return on Equity	7.5	7.6	8.0	8.3	9.3	8.3	8.0	9.0	7.9	8.0	5.4
Computers & Electric Eq. (6 companies)	Net Income(Loss) after Taxes	2.3	3.0	2.5	2.7	4.1	2.9	2.9	5.4	5.2	5.2	5.8
	Business Income to Total Assets	5.6	6.2	5.7	5.4	6.4	6.6	6.6	5.1	5.7	5.9	6.2
	Return on Equity	9.7	11.0	8.9	8.7	12.0	7.9	7.5	12.5	11.4	10.9	10.4
Electronic Eq. & Comp. (76 companies)	Net Income(Loss) after Taxes	6.1	8.4	6.8	6.5	5.1	6.1	3.9	6.1	9.8	9.0	7.3
	Business Income to Total Assets	7.3	8.7	8.2	7.4	7.4	7.5	5.4	6.1	9.0	8.7	6.6
	Return on Equity	7.8	10.3	8.0	7.1	6.1	7.2	4.3	6.5	10.9	9.8	7.1
Household Electric Appl. (18 companies)	Net Income(Loss) after Taxes	0.2	△ 0.6	0.7	1.3	4.2	6.4	4.4	7.4	6.0	4.2	5.2
	Business Income to Total Assets	2.3	2.1	2.6	3.1	4.9	4.9	4.2	4.2	4.2	3.8	3.8
	Return on Equity	0.7	△ 2.7	2.8	4.8	16.0	21.3	12.6	17.7	12.1	8.6	10.6
Automobiles (9 companies)	Net Income(Loss) after Taxes	5.8	6.0	5.8	5.2	7.0	4.7	3.2	3.8	6.0	4.9	7.6
	Business Income to Total Assets	6.3	6.2	6.1	5.0	5.3	4.8	3.9	3.0	4.3	4.4	6.7
	Return on Equity	13.3	12.6	12.2	10.3	13.7	8.9	5.7	5.7	9.2	8.1	13.3
Optical Instruments (11 companies)	Net Income(Loss) after Taxes	3.5	1.5	4.9	5.5	6.4	5.4	4.6	0.4	10.4	16.0	14.4
	Business Income to Total Assets	7.7	7.6	7.6	7.4	7.7	7.4	6.1	4.4	9.1	9.3	7.7
	Return on Equity	7.4	2.6	8.4	8.6	9.7	7.8	6.3	0.5	14.0	19.9	16.9
Manufacturing Industries (1,111 companies)	Net Income(Loss) after Taxes	4.0	4.2	4.1	4.7	5.6	5.0	3.4	4.4	6.5	5.3	5.9
	Business Income to Total Assets	6.0	6.0	6.2	5.9	6.6	6.2	5.1	4.6	6.2	6.0	6.4
	Return on Equity	8.5	8.4	7.8	8.5	10.4	9.0	5.9	6.7	10.1	8.7	9.2

Note :

1. The pharmaceutical companies surveyed include Kyowa Kirin, Kaken, Hisamitsu, Eiken Chemical, Eisai, Ono, Santen, Shionogi, Sumitomo Pharma, Takeda, Chugai, Nxera Pharma, Nippon Chemiphar, Nippon Shinyaku, Morishita Jintan, Mochida, Astellas, Rohto, Zeria, Seikagaku, Tsumura, Kissei, Towa, Taiko, JCR Pharma, SNBL, Daiichi Sankyo, Kyorin Pharmaceutical, Daito, Otsuka Holdings, Sawai Group Holdings.

2. Formulation:

Business income to total assets (%) = Operating income (loss) / Total assets × 100

Return on equity (%) = Net income (loss) / Equity × 100

Total asset employed : Current assets + Non-current assets + Deferred Assets + Note discounted

Operating income (loss) : Sales income (loss) + Amortization of goodwill + Accounts receivable and dividends

Source : Development Bank of Japan, Handbook of Industrial Financial Data 2024

Value-Added Ratio of Industrial Sectors (Japan)

A-3-7

Industrial Sector	Fiscal Year	1980	1990	2000	2010	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Manufacturing Industries	Value-Added Ratio (%)	20.4	20.7	19.9	17.7	17.2	19.3	23.9	24.8	24.7	25.3	26.1	26.7	29.5	31.4	29.2	28.5
	No. of Firms Investigated	1,014	1,046	1,144	1,052	1,023	1,021	1,025	1,026	1,021	1,022	1,027	1,017	1,010	1,187	1,161	1,149
Foods	Value-Added Ratio (%)	17.7	17.7	17.6	19.0	17.9	21.0	20.8	21.4	23.0	22.5	23.0	23.9	25.4	26.5	24.3	25.3
	No. of Firms Investigated	85	91	102	84	86	87	84	80	79	78	80	80	80	96	93	94
Textiles	Value-Added Ratio (%)	19.2	21.4	22.9	21.7	19.7	26.6	33.2	29.3	33.2	37.1	33.7	26.6	30.1	38.4	35.9	32.7
	No. of Firms Investigated	79	76	60	35	33	33	33	31	31	31	31	31	31	29	28	28
Paper & Pulp	Value-Added Ratio (%)	19.6	21.7	23.5	20.2	18.6	23.4	25.7	25.4	18.6	18.0	15.2	17.2	17.0	32.7	28.1	25.8
	No. of Firms Investigated	29	30	24	16	15	15	15	15	15	15	16	16	16	21	21	22
Printing	Value-Added Ratio (%)	21.7	19.5	17.4	14.4	14.2	40.7	31.3	32.2	31.2	31.5	30.7	30.9	28.7	33.2	38.2	38.6
	No. of Firms Investigated	8	8	12	17	17	17	18	18	17	17	17	16	16	16	15	13
Chemicals	Value-Added Ratio (%)	21.3	23.0	25.6	23.9	21.8	24.9	28.3	28.9	28.5	26.8	27.8	29.7	31.8	37.3	35.3	33.3
	No. of Firms Investigated	131	141	152	156	154	155	154	156	154	153	155	153	153	163	161	157
Chemicals-Major	Value-Added Ratio (%)	15.9	19.4	18.9	13.6	10.9	11.0	-	-	-	-	-	-	-	-	-	-
	No. of Firms Investigated	5	6	6	4	4	4	4	4	4	4	4	4	4	4	3	3
Organic Chemicals	Value-Added Ratio (%)	18.5	22.2	22.8	24.1	22.6	25.9	24.5	26.1	29.7	27.6	26.1	27.7	29.5	32.5	30.9	33.6
	No. of Firms Investigated	28	30	29	33	33	33	33	36	34	33	33	33	33	33	34	34
Inorganic Chemicals	Value-Added Ratio (%)	20.7	19.9	21.6	21.6	18.2	26.5	29.0	29.5	32.4	30.7	28.5	27.8	28.1	22.5	20.4	22.4
	No. of Firms Investigated	30	33	33	29	28	28	29	28	28	28	28	28	27	28	27	27
Oil, Fats & Cosmetics	Value-Added Ratio (%)	18.7	17.3	22.4	22.7	21.4	20.5	25.1	23.7	21.2	21.4	22.5	22.4	21.1	28.4	24.3	21.3
	No. of Firms Investigated	9	9	11	15	15	17	17	16	16	16	16	16	17	21	22	22
Paints	Value-Added Ratio (%)	16.1	18.2	20.5	18.8	19.9	20.2	22.2	25.0	27.3	27.3	26.7	26.4	28.9	18.5	16.3	13.1
	No. of Firms Investigated	15	16	18	18	17	16	15	15	15	15	15	15	15	18	18	16
Pharmaceuticals	Value-Added Ratio (%)	36.0	33.3	37.5	31.6	28.6	33.6	29.5	30.8	29.9	27.6	29.0	31.2	33.8	40.1	37.8	35.4
	No. of Firms Investigated	32	34	40	35	34	35	35	34	34	34	35	34	34	33	32	32
Petroleum	Value-Added Ratio (%)	4.7	7.2	5.1	4.8	2.6	3.4	△ 0.9	1.3	9.1	6.7	3.7	(4.0)	6.5	6.8	2.1	4.5
	No. of Firms Investigated	10	10	9	5	5	6	6	6	6	5	5	4	4	4	3	3
Rubber Products	Value-Added Ratio (%)	25.6	29.6	30.0	23.8	26.8	29.6	15.7	17.9	21.5	21.6	21.1	20.6	21.1	35.9	-	-
	No. of Firms Investigated	18	18	18	18	18	18	18	18	18	18	18	18	18	20	19	19
Stone, Clay & Glass Pds.	Value-Added Ratio (%)	24.6	23.0	24.3	27.4	23.2	18.8	17.0	19.0	19.0	19.5	22.7	20.5	22.1	24.9	20.8	19.0
	No. of Firms Investigated	61	56	52	50	48	47	47	48	46	46	46	46	46	54	53	52
Iron & Steel	Value-Added Ratio (%)	28.4	28.5	25.3	18.3	14.3	13.7	15.7	19.3	17.8	15.0	16.0	17.3	16.6	16.3	17.3	16.9
	No. of Firms Investigated	57	55	53	45	41	39	38	38	39	39	39	38	38	41	40	40
Nonferrous Metals	Value-Added Ratio (%)	15.1	16.4	19.6	11.9	11.9	33.2	35.2	28.3	28.3	31.5	34.2	33.5	33.2	33.8	36.3	35.2
	No. of Firms Investigated	37	38	37	28	27	25	25	27	28	27	27	27	27	31	30	29
Fabricated Metal Products	Value-Added Ratio (%)	22.9	25.3	22.5	22.8	23.4	24.5	24.7	24.5	24.9	27.3	27.8	29.4	31.0	30.2	28.6	27.3
	No. of Firms Investigated	45	49	58	54	51	50	50	50	51	50	52	52	52	67	63	63
Machinery	Value-Added Ratio (%)	26.8	24.4	23.4	21.6	20.7	20.5	25.3	24.4	30.0	35.8	35.7	35.4	38.0	39.1	40.0	40.3
	No. of Firms Investigated	148	154	173	160	157	157	158	154	155	159	159	159	156	184	183	182
Electric Equipment	Value-Added Ratio (%)	25.6	21.9	19.5	17.2	17.3	24.4	27.8	26.5	23.0	25.9	26.1	25.0	25.3	28.3	25.2	23.7
	No. of Firms Investigated	135	139	179	170	165	168	167	167	166	168	166	163	164	199	193	190
Computers & Electric Eq.	Value-Added Ratio (%)	-	23.8	19.5	17.8	17.3	-	-	-	18.1	18.3	18.1	19.6	20.3	18.3	16.4	16.4
	No. of Firms Investigated	-	5	5	5	5	5	5	5	6	6	7	7	7	7	7	6
Industrial Electric Eq.	Value-Added Ratio (%)	31.7	26.5	23.3	25.6	25.4	24.0	28.8	28.4	28.7	30.4	28.4	29.7	30.7	33.5	30.1	32.5
	No. of Firms Investigated	25	30	34	41	39	39	37	37	38	39	39	38	38	44	41	41
Communications Equipment	Value-Added Ratio (%)	29.4	27.0	22.9	24.2	25.8	27.8	29.8	30.1	25.9	29.8	29.6	28.0	33.4	31.3	25.6	25.7
	No. of Firms Investigated	22	22	28	23	23	23	23	22	22	20	20	19	19	21	20	20
Electric Measuring Instr.	Value-Added Ratio (%)	39.1	36.0	26.5	28.5	26.9	28.7	37.9	42.6	40.5	36.1	31.8	29.9	33.2	35.1	28.6	35.8
	No. of Firms Investigated	9	10	14	12	13	13	14	14	14	14	14	14	14	18	18	18
Electric Eq. & Comp.	Value-Added Ratio (%)	28.7	25.5	24.8	23.3	22.2	24.8	29.6	27.8	23.6	27.4	28.1	28.0	26.5	30.6	26.3	22.0
	No. of Firms Investigated	33	36	56	58	60	63	62	63	60	62	61	60	62	79	78	76
Household Electric Appl.	Value-Added Ratio (%)	19.0	16.5	15.0	11.8	11.2	20.3	17.9	18.4	19.3	18.6	18.3	17.4	18.6	19.1	19.1	20.0
	No. of Firms Investigated	27	29	29	23	18	18	19	19	19	19	17	17	17	18	16	16
Transportation Equipment	Value-Added Ratio (%)	17.7	17.3	17.6	13.8	15.5	19.3	18.2	18.5	17.5	16.9	16.5	15.2	14.6	15.1	14.1	12.5
	No. of Firms Investigated	94	102	113	108	104	101	103	105	103	101	101	99	95	108	108	105
Automobiles	Value-Added Ratio (%)	16.9	15.2	15.2	10.0	13.3	17.8	16.2	16.3	15.5	14.9	14.6	13.1	13.0	13.0	11.8	10.4
	No. of Firms Investigated	10	10	11	10	10	10	10	10	9	9	9	9	9	9	9	9
Auto Parts & Accessories	Value-Added Ratio (%)	24.3	23.8	25.6	21.3	22.5	22.5	32.1	34.4	35.2	32.3	30.1	30.5	32.0	28.5	30.4	29.2
	No. of Firms Investigated	55	61	69	74	71	68	71	73	71	70	70	69	65	77	78	75
Precision Instruments	Value-Added Ratio (%)	30.4	24.0	24.7	28.3	27.9	51.7	59.5	58.1	58.1	61.8	61.2	58.9	59.1	63.6	62.5	61.5
	No. of Firms Investigated	28	28	27	27	27	27	29	32	32	33	34	34	32	39	39	39
Misc. Manufacturing	Value-Added Ratio (%)	23.1	24.8	20.6	22.1	17.8	14.8	16.8	16.2	12.7	15.2	23.6	28.8	37.0	34.8	31.2	32.5
	No. of Firms Investigated	44	32	44	51	48	49	53	54	54	54	53	53	55	80	78	78

Note :

Formulation: Value added ratio (%) = Value added / Adjusted sales × 100

Source : Development Bank of Japan, Handbook of Industrial Financial Data

A. Pharmaceutical Industry Outlook

A-4. Exports and Imports (Pharmaceutical Products / Technology)

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International Trade of Pharmaceutical Products (Japan)

A-4-1

Year	Exports		Imports		Trade Deficit	
	Values (A) (JPY mil.)	Change (%)	Values (B) (JPY mil.)	Change (%)	(B)- (A) (JPY mil.)	(B) / (A) (Times)
1994	158,454	△ 3.4	431,619	△ 1.4	273,165	2.72
1995	172,870	9.1	461,522	6.9	288,652	2.67
1996	205,656	19.0	489,823	6.1	284,167	2.38
1997	236,197	14.9	512,877	4.7	276,680	2.17
1998	249,890	5.8	489,947	△ 4.5	240,057	1.96
1999	274,100	9.7	522,592	6.7	248,492	1.91
2000	294,407	7.4	514,885	△ 1.5	220,478	1.75
2001	331,628	12.6	613,405	19.1	281,777	1.85
2002	351,833	6.1	678,710	10.6	326,877	1.93
2003	368,768	4.8	716,502	5.6	347,734	1.94
2004	383,028	3.9	769,196	7.4	386,168	2.01
2005	367,664	△ 4.0	905,966	17.8	538,302	2.46
2006	372,115	1.2	991,234	9.4	619,119	2.66
2007	374,417	0.6	1,078,431	8.8	704,014	2.88
2008	379,876	1.5	1,142,372	5.9	762,496	3.01
2009	384,449	1.2	1,328,601	16.3	944,152	3.46
2010	378,738	△ 1.5	1,522,579	14.6	1,143,841	4.02
2011	358,987	△ 5.2	1,725,019	13.3	1,366,032	4.81
2012	320,393	△ 10.8	1,940,705	12.5	1,620,312	6.06
2013	359,631	12.2	2,138,232	10.2	1,778,601	5.95
2014	353,006	△ 1.8	2,213,971	3.5	1,860,965	6.27
2015	462,318	31.0	2,924,116	32.1	2,461,798	6.32
2016	490,128	6.0	2,780,238	△ 4.9	2,290,110	5.67
2017	559,294	14.1	2,644,919	△ 4.9	2,085,625	4.73
2018	648,722	16.0	2,962,208	12.0	2,313,486	4.57
2019	733,105	13.0	3,091,877	4.4	2,358,772	4.22
2020	835,975	14.0	3,197,264	3.4	2,361,289	3.82
2021	861,125	3.0	4,208,486	31.6	3,347,361	4.89
2022	1,142,825	32.7	5,761,720	36.9	4,618,895	5.04
2023	1,230,421	7.7	4,727,330	△ 18.0	3,496,909	3.84

Note: Numerical data may differ from those of past DATA BOOK due to revision in accordance with changes in data in the quoted sources.

Source : Ministry of Finance, Trade Statistics of Japan
<https://www.customs.go.jp/toukei/suii/html/time.htm>

International Trade of Pharmaceutical Products by Partner Countries (Japan) (1/2) A-4-2

(1) Exports

	Export destination	Year													
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Value (JPY mil.)	USA	127,227	94,053	67,271	72,691	71,839	149,077	171,164	177,798	204,221	272,162	268,697	280,472	415,641	437,217
	China	33,752	35,949	41,398	52,744	63,969	71,698	75,350	89,621	114,034	145,724	158,014	127,796	185,612	203,685
	Switzerland	26,814	36,509	35,547	44,201	30,916	34,629	30,749	40,621	42,676	55,879	122,555	113,024	159,003	154,150
	Korea	27,006	27,949	26,990	27,361	29,649	33,048	37,317	38,999	39,526	36,909	36,135	41,087	52,683	61,160
	Taiwan	10,808	12,050	12,426	14,470	15,965	19,560	21,028	22,274	25,921	26,268	28,638	39,054	43,183	43,444
	Germany	9,084	15,111	15,374	20,014	15,565	14,826	15,770	18,925	23,479	21,782	20,365	33,253	38,137	42,565
	UK	5,654	5,243	5,592	7,210	4,935	6,607	8,252	21,967	49,234	28,836	45,516	40,378	42,817	36,846
	Hong Kong	5,274	5,990	6,462	8,167	10,005	12,538	15,671	17,788	19,088	23,015	28,737	28,805	31,750	35,574
	France	9,592	11,100	8,348	10,757	12,018	18,970	15,317	21,241	20,351	18,202	22,000	19,786	20,667	25,807
	Thailand	5,779	5,414	6,181	7,003	8,027	9,546	8,712	9,035	10,828	14,240	9,012	12,804	15,966	23,114
	Italy	25,543	12,532	11,880	11,056	11,058	12,207	13,544	9,268	11,682	9,831	13,454	14,824	18,146	19,518
	Belgium	18,301	16,843	15,327	14,321	13,157	12,247	12,112	17,401	16,996	14,585	10,652	13,318	15,754	18,121
	Netherlands	15,742	22,366	14,762	11,607	11,282	13,682	11,105	9,713	10,294	7,026	12,874	13,226	17,969	17,868
	Ireland	16,890	17,672	16,197	20,300	15,625	8,210	6,094	9,779	7,629	5,445	5,590	6,739	11,648	14,943
	Singapore	2,332	2,579	2,287	2,221	2,177	2,303	3,052	3,499	3,873	4,608	5,849	6,385	10,129	10,166
	Brazil	1,735	1,728	2,105	2,271	1,889	1,588	1,598	2,566	3,457	3,509	1,752	2,948	3,966	4,870
	India	2,576	2,028	2,144	1,853	2,282	2,158	3,313	2,514	2,201	2,757	2,031	2,863	4,613	4,329
	Spain	4,917	4,494	2,912	2,611	2,239	3,048	2,532	2,508	3,922	3,761	3,486	1,842	4,050	3,587
	Indonesia	2,483	3,351	3,626	3,190	2,978	3,207	2,583	2,695	2,911	2,623	3,195	7,287	2,603	3,453
	Canada	1,620	559	621	547	364	2,645	1,748	2,167	1,836	3,410	1,812	3,058	3,598	3,062
	Australia	1,216	1,399	1,833	1,760	1,307	1,479	1,948	1,879	2,174	2,217	2,238	2,830	2,612	2,566
Philippine	1,483	1,007	927	1,218	1,062	1,354	1,153	802	921	1,348	1,723	2,847	1,414	1,980	
Turkey	2,680	1,111	887	599	475	276	308	633	402	697	926	1,620	935	1,973	
Mexico	1,242	1,885	2,085	2,291	1,891	1,780	2,003	1,274	1,814	1,272	687	887	2,275	1,950	
Others	18,989	20,065	17,211	19,169	22,333	25,635	27,706	34,327	29,254	26,999	30,038	43,987	56,135	58,429	
	Total	378,738	358,987	320,393	359,631	353,006	462,318	490,128	559,294	648,722	733,105	835,975	861,122	1,161,306	1,230,376
Share (%)	USA	33.6	26.2	21.0	20.2	20.4	32.2	34.9	31.8	31.5	37.1	32.1	32.6	35.8	35.5
	China	8.9	10.0	12.9	14.7	18.1	15.5	15.4	16.0	17.6	19.9	18.9	14.8	16.0	16.6
	Switzerland	7.1	10.2	11.1	12.3	8.8	7.5	6.3	7.3	6.6	7.6	14.7	13.1	13.7	12.5
	Korea	7.1	7.8	8.4	7.6	8.4	7.1	7.6	7.0	6.1	5.0	4.3	4.8	4.5	5.0
	Taiwan	2.9	3.4	3.9	4.0	4.5	4.2	4.3	4.0	4.0	3.6	3.4	4.5	3.7	3.5
	Germany	2.4	4.2	4.8	5.6	4.4	3.2	3.2	3.4	3.6	3.0	2.4	3.9	3.3	3.5
	UK	1.5	1.5	1.7	2.0	1.4	1.4	1.7	3.9	7.6	3.9	5.4	4.7	3.7	3.0
	Hong Kong	1.4	1.7	2.0	2.3	2.8	2.7	3.2	3.2	2.9	3.1	3.4	3.3	2.7	2.9
	France	2.5	3.1	2.6	3.0	3.4	4.1	3.1	3.8	3.1	2.5	2.6	2.3	1.8	2.1
	Thailand	1.5	1.5	1.9	1.9	2.3	2.1	1.8	1.6	1.7	1.9	1.1	1.5	1.4	1.9
	Italy	6.7	3.5	3.7	3.1	3.1	2.6	2.8	1.7	1.8	1.3	1.6	1.7	1.6	1.6
	Belgium	4.8	4.7	4.8	4.0	3.7	2.6	2.5	3.1	2.6	2.0	1.3	1.5	1.4	1.5
	Netherlands	4.2	6.2	4.6	3.2	3.2	3.0	2.3	1.7	1.6	1.0	1.5	1.5	1.5	1.5
	Ireland	4.5	4.9	5.1	5.6	4.4	1.8	1.2	1.7	1.2	0.7	0.7	0.8	1.0	1.2
	Singapore	0.6	0.7	0.7	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.9	0.8
	Brazil	0.5	0.5	0.7	0.6	0.5	0.3	0.3	0.5	0.5	0.2	0.3	0.3	0.3	0.4
	India	0.7	0.6	0.7	0.5	0.6	0.5	0.7	0.4	0.3	0.4	0.2	0.3	0.4	0.4
	Spain	1.3	1.3	0.9	0.7	0.6	0.7	0.5	0.4	0.6	0.5	0.4	0.2	0.3	0.3
	Indonesia	0.7	0.9	1.1	0.9	0.8	0.7	0.5	0.5	0.4	0.4	0.4	0.8	0.2	0.3
	Canada	0.4	0.2	0.2	0.2	0.1	0.6	0.4	0.4	0.3	0.5	0.2	0.4	0.3	0.2
	Australia	0.3	0.4	0.6	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2
Philippine	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.2	0.2	0.3	0.1	0.2	
Turkey	0.7	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	
Mexico	0.3	0.5	0.7	0.6	0.5	0.4	0.4	0.2	0.3	0.2	0.1	0.1	0.2	0.2	
Others	5.0	5.6	5.4	5.3	6.3	5.5	5.7	6.1	4.5	3.7	3.6	5.1	4.8	4.7	
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source : Ministry of Finance, Trade Statistics of Japan
<https://www.customs.go.jp/toukei/suii/html/time.htm>

International Trade of Pharmaceutical Products by Partner Countries (Japan) (2/2) A-4-2

(2) Imports

	Import destination	Year													
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Value (JPY mil.)	USA	249,057	290,103	339,159	353,092	397,352	444,629	406,116	413,328	463,481	484,713	564,645	854,375	1,319,564	1,079,595
	Germany	219,304	259,611	319,845	370,488	396,149	415,747	425,900	462,156	472,480	521,353	488,486	533,192	590,647	577,804
	Ireland	33,095	27,721	31,845	38,010	43,033	578,265	378,424	196,687	330,260	331,832	321,329	406,841	489,804	496,021
	Switzerland	206,728	201,129	231,252	214,912	216,625	278,159	291,469	303,757	288,070	315,499	321,431	371,009	398,233	436,112
	Belgium	81,308	121,272	57,263	64,152	82,614	88,856	96,272	84,075	91,229	100,677	108,352	481,077	555,703	256,059
	Spain	43,911	57,221	56,446	63,727	59,956	70,323	55,898	44,021	50,748	43,395	36,146	192,999	393,836	190,468
	France	132,375	138,243	174,781	196,398	200,873	193,719	193,619	188,591	181,016	149,713	154,713	128,493	147,183	166,089
	UK	103,280	107,581	109,779	104,942	87,137	113,721	99,351	149,782	154,139	160,230	113,940	110,145	142,093	151,504
	Puerto Rico	64,036	73,146	94,814	87,224	111,312	111,118	134,095	131,328	150,941	165,777	161,903	151,187	153,885	151,224
	Singapore	68,407	80,868	103,578	114,157	113,879	126,170	160,463	111,602	129,557	126,087	135,436	123,322	127,157	139,187
	Sweden	16,875	24,707	21,406	42,292	40,815	54,183	70,726	85,065	86,587	103,119	119,520	116,743	153,202	130,818
	Denmark	58,333	47,349	45,771	47,372	55,160	60,593	71,838	69,797	80,902	83,097	107,244	107,683	124,230	130,620
	Canada	16,766	13,669	27,942	28,669	52,077	42,835	46,724	44,205	79,954	100,189	123,196	107,811	120,241	128,319
	China	53,901	51,874	55,528	61,339	75,786	89,881	85,937	85,691	89,671	80,582	76,816	77,916	139,072	121,311
	Italy	89,215	134,970	165,366	214,308	135,536	83,580	95,576	108,975	111,078	110,356	99,183	137,236	200,239	107,407
	Korea	16,860	15,480	18,310	24,322	28,167	47,736	34,531	32,041	37,957	46,078	58,286	79,360	212,126	102,188
	Netherlands	9,852	15,698	15,577	21,076	22,080	23,910	23,522	16,240	24,778	31,545	45,105	43,794	46,372	66,712
	Taiwan	2,908	2,493	2,986	3,644	4,680	6,403	8,390	8,182	9,411	10,198	10,488	12,634	18,061	21,416
	Mexico	849	729	892	9,103	7,191	12,636	8,416	11,294	12,780	13,636	12,249	13,017	15,409	14,339
	Australia	12,214	10,702	10,236	13,114	9,670	9,092	12,445	10,186	7,705	8,587	6,926	10,960	9,142	9,603
	Brazil	178	143	148	314	222	289	384	1,036	981	4,649	7,535	8,617	7,858	6,874
Others	43,126	50,310	57,781	65,578	73,655	72,272	80,141	84,863	108,486	100,565	124,334	118,240	131,932	166,460	
	Total	1,522,579	1,725,019	1,940,705	2,138,232	2,213,971	2,924,116	2,780,238	2,644,919	2,962,208	3,091,877	3,197,264	4,186,652	5,495,990	4,650,130
Share (%)	USA	16.4	16.8	17.5	16.5	17.9	15.2	14.6	15.6	15.6	15.7	17.7	20.4	24.0	23.2
	Germany	14.4	15.0	16.5	17.3	17.9	14.2	15.3	17.5	16.0	16.9	15.3	12.7	10.7	12.4
	Ireland	2.2	1.6	1.6	1.8	1.9	19.8	13.6	7.4	11.1	10.7	10.1	9.7	8.9	10.7
	Switzerland	13.6	11.7	11.9	10.1	9.8	9.5	10.5	11.5	9.7	10.2	10.1	8.9	7.2	9.4
	Belgium	5.3	7.0	3.0	3.0	3.7	3.0	3.5	3.2	3.1	3.3	3.4	11.5	10.1	5.5
	Spain	2.9	3.3	2.9	3.0	2.7	2.4	2.0	1.7	1.7	1.4	1.1	4.6	7.2	4.1
	France	8.7	8.0	9.0	9.2	9.1	6.6	7.0	7.1	6.1	4.8	4.8	3.1	2.7	3.6
	UK	6.8	6.2	5.7	4.9	3.9	3.9	3.6	5.7	5.2	5.2	3.6	2.6	2.6	3.3
	Puerto Rico	4.2	4.2	4.9	4.1	5.0	3.8	4.8	5.0	5.1	5.4	5.1	3.6	2.8	3.3
	Singapore	4.5	4.7	5.3	5.3	5.1	4.3	5.8	4.2	4.4	4.1	4.2	2.9	2.3	3.0
	Sweden	1.1	1.4	1.1	2.0	1.8	1.9	2.5	3.2	2.9	3.3	3.7	2.8	2.8	2.8
	Denmark	3.8	2.7	2.4	2.2	2.5	2.1	2.6	2.6	2.7	2.7	3.4	2.6	2.3	2.8
	Canada	1.1	0.8	1.4	1.3	2.4	1.5	1.7	1.7	2.7	3.2	3.9	2.6	2.2	2.8
	China	3.5	3.0	2.9	2.9	3.4	3.1	3.1	3.2	3.0	2.6	2.4	1.9	2.5	2.6
	Italy	5.9	7.8	8.5	10.0	6.1	2.9	3.4	4.1	3.7	3.6	3.1	3.3	3.6	2.3
	Korea	1.1	0.9	0.9	1.1	1.3	1.6	1.2	1.2	1.3	1.5	1.8	1.9	3.9	2.2
	Netherlands	0.6	0.9	0.8	1.0	1.0	0.8	0.8	0.6	0.8	1.0	1.4	1.0	0.8	1.4
	Taiwan	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
	Mexico	0.1	0.0	0.0	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3
	Australia	0.8	0.6	0.5	0.6	0.4	0.3	0.4	0.4	0.3	0.3	0.2	0.3	0.2	0.2
	Brazil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.1
Others	2.8	2.9	3.0	3.1	3.3	2.5	2.9	3.2	3.7	3.3	3.9	2.8	2.4	3.6	
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source : Ministry of Finance, Trade Statistics of Japan
<https://www.customs.go.jp/toukei/suii/html/time.htm>

