



# **DATA BOOK** **2026**

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 FY2024.

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 1<sup>st</sup>, 2026

Japan Pharmaceutical Manufacturers Association  
Office of Pharmaceutical Industry Research

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**Contact :**

Japan Pharmaceutical Manufacturers Association  
Office of Pharmaceutical Industry Research Inquiry counter  
E-mail: opir-sp@jpma.or.jp

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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
2023 *	316	111	40	110	95	345	69

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	301-1,000	1,001-3,000	Over 3,000	Total	-10 employees	11-50	51-100	101-300	301-1,000	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*	24	57	33	69	74	49	29	335	7.2	17.0	9.9	20.6	22.1	14.6	8.7	100.0
2024 JPMA (46 Members)	—	—	—	3	12	23	8	46	—	—	—	6.5	26.1	50.0	17.4	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	10.0	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	—	41.7	26.6
2016*	301	151,282	22,132	39,839	26,171	—	63,140	42,552	100.0	14.6	26.3	17.3	—	42.1	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*	318	149,812	25,675	46,860	26,174	—	51,103	32,098	100.0	17.1	31.3	17.5	—	34.1	21.4
2024	—	85,980	7,940	8,701	12,354	—	23,028	17,609	—	—	—	—	—	—	—
JPMA	—	46	36	36	37	—	37	38	—	—	—	—	—	—	—

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 completion 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

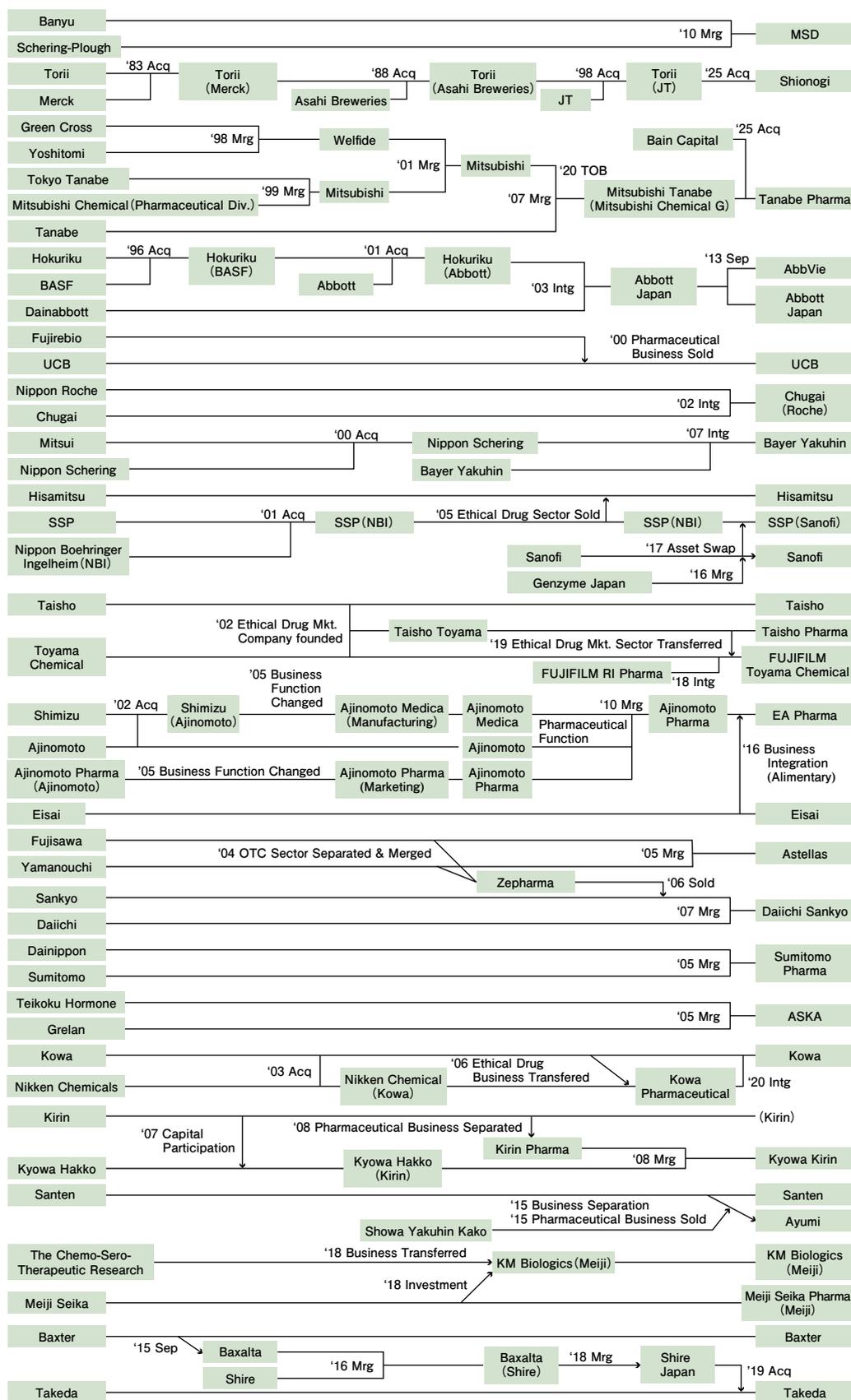
(Unit: No. of Employees)

Year	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
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	19,973	
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	33,701	33,701	34,075	34,617	35,250	35,711	37,073	38,489	40,464	42,062	43,501	44,958
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	45,585
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	6,190
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	98,043
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	132,660
Greece	8,000	11,500	11,500	11,200	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	32,786
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	50,000
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	66,500	66,400	67,300	68,600	70,000
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	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	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	10,000
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	57,800
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	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	52,183
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	70,000

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

# M&A in Pharmaceutical Industry (Japan)

A-1-5



Acq: Acquisition Mrg: Merger Intg: Integration Sep: Separation





## 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	1565	52,821	41,903	—	7,478	3,441
1995	1564	73,104	59,407	—	9,195	4,501
2000	1396	81,126	68,848	3,124	7,820	4,458
2001	1391	88,271	74,593	2,356	8,407	5,271
2002	1347	92,585	79,560	2,819	8,331	4,694
2003	1342	94,467	81,763	2,663	7,479	5,225
2004 <sup>†</sup>	—	—	—	—	—	—
2005	1231	97,232	85,328	3,130	7,040	4,864
2006 <sup>*</sup>	364	89,586	79,139	4,074	6,360	4,087
2007 <sup>*</sup>	380	88,820	77,309	4,249	7,492	4,018
2008 <sup>*</sup>	351	94,980	84,219	3,944	6,518	4,243
2009 <sup>*</sup>	380	113,432	101,383	4,429	7,022	5,027
2010 <sup>*</sup>	370	106,516	94,462	7,970	7,259	4,795
2011 <sup>*</sup>	341	116,137	103,901	8,010	7,473	4,763
2012 <sup>*</sup>	349	118,567	106,718	8,372	7,239	4,610
2013 <sup>*</sup>	329	132,948	121,749	9,959	7,476	3,723
2014 <sup>*</sup>	313	123,339	113,098	9,490	7,194	3,047
2015 <sup>*</sup>	288	106,578	97,281	9,757	5,381	3,916
2016 <sup>*</sup>	287	107,132	97,537	7,412	6,527	3,069
2017 <sup>*</sup>	268	110,151	100,565	4,744	6,548	3,037
2018 <sup>†</sup>	—	—	—	—	—	—
2019 <sup>*</sup>	259	109,557	96,182	8,635	6,741	2,404
2020 <sup>*</sup>	290	116,922	103,491	8,148	5,795	2,539
2021 <sup>*</sup>	302	136,925	116,258	12,904	6,746	3,222
2022 <sup>*</sup>	306	165,305	143,316	13,505	7,330	2,825
2023 <sup>*</sup>	308	162,923	141,475	11,934	8,038	2,722

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

FY2023

(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	73,575	89,790	229,612	1,328,713	595,252	2,051,114	11,959,479	16,327,535
	Generic	0	42,133	50,097	376,880	50,947	385,411	417,377	1,322,845
	OTC	4	47,302	74,832	106,336	13,123	51,215	346,397	639,209
	Raw materials and Others	855	10,130	20,657	32,796	3,010	46,723	142,595	256,766
	Total	74,434	147,222	325,101	1,467,845	611,385	2,149,052	12,448,471	17,223,510
Diversified Companies	Ethical Drug	19	3,562	3,235	12,417	29,055	89,425	398,494	536,207
	Generic	0	65	1,205	0	7,639	980	173,872	183,761
	OTC	30	7,211	16,528	45,528	4,077	125,920	83,571	282,865
	Raw materials and Others	3	145	0	2,328	0	12	14,764	17,252
	Total	52	10,918	19,763	60,273	33,132	215,357	496,829	836,324
Total	Ethical Drug	73,594	93,352	232,847	1,341,130	624,307	2,140,539	12,357,973	16,863,742
	Generic	0	42,198	51,302	376,880	58,586	386,391	591,249	1,506,606
	OTC	34	54,513	91,360	151,864	17,200	177,135	429,968	922,074
	Raw materials and Others	858	10,275	20,657	35,124	3,010	46,735	157,359	274,018
	Total	74,486	158,140	344,864	1,528,118	644,517	2,364,409	12,945,300	18,059,834

Note :

1. The number of surveyed companies is 313.

Among the companies, having obtained a pharmaceutical manufacturing and marketing license under the Pharmaceutical Affairs Law as of the end of FY2023 (March 31), the surveys targeted the member companies under the fourteen industrial bodies affiliated with the Federation of Pharmaceutical Manufacturers' Associations of Japan.

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.

3. 'Ethical drug' includes in vitro diagnostics.

4. '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
2023 *	286	13,746,569	86.8	30	2,094,290	13.2	316	15,840,859	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	1788	18.3%	30.9%	55.7%	68.9%	83.8%
1995	1691	19.3%	31.4%	56.3%	69.6%	84.2%
1996	1596	22.2%	34.6%	59.2%	72.2%	85.3%
1997	1562	23.6%	36.0%	62.9%	75.9%	87.4%
1998	1627	20.3%	32.2%	60.1%	73.0%	85.8%
1999	1427	23.6%	36.6%	65.6%	78.8%	90.7%
2000	1396	26.7%	40.6%	68.0%	80.6%	92.3%
2001	1391	27.4%	41.5%	69.3%	81.5%	92.2%
2002	1347	28.3%	42.3%	69.7%	82.0%	92.8%
2003	1342	28.6%	42.5%	70.8%	82.3%	92.7%
2004 <sup>†</sup>	—	—	—	—	—	—
2005	1231	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 <sup>†</sup>	—	—	—	—	—	—
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%
2023*	321	47.1%	59.5%	82.0%	90.3%	97.4%

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.