Export / Import of Major Countries (Worldwide) (1/2)

A-4-3

		(Unit: USD mil.)																			
		2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Austria	Export	1,639	4,483	5,317	6,246	7,322	7,682	8,101	9,039	8,442	8,870	9,285	8,104	8,583	9,083	10,038	11,261	12,382	14,424	13,719	17,588
	Import	1,997	4,184	4,892	5,515	6,229	6,831	7,245	8,349	5,191	5,526	6,010	5,278	5,712	6,018	7,277	7,631	7,959	10,782	10,069	11,279
	Surplus	△ 358	298	425	731	1,093	851	855	690	3,251	3,343	3,275	2,826	2,870	3,065	2,762	3,631	4,423	3,642	3,649	6,309
Belgium	Export	6,847	34,798	38,363	47,367	50,634	52,186	51,441	49,956	44,842	50,359	49,846	43,154	41,975	42,618	31,780	38,140	45,531	73,500	76,203	60,469
	Import	5,562	35,956	35,458	41,603	44,275	43,529	42,346	37,136	34,783	40,970	39,416	36,301	34,892	35,007	28,055	33,362	36,889	46,990	48,339	53,726
	Surplus	1,285	△ 1,158	2,905	5,764	6,359	8,657	9,095	12,820	10,059	9,389	10,430	6,854	7,084	7,611	3,725	4,778	8,641	26,510	27,864	6,743
Denmark	Export	2,915	6,382	6,493	7,167	7,961	7,917	5,245	5,951	10,727	11,735	12,172	11,721	12,467	12,946	14,436	17,547	19,066	19,519	19,897	21,012
	Import	950	2,343	2,595	2,845	3,348	3,275	3,595	3,566	3,861	4,378	4,650	3,809	3,773	4,110	4,489	4,453	5,333	6,625	5,796	5,442
	Surplus	1,966	4,039	3,899	4,322	4,613	4,642	1,650	2,385	6,866	7,358	7,522	7,912	8,694	8,836	9,947	13,094	13,733	12,894	14,101	15,571
Finland	Export	264	783	972	892	1,180	1,176	1,320	1,594	1,415	1,238	1,160	942	930	843	867	749	951	1,233	1,264	1,984
	Import	690	1,767	2,041	1,994	2,459	2,318	2,211	2,347	2,314	2,403	2,458	2,199	2,166	2,115	2,293	2,194	2,377	2,675	2,573	2,576
	Surplus	△ 427	△ 985	△ 1,069	△ 1,102	△ 1,280	△ 1,143	△ 891	△ 753	△ 899	△ 1,164	△ 1,298	△ 1,257	△ 1,236	△ 1,272	△ 1,426	△ 1,446	△ 1,427	△ 1,441	△ 1,309	△ 592
France	Export	10,093	22,759	24,585	28,273	33,212	34,187	34,353	33,847	34,928	37,048	35,161	29,894	30,126	31,407	33,852	35,614	37,932	39,037	37,530	37,337
	Import	7,796	17,122	18,615	22,061	24,838	27,177	28,389	29,772	26,424	26,060	27,852	22,194	22,068	23,118	25,247	25,188	28,805	34,030	32,360	36,151
	Surplus	2,297	5,637	5,970	6,212	8,374	7,009	5,964	4,076	8,504	10,988	7,309	7,699	8,059	8,290	8,605	10,426	9,127	5,008	5,170	1,186
Germany	Export	13,715	38,151	44,957	55,521	67,439	64,284	65,834	69,648	70,387	74,819	79,699	75,777	77,098	84,172	96,926	91,163	99,258	119,270	126,671	120,989
	Import	9,438	30,593	34,630	40,934	46,669	46,658	47,300	51,529	43,533	45,233	49,294	45,671	49,096	53,791	58,056	59,495	67,148	80,660	81,747	74,719
	Surplus	4,277	7,558	10,327	14,587	20,770	17,625	18,534	18,119	26,854	29,586	30,405	30,107	28,002	30,381	38,870	31,668	32,109	38,610	44,924	46,271
Greece	Export	242	1,176	1,134	1,285	1,272	1,292	1,342	1,220	1,237	1,392	1,380	1,126	1,170	1,333	1,732	2,164	3,279	3,405	2,687	3,025
	Import	1,133	3,407	3,706	4,569	5,378	5,490	4,723	4,344	3,667	3,548	3,485	2,981	3,027	3,282	3,352	3,086	3,541	4,255	4,173	4,378
	Surplus	△ 891	△ 2,231	△ 2,572	△ 3,284	△ 4,106	△ 4,198	△ 3,381	△ 3,124	△ 2,430	△ 2,156	△ 2,095	△ 1,855	△ 1,857	△ 1,950	△ 1,620	△ 922	△ 262	△ 851	△ 1,486	△ 1,353
Ireland	Export	4,909	17,947	17,860	20,176	24,549	29,376	31,956	36,574	29,422	25,716	27,195	31,865	31,796	38,322	53,491	53,398	65,756	67,556	75,564	71,564
	Import	1,417	2,427	2,783	3,264	4,216	3,938	4,566	6,080	4,366	4,880	5,135	5,556	6,014	9,409	12,777	7,612	9,269	10,960	11,628	13,449
	Surplus	3,492	15,520	15,077	16,912	20,333	25,437	27,390	30,494	25,056	20,836	22,060	26,310	25,782	28,913	40,713	45,787	56,487	56,596	63,936	58,115
Italy	Export	6,354	13,146	14,051	15,647	16,688	16,053	17,592	20,412	19,988	23,578	25,267	19,803	21,215	25,687	27,717	33,659	36,069	36,716	47,643	50,321
	Import	5,988	13,837	15,701	18,178	20,068	21,378	21,701	25,132	20,578	21,256	21,544	20,628	21,289	23,208	26,682	27,211	28,545	30,829	34,710	32,731
	Surplus	366	△ 691	△ 1,650	△ 2,531	△ 3,379	△ 5,325	△ 4,109	△ 4,719	△ 590	△ 2,321	3,723	△ 825	△ 73	2,479	1,035	6,448	7,524	5,887	12,933	17,590
Netherlands	Export	4,215	11,281	13,056	16,849	24,553	27,691	27,802	16,339	23,441	22,522	25,745	22,938	23,613	25,686	28,498	30,086	34,059	37,186	28,574	34,196
	Import	3,993	11,164	12,938	16,626	23,950	25,630	26,251	13,849	17,007	16,936	19,320	14,432	15,426	15,215	16,696	18,326	21,323	25,588	24,197	28,869
	Surplus	221	117	119	223	604	2,062	1,551	2,490	6,433	5,586	6,425	8,506	8,187	10,470	11,803	11,760	12,736	11,597	4,377	5,327
Norway	Export	240	533	550	699	705	664	743	698	718	742	906	716	690	756	935	748	746	692	691	783
	Import	742	1,343	1,424	1,682	1,826	1,687	1,843	1,904	1,919	1,912	2,087	1,824	1,887	2,328	2,388	2,233	2,363	2,924	2,787	2,579
	Surplus	△ 502	△ 810	△ 874	△ 983	△ 1,121	△ 1,023	△ 1,100	△ 1,206	△ 1,201	△ 1,170	△ 1,181	△ 1,108	△ 1,197	△ 1,573	△ 1,453	△ 1,486	△ 1,617	△ 2,232	△ 2,096	△ 1,796
Portugal	Export	282	354	423	542	598	612	670	824	854	906	1,093	939	1,180	1,136	1,138	1,243	1,386	1,448	1,871	2,916
	Import	923	2,046	2,301	2,579	2,932	3,009	2,972	3,042	2,649	2,591	2,697	2,497	2,566	2,614	3,162	2,949	3,239	3,767	3,735	3,857
	Surplus	△ 641	△ 1,692	△ 1,878	△ 2,038	△ 2,334	△ 2,397	△ 2,303	△ 2,217	△ 1,795	△ 1,685	△ 1,605	△ 1,559	△ 1,385	△ 1,478	△ 2,024	△ 1,706	△ 1,853	△ 2,319	△ 1,864	△ 941

Note: Numerical data may differ from those of past DATA BOOK due to revision in accordance with changes in data in the quoted sources.

Source: OECD, "International Trade by Commodity Statistics" (2000-2011 SITC Revision 3 Classification No.54, 2012-2018 Harmonised System 2012 Classification No.30)

Since 2019 UN Comtrade Database (HS Commodity Code 30)

Export / Import of Major Countries (Worldwide) (2/2)

A-4-3

		(Unit: USD mil.)																			
		2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Spain	Export	2,057	6,722	7,596	9,820	11,358	10,972	11,764	12,243	12,000	13,030	12,682	11,357	10,800	11,353	11,971	12,755	13,757	20,197	28,098	21,861
	Import	3,613	8,985	9,629	12,171	15,274	16,977	15,174	15,637	14,342	14,495	15,186	14,677	13,922	14,132	15,703	15,689	16,932	24,676	23,785	22,432
	Surplus	△ 1,557	△ 2,263	△ 2,033	△ 2,352	△ 3,916	△ 6,005	△ 3,410	△ 3,394	△ 3,394	△ 2,342	△ 1,465	△ 2,504	△ 3,320	△ 3,122	△ 2,779	△ 3,731	△ 2,994	△ 3,175	△ 4,479	4,313
Sweden	Export	3,922	7,190	8,713	8,720	9,174	8,908	9,215	8,878	7,372	7,393	7,597	7,343	7,174	7,768	8,652	10,231	11,717	11,238	13,243	13,589
	Import	1,341	2,730	3,185	3,606	4,177	4,056	4,078	4,436	4,474	4,511	4,362	3,868	4,258	4,305	4,615	4,848	5,380	5,929	6,341	6,464
	Surplus	2,581	4,459	5,528	5,114	4,996	4,852	5,136	4,442	2,899	2,883	3,235	3,476	2,916	3,463	4,037	5,383	6,337	5,309	6,902	7,125
Switzerland	Export	10,520	25,907	31,177	36,233	44,177	44,544	49,061	57,726	54,356	57,497	62,595	60,596	67,455	70,287	75,200	82,970	88,354	101,559	98,031	99,011
	Import	5,208	13,021	14,786	16,693	17,783	17,327	18,779	22,340	20,393	22,113	23,527	21,726	24,674	28,719	29,985	31,537	38,940	42,254	48,686	58,466
	Surplus	5,312	12,886	16,392	19,539	26,394	27,217	30,282	35,386	33,966	33,964	35,384	39,068	38,870	42,781	41,568	45,215	51,433	49,414	59,306	49,345
UK	Export	10,850	22,238	25,471	28,978	31,628	31,602	33,966	36,099	33,102	32,094	33,567	35,973	32,580	32,716	32,259	27,124	24,948	26,068	27,852	27,504
	Import	7,399	15,937	17,450	20,421	20,874	20,950	23,878	26,450	26,877	27,728	33,728	33,744	32,754	33,096	33,032	27,996	26,106	26,947	32,883	27,348
	Surplus	3,451	6,301	8,021	8,556	10,754	10,652	10,088	9,649	6,224	4,366	△ 160	2,229	△ 174	△ 380	△ 773	△ 872	△ 1,159	△ 880	△ 5,030	156
Canada	Export	1,230	3,485	4,675	6,180	6,181	6,439	5,703	5,636	5,079	5,433	7,069	7,720	8,392	6,265	7,887	8,452	8,270	9,559	10,734	9,589
	Import	3,801	7,838	9,536	10,533	11,227	12,058	12,324	13,086	12,296	12,114	12,478	11,395	11,371	11,711	12,558	13,865	14,277	18,474	20,067	18,893
	Surplus	△ 2,571	△ 4,353	△ 4,861	△ 4,354	△ 5,046	△ 5,619	△ 6,620	△ 7,449	△ 7,218	△ 6,681	△ 5,410	△ 3,675	△ 2,979	△ 5,445	△ 4,670	△ 5,413	△ 6,007	△ 8,915	△ 9,333	△ 9,304
USA	Export	13,122	25,946	29,105	33,380	38,077	44,084	44,397	42,934	40,129	39,709	43,996	47,293	46,829	44,936	48,346	53,562	53,939	77,962	83,493	90,308
	Import	14,855	39,323	46,222	53,954	59,868	60,157	65,563	69,912	65,004	63,314	73,042	86,014	92,512	96,879	115,635	128,238	139,518	149,500	164,993	177,848
	Surplus	△ 1,733	△ 13,376	△ 17,117	△ 20,574	△ 21,792	△ 16,073	△ 21,166	△ 26,978	△ 24,875	△ 23,605	△ 29,047	△ 38,721	△ 45,683	△ 51,943	△ 67,289	△ 74,676	△ 85,579	△ 71,537	△ 81,501	△ 87,540
Australia	Export	1,078	2,463	2,600	3,302	3,349	3,192	3,673	3,857	4,385	3,354	2,545	1,743	2,366	2,530	2,973	3,780	3,406	2,352	2,532	2,663
	Import	2,319	5,455	5,486	6,707	7,069	7,405	8,794	10,865	10,276	9,371	8,472	7,257	7,781	8,038	8,329	8,540	8,987	11,029	13,399	11,352
	Surplus	△ 1,242	△ 2,992	△ 2,886	△ 3,405	△ 3,720	△ 4,212	△ 5,121	△ 7,008	△ 5,891	△ 6,017	△ 5,927	△ 5,514	△ 5,415	△ 5,415	△ 5,508	△ 5,356	△ 4,759	△ 5,582	△ 8,677	△ 10,867
Japan	Export	2,731	3,327	3,193	3,187	3,663	4,121	4,324	4,507	3,391	3,243	2,923	3,410	4,064	4,557	5,545	6,369	7,509	7,569	7,440	7,627
	Import	4,775	8,205	8,518	9,146	10,999	14,197	17,338	21,599	23,043	20,864	19,899	23,186	24,388	22,394	25,497	27,322	28,642	37,289	39,038	30,825
	Surplus	△ 2,044	△ 4,877	△ 5,325	△ 5,959	△ 7,336	△ 10,076	△ 13,014	△ 17,092	△ 19,652	△ 17,621	△ 16,976	△ 19,777	△ 20,324	△ 17,837	△ 19,952	△ 20,953	△ 21,133	△ 29,720	△ 31,598	△ 23,198
Others	Export	2,285	5,339	10,905	13,341	17,171	16,723	20,141	23,302	23,014	24,780	27,069	26,976	27,572	30,578	31,547	—	—	—	—	—
	Import	7,443	16,913	21,894	26,323	32,774	30,642	32,879	36,678	33,609	36,116	38,534	38,702	40,306	43,057	48,768	—	—	—	—	—
	Surplus	△ 5,158	△ 11,574	△ 10,989	△ 12,982	△ 15,603	△ 13,919	△ 12,739	△ 13,376	△ 10,594	△ 11,336	△ 11,465	△ 11,726	△ 12,734	△ 12,480	△ 17,220	—	—	—	—	—
OECD Total	Export	99,509	254,411	291,195	343,802	400,891	413,702	428,641	441,285	429,230	445,458	468,951	449,391	439,900	484,980	525,790	—	—	—	—	—
	Import	91,384	244,597	273,787	321,405	366,233	374,688	391,950	408,052	376,606	386,319	413,157	403,940	404,690	442,546	484,595	—	—	—	—	—
	Surplus	8,125	9,813	17,407	22,397	34,658	39,014	36,692	33,234	52,624	59,139	55,794	45,452	35,209	42,433	41,195	—	—	—	—	—

Note: Numerical data may differ from those of past DATA BOOK due to revision in accordance with changes in data in the quoted sources.

Source: OECD, "International Trade by Commodity Statistics" (2000-2011 SITC Revision 3 Classification No.54, 2012-2018 Harmonised System 2012 Classification No.30)
Since 2019 UN Comtrade Database (HS Commodity Code 30)

Exports / Imports of Pharmaceutical Products by Partner Country (Worldwide)

A-4-4

2023

(1) Exports

(Unit: USD 1,000)

Importer	Exporter															
	Austria	Belgium	Denmark	France	Germany	Ireland	Italy	Netherlands	Spain	Sweden	Switzerland	UK	USA	Canada	Australia	Japan
Austria	—	461,204	8,994	578,205	3,175,966	190,518	924,666	676,489	160,863	530,481	1,283,451	103,464	2,220,683	11,791	308	108,824
Belgium	830,659	—	88,063	4,399,699	6,547,705	13,278,013	7,357,633	1,950,601	4,816,345	326,089	2,419,021	2,871,719	8,064,928	212,728	44,218	92,064
Denmark	89,051	234,841	—	748,658	1,044,327	103,034	110,849	383,470	150,762	300,845	318,015	84,074	234,789	3,435	12,299	185
France	463,698	2,817,197	40,501	—	6,168,101	3,131,549	2,446,037	2,351,331	1,292,274	882,179	3,410,274	1,703,867	1,916,625	138,934	25,511	159,376
Germany	3,407,855	5,534,220	308,505	4,214,691	—	8,518,288	3,420,149	6,246,018	2,285,115	2,142,845	10,487,657	1,722,524	6,563,883	64,249	83,462	216,096
Ireland	77,546	573,159	5,009	678,605	1,467,791	—	1,004,510	794,665	644,974	106,985	331,664	1,769,117	4,023,700	82,407	11,505	75,016
Italy	659,095	4,302,489	39,562	2,223,228	8,063,647	1,805,160	—	1,998,434	957,348	417,606	4,562,477	212,203	1,781,805	304,569	259	101,727
Netherlands	336,279	4,660,382	1,290,506	1,023,688	10,587,129	9,447,062	4,046,756	—	611,843	289,115	1,437,116	1,194,497	8,601,736	182,405	20,232	108,779
Spain	120,862	1,833,766	56,626	1,545,124	3,677,740	943,612	1,223,052	1,214,080	—	415,887	2,317,406	416,788	5,526,170	52,891	348	5,387
Sweden	79,340	465,100	182,623	221,406	1,557,546	177,381	349,682	417,559	109,617	—	324,298	45,843	1,060,623	5,583	344	417
Switzerland	2,231,566	1,036,388	91,286	993,813	8,580,689	3,117,334	7,515,247	1,103,466	3,890,149	185,045	—	1,025,006	2,768,806	35,438	66,223	1,086,294
UK	187,243	3,554,173	39,611	1,445,183	3,791,159	1,795,447	1,096,965	2,081,834	614,191	382,507	2,389,579	—	5,503,307	86,381	24,016	248,945
USA	2,681,315	14,272,171	637,319	4,043,727	27,513,004	20,197,546	8,430,854	2,821,163	615,217	2,301,906	30,701,361	8,087,248	—	6,747,141	1,065,181	2,917,038
Canada	123,004	983,254	27,173	281,846	1,520,861	637,829	303,895	589,431	217,897	342,634	2,593,779	374,003	5,868,531	—	19,734	15,303
Australia	79,339	713,260	66,557	435,398	1,614,102	366,584	415,519	640,277	154,988	65,631	1,034,364	462,468	2,240,155	70,378	—	15,441
Japan	259,085	2,233,597	58,782	427,936	3,298,317	1,583,690	488,242	739,589	124,086	216,603	3,575,491	640,420	6,320,129	708,463	72,874	—
Others	5,962,072	16,793,862	18,071,023	14,076,152	32,381,032	6,270,999	11,186,618	10,187,645	5,215,024	4,682,586	31,825,072	6,790,713	27,622,344	882,029	1,216,054	2,476,602
World Total	17,588,010	60,469,061	21,012,142	37,337,358	120,989,117	71,564,046	50,320,672	34,196,051	21,860,694	13,588,944	99,011,025	27,503,955	90,308,213	9,588,820	2,662,568	7,627,495

(2) Imports

(Unit: USD 1,000)

Exporter	Importer															
	Austria	Belgium	Denmark	France	Germany	Ireland	Italy	Netherlands	Spain	Sweden	Switzerland	UK	USA	Canada	Australia	Japan
Austria	—	218,886	90,118	449,993	2,691,540	36,621	618,159	402,124	140,927	93,784	3,124,850	337,920	3,845,484	232,910	125,788	103,805
Belgium	201,357	—	285,716	4,076,722	5,548,466	684,276	6,317,375	5,409,707	1,239,417	666,900	777,089	1,585,650	6,739,576	976,615	944,317	1,809,056
Denmark	155,323	172,147	—	817,572	1,023,075	153,374	508,725	1,220,998	610,850	932,197	565,964	645,224	5,700,160	1,110,576	401,875	891,897
France	583,605	3,942,482	240,709	—	4,679,779	621,418	2,526,840	962,415	1,192,625	226,956	890,831	1,365,062	4,165,467	533,213	574,256	1,126,903
Germany	2,723,913	5,039,206	914,824	5,724,733	—	1,908,080	7,791,665	6,156,962	3,523,176	1,410,027	10,365,265	3,428,216	19,118,890	2,155,242	1,551,673	3,911,941
Ireland	308,121	12,242,285	153,938	3,713,800	9,900,876	2,654	1,847,074	3,865,756	645,544	285,727	3,600,652	3,221,095	36,027,270	1,353,778	807,627	3,425,851
Italy	867,134	6,314,711	75,030	2,220,981	3,602,975	205,125	—	1,418,933	1,003,436	274,083	7,192,311	1,505,632	8,092,776	528,519	520,619	695,999
Netherlands	581,217	1,384,518	464,593	5,482,814	8,481,459	760,834	3,133,529	—	1,689,261	622,338	528,789	699,898	10,667,631	128,148	134,601	462,315
Spain	179,169	486,225	141,456	1,202,619	2,797,011	659,198	929,358	326,445	—	96,548	5,786,115	1,365,368	2,777,197	242,300	309,327	1,323,485
Sweden	478,859	263,590	369,235	1,054,120	2,058,462	130,469	503,643	312,768	386,703	—	99,984	2,039,532	2,949,825	544,208	173,891	829,829
Switzerland	850,482	8,771,202	157,215	1,967,065	10,281,789	660,319	3,453,879	1,032,795	2,069,329	229,949	—	4,037,896	15,078,696	1,556,778	806,822	3,053,703
UK	211,048	678,836	60,748	1,643,687	2,256,650	1,836,122	259,371	945,289	502,049	40,445	662,648	421,923	6,840,658	409,668	476,367	961,483
USA	2,692,848	11,682,212	213,576	1,677,498	12,273,767	4,449,057	1,586,080	3,817,659	6,862,757	950,738	5,038,664	4,940,172	—	5,166,828	2,470,665	8,076,252
Canada	46,039	406,601	3,762	149,667	675,728	219,136	269,910	64,720	230,285	9,639	197,324	279,736	5,694,517	57,914	253,487	907,187
Australia	999	19,220	158	31,753	103,501	22,893	404	21,803	3,786	78	57,632	112,134	1,194,192	34,595	6,248	63,935
Japan	140,164	114,123	2,108	367,433	660,544	127,736	252,833	240,206	72,253	21,087	1,913,796	412,475	6,589,219	174,493	146,076	—
Others	1,263,923	2,039,695	2,268,366	5,571,000	7,682,974	971,788	2,733,102	2,670,353	2,259,222	602,642	17,664,501	4,570,875	42,366,919	3,687,217	1,648,315	3,181,850
World Total	11,279,201	53,725,939	5,441,552	36,151,458	74,718,593	13,449,101	32,730,946	28,868,933	22,431,620	6,463,798	58,466,414	27,348,401	177,948,476	18,893,002	11,351,954	30,825,492

Source : UN Comtrade Database (HS Commodity Code 30)

Technology Exports and Imports in the Pharmaceutical Industry (Japan) A-4-5

Fiscal Year	Total Contracts						New Contracts					
	Revenue		Payment		Balance		Revenue		Payment		Balance	
	No. of Cases	Value (JPY mil.)	No. of Cases	Value (JPY mil.)	No. of Cases	Value (JPY mil.)	No. of Cases	Value (JPY mil.)	No. of Cases	Value (JPY mil.)	No. of Cases	Value (JPY mil.)
1980	148	2,986	132	10,162	16	△ 7,176	26	273	26	600	0	△ 327
1985	239	13,068	166	13,085	73	△ 17	25	919	31	498	△ 6	421
1990	385	24,971	247	22,514	138	2,457	39	3,372	24	4,434	15	△ 1,062
1995	418	36,700	320	36,700	98	0	40	2,309	42	5,829	△ 2	△ 3,520
1998	479	80,500	297	38,500	182	42,000	31	3,296	24	2,557	7	739
1999	518	103,600	284	37,000	234	66,600	54	22,359	34	3,460	20	18,899
2000	467	86,380	272	39,017	195	47,363	44	9,036	36	2,645	8	6,391
2001	-	110,845	-	65,359	-	45,486	Contracts with Parent/Affiliated Company					
2002	-	142,212	-	41,684	-	100,528	-	40,530	-	2,336	-	38,194
2003	-	135,912	-	36,460	-	99,452	-	43,873	-	3,753	-	40,120
2004	-	182,803	-	33,520	-	149,283	-	74,485	-	3,017	-	71,468
2005	-	193,384	-	44,499	-	148,885	-	83,521	-	2,194	-	81,327
2006	-	238,277	-	35,295	-	202,982	-	102,637	-	1,741	-	100,896
2007	-	282,985	-	36,907	-	246,078	-	115,537	-	4,098	-	111,439
2008	-	287,879	-	58,667	-	229,212	-	145,053	-	2,264	-	142,789
2009	-	261,243	-	44,918	-	216,325	-	123,404	-	527	-	122,877
2010	-	312,753	-	51,886	-	260,867	-	122,978	-	192	-	122,786
2011	-	288,976	-	33,494	-	255,482	-	106,012	-	73	-	105,939
2012	-	305,686	-	58,955	-	246,731	-	91,475	-	1,815	-	89,660
2013	-	441,274	-	80,427	-	360,847	-	140,207	-	149	-	140,058
2014	-	447,626	-	105,632	-	341,994	-	177,113	-	195	-	176,918
2015	-	477,086	-	175,827	-	301,259	-	194,119	-	3,321	-	190,798
2016	-	444,181	-	142,366	-	301,815	-	179,877	-	5,003	-	174,874
2017	-	659,223	-	210,724	-	448,499	-	332,293	-	69,065	-	263,228
2018	-	640,097	-	175,961	-	464,136	-	271,080	-	6,571	-	264,509
2019	-	625,844	-	167,891	-	457,953	-	283,182	-	11,549	-	271,633
2020	-	634,099	-	189,876	-	444,223	-	293,104	-	14,395	-	278,709
2021	-	710,971	-	237,914	-	473,057	-	328,861	-	-	-	-
2022	-	929,177	-	271,643	-	657,534	-	389,100	-	35,620	-	353,480
2023	-	979,744	-	253,013	-	726,731	-	412,182	-	21,453	-	390,729

Note:

The values of the payment of technology considerations for the contracts between Parent and Affiliated Companies in FY2021 are not shown because they were not disclosed as confidential.

Source: Ministry of Internal Affairs and Communications, Report on the Survey of Research and Development
<https://www.e-stat.go.jp/stat-search/files?page=1&toukei=00200543&cycle=0>

A. Pharmaceutical Industry Outlook

A-5. Overseas Business of Japanese Companies

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Overseas Business of Japanese Pharmaceutical Companies (Japan) A-5-1

Fiscal Year	No. of Pharmaceutical Companies	No. of Overseas Subsidiaries	
		Manufacture (Production Plant)	Marketing (Including Import)
1965	10	8	8
1970	15	8	15
1975	30	13	25
1980	43	17	33
1985	64	23	37
1990	93	38	46
1995	148	59	73
1996	176	72	116
1997	187	76	125
1998	208	92	139
1999	229	99	164
2000	249	103	192
2001	276	130	213
2002	292	122	237
2003	304	127	232
2004	318	126	243
2005	291	104	212
2006	297	108	219
2007	292	109	209
2008	320	113	224
2009	331	117	235
2010	337	121	248
2011	334	119	256
2012	363	135	275
2013	371	137	283
2014	378	130	286
2015	384	136	295
2016	372	135	280
2017	364	134	274

Note :

1. Japanese overseas subsidiaries whose investment ratio is more than 50% independently.
2. Business relating to pharmaceutical bulk products, medical devices and equipments, nutrition-tonics and R&D activities are included.
3. This table has not been updated, because the survey has not been conducted since 2018.

Source : Yano Research Institute

Overseas Business of Japanese Pharmaceutical Companies by countries (Japan) A-5-2

Year	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
No. of Pharmaceutical Companies																				
USA	22	34	51	56	63	70	71	67	65	65	68	75	72	73	73	74	74	72	71	71
UK	3	18	23	24	23	23	22	27	29	28	26	26	26	25	26	25	26	28	27	26
Germany	8	20	15	18	20	23	19	18	16	15	17	17	16	16	15	14	14	15	12	14
France	7	7	8	10	10	10	10	9	9	8	8	8	10	10	12	11	11	11	11	12
China	-	6	20	11	13	13	12	30	32	33	39	42	44	44	48	47	49	49	45	46
Taiwan	16	7	24	6	7	8	9	18	17	16	17	17	17	17	16	17	17	16	16	16
Indonesia	5	10	10	23	20	21	29	15	15	15	15	16	15	14	14	14	13	13	13	12
Korea	4	5	10	9	11	12	16	12	11	11	11	11	11	9	12	12	13	12	12	11
Hong Kong	6	6	6	8	8	7	6	8	9	9	10	10	11	9	9	10	10	10	11	10
Singapore	3	9	8	24	27	28	30	8	10	8	12	10	10	8	9	10	12	11	13	12
Others	17	24	70	83	86	84	89	72	77	77	89	91	105	109	129	137	139	147	141	134
Total	91	146	245	272	288	299	313	284	290	285	312	323	337	334	363	371	378	384	372	364
Percentage of total (%)																				
USA	24.2	23.3	20.8	20.8	21.9	23.4	22.7	23.6	22.4	22.8	21.8	23.2	21.4	21.9	20.1	19.9	19.6	18.8	19.1	19.5
UK	3.3	12.3	9.4	8.8	8.0	7.7	7.0	9.5	10.0	9.8	8.3	8.0	7.7	7.5	7.2	6.7	6.9	7.3	7.3	7.1
Germany	8.8	13.7	6.1	6.6	6.9	7.7	6.1	6.3	5.5	5.3	5.4	5.3	4.7	4.8	4.1	3.8	3.7	3.9	3.2	3.8
France	7.7	4.8	3.3	3.7	3.5	3.3	3.2	3.2	3.1	2.8	2.6	2.5	3.0	3.0	3.3	3.0	2.9	2.9	3.0	3.3
China	-	4.1	8.2	4.0	4.5	4.3	3.8	10.6	11.0	11.5	12.5	13.0	13.1	13.2	13.2	12.7	13.0	12.8	12.1	12.6
Taiwan	17.6	4.8	9.8	2.2	2.4	2.7	2.9	6.3	5.9	5.6	5.4	5.3	5.0	5.1	4.4	4.6	4.5	4.2	4.3	4.4
Indonesia	5.5	6.8	4.1	8.5	6.9	7.0	9.3	5.3	5.2	5.3	4.8	5.0	4.5	4.2	3.9	3.8	3.4	3.4	3.5	3.3
Korea	4.4	3.4	4.1	3.3	3.8	4.0	5.1	4.2	3.8	3.9	3.5	3.4	3.3	2.7	3.3	3.2	3.4	3.1	3.2	3.0
Hong Kong	6.6	4.1	2.4	2.9	2.8	2.3	1.9	2.8	3.1	3.2	3.2	3.1	3.3	2.7	2.5	2.7	2.6	2.6	3.0	2.7
Singapore	3.3	6.2	3.3	8.8	9.4	9.4	9.6	2.8	3.4	2.8	3.8	3.1	3.0	2.4	2.5	2.7	3.2	2.9	3.5	3.3
Others	18.7	16.4	28.6	30.5	29.9	28.0	28.4	25.4	26.6	27.0	28.5	28.2	31.2	32.6	35.5	36.9	36.8	38.3	37.9	36.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note :

1. Japanese overseas subsidiaries whose investment ratio is more than 50% independently.
2. Business relating to pharmaceutical bulk products, medical devices and equipments, nutrition-tonics and R&D activities are included.
3. This table has not been updated, because the survey has not been conducted since 2018.