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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 :

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<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
2024	5,410,990	2.3	2,169,056	3.2	3,923,667	0.8	11,503,713	2.0

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

A-2-6

## (1) Promotion Company Level [NHI price basis]

	2024 (Jan.-Dec.)	2023 (Jan.-Dec.)	2022 (Jan.-Dec.)	2021 (Jan.-Dec.)	2020 (Jan.-Dec.)
1 Chugai	532,992	Chugai	546,095	Chugai	526,456
2 AstraZeneca	514,130	AstraZeneca	496,060	Takeda	503,135
3 Daiichi Sankyo	490,713	Daiichi Sankyo	470,620	AstraZeneca	458,353
4 MSD	475,912	MSD	466,868	Daiichi Sankyo	420,187
5 Takeda	428,971	Takeda	460,888	Janssen Pharmaceutical	397,567
6 Janssen Pharmaceutical	397,473	Janssen Pharmaceutical	414,522	MSD	373,517
7 Novartis Pharma	357,621	Novartis Pharma	338,093	Otsuka	330,653
8 Pfizer	320,934	Otsuka	307,921	Novartis Pharma	316,864
9 Otsuka	312,899	Bayer	289,336	Bayer	295,553
10 Bayer	268,024	Bristol-Myers Squibb	270,168	Bristol-Myers Squibb	274,008
11 Sanofi	259,150	Ono	259,360	Eli Lilly Japan	252,239
12 Eli Lilly Japan	258,346	Pfizer	247,088	Ono	247,714
13 Bristol-Myers Squibb	253,417	Glaxo Smith Kline	246,619	Eli Lilly Japan	238,826
14 Nippon Boehringer Ingelheim	251,326	Eli Lilly Japan	238,504	Glaxo Smith Kline	227,661
15 Glaxo Smith Kline	245,056	Nippon Boehringer Ingelheim	231,890	Astellas	226,669
16 Ono	232,504	Sanofi	225,920	Mitsubishi Tanabe	217,327
17 Astellas	208,661	Astellas	221,491	Nippon Boehringer Ingelheim	216,778
18 Sawai	207,407	Sawai	205,068	Sanofi	201,833
19 Mitsubishi Tanabe	202,166	Mitsubishi Tanabe	193,476	Sawai	194,738
20 Tsumura	185,104	Glilead Sciences	170,249	Glilead Sciences	185,388

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## (2) Distributor Level [NHI price basis]

	2024 (Jan.-Dec.)	2023 (Jan.-Dec.)	2022 (Jan.-Dec.)	2021 (Jan.-Dec.)	2020 (Jan.-Dec.)
1 Takeda	692,235	Takeda	723,174	Takeda	746,460
2 Daiichi Sankyo	660,915	Daiichi Sankyo	632,495	Daiichi Sankyo	579,900
3 Chugai	532,992	Chugai	546,095	Chugai	526,456
4 MSD	462,389	MSD	463,803	Pfizer	398,556
5 AstraZeneca	413,698	AstraZeneca	413,883	MSD	355,470
6 Pfizer	375,916	Ono	370,292	Astellas	348,430
7 Ono	362,941	Otsuka	339,025	Mitsubishi Tanabe	339,759
8 Otsuka	345,099	Astellas	335,222	Ono	334,857
9 Mitsubishi Tanabe	344,891	Mitsubishi Tanabe	327,994	AstraZeneca	329,272
10 Astellas	330,770	Pfizer	307,032	Ono	313,865
11 Novartis Pharma	315,471	Novartis Pharma	290,185	Janssen Pharmaceutical	262,945
12 Glaxo Smith Kline	266,471	Janssen Pharmaceutical	273,285	Novartis Pharma	262,829
13 Janssen Pharmaceutical	266,259	Glaxo Smith Kline	268,112	Glaxo Smith Kline	249,255
14 Nippon Boehringer Ingelheim	251,326	Nippon Boehringer Ingelheim	231,890	Nippon Boehringer Ingelheim	216,778
15 Sanofi	242,518	Eli Lilly Japan	224,101	Eisai	200,447
16 Eli Lilly Japan	218,565	Sawai	205,068	Eli Lilly Japan	198,483
17 Sawai	207,407	Sanofi	204,632	Bayer	197,786
18 Santen	189,631	Santen	203,115	Sawai	194,738
19 Tsumura	185,104	Bayer	189,480	Santen	191,693
20 Bayer	174,101	Kyowa Kirin	183,758	Kyowa Kirin	187,359

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## Pharmaceutical Market (Worldwide Market) (1/2)

## (1) Sales by Geographic Region

Year	North America		Europe		Africa / Asia / Australasia		Latin America		World Total	
	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)	Sales (USD bil.)	Share (%)
2005	261.1	43.4	174.4	29.0	133.5	22.2	32.2	5.4	601.2	100.0
2006	285.7	44.0	187.8	28.9	139.3	21.5	35.9	5.5	648.7	100.0
2007	298.6	41.1	229.1	31.4	155.5	21.4	43.3	6.0	726.4	100.0
2008	304.5	38.1	256.1	32.1	186.2	23.3	52.0	6.5	799.0	100.0
2009	320.2	38.6	246.1	29.7	211.0	25.4	53.3	6.4	830.6	100.0
2010	340.9	38.4	245.9	27.6	239.0	26.9	62.4	7.0	888.2	100.0
2011	355.6	36.9	263.2	27.2	277.4	28.8	67.2	7.0	963.4	100.0
2012	351.1	36.4	245.8	25.5	296.2	30.7	71.1	7.4	964.2	100.0
2013	367.1	36.9	258.1	26.0	296.1	29.8	72.5	7.3	993.8	100.0
2014	414.2	39.2	266.2	25.2	310.4	29.4	65.1	6.2	1,055.9	100.0
2015	453.8	41.1	238.5	21.6	337.0	30.5	74.7	6.8	1,104.0	100.0
2016	479.0	42.0	244.5	21.4	330.9	29.0	86.9	7.6	1,141.3	100.0
2017	489.7	41.5	258.5	21.9	333.2	28.2	97.9	8.3	1,179.3	100.0
2018	519.1	43.1	273.7	22.7	350.6	29.1	59.8	5.0	1,203.2	100.0
2019	548.8	43.4	281.8	22.3	373.8	29.6	60.5	4.8	1,265.0	100.0
2020	575.4	44.8	292.3	22.8	356.9	27.8	60.2	4.7	1,284.8	100.0
2021	623.8	44.0	327.7	23.1	394.3	27.8	72.2	5.1	1,417.9	100.0
2022	683.9	46.7	321.7	22.0	378.6	25.9	79.7	5.4	1,463.8	100.0
2023	780.2	48.6	353.6	22.0	380.8	23.7	89.4	5.6	1,604.0	100.0
2024	853.3	49.6	385.6	22.4	385.4	22.4	95.7	5.6	1,720.0	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		Germany		Japan		France		UK		Italy		Brazil		Spain		Canada		Others		World Total	
	Sales (USD bil.)	Share (%)																						
2005	247.7	41.2	11.6	1.9	31.1	5.2	67.7	11.3	32.0	5.3	19.4	3.2	19.9	3.3	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	32.1	4.9	63.7	9.8	33.2	5.1	20.5	3.2	21.5	3.3	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	37.3	5.1	65.7	9.0	38.5	5.3	23.4	3.2	24.2	3.3	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	41.9	5.2	77.0	9.6	42.5	5.3	22.2	2.8	27.3	3.4	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	41.3	5.0	89.9	10.8	40.4	4.9	19.8	2.4	27.1	3.3	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	42.2	4.7	96.2	10.8	38.5	4.3	20.3	2.3	26.6	3.0	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	44.7	4.6	112.1	11.6	40.0	4.1	23.1	2.4	28.7	3.0	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	42.1	4.4	108.6	11.3	36.9	3.8	23.2	2.4	31.4	3.3	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	45.9	4.6	90.7	9.1	37.5	3.8	24.3	2.4	28.1	2.8	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	48.4	4.6	85.4	8.1	38.3	3.6	27.9	2.6	28.9	2.7	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	42.3	3.8	78.8	7.1	32.2	2.9	28.5	2.6	27.1	2.5	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	43.8	3.8	89.1	7.8	33.2	2.9	26.7	2.3	29.0	2.5	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	46.4	3.9	84.8	7.2	34.3	2.9	25.6	2.2	30.9	2.6	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	51.5	4.3	84.2	7.0	36.3	3.0	27.8	2.3	33.9	2.8	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	52.0	4.1	87.9	7.0	35.9	2.8	29.1	2.3	33.2	2.6	26.9	2.1	24.8	2.0	23.4	1.8	280.4	22.2	1,265.0	100.0
2020	545.9	42.5	148.5	11.6	57.0	4.4	87.4	6.8	37.7	2.9	31.5	2.5	33.9	2.6	23.4	1.8	26.7	2.1	24.8	1.9	267.9	20.8	1,284.8	100.0
2021	590.3	41.6	171.4	12.1	63.6	4.5	86.7	6.1	42.6	3.0	37.6	2.7	37.5	2.6	28.4	2.0	30.3	2.1	28.4	2.0	301.1	21.2	1,417.9	100.0
2022	647.9	44.3	164.8	11.3	59.6	4.1	74.8	5.1	41.8	2.9	36.4	2.5	36.9	2.5	31.2	2.1	29.0	2.0	30.2	2.1	311.0	21.2	1,463.8	100.0
2023	741.5	46.2	165.8	10.3	64.7	4.0	72.3	4.5	46.6	2.9	40.9	2.5	41.2	2.6	35.3	2.2	32.3	2.0	32.2	2.0	331.3	20.7	1,604.0	100.0
2024	812.5	47.2	165.9	9.6	69.8	4.1	68.3	4.0	49.1	2.9	45.3	2.6	44.9	2.6	37.2	2.2	35.5	2.1	34.1	2.0	357.4	20.8	1,720.0	100.0

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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
2024	653,688	316,544	94,542	51,427	35,381	29,119	22,883	19,138	17,393	15,040	320,969	1,576,124
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%
2024	41.5%	20.1%	6.0%	3.3%	2.2%	1.8%	1.5%	1.2%	1.1%	1.0%	20.4%	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
2024	653,688	970,232	1,064,774	1,116,201	1,151,582	1,180,701	1,203,584	1,222,722	1,240,115	1,255,155	1,576,124
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%
2024	41.5%	61.6%	67.6%	70.8%	73.1%	74.9%	76.4%	77.6%	78.7%	79.6%	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

### FY2024 (vs. FY2023)

Company	Total Sales (JPY mil.)		Pharmaceutical Sales (JPY mil.)		Operating Income (JPY mil.)		Ordinary Income (JPY mil.)		Net Income (JPY mil.)		No. of Employees	
	FY2023	FY2024	FY2023	FY2024	FY2023	FY2024	FY2023	FY2024	FY2023	FY2024	FY2023	FY2024
Alfresa Pharma	*	46,531	—	—	273	71	548	772	266	△ 2,731	—	—
Amgen	*	87,891	109,851	—	4,098	5,168	4,068	5,137	2,731	3,411	約 700	—
Asahi Kasei Pharma	*	81,044	84,656	76,488	10,719	12,676	10,312	12,590	6,531	9,371	1,600	1,584
ASKA Pharma.	*	57,303	57,720	56,224	6,468	—	6,628	4,886	7,697	3,725	838	865
Astellas	*	1,603,672	1,912,323	1,533,685	25,518	41,039	373,257	431,119	17,045	50,747	14,754	13,643
AstraZeneca	*	421,527	417,250	421,527	32,350	29,945	34,351	31,908	23,789	22,293	3,274	3,148
Bayer	*	223,877	215,997	221,358	21,794	12,040	20,931	11,062	24,325	6,642	1,590	1,521
Biogen	*	18,078	16,842	18,078	639	597	768	708	503	375	197	182
Boehringer Ingelheim	*	200,159	212,088	—	4,098	6,584	3,712	11,139	2,226	9,169	—	—
Bristol-Myers Squibb	*	206,594	190,215	—	21,152	19,463	22,239	20,496	12,947	13,722	—	—
Chugai	*	1,111,367	1,170,611	974,493	439,174	542,002	—	—	325,472	387,317	7,604	7,778
Daiichi Sankyo	*	1,601,688	1,886,256	1,599,305	211,588	331,925	—	—	201,016	295,756	18,726	19,765
EA Pharma	*	56,622	57,978	—	5,454	△ 325	5,385	△ 650	3,902	△ 206	—	—
Eisai	*	741,751	790,400	691,458	53,408	54,378	—	—	43,784	48,059	11,067	10,917
Eli Lilly	*	195,427	228,187	195,427	15,332	17,908	15,718	17,874	10,642	13,020	2,745	2,797
Fuji Pharma	*	40,889	46,138	40,889	3,858	3,880	4,519	4,445	3,435	6,146	1,621	1,658
Fujimoto Pharma.	*	—	—	—	—	—	—	—	—	—	441	415
Fuso Pharma.	*	55,407	60,563	—	1,964	4,131	1,868	3,780	1,377	△ 3,288	1,307	1,340
GlaxoSmithKline	*	214,030	219,218	—	19,046	16,190	18,903	15,798	13,134	10,699	2,500	2,500
Hisamitsu Pharma.	*	141,706	156,006	138,455	13,167	18,895	19,649	24,010	13,969	21,758	2,759	2,799
Janssen	*	320,840	303,190	—	32,866	18,686	323,796	343,593	308,258	320,382	—	—
JCR Pharma	*	42,871	33,072	—	7,531	△ 6,650	7,264	△ 7,477	5,507	△ 4,759	934	987
Kaken Pharma.	*	72,044	94,035	—	9,513	21,034	9,951	21,279	8,025	13,945	1,135	1,126
Kissei Pharma.	*	75,579	88,330	63,348	4,017	5,773	6,142	6,974	11,160	11,961	1,779	1,778
Kowa	*	573,930	556,923	165,700	20,097	10,914	22,030	7,050	14,220	9,959	7,974	8,074
Kracie	*	88,731	93,446	32,312	6,436	7,342	7,260	7,825	5,397	7,821	1,980	2,026
Kyorin Pharma.	*	119,532	130,087	116,655	6,013	12,567	6,602	13,219	5,322	9,086	2,042	1,998
Kyoto Pharma.	*	8,068	8,086	3,507	949	517	1,113	609	680	390	324	334
Kyowa Kirin	*	442,233	495,558	442,233	96,785	95,405	—	—	81,188	59,870	5,974	5,669
Maruho	*	96,184	98,368	84,759	6,227	13,553	6,967	12,990	3,866	10,443	2,241	2,244

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.2025), 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	
	FY2023	FY2024	FY2023	FY2024	FY2023	FY2024	FY2023	FY2024	FY2023	FY2024	FY2023	FY2024
Maruishi Pharma.	*	42,378	41,825	45,449	1,015	3,160	3,000	4,092	2,204	3,106	481	486
Meiji Holdings, Pharmaceuticals Seg.	†	206,100	206,100	229,600	22,700	24,700	23,100	26,400	10,000	11,500	6,753	6,871
Mochida Pharma.		102,885	105,159	94,850	5,802	8,126	6,037	8,067	4,547	5,685	1,522	1,508
MSD	*	395,277	443,292	—	32,272	36,143	31,914	35,127	21,855	24,138	—	—
Nippon Chemiphar		30,748	32,570	24,093	△ 494	606	△ 219	443	△ 180	294	887	855
Nippon Kayaku		201,791	222,584	52,765	7,337	20,401	12,562	22,266	4,179	17,508	5,902	5,979
Nippon Shinyaku		148,255	160,232	125,105	33,295	35,450	33,616	36,135	25,851	32,558	2,213	2,243
Nippon Zoki Pharma.	*	23,272	23,581	22,767	1,047	2,974	1,744	3,301	11,599	3,157	515	462
Novartis	*	269,504	288,834	—	8,588	10,618	8,435	17,557	4,847	16,643	—	—
Novo Nordisk	*	129,764	134,499	126,450	6,477	8,510	7,240	9,057	4,845	6,261	1,135	1,274
Ono Pharma.		502,672	486,871	306,711	159,935	59,747	163,734	59,328	127,977	50,047	3,853	4,287
Otsuka Pharma.	*	716,504	650,914	—	220,864	144,075	236,728	170,968	186,602	130,975	5,940	6,031
Sanofi	*	205,800	230,000	—	10,700	12,600	18,400	22,300	13,700	16,200	1,513	—
Santen Pharma.		301,965	300,004	292,267	38,541	46,880	—	—	26,703	35,853	3,744	3,849
Sarwa Kagaku	*	46,399	47,785	—	976	1,340	995	1,437	665	1,019	—	816
Seikagaku		36,213	39,374	25,942	433	1,333	1,691	1,933	2,186	1,214	988	1,075
Senju Pharma.		48,969	48,917	36,802	7,157	2,423	9,146	2,938	7,504	2,427	1,002	1,053
Shionogi		435,081	438,268	435,081	153,310	156,603	—	—	162,030	170,435	4,959	4,955
Sumitomo Pharma		314,558	398,832	313,194	△ 354,859	28,804	—	—	△ 314,929	23,635	4,980	3,832
Taiho Pharma.	*	167,351	220,567	156,912	22,532	47,400	26,041	53,419	21,404	49,453	2,159	2,145
Takeda		4,263,762	4,581,551	4,263,762	214,075	342,586	—	—	144,197	108,143	49,281	47,455
Tanabe Pharma		437,364	460,420	437,364	68,935	51,612	78,564	52,411	56,403	23,234	5,569	4,492
Teijin Pharma		144,763	136,976	—	7,327	5,690	6,871	—	4,844	△ 21,138	—	—
Teikoku Seiyaku	*	39,516	41,776	36,285	5,763	5,639	8,133	8,049	4,608	5,555	797	807
Toa Eiyo	*	12,958	12,127	12,770	322	556	999	1,229	286	2,003	422	278
Torii Pharma.	*	54,638	60,426	54,339	5,035	6,798	5,307	6,926	4,119	5,042	583	592
Tsumura		150,845	181,093	150,845	20,017	40,125	23,493	42,446	18,046	34,523	4,138	4,272
Wakamoto Pharma.	*	7,738	7,789	7,564	△ 196	△ 458	△ 162	△ 409	109	64	274	286
Zeria Pharma.		75,725	87,311	75,570	9,621	12,198	8,513	12,841	7,731	9,936	1,777	1,746

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.2025), Financial statements.