Source : Yano Research Institute

Overseas Sales and Number of Employees (JPMA Member Companies) A-5-3

Fiscal Year	Overseas Sales (JPY mil.)		Number of Employees - Overseas							
			North America		Europe		Asia and Others		Total	
	Value	No. of companies	No. of Employees	No. of Companies	No. of Employees	No. of Companies	No. of Employees	No. of Companies	No. of Employees	No. of Companies
1997	297,249	13	1,621	17	2,786	16	1,017	17	5,424	21
1998	431,897	22	4,978	19	3,630	16	5,584	18	14,192	22
1999	581,065	28	5,215	22	4,221	21	6,049	20	15,485	27
2000	922,761	31	6,405	24	5,338	20	9,027	23	21,345	29
2001	1,120,044	29	6,673	25	5,677	22	9,526	22	21,876	29
2002	1,339,311	28	8,034	26	6,658	22	8,574	20	23,266	28
2003	1,502,031	29	6,253	26	7,034	22	8,464	20	24,766	29
2004	1,536,004	29	7,456	26	8,611	22	6,334	23	26,851	30
2005	1,706,859	27	8,723	24	8,974	20	6,995	20	29,547	28
2006	2,018,424	28	7,791	22	7,175	16	6,516	18	32,075	28
2007	2,163,996	27	5,185	18	4,928	13	5,647	14	34,765	24
2008	2,330,551	29	13,893	17	7,650	13	6,452	13	53,618	22
2009	2,447,679	31	15,983	18	7,801	12	6,621	13	60,060	23
2010	2,216,743	30	14,002	17	7,796	9	6,215	11	49,649	21
2011	2,691,265	30	7,641	16	5,764	9	6,377	11	65,034	22
2012	2,873,613	28	7,309	16	5,763	9	6,798	12	78,840	24
2013	3,549,137	27	7,010	14	5,989	8	7,193	11	81,928	21
2014	2,964,694	28	7,818	16	6,507	10	8,775	15	30,985	22
2015	3,378,718	24	6,311	11	5,991	7	9,062	13	21,364	16
2016	3,262,055	26	6,256	12	6,088	7	8,364	14	20,708	17
2017	3,208,533	25	6,053	12	5,811	7	8,622	13	20,486	18
2018	3,858,173	22	7,274	11	6,538	10	6,506	11	20,318	16
2019	5,288,894	25	4,916	11	4,473	9	9,436	13	18,825	15
2020	4,390,860	25	7,860	12	4,434	9	9,350	13	21,644	17
2021	4,945,292	20	8,253	9	4,281	8	9,014	12	21,548	14
2022	5,967,969	21	7,949	11	5,068	10	10,141	16	23,158	18
2023	6,204,059	22	7,434	11	5,482	10	10,080	16	22,996	18

Note :

1. Survey of companies with more than 50% domestic capital.
2. Overseas Sales: 'No. of Companies' represents number of valid answers only.
3. The number of companies with employees in overseas indicates the number of companies that actually have employees locally.
4. The total number of employees being greater than the total of the numbers of employees in the three regions reflects the fact that some companies responded by giving only the total number of employees.
5. The total number of companies being smaller than the sum of the numbers of companies in each of the three regions reflects the fact that some companies have their overseas sites in multiple regions.

Source: JPMA Survey

Number of Overseas Bases (JPMA Member Companies)

A-5-4

Fiscal Year	Laboratory		R&D Bases		Factory	
	No. of Facilities	No. of Companies	No. of Facilities	No. of Companies	No. of Facilities	No. of Companies
1997	10	4	—	—	20	7
1998	18	7	—	—	42	14
1999	22	9	—	—	50	15
2000	24	12	—	—	63	15
2001	24	14	—	—	69	16
2002	26	15	—	—	63	17
2003	29	14	16	10	62	17
2004	23	13	39	15	67	17
2005	19	12	30	15	63	17
2006	23	10	42	20	63	16
2007	25	9	51	22	66	15
2008	27	9	54	22	59	13
2009	24	12	57	22	58	13
2010	23	11	50	20	44	12
2011	32	13	60	21	58	13
2012	35	14	64	21	68	13
2013	36	14	69	22	66	13
2014	33	14	60	18	65	12
2015	30	12	38	15	56	14
2016	27	12	46	18	48	13
2017	28	12	45	16	52	12
2018	27	12	51	15	43	12
2019	37	12	38	13	39	10
2020	40	13	65	17	59	15
2021	38	13	57	15	56	13
2022	41	13	54	16	59	15
2023	38	14	52	17	56	15

Note :

1. Survey of companies with more than 50% domestic capital.
2. 'No. of Companies' represents number of valid answers only. (No of companies with any of overseas sites)

Source: JPMA Survey

Overseas Bases by Countries (JPMA Member Companies) (1/3)

A-5-5

(1) Number of Laboratories by Countries

	Fiscal Year	2000	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
USA	Companies	9	12	11	10	9	9	11	10	12	12	12	10	8	9	9	10	10	11	11	10	11
	Facilities	11	14	14	15	19	16	18	18	21	23	21	14	13	15	15	21	25	29	27	25	23
Canada	Companies											1	1	1	1	1	1	1	1	1	1	1
	Facilities											1	1	1	1	1	1	1	1	1	1	1
Ireland	Companies	0																				1
	Facilities	0																				1
Denmark	Companies									1			1	1	1	1	1	1	1		1	1
	Facilities									1			1	1	1	1	1	1	1		1	1
Germany	Companies	3	1		1	1	1			1	1	1	1	1					1	1	1	1
	Facilities	3	1		1	1	1			1	1	1	1	1					1	2	2	2
Spain	Companies										1	1	1	1	1	1						
	Facilities										1	1	1	1	1	1						
Italy	Companies	0																				
	Facilities	0																				
UK	Companies	5	5	2	3	2	1	2	2	3	3	3	3	2	1	1		2	2	2	2	2
	Facilities	6	5	2	3	2	1	2	2	3	3	3	3	2	1	1		2	2	2	2	2
France	Companies	0	1																			
	Facilities	0	1																			
Netherlands	Companies			1	1	1	1	1	1													1
	Facilities			1	1	1	1	1	1													1
Switzerland	Companies							1	1	1	1	1	2	1	1	1	1	1	1		1	1
	Facilities							1	1	1	1	1	2	1	1	1	1	1	1		1	1
China	Companies	0	2	2	2	1	1	1		2	2	3	2	2	1	1		1			1	1
	Facilities	0	2	2	2	1	2	1		3	3	3	3	3	1	1		1			1	1
Indonesia	Companies	0																				
	Facilities	0																				
Taiwan	Companies	0																				
	Facilities	0																				
Vietnam	Companies													1	1	1	1	2	1			1
	Facilities													1	1	1	1	2	1			1
Korea	Companies	0																				
	Facilities	0																				
Singapore	Companies				1	1	1	1	1	1	1	2	2	2	2	2		1	1	1	1	1
	Facilities				1	1	1	1	1	1	1	3	2	2	2	2		1	1	1	1	1
India	Companies						1			1	1	1	2	3	2	2	1	1	2	2	2	2
	Facilities						4			1	1	1	2	3	2	2	1	1	2	2	2	2
Malaysia	Companies													1	1	1		1				
	Facilities													1	1	1		1				
Israel	Companies															1	1	1	1	2	2	2
	Facilities															1	1	1	1	2	2	2
Brazil	Companies										1	1	1									
	Facilities										1	1	1									
Others	Companies	4																				
	Facilities	4																				
Total	Companies	12	13	12	10	9	9	12	11	13	14	14	11	12	12	12	12	12	13	13	13	14
	Facilities	24	12	19	23	25	27	24	23	32	35	36	31	30	27	28	27	37	40	38	41	38

Note :

1. Survey of companies with more than 50% domestic capital.
2. 'No. of Companies' represents number of valid answers only. (No. of companies with any of oversea sites)
3. No. of companies of the total column shows the number of companies having the laboratories abroad.
4. In 2000, the survey required specification of 10 countries. The other countries are shown as 'Others'.
From 2004, all countries are shown in the table.

Source: JPMA Survey

Overseas Bases by Countries (JPMA Member Companies) (2/3)

A-5-5

(2) Number of R&D Bases by Countries

	Fiscal Year	2005	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
USA	Companies	14	21	20	21	21	22	18	13	16	14	14	12	16	14	12	15
	Facilities	15	28	25	26	26	29	23	17	20	18	26	16	31	27	25	21
Canada	Companies	1	1	1			1	1	1	2	2	2	2	2	1	1	
	Facilities	1	1	1			1	1	1	2	2	2	2	2	1	1	
Ireland	Companies	1										1					
	Facilities	1										1					
Denmark	Companies					2	2	1									
	Facilities					2	2	1									
Finland	Companies	1	1	1	1	1	1	1				1		1	1	1	1
	Facilities	1	1	1	1	1	1	1				1		1	1	1	1
Germany	Companies	3	3	2	3	2	3	2		1	1	1	1	1	1	1	1
	Facilities	3	3	2	3	2	3	2		1	1	1	1	1	1	1	1
UK	Companies	5	9	7	8	10	10	9	6	6	4	5	3	5	4	3	3
	Facilities	5	9	7	9	11	10	9	6	6	4	6	3	5	4	3	3
France	Companies				1	1	1							2	2	2	2
	Facilities				1	1	1							2	2	2	2
Netherlands	Companies	1	1	1	1	1	1	1	1	1	1						1
	Facilities	1	1	1	1	1	1	1	1	1	1						1
Switzerland	Companies		1	1	1	1	1	2	1	2	2	1	1	3	1	2	3
	Facilities		1	1	2	1	1	2	1	2	2	1	1	3	1	2	3
Russia	Companies									1	1						
	Facilities									1	1						
China	Companies	2	7	5	8	8	7	9	8	6	7	7	5	8	8	8	9
	Facilities	2	7	5	10	11	11	12	9	6	7	8	6	9	8	8	9
Hong-Kong	Companies													1	1	1	1
	Facilities													1	1	1	1
Taiwan	Companies		1	1	1	1	1	1		1	1	1	1	1	2	2	2
	Facilities		1	1	1	1	1	1		1	1	1	1	1	2	2	2
Vietnam	Companies												1				
	Facilities												1				
Korea	Companies	1	2	3	3	3	3	2	1	1	1	2	2	3	4	3	3
	Facilities	1	2	3	3	3	3	2	1	1	1	2	2	3	4	3	3
Singapore	Companies		3	3	3	3	4	4	1	2	3	1	1	2	2	2	2
	Facilities		3	3	3	3	5	4	1	2	3	1	1	2	2	2	2
India	Companies									1	1		1	1			
	Facilities									1	1		1	1			
Malaysia	Companies								1	1	1		1				
	Facilities								1	1	1		1				
Thailand	Companies													1	1	1	1
	Facilities													1	1	1	1
Israel	Companies										1		1	1	1	1	1
	Facilities										1		1	1	1	1	1
Brazil	Companies					1		1		1	1	1	1	1	1	1	1
	Facilities					1		1		1	1	1	1	1	1	1	1
Total	Companies	15	22	20	21	21	22	19	15	18	16	15	13	17	15	16	17
	Facilities	30	57	50	60	64	69	60	38	46	45	51	38	65	57	54	52

Note :

1. Survey of companies with more than 50% domestic capital.
2. 'No. of Companies' represents number of valid answers only. (No. of companies with any of overseas sites)
3. No. of companies of the total column shows the number of companies having the development bases abroad.

Source: JPMA Survey

Overseas Bases by Countries (JPMA Member Companies) (3/3)

A-5-5

(3) Number of Factories by Countries

	Fiscal Year	2000	2005	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
USA	Companies	5	5	5	5	5	4	5	3	4	4	4	2	3	3	3	3	5
	Facilities	8	6	5	5	5	4	6	4	5	4	4	2	3	5	5	5	10
Canada	Companies			2	1	1									1			
	Facilities			2	1	1									1			
Ireland	Companies	3	2	2	2	2	2	2	2	1	2	2	1	1	1	1	1	1
	Facilities	4	4	3	3	3	4	4	2	2	2	2	2	2	2	2	2	2
Denmark	Companies				1	2	2	2	2	1	2	2	1	1	1	1	1	1
	Facilities				1	2	3	2	2	1	1	1	1	1	1	1	1	1
Norway	Companies					1	1	1	1		1	1						
	Facilities					1	2	1	1		—	—						
Finland	Companies		1	1	1	1	1	1	1									
	Facilities		1	1	1	1	1	1	1									
Germany	Companies	3	2			1	1	1	1	1	1	1	1	1	1	1	1	1
	Facilities	3	2			1	2	2	2	1	—	—	1	1	1	1	1	1
Spain	Companies		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Facilities		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Italy	Companies	2	1	1	1	1	1	1	1		1	1						
	Facilities	2	1	1	1	1	1	1	1		—	—						
UK	Companies	0	1	1	1	1	1	1	2	2	2	2	1	1	2	2	2	2
	Facilities	0	1	1	1	1	1	1	2	2	2	2	1	1	2	2	2	2
France	Companies	1	2							1			1	2	2	2	2	2
	Facilities	1	2							1			1	2	3	3	3	3
Netherlands	Companies		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Facilities		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Belgium	Companies					1	1	1	1		1	1						
	Facilities					1	1	1	1		—	—						
Austria	Companies					1	1	1	1		1	1						
	Facilities					1	1	1	1		—	—						
Switzerland	Companies			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Facilities			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Poland	Companies					1	1	1	1		1	1						
	Facilities					1	1	1	1		—	—						
Russia	Companies						1	1	1		1	1						
	Facilities						1	1	1		—	—						
Estonia	Companies						1	1	1									
	Facilities						1	1	1									
China	Companies	6	12	10	9	11	11	11	11	11	10	10	8	7	11	11	10	10
	Facilities	7	14	16	10	14	15	15	14	15	12	14	11	10	15	15	13	12
Indonesia	Companies	5	7	7	6	7	7	7	6	5	6	6	3	4	5	5	5	5
	Facilities	5	8	8	7	8	9	9	7	5	5	5	3	4	5	5	5	5
Taiwan	Companies	8	7	5	3	3	2	1	1	1	1	1	2	1	1	1	1	1
	Facilities	8	7	5	3	3	2	1	1	1	1	1	2	1	1	1	1	1
Vietnam	Companies		2	2	2	2	2	2	2	5	4	5	3	4	4	3	5	5
	Facilities		2	2	2	2	2	2	2	6	4	6	3	5	6	5	8	8
Korea	Companies	3	2	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1
	Facilities	3	2	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1
Thailand	Companies		3	2	1	1	1	1	1	1	2	2	2		1	1	2	2
	Facilities		3	3	1	1	1	1	1	1	2	2	3		1	1	2	2
India	Companies		1	1	1	1	2	2	3	3	2	3	1	1	2	2	2	2
	Facilities		1	1	1	1	2	2	8	7	7	7	7	7	7	8	8	8
Philippines	Companies		1	1	1	1	1											
	Facilities		1	1	1	1	1											
Malaysia	Companies		1	1	1	1	1	1	1	1	1	1		1	1	1	1	1
	Facilities		1	1	1	1	1	1	2	2	2	2		2	2	2	2	2
Pakistan	Companies		1	1														
	Facilities		1	1														
Mexico	Companies					1	2	2	2	1	2	2		1	1	1		
	Facilities					1	2	2	2	1	1	1		1	1	1		
Brazil	Companies		2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	Facilities		2	1	1	2	3	3	3	2	1	1	2	2	2	2	2	2
Colombia	Companies						1	1	1									
	Facilities						1	1	1									
Argentina	Companies						1	1	1			1	1					
	Facilities						1	1	1		—	—						
Venezuela	Companies		1															
	Facilities		1															
Egypt	Companies		1	1														
	Facilities		1	1														
Others	Companies	9																
	Facilities	22																
Total	Companies	15	17	13	12	13	13	13	13	14	13	12	12	10	15	13	15	15
	Facilities	63	63	58	44	58	68	66	66	56	48	52	43	39	59	56	59	56

Note :

1. Survey of companies with more than 50% domestic capital.
2. 'No. of Companies' represents number of valid answers only. (No. of companies with any of oversea sites)
3. No. of companies of the total column shows the number of companies having the factories abroad.
4. In 2016 and 2017, there were companies which gave out no information about No. of facility.
Therefore, No. of facility can be lower than No. of company.
5. In 2000, the survey required specification of 10 countries. The other countries are shown as 'Others'.
From 2005, all countries are shown in the table.

Source: JPMA Survey

A. Pharmaceutical Industry Outlook

A-6. Pharmaceutical Production

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Pharmaceutical Production (Japan)

A-6-1

(Unit: JPY 100 mil.)

Year	Pharmaceutical Production			Ethicals			Imports	Ratio to Ethics (%)
		Change (%)	Ratio to GDP (%)		Change (%)	Ratio to Pharmaceutical Production (%)		
1975*	17,924	5.5	1.21	14,640	5.9	81.7	5,581	38.1
1980*	34,822	14.5	1.43	29,784	16.3	85.5	9,972	33.5
1985*	40,018	△ 0.6	1.23	33,837	△ 1.3	84.6	9,977	29.5
1990*	55,954	1.7	1.26	47,203	0.9	84.4	13,955	29.6
1995*	61,681	7.3	1.18	52,436	7.4	85.0	14,959	28.5
2000	59,273	△ 1.9	1.11	51,278	△ 1.4	86.5	12,491	24.4
2001	61,954	4.5	1.17	54,259	5.8	87.6	13,633	25.1
2002	61,448	△ 0.8	1.17	53,913	△ 0.6	87.7	13,571	25.2
2003	61,734	0.5	1.18	54,589	1.3	88.4	13,385	24.5
2004	61,212	△ 0.8	1.16	54,402	△ 0.3	88.9	13,080	24.0
2005	63,907	4.4	1.20	57,413	5.5	89.8	14,941	26.0
2006	64,381	0.7	1.20	58,036	1.1	90.1	14,620	25.2
2007	64,522	0.2	1.20	58,281	0.4	90.3	15,015	25.8
2008	66,201	2.6	1.25	59,928	2.8	90.5	15,255	25.5
2009	68,196	3.0	1.38	61,742	3.0	90.5	15,529	25.2
2010	67,791	△ 0.6	1.34	61,489	△ 0.4	90.7	16,549	26.9
2011	69,874	3.1	1.40	63,445	3.2	90.8	17,298	27.3
2012	69,767	△ 0.2	1.39	62,630	△ 1.3	89.8	16,726	26.7
2013	68,940	△ 1.2	1.36	61,940	△ 1.1	89.8	15,617	25.2
2014	65,898	△ 4.4	1.27	58,689	△ 5.2	89.1	15,676	26.7
2015	67,481	2.4	1.25	59,969	2.2	88.9	15,829	26.4
2016	66,239	△ 1.8	1.22	58,714	△ 2.1	88.6	14,765	25.1
2017	67,213	1.5	1.22	60,074	2.3	89.4	16,296	27.1
2018	69,077	2.8	1.24	61,726	2.7	89.4	18,907	30.6
2019 [†]	94,754	37.2	1.70	86,523	40.2	91.3	62,531	72.3
2020 [†]	92,639	△ 2.2	1.72	84,781	△ 2.0	91.5	58,434	68.9
2021 [†]	91,747	△ 1.0	1.66	84,255	△ 0.6	91.8	55,534	65.9
2022 [†]	99,819	8.8	1.78	92,278	9.5	92.4	60,968	66.1
2023	100,332	- ^{††}	1.70	91,529	- ^{††}	91.2	60,926	66.6
23 JPMA Total	(32companies) 34,827	—	—	(32companies) 33,569	—	(32companies) 96.0	—	—

Note :

- "Imports" means the pharmaceutical products that the final manufacturing process is carried out by a Japan domestic manufacturer from imported active pharmaceutical ingredients whose number is more than domestic ones. That is, "Imports" does not include imported pharmaceutical products, i.e., either products for which a foreign manufacturer has performed the final manufacturing process or final products for which the final manufacturing process, and packaging and labeling processes have been carried out.
- JPMA Total is based on the JPMA Survey.
- Values of Pharmaceutical Production from 2000 to 2005 were retroactively revised, based on the revised definition in 2006. Values of Pharmaceutical Production from 1975 to 1995 were based on the previous definition.
- The survey method of Statistics of Production by Pharmaceutical Industry has been changed from 2019. For details, please refer to the "Notification on the Change of Survey Method of the Current Survey of Pharmaceutical Industry Production" (Notification from the Director of the Economic Affairs Division, Health Policy Bureau, Ministry of Health, Labour and Welfare, dated April 10, 2018, report No. 0410-1).
- Values have been retrospectively revised in accordance with revisions in the source documents cited. The numbers marked with [†] are based on the figure reported in the previous report, as they are currently being reviewed in the latest report. Therefore, the ratio marked with ^{††} have not been calculated.
- Values of GDP for each year are based on the 1990 standard for 1975, the 2000 standard for 1980-1990, and the 2015 standard for 1995 and later.

Source :

Ministry of Health, Labour and Welfare, Statistics of Production by Pharmaceutical Industry
<https://www.mhlw.go.jp/toukei/list/105-1c.html>
 Economic and Social Research Institute, Cabinet Office, Statistics of GDP
<https://www.esri.cao.go.jp/sna/menu.html>
 JPMA Survey

Pharmaceutical Production by Therapeutic Category (Japan)

A-6-2

2023

(Unit:JPY mil.)

Therapeutic Category	Total	Ethical Drug			OTC, etc.	
		Share (%)	Domestic Products	Imports		
Total	10,033,216	9,152,877	100.0	3,060,304	6,092,573	880,338
CNS	1,091,625	937,881	10.2	308,487	629,394	153,744
Peripheral nervous system	38,728	36,185	0.4	6,277	29,908	2,542
Sensory organs	348,139	247,994	2.7	46,960	201,034	100,145
Other agents affecting nervous system and sensory organs	11,755	11,755	0.1	11,755	—	—
Cardiovascular system	803,097	791,433	8.6	289,992	501,441	11,664
Respiratory system	137,485	104,730	1.1	32,406	72,325	32,755
Gastrointestinals	610,068	531,051	5.8	246,436	284,615	79,017
Hormones	321,880	321,742	3.5	147,204	174,538	138
Genito-urinary system	151,709	142,081	1.6	52,593	89,488	9,628
Dermatologicals	422,382	232,549	2.5	40,549	191,999	189,833
Dental use	26,544	10,095	0.1	1,338	8,758	16,449
Other agents affecting individual organs	260	260	0.0	86	174	—
Vitamins	188,113	96,860	1.1	32,842	64,017	91,253
Nutrients/Tonics	178,632	133,110	1.5	55,705	77,404	45,522
Blood/Blood forming organs	675,909	675,871	7.4	371,207	304,664	38
Artificial dialysis agents	61,054	61,054	0.7	31,054	30,001	—
Other metabolic agents	1,403,689	1,363,564	14.9	431,851	931,713	40,125
Agents activating cellular function	1,016	57	0.0	—	57	959
Antitumor agents	1,344,706	1,344,679	14.7	160,903	1,183,777	26
Radio pharmaceuticals	49,996	49,996	0.5	38,289	11,708	—
Antiallergics	165,265	152,186	1.7	40,441	111,745	13,079
Crude drugs	4,042	2,910	0.0	6	2,904	1,132
Chinese herbal drugs	236,075	181,202	2.0	1,088	180,114	54,873
Other natural drugs & Chinese medicine	13,811	4,055	0.0	—	4,055	9,755
Antibiotics	182,849	182,849	2.0	63,812	119,036	—
Chemotherapeutics	423,598	422,753	4.6	50,350	372,402	845
Biological products	575,581	575,581	6.3	307,578	268,003	—
Antiparasitics	765	671	0.0	1	670	94
Dispensing drugs	11,426	9,901	0.1	5,572	4,328	1,525
Diagnostics, In Vivo	37,420	37,420	0.4	7,617	29,803	—
Hygiene products	25,637	8,381	0.1	3,868	4,513	17,256
Diagnostics, In Vitro	445,446	439,801	4.8	244,742	195,059	5,645
Other agents	19,359	17,064	0.2	9,341	7,723	2,296
Alkaloidal narcotics	15,734	15,734	0.2	15,734	—	—
Non-alkaloidal narcotics	9,424	9,424	0.1	4,220	5,204	—

Note :

- "Domestic products" means the pharmaceutical products that the final manufacturing process is carried out by a Japan domestic manufacturer from domestic active pharmaceutical ingredients whose number is the same to or more than imported ones.
- "Imports" means the pharmaceutical products that the final manufacturing process is carried out by a Japan domestic manufacturer from imported active pharmaceutical ingredients whose number is more than domestic ones. That is, "Imports" does not include imported pharmaceutical products, i.e., either products for which a foreign manufacturer has performed the final manufacturing process or final products for which the final manufacturing process, and packaging and labeling processes have been carried out.
- The survey method of Statistics of Production by Pharmaceutical Industry has been changed from 2019.
For details, please refer to the "Notification on the Change of Survey Method of the Current Survey of Pharmaceutical Industry Production" (Notification from the Director of the Economic Affairs Division, Health Policy Bureau, Ministry of Health, Labour and Welfare, dated April 10, 2018, report No. 0410-1).
- OTC etc. includes non-prescription drugs Pharmacist's guidance required.