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

A-3-2

FY2024

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	4,581,551	4,581,551	100.0	175,084	3.8	107,928	2.4	14,248,344	6,935,084	48.7	0.7	1.5	4,163,088	90.9	47,455
Otsuka Holdings	IFRS	2,329,861	1,629,032	69.9	335,854	14.4	343,120	14.7	3,739,251	2,733,581	73.1	9.7	13.4	1,630,150	70.0	35,338
Astellas	IFRS	1,912,323	1,912,323	100.0	31,237	1.6	50,747	2.7	3,339,544	1,513,255	45.3	1.5	3.3	1,632,217	85.4	13,643
Daiichi Sankyo	IFRS	1,886,256	1,886,256	100.0	355,631	18.9	295,756	15.7	3,456,119	1,623,416	47.0	8.6	17.9	1,302,452	69.0	19,765
Chugai	IFRS	1,170,611	1,170,611	100.0	543,034	46.4	387,317	33.1	2,208,373	1,901,499	86.1	18.7	22.0	706,696	60.4	7,778
Eisai	IFRS	789,400	749,031	94.9	61,065	7.7	46,432	5.9	1,386,547	841,417	60.7	3.3	5.4	532,750	71.0	10,917
Kyowa Kirin	IFRS	495,558	495,558	100.0	83,453	16.8	59,870	12.1	1,067,363	850,811	79.7	5.7	7.1	354,391	71.5	4,013
Ono Pharma.	IFRS	486,871	486,871	100.0	59,328	12.2	50,047	10.3	1,064,046	782,451	73.5	5.1	6.4	191,623	39.4	4,287
Tanabe Pharma	IFRS	460,400	460,400	100.0	-	-	23,200	5.0	-	-	-	-	-	140,600	30.5	-
Shionogi	IFRS	438,268	438,268	100.0	200,750	45.8	170,435	38.9	1,535,349	1,361,924	88.7	11.5	13.1	308,264	70.3	4,955
Sumitomo Pharma	IFRS	398,832	398,832	100.0	17,611	4.4	23,634	5.9	742,604	169,479	22.8	2.9	14.5	306,240	76.8	3,832
Santen Pharma.	IFRS	300,004	300,004	100.0	47,481	15.8	36,256	12.1	409,277	286,242	69.9	8.6	12.2	134,695	44.9	3,849
Tsumura	J-GAAP	181,093	181,093	100.0	45,559	25.2	32,428	17.9	464,380	300,531	64.7	7.3	11.4	19,422	10.7	4,272
Nippon Shinyaku	IFRS	160,232	138,654	86.5	36,135	22.6	32,558	20.3	283,637	247,028	87.1	11.9	13.9	75,751	47.3	2,243
Hisamitsu Pharma.	J-GAAP	156,006	156,006	100.0	28,687	18.4	21,758	13.9	343,068	276,826	80.7	6.5	8.0	73,641	47.2	2,799
Kyorin Pharma.	J-GAAP	130,087	130,087	100.0	15,610	12.0	9,086	7.0	193,618	136,285	70.4	4.9	6.8	-	< 10	1,330
Mochida Pharma.	J-GAAP	105,159	105,159	100.0	8,052	7.7	5,685	5.4	160,121	130,694	81.6	3.6	4.4	-	< 10	1,508
Kaken Pharma.	J-GAAP	94,035	91,553	97.4	19,435	20.7	13,945	14.8	190,422	152,634	80.2	7.7	9.4	26,607	28.3	1,126
Kissei Pharma.	J-GAAP	88,330	75,299	85.2	15,610	17.7	11,961	13.5	244,059	209,004	85.6	4.7	5.6	-	< 10	1,778
Zeria Pharma.	J-GAAP	87,311	87,150	99.8	12,619	14.5	9,936	11.4	159,172	89,540	56.3	6.4	11.7	49,706	56.9	1,746

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

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

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

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

A-3-3

FY2024

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	2024/12	USD mil.	63,627	62,400	62,400	98.1	8,023	12.6	8,031	12.6	213,396	88,203	41.3	3.7	9.1	81,000	99.0
Merck (USA)	US-GAAP	2024/12	USD mil.	64,168	57,400	57,400	89.5	19,936	31.1	17,117	26.7	117,106	46,313	39.5	15.3	40.8	75,000	265.8
Johnson & Johnson	US-GAAP	2024/12	USD mil.	88,821	56,964	56,964	64.1	16,687	18.8	14,066	15.8	180,104	71,490	39.7	8.1	20.1	139,800	119.4
AbbVie	US-GAAP	2024/12	USD mil.	56,334	56,334	56,334	100.0	3,716	6.6	4,238	7.5	135,161	3,325	2.5	3.1	61.9	55,000	67.6
AstraZeneca	IFRS	2024/12	USD mil.	54,073	54,073	54,073	100.0	8,691	16.1	7,035	13.0	104,035	40,786	39.2	6.9	17.6	94,300	92.2
Roche	IFRS	2024/12	CHF mil.	60,495	46,171	52,441	76.3	11,793	19.5	8,277	13.7	101,801	31,767	31.2	8.6	27.1	103,249	129.7
Novartis	IFRS	2024/12	USD mil.	50,317	50,317	50,317	100.0	13,640	27.1	11,941	23.7	102,246	44,046	43.1	11.8	26.3	75,883	179.8
Bristol-Myers Squibb	US-GAAP	2024/12	USD mil.	48,300	48,300	48,300	100.0	△ 8,379	△ 17.3	△ 8,948	△ 18.5	92,603	16,335	17.6	△ 9.5	△ 39.1	34,100	△ 245.7
Eli Lilly	US-GAAP	2024/12	USD mil.	45,043	45,043	45,043	100.0	12,680	28.2	10,590	23.5	78,715	14,192	18.0	14.8	84.8	47,000	269.8
Sanofi	IFRS	2024/12	EUR mil.	41,081	41,081	44,465	100.0	6,698	16.3	5,560	13.5	132,798	77,507	58.4	4.3	7.3	82,878	87.5
Novo Nordisk	IFRS	2024/12	DKK mil.	290,403	290,403	42,121	100.0	127,191	43.8	100,988	34.8	465,795	143,486	30.8	25.9	80.8	76,302	241.8
GlaxoSmithKline	IFRS	2024/12	GBP mil.	31,376	31,376	40,102	100.0	3,477	11.1	2,575	8.2	59,463	13,671	23.0	4.3	19.1	68,629	64.8
Amgen	US-GAAP	2024/12	USD mil.	33,424	33,424	33,424	100.0	4,609	13.8	4,090	12.2	91,839	5,877	6.4	4.3	67.6	28,000	164.6
Takeda	IFRS	2025/03	JPY mil.	4,581,551	4,581,551	30,268	100.0	175,084	3.8	107,928	2.4	14,248,344	6,955,084	48.7	0.7	1.5	47,455	24.4
Gilead Sciences	US-GAAP	2024/12	USD mil.	28,754	28,754	28,754	100.0	690	2.4	480	1.7	58,995	19,330	32.8	0.8	2.3	17,600	39.2
Boehringer Ingelheim	HGB	2024/12	EUR mil.	26,796	21,928	23,734	81.8	-	-	-	-	-	-	-	-	-	54,500	-
Bayer	IFRS	2024/12	EUR mil.	46,606	18,131	19,625	38.9	△ 2,334	△ 5.0	△ 2,552	△ 5.5	110,850	31,908	28.8	△ 2.2	△ 7.9	92,815	△ 27.2
Teva	US-GAAP	2024/12	USD mil.	16,544	16,544	16,544	100.0	△ 1,284	△ 7.8	△ 1,639	△ 9.9	39,326	5,373	13.7	△ 4.0	△ 25.5	35,686	△ 36.0
CSL	IFRS	2025/06	USD mil.	15,558	15,558	15,558	100.0	3,724	23.9	3,002	19.3	39,404	19,335	49.1	7.8	16.4	29,904	124.5
Viatrix Inc	US-GAAP	2024/12	USD mil.	14,739	14,739	14,739	100.0	△ 623	△ 4.2	△ 634	△ 4.3	41,501	18,636	44.9	△ 1.4	△ 3.2	32,000	△ 19.5
Astellas	IFRS	2025/03	JPY mil.	1,912,323	1,912,323	12,634	100.0	31,237	1.6	50,747	2.7	3,339,544	1,513,255	45.3	1.5	3.3	13,643	15.1
Daiichi Sankyo	IFRS	2025/03	JPY mil.	1,886,256	1,886,256	12,462	100.0	355,631	18.9	295,756	15.7	3,456,119	1,623,416	47.0	8.6	17.9	19,765	118.9
Otsuka Holdings	IFRS	2024/12	JPY mil.	2,329,861	1,629,032	10,762	69.9	335,884	14.4	343,120	14.7	3,739,251	2,733,581	73.1	9.7	13.4	35,338	62.8
Biogen	US-GAAP	2024/12	USD mil.	9,676	9,676	9,676	100.0	1,906	19.7	1,632	16.9	28,049	16,716	59.6	5.9	10.4	7,605	250.6
Merck (Germany)	IFRS	2024/12	EUR mil.	21,156	8,455	9,152	40.0	3,536	16.7	2,777	13.1	51,567	29,912	58.0	5.6	9.8	62,557	61.2

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

## Oversea 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	2024
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	2,689,402	2,638,064	2,910,022	3,515,435	3,812,369	4,163,088
		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	90.9
Astellas	Outside of Japan	Value	JPY mil.	-	-	-	398,261	450,062	489,570	466,979	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	1,632,217
		Share	%	-	-	-	45.3	48.9	50.3	48.6	47.3	44.3	44.3	46.1	53.4	60.8	64.3	64.6	68.7	71.2	71.2	76.2	79.3	81.2	82.2	85.4
Otsuka Holdings	Outside of Japan	Value	JPY mil.	-	-	-	-	-	-	395,014	482,337	515,467	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	1,630,150
		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	70.0
Daiichi Sankyo	Outside of Japan	Value	JPY mil.	-	-	-	358,639	373,254	489,735	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	1,302,452	
		Share	%	-	-	-	38.4	40.8	44.3	48.5	50.6	50.0	48.8	52.3	42.7	43.7	39.3	35.6	35.9	38.1	41.7	46.6	58.3	62.5	69.0	
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	258,328	231,571	243,729	240,660	251,770	243,515	257,063	346,035	415,925	382,422	512,840	494,076	515,306	532,750
		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	71.0
Sumitomo Pharma	Outside of Japan	Value	JPY mil.	-	-	-	-	-	24,520	22,051	53,015	152,226	130,242	128,187	172,980	172,809	213,049	225,284	280,703	288,351	302,054	323,344	337,151	384,932	207,215	306,240
		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	76.8
Tanabe Pharma	Outside of Japan	Value	JPY mil.	-	-	-	-	-	37,283	35,208	26,862	-	-	47,735	59,375	77,944	116,937	103,608	112,966	117,044	65,800	64,800	76,100	216,400	127,200	140,600
		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	29.1	30.5
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	308,264
		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	51.3	62.1	70.3

## 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	2024
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	24,936
		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	39.2
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	38,519
		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	43.4
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	31,891
		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	49.7
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	13,305
		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	23.6
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	8,163
		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	28.4
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	9,561
		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	28.6
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	14,667
		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	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	14,195
		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	29.4