Source : Ministry of Health, Labour and Welfare, Statistics of Production by Pharmaceutical Industry
<https://www.mhlw.go.jp/toukei/list/105-1.html>

Trends in Ethical Drug Production by Composition Ratio of Main Therapeutic Category (Japan)

A-6-3

Year	Rank									
	Upper row: Therapeutic Category, Bottom row: Share (%)					Rank				
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
1980	Antibiotics 27.3%	Cardiovascular 12.1%	CNS 9.1%	Metabolic 8.6%	Vitamins 6.3%	Gastrointestinals 6.2%	Dermatological 4.1%	Biologicals 3.8%	Antineoplastics 3.6%	Hormones 3.0%
1985	Antibiotics 20.4%	Cardiovascular 15.0%	CNS 8.6%	Gastrointestinals 8.0%	Metabolic 5.5%	Vitamins 5.4%	Dermatological 4.6%	Biologicals 4.5%	Antineoplastics 4.1%	Blood forming organs 3.6%
1990	Cardiovascular 17.3%	Antibiotics 13.2%	CNS 9.1%	Gastrointestinals 9.0%	Metabolic 3.5%	Respiratory system 4.3%	Dermatological 4.8%	Vitamins 3.9%	Blood forming organs 3.8%	Biologicals 3.5%
1995	Cardiovascular 19.1%	Gastrointestinals 8.7%	Antibiotics 8.6%	CNS 8.4%	Metabolic 7.9%	Blood forming organs 5.0%	Biologicals 4.4%	Dermatological 4.2%	Antiallergics 3.5%	Chemotherapeutic 3.4%
2000	Cardiovascular 20.7%	Gastrointestinals 8.3%	Metabolic 8.1%	CNS 7.2%	Antibiotics 7.0%	Blood forming organs 6.4%	Biologicals 4.7%	Dermatological 4.5%	Antiallergics 3.4%	in vitro Diagnostics 3.1%
2001	Cardiovascular 21.6%	Metabolic 8.5%	Gastrointestinals 8.3%	CNS 7.5%	Antibiotics 7.2%	Blood forming organs 5.3%	Biologicals 4.5%	Antiallergics 4.3%	Dermatological 4.1%	Chemotherapeutic 2.9%
2002	Cardiovascular 21.4%	Metabolic 9.1%	Gastrointestinals 8.3%	CNS 8.0%	Antibiotics 6.5%	Blood forming organs 5.2%	Biologicals 4.4%	Dermatological 4.0%	Antiallergics 3.8%	Chemotherapeutic 3.3%
2003	Cardiovascular 22.4%	Metabolic 9.1%	Gastrointestinals 8.4%	CNS 8.2%	Antibiotics 6.7%	Blood forming organs 5.4%	Antiallergics 4.2%	Biologicals 4.1%	Dermatological 3.8%	Chemotherapeutic 3.3%
2004	Cardiovascular 22.0%	Metabolic 9.7%	CNS 8.7%	Gastrointestinals 8.4%	Antibiotics 6.2%	Blood forming organs 5.4%	Biologicals 4.5%	Dermatological 4.1%	Antiallergics 3.9%	Chemotherapeutic 3.3%
2005	Cardiovascular 22.6%	Metabolic 10.1%	Gastrointestinals 9.1%	CNS 7.7%	Antibiotics 6.0%	Blood forming organs 5.8%	Dermatological 4.1%	Biologicals 4.0%	Antiallergics 4.02%	in vitro Diagnostics 3.1%
2006	Cardiovascular 24.3%	Metabolic 9.5%	Gastrointestinals 8.5%	CNS 7.7%	Blood forming organs 6.5%	Antibiotics 5.6%	Biologicals 4.3%	Dermatological 4.0%	Antiallergics 3.7%	in vitro Diagnostics 3.2%
2007	Cardiovascular 23.7%	Metabolic 9.8%	Gastrointestinals 8.7%	CNS 8.3%	Blood forming organs 6.4%	Antibiotics 5.1%	Biologicals 4.7%	Dermatological 3.94%	Antiallergics 3.89%	in vitro Diagnostics 3.3%
2008	Cardiovascular 23.9%	Metabolic 10.0%	CNS 8.6%	Gastrointestinals 8.6%	Blood forming organs 6.8%	Biologicals 4.6%	Antibiotics 4.5%	Antiallergics 4.04%	Dermatological 3.96%	in vitro Diagnostics 3.1%
2009	Cardiovascular 22.9%	Metabolic 10.2%	CNS 9.7%	Gastrointestinals 8.9%	Blood forming organs 7.0%	Biologicals 4.6%	Antibiotics 4.3%	Dermatological 3.9%	Antiallergics 3.8%	in vitro Diagnostics 3.2%
2010	Cardiovascular 22.7%	CNS 10.8%	Metabolic 9.5%	Gastrointestinals 8.4%	Blood forming organs 7.3%	Biologicals 4.9%	Antibiotics 3.9%	Antiallergics 3.8%	Dermatological 3.6%	in vitro Diagnostics 3.2%
2011	Cardiovascular 21.1%	CNS 11.8%	Metabolic 9.9%	Gastrointestinals 7.9%	Blood forming organs 7.3%	Biologicals 5.0%	Antibiotics 4.2%	Antiallergics 4.1%	Dermatological 3.9%	in vitro Diagnostics 2.9%
2012	Cardiovascular 20.6%	CNS 11.6%	Metabolic 9.5%	Blood forming organs 8.2%	Gastrointestinals 7.8%	Biologicals 4.9%	Antibiotics 4.0%	Dermatological 3.8%	Antiallergics 3.6%	in vitro Diagnostics 3.3%
2013	Cardiovascular 20.1%	CNS 10.8%	Metabolic 10.0%	Blood forming organs 8.0%	Gastrointestinals 7.2%	Biologicals 5.3%	Antiallergics 4.1%	Dermatological 3.83%	Antibiotics 3.77%	in vitro Diagnostics 3.5%
2014	Cardiovascular 19.6%	CNS 11.2%	Metabolic 10.0%	Blood forming organs 7.7%	Gastrointestinals 6.8%	Biologicals 5.1%	Antibiotics 4.0%	Dermatological 3.9%	Antiallergics 3.69%	in vitro Diagnostics 3.67%
2015	Cardiovascular 18.0%	CNS 10.81%	Metabolic 10.78%	Blood forming organs 7.7%	Gastrointestinals 6.4%	Biologicals 5.5%	Antiallergics 3.84%	in vitro Diagnostics 3.82%	Antineoplastics 3.79%	Dermatological 3.7%
2016	Cardiovascular 17.0%	CNS 11.5%	Metabolic 11.0%	Blood forming organs 7.2%	Antineoplastics 5.56%	Biologicals 5.55%	Gastrointestinals 5.5%	in vitro Diagnostics 4.0%	Sensory organ 3.62%	Antibiotics 3.57%
2017	Cardiovascular 15.4%	Metabolic 12.5%	CNS 10.4%	Antineoplastics 7.4%	Blood forming organs 7.0%	Biologicals 5.8%	Gastrointestinals 5.6%	Dermatological 3.7%	in vitro Diagnostics 3.6%	Sensory organ 3.3%
2018	Metabolic 13.2%	Cardiovascular 12.9%	CNS 10.4%	Antineoplastics 9.9%	Blood forming organs 7.6%	Biologicals 5.8%	Gastrointestinals 5.0%	Chemotherapeutic 4.5%	in vitro Diagnostics 4.3%	Dermatological 3.5%
2019	Antineoplastics 13.4%	Metabolic 12.9%	CNS 11.4%	Cardiovascular 11.2%	Blood forming organs 7.9%	Biologicals 5.8%	Gastrointestinals 5.6%	in vitro Diagnostics 4.6%	Chemotherapeutic 4.5%	Hormones 3.0%
2020	Metabolic 14.23%	Antineoplastics 14.17%	Cardiovascular 11.0%	CNS 10.8%	Blood forming organs 7.6%	Biologicals 6.4%	Gastrointestinals 5.7%	in vitro Diagnostics 4.4%	Hormones 3.0%	Chemotherapeutic 2.9%
2021	Metabolic 15.5%	Antineoplastics 15.4%	Cardiovascular 10.6%	CNS 9.8%	Blood forming organs 7.3%	Biologicals 6.7%	Gastrointestinals 5.6%	in vitro Diagnostics 5.4%	Hormones 3.3%	Dermatological 2.8%
2022	Antineoplastics 15.5%	Metabolic 14.7%	Cardiovascular 9.7%	CNS 9.5%	Blood forming organs 6.8%	Biologicals 6.5%	in vitro Diagnostics 6.2%	Gastrointestinals 5.5%	Chemotherapeutic 4.1%	Hormones 3.3%
2023	Metabolic 14.9%	Antineoplastics 14.7%	CNS 10.2%	Cardiovascular 8.6%	Blood forming organs 7.4%	Biologicals 6.3%	Gastrointestinals 5.8%	in vitro Diagnostics 4.8%	Chemotherapeutic 4.6%	Hormones 3.5%

Note:

- Each numeric data rounded off the 2nd decimal place to the 1st decimal place. If the same numeric data given is the same, numeric data rounded off the 3rd decimal place to the 2nd decimal place is shown.
- The survey method of Statistics of Production by Pharmaceutical Industry has been changed from 2019. For details, please refer to the "Notification on the Change of Survey Method of the Current Survey of Pharmaceutical Industry Production" (Notification from the Director of the Economic Affairs Division, Health Policy Bureau, Ministry of Health, Labour and Welfare, dated April 10, 2018, report No. 0410-1).
- Values have been retrospectively revised in accordance with revisions in the source documents cited.

Source : Ministry of Health, Labour and Welfare, Statistics of Production by Pharmaceutical Industry
<http://www.mhlw.go.jp/toukei/list/105-1.c.html>

Pharmaceutical Production by Dosage Forms (Japan)

A-6-4

Dosage Form	Year	1995	2000	2005	2010	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
		Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)	Value (JPY mil.)
Powders and granules etc.	Value (JPY mil.)	548,989	472,808	413,219	384,555	385,762	389,397	371,010	382,505	386,409	366,201	356,305	350,743	362,211	328,128	367,584	406,768
	Share (%)	8.9	7.6	6.5	5.7	5.5	5.6	5.6	5.6	5.7	5.8	5.4	5.2	3.7	3.6	3.7	4.1
Tablets	Value (JPY mil.)	2,398,684	2,519,393	2,945,439	3,599,803	3,599,428	3,497,293	3,234,652	3,230,842	3,049,389	3,043,763	3,085,101	4,534,305	4,303,025	4,083,019	4,411,398	4,638,163
	Share (%)	38.9	40.7	46.1	53.1	51.6	50.7	49.1	47.9	46.0	45.3	44.7	47.9	46.4	44.5	44.2	46.2
Pills*1	Value (JPY mil.)	22,400	18,448	16,108	13,590	13,126	14,248	14,618	14,952	15,390	15,456	13,800	17,904	14,183	11,401	12,926	17,800
	Share (%)	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
Capsules	Value (JPY mil.)	571,016	531,189	503,496	403,529	405,009	426,207	409,149	442,634	425,401	426,239	454,054	671,959	645,275	568,177	735,180	787,329
	Share (%)	9.3	8.6	7.9	6.0	5.8	6.2	6.2	6.6	6.6	6.4	6.3	6.6	7.1	7.0	6.2	7.4
Oral liquid preparations	Value (JPY mil.)	370,876	218,183	174,076	173,494	174,184	165,355	171,200	165,346	161,967	146,566	150,522	201,362	178,070	164,722	190,212	196,354
	Share (%)	6.0	3.5	2.7	2.6	2.5	2.4	2.6	2.5	2.4	2.2	2.2	2.1	1.9	1.8	1.9	2.0
Injections*2	Value (JPY mil.)	627,865	556,952	461,396	365,372	368,988	351,452	345,097	390,366	469,191	527,534	638,188	1,200,312	1,278,588	1,432,308	1,459,779	1,286,789
	Share (%)	10.2	9.0	7.2	5.4	5.3	5.1	5.2	5.8	7.1	7.8	9.2	12.7	13.8	15.6	14.6	12.8
Powders for injection*3	Value (JPY mil.)	493,979	444,021	290,634	204,385	254,308	253,298	268,894	245,996	222,609	239,178	239,005	283,570	319,289	286,788	335,321	364,683
	Share (%)	8.0	7.2	4.5	3.0	3.6	3.7	4.1	3.6	3.4	3.6	3.5	3.0	3.4	3.1	3.4	3.6
Solution for external application	Value (JPY mil.)	242,652	313,427	290,151	296,169	323,820	331,027	357,631	408,296	449,993	415,194	441,025	426,192	437,228	458,890	458,874	472,860
	Share (%)	3.9	5.1	4.5	4.4	4.6	4.8	5.4	6.1	6.8	6.2	6.4	4.5	4.7	5.0	4.6	4.7
Aerosols	Value (JPY mil.)	6,293	12,976	12,611	11,932	13,072	12,775	14,069	16,781	17,390	25,951	27,889	34,597	25,612	23,308	24,563	22,770
	Share (%)	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2
Ointments and creams	Value (JPY mil.)	146,814	150,597	123,662	138,490	178,555	160,850	158,268	150,288	157,055	157,421	165,763	180,678	189,857	196,813	189,660	191,118
	Share (%)	2.4	2.4	1.9	2.0	2.6	2.3	2.4	2.2	2.2	2.4	2.4	1.9	2.0	2.1	1.9	1.9
Suppositories	Value (JPY mil.)	41,728	35,139	24,496	18,615	21,455	18,793	13,541	12,577	12,453	12,178	9,664	13,033	13,610	12,354	13,139	14,475
	Share (%)	0.7	0.6	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Cataplasms etc**4	Value (JPY mil.)	126,979	173,897	188,832	195,706	213,533	214,196	210,838	219,583	216,591	223,245	204,357	207,710	198,052	200,405	205,938	211,661
	Share (%)	2.1	2.8	3.0	2.9	3.1	3.1	3.2	3.3	3.3	3.3	3.0	2.2	2.1	2.2	2.1	2.1
Others	Value (JPY mil.)	569,787	735,600	946,601	973,460	1,025,471	1,059,124	1,020,795	1,067,955	1,040,023	1,122,390	1,122,048	1,353,001	1,298,865	1,408,354	1,577,308	1,422,445
	Share (%)	9.2	11.9	14.8	14.4	14.7	15.4	15.5	15.8	15.7	16.7	16.2	14.3	14.0	15.4	15.8	14.2
Total	Value (JPY mil.)	6,168,062	6,182,631	6,390,722	6,779,099	6,976,712	6,894,014	6,589,762	6,748,121	6,623,860	6,721,317	6,907,722	9,475,366	9,263,864	9,174,668	9,981,883	10,033,216
	Share (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note:

1. The survey method of Statistics of Production by Pharmaceutical Industry has been changed from 2019. For details, please refer to the "Notification on the Change of Survey Method of the Current Survey of Pharmaceutical Industry Production" (Notification from the Director of the Economic Affairs Division, Health Policy Bureau, Ministry of Health, Labour and Welfare, dated April 10, 2018, report No. 0410-1).

2. Values have been retrospectively revised in accordance with revisions in the source documents cited.

*1 Usually prepared by mixing drugs uniformly with diluents, binders and others and rolling into spherical form

*2 Solutions, Suspensions or Emulsions

*3 To be dissolved before use

*4 Pasty Preparation or those spread on cloth or plastic film for external application

Source : Ministry of Health, Labour and Welfare, Statistics of Production by Pharmaceutical Industry <http://www.mhlw.go.jp/toukei/list/105-1-c.html>

A. Pharmaceutical Industry Outlook

A-7. Research and Development

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R&D Expenditures of the Pharmaceutical Industry (Japan)

A-7-1

Fiscal Year	R&D Expenditures (JPY 100 mil.)	Change from the previous year		% of Sales
		Value (JPY 100 mil.)	%	
1980	1,898	129	7.3	5.45
1985	3,419	466	15.8	7.04
1990	5,161	601	13.2	8.02
1994	6,328	36	0.6	7.79
1995	6,422	94	1.5	8.03
1996	6,671	249	3.9	8.11
1997	6,433	△ 238	△ 3.6	8.06
1998	6,811	378	5.9	8.07
1999	6,894	83	1.2	8.07
2000	7,462	568	8.2	8.60
2001	8,109	647	8.7	8.52
2002	9,657	1,548	19.1	8.91
2003	8,837	△ 820	△ 8.5	8.43
2004	9,067	230	2.6	8.64
2005	10,477	1,410	15.5	10.01
2006	11,735	1,258	12.0	10.95
2007	12,537	802	6.8	12.11
2008	12,956	419	3.3	11.74
2009	11,937	△ 1,019	△ 7.9	11.66
2010	12,760	823	6.9	12.02
2011	12,299	△ 461	△ 3.6	11.96
2012	13,061	762	6.2	11.81
2013	14,371	1,310	10.0	11.70
2014	14,953	582	4.1	12.21
2015	14,577	△ 376	△ 2.5	11.93
2016	13,516	△ 1,061	△ 7.3	10.04
2017	14,653	1,137	8.4	11.10
2018	14,047	△ 606	△ 4.1	11.05
2019	13,392	△ 655	△ 4.7	10.08
2020	13,216	△ 176	△ 1.3	9.68
2021	13,986	770	5.8	10.06
2022	14,304	318	2.3	9.73
2023	15,386	1,082	7.6	10.26

Note.

The R&D expenditures described here refer to research expenditures used internally, as defined in "Report on the Survey of Research and Development" by the Ministry of Internal Affairs and Communications.

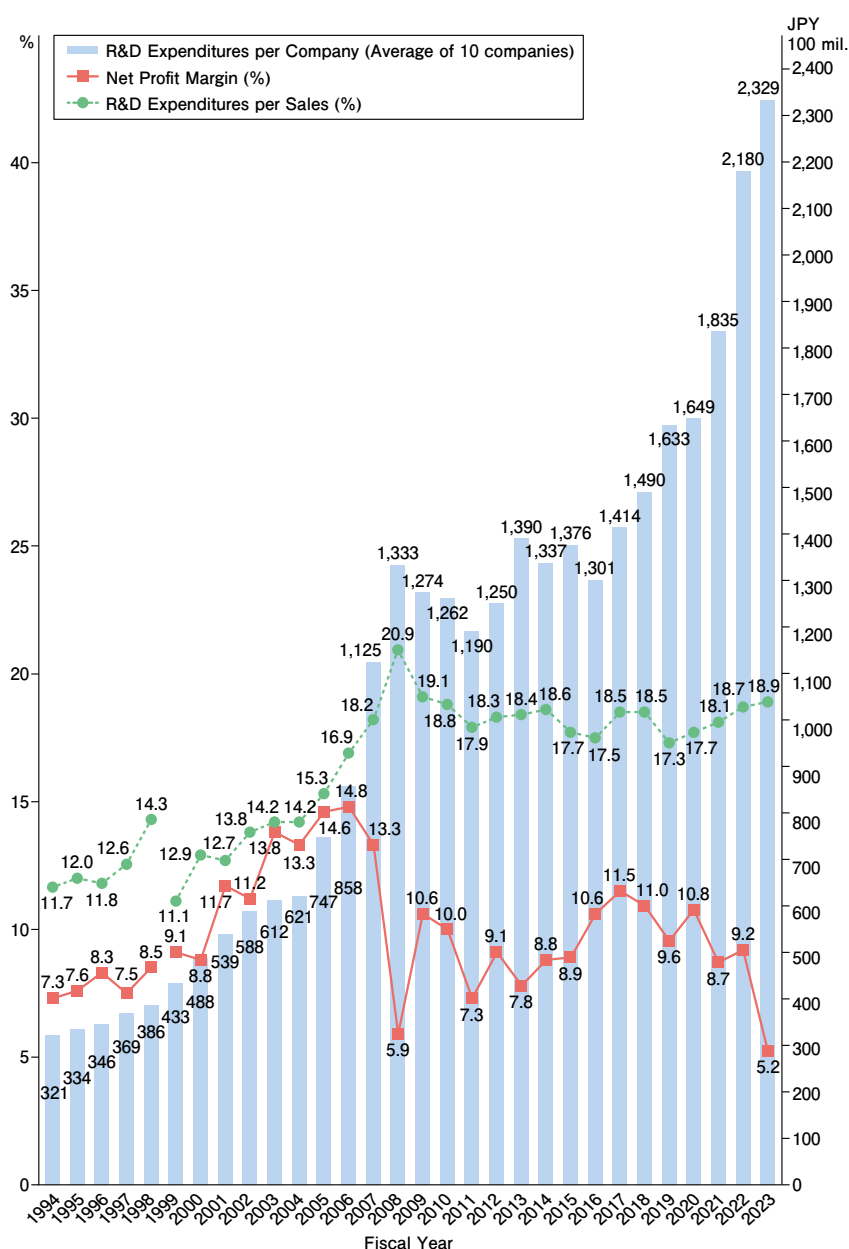
They mean research expenditures used within the companies out of their own funds and funds received from external sources. They do not include research expenditures paid to external parties, such as contract research and joint research.

Source : Ministry of Internal Affairs and Communications, Report on the Survey of Research and Development
<http://www.stat.go.jp/data/kagaku/index.html>

Trends of R&D Expenditures and Profits as Sales Ratio (Japan)

A-7-4

Fiscal Year	R&D Expenditures Average (JPY 100 mil.)	Net Profit Margin (%)	R&D Expenditures per Sales (%)
1994	321	7.3	11.7
1995	334	7.6	12.0
1996	346	8.3	11.8
1997	369	7.5	12.6
1998	386	8.5	14.3
1999	433	9.1	11.1
2000	488	8.8	12.9
2001	539	11.7	12.7
2002	588	11.2	13.8
2003	612	13.8	14.2
2004	621	13.3	14.2
2005	747	14.6	15.3
2006	858	14.8	16.9
2007	1,125	13.3	18.2
2008	1,333	5.9	20.9
2009	1,274	10.6	19.1
2010	1,262	10.0	18.8
2011	1,190	7.3	17.9
2012	1,250	9.1	18.3
2013	1,390	8.8	18.4
2014	1,337	7.8	18.6
2015	1,376	8.9	17.7
2016	1,301	10.6	17.5
2017	1,414	11.5	18.5
2018	1,490	11.0	18.5
2019	1,633	9.6	17.3
2020	1,649	10.8	17.7
2021	1,835	8.7	18.1
2022	2,180	9.2	18.7
2023	2,329	5.2	18.9



Note:

1. Companies surveyed: 10 companies

FY1994 to 2004: Takeda, Sankyo, Yamanouchi, Daiichi, Taisho, Eisai, Shionogi, Fujisawa, Chugai and Tanabe

FY2005: Takeda, Astellas, Eisai, Sankyo, Daiichi, Chugai, Mitsubishi, Sumitomo Dainippon, Shionogi and Taisho

FY2006: Takeda, Astellas, Daiichi Sankyo, Eisai, Sumitomo Dainippon, Mitsubishi, Shionogi, Tanabe, Taisho and Ono

From FY2007: Takeda, Astellas, Daiichi Sankyo, Eisai, Mitsubishi Tanabe, Sumitomo Dainippon, Shionogi, Taisho (from FY2011 Taisho Holdings), Ono and Otsuka Holdings (took Otsuka's consolidated result for 2007)

From FY2019: Takeda, Astellas, Daiichi Sankyo, Eisai, Mitsubishi Tanabe, Sumitomo Pharma, Shionogi, Ono, Otsuka Holdings, and Kyowa Kirin

2. Consolidated basis since 1999.

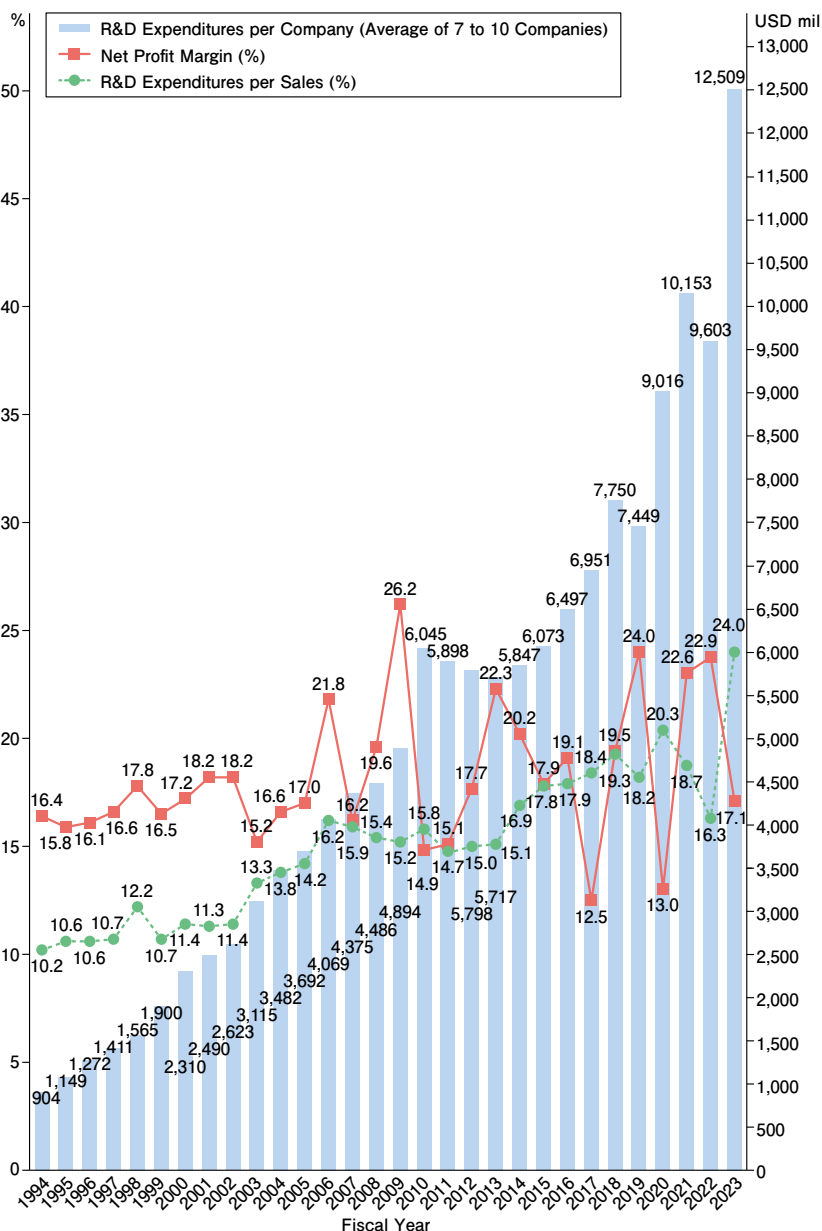
3. Chugai had an irregular 9 months financial result (Apr.-Dec.) in FY2003

Source: SPEEDA (UZABASE, Inc.), Financial statements

Trends of R&D Expenditures and Profits as Sales Ratio (USA)

A-7-5

Fiscal Year	R&D Expenditures Average (USD mil.)	Net Profit Margin (%)	R&D Expenditures per Sales (%)
1994	904	16.4	10.2
1995	1,149	15.8	10.6
1996	1,272	16.1	10.6
1997	1,411	16.6	10.7
1998	1,565	17.8	12.2
1999	1,900	16.5	10.7
2000	2,310	17.2	11.4
2001	2,490	18.2	11.3
2002	2,623	18.2	11.4
2003	3,115	15.2	13.3
2004	3,482	16.6	13.8
2005	3,692	17.0	14.2
2006	4,069	21.8	15.9
2007	4,375	16.2	15.4
2008	4,486	19.6	15.2
2009	4,894	26.2	14.9
2010	6,045	14.9	15.8
2011	5,898	15.1	15.1
2012	5,798	17.7	14.7
2013	5,717	22.3	15.0
2014	5,847	20.2	15.1
2015	6,073	17.9	16.9
2016	6,497	19.1	17.8
2017	6,951	12.5	17.9
2018	7,750	19.5	18.4
2019	7,449	24.0	19.3
2020	9,016	13.0	18.2
2021	10,153	22.6	20.3
2022	9,603	22.9	18.7
2023	12,509	17.1	16.3



Note:

- 1. Companies surveyed : 7 to 10 leading companies
- FY1994: 10 companies (Abbott, AHP, Bristol-Myers Squibb, Eli Lilly, Johnson & Johnson, Merck, Pfizer, Schering-Plough, Upjohn, Warner Lambert)
- FY1995: 10 companies (Abbott, AHP, Bristol-Myers Squibb, Eli Lilly, Johnson & Johnson, Merck, Pfizer, Schering-Plough, Pharmacia & Upjohn, Warner Lambert)
- FY1996 to 98 : 10 companies (Abbott, AHP, Bristol-Myers Squibb, Eli Lilly, Johnson & Johnson, Merck, Pfizer, Schering-Plough, Pharmacia & Upjohn, Warner Lambert)
- FY1999: 8 companies (Abbott, AHP, Bristol-Myers Squibb, Eli Lilly, Johnson & Johnson, Merck, Pfizer, Schering-Plough)
- FY2000 to 02: 9 companies (Abbott, Bristol-Myers Squibb, Eli Lilly, Johnson & Johnson, Merck, Pfizer, Pharmacia, Schering-Plough, Wyeth)
- *Pfizer acquired Warner Lambert. AHP to change name to Wyeth.
- FY2003 to 05: 8 companies (Abbott, Bristol-Myers Squibb, Eli Lilly, Johnson & Johnson, Merck, Pfizer, Schering-Plough, Wyeth)
- *Pfizer acquired Pharmacia.
- FY2006 to 08: 9 companies (Abbott, Amgen, Bristol-Myers Squibb, Eli Lilly, Johnson & Johnson, Merck, Pfizer, Schering-Plough, Wyeth)
- *Added Amgen.
- FY2009 to 13: 7 companies (Abbott, Amgen, Bristol-Myers Squibb, Eli Lilly, Johnson & Johnson, Merck, Pfizer)
- *Merck incorporated Schering-Plough, Pfizer acquired Wyeth.
- *In 2013, Abbott Laboratories (Abbott) separated into two traded companies as AbbVie and Abbott. The enumeration data as of 2013 is combined both of two companies' data as one firm.
- FY2014 to 22: 7 companies (AbbVie, Amgen, Bristol-Myers Squibb, Eli Lilly, Johnson & Johnson, Merck, Pfizer)
- A part of the past data has been updated due to original data revision.

Source : SPEEDA (UZABASE, Inc.), Annual Report

R&D Expenditures by Industry and Type (Japan)

A-7-7

FY2023

(Unit: %)

Industry	Basic Research	Applied Research	Development
All Industries	6.9	15.7	77.4
Agriculture, Forestry & Fisheries	20.4	8.8	70.7
Mining, Quarrying & Gravel Extraction	2.1	7.7	90.2
Construction	6.2	21.9	71.9
Manufacturing	7.2	16.3	76.5
Food	13.8	26.7	59.5
Textiles	13.5	41.5	45.0
Pulp, Paper & Paper Products	3.5	6.7	89.8
Publishing, Printing & Allied Industries	18.4	30.7	50.9
Pharmaceuticals	19.8	19.4	60.8
JPMA*	19.0	17.3	63.7
Chemicals	9.4	25.3	65.3
Petroleum & Coal Products	1.8	15.6	82.6
Plastic Products	3.5	14.5	82.1
Rubber Products	5.4	14.3	80.3
Ceramics, Stone & Clay Products	9.4	19.9	70.7
Iron & Steel	10.7	25.2	64.1
Non-ferrous Metals & Products	5.4	26.7	67.9
Metal Products	1.5	6.0	92.6
General Machinery	8.4	10.5	81.1
Machinery & Tools for Production	4.1	13.4	82.5
Machinery & Tools for Institutional Use	8.0	9.2	82.9
Electric Component, Devices, Electric Circuit	1.5	20.0	78.5
Electric Machinery	4.0	30.6	65.4
Electronic Equipment & Electric Measurements	1.3	10.4	88.3
Other Electric Machinery	4.8	36.4	58.8
Information & Telecommunications Equipment	5.0	22.1	72.9
Transportation Equipment	5.3	7.5	87.2
Motor Vehicles & its Accessories	5.2	7.5	87.3
Other Transport Equipment	9.1	7.7	83.1
Other Manufacturing	2.9	37.7	59.3
Information & Communication	0.7	4.5	94.8
Information Services	1.0	4.6	94.4

Note:

1. The "R&D expenditures by Type" described here refers to research expenditures by type as defined in "Report on the Survey of Research and Development" by the Ministry of Internal Affairs and Communications.
Research expenditures by Type refer to research expenditures used internally (within the company) for natural science, which are classified into basic, applied, and development.
2. JPMA represents 24 companies of JPMA members responded to the survey.