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	2024
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	39,965	36,842	33,490	32,942	31,439	31,439	32,836	29,512	29,944	31,429	32,078	30,443	30,443
		Share	%	67.3	64.7	63.6	62.7	63.3	59.5	56.5	58.5	63.3	63.3	65.2	63.6	64.2	66.7	64.8	64.4	63.3	62.2	61.5	60.9	63.5	67.0	60.5
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	49,002
		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	98.4	98.3	98.1	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	32,054
		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	78.0
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	32,144	33,865	33,818	35,505	40,701	40,691	39,267
		Share	%	-	-	-	-	-	-	87.1	87.5	89.1	90.4	90.7	91.9	92.2	92.7	93.5	93.5	93.3	93.7	93.8	94.0	94.7	94.5	95.6
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	46,529
		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	76.9
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	59,748
		Share	%	98.2	98.3	98.7	98.6	98.9	98.9	98.9	99.0	99.0	99.0	98.8	98.9	98.9	99.0	98.9	98.9	98.9	98.9	99.0	98.9	98.8	98.9	98.8
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	24,710
		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	77.0	78.4	78.8
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	30,668
		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	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	37,630
		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	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	49,333
		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	91.2
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	32,698
		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	70.2
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	44,196
		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	94.8
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	181,394
		Share	%	56.8	55.8	57.2	60.2	62.0	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	17,417
		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	65.0
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	94.6	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: SPEDA (UZABASE Inc.), Annual reports

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

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FY2024

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.					in USD mil.	in USD mil.
Pharmaceuticals	Takeda	IFRS	JPY mil.	2025/03	4,581,551	107,928	713	0.7%	1.5%	100.6%	6,944,516	45,879	
	Otsuka Holdings	IFRS	JPY mil.	2024/12	2,329,861	343,120	2,267	9.7%	13.4%	216.1%	4,668,971	30,846	
	Astellas	IFRS	JPY mil.	2025/03	1,912,323	50,747	335	1.5%	3.3%	113.2%	2,589,683	17,109	
	Daiichi Sankyo	IFRS	JPY mil.	2025/03	1,886,256	12,462	1,954	8.6%	17.9%	253.2%	6,553,820	43,298	
	Chugai	IFRS	JPY mil.	2024/12	1,170,611	7,734	387,317	18.7%	22.0%	553.1%	11,517,035	76,087	
	Eisai	IFRS	JPY mil.	2025/03	789,400	5,215	46,432	3.3%	5.4%	195.5%	1,168,427	7,719	
	Kyowa Kirin	IFRS	JPY mil.	2024/12	495,558	3,274	59,870	12.1%	7.1%	306.1%	1,243,236	8,213	
	Ono pharma.	IFRS	JPY mil.	2025/03	486,871	3,217	50,047	10.3%	6.4%	306.9%	752,811	4,973	
	Tanabe Pharma	IFRS	JPY mil.	2025/03	460,400	3,042	23200.0	5.0	-	-	-	-	-
	Shionogi	IFRS	JPY mil.	2025/03	438,268	2,895	170,435	11.5%	13.1%	663.49	1,910,644	12,623	
	Toyota	IFRS	JPY mil.	2025/03	48,036,704	317,354	4,765,086	31,480	5.2%	126.0%	34,136,000	225,519	
	Automobiles	Honda	IFRS	JPY mil.	2025/03	21,688,767	143,287	835,837	5,522	2.8%	135.7%	5,835,189	38,550
Nissan		J-GAAP	JPY mil.	2025/03	12,633,214	83,461	△ 670,898	△ 4,432	△ 3.5%	△ 152.7%	1,322,523	8,737	
Sony		IFRS	JPY mil.	2025/03	12,957,064	85,601	1,141,600	7,542	3.3%	69.7%	22,684,139	149,863	
Electric Machinery	Hitachi	IFRS	JPY mil.	2025/03	9,783,370	64,634	615,724	4,068	4.8%	111.7%	15,830,290	104,583	
	Panasonic	IFRS	JPY mil.	2025/03	8,458,185	55,879	366,205	2,419	3.9%	134.8%	4,135,725	27,323	
	Mitsubishi	IFRS	JPY mil.	2025/03	5,521,711	36,479	324,084	2,141	5.9%	202.9%	5,645,045	37,294	
	Canon	US-GAAP	JPY mil.	2024/12	4,509,821	29,794	160,025	1,057	2.9%	158.4%	4,871,942	32,186	
	Fujitsu	IFRS	JPY mil.	2025/03	3,550,116	23,454	219,807	1,452	6.2%	156.6%	5,244,933	34,651	
	NEC	IFRS	JPY mil.	2025/03	3,423,431	22,617	175,183	1,157	4.1%	136.2%	4,270,719	28,214	
	Ricoh	IFRS	JPY mil.	2025/03	2,527,876	16,700	45,709	302	2.0%	141.1%	897,550	5,930	
	Johnson & Johnson	US-GAAP	USD mil.	2024/12	88,821	88,821	14,066	14,066	8.1%	20.1%	111.1%	348,190	348,190
USA	Merck (USA)	US-GAAP	USD mil.	2024/12	64,168	64,168	17,117	17,117	15.3%	40.8%	136.5%	251,648	251,648
	Pfizer	US-GAAP	USD mil.	2024/12	63,627	63,627	8,031	8,031	3.7%	9.1%	117.1%	150,345	150,345
	AbbVie	US-GAAP	USD mil.	2024/12	56,334	56,334	4,238	4,238	3.1%	61.9%	66.0%	314,021	314,021
	Bristol-Myers Squibb	US-GAAP	USD mil.	2024/12	48,300	48,300	△ 8,948	△ 8,948	△ 9.5%	△ 39.1%	125.3%	114,714	114,714
	Eli Lilly	US-GAAP	USD mil.	2024/12	45,043	45,043	10,590	10,590	14.8%	84.8%	115.4%	694,272	694,272
	Amgen	US-GAAP	USD mil.	2024/12	33,424	33,424	4,090	4,090	4.3%	67.6%	125.7%	140,103	140,103
Gilead Sciences	US-GAAP	USD mil.	2024/12	28,754	28,754	480	480	1.7%	2.3%	159.7%	115,118	115,118	

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

## 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.	in USD mil.
USA	Amazon	US-GAAP	USD mil.	2024/12	637,959	637,959	59,248	9.3%	10.3%	106.4%	2,306,888	2,306,888
	Apple	US-GAAP	USD mil.	2025/09	416,161	416,161	112,010	26.9%	30.9%	123.4%	3,778,809	3,778,809
	Alphabet Inc	US-GAAP	USD mil.	2024/12	350,018	350,018	100,118	28.6%	23.5%	183.7%	2,323,530	2,323,530
	Microsoft	US-GAAP	USD mil.	2025/06	281,724	281,724	101,832	36.1%	18.0%	135.3%	3,697,022	3,697,022
	Meta(Facebook)	US-GAAP	USD mil.	2024/12	164,501	164,501	62,360	37.9%	24.7%	297.8%	1,478,113	1,478,113
	General Motors Co	US-GAAP	USD mil.	2024/12	187,442	187,442	7,189	3.8%	2.6%	112.8%	58,575	58,575
	Ford Motor	US-GAAP	USD mil.	2024/12	184,992	184,992	5,879	3.2%	2.1%	116.5%	39,345	39,345
	GE	US-GAAP	USD mil.	2024/12	38,702	38,702	6,556	16.9%	4.4%	109.4%	180,516	180,516
	IBM	US-GAAP	USD mil.	2024/12	62,753	62,753	6,023	9.6%	4.4%	104.0%	203,265	203,265
	Intel	US-GAAP	USD mil.	2024/12	53,101	53,101	△ 18,756	△ 35.3%	△ 9.7%	△ 132.7%	86,476	86,476
Europe	Roche	IFRS	CHF mil.	2024/12	60,495	68,710	8,277	13.7%	8.6%	148.2%	205,191	233,054
	Astrazeneca	IFRS	USD mil.	2024/12	54,073	54,073	7,035	13.0%	6.9%	92.7%	203,635	203,635
	Bayer	IFRS	EUR mil.	2024/12	46,606	50,445	△ 2,552	△ 5.5%	△ 2.2%	△ 119.0%	18,975	20,538
	Novartis	IFRS	USD mil.	2024/12	50,317	50,317	11,941	23.7%	11.8%	103.5%	196,269	196,269
	Sanofi	IFRS	EUR mil.	2024/12	41,081	44,465	5,560	13.5%	4.3%	146.0%	117,512	127,192
	Novo Nordisk	IFRS	DKK mil.	2024/12	290,403	42,121	100,988	34.8%	25.9%	74.0%	2,772,285	402,102
	GlaxoSmithKline	IFRS	GBP mil.	2024/12	31,376	40,102	2,575	8.2%	4.3%	78.3%	54,944	70,224
	Volkswagen	IFRS	EUR mil.	2024/12	324,655	351,400	10,721	3.3%	1.7%	113.0%	45,391	49,130
	Mercedes-Benz	IFRS	EUR mil.	2024/12	145,594	157,588	10,207	7.0%	3.9%	136.0%	51,804	56,072
	Siemens	IFRS	EUR mil.	2025/09	78,914	85,415	10,387	13.2%	6.6%	136.9%	177,164	191,759
BASF	IFRS	EUR mil.	2024/12	65,260	70,636	1,298	2.0%	1.6%	183.3%	37,896	41,018	

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 FY2024 for each company.  
3. ' - ' represents that published data is not available.

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

Source: SPEEDA (UZABASE Inc.), Annual reports

## 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	2024
Pharmaceuticals ( 32 companies )	Net Income(Loss) after Taxes	8.4	9.1	9.4	10.1	11.3	11.2	10.7	12.4	10.7	10.4	7.2	10.6
	Business Income to Total Assets	8.3	7.5	8.0	7.5	8.2	6.5	6.7	7.2	7.3	7.7	6.7	7.6
	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	8.3
Computers & Electric Eq. ( 7 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	6.0
	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	6.3	7.4
	Return on Equity	9.7	11.0	8.9	8.7	12.0	7.9	7.5	12.5	11.4	10.9	10.5	10.0
Electronic Eq. & Comp. ( 75 companies )	Net Income(Loss) after Taxes	6.1	8.5	6.9	6.5	5.1	6.2	3.9	6.1	9.7	8.8	7.4	6.9
	Business Income to Total Assets	7.3	8.8	8.2	7.5	7.5	7.5	5.4	6.0	8.8	8.6	6.7	5.9
	Return on Equity	7.8	10.4	8.1	7.2	6.1	7.3	4.3	6.4	10.7	9.6	7.2	6.4
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	6.4
	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	4.5
	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	11.9
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	5.5
	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	5.3
	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	9.2
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	7.4
	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	8.3
	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	8.6
Manufacturing Industries ( 1,104 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	5.5
	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	6.2
	Return on Equity	8.5	8.4	7.8	8.5	10.4	9.1	5.9	6.8	10.1	8.7	9.2	8.3

Note :

- 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, Fuji Pharma, SNBL, Daiichi Sankyo, Kyorin Pharmaceutical, Daito, Otsuka Holdings, Sawai Group Holdings.
- 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

## 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	2024
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	27.0
	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	1,126
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	25.0
	No. of Firms Investigated	85	91	102	84	86	87	84	80	79	78	80	80	80	96	93	94	93
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	35.0
	No. of Firms Investigated	79	76	60	35	33	33	33	31	31	31	31	31	31	29	28	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	28.6
	No. of Firms Investigated	29	30	24	16	15	15	15	15	15	15	16	16	16	21	21	22	21
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	38.3
	No. of Firms Investigated	8	8	12	17	17	17	18	18	17	17	17	16	16	16	15	13	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	31.4
	No. of Firms Investigated	131	141	152	156	154	155	154	156	154	153	155	153	163	161	157	155	155
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	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	32.2
	No. of Firms Investigated	28	30	29	33	33	33	33	36	34	33	33	33	33	33	34	34	33
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	21.8
	No. of Firms Investigated	30	33	33	29	28	28	29	28	28	28	28	28	27	28	27	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	22.5
	No. of Firms Investigated	9	9	11	15	15	17	17	16	16	16	16	16	17	21	22	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	13.3
	No. of Firms Investigated	15	16	18	18	17	16	15	15	15	15	15	15	15	18	18	16	15
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	33.5
	No. of Firms Investigated	32	34	40	35	34	35	35	34	34	34	35	34	34	33	32	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	1.4
	No. of Firms Investigated	10	10	9	5	5	6	6	6	6	5	5	4	4	4	3	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	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	21.5
	No. of Firms Investigated	61	56	52	50	48	47	47	48	46	46	46	46	46	54	53	52	49
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	16.5
	No. of Firms Investigated	57	55	53	45	41	39	38	38	39	39	39	38	38	41	40	40	38
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	34.4
	No. of Firms Investigated	37	38	37	28	27	25	25	27	28	27	27	27	27	31	30	29	28
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	28.7
	No. of Firms Investigated	45	49	58	54	51	50	50	50	51	50	52	52	52	67	63	63	61
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	43.5
	No. of Firms Investigated	148	154	173	160	157	157	158	154	155	159	159	159	156	184	183	182	179
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	25.3
	No. of Firms Investigated	135	139	179	170	165	168	167	167	166	168	166	163	164	199	193	190	186
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	21.9
	No. of Firms Investigated	-	5	5	5	5	5	5	5	6	6	7	7	7	7	7	6	7
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	32.5
	No. of Firms Investigated	25	30	34	41	39	39	37	37	38	39	39	38	38	44	41	41	42
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	32.3
	No. of Firms Investigated	22	22	28	23	23	23	23	22	22	20	20	19	19	21	20	20	17
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	43.0
	No. of Firms Investigated	9	10	14	12	13	13	14	14	14	14	14	14	14	18	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	23.1
	No. of Firms Investigated	33	36	56	58	60	63	62	63	60	62	61	60	62	79	78	76	74
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	19.2
	No. of Firms Investigated	27	29	29	23	18	18	19	19	19	19	17	17	17	18	16	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	10.3
	No. of Firms Investigated	94	102	113	108	104	101	103	105	103	101	101	99	95	108	108	105	103
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	7.4
	No. of Firms Investigated	10	10	11	10	10	10	10	10	9	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	28.5
	No. of Firms Investigated	55	61	69	74	71	68	71	73	71	70	70	69	65	77	78	75	73
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	63.2
	No. of Firms Investigated	28	28	27	27	27	27	29	32	32	33	34	34	32	39	39	39	38
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	21.2
	No. of Firms Investigated	44	32	44	51	48	49	53	54	54	54	53	53	55	80	78	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
2024	1,333,893	8.4	4,929,231	4.3	3,595,338	3.70

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	2024
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	274,367
	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	197,821
	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	188,952
	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	47,450
	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	39,303
	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	36,397
	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	27,148
	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	20,821
	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	19,886
	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	17,289
	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	13,633
	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	13,377
	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	11,855
	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	11,498
	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	7,864
	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	5,374
	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	5,224
	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	3,912
	Turkey	2,680	1,111	887	599	475	276	308	633	402	697	926	1,620	935	1,973	2,782
	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	2,462
	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	2,343
	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	2,307
	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	2,267
	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	1,843
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	69,403	
	<b>Total</b>	<b>378,738</b>	<b>358,987</b>	<b>320,393</b>	<b>359,631</b>	<b>353,006</b>	<b>462,318</b>	<b>490,128</b>	<b>559,294</b>	<b>648,722</b>	<b>733,105</b>	<b>835,975</b>	<b>861,122</b>	<b>1,161,306</b>	<b>1,230,376</b>	<b>1,025,578</b>
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	26.8
	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	19.3
	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	18.4
	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	4.6
	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	3.8
	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	3.5
	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	2.6
	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	2.0
	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	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	1.7
	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	1.3
	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	1.3
	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	1.2
	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	1.1
	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	0.8
	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	0.5
	Brazil	0.5	0.5	0.7	0.6	0.5	0.3	0.3	0.5	0.5	0.5	0.2	0.3	0.3	0.4	0.5
	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	0.4
	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	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	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	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	0.2
	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	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	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	6.8	
	<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>												

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	2024
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	921,971
	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	530,046
	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	524,758
	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	327,926
	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	157,884
	Switzerland	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	157,686
	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	157,266
	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	152,339
	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	139,445
	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	113,214
	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	107,736
	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	97,064
	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	92,024
	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	54,442
	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	35,562
	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	31,554
	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	31,108
	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	16,085
	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	11,817
	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	9,005
	Brazil	178	143	148	314	222	289	384	1,036	981	4,649	7,535	8,617	7,858	6,874	4,553
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	214,289	
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	3,887,774	
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	23.7
	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	13.6
	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	13.5
	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	8.4
	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	4.1
	Switzerland	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	4.1
	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	4.0
	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	3.9
	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	3.6
	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	2.9
	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	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	2.5
	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	2.4
	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	1.4
	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	0.9
	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	0.8
	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	0.8
	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	0.4
	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	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	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	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	5.5	
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	

Source : Ministry of Finance, Trade Statistics of Japan  
<https://www.customs.go.jp/toukei/sui/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	2024	
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	21,035
	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	11,668
	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	9,366
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	60,480
	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	44,258
	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	16,221
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	18,679	18,782	20,905	21,731
	Import	950	2,343	2,595	2,845	3,348	3,275	3,595	3,566	4,378	4,650	3,809	3,773	3,773	4,110	4,489	4,453	5,333	6,677	5,451	5,493	6,759
	Surplus	1,966	4,039	3,899	4,322	4,613	4,642	1,650	2,385	6,366	7,522	7,912	8,694	8,694	8,836	9,947	13,094	13,733	12,002	13,331	15,412	14,972
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	2,369
	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	2,559
	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	△ 190
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	38,771
	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	33,070
	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	5,700
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	127,490	122,323	120,886
	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	82,073	75,491	76,398
	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	45,417	46,832	44,488
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	3,043
	Import	1,133	3,407	3,706	4,569	5,378	5,490	4,723	4,344	3,667	3,548	3,465	2,981	3,027	3,282	3,352	3,086	3,541	4,255	4,173	4,378	4,295
	Surplus	△ 891	△ 2,231	△ 2,572	△ 3,284	△ 4,106	△ 4,198	△ 3,381	△ 3,124	△ 2,430	△ 2,156	△ 2,085	△ 1,855	△ 1,857	△ 1,950	△ 1,620	△ 922	△ 262	△ 851	△ 1,486	△ 1,353	△ 1,252
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	75,661	71,564	89,812
	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	11,630	13,449	16,616
	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	64,031	58,115	73,195
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	55,548
	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	33,017
	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	22,531
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	32,638	38,491
	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	24,017	27,004
	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	8,621	11,487
Norway	Export	240	533	550	699	705	664	743	698	718	742	906	716	690	756	935	748	746	692	673	783	945
	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	2,716	2,581	3,034
	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	△ 2,043	△ 1,798	△ 2,090

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	2024
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	1,882	2,874	3,585
	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	3,756	3,798	4,062
	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	△ 1,874	△ 1,874	△ 923
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	18,183
	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	22,720
	Surplus	△ 1,557	△ 2,263	△ 2,033	△ 2,352	△ 3,916	△ 6,005	△ 3,410	△ 3,394	△ 2,342	△ 1,465	△ 2,504	△ 3,320	△ 3,122	△ 2,779	△ 3,731	△ 2,934	△ 3,175	△ 4,479	4,313	△ 571	△ 4,536
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	13,592	13,467
	Import	1,341	2,730	3,185	3,606	4,177	4,056	4,078	4,436	4,474	4,511	4,382	3,868	4,258	4,305	4,615	4,848	5,380	5,929	6,341	6,464	7,360
	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	7,128	6,107
Switzerland	Export	10,520	25,907	31,177	36,233	44,177	44,544	49,061	57,726	54,356	57,497	62,595	67,455	70,287	75,200	82,970	88,354	101,559	98,031	99,011	110,367	110,367
	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	31,557	38,940	42,254	48,686	58,466	67,741
	Surplus	5,312	12,886	16,392	19,539	26,394	27,217	30,282	35,386	33,964	35,384	39,068	38,870	42,781	41,568	45,215	51,433	49,414	59,306	49,345	40,545	42,626
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	27,507
	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	29,764
	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	△ 2,257
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	8,453	8,270	9,559	10,735	9,611	10,890
	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	13,866	14,277	18,467	20,086	18,926	18,860
	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	△ 8,908	△ 9,351	△ 9,316	△ 7,971
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	94,387
	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	212,667
	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	△ 118,280
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	3,184
	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	11,149
	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	△ 5,508	△ 5,356	△ 4,759	△ 5,582	△ 8,677	△ 10,867	△ 8,689	△ 7,966
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	7,729
	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	30,223
	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	△ 22,494
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