Source :

Ministry of Internal Affairs and Communications, Report on the Survey of Research and Development
<http://www.stat.go.jp/data/kagaku/index.html>

R&D Expenditures by Developmental Stage (USA)

A-7-8

	Year	Prehuman / Preclinical	Phase I	Phase II	Phase III	Approval	Phase IV	Subtotal	Uncategorized	Total	
Expenditures (USD mil.)	2004	9,585.7	2,473.3	3,770.4	9,682.1	3,415.3	4,902.9	33,829.7	3,188.4	37,018.1	
	2005	10,258.1	2,318.9	4,670.9	10,176.4	2,750.0	5,284.2	35,458.5	4,399.4	39,857.9	
	2006	11,816.1	2,902.7	5,687.4	12,187.3	2,649.3	5,584.6	40,827.4	2,611.6	43,439.0	
	2007	13,087.4	3,547.7	6,251.0	13,664.7	2,413.8	6,439.9	45,404.5	2,498.6	47,903.1	
	2008	12,795.6	3,889.6	6,089.7	15,407.4	2,225.8	6,835.8	47,244.0	139.1	47,383.1	
	2009	11,717.4	3,752.9	7,123.7	16,300.1	2,046.9	5,302.7	46,243.8	197.8	46,441.6	
	2010	12,578.2	4,130.3	6,483.3	18,598.1	3,108.3	4,839.0	49,737.2	972.6	50,709.8	
	2011	10,466.3	4,211.0	6,096.4	17,392.9	4,033.4	4,760.9	46,961.0	1,684.0	48,645.0	
	2012	11,816.3	3,823.3	5,756.2	15,926.8	3,834.6	6,776.5	47,933.8	1,653.8	49,587.6	
	2013	10,717.8	3,666.9	5,351.3	15,239.2	5,395.4	7,574.2	47,944.8	3,668.7	51,613.6	
	2014	11,272.7	4,722.0	5,697.8	15,264.4	2,717.7	8,827.0	48,501.6	4,751.5	53,253.2	
	2015	-	-	-	-	-	-	-	-	-	-
	2016	11,292.6	6,054.8	7,426.1	18,327.3	2,413.8	7,466.1	52,980.7	12,557.6	65,538.3	
	2017	11,168.7	6,201.0	8,277.4	21,377.0	2,788.7	8,152.9	57,965.7	13,433.8	71,399.4	
	2018	13,069.0	7,749.4	8,436.0	23,033.2	2,647.6	9,230.2	64,165.4	15,437.4	79,602.8	
	2019	13,034.3	7,260.8	8,045.7	23,979.8	3,538.8	9,321.1	65,180.5	17,775.7	82,956.3	
	2020	13,604.0	6,968.3	8,429.4	24,773.1	3,932.5	10,512.4	68,219.7	22,906.6	91,126.3	
	2021	15,079.0	9,234.9	11,760.5	29,401.0	4,963.5	13,200.9	83,639.8	18,648.7	102,288.4	
	2022	16,030.1	8,531.5	11,197.7	29,050.3	4,290.9	11,597.6	80,698.1	20,147.0	100,845.2	
	2023	15,162.3	7,242.3	9,144.6	25,757.0	2,082.4	7,697.3	67,085.9	28,934.7	96,020.6	
	Share (%)	2004	28.3	7.3	11.1	28.6	10.1	14.5	100.0		
		2005	28.9	6.5	13.2	28.7	7.8	14.9	100.0		
		2006	28.9	7.1	13.9	29.9	6.5	13.7	100.0		
2007		28.8	7.8	13.8	30.1	5.3	14.2	100.0			
2008		27.1	8.2	12.9	32.6	4.7	14.5	100.0			
2009		25.3	8.1	15.4	35.2	4.4	11.5	100.0			
2010		25.3	8.3	13.0	37.4	6.2	9.7	100.0			
2011		22.3	9.0	13.0	37.0	8.6	10.1	100.0			
2012		24.7	8.0	12.0	33.2	8.0	14.1	100.0			
2013		22.4	7.6	11.2	31.8	11.3	15.8	100.0			
2014		23.5	9.8	11.9	31.8	5.7	18.4	100.0			
2015		-	-	-	-	-	-	-			
2016		21.3	11.4	14.0	34.6	4.6	14.1	100.0			
2017		19.3	10.7	14.3	36.9	4.8	14.1	100.0			
2018		20.4	12.1	13.1	35.9	4.1	14.4	100.0			
2019		20.0	11.1	12.3	36.8	5.4	14.3	100.0			
2020		19.9	10.2	12.4	36.3	5.8	15.4	100.0			
2021		18.0	11.0	14.1	35.2	5.9	15.8	100.0			
2022		19.9	10.6	13.9	36.0	5.3	14.4	100.0			
2023		22.6	10.8	13.6	38.4	3.1	11.5	100.0			
Share (including 'Uncategorized') (%)		2004	25.9	6.7	10.2	26.2	9.2	13.2	91.4	8.6	100.0
		2005	25.7	5.8	11.7	25.5	6.9	13.3	89.0	11.0	100.0
		2006	27.2	6.7	13.1	28.1	6.1	12.9	94.0	6.0	100.0
	2007	27.3	7.4	13.0	28.5	5.0	13.4	94.8	5.2	100.0	
	2008	27.0	8.2	12.9	32.5	4.7	14.4	99.7	0.3	100.0	
	2009	25.2	8.1	15.3	35.1	4.4	11.4	99.6	0.4	100.0	
	2010	24.8	8.1	12.8	36.7	6.1	9.5	98.1	1.9	100.0	
	2011	21.5	8.7	12.5	35.8	8.3	9.8	96.5	3.5	100.0	
	2012	23.8	7.7	11.6	32.1	7.7	13.7	96.7	3.3	100.0	
	2013	20.8	7.1	10.4	29.5	10.5	14.7	93.0	7.1	100.0	
	2014	21.2	8.9	10.7	28.7	5.1	16.6	91.2	8.9	100.0	
	2015	-	-	-	-	-	-	-	-	-	-
	2016	17.2	9.2	11.3	28.0	3.7	11.4	80.8	19.2	100.0	
	2017	15.6	8.7	11.6	29.9	3.9	11.4	81.1	18.8	100.0	
	2018	16.4	9.7	10.6	28.9	3.3	11.6	80.6	19.4	100.0	
	2019	15.7	8.8	9.7	28.9	4.3	11.2	78.6	21.4	100.0	
	2020	14.9	7.6	9.3	27.2	4.3	11.5	74.9	25.1	100.0	
	2021	14.7	9.0	11.5	28.7	4.9	12.9	81.8	18.2	100.0	
	2022	15.9	8.5	11.1	28.8	4.3	11.5	80.0	20.0	100.0	
	2023	15.8	7.5	9.5	26.8	2.2	8.0	69.9	30.1	100.0	

Note:

Data in 2015 is not disclosed

Source :

2004-2012 PhRMA, Pharmaceutical Industry Profile
since 2013 PhRMA, Annual Membership Survey

Success Rate of Developing New Drugs (Japan) (1/2)

A-7-9

(1) Number of compounds by stage and success rate in every 5 years

Small Molecules

Fiscal Year	Number of compounds by stage (5 years)				Probability to Move from Previous Phase		
	Synthesized Compounds	Pre-Clinical Studies Started	Clinical Studies Started in Japan	Approval Granted	Pre-Clinical Studies Started	Clinical Studies Started in Japan	Approval Granted
2000 ~ 2004	463,961	215	127	36	1 : 2,158	1 : 3,653	1 : 12,888
2001 ~ 2005	499,915	197	97	32	1 : 2,538	1 : 5,154	1 : 15,622
2002 ~ 2006	535,049	203	73	27	1 : 2,636	1 : 7,329	1 : 19,817
2003 ~ 2007	563,589	202	83	26	1 : 2,790	1 : 6,790	1 : 21,677
2004 ~ 2008	611,576	199	81	24	1 : 3,073	1 : 7,550	1 : 25,482
2005 ~ 2009	652,336	203	75	21	1 : 3,213	1 : 8,698	1 : 31,064
2006 ~ 2010	673,002	216	83	22	1 : 3,116	1 : 8,108	1 : 30,591
2007 ~ 2011	704,333	219	85	26	1 : 3,216	1 : 8,286	1 : 27,090
2008 ~ 2012	742,465	198	71	25	1 : 3,750	1 : 10,457	1 : 29,699
2009 ~ 2013	728,512	201	68	25	1 : 3,624	1 : 10,713	1 : 29,140
2010 ~ 2014	712,040	190	74	29	1 : 3,748	1 : 9,622	1 : 24,553
2011 ~ 2015	703,397	165	70	28	1 : 4,263	1 : 10,049	1 : 25,121
2012 ~ 2016	674,850	151	62	26	1 : 4,469	1 : 10,885	1 : 25,956
2013 ~ 2017	624,482	146	65	24	1 : 4,277	1 : 9,607	1 : 26,020
2014 ~ 2018	582,573	150	62	26	1 : 3,884	1 : 9,396	1 : 22,407
2015 ~ 2019	545,967	146	53	24	1 : 3,740	1 : 10,301	1 : 22,749
2016 ~ 2020	505,141	173	52	23	1 : 2,920	1 : 9,714	1 : 21,963
2017 ~ 2021	473,388	178	50	19	1 : 2,659	1 : 9,468	1 : 24,915
2018 ~ 2022	445,345	182	47	19	1 : 2,447	1 : 9,475	1 : 23,439
2019 ~ 2023	431,293	161	47	14	1 : 2,679	1 : 9,176	1 : 30,807

Note:

1. Chemical libraries, such as synthesized compounds through combinatorial chemistry, are not included in "Synthesized Compounds"
2. Only the compounds of in-house (excl. in-licensing). Additional dosage forms and indications are excluded.
3. Probability to move from previous phase is the ratio of the number of compounds at each stage to the total number of compounds.

Source : JPMA Survey (Data obtained from domestic companies of the R&D Committee members)

Success Rate of Developing New Drugs (Japan) (2/2)

A-7-9

(2) Number of compounds by stage (Trends by Fiscal Year)

Small Molecules

Fiscal Year	Number of surveyed companies	Synthesized Compounds	Pre-Clinical Studies Started	Clinical Studies Started in Japan	Approval Granted
2000	18	86,883	54	42	8
2001	18	85,300	34	41	9
2002	18	89,338	48	13	7
2003	18	97,824	42	15	7
2004	17	104,616	37	16	5
2005	20	122,837	36	12	4
2006	19	120,434	40	17	4
2007	18	117,878	47	23	6
2008	20	145,811	39	13	5
2009	20	145,376	41	10	2
2010	20	143,503	49	20	5
2011	22	151,765	43	19	8
2012	22	156,010	26	9	5
2013	21	131,858	42	10	5
2014	21	128,904	30	16	6
2015	25	134,860	24	16	4
2016	22	123,218	29	11	6
2017	21	105,642	21	12	3
2018	22	89,949	46	7	7
2019	20	92,298	26	7	4
2020	21	94,034	51	15	3
2021	21	91,465	34	9	2
2022	20	77,599	25	9	3
2023	20	75,897	25	7	2
Total		2,713,299	889	369	120

New Modalities

Fiscal Year	Antibody Drugs				Other Drugs*			
	Number of surveyed companies	Pre-Clinical Studies Started	Clinical Studies Started in Japan	Approval Granted	Number of surveyed companies	Pre-Clinical Studies Started	Clinical Studies Started in Japan	Approval Granted
2012	22	5	1	0	22	2	0	0
2013	21	8	1	0	21	2	2	0
2014	21	5	2	1	21	1	0	1
2015	25	11	2	0	25	5	1	0
2016	22	10	3	0	22	6	0	0
2017	21	14	4	0	21	16	1	0
2018	22	9	5	3	22	21	2	0
2019	20	12	6	4	20	8	2	2
2020	21	15	1	0	21	14	7	2
2021	21	16	3	2	21	22	5	3
2022	20	19	3	0	20	67	0	1
2023	20	12	5	1	20	14	4	5
Total		136	36	11		178	24	14

Note:

1. Chemical libraries, such as synthesized compounds through combinatorial chemistry, are not included in "Synthesized Compounds"

2. Only the compounds of in-house (excl. in-licensing). Additional dosage forms and indications are excluded.

3. Other Drugs* are including nucleic acid medicine, peptide, cell therapy, gene therapy, etc.

4. The survey of 'New modalities' began in FY2012.

Source : JPMA Survey (Data obtained from domestic companies of the R&D Committee members)

A. Pharmaceutical Industry Outlook

A-8. Patents

A-8-1. Number of Patents for Drugs in Japan	68
A-8-2. Number of Published Patent Applications for Drugs by Company in Japan	69
A-8-3. Number of Published Patent Applications for Biopharmaceuticals in Japan by Applicant's Nationality	71
A-8-4. Published PCT Applications by Pharmaceutical Company	72
A-8-5. Number of Published PCT Applications for Biopharmaceuticals by Applicant's Nationality	74

Number of Patents for Drugs in Japan

A-8-1

Year	No. of Patents for Drugs (A)	Applicants		Total No. of Patents (B)	Ratio to Total No. of Patents (A) / (B)
		Domestic Applicants	Foreign Applicants		
1980	646	376	270	51,880	1.25%
1985	1,144	718	426	60,080	1.90%
1990	1,055	623	432	63,320	1.67%
1995	1,881	819	1,062	123,360	1.52%
1997	1,581	772	809	147,686	1.07%
1998	1,904	952	952	141,448	1.35%
1999	851	423	428	150,058	0.60%
2000	1,492	772	720	125,834	1.19%
2001	1,457	718	739	121,716	1.20%
2002	926	401	525	120,007	0.77%
2003	1,087	561	526	122,507	0.89%
2004	1,230	617	613	124,186	0.99%
2005	1,169	615	554	122,941	0.95%
2006	1,533	743	790	141,397	1.08%
2007	1,911	964	947	164,954	1.16%
2008	2,483	1,060	1,423	176,949	1.40%
2009	3,059	1,284	1,775	193,348	1.58%
2010	4,259	1,634	2,625	222,692	1.91%
2011	4,938	1,845	3,093	238,322	2.07%
2012	6,072	2,214	3,858	274,786	2.21%
2013	6,292	2,110	4,182	277,077	2.27%
2014	6,156	1,838	4,318	227,141	2.71%
2015	6,182	1,725	4,457	189,357	3.26%
2016	6,188	1,769	4,419	203,087	3.05%
2017	5,831	1,611	4,220	199,577	2.92%
2018	5,461	1,472	3,989	194,525	2.81%
2019	4,983	1,302	3,681	179,910	2.77%
2020	5,114	1,479	3,635	179,381	2.85%
2021	6,182	1,677	4,505	184,372	3.35%
2022	6,461	1,632	4,829	201,420	3.21%
2023	7,344	1,834	5,510	209,368	3.51%

Note :

- The total number of patents :
Until 1995, the total number of examined patent publications
From 1997, the number of granted patent publications
- Counted by the International Patent Classification A61P
(Specific Therapeutic Activity of Chemical Compounds or Medicinal Preparations).

Source :Until 1999, Japan Patent Information Organization.

From 2000 to 2012, Patent On-Line Information System (PATOLIS). From 2013, JP-Net

Number of Published Patent Applications for Drugs by Company in Japan (1/2) A-8-2

Japanese Companies

Company* / Year	2013	2014	2015	2016	2017	2018	2019	
Alfresa Pharma	0	0	0	0	0	1	0	
Asahi Kasei Pharma	2	2	5	9	11	3	18	
ASKA Pharma.	3	2	1	3	0	0	0	
Astellas	8	8	6	6	5	3	3	
Biken	1	2	0	0	1	2	0	
Chugai	13	7	10	13	24	20	20	
Daiichi Sankyo	47	24	21	25	29	13	28	
EA Pharma	0	0	0	1	1	3	3	
Eisai	1	1	1	4	6	14	10	
FUJIFILM Toyama Chemical	3	2	4	4	1	2	0	
Fuso Pharma.	0	1	2	0	0	1	2	
Hisamitsu Pharma.	2	2	3	6	2	0	4	
Kaken Pharma.	0	0	0	0	0	1	3	
Kissei Pharma.	2	5	5	5	1	2	3	
KM Biologics	5	0	0	3	1	0	1	
Kowa	38	30	34	40	23	25	36	
Kracie Pharma	5	4	2	2	1	3	2	
Kyorin Pharma.	5	9	9	5	3	11	4	
Kyoto Pharma.	0	0	0	0	0	1	1	
Kyowa Kirin	11	11	5	7	9	6	9	
Maruho	1	0	2	2	1	0	0	
Maruishi Pharma.	0	0	0	0	0	1	0	
Meiji Seika Pharma	4	5	1	3	2	6	3	
Minophagen Pharma.	2	0	0	0	0	0	0	
Mitsubishi Tanabe	17	11	4	3	13	5	5	
Mochida Pharma.	2	5	5	4	6	7	4	
Nihon Pharma.	0	0	2	0	0	0	0	
Nippon Chemiphar	7	4	4	7	6	10	5	
Nippon Kayaku	0	11	5	7	9	13	13	
Nippon Shinyaku	1	7	3	2	6	4	5	
Nippon Zoki Pharma.	4	7	3	5	2	6	5	
Ono Pharma.	8	7	7	7	8	14	6	
Otsuka Pharma.	9	14	10	5	9	3	7	
Santen Pharma.	12	14	7	15	20	11	13	
Sanwa Kagaku	3	5	5	6	1	3	4	
Seikagaku	0	1	2	2	5	1	7	
Senju Pharma.	3	4	3	5	3	7	13	
Shionogi	11	13	9	9	10	7	13	
Sumitomo Dainippon	25	20	15	23	10	15	16	
Taiho Pharma.	5	8	9	2	4	4	0	
Taisho Pharma.	33	43	30	35	26	28	21	
Takeda	Takeda	11	9	9	8	7	25	43
	Shire	3	2	7	11	11		
Teijin Pharma	1	0	5	3	1	2	1	
Teikoku Seiyaku	1	2	2	3	0	0	2	
Toa Eiyo	2	1	5	0	3	4	3	
Toray	15	7	5	6	10	2	1	
Tsumura	1	0	0	0	0	2	1	
Wakamoto Pharma.	1	1	1	1	0	1	1	
Yakult	5	6	3	3	0	4	1	
Zeria Pharma.	3	0	0	1	1	1	3	

* Refer to the List of abbreviated Names of JPMA member Companies.

Note :

1. Counted by the International Patent Classification A61P
(Specific Therapeutic Activity of Chemical Compounds or Medicinal Preparations).
2. The number of laid-open disclosure public patent bulletin for patent application filed to the Japan Patent Office
3. Companies that had published patent applications among JPMA members

Source : JP-Net

(This table will not be updated after 2020.)

Number of Published Patent Applications for Drugs by Company in Japan (2/2) A-8-2

Foreign Companies

Company / Year	2013	2014	2015	2016	2017	2018	2019
AbbVie	2	31	35	43	33	29	25
AstraZeneca	8	15	10	4	5	6	9
Bayer	16	15	16	11	16	13	7
Biogen	23	20	18	11	22	11	13
Boehringer Ingelheim	24	17	19	16	15	18	10
Bristol-Myers Squibb	11	9	11	14	10	10	18
Celgene	16	17	16	18	24	22	20
Eli Lilly	4	4	6	3	10	6	9
GlaxoSmithKline	17	16	19	21	17	16	17
Janssen	5	8	6	8	6	4	11
Merck (Germany)	4	8	10	5	9	11	0
MSD	43	25	17	15	13	12	15
Mylan	19	2	5	2	2	1	1
Novartis	108	82	74	82	65	66	45
Novo Nordisk	10	12	11	13	6	6	3
Pfizer	26	31	39	49	34	30	33
Sanofi	21	26	31	37	41	34	35
Sun Pharma	Sun Pharma	4	0	1	5	1	0
	Pola Pharma	15	26	42	10	25	12
UCB	4	4	7	5	6	5	4

Note :

- Counted by the International Patent Classification A61P
(Specific Therapeutic Activity of Chemical Compounds or Medicinal Preparations).
- The number of laid-open disclosure public patent bulletin for patent application filed to the Japan Patent Office
- Companies that had published patent applications among JPMA members
(Including patent publications by each global headquarter)

Source : JP-Net

(This table will not be updated after 2020.)

Number of Published Patent Applications for Biopharmaceuticals in Japan by Applicant's Nationality

A-8-3

Year	Japan	USA	Europe	China	Others	Total
2000	103	64	30	0	3	200
2001	231	73	39	0	11	354
2002	310	108	59	0	13	490
2003	362	98	41	2	6	509
2004	400	139	39	0	11	589
2005	289	102	28	0	12	431
2006	276	172	33	0	14	495
2007	269	196	43	1	16	525
2008	271	228	45	0	8	552
2009	216	348	71	0	24	659
2010	156	313	65	4	23	561
2011	176	320	80	5	17	598
2012	146	323	71	0	19	559
2013	178	364	88	2	22	654
2014	168	433	101	3	26	731
2015	176	476	98	3	30	783
2016	180	590	111	9	19	909
2017	165	564	106	1	28	864
2018	185	563	97	4	27	876
2019	175	591	112	7	26	911
2020	178	719	197	18	47	1,159
2021	197	759	218	30	48	1,252
2022	256	1,168	244	42	77	1,787
2023	246	1,113	255	62	70	1,746

Note :

1. Limiting the International Patent Classification C12N15/00 (including subcategories) further to A61P (including subcategories).
2. Europe includes European Patent Office with 5 countries, namely, the UK, Germany, France, Switzerland and the Netherlands. Adjusted and counted by Convention Priority Right countries.

Source : JP-Net

Published PCT Applications by Pharmaceutical Company (1/2)

A-8-4

Japanese Companies

Company / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Asahi Kasei Pharma	7	4	2	2	0	0	0	1	1	3	
ASKA Pharma.	2	2	3	0	6	1	1	3	0	2	
AYUMI Pharma.	0	0	0	0	0	0	0	0	1	0	
Astellas	35	23	22	15	20	14	16	10	9	7	
Biken	2	0	1	1	2	1	2	2	3	2	
Chugai	16	6	8	14	13	17	16	14	17	15	
Daiichi Sankyo	48	42	30	30	26	30	34	17	39	37	
EA Pharma	0	0	0	0	0	0	2	4	1	2	
Eisai	18	13	11	10	15	18	16	16	22	15	
FUJIFILM Toyama Chemical	2	4	2	7	5	4	3	9	13	0	
Fuso Pharma.	0	1	2	1	2	2	0	1	0	4	
Hisamitsu Pharma.	7	2	7	4	5	8	7	8	8	9	
Kaken Pharma.	1	1	3	2	3	0	0	1	4	1	
Kissei Pharma.	7	7	8	3	9	5	5	1	4	4	
KM Biologics	1	3	2	4	4	5	2	4	2	3	
Kowa	15	15	17	11	18	3	13	6	7	15	
Kracie Pharma	1	0	1	1	0	2	0	1	1	0	
Kyorin Pharma.	6	5	7	10	6	4	9	1	1	2	
Kyoto Pharma.	0	0	1	0	1	2	0	2	3	4	
Kyowa Kirin	31	31	14	13	22	13	12	22	19	10	
Maruho	0	0	2	3	2	1	5	1	2	5	
Maruishi Pharma.	0	0	1	1	1	4	0	0	2	0	
Meiji Seika Pharma	0	0	10	6	6	8	2	6	6	3	
Mitsubishi Tanabe	11	15	9	7	9	11	5	8	6	8	
Mochida Pharma.	11	6	10	6	6	4	8	10	4	5	
Nihon Pharma.	0	4	1	0	1	1	0	0	2	3	
Nippon Chemiphar	5	5	10	5	4	5	4	3	6	7	
Nippon Kayaku	2	2	3	2	1	5	6	11	2	2	
Nippon Shinyaku	3	2	5	4	1	2	3	4	1	8	
Nippon Zoki Pharma.	3	2	3	3	5	2	1	7	5	5	
Ono Pharma.	7	4	6	9	8	10	10	10	7	13	
Otsuka Pharma.	8	8	9	12	5	7	2	9	4	10	
Santen Pharma.	16	9	4	12	6	7	19	15	14	16	
Sanwa Kagaku	1	5	3	1	7	4	3	0	2	0	
Seikagaku	0	1	1	1	2	4	4	1	3	3	
Senju Pharma.	2	6	2	3	10	13	6	7	0	8	
Shionogi	30	21	22	24	21	12	23	23	13	13	
Sumitomo Dainippon	15	33	28	11	15	10	16	21	19	23	
Taiho Pharma.	14	9	8	17	12	15	10	16	7	13	
Taisho Pharma.	10	10	21	20	13	12	10	10	3	3	
Takeda	Takeda	55	47	33	37	23	39	32	27	38	32
	Shire	4	11	4	2	10	4	7	4		
Teijin Pharma	5	2	3	8	6	3	5	4	4	1	
Teikoku Seiyaku	0	10	2	6	2	5	0	0	4	2	
Toa Eiyo	0	2	0	1	0	8	0	0	1	1	
Toray	10	17	7	23	5	11	11	19	12	10	
Wakamoto Pharma.	0	1	1	0	0	1	1	1	1	0	
Yakult	3	7	4	5	1	7	5	3	4	4	
Zeria Pharma.	1	2	0	0	2	2	1	1	3	2	

* Refer to the List of abbreviated Names of JPMA member Companies.

Note :

1. Counted by the International Patent Classification A61P

(Specific Therapeutic Activity of Chemical Compounds or Medicinal Preparations)

2. Companies that had published PCT applications among JPMA members (including published PCT applications of group companies) are listed.

Source : JP-Net

(This table will not be updated after 2020.)

Published PCT Applications by Pharmaceutical Company (2/2)

A-8-4

Foreign Companies

Company / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
AbbVie	0	1	6	32	42	28	30	40	19	29	
AstraZeneca	85	35	23	16	9	11	11	31	15	20	
Bayer	60	61	62	53	80	77	85	80	100	98	
Biogen	3	1	2	4	11	9	11	4	10	6	
Boehringer Ingelheim	100	63	68	72	68	38	38	32	34	26	
Bristol-Myers Squibb	45	40	47	52	92	77	80	44	56	79	
Celgene	4	6	7	3	12	10	9	13	12	7	
Eli Lilly	24	17	19	19	21	23	44	34	45	37	
GlaxoSmithKline	91	60	47	31	26	33	58	54	51	57	
Janssen	50	42	33	18	43	17	39	34	46	40	
Merck (Germany)	35	24	33	28	36	18	23	18	36	21	
Merck (USA)	39	26	23	22	78	60	85	56	17	21	
Mylan	8	6	4	3	6	4	7	2	5	4	
Novartis	83	102	107	110	90	73	65	55	83	72	
Novo Nordisk	8	9	12	10	9	6	4	5	7	5	
Pfizer	84	34	36	22	27	35	37	26	20	27	
Roche	125	130	130	134	144	111	113	106	118	89	
Sanofi	94	103	70	73	48	37	19	10	17	30	
Sun Pharma	Sun Pharma	1	2	1	3	1	3	9	3	4	3
	Pola Pharma	0	2	0	1	6	5	2	4	1	1
UCB	11	10	5	7	5	24	9	10	8	13	

Note :

- Counted by the International Patent Classification A61P (Specific Therapeutic Activity of Chemical Compounds or Medicinal Preparations).
- Companies that had published PCT applications among JPMA members (including published PCT applications of group companies) are listed.

Source : JP-Net

(This table will not be updated after 2020.)

Number of Published Patent Applications for Biopharmaceuticals in Japan by Applicant's Nationality

A-8-5

Year	Japan	USA	Europe	China	Others	Total
2000	46	1,250	362	4	146	1,746
2001	146	1,429	492	211	251	2,383
2002	187	1,224	380	78	213	1,970
2003	198	936	405	12	239	1,652
2004	196	245	136	16	83	628
2005	225	184	83	20	65	541
2006	197	143	53	22	44	434
2007	187	155	44	17	42	427
2008	136	184	47	37	46	422
2009	121	194	38	14	42	394
2010	143	238	39	15	61	470
2011	127	247	45	46	83	516
2012	125	217	60	53	102	513
2013	121	216	33	40	67	453
2014	135	147	44	42	72	406
2015	132	116	33	60	62	381
2016	115	172	35	81	62	441
2017	133	215	29	110	49	515
2018	142	208	23	160	51	565
2019	152	271	35	213	65	711
2020	151	392	61	262	118	935
2021	205	549	87	415	108	1,364
2022	247	634	93	545	179	1,698
2023	236	933	64	726	153	2,112

Note :

1. Limiting the International Patent Classification C12N15/00 (including subcategories) further to A61P (including subcategories).
2. Europe includes European Patent Office with 5 countries, namely, the UK, Germany, France, Switzerland and the Netherlands.
Adjusted and counted by Convention Priority Right countries.

Source : JP-Net

A. Pharmaceutical Industry Outlook

A-9. Pharmaceutical Affairs Government

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Trends in Notification of Clinical Trials (Japan)

A-9-1

Drugs

(Unit: No. of Notification)

Year	Initial Notification		Notification of n th time	Notification of Change	Notification of Completion	Notification of Suspension	Notification of Development Suspension
	NMEs	New Administration Route New Ethical Combination					
1990	138	-	995	1,841	166	37	-
1995	104	-	678	2,153	130	63	-
1998	54	11	341	2,960	529	76	67
1999	52	12	327	2,974	508	57	89
2000	63	17	383	2,701	464	41	101
2001	43	19	362	2,117	425	29	59
2002	60	13	365	2,110	401	25	58
Fiscal Year	Initial Notification		Notification of n th time	Notification of Change	Notification of Completion	Notification of Suspension	Notification of Development Suspension
2002	65		357	2,114	416	28	68
2003	64		318	2,129	377	32	38
2004	76		330	2,575	348	38	58
2005	112		422	2,697	365	31	41
2006	112		387	3,200	429	32	40
2007	129		379	3,564	402	28	57
2008	128		396	3,339	477	30	80
2009	129		431	3,363	461	45	96
2010	159		473	3,655	465	29	74
2011	165		524	3,997	497	46	80
2012	132		424	4,568	495	57	70
2013	127		475	4,356	446	61	78
2014	151		450	4,321	498	67	117
2015	127		530	4,566	507	70	102
2016	134		511	4,998	469	93	111
2017	136		557	5,200	456	65	100
2018	175		589	5,485	477	98	119
2019	162		512	6,063	465	86	110
2020	186		603	6,289	440	82	103
2021	194		614	7,114	525	135	122
2022	179		463	6,489	503	109	157
2023	161		377	5,660	390	108	155

Regenerative Medical Products

Fiscal Year	Initial Notification	Notification of n th time	Notification of Change	Notification of Completion	Notification of Suspension	Notification of Development Suspension
2014	3	1	2	0	0	0
2015	10	3	19	0	0	0
2016	16	5	52	1	0	0
2017	13	14	93	2	3	1
2018	18	17	151	7	1	1
2019	13	16	206	15	4	0
2020	19	22	215	11	4	1
2021	15	18	278	12	9	1
2022	12	25	282	21	9	6
2023	16	23	252	22	11	9

Note:

- "Notification of nth time" represents on and after 2nd time of CTPN.
- About "Notification of Completion", it was formerly allowed submitting each Clinical Trial Plan and/or all Clinical Trial Plans. It is currently only allowed submitting each Clinical Trial Plan respectively, since April 1997.
- "Notification of Development Suspension" is required its submission since April 1997.

Source: Pharmaceuticals and Medical Devices Agency
<https://www.pmda.go.jp/review-services/trials/0014.html>

Development Times for New Molecular Entities (Japan)

A-9-2

Year (NDA approved)	All Products		Priority Review Products		Standard Review Products	
	Number of Approvals	Development Time (Months)	Number of Approvals	Development Time (Months)	Number of Approvals	Development Time (Months)
2000	33	115.8	4	130.4	29	113.7
2001	17	93.4	6	64.2	11	104.6
2002	22	94.4	7	74.6	15	111.8
2003	14	87.2	2	65.7	12	99.7
2004	11	115.7	2	71.1	9	117.9
2005	16	99.7	3	74.0	13	108.7
2006	19	94.8	6	73.1	13	136.7
2007	28	92.2	10	68.0	18	121.5
2008	27	104.3	12	67.9	15	163.8
2009	24	105.8	7	48.5	17	115.9
2010	28	74.2	6	45.5	22	92.5
2011	34	73.5	7	63.5	27	86.2
2012	39	65.8	11	31.9	28	73.1
2013	31	66.9	13	40.2	18	94.8
2014	55	66.0	27	46.5	28	71.6
2015	35	63.0	14	62.9	21	65.6
2016	42	53.9	20	49.0	22	57.5

Note :

1. Development time is the median of the periods from the date of the initial protocol application to the date of the marketing approval.
2. Standard review products include accelerated approval products.