2024

(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	—	489,010	9,852	604,018	3,324,988	208,823	871,929	741,376	191,134	500,071	1,545,812	164,830	1,913,676	12,681	1,526	147,897
Belgium	871,124	—	111,223	4,003,014	6,603,080	14,437,037	7,649,845	2,138,197	1,016,351	263,084	2,426,345	3,238,460	4,643,933	173,919	69,219	81,370
Denmark	66,624	270,374	—	768,308	1,121,461	90,803	135,772	392,862	219,808	321,252	402,665	82,167	249,149	4,032	12,381	37
France	511,837	3,352,939	76,839	—	5,488,926	2,024,348	2,843,761	2,349,772	1,316,891	786,347	3,207,340	1,853,071	1,758,453	150,188	21,368	154,963
Germany	3,994,883	5,394,395	287,640	4,600,727	—	6,346,827	4,016,982	7,372,566	2,666,542	2,270,426	11,505,456	2,369,468	7,674,910	62,744	146,311	199,806
Ireland	88,311	573,388	6,860	539,228	1,763,035	—	684,399	907,721	583,960	96,449	362,841	1,748,816	4,474,588	97,711	2,826	71,800
Italy	696,214	4,855,258	41,017	2,283,980	5,675,907	2,373,520	—	2,395,142	980,696	500,478	4,303,271	204,099	3,168,823	205,753	505	112,650
Netherlands	435,427	2,869,056	1,917,942	1,014,939	9,444,242	14,723,558	5,122,000	—	604,888	342,956	1,689,796	995,973	8,706,470	100,423	33,337	90,102
Spain	159,052	2,100,099	51,980	1,679,170	3,428,694	1,100,299	1,775,483	1,310,343	—	484,138	2,305,748	464,207	5,150,158	56,295	211	5,699
Sweden	100,318	533,272	225,334	221,812	1,472,266	255,113	371,901	461,316	118,879	—	411,882	43,438	1,224,018	7,245	402	204
Switzerland	2,363,928	1,004,313	12,547	1,020,248	8,975,714	2,971,366	9,641,958	571,981	2,737,656	179,741	—	773,220	3,170,569	30,082	142,294	1,571,547
UK	216,758	3,568,388	51,270	1,461,466	4,094,005	1,857,248	2,032,767	2,167,232	755,724	422,950	2,553,893	—	5,618,687	115,161	22,867	198,122
USA	4,917,016	16,493,978	339,588	3,956,148	28,522,361	33,085,990	10,638,885	4,793,582	1,146,935	1,568,149	35,448,515	6,482,051	—	8,353,268	1,347,791	2,537,892
Canada	134,519	1,034,429	19,055	327,132	1,775,249	718,897	292,749	622,117	264,480	345,922	2,214,688	363,872	6,800,063	—	18,653	14,412
Australia	79,520	668,743	39,146	448,949	1,111,761	501,902	659,919	699,281	155,072	46,013	985,722	515,148	2,379,080	69,581	—	16,516
Japan	70,649	842,909	62,942	670,819	5,782,058	1,412,391	665,389	827,386	114,599	460,398	3,976,889	785,646	8,411,860	510,226	89,073	—
Others	6,328,426	16,529,206	18,478,117	15,170,847	32,302,711	7,703,503	8,144,285	10,740,258	5,309,618	4,878,339	37,025,696	7,422,241	29,042,477	940,193	1,274,909	2,525,554
World Total	21,034,604	60,479,756	21,731,352	38,770,805	120,886,456	89,811,625	55,548,025	38,491,134	18,183,233	13,466,715	110,366,559	27,506,707	94,386,914	10,889,501	3,183,672	7,728,571

(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	—	203,473	85,925	580,150	2,734,519	30,528	620,541	452,420	143,997	108,575	3,216,126	327,795	3,568,112	274,415	158,945	118,620
Belgium	254,183	—	268,203	1,971,683	4,223,151	562,512	6,863,935	2,540,753	1,240,294	961,125	736,407	1,928,599	12,390,738	998,577	834,572	1,926,636
Denmark	129,460	181,745	—	494,233	1,302,211	196,648	673,773	193,406	676,249	1,171,960	1,034,515	786,415	2,949,419	696,546	338,595	783,399
France	590,170	3,651,791	264,110	470,717	4,945,941	496,857	2,521,041	773,719	1,060,071	267,467	865,892	1,278,392	4,064,047	598,387	534,469	786,881
Germany	2,774,089	5,388,329	997,361	4,843,495	—	4,543,125	5,882,371	6,370,319	3,469,904	1,421,213	11,173,742	4,022,991	17,219,267	1,909,426	1,487,608	4,305,836
Ireland	316,609	7,200,546	142,963	4,056,380	9,698,707	9,673	2,437,822	4,908,647	703,909	262,907	2,746,184	2,520,490	50,324,202	1,435,052	862,544	3,435,746
Italy	826,393	7,408,055	103,608	2,764,160	4,645,427	280,538	—	1,585,502	1,748,140	308,988	9,092,088	3,057,944	11,576,253	597,329	534,590	828,782
Netherlands	619,548	1,345,354	600,020	892,770	6,855,798	925,011	3,805,613	—	1,001,242	739,020	1,625,414	671,421	6,989,225	169,535	115,462	485,407
Spain	255,427	363,595	187,737	1,065,096	2,992,232	611,968	1,014,074	251,857	—	99,219	3,913,496	1,171,630	2,251,404	298,136	236,532	346,954
Sweden	457,538	230,992	390,382	732,926	1,903,919	115,545	541,687	396,462	487,323	—	141,711	393,782	2,516,005	500,493	149,568	1,153,881
Switzerland	984,649	8,303,421	242,803	2,709,545	11,799,413	705,528	3,379,848	1,173,003	2,062,033	297,195	—	2,204,244	19,008,843	1,269,644	719,436	2,822,135
UK	248,890	520,871	55,490	1,990,512	2,720,526	1,776,900	199,270	924,965	920,676	52,073	454,033	366,111	7,292,454	416,508	460,519	1,272,575
USA	2,639,969	6,449,288	276,780	4,771,437	13,387,093	4,569,335	1,540,951	4,614,978	6,546,240	941,919	5,464,382	4,701,641	—	5,915,839	2,493,485	7,966,565
Canada	69,089	372,677	5,359	441,218	655,395	416,694	564,866	64,707	259,661	11,292	282,682	315,252	5,342,296	94,396	171,505	851,193
Australia	4,219	57,858	728	45,717	144,699	5,461	248	25,088	5,893	454	128,416	105,267	1,377,111	36,471	14,303	76,362
Japan	186,473	83,834	2,159	357,976	510,471	134,112	115,901	111,661	55,341	9,016	2,576,916	430,657	7,423,357	249,097	195,668	—
Others	1,311,736	2,496,467	3,135,706	4,882,472	8,578,847	1,235,780	2,854,982	2,616,602	2,338,672	707,730	24,288,603	5,481,325	58,374,049	3,400,192	1,841,591	3,061,555
World Total	11,668,442	44,258,295	6,759,335	33,070,489	76,398,348	16,616,215	33,016,923	27,004,088	22,719,645	7,360,152	67,740,609	29,763,956	212,666,782	18,860,044	11,149,392	30,222,528

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	<b>Contracts with Parent/Affiliated Company</b>					
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
2024	—	1,200,584	—	—	—	—	—	512,031	—	—	—	—

Note:

1. 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.
2. The values of the payment of technology considerations and the payment of technology considerations for the contracts between Parent and Affiliated Companies in FY2024 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
<b>No. of Pharmaceutical Companies</b>																				
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
<b>Total</b>	<b>91</b>	<b>146</b>	<b>245</b>	<b>272</b>	<b>288</b>	<b>299</b>	<b>313</b>	<b>284</b>	<b>290</b>	<b>285</b>	<b>312</b>	<b>323</b>	<b>337</b>	<b>334</b>	<b>363</b>	<b>371</b>	<b>378</b>	<b>384</b>	<b>372</b>	<b>364</b>
<b>Percentage of total (%)</b>																				
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
<b>Total</b>	<b>100.0</b>																			

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
2024	6,928,793	23	7,686	10	5,971	8	10,087	16	23,744	17

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	46	17	52	12
2018	27	12	55	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
2024	34	11	54	16	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 oversea 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	2024	
USA	Companies	9	12	11	10	9	9	11	10	12	12	12	10	8	9	9	10	10	11	11	10	11	9	
	Facilities	11	14	14	15	19	16	18	18	18	21	23	21	14	13	15	15	21	25	29	27	25	23	20
Canada	Companies											1	1	1	1	1	1	1	1	1	1			
	Facilities											1	1	1	1	1	1	1	1	1	1			
Ireland	Companies	0																				1	1	
	Facilities	0																				1	1	
Denmark	Companies									1			1	1	1	1	1	1	1			1	1	1
	Facilities									1			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	1	1
	Facilities	3	1		1	1	1			1	1	1	1	1					1	2	2	2	2	3
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	2	2
	Facilities	6	5	2	3	2	1	2	2	3	3	3	3	2	1	1		2	2	2	2	2	2	2
France	Companies	0	1																					
	Facilities	0	1																					
Netherlands	Companies			1	1	1	1	1	1													1	1	
	Facilities			1	1	1	1	1	1													1	1	
Switzerland	Companies							1	1	1	1	1	2	1	1	1	1	1	1			1	1	1
	Facilities							1	1	1	1	1	2	1	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	1	1	1
	Facilities	0	2	2	2	1	2	1		3	3	3	3	3	1	1		1		1	1	1	1	1
Indonesia	Companies	0																						
	Facilities	0																						
Taiwan	Companies	0																						
	Facilities	0																						
Vietnam	Companies													1	1	1	1	2	1			1	1	1
	Facilities													1	1	1	1	2	1			1	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	1	1
	Facilities				1	1	1	1	1	1	1	3	2	2	2	2		1	1	1	1	1	1	1
India	Companies						1			1	1	1	2	3	2	2	1	1	2	2	2	2	2	2
	Facilities						4			1	1	1	2	3	2	2	1	1	2	2	2	2	2	2
Malaysia	Companies													1	1	1		1						
	Facilities													1	1	1		1						
Israel	Companies															1	1	1	1	2	2	2	2	2
	Facilities															1	1	1	1	2	2	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	11	
	Facilities	24	12	19	23	25	27	24	23	32	35	36	31	30	27	28	27	37	40	38	41	38	34	