Source : JPMA Survey

(This table will not be updated after 2016 due to a review of the questionnaire items.)

Approval Times for New Drugs (Japan)

A-9-3

Year (NDA filed)	All Products		Priority Review Products		Standard Review Products	
	Number of Applications	Approval Time (Months)	Number of Applications	Approval Time (Months)	Number of Applications	Approval Time (Months)
2000	49	15.2	14	12.4	35	16.6
2001	62	15.4	9	6.8	53	17.6
2002	54	20.6	8	17.8	46	21.3
2003	62	25.2	15	25.1	47	26.0
2004	72	19.1	14	9.7	58	20.1
2005	55	19.3	17	15.5	38	21.7
2006	82	20.1	23	15.7	59	21.7
2007	79	18.8	27	13.1	52	21.6
2008	84	17.9	11	11.7	73	18.9
2009	69	12.6	11	11.9	56	12.9
2010	107	10.0	10	9.4	97	10.1
2011	103	9.5	20	9.2	83	9.6
2012	145	10.0	22	8.7	123	10.6
2013	124	10.0	40	8.8	84	10.9
2014	116	9.9	33	8.1	83	10.8
2015	105	10.2	26	8.4	79	10.9
2016	111	9.8	36	8.4	75	10.8
2017	98	10.1	32	8.0	66	10.9
2018	130	9.8	36	7.9	94	10.4
2019	117	10.6	32	8.0	85	11.0
2020	136	9.9	45	8.8	89	10.9
2021	143	9.6	42	8.3	92	10.5
2022	131	9.2	22	8.5	101	10.0
2023	80	8.9	32	8.3	45	10.6

Note:

1. Approval time is the median of the periods from the date of submission of application for marketing approval to the date of marketing approval.
2. About products filed for NDA since 2019, they have some pending items hence it does not include counting in this table.
Further information should be required to evaluate this table totally.
3. Researched items are the products in which approved from 2000 to 2023.
(Product items for Subcommittee of Pharmaceutical Affairs and Food Sanitation Council, plus its reported items)
4. Standard review products include accelerated approval products.
5. Products related to "Special Approval for Emergency" and "Emergency Approval" are included only in the list of all products, not in the list of products under standard review or priority review.

Source : Pharmaceuticals and Medical Devices Agency, List of Approved Products: New Drugs, etc.
<https://www.pmda.go.jp/review-services/drug-reviews/review-information/p-drugs/0010.html>

Number of New Molecular Entities Approved (Japan)

A-9-4

Year	No. of New Drugs (New Molecular Entities)		
		No. of Biopharmaceuticals	Share (%)
2000	39	2	5
2001	25	7	28
2002	24	3	13
2003	16	2	13
2004	16	2	13
2005	21	4	19
2006	23	6	26
2007	35	10	29
2008	34	8	24
2009	25	8	32
2010	33	8	24
2011	38	12	32
2012	45	10	22
2013	32	10	31
2014	60	16	27
2015	38	9	24
2016	52	14	27
2017	24	8	33
2018	37	14	38
2019	39	10	26
2020	38	9	24
2021	52	24	46
2022	52	23	44
2023	30	17	57

Note :

In vitro diagnostics, insecticides, and OTC products are excluded.

Source :

Yakumu Kohosha, Yakumu Koho

Pharmaceuticals and Medical Devices Agency, List of Approved Products: New Drugs

<https://www.pmda.go.jp/review-services/drug-reviews/review-information/p-drugs/0010.html>

Number of New Molecular Entities Approved (company specific) (Japan)

A-9-5

Accumulation from 2000 to 2023

Company	Total	Approval in 2023
Pfizer	49	2
Sanofi	43	1
MSD	41	0
Novartis	37	1
GlaxoSmithKline	37	1
Takeda	33	1
Chugai	28	1
Janssen	28	0
Bayer	26	0
AstraZeneca	25	0
Daiichi Sankyo	23	2
Astellas	21	0
Eli Lilly	19	1
Ono	18	0
Kyowa Kirin	16	1
Bristol-Myers Squibb	16	0
Shionogi	15	1
Novo Nordisk	15	1
Mitsubishi Tanabe	15	0
Otsuka	13	0
Sumitomo Pharma	13	0
AbbVie	12	0
Boehringer Ingelheim	12	0
Eisai	11	1
Kyorin Pharma	10	0
Taiho	9	1
FUJIFILM Toyama Chemical	9	0
Meiji Seika Pharma	8	1
KM Biologics	8	1
Nippon Shinyaku	8	0
UCB	7	2
Kissei	6	0
Teijin Pharma	6	0
Biken	5	1
Maruho	5	0
Amgen	5	0
Kaken Pharma.	5	0
Taisho Pharma.	5	0
Kowa	5	0
Sanwa Kagaku	5	0
Biogen	5	0
Merck Biopharma	5	0

Note :

1. JPMA Member Companies with 5 approved NMEs or more since 2000 are listed (42 companies).
2. In case of multiple applicants for one NME, every applicant can count it as its own approved NME.

Source : Yakumu Kohosha, Yakumu Koho,
Pharmaceuticals and Medical Devices Agency, List of Approved Products: New Drugs
<https://www.pmda.go.jp/review-services/drug-reviews/review-information/p-drugs/0010.html>

Number of Pharmaceutical Approvals (Japan)

A-9-6

(Unit: No. of drugs)

Fiscal Year	Ethical Drugs				OTC Drugs			
	Manufacturing Approval	Import Approval	Marketing	Total	Manufacturing Approval	Import Approval	Marketing	Total
1975	735	186	—	921	1,509	47	—	1,556
1980	2,074	285	—	2,359	1,993	122	—	2,115
1985	6,797	351	—	7,148	1,796	48	—	1,844
1990	1,302	381	—	1,683	1,643	76	—	1,719
1995	788	255	—	1,043	789	51	—	840
2000	656	253	—	909	807	18	—	825
2001	854	524	—	1,378	975	45	—	1,020
2002	692	266	—	958	859	12	—	871
2003	552	160	—	712	951	26	—	977
2004	667	149	—	816	561	16	—	577
2005*	826	249	192	1,267	1,171	33	0	1,204
2006	400	140	893	1,433	330	3	273	606
2007	88	41	1,765	1,894	92	2	1,050	1,144
2008	4	3	2,458	2,465	27	16	829	872
2009	4	1	2,331	2,336	12	0	837	849
2010	8	1	937	946	6	0	831	837
2011	0	0	1,250	1,250	5	2	740	747
2012	0	0	1,481	1,481	0	0	608	608
2013	1	0	1,999	2,000	0	0	628	628
2014	0	0	1,411	1,411	0	0	672	672
2015	0	0	1,069	1,069	0	0	644	644
2016	0	0	821	821	0	0	446	446
2017	0	0	1,066	1,066	0	0	427	427
2018	0	0	971	971	0	0	346	346
2019	0	0	776	776	0	0	440	440
2020	0	0	1,062	1,062	0	0	463	463
2021	0	0	584	584	0	0	381	381
2022	0	0	563	563	0	0	375	375
2023	0	0	359	359	0	0	302	302

Note:

In the revised Japan's Pharmaceutical Affairs Law of April 1, 2005, 'Manufacturing Approval' and 'Import Approval' were replaced by 'Marketing Approval'.

Source : Until 2004, The Yakuji Nippo, Recent New Drugs. From 2005, Jiho, Yakuji Handbook

Number of Pharmaceuticals Included in the NHI Price List (Japan)

A-9-7

(Unit: No. of drugs)

Fiscal Year	Internal	Injections	External	Dental Drugs	Total
1990	8,672	2,957	1,619	104	13,352
1995	8,670	3,531	1,997	106	14,304
1996	7,547	3,307	1,910	105	12,869
1997	6,796	3,232	1,846	100	11,974
1998	6,518	3,228	1,851	95	11,692
1999	6,875	3,368	1,943	97	12,283
2000	6,209	3,166	1,870	42	11,287
2001	-	-	-	-	-
2002	6,036	3,222	1,894	39	11,191
2003	6,308	3,418	1,947	43	11,716
2004	6,646	3,316	1,996	35	11,993
2005	6,899	3,500	2,032	37	12,468
2006	7,299	3,509	2,467	36	13,311
2007	7,938	3,975	2,641	37	14,591
2008	7,866	3,759	2,694	40	14,359
2009	9,148	4,610	3,164	42	16,964
2010	8,676	4,010	2,733	36	15,455
2011	9,177	4,184	2,844	36	16,241
2012	8,629	3,820	2,426	27	14,902
2013	9,655	4,012	2,509	27	16,203
2014	9,092	3,721	2,465	25	15,303
2015	9,934	3,951	2,540	26	16,451
2016	9,617	3,871	2,411	26	15,925
2017	10,067	3,962	2,452	28	16,509
2018	10,253	3,827	2,324	28	16,432
2019	10,741	3,977	2,403	28	17,149
2020	8,517	3,444	2,052	28	14,041
2021	8,549	3,534	2,118	27	14,228
2022	7,740	3,523	2,081	26	13,370
2023	7,443	3,554	2,075	26	13,098
2024	7,264	3,567	2,060	26	12,917

Note :

Number of pharmaceuticals as of April 1 of each fiscal year, or as close to that date as possible.

Source : Ministry of Health, Labour and Welfare, Notice by Health Insurance Bureau

B. Statistics on Health

B-1. Life Expectancy / Vital Statistics

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Life Expectancy (Japan)

B-1-1

(Unit: Years)

Year	Male				Female			
	Age 0	Age 20	Age 40	Age 65	Age 0	Age 20	Age 40	Age 65
1950	58.00	45.30	29.40	11.50	61.50	48.70	32.70	13.90
1955	63.60	48.47	30.85	11.82	67.75	52.25	34.34	14.13
1960	65.32	49.08	31.02	11.62	70.19	53.39	34.90	14.10
1965	67.74	50.18	31.73	11.88	72.92	54.85	35.91	14.56
1970	69.31	51.26	32.68	12.50	74.66	56.11	37.01	15.34
1975	71.73	53.27	34.41	13.72	76.89	58.04	38.76	16.56
1980	73.35	54.56	35.52	14.56	78.76	59.66	40.23	17.68
1985	74.78	55.74	36.63	15.52	80.48	61.20	41.72	18.94
1990	75.92	56.77	37.58	16.22	81.90	62.54	43.00	20.03
1995	76.38	57.16	37.96	16.48	82.85	63.46	43.91	20.94
2000	77.72	58.33	39.13	17.54	84.60	65.08	45.52	22.42
2001	78.07	58.64	39.43	17.78	84.93	65.39	45.82	22.68
2002	78.32	58.87	39.64	17.96	85.23	65.69	46.12	22.96
2003	78.36	58.89	39.67	18.02	85.33	65.79	46.22	23.04
2004	78.64	59.15	39.93	18.21	85.59	66.01	46.44	23.28
2005	78.56	59.08	39.86	18.13	85.52	65.93	46.38	23.19
2006	79.00	59.49	40.25	18.45	85.81	66.22	46.66	23.44
2007	79.19	59.66	40.40	18.56	85.99	66.39	46.82	23.59
2008	79.29	59.75	40.49	18.60	86.05	66.45	46.89	23.64
2009	79.59	60.04	40.78	18.88	86.44	66.81	47.25	23.97
2010	79.55	59.99	40.73	18.74	86.30	66.67	47.08	23.80
2011	79.44	59.93	40.69	18.69	85.90	66.35	46.84	23.66
2012	79.94	60.36	41.05	18.89	86.41	66.78	47.17	23.82
2013	80.21	60.61	41.29	19.08	86.61	66.94	47.32	23.97
2014	80.50	60.90	41.57	19.29	86.83	67.16	47.55	24.18
2015	80.75	61.13	41.77	19.41	86.99	67.31	47.67	24.24
2016	80.98	61.34	41.96	19.55	87.14	67.46	47.82	24.38
2017	81.09	61.45	42.05	19.57	87.26	67.57	47.90	24.43
2018	81.25	61.61	42.20	19.70	87.32	67.63	47.97	24.50
2019	81.41	61.77	42.35	19.83	87.45	67.77	48.11	24.63
2020	81.56	61.90	42.50	19.97	87.71	68.01	48.37	24.88
2021	81.47	61.81	42.40	19.85	87.57	67.87	48.24	24.73
2022	81.05	61.39	41.97	19.44	87.09	67.39	47.77	24.30
2023	81.09	61.45	42.06	19.52	87.14	67.48	47.85	24.38

Note: Numerical data may differ from those of past DATA BOOK due to revision in accordance with changes in data in the quoted sources.

Source: Ministry of Health, Labour and Welfare, Abridged Life Table
<https://www.mhlw.go.jp/toukei/saikin/hw/seimei/list54-57-02.html>

Life Expectancy (Worldwide)

B-1-2

(Unit: Years)

Region	Country	1988			2023		
		Male	Female	Period	Male	Female	Period
Asia	Japan	75.54	81.30	1988	81.09	87.14	2023
	Israel	73.53	76.99	1985	80.78	84.75	2017-2021
	India	55.60	55.20	1980-1985	68.6	71.4	2016-2020
	Indonesia	54.60	57.40	1985-1990	70.17	74.18	2023
	Korea	62.70	69.07	1978-1979	79.9	85.6	2022
	China	67.98	70.94	1985-1990	75.37	80.88	2020
Europe	Iceland	75.04	80.38	1985-1986	80.9	83.8	2022
	Italy	71.40	78.10	1983	81.090	85.225	2023
	UK	71.80	77.74	1983-1985	78.57	82.57	2020-2022
	Austria	70.40	77.36	1985	79.05	83.78	2022
	Netherlands	73.69	80.24	1988	80.1	83.09	2022
	Switzerland	73.60	80.30	1985-1986	82.3	85.9	2023
	Sweden	74.16	80.30	1987	81.58	84.9	2023
	Czech Republic	67.25	74.71	1985	76.89	82.78	2023
	Denmark	71.80	77.60	1987	79.58	83.44	2022-2023
	Germany	71.81	78.37	1985-1987	78.33	83.18	2020-2022
	Norway	72.75	79.55	1987	81.39	84.63	2023
	Finland	70.49	78.72	1986	78.96	84.19	2023
	France	71.52	79.70	1986	80.03	85.75	2023
	Russia	64.15	73.27	1985-1986	67.57	77.77	2022
North America	USA	71.50	78.30	1987	74.8	80.2	2022
	Canada	71.88	78.98	1980-1982	79.28	83.84	2020-2022
	Mexico	62.10	66.00	1979	72.3	78.6	2023
South America	Argentina	65.43	72.12	1975-1980	74.90	81.44	2020
	Brazil	62.30	67.60	1985-1990	71.96	78.95	2022
Africa	Egypt	52.29	61.97	1985-1990	68.8	73.8	2023
	South Africa	57.51	63.48	1985-1990	60.0	65.6	2022
Oceania	Australia	72.32	76.83	1985	81.22	85.26	2020-2022
	New Zealand	70.97	76.83	1985	80.25	83.73	2021-2023

Source: Ministry of Health, Labour and Welfare, Abridged Life Table
United Nations, Statistics Division, Demographic Yearbook

Trends of Vital Statistics (Japan)

B-1-3

Year	Live Births	Deaths	Natural Change	Infant Deaths	Neonatal Deaths
	per 1,000 Population			per 1,000 Births	
1900	32.4	20.8	11.6	155.0	79.0
1910	34.8	21.6	13.2	161.2	74.1
1920	36.2	25.4	10.8	165.7	69.0
1925	34.9	20.3	14.7	142.4	58.1
1930	32.4	18.2	14.2	124.1	49.9
1935	31.6	16.8	14.9	106.7	44.7
1940	29.4	16.5	12.9	90.0	38.7
1945	—	—	—	—	—
1950	28.1	10.9	17.2	60.1	27.4
1955	19.4	7.8	11.6	39.8	22.3
1960	17.2	7.6	9.6	30.7	17.0
1965	18.6	7.1	11.4	18.5	11.7
1970	18.8	6.9	11.8	13.1	8.7
1975	17.1	6.3	10.8	10.0	6.8
1980	13.6	6.2	7.3	7.5	4.9
1985	11.9	6.3	5.6	5.5	3.4
1990	10.0	6.7	3.3	4.6	2.6
1995	9.6	7.4	2.1	4.3	2.2
2000	9.5	7.7	1.8	3.2	1.8
2001	9.3	7.7	1.6	3.1	1.6
2002	9.2	7.8	1.4	3.0	1.7
2003	8.9	8.0	0.9	3.0	1.7
2004	8.8	8.2	0.7	2.8	1.5
2005	8.4	8.6	△ 0.2	2.8	1.4
2006	8.7	8.6	0.1	2.6	1.3
2007	8.6	8.8	△ 0.1	2.6	1.3
2008	8.7	9.1	△ 0.4	2.6	1.2
2009	8.5	9.1	△ 0.6	2.4	1.2
2010	8.5	9.5	△ 1.0	2.3	1.1
2011	8.3	9.9	△ 1.6	2.3	1.1
2012	8.2	10.0	△ 1.7	2.2	1.0
2013	8.2	10.1	△ 1.9	2.1	1.0
2014	8.0	10.1	△ 2.1	2.1	0.9
2015	8.0	10.3	△ 2.3	1.9	0.9
2016	7.8	10.5	△ 2.6	2.0	0.9
2017	7.6	10.8	△ 3.2	1.9	0.9
2018	7.4	11.0	△ 3.6	1.9	0.9
2019	7.0	11.2	△ 4.2	1.9	0.9
2020	6.8	11.1	△ 4.3	1.8	0.8
2021	6.6	11.7	△ 5.1	1.7	0.8
2022	6.3	12.9	△ 6.5	1.8	0.8
2023	6.0	13.0	△ 7.0	1.8	0.8

Note:

No data available for 1945.

Source: Ministry of Health, Labour and Welfare, Vital Statistics
<https://www.mhlw.go.jp/toukei/list/81-1a.html>

Trends of Vital Statistics (Worldwide)

B-1-4

		1960				2023			
		Live Births	Deaths	Infant Deaths	Neonatal Deaths	Live Births	Deaths	Infant Deaths	Neonatal Deaths
Region	Country	per 1,000 populat.		per 1,000 Births		per 1,000 populat.		per 1,000 Births	
Asia	Japan	17.2	7.6	30.7	17.0	⁽²⁰²³⁾ 6.0	⁽²⁰²³⁾ 13.0	⁽²⁰²³⁾ 1.8	⁽²⁰²³⁾ 0.8
	Israel	26.9	5.7	31.0		⁽²⁰²⁰⁾ 19.2	⁽²⁰²⁰⁾ 5.3	⁽²⁰²²⁾ 2.7	⁽²⁰²²⁾ 1.8
	India	^(1960 ~ 65) 44.0	8.2	86.5		⁽²⁰²⁰⁾ 19.5	⁽²⁰²⁰⁾ 6.0	⁽²⁰²²⁾ 25.5	⁽²⁰²²⁾ 18.1
	Indonesia	^(1960 ~ 65) 46.5	21.9	83.9		⁽²⁰¹⁰⁾ 25.3	⁽²⁰¹⁰⁾ 5.2	⁽²⁰²²⁾ 18.1	⁽²⁰²²⁾ 10.8
	Korea	39.6	12.4			⁽²⁰²²⁾ 4.9	⁽²⁰²²⁾ 7.3	⁽²⁰²²⁾ 2.4	⁽²⁰²²⁾ 1.3
	China	^(1960 ~ 65) 33.8	13.6			⁽²⁰²³⁾ 6.4	⁽²⁰²³⁾ 7.9	⁽²⁰²²⁾ 4.8	⁽²⁰²²⁾ 3.0
Europe	Iceland	28.0	6.6	17.5		⁽²⁰²³⁾ 11.1	⁽²⁰²³⁾ 6.6	⁽²⁰²²⁾ 2.1	⁽²⁰²²⁾ 1.3
	Italy	18.4	9.6	43.9	23.9	⁽²⁰²²⁾ 6.7	⁽²⁰²²⁾ 12.1	⁽²⁰²²⁾ 2.2	⁽²⁰²²⁾ 1.6
	UK	17.5	11.5	22.5	16.0	⁽²⁰²²⁾ 10.0	⁽²⁰²²⁾ 9.7	⁽²⁰²²⁾ 3.6	⁽²⁰²²⁾ 2.7
	Austria	17.9	12.7	37.5	24.6	⁽²⁰²¹⁾ 9.6	⁽²⁰²²⁾ 10.4	⁽²⁰²²⁾ 2.6	⁽²⁰²²⁾ 2.0
	Netherlands	20.8	7.7	17.9	13.5	⁽²⁰²³⁾ 9.2	⁽²⁰²³⁾ 9.5	⁽²⁰²²⁾ 3.4	⁽²⁰²²⁾ 2.6
	Switzerland	17.6	9.7	21.1	16.1	⁽²⁰²²⁾ 9.3	⁽²⁰²²⁾ 8.4	⁽²⁰²²⁾ 3.5	⁽²⁰²²⁾ 2.9
	Sweden	13.6	10.0	16.0	13.4	⁽²⁰²²⁾ 10.0	⁽²⁰²²⁾ 9.1	⁽²⁰²²⁾ 2.0	⁽²⁰²²⁾ 1.4
	Czech Republic	13.4	9.2	23.5	13.1	⁽²⁰²³⁾ 8.4	⁽²⁰²³⁾ 10.4	⁽²⁰²²⁾ 2.1	⁽²⁰²²⁾ 1.3
	Denmark	16.6	9.5	21.5	16.1	⁽²⁰²³⁾ 9.7	⁽²⁰²³⁾ 9.8	⁽²⁰²²⁾ 3.1	⁽²⁰²²⁾ 1.9
	Germany	17.5	11.6	33.8	23.2	⁽²⁰²³⁾ 8.2	⁽²⁰²³⁾ 12.2	⁽²⁰²²⁾ 3.0	⁽²⁰²²⁾ 2.2
	Norway	17.3	9.1	18.9	11.7	⁽²⁰²³⁾ 9.5	⁽²⁰²³⁾ 8.0	⁽²⁰²²⁾ 1.8	⁽²⁰²²⁾ 1.3
	Finland	18.5	9.0	21.0	14.4	⁽²⁰²³⁾ 7.8	⁽²⁰²³⁾ 11.0	⁽²⁰²²⁾ 1.9	⁽²⁰²²⁾ 1.4
	France	17.9	11.4	27.4	17.7	⁽²⁰²¹⁾ 10.7	⁽²⁰²¹⁾ 9.8	⁽²⁰²²⁾ 3.3	⁽²⁰²²⁾ 2.5
	Russia	24.9	7.1	32.6		⁽²⁰²³⁾ 8.6	⁽²⁰²³⁾ 12.0	⁽²⁰²²⁾ 3.8	⁽²⁰²²⁾ 1.8
North America	USA	23.8	9.5	26.0	18.7	⁽²⁰²¹⁾ 11.0	⁽²⁰²⁰⁾ 10.2	⁽²⁰²²⁾ 5.4	⁽²⁰²²⁾ 3.2
	Canada	26.3	7.8	27.3		⁽²⁰²²⁾ 9.0	⁽²⁰²²⁾ 8.6	⁽²⁰²²⁾ 4.3	⁽²⁰²²⁾ 3.3
	Mexico	41.7	11.5	74.2	⁽¹⁹⁷⁰⁾ 28.1	⁽²⁰²³⁾ 15.8	⁽²⁰²³⁾ 6.1	⁽²⁰²²⁾ 11.1	⁽²⁰²²⁾ 7.8
South America	Argentina	23.0	8.7	62.4		⁽²⁰²²⁾ 10.7	⁽²⁰²²⁾ 8.6	⁽²⁰²²⁾ 8.4	⁽²⁰²²⁾ 5.7
	Brazil	^(1960 ~ 65) 42.1	10.2			⁽²⁰²²⁾ 11.8	⁽²⁰²²⁾ 7.0	⁽²⁰²²⁾ 12.5	⁽²⁰²²⁾ 8.6
Africa	Egypt	43.0		⁽¹⁹⁷⁹⁾ 76.4		⁽²⁰²³⁾ 17.5	⁽²⁰²²⁾ 5.8	⁽²⁰²²⁾ 15.5	⁽²⁰²²⁾ 9.5
	South Africa	40.2	14.8			⁽²⁰²²⁾ 15.0		⁽²⁰²²⁾ 27.7	⁽²⁰²²⁾ 11.0
Oceania	Australia	22.4	8.6	20.2	14.6	⁽²⁰²²⁾ 11.6	⁽²⁰²²⁾ 7.3	⁽²⁰²²⁾ 3.2	⁽²⁰²²⁾ 2.3
	New Zealand	26.5	8.8	22.6	13.5	⁽²⁰²¹⁾ 11.5	⁽²⁰²¹⁾ 6.8	⁽²⁰²²⁾ 3.9	⁽²⁰²²⁾ 2.5

Source: Ministry of Health, Labour and Welfare, Vital Statistics

United Nations, statistic division, Demographic and Social Statistics, population and vital statistics report

(https://unstats.un.org/unsd/demographic-social/products/vitstats/)

WHO Global Health Observatory, Global Health Estimates: Life expectancy and leading causes of death and disability

(https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates)

Mortality and Mortality Rate by Major Causes (Japan)

B-1-5

Causes of Death	Year																						
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
No. of Deaths	970,331	982,379	1,014,951	1,028,602	1,083,796	1,084,450	1,108,334	1,142,407	1,141,865	1,197,014	1,253,066	1,256,359	1,269,436	1,273,025	1,290,510	1,308,158	1,340,567	1,362,470	1,381,093	1,372,755	1,439,856	1,569,050	1,576,016
Tuberculosis	2,491	2,317	2,337	2,330	2,296	2,269	2,194	2,220	2,159	2,129	2,166	2,110	2,087	2,100	1,966	1,893	2,306	2,204	2,087	1,909	1,845	1,664	1,587
Malignant Neoplasms	300,658	304,568	309,543	320,358	325,941	329,314	336,468	342,963	344,105	353,499	357,305	360,963	364,872	368,106	370,362	373,088	373,365	373,584	376,425	378,385	381,505	385,797	382,504
Stomach	49,958	49,213	49,533	50,562	50,311	50,415	50,597	50,160	50,017	50,136	49,830	49,129	48,681	47,904	46,681	45,546	45,227	44,192	42,931	42,319	41,624	40,711	38,771
Liver	34,311	34,637	34,089	34,510	34,268	33,662	33,599	33,665	32,725	32,765	31,875	30,690	30,175	29,544	28,890	28,535	27,116	25,925	25,264	24,939	24,102	23,620	22,908
Trachea, Bronchus & Lung	55,034	56,405	56,720	59,922	62,063	63,255	65,608	66,849	67,583	69,813	70,293	71,518	72,734	73,396	74,382	73,860	74,127	74,328	75,394	75,585	76,212	76,663	75,762
Diabetes	12,147	12,635	12,879	12,637	13,621	13,650	13,999	14,462	13,987	14,422	14,664	14,486	13,812	13,669	13,328	13,483	13,971	14,181	13,846	13,902	14,356	15,927	15,448
Hypertensive disease	5,857	5,621	5,597	5,706	5,835	5,810	6,144	6,264	6,223	6,760	7,023	7,261	7,165	6,932	6,726	6,843	9,570	9,581	9,549	10,003	10,223	11,665	11,396
Heart disease (excluding hypertensive heart disease)	148,292	152,518	159,545	159,625	173,125	173,024	175,539	181,928	180,745	189,361	194,926	198,836	196,723	196,931	196,127	198,070	204,868	208,221	207,714	205,596	214,710	232,964	231,148
Cerebrovascular disease	131,856	130,257	132,067	129,055	132,847	128,268	127,041	127,023	122,350	123,461	123,867	121,602	118,347	114,209	111,974	109,353	109,896	108,186	106,552	102,978	104,595	107,481	104,533
Pneumonia	85,305	87,421	94,942	95,534	107,241	107,242	110,159	115,317	112,004	118,888	124,749	123,925	122,969	119,652	120,959	119,346	96,859	94,661	95,518	78,450	73,194	74,013	75,753
Hepatic disease	15,848	15,490	15,737	15,885	16,430	16,267	16,195	16,268	15,969	16,216	16,390	15,980	15,930	15,692	15,659	15,780	17,019	17,275	17,273	17,688	18,017	18,896	18,638
Renal disease	17,690	18,185	18,821	19,117	20,528	21,158	21,632	22,517	22,743	23,725	24,526	25,107	25,101	24,776	24,561	24,620	25,135	26,081	26,644	26,948	28,688	30,739	30,208
Senility without psychosis	22,140	22,682	23,449	24,126	26,360	27,764	30,724	35,975	38,670	45,342	52,242	60,719	69,720	75,391	84,819	92,836	101,411	109,605	121,863	132,440	152,027	179,529	189,919
Accidents	39,496	38,643	38,714	38,193	39,863	38,270	37,966	38,153	37,756	40,732	59,416	41,031	39,574	39,030	38,310	38,314	40,332	41,238	39,184	38,133	38,355	43,420	44,440
Suicides	29,375	29,949	32,109	30,247	30,553	30,827	30,229	30,707	29,554	29,564	28,896	26,433	26,063	24,417	23,152	21,021	20,468	20,031	19,425	20,243	20,291	21,252	21,037
Deaths per 100,000 population	770.7	779.6	804.6	815.2	858.8	859.6	879.0	907.1	907.5	947.1	993.1	997.5	1009.1	1014.9	1029.8	1046.4	1075.5	1096.8	1116.2	1112.5	1172.7	1285.8	1300.4
Tuberculosis	2.0	1.8	1.9	1.8	1.8	1.8	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.5	1.9	1.8	1.7	1.5	1.5	1.4	1.3
Malignant Neoplasms	238.8	241.7	245.4	253.9	258.3	261.0	266.9	272.3	273.5	279.7	283.2	286.6	290.3	293.5	295.5	298.4	299.5	300.7	304.2	306.6	310.7	316.1	315.6
Stomach	39.7	39.1	39.3	40.1	39.9	40.0	40.1	39.8	39.8	39.7	39.5	39.0	38.7	38.2	37.2	36.4	36.3	35.6	34.7	34.3	33.9	33.4	32.0
Liver	27.3	27.5	27.0	27.4	27.2	26.7	26.6	26.7	26.0	25.9	25.3	24.4	24.0	23.6	23.1	22.8	21.8	20.9	20.4	20.1	19.6	19.4	18.9
Trachea, Bronchus & Lung	43.7	44.8	45.0	47.5	49.2	50.1	52.0	53.1	53.7	55.2	55.7	56.8	57.9	58.5	59.4	59.1	59.5	59.8	60.9	61.3	62.1	62.8	62.5
Diabetes	9.6	10.0	10.2	10.0	10.8	10.8	11.1	11.5	11.1	11.4	11.6	11.5	11.0	10.9	10.6	10.8	11.2	11.4	11.2	11.3	11.7	13.1	12.7
Hypertensive disease	4.7	4.5	4.4	4.5	4.6	4.6	4.9	5.0	4.9	5.3	5.6	5.8	5.7	5.5	5.4	5.5	7.7	7.7	7.7	8.1	8.3	9.6	9.4
Heart disease (excluding hypertensive heart disease)	117.8	121.0	126.5	126.5	137.2	137.2	139.2	144.4	143.7	149.8	154.5	157.9	156.5	157.0	156.5	158.4	164.4	167.6	167.9	166.6	174.9	190.9	190.7
Cerebrovascular disease	104.7	103.4	104.7	102.3	105.3	101.7	100.8	100.9	97.2	97.7	98.2	96.5	94.1	91.1	89.4	87.5	88.2	87.1	86.1	83.5	85.2	88.1	86.3
Pneumonia	67.8	69.4	75.3	75.7	85.0	85.0	87.4	91.6	89.0	94.1	98.9	98.4	97.8	95.4	96.5	95.5	77.7	76.2	77.2	63.6	59.6	60.7	62.5
Hepatic disease	12.6	12.3	12.5	12.6	13.0	12.9	12.8	12.9	12.7	12.8	13.0	12.7	12.7	12.5	12.5	12.6	13.7	13.9	14.0	14.3	14.7	15.5	15.4
Renal disease	14.0	14.4	14.9	15.2	16.3	16.8	17.2	17.9	18.1	18.8	19.4	19.9	20.0	19.8	19.6	19.7	20.2	21.0	21.5	21.8	23.4	25.2	24.9
Senility without psychosis	17.6	18.0	18.6	19.1	20.9	22.0	24.4	28.6	30.7	35.9	41.4	48.2	55.5	60.1	67.7	74.3	81.4	88.2	96.5	107.3	123.8	147.1	156.7
Accidents	31.4	30.7	30.7	30.3	31.6	30.3	30.1	30.3	30.0	32.2	47.1	32.6	31.5	31.1	30.6	30.6	32.4	33.2	31.7	30.9	31.2	35.6	36.7
Suicides	23.3	23.8	25.5	24.0	24.2	23.7	24.4	24.0	24.4	23.4	22.9	21.0	20.7	19.5	18.5	16.8	16.4	16.1	15.7	16.4	16.5	17.4	17.4

Note: Underlined numerical data have been revised due to revision in accordance with changes in data in the quoted sources.

Source: Ministry of Health, Labour and Welfare, Vital Statistics <https://www.mhlw.go.jp/toukei/list/81-1a.html>

Mortality Rate by Major Causes (Worldwide)

B-1-6

No. of Deaths	Causes of Death	USA (2021)		UK (2020)		Germany (2022)		France (2021)		Japan (2021)	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total		1,838,108	1,626,123	348,435	340,371	532,333	534,008	323,053	319,229	738,141	701,715
Total		1,117.9	970.1	1,051.2	1,003.0	1,296.3	1,266.3	1,019.7	945.4	1,207.9	1,086.7
Deaths per 100,000 population	Tuberculosis	0.2	0.1	0.4	0.2	0.3	0.2	0.4	0.2	1.7	1.2
	Septicaemia	12.5	12.4	2.9	3.7	9.8	8.6	8.6	8.3	8.2	7.7
	Viral hepatitis	1.4	0.8	0.3	0.2	0.7	0.5	0.5	0.4	1.4	1.7
	HIV disease	2.3	0.7	0.3	0.1	0.5	0.1	0.4	0.2	0.1	—
	Malignant Neoplasms	193.8	170.9	270.5	231.2	304.4	252.6	281.2	207.3	364.0	246.3
	Esophagus	7.6	1.9	17.1	6.9	11.2	3.3	8.5	2.6	14.5	3.2
	Stomach	4.0	2.6	7.9	4.1	11.8	7.5	8.5	4.2	44.5	22.3
	Colon, Rectosigmoid Junction, Rectum & Anus	17.6	15.0	28.8	23.6	31.4	25.3	27.7	23.0	46.4	38.1
	Liver and Intrahepatic Bile Ducts	11.5	5.9	11.6	7.2	13.1	6.6	19.4	7.2	26.0	12.7
	Trachea, Bronchus & Lung	43.5	37.6	53.7	46.7	66.1	42.9	64.0	29.0	87.2	35.5
	Prostate	57.5	—	101.5	—	88.5	—	74.0	—	47.4	—
	Breast (Female)	—	30.7	—	41.1	—	51.7	—	43.9	—	25.8
	Cervix Uteri	—	3.2	—	3.1	—	4.2	—	2.6	—	5.0
	Lymphoid, Leukemia & Haematopoietic tissue	20.1	14.6	23.0	16.6	26.7	20.5	23.4	18.4	25.5	18.4
	Diabetes	35.7	26.6	13.9	12.7	31.8	32.8	18.5	17.1	13.0	9.9
	Hypertensive Disease	37.1	37.8	11.4	15.0	43.4	81.8	12.3	21.2	7.0	9.2
	Ischaemic Heart Diseases	137.7	88.9	123.8	67.8	174.0	129.3	59.7	34.8	66.7	42.2
	Cerebrovascular Diseases	43.1	54.9	45.4	57.2	60.0	72.7	40.4	51.2	84.4	82.1
	Pneumonia	13.4	11.5	30.7	32.7	22.5	17.8	16.1	15.0	69.3	47.8
	Gastric & Duodenal Ulcer	1.3	1.1	3.2	2.3	3.4	3.3	1.2	1.0	2.2	1.6
	Diseases of the Liver	26.3	17.1	20.6	12.8	27.6	14.1	17.3	6.9	19.3	9.7
	Disorders of Kidney and Ureter	19.7	17.9	5.9	6.7	22.1	26.5	12.8	13.6	29.4	28.4
	COVID-19	143.9	107.5	135.3	107.6	69.4	58.0	97.4	81.0	15.9	10.9
	Transport Accidents	21.5	8.1	3.2	0.9	5.8	1.8	5.4	1.5	4.0	1.7
	Intentional Self-Harm	23.3	5.9	12.6	3.9	18.3	6.2	20.9	6.4	22.1	10.5

Source: United Nations, Statistics Division, Demographic Yearbook 2023

B. Statistics on Health

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National Health Care Expenditures (Japan)

B-2-1

Fiscal Year	National Health Care Expenditures				Proportion of National Health Care Expenditures	
	Value (JPY 100 mil.)	Change (%)	per Capita (JPY 1,000)	Change (%)	% of GDP	% of National Income
1954	2,152	-	2.4	-	-	-
1955	2,388	11.0	2.7	12.5	2.78	3.42
1965	11,224	19.5	11.4	17.5	3.32	4.18
1975	64,779	20.4	57.9	19.1	4.25	5.22
1985	160,159	6.1	132.3	5.4	4.85	6.15
1991	218,260	5.9	176.0	5.6	4.61	5.92
1992	234,784	7.6	188.7	7.2	4.86	6.41
1993	243,631	3.8	195.3	3.5	5.05	6.67
1994	257,908	5.9	206.3	5.6	5.04	6.91
1995	269,577	4.5	214.7	4.1	5.13	7.09
1996	284,542	5.6	226.1	5.3	5.28	7.22
1997	289,149	1.6	229.2	1.4	5.33	7.40
1998	295,823	2.3	233.9	2.1	5.53	7.80
1999	307,019	3.8	242.3	3.6	5.79	8.12
2000	301,418	△ 1.8	237.5	△ 2.0	5.61	7.73
2001	310,998	3.2	244.3	2.9	5.90	8.27
2002	309,507	△ 0.5	242.9	△ 0.6	5.91	8.27
2003	315,375	1.9	247.1	1.7	5.99	8.27
2004	321,111	1.8	251.5	1.8	6.06	8.26
2005	331,289	3.2	259.3	3.1	6.20	8.54
2006	331,276	△ 0.0	259.3	△ 0.0	6.17	8.39
2007	341,360	3.0	267.2	3.0	6.34	8.65
2008	348,084	2.0	272.6	2.0	6.74	9.55
2009	360,067	3.4	282.4	3.6	7.24	10.21
2010	374,202	3.9	292.2	3.5	7.41	10.26
2011	385,850	3.1	301.9	3.3	7.72	10.79
2012	392,117	1.6	307.5	1.9	7.85	10.95
2013	400,610	2.2	314.7	2.3	7.81	10.75
2014	408,071	1.9	321.1	2.0	7.80	10.83
2015	423,644	3.8	333.3	3.8	7.83	10.79
2016	421,381	△ 0.5	332.0	△ 0.4	7.73	10.74
2017	430,710	2.2	339.9	2.4	7.75	10.75
2018	433,949	0.8	343.2	1.0	7.80	10.77
2019	443,895	2.3	351.8	2.5	7.97	11.03
2020	429,665	△ 3.2	340.6	△ 3.2	7.97	11.43
2021	450,359	4.8	358.8	5.3	8.13	11.38
2022	466,967	3.7	373.7	4.2	8.24	11.42

Note :

1. Long-Term Care Insurance cost was excluded since 2000 according to the introduction of the Long-Term Care Insurance system in Japan.
2. GDP and National Income were based on Economic and Social Research Institute, Cabinet Office, Annual Report on National Accounts.
3. Values have been retrospectively revised in accordance with revisions in the source documents cited.

Source :

Ministry of Health, Labour, and Welfare, Estimates of National Medical Care Expenditure
<https://www.mhlw.go.jp/toukei/list/37-21c.html>
 Cabinet Office, Annual Report on National Accounts
<https://www.esri.cao.go.jp/jp/sna/menu.html>

National Health Care Expenditures (Worldwide)

B-2-2

Year	1970	1980	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Australia		8,675	19,868	40,920	44,113	48,369	50,897	56,208	57,957	61,281	66,608	71,188	74,080	79,173	85,096	87,619	94,544	106,967	113,749	121,866	124,807	129,723	132,861	148,876	163,890	173,890	
% of GDP		5.8	6.5	7.6	7.7	7.9	7.9	8.1	8.0	8.1	8.1	8.2	8.5	8.4	8.5	8.5	8.7	8.7	8.8	10.2	10.1	10.1	10.2	10.7	10.4	10.7	10.4
Austria	1,295	5,366	11,379	22,469	23,000	25,062	25,970	27,873	28,599	30,043	31,488	33,363	34,128	35,823	36,463	38,680	40,424	41,521	42,725	45,392	46,762	48,787	52,922	55,742	66,439	69,006	
% of GDP		4.8	7.0	7.7	9.2	9.3	9.4	9.5	9.6	9.5	9.5	9.7	10.2	10.2	10.2	10.2	10.3	10.3	10.4	10.4	10.4	10.3	10.5	11.3	12.2	11.2	11.2
Belgium	1,444	5,840	12,975	23,565	24,738	27,321	30,116	32,160	32,522	33,683	35,140	37,960	40,063	42,580	44,739	47,119	49,565	51,499	54,315	56,807	58,223	61,144	66,066	68,685	75,850	81,418	
% of GDP		3.9	6.2	7.1	8.0	8.2	8.3	9.2	9.3	9.2	9.1	9.1	9.6	10.3	10.2	10.4	10.5	10.6	10.6	10.8	10.8	10.8	10.9	11.3	11.0	10.8	10.8
Canada	5,942	19,412	47,069	75,198	81,408	86,493	92,217	99,731	106,144	113,358	121,790	127,729	132,455	141,341	145,227	150,957	155,746	161,199	165,876	182,605	189,479	198,515	203,618	236,230	280,570		
% of GDP		6.3	6.5	8.4	8.2	8.6	8.9	9.0	9.1	9.0	9.3	9.4	9.6	10.7	10.7	10.4	10.5	10.3	10.8	11.1	11.1	10.9	11.1	13.0	12.4	12.4	12.4
Denmark		4,083	7,410	12,528	13,252	14,578	14,678	15,784	16,339	17,876	19,460	20,753	22,183	23,666	24,752	25,364	25,902	26,832	28,033	29,476	30,745	32,890	35,845	40,449	44,499	39,396	
% of GDP		8.4	8.0	8.1	8.4	8.7	8.9	9.0	9.1	9.2	9.3	9.5	10.7	10.7	10.6	10.4	10.5	10.3	10.3	10.3	10.2	10.1	10.1	10.2	10.7	10.9	9.6
France	9,947	36,444	84,869	163,337	176,023	194,303	189,708	198,275	205,672	218,436	229,033	239,345	250,347	262,220	271,042	281,349	298,689	306,570	310,566	328,973	335,361	342,393	370,812	395,132	443,922	470,407	
% of GDP		5.2	6.8	8.0	9.6	9.7	10.0	10.1	10.2	10.2	10.4	10.3	10.5	11.3	11.2	11.3	11.4	11.5	11.4	11.5	11.4	11.2	11.1	12.1	12.3	11.9	11.9
Germany	15,416	55,996	108,982	235,919	245,386	264,295	271,478	276,244	278,981	289,421	303,798	319,431	334,688	355,134	366,589	381,663	399,352	417,338	432,858	467,215	493,533	521,148	568,084	615,053	670,243	715,760	
% of GDP		5.7	8.1	8.0	9.9	9.9	10.2	10.4	10.1	10.3	10.2	10.1	10.3	11.2	11.1	10.8	10.9	11.0	11.0	11.2	11.2	11.3	11.5	11.7	12.7	12.9	12.6
Ireland	343	1,623	2,642	6,964	8,254	9,511	10,305	11,416	12,868	13,692	14,888	16,357	17,485	18,475	19,182	20,004	19,826	19,497	20,262	21,652	22,512	23,737	25,881	28,161	30,672	34,323	
% of GDP		4.9	7.5	5.6	5.9	6.4	6.7	7.2	7.6	7.5	7.8	9.1	10.5	10.5	10.5	10.6	10.3	9.5	7.3	7.5	7.5	6.9	6.7	7.1	6.6	6.1	6.1
Italy		72,253	115,649	122,628	130,820	131,196	141,381	145,161	154,739	157,535	172,507	173,602	184,041	183,973	182,883	183,288	184,608	187,593	198,496	204,377	211,226	226,994	239,625	261,401	279,155		
% of GDP		7.0	7.6	7.7	7.9	7.8	8.2	8.3	8.4	8.1	8.5	8.9	8.8	9.0	8.9	8.8	8.8	8.9	8.9	8.9	8.7	8.7	8.7	9.6	9.6	9.0	9.0
Japan	15,746	62,629	134,608	234,532	247,652	263,170	280,052	294,150	315,738	327,581	344,397	358,532	380,430	405,838	478,197	506,641	548,931	550,729	573,903	545,285	559,136	575,857	589,693	599,904	627,730		
% of GDP		4.3	6.1	5.7	7.0	7.2	7.4	7.5	7.5	7.7	7.7	7.8	8.1	9.0	9.1	10.5	10.7	10.7	10.8	10.7	10.7	10.7	11.0	11.0	11.2	11.2	11.2
Korea	625	3,495	15,179	33,716	39,819	41,085	48,820	52,132	57,290	64,559	70,507	76,349	84,716	94,779	100,095	104,753	108,440	113,738	128,381	135,946	143,165	157,614	174,081	184,092	214,077	239,422	
% of GDP		2.6	3.4	3.6	3.9	4.3	4.1	4.6	4.6	4.8	5.2	5.2	5.4	5.9	6.0	6.1	6.2	6.3	6.5	6.7	6.9	7.0	7.5	8.1	8.4	9.0	9.4
Luxembourg		218	563	1,427	1,576	1,820	1,912	2,100	2,171	2,318	2,318	2,516	2,659	2,661	2,504	2,349	2,519	2,619	2,673	2,838	2,975	3,217	3,485	3,693	4,181	4,528	
% of GDP		4.8	5.3	5.9	6.4	6.8	7.0	7.3	7.1	6.6	6.2	6.2	7.0	6.7	6.0	5.3	5.2	5.2	5.1	5.1	5.1	5.1	5.3	5.5	5.8	5.7	5.6
Netherlands		10,620	20,930	42,172	46,276	53,243	53,682	56,898	58,481	62,574	66,789	72,005	73,294	74,353	76,244	80,128	82,744	83,222	83,465	86,784	90,004	94,468	102,480	113,648	125,327	128,832	
% of GDP		6.5	7.0	7.7	8.1	8.6	9.1	9.1	9.1	9.1	9.1	9.3	10.0	10.2	10.2	10.2	10.5	10.6	10.6	10.3	10.3	10.1	10.0	10.1	11.2	11.1	10.1
Norway		2,484	5,772	12,550	13,267	15,381	15,738	16,785	17,293	18,478	20,306	21,955	22,579	23,359	24,593	26,145	27,866	29,320	29,715	30,906	32,899	34,501	36,942	38,844	42,542	47,127	
% of GDP		4.0	5.4	7.1	7.7	8.0	9.0	9.2	8.8	8.8	7.9	8.0	7.9	9.0	8.9	8.7	8.7	8.9	9.3	10.1	10.5	10.2	10.0	10.4	11.4	9.8	7.9
Portugal		2,495	6,293	16,909	17,723	19,163	20,099	21,861	22,936	23,568	24,255	25,847	26,563	27,283	25,945	25,455	26,187	26,394	27,299	29,068	29,937	32,231	35,294	36,915	43,141	47,214	
% of GDP		2.3	4.8	5.5	6.8	6.8	6.8	7.7	7.7	7.7	7.7	7.8	7.9	8.4	9.1	10.0	9.7	9.4	9.3	9.4	9.3	9.4	9.5	10.5	11.1	10.5	10.5
Spain	2,805	12,382	31,934	61,842	66,834	74,722	85,001	91,026	96,679	106,250	112,381	122,786	127,203	127,516	127,792	127,629	128,891	132,854	140,269	146,390	154,620	160,422	177,351	186,460	202,225	215,878	
% of GDP		3.1	5.0	6.1	6.8	6.8	6.8	7.6	7.7	7.7	7.8	7.9	8.4	9.1	9.1	9.2	9.2	9.1	9.1	9.1	8.9	8.9	9.0	9.1	10.7	10.3	9.7
Sweden	2,188	7,464	12,749	19,488	21,352	23,539	23,969	24,938	25,379	27,321	29,511	31,485	32,092	32,181	42,139	44,547	45,429	47,177	49,036	50,881	52,495	55,142	59,167	62,546	69,107	73,508	
% of GDP		5.4	7.7	7.2	7.3	7.9	8.2	8.3	8.1	8.2	8.1	8.0	8.2	8.8	8.3	10.4	10.7	10.9	10.8	10.9	10.8	10.9	10.8	10.8	11.3	11.1	10.5
Switzerland		6,070	14,343	23,902	25,704	28,316	28,731	30,355	30,537	31,677	34,716	37,512	39,180	39,777	41,674	44,566	48,175	50,283	52,924	56,022	56,931	58,434	63,256	65,912	73,281	79,372	
% of GDP		4.8	6.4	7.6	9.1	9.5	9.9	10.1	10.2	10.1	9.6	9.4	9.5	10.1	10.0	10.3	10.6	10.7	11.0	11.2	11.4	11.2	11.4	12.0	12.0	11.7	11.7
UK	6,907	21,690	44,790	111,440	123,667	139,045	147,124	163,552	165,026	177,232	187,662	198,071	202,681	212,017	217,633	228,276	236,814	242,918	247,448	258,613	266,530	277,808	303,663	355,175	392,634	394,829	
% of GDP		4.0	5.1	5.1	7.2	7.5	7.9	8.1	8.3	8.4	8.5	8.8	9.0	9.8	9.8	9.8	9.9	10.0	9.9	9.8	9.8	9.6	9.7	10.0	12.0	12.0	11.1
USA	67,044	235,473	670,174	1,280,346	1,398,446	1,529,567	1,661,824	1,777,752	1,901,045	2,032,105	2,246,088	2,345,546	2,437,516	2,517,797	2,620,099	2,692,589	2,942,192	3,000,644	3,139,123	3,263,040	3,411,631	3,562,338	3,962,160	4,081,628	4,246,783		
% of GDP		6.2	8.2	11.2	12.5	13.2	14.0	14.5	14.6	14.6	14.7	14.9	15.2	16.2	16.2	16.1	16.1										

National Health Care Expenditures and Share by Source of Revenues (Japan) B-2-3

Fiscal Year	National Health Care Expenditures			Source of Revenue (%)							
	Total (JPY 100 mil.)	% of GDP	per Capita (JPY 1,000)	Public Expenses	National Treasury	Perfectures	Health Insurance	Employer	Employee	Out of pockets	Others
1990	206,074	4.56	166.7	31.4	24.6	6.8	56.3	24.5	31.9	12.1	0.2
1995	269,577	5.13	214.7	31.7	24.2	7.5	56.4	24.5	31.9	11.8	0.1
2000	301,418	5.61	237.5	33.2	24.7	8.5	53.4	22.7	30.7	13.4	0.1
2005	331,289	6.20	259.3	36.4	25.1	11.4	49.2	20.2	28.9	14.4	0.0
2006	331,276	6.17	259.3	36.6	24.7	11.9	49.0	20.2	28.8	14.4	0.0
2007	341,360	6.34	267.2	36.7	24.7	12.0	49.2	20.3	28.9	14.1	0.0
2008	348,084	6.74	272.6	37.1	25.1	12.0	48.8	20.4	28.3	14.1	0.1
2009	360,067	7.24	282.4	37.5	25.3	12.1	48.6	20.3	28.3	13.9	0.0
2010	374,202	7.41	292.2	38.1	25.9	12.2	48.5	20.1	28.3	12.7	0.7
2011	385,850	7.72	301.9	38.4	26.0	12.4	48.6	20.2	28.4	12.3	0.7
2012	392,117	7.85	307.5	38.6	25.8	12.8	48.8	20.3	28.5	11.9	0.7
2013	400,610	7.81	314.7	38.8	25.9	12.9	48.7	20.3	28.5	11.8	0.7
2014	408,071	7.80	321.1	38.8	25.8	13.0	48.7	20.4	28.3	11.7	0.8
2015	423,644	7.83	333.3	38.9	25.7	13.2	48.8	20.6	28.2	11.6	0.7
2016	421,381	7.73	332.0	38.6	25.4	13.2	49.1	20.8	28.3	11.5	0.7
2017	430,710	7.75	339.9	38.4	25.3	13.1	49.4	21.1	28.3	11.6	0.7
2018	433,949	7.80	343.2	38.3	25.4	12.8	49.3	21.2	28.0	11.8	0.7
2019	443,895	7.97	351.8	38.3	25.4	12.8	49.4	21.3	28.1	11.7	0.6
2020	429,665	7.97	340.6	38.4	25.7	12.7	49.5	21.3	28.2	11.5	0.6
2021	450,359	8.13	358.8	38.0	25.3	12.7	50.0	21.6	28.3	11.6	0.4
2022	466,967	8.24	373.7	37.9	25.3	12.6	50.0	21.7	28.3	11.6	0.5

Note :

1. In accordance with the revisions of the data in the Summary of National Health Care Expenditure in FY2022, the ratios of National Health Care Expenditures to GDP have been retrospectively revised.
2. Long-term care insurance cost was excluded since 2000.
3. Special measures to reduce insurance premiums are included in National Treasury.
4. GDP was based on Economic and Social Research Institute, Cabinet Office, Annual Report on National Accounts

Source :

Ministry of Health, Labour and Welfare, Estimates of National Medical Care Expenditure

<https://www.mhlw.go.jp/toukei/list/37-21c.html>

Cabinet Office, Annual Report on National Accounts

<https://www.esri.cao.go.jp/jp/sna/menu.html>

National Health Care Expenditures and Share by Source of Revenues (USA) B-2-4

Year	National Health Care Expenditures			Source of Revenue (%)					
	Total (USD bil.)	% of GDP	per Capita (USD)	Government			Insurance Premium	Out of pockets	Others
					Federal	State & Local			
1990	612	12.1	2,643	39.4	28.3	11.1	32.7	21.9	6.0
2000	1,157	13.3	4,541	42.8	31.9	10.9	34.1	16.7	6.3
2001	1,257	14.0	4,897	43.8	32.8	11.0	34.5	16.0	5.8
2002	1,365	14.9	5,327	43.9	32.7	11.1	34.6	16.0	5.5
2003	1,476	15.5	5,739	43.9	33.0	10.9	34.7	15.9	5.5
2004	1,582	15.5	6,083	44.4	33.4	11.0	34.5	15.7	5.4
2005	1,694	15.5	6,446	44.4	33.2	11.1	34.7	15.6	5.3
2006	1,806	15.7	6,824	44.9	34.4	10.5	34.2	15.4	5.5
2007	1,921	15.9	7,181	44.8	34.4	10.4	34.2	15.3	5.7
2008	2,007	16.3	7,397	46.0	35.8	10.2	33.9	14.9	5.2
2009	2,105	17.2	7,655	47.0	37.9	9.1	33.7	14.1	5.3
2010	2,180	17.2	7,890	47.4	38.4	9.0	33.3	13.8	5.5
2011	2,254	17.2	8,090	47.5	37.6	9.9	33.4	13.8	5.3
2012	2,346	17.1	8,353	47.3	37.1	10.3	33.2	13.8	5.7
2013	2,405	16.9	8,522	47.9	37.5	10.4	32.4	13.8	5.9
2014	2,526	17.0	8,924	48.5	38.6	9.9	32.3	13.5	5.7
2015	2,673	17.3	9,348	48.6	39.0	9.7	32.5	13.2	5.6
2016	2,794	17.6	9,702	48.2	38.8	9.4	32.8	13.1	5.9
2017	2,901	17.6	10,017	48.2	38.8	9.3	32.9	12.8	6.1
2018	3,017	17.4	10,410	48.4	39.2	9.3	32.7	12.8	6.1
2019	3,173	17.5	10,821	48.7	39.7	9.0	32.3	12.7	6.3
2020	3,368	19.5	11,958	52.6	44.7	7.9	29.6	11.8	6.0
2021	3,581	18.3	12,408	50.9	43.1	7.8	30.7	12.3	6.1
2022	3,755	17.4	12,934	50.2	42.4	7.9	31.4	12.6	5.8
2023	4,107	17.6	13,855	49.5	41.1	8.4	32.0	12.3	6.2

Note :

- 'National Health Care Expenditure' are Personal Health Care which is equivalent to Japanese National Health Care Expenditure. The ratio to GDP and medical treatment expenses per capita are based on National Health Expenditure in NHE Web tables of CMS data.
- 'Insurance Premium' includes only Private Health Insurance.
- Values have been retrospectively revised in accordance with revisions in the source documents cited.

Source :

Centers for Medicare & Medicaid Services, National Health Expenditure Data

<https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>

Proportion of National Treasury Expenses in National Health Care Expenditures (Japan) B-2-5

Fiscal Year	General Accounts Budget (A)	National Health Care Expenditures (B)	National Treasury Expenses in (B) (C)	(C) / (A)	(C) / (B)
	(JPY 100 mil.)	(JPY 100 mil.)	(JPY 100 mil.)	(%)	(%)
1970	82,131	24,962	6,031	7.3	24.2
1975	212,888	64,779	18,725	8.8	28.9
1980	425,888	119,805	36,464	8.6	30.4
1985	524,996	160,159	42,551	8.1	26.6
1990	662,368	206,074	50,787	7.7	24.6
1995	709,871	269,577	65,132	9.2	24.2
2000	849,871	301,418	74,302	8.7	24.7
2001	826,524	310,998	77,399	9.4	24.9
2002	812,300	309,507	78,113	9.6	25.2
2003	817,891	315,375	80,639	9.9	25.6
2004	821,109	321,111	84,121	10.2	26.2
2005	821,829	331,289	83,544	10.2	25.2
2006	796,860	331,276	82,367	10.3	24.9
2007	829,088	341,360	84,794	10.2	24.8
2008	830,613	348,084	87,234	10.5	25.1
2009	885,480	360,067	91,287	10.3	25.4
2010	922,992	374,202	97,038	10.5	25.9
2011	924,116	385,850	100,303	10.9	26.0
2012	903,339	392,117	101,134	11.2	25.8
2013	926,115	400,610	103,636	11.2	25.9
2014	958,823	408,071	105,369	11.0	25.8
2015	963,420	423,644	108,699	11.3	25.7
2016	967,218	421,381	107,180	11.1	25.4
2017	974,547	430,710	108,972	11.2	25.3
2018	977,128	433,949	110,400	11.3	25.4
2019	1,014,571	443,895	112,963	11.1	25.4
2020	1,026,580	429,665	110,245	10.7	25.7
2021	1,066,097	450,359	114,027	10.7	25.3
2022	1,075,964	466,967	117,912	11.0	25.3

Notes:

Values have been retrospectively revised in accordance with revisions in the source documents cited.

Source :

National Health Care Expenditures: Ministry of Health, Labour and Welfare, Estimates of National Medical Care Expenditure
<https://www.mhlw.go.jp/toukei/list/37-21c.html>

General Accounts Budget: Ministry of Finance Japan, Budget
https://www.mof.go.jp/budget/budger_workflow/budget/index.html

Proportion of National Treasury Expenses in National Health Care Expenditures (USA) B-2-6

Year	Outlays: Budget (A) (USD bil.)	National Health Care Expenditure (B) (USD bil.)	National Treasury Expense in (B) (C) (USD bil.)	(C) / (A) (%)	(C) / (B) (%)
1990	1,251.7	611.9	173.2	13.8	28.3
2000	1,788.1	1,156.5	369.3	20.7	31.9
2003	2,140.4	1,475.9	486.9	22.7	33.0
2004	2,318.8	1,582.4	529.1	22.8	33.4
2005	2,479.4	1,693.8	563.0	22.7	33.2
2006	2,708.7	1,806.5	620.6	22.9	34.4
2007	2,784.3	1,921.5	661.8	23.8	34.4
2008	2,931.2	2,007.2	719.0	24.5	35.8
2009	3,997.8	2,105.5	798.0	20.0	37.9
2010	3,720.7	2,180.5	838.4	22.5	38.4
2011	3,818.8	2,253.9	848.2	22.2	37.6
2012	3,795.5	2,346.2	869.4	22.9	37.1
2013	3,684.9	2,404.8	902.9	24.5	37.5
2014	3,650.5	2,526.3	975.0	26.7	38.6
2015	3,758.6	2,673.0	1,041.5	27.7	39.0
2016	3,951.3	2,793.8	1,084.1	27.4	38.8
2017	3,980.7	2,901.3	1,127.1	28.3	38.8
2018	4,173.0	3,017.0	1,182.1	28.3	39.2
2019	4,529.2	3,172.8	1,259.2	27.8	39.7
2020	4,789.7	3,368.3	1,504.9	31.4	44.7
2021	7,249.5	3,581.3	1,542.4	21.3	43.1
2022	5,851.6	3,755.2	1,590.4	27.2	42.4
2023	6,371.8	4,107.4	1,690.0	26.5	41.1

Note:

1. 'National Health Care Expenditure' are Personal Health Care which is equivalent to Japanese National Health Care Expenditure.
2. 'National Treasury Expense' represent the expense of the Federal Government.
3. Values have been retrospectively revised in accordance with revisions in the source documents cited.

Source :

National Health Care Expenditure:

Centers for Medicare & Medicaid Services, National Health Expenditure Data

<https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>

National Treasury Expense:

Until 1995, Bank of Japan, Comparative Economic and Financial Statistics Japan and Other Major Countries

2000, Toyo Keizai, Economic Statistic Almanac

From 2003, United States Department of the Treasury, Joint Statement on Budget Results for Fiscal Year

Social Benefit by Category (Japan)

B-2-7

Fiscal Year	Medical Care	Pensions	Welfare & Others	Long-term Care	Total
Value (JPY 100 mil.)					
2000	266,062	405,367	112,646	32,806	784,075
2001	272,333	419,419	125,053	41,563	816,806
2002	268,779	433,107	136,616	47,053	838,503
2003	272,032	441,989	131,394	51,559	845,415
2004	277,185	450,514	133,216	56,167	860,915
2005	287,456	461,194	139,891	58,701	888,540
2006	293,185	471,517	142,040	60,492	906,741
2007	302,301	481,153	147,350	63,584	930,804
2008	308,666	493,777	156,009	66,513	958,453
2009	321,050	515,524	180,153	71,192	1,016,727
2010	336,453	522,286	194,921	75,082	1,053,660
2011	347,884	523,253	211,687	78,891	1,082,824
2012	353,442	532,329	205,073	83,978	1,090,844
2013	360,761	538,799	208,293	87,888	1,107,854
2014	367,817	535,104	218,891	91,908	1,121,812
2015	385,651	540,929	241,564	95,106	1,168,144
2016	388,174	543,800	251,153	97,175	1,183,126
2017	394,243	548,349	258,098	101,030	1,200,690
2018	397,494	552,581	263,925	103,885	1,213,999
2019	407,242	554,520	277,481	107,347	1,239,244
2020	427,193	556,336	338,668	114,163	1,322,196
2021	474,205	558,151	355,169	112,117	1,387,526
2022	487,511	557,908	332,918	112,912	1,378,337
Share (%)					
2000	33.9	51.7	14.4	4.2	100.0
2001	33.3	51.3	15.3	5.1	100.0
2002	32.1	51.7	16.3	5.6	100.0
2003	32.2	52.3	15.5	6.1	100.0
2004	32.2	52.3	15.5	6.5	100.0
2005	32.4	51.9	15.7	6.6	100.0
2006	32.3	52.0	15.7	6.7	100.0
2007	32.5	51.7	15.8	6.8	100.0
2008	32.2	51.5	16.3	6.9	100.0
2009	31.6	50.7	17.7	7.0	100.0
2010	31.9	49.6	18.5	7.1	100.0
2011	32.1	48.3	19.5	7.3	100.0
2012	32.4	48.8	18.8	7.7	100.0
2013	32.6	48.6	18.8	7.9	100.0
2014	32.8	47.7	19.5	8.2	100.0
2015	33.0	46.3	20.7	8.1	100.0
2016	32.8	46.0	21.2	8.2	100.0
2017	32.8	45.7	21.5	8.4	100.0
2018	32.7	45.5	21.7	8.6	100.0
2019	32.9	44.7	22.4	8.7	100.0
2020	32.3	42.1	25.6	8.6	100.0
2021	34.2	40.2	25.6	8.1	100.0
2022	35.4	40.5	24.2	8.2	100.0
Percentage of National Income (%)					
2000	6.8	10.4	2.9	0.8	20.1
2001	7.2	11.2	3.3	1.1	21.7
2002	7.2	11.6	3.7	1.3	22.4
2003	7.1	11.6	3.4	1.4	22.2
2004	7.1	11.6	3.4	1.5	22.2
2005	7.4	11.9	3.6	1.5	22.9
2006	7.4	11.9	3.6	1.5	23.0
2007	7.7	12.2	3.7	1.6	23.6
2008	8.5	13.6	4.3	1.8	26.3
2009	9.1	14.6	5.1	2.0	28.8
2010	9.2	14.3	5.3	2.1	28.9
2011	9.7	14.6	5.9	2.2	30.3
2012	9.9	14.9	5.7	2.3	30.5
2013	9.7	14.5	5.6	2.4	29.7
2014	9.8	14.2	5.8	2.4	29.8
2015	9.8	13.8	6.2	2.4	29.8
2016	9.9	13.9	6.4	2.5	30.2
2017	9.8	13.7	6.4	2.5	30.0
2018	9.9	13.7	6.6	2.6	30.1
2019	10.1	13.8	6.9	2.7	30.8
2020	11.4	14.8	9.0	3.0	35.2
2021	12.0	14.1	9.0	2.8	35.1
2022	11.9	13.6	8.1	2.8	33.7

Note:

1. Values have been retrospectively revised in accordance with revisions in the source documents cited.
2. National Income was based on Economic and Social Research Institute, Cabinet Office, Annual Report on National Accounts. <https://www.esri.cao.go.jp/jp/sna/menu.html>

Source :

National Institute of Population and Social Security Research, The Financial Statistics of Social Security in Japan http://www.ipss.go.jp/ss-cost/j/fsss-R01/fsss_R01.asp

B. Statistics on Health

B-3. Medical Care Systems

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Number of Medical Care Facilities (Japan)

B-3-1

Year	Hospitals & Clinics													Pharmacies
	Total	Hospitals	Psychiatric Hospitals	Infectious Dis. Hospitals	Tuberculosis Sanatoria	General Hospitals	Regional Medical Care Support Hospitals	General Practitioners	With Beds	Without Beds	Dental Clinics	With Beds	Without Beds	
Number of Facilities														
1990	143,164	10,096	1,049	10	15	9,022	-	80,852	23,589	57,263	52,216	51	52,165	36,981
1995	155,082	9,606	1,059	5	8	8,519	-	87,069	21,764	65,305	58,407	52	58,355	39,433
2000	165,451	9,266	1,058	-	3	8,205	26	92,824	17,853	74,971	63,361	46	63,315	46,763
2001	167,555	9,239	1,065	-	3	8,171	29	94,019	17,218	76,801	64,297	39	64,258	48,252
2002	169,079	9,187	1,069	-	2	8,116	43	94,819	16,178	78,641	65,073	59	65,014	49,332
2003	171,000	9,122	1,073	-	2	8,047	48	96,050	15,371	80,679	65,828	58	65,770	49,956
2004	172,685	9,077	1,076	-	2	7,999	84	97,051	14,765	82,286	66,557	54	66,503	50,600
2005	173,200	9,026	1,073	-	1	7,952	106	97,442	13,477	83,965	66,732	49	66,683	51,233
2006	174,944	8,943	1,072	-	1	7,870	135	98,609	12,858	85,751	67,392	47	67,345	51,952
2007	176,192	8,862	1,076	-	1	7,785	176	99,532	12,399	87,133	67,798	48	67,750	52,539
2008	175,656	8,794	1,079	-	1	7,714	228	99,083	11,500	87,583	67,779	41	67,738	53,304
2009	176,471	8,739	1,083	-	1	7,655	267	99,635	11,072	88,563	68,097	40	68,057	53,642
2010	176,878	8,670	1,082	-	1	7,587	316	99,824	10,620	89,204	68,384	41	68,343	53,001
2011	176,308	8,605	1,076	-	1	7,528	378	99,547	9,934	89,613	68,156	38	68,118	54,780
2012	177,191	8,565	1,071	-	1	7,493	432	100,152	9,596	90,556	68,474	37	68,437	55,797
2013	177,769	8,540	1,066	-	0	7,474	466	100,528	9,249	91,279	68,701	37	68,664	57,071
2014	177,546	8,493	1,067	-	-	7,426	493	100,461	8,355	92,106	68,592	32	68,560	57,784
2015	178,212	8,480	1,064	-	-	7,416	515	100,995	7,961	93,034	68,737	29	68,708	58,326
2016	178,911	8,442	1,061	-	-	7,380	543	101,529	7,269	93,900	68,940	27	68,913	58,678
2017	178,492	8,412	1,059	-	-	7,353	556	101,471	7,202	94,269	68,609	24	68,585	59,138
2018	179,090	8,372	1,058	-	-	7,314	604	102,105	6,934	95,171	68,613	21	68,592	59,613
2019	179,416	8,300	1,054	-	-	7,246	618	102,616	6,644	95,972	68,500	20	68,480	60,171
2020	178,724	8,238	1,059	-	-	7,179	652	102,612	6,303	96,309	67,874	21	67,853	60,951
2021	180,396	8,205	1,053	-	-	7,152	667	104,292	6,169	98,123	67,899	21	67,878	61,791
2022	181,093	8,156	1,056	-	-	7,100	685	105,182	5,958	99,224	67,755	21	67,734	62,375
2023	179,834	8,122	1,057	-	-	7,065	700	104,894	5,641	99,253	66,818	20	66,798	62,828
Number of Facilities per 100,000 Population														
1990	115.8	8.2	0.8	0.0	0.0	7.3	-	65.4	19.1	46.3	42.2	-	-	29.9
1995	123.5	7.7	0.8	0.0	0.0	6.8	-	69.3	17.3	52.0	46.5	-	-	31.4
2000	130.4	7.3	0.8	-	0.0	6.5	0.0	73.1	14.1	59.1	49.9	-	-	37.2
2001	131.6	7.3	0.8	-	0.0	6.4	0.0	73.9	13.5	60.3	50.5	-	-	37.9
2002	132.7	7.2	0.8	-	0.0	6.4	0.0	74.4	12.7	61.7	51.1	-	-	38.7
2003	134	7.1	0.8	-	0.0	6.3	0.0	75.3	12.0	63.2	51.6	-	-	39.1
2004	135.2	7.1	0.8	-	0.0	6.3	0.1	76.0	11.6	64.4	52.1	-	-	39.6
2005	135.6	7.1	0.8	-	0.0	6.2	0.1	76.3	10.5	65.7	52.2	-	-	40.1
2006	136.9	7.0	0.8	-	0.0	6.2	0.1	77.2	10.1	67.1	52.7	-	-	40.7
2007	137.9	6.9	0.8	-	0.0	6.1	0.1	77.9	9.7	68.2	53.1	-	-	41.1
2008	137.6	6.9	0.8	-	0.0	6.0	0.2	77.6	9.0	68.6	53.1	-	-	41.7
2009	138.4	6.9	0.8	-	0.0	6.0	0.2	78.1	8.7	69.5	53.4	-	-	42.1
2010	138.1	6.8	0.8	-	0.0	5.9	0.2	78.0	8.3	69.7	53.4	-	-	42.2
2011	138	6.7	0.8	-	0.0	5.9	0.3	77.9	7.8	70.1	53.3	-	-	42.9
2012	139	6.7	0.8	-	0.0	5.9	0.3	78.5	7.5	71.0	53.7	-	-	43.8
2013	139.6	6.7	0.8	-	0.0	5.9	0.4	79.0	7.3	71.7	54.0	-	-	44.8
2014	139.7	6.7	0.8	-	-	5.8	0.4	79.1	6.6	72.5	54.0	-	-	45.5
2015	140.2	6.7	0.8	-	-	5.8	0.4	79.5	6.3	73.2	54.1	-	-	45.9
2016	140.9	6.7	0.8	-	-	5.8	0.4	80.0	6.0	74.0	54.3	-	-	46.2
2017	140.9	6.6	0.8	-	-	5.8	0.4	80.1	5.7	74.4	54.1	-	-	46.7
2018	141.6	6.6	0.8	-	-	5.8	0.5	80.8	5.5	75.3	54.3	-	-	47.1
2019	142.2	6.6	0.8	-	-	5.7	0.5	81.3	5.3	76.1	54.3	-	-	47.7
2020	141.7	6.5	0.8	-	-	5.7	0.5	81.3	5.0	76.3	53.8	-	-	48.3
2021	143.7	6.5	0.8	-	-	5.7	0.5	83.1	4.9	78.2	54.1	-	-	49.2
2022	144.9	6.5	0.8	-	-	5.7	0.5	84.2	4.8	79.4	54.2	-	-	49.9
2023	144.6	6.5	0.9	-	-	5.7	0.6	84.4	4.5	79.8	53.7	-	-	50.5

Note :

1. Infectious Disease Hospitals were abolished in April 1999.

2. Besides pharmacies, there are drug sellers with first-class license and with second-class license as pharmaceutical sales business.

3. The number of pharmacies in FY2010 does not include municipalities in Miyagi prefecture and some Fukushima prefectures due to the impact of the Great East Japan Earthquake.

Source :

Hospitals: Ministry of Health, Labour and Welfare, Medical Care Facility Survey, Hospital Report
<https://www.mhlw.go.jp/toukei/list/79-1a.html>Pharmacies: Ministry of Health, Labour and Welfare, Hygiene Administration Report in Japan
<https://www.mhlw.go.jp/toukei/list/36-19a.html>

Number of Beds in Medical Care Facilities (Japan)

B-3-2

Year	Medical Care Facilities										Total
	Hospitals	Psychiatric Care	Infection Care	Tuberculosis Care	Convalescent Ward	General Hospitals	former 'Other Facilities'	General Practitioners	Convalescent Ward	Dental Clinics	
Number of Beds											
1980	1,147,555	308,554	18,218	84,905	-	-	907,729	287,835	-	241	1,435,631
1990	1,676,803	359,037	12,199	42,210	-	-	1,263,307	272,456	-	234	1,949,493
2000	1,647,253	358,153	2,396	22,631	-	-	1,264,073	216,755	22,786	170	1,864,178
2001	1,646,797	357,385	2,033	20,847	33,139	55,310	1,178,083	209,544	23,684	153	1,856,494
2002	1,642,593	355,966	1,854	17,558	113,534	249,858	903,823	196,596	24,880	187	1,839,376
2003	1,632,141	354,448	1,773	14,507	342,343	919,070	-	187,894	24,840	177	1,820,212
2004	1,631,553	354,927	1,690	13,293	349,450	912,193	-	181,001	24,373	168	1,812,722
2005	1,631,473	354,296	1,799	11,949	359,230	904,199	-	167,000	24,681	164	1,798,637
2006	1,626,589	352,437	1,779	11,129	350,230	911,014	-	159,898	21,584	162	1,786,649
2007	1,620,173	351,188	1,809	10,542	343,400	913,234	-	155,143	18,993	165	1,775,481
2008	1,609,403	349,321	1,785	9,502	339,358	909,437	-	146,568	17,519	144	1,756,115
2009	1,601,476	348,121	1,757	8,924	336,273	906,401	-	141,817	16,476	122	1,743,415
2010	1,593,354	346,715	1,788	8,244	332,986	903,621	-	136,861	15,078	124	1,730,339
2011	1,583,073	344,047	1,793	7,681	330,167	899,385	-	129,366	14,150	100	1,712,539
2012	1,578,254	342,194	1,798	7,208	328,888	898,166	-	125,599	13,308	97	1,703,950
2013	1,573,772	339,780	1,815	6,602	328,195	897,380	-	121,342	12,473	96	1,695,210
2014	1,568,261	338,174	1,778	5,949	328,144	894,216	-	112,364	11,410	87	1,680,712
2015	1,565,968	336,282	1,814	5,496	328,406	893,970	-	107,626	10,657	75	1,673,669
2016	1,561,005	334,258	1,841	5,347	328,161	891,398	-	103,451	9,906	69	1,664,525
2017	1,554,879	331,700	1,876	5,210	325,228	890,865	-	98,355	9,069	69	1,653,303
2018	1,546,554	329,692	1,882	4,762	319,506	890,712	-	94,853	8,509	61	1,641,468
2019	1,529,215	326,666	1,888	4,370	308,444	887,847	-	90,825	7,882	57	1,620,097
2020	1,507,526	324,481	1,904	4,107	289,114	887,920	-	86,046	6,936	61	1,593,633
2021	1,500,057	323,502	1,893	3,944	284,662	886,056	-	83,668	6,310	58	1,583,783
2022	1,492,957	321,828	1,909	3,863	278,694	886,663	-	80,436	5,745	58	1,573,451
2023	1,481,183	318,921	1,911	3,744	273,745	882,862	-	75,780	4,906	57	1,557,020
Number of Beds per 100,000 Population											
1980	1,127.2	263.6	15.6	72.5	-	-	775.5	245.9	-	0.2	1,373.3
1990	1,356.5	290.5	9.9	34.1	-	-	1,022.0	220.4	-	0.2	1,577.1
2000	1,297.8	282.2	1.9	17.8	-	-	995.9	170.8	18.0	0.1	1,468.7
2001	1,293.7	280.8	1.6	16.4	26.0	43.5	-	164.6	18.6	0.1	1,458.5
2002	1,289.0	279.3	1.5	13.8	89.1	196.1	-	154.3	19.5	0.1	1,443.4
2003	1,278.9	277.7	1.4	11.4	268.3	720.2	-	147.2	19.5	0.1	1,426.3
2004	1,277.8	278.0	1.3	10.4	273.7	714.4	-	141.8	19.1	0.1	1,419.8
2005	1,276.9	277.3	1.4	9.4	281.2	707.7	-	130.7	19.3	0.1	1,407.7
2006	1,273.1	275.8	1.4	8.7	274.1	713.0	-	125.1	16.9	0.1	1,398.3
2007	1,268.0	274.9	1.4	8.3	268.8	714.7	-	121.4	14.9	0.1	1,389.6
2008	1,260.4	273.6	1.4	7.4	265.8	712.2	-	114.8	13.7	0.1	1,375.3
2009	1,256.0	273.0	1.4	7.0	263.7	710.8	-	111.2	12.9	0.1	1,367.3
2010	1,244.3	270.8	1.4	6.4	260.0	705.6	-	106.9	11.8	0.1	1,351.2
2011	1,238.7	269.2	1.4	6.0	258.3	703.7	-	101.2	11.1	0.1	1,340.0
2012	1,237.7	268.4	1.4	5.7	257.9	704.4	-	98.5	10.4	0.1	1,336.3
2013	1,236.3	266.9	1.4	5.2	257.8	704.9	-	95.3	9.8	0.1	1,331.7
2014	1,234.0	266.1	1.4	4.7	258.2	703.6	-	88.4	9.0	0.1	1,322.5
2015	1,232.1	264.6	1.4	4.3	258.4	703.4	-	84.7	8.4	0.1	1,316.9
2016	1,229.8	263.3	1.5	4.2	258.5	702.3	-	81.5	7.8	0.1	1,311.3
2017	1,227.2	261.8	1.5	4.1	256.7	703.1	-	77.6	7.2	0.1	1,304.8
2018	1,223.1	260.7	1.5	3.8	252.7	704.4	-	75.0	6.7	0.0	1,298.2
2019	1,212.1	258.9	1.5	3.5	244.5	703.7	-	72.0	6.2	0.0	1,284.1
2020	1,195.1	257.2	1.5	3.3	229.2	703.9	-	68.2	5.5	0.0	1,263.3
2021	1,195.2	257.8	1.5	3.1	226.8	706.0	-	66.7	5.0	0.0	1,262.0
2022	1,194.9	257.6	1.5	3.1	223.0	709.6	-	64.4	4.6	0.0	1,259.3
2023	1,191.1	256.5	1.5	3.0	220.1	710.0	-	60.9	3.9	0.0	1,252.1

Source : Ministry of Health, Labour and Welfare, Medical Care Facility Survey, Hospital Report
<https://www.mhlw.go.jp/toukei/list/79-1a.html>

Number of Medical Care Personnel (Japan)

B-3-3

Fiscal Year	Physicians*1	Dentists*1	Nurses*2	Pharmacists*1
Total Number				
1970	118,990	37,859	273,572	79,393
1980	156,235	53,602	487,169	116,056
1986	191,346	66,797	639,936	135,990
1988	201,658	70,572	694,999	143,429
1990	211,797	74,028	745,301	150,627
1992	219,704	77,416	795,810	162,021
1994	230,519	81,055	862,013	176,871
1996	240,908	85,518	928,896	194,300
1998	248,611	88,061	985,821	205,953
2000	255,792	90,857	1,042,468	217,477
2002	262,687	92,874	1,097,326	229,744
2004	270,371	95,197	1,146,181	241,369
2006	277,927	97,198	1,194,121	252,533
2008	286,699	99,426	1,252,224	267,751
2010	295,049	101,576	1,320,873	276,517
2012	303,268	102,551	1,373,521	280,052
2014	311,205	103,972	1,426,932	288,151
2016	319,480	104,533	1,472,508	301,323
2018	327,210	104,908	1,523,085	311,289
2020	339,623	107,443	1,565,500	321,982
2022	343,275	105,267	1,566,016	323,690
Number per 100,000 Population				
1970	114	36	261	76
1980	134	46	416	99
1986	157	55	526	112
1988	164	58	566	117
1990	171	60	603	122
1992	177	62	639	130
1994	184	65	689	142
1996	191	68	738	154
1998	197	70	779	163
2000	202	72	821	171
2002	206	73	861	180
2004	212	75	898	189
2006	218	76	935	198
2008	225	78	981	210
2010	230	79	1,032	216
2012	238	80	1,077	220
2014	245	82	1,123	227
2016	252	82	1,160	237
2018	259	83	1,205	246
2020	269	85	1,241	255
2022	275	84	1,253	259

Note :

*1: Number of licensed specialists.

*2: Number of actual workers including nurses and assistant nurses.

Source :

Ministry of Health, Labour and Welfare, Report on Public Health Administration and Services

<https://www.mhlw.go.jp/toukei/list/36-19a.html>

Ministry of Health, Labour and Welfare, Report on Survey of Physicians, Dentists and Pharmacists

<https://www.mhlw.go.jp/toukei/list/33-20c.html>

Appendix

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C2	List of abbreviated Names of JPMA member Companies	105

Exchange Rates

Per US Dollar (Period average: Year)

Country	Currency	Currency Abbreviation	Year																					
			1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Australia	Australian Dollar	AUD	1.28	1.35	1.72	1.31	1.33	1.20	1.19	1.28	1.09	0.97	0.97	1.04	1.11	1.33	1.35	1.30	1.34	1.44	1.45	1.33	1.44	1.51
Canada	Canadian Dollar	CAD	1.17	1.37	1.49	1.21	1.13	1.07	1.07	1.14	1.03	0.99	1.00	1.03	1.10	1.28	1.33	1.30	1.30	1.33	1.34	1.25	1.30	1.35
China	Yuan	CNY	4.78	8.35	8.28	8.19	7.97	7.61	6.95	6.83	6.77	6.46	6.31	6.20	6.14	6.23	6.64	6.76	6.62	6.91	6.90	6.45	6.74	7.08
Denmark	Danish Krone	DKK	6.19	5.60	8.08	6.00	5.95	5.44	5.10	5.36	5.62	5.37	5.79	5.62	5.61	6.73	6.73	6.60	6.31	6.67	6.54	6.29	7.08	6.89
EU	Euro	EUR	1.27	1.31																				
Austria	Schilling	ATS	11.37	10.08																				
Belgium	Belgian Franc	BEF	33.42	29.48																				
France	Franc	FRF	5.45	4.99																				
Germany	Deutsche Mark	DEM	1.62	1.43	1.08	0.80	0.80	0.73	0.68	0.72	0.75	0.72	0.78	0.75	0.75	0.90	0.90	0.89	0.85	0.89	0.88	0.85	0.95	0.92
Italy	Italian Lira	ITL	1,198.10	1,629.60																				
NetherLands	Guilder	NLG	1.82	1.61																				
Portugal	Portuguese Escudo	PTE	142.55	149.97																				
Spain	Spanish Peseta	ESP	101.93	124.69																				
Japan	Yen	JPY	144.79	94.06	107.77	110.22	116.30	117.75	103.36	93.57	87.78	79.81	79.79	97.60	105.94	121.04	108.79	112.17	110.42	109.01	106.77	109.75	131.50	140.49
Korea	Korean Won	KRW	707.77	771.25	1,130.36	1,024.33	955.34	929.38	1,100.13	1,277.25	1,156.46	1,108.23	1,126.81	1,094.98	1,052.84	1,130.95	1,160.77	1,131.00	1,100.16	1,165.36	1,180.27	1,143.95	1,291.45	1,305.66
Sweden	Swedish Krona	SEK	5.92	7.13	9.16	7.47	7.38	6.76	6.59	7.65	7.21	6.49	6.78	6.51	6.86	8.43	8.56	8.55	8.69	9.46	9.21	8.58	10.11	10.61
Switzerland	Swiss Franc	CHF	1.39	1.18	1.69	1.25	1.25	1.20	1.08	1.09	1.04	0.89	0.94	0.93	0.92	0.96	0.99	0.98	0.98	0.99	0.94	0.91	0.95	0.90
United Kingdom	Pound Sterling	GBP	0.56	0.63	0.66	0.55	0.54	0.50	0.54	0.64	0.65	0.62	0.63	0.64	0.61	0.65	0.74	0.78	0.75	0.78	0.78	0.73	0.81	0.80
United States	US Dollar	USD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Note:

Currency unit of EU : The euro has been used in Austria, Belgium, France, Germany, Italy, Netherlands, Portugal and Spain since 2000.

Source : International Monetary Fund, International Financial Statistics

List of abbreviated Names of JPMA member Companies

(as of Jan. 31th, 2025)

Abbreviated Name	Official Name
AbbVie	AbbVie GK
Alfresa Pharma	Alfresa Pharma Corporation
Amgen	Amgen K.K.
Asahi Kasei Pharma	ASAHI KASEI PHARMA CORPORATION
ASKA Pharma.	ASKA Pharmaceutical Co., Ltd.
Astellas	ASTELLAS PHARMA INC.
AstraZeneca	AstraZeneca K.K.
Bayer	BAYER YAKUHIN, LTD.
Biken	THE RESEARCH FOUNDATION FOR MICROBIAL DISEASES OF OSAKA UNIVERSITY
Biogen	Biogen Japan Ltd.
Boehringer Ingelheim	NIPPON BOEHRINGER INGELHEIM CO., LTD.
Bristol-Myers Squibb	Bristol-Myers Squibb K.K.
Chugai	CHUGAI PHARMACEUTICAL CO., LTD.
Daiichi Sankyo	DAIICHI SANKYO CO., LTD.
EA Pharma	EA Pharma Co., Ltd.
Eisai	Eisai Co., Ltd.
Eli Lilly	ELI LILLY JAPAN K.K.
FUJIFILM Toyama Chemical	FUJIFILM Toyama Chemical Co., Ltd.
Fujimoto Pharma.	FUJIMOTO PHARMACEUTICAL CORPORATION
Fuji Pharma	Fuji Pharma Co., Ltd.
Fuso Pharma.	FUSO PHARMACEUTICAL INDUSTRIES, LTD.
GlaxoSmithKline	GlaxoSmithKline K.K.
Hisamitsu Pharma.	Hisamitsu Pharmaceutical Co.,Inc
Janssen	JANSSEN PHARMACEUTICAL K.K.
JCR Pharma	JCR Pharmaceuticals Co., Ltd.
Kaken Pharma.	KAKEN PHARMACEUTICAL CO., LTD.
Kissei Pharma.	KISSEI PHARMACEUTICAL CO., LTD.
KM Biologics	KM Biologics Co.,Ltd.
Kowa	Kowa Company, Ltd.
Kracie	Kracie, Ltd.
Kyorin Pharma.	KYORIN Pharmaceutical Co.,Ltd.
Kyoto Pharma.	KYOTO PHARMACEUTICAL INDUSTRIES, LTD.
Kyowa Kirin	Kyowa Kirin Co., Ltd.
Maruho	MARUHO CO., LTD.
Maruishi Pharma.	MARUISHI PHARMACEUTICAL CO., LTD.
Meiji Seika Pharma	Meiji Seika Pharma Co., Ltd.
Merck Biopharma	Merck Biopharma Co., Ltd.
Mitsubishi Tanabe	mitsubishi tanabe PHARMA CORPORATION
Mochida Pharma.	MOCHIDA PHARMACEUTICAL CO., LTD.
MSD	MSD K.K.

Abbreviated Name	Official Name
Nippon Chemiphar	NIPPON CHEMIPHAR CO., LTD.
Nippon Kayaku	NIPPON KAYAKU CO., LTD.
Nippon Shinyaku	NIPPON SHINYAKU Co., Ltd.
Nippon Zoki Pharma.	NIPPON ZOKI PHARMACEUTICAL CO., LTD.
Novartis	NOVARTIS PHARMA K.K.
Novo Nordisk	NOVO NORDISK PHARMA LTD.
Ono Pharma.	ONO PHARMACEUTICAL CO., LTD.
Otsuka Pharma.	OTSUKA PHARMACEUTICAL Co., Ltd.
Pfizer	PFIZER JAPAN INC.
Sanofi	Sanofi K.K.
Santen Pharma.	SANTEN PHARMACEUTICAL CO., LTD.
Sanwa Kagaku	SANWA KAGAKU KENKYUSHO CO., LTD.
Seikagaku	SEIKAGAKU CORPORATION
Senju Pharma.	SENJU PHARMACEUTICAL CO., LTD.
Shionogi	SHIONOGI & CO., LTD.
Sumitomo Pharma	SUMITOMO PHARMA CO., LTD.
Sun Pharma	Sun Pharma Japan Ltd.
Taiho Pharma.	TAIHO PHARMACEUTICAL CO., LTD.
Taisho Pharma.	TAISHO PHARMACEUTICAL CO., LTD.
Takeda	TAKEDA PHARMACEUTICAL COMPANY LIMITED
Teijin Pharma	TEIJIN PHARMA LIMITED
Teikoku Seiyaku	TEIKOKU SEIYAKU CO., LTD.
Toa Eiyo	TOA EIYO LTD.
Toray	Toray Industries, Inc.
Torii Pharma.	TORII PHARMACEUTICAL CO., LTD.
Tsumura	TSUMURA & Co.
UCB	UCB JAPAN CO., LTD.
Viatrix	Viatrix Pharmaceuticals Japan G.K.
Wakamoto Pharma.	WAKAMOTO PHARMACEUTICAL CO., LTD.
Zeria Pharma.	ZERIA PHARMACEUTICAL CO., LTD.