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)

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## (2) Number of R&amp;D Bases by Countries

	Fiscal Year	2005	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
USA	Companies	14	21	20	21	21	22	18	13	16	14	14	12	16	14	12	15	14
	Facilities	15	28	25	26	26	29	23	17	20	18	26	16	31	27	25	21	20
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	1
	Facilities	1	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	1
	Facilities	3	3	2	3	2	3	2		1	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	2
	Facilities	5	9	7	9	11	10	9	6	6	4	6	3	5	4	3	3	2
France	Companies				1	1	1							2	2	2	2	2
	Facilities				1	1	1							2	2	2	2	2
Netherlands	Companies	1	1	1	1	1	1	1	1	1	1						1	2
	Facilities	1	1	1	1	1	1	1	1	1	1						1	2
Switzerland	Companies		1	1	1	1	1	2	1	2	2	1	1	3	1	2	3	3
	Facilities		1	1	2	1	1	2	1	2	2	1	1	3	1	2	3	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	8	9
	Facilities	2	7	5	10	11	11	12	9	6	7	8	6	9	8	8	8	10
Hong-Kong	Companies													1	1	1	1	1
	Facilities													1	1	1	1	1
Taiwan	Companies		1	1	1	1	1	1		1	1	1	1	1	2	2	2	2
	Facilities		1	1	1	1	1	1		1	1	1	1	1	2	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	3
	Facilities	1	2	3	3	3	3	2	1	1	1	2	2	3	4	3	3	3
Singapore	Companies		3	3	3	3	4	4	1	2	3	1	1	2	2	2	2	3
	Facilities		3	3	3	3	5	4	1	2	3	1	1	2	2	2	2	3
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	1
	Facilities													1	1	1	1	1
Israel	Companies										1		1	1	1	1	1	1
	Facilities										1		1	1	1	1	1	1
Brazil	Companies					1		1		1	1	1	1	1	1	1	1	1
	Facilities					1		1		1	1	1	1	1	1	1	1	1
Others	Companies																	1
	Facilities																	1
Total	Companies	15	22	20	21	21	22	19	15	18	16	15	13	17	15	16	17	16
	Facilities	30	57	50	60	64	69	60	38	46	45	51	38	65	57	54	52	54

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)

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## (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	2024
USA	Companies	5	5	5	5	5	4	5	3	4	4	4	2	3	3	3	3	5	5
	Facilities	8	6	5	5	5	4	6	4	5	4	4	2	3	5	5	5	10	11
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	1
	Facilities	4	4	3	3	3	4	4	2	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	1
	Facilities	3	2			1	2	2	2	1	-	-	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	1
	Facilities		1	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	2
	Facilities	0	1	1	1	1	1	1	2	2	2	2	1	1	2	2	2	2	2
France	Companies	1	2							1			1	2	2	2	2	2	2
	Facilities	1	2							1			1	2	3	3	3	3	3
Netherlands	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		
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	1							
	Facilities					1	1	1	1		-	-							
Estonia	Companies					1	1	1	1										
	Facilities					1	1	1	1										
China	Companies	6	12	10	9	11	11	11	11	11	10	10	8	7	11	11	10	10	9
	Facilities	7	14	16	10	14	15	15	14	15	12	14	11	10	15	15	13	12	11
Indonesia	Companies	5	7	7	6	7	7	7	6	5	6	6	3	4	5	5	5	5	5
	Facilities	5	8	8	7	8	9	9	7	5	5	5	3	4	5	5	5	5	5
Taiwan	Companies	8	7	5	3	3	2	1	1	1	1	1	2	1	1	1	1	1	1
	Facilities	8	7	5	3	3	2	1	1	1	1	1	2	1	1	1	1	1	1
Vietnam	Companies		2	2	2	2	2	2	2	5	4	5	3	4	4	3	5	5	5
	Facilities		2	2	2	2	2	2	2	6	4	6	3	5	6	5	8	8	8
Korea	Companies	3	2	2	1	2	2	2	1	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	1
Thailand	Companies		3	2	1	1	1	1	1	1	2	2	2		1	1	2	2	2
	Facilities		3	3	1	1	1	1	1	1	2	2	3		1	1	2	2	2
India	Companies		1	1	1	1	2	2	3	3	2	3	1	1	2	2	2	2	2
	Facilities		1	1	1	1	2	2	8	7	7	7	7	1	7	8	8	8	2
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	1
	Facilities		1	1	1	1	1	1	2	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	2
	Facilities		2	1	1	2	3	3	3	2	1	1	2	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	15
	Facilities	63	63	58	44	58	68	66	66	56	48	52	43	39	59	56	59	56	56

Note :

- Survey of companies with more than 50% domestic capital.
- 'No. of Companies' represents number of valid answers only. (No. of companies with any of oversea sites)
- No. of companies of the total column shows the number of companies having the factories abroad.
- 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.
- 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	1.09	51,278	△ 1.4	86.5	12,491	24.4
2001	61,954	4.5	1.15	54,259	5.8	87.6	13,633	25.1
2002	61,448	△ 0.8	1.15	53,913	△ 0.6	87.7	13,571	25.2
2003	61,734	0.5	1.16	54,589	1.3	88.4	13,385	24.5
2004	61,212	△ 0.8	1.14	54,402	△ 0.3	88.9	13,080	24.0
2005	63,907	4.4	1.19	57,413	5.5	89.8	14,941	26.0
2006	64,381	0.7	1.19	58,036	1.1	90.1	14,620	25.2
2007	64,522	0.2	1.18	58,281	0.4	90.3	15,015	25.8
2008	66,201	2.6	1.24	59,928	2.8	90.5	15,255	25.5
2009	68,196	3.0	1.37	61,742	3.0	90.5	15,529	25.2
2010	67,791	△ 0.6	1.33	61,489	△ 0.4	90.7	16,549	26.9
2011	69,874	3.1	1.39	63,445	3.2	90.8	17,298	27.3
2012	69,767	△ 0.2	1.38	62,630	△ 1.3	89.8	16,726	26.7
2013	68,940	△ 1.2	1.34	61,940	△ 1.1	89.8	15,617	25.2
2014	65,898	△ 4.4	1.25	58,689	△ 5.2	89.1	15,676	26.7
2015	67,481	2.4	1.23	59,969	2.2	88.9	15,829	26.4
2016	66,239	△ 1.8	1.19	58,714	△ 2.1	88.6	14,765	25.1
2017	67,213	1.5	1.19	60,074	2.3	89.4	16,296	27.1
2018	69,077	2.8	1.21	61,726	2.7	89.4	18,907	30.6
2019	92,815	34.4	1.62	84,584	37.0	91.1	60,501	71.5
2020	90,296	△ 2.7	1.63	82,438	△ 2.5	91.3	55,964	67.9
2021	89,383	△ 1.0	1.56	81,891	△ 0.7	91.6	53,077	64.8
2022	98,332	10.0	1.68	90,791	10.9	92.3	59,351	65.4
2023	100,332	2.0	1.63	91,529	0.8	91.2	60,926	66.6
2024	102,485	2.1	1.62	93,154	1.8	90.9	59,924	64.3
24 JPMA Total	(32companies) 33,448	—	—	(32companies) 30,110	—	(32companies) 90.0	—	—

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.
- 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/jp/sna/menu.html>

JPMA Survey

## Pharmaceutical Production by Therapeutic Category (Japan)

A-6-2

2024

(Unit:JPY mil.)

Therapeutic Category	Total	Ethical Drug			OTC, etc.	
		Share (%)	Domestic Products	Imports		
Total	10,248,495	9,315,428	100.0	3,323,055	5,992,373	933,066
CNS	1,124,985	963,469	10.3	273,717	689,752	161,516
Peripheral nervous system	47,535	43,585	0.5	6,892	36,693	3,951
Sensory organs	350,206	249,411	2.7	54,653	194,758	100,795
Other agents affecting nervous system and sensory organs	11,270	11,270	0.1	11,103	167	—
Cardiovascular system	733,229	719,581	7.7	302,667	416,914	13,648
Respiratory system	153,842	115,935	1.2	36,746	79,189	37,907
Gastrointestinals	559,363	480,372	5.2	207,460	272,913	78,991
Hormones	338,633	338,460	3.6	148,077	190,383	173
Genito-urinary system	150,850	141,454	1.5	52,512	88,941	9,396
Dermatologicals	444,417	244,854	2.6	57,447	187,407	199,562
Dental use	27,755	11,096	0.1	1,247	9,849	16,659
Other agents affecting individual organs	267	267	0.0	111	156	—
Vitamins	193,218	84,389	0.9	32,530	51,859	108,829
Nutrients/Tonics	185,035	142,649	1.5	57,162	85,487	42,387
Blood/Blood forming organs	676,501	676,475	7.3	392,946	283,529	26
Artificial dialysis agents	68,023	68,023	0.7	32,948	35,075	—
Other metabolic agents	1,515,251	1,470,246	15.8	607,387	862,859	45,005
Agents activating cellular function	1,216	82	0.0	—	82	1,133
Antitumor agents	1,320,778	1,320,778	14.2	164,451	1,156,327	—
Radio pharmaceuticals	50,195	50,195	0.5	39,001	11,194	—
Antiallergics	169,830	156,978	1.7	47,101	109,877	12,852
Crude drugs	3,787	2,739	0.0	4	2,736	1,048
Chinese herbal drugs	266,274	209,340	2.2	1,218	208,122	56,934
Other natural drugs & Chinese medicine	13,388	4,482	0.0	—	4,482	8,907
Antibiotics	171,502	171,502	1.8	72,296	99,205	—
Chemotherapeutics	407,774	407,247	4.4	99,512	307,735	526
Biological products	713,853	713,853	7.7	335,950	377,904	—
Antiparasitics	572	515	0.0	0	515	57
Dispensing drugs	12,875	11,270	0.1	6,243	5,027	1,605
Diagnostics, In Vivo	37,689	37,689	0.4	6,007	31,682	—
Hygiene products	21,288	7,099	0.1	2,306	4,793	14,189
Diagnostics, In Vitro	432,974	417,822	4.5	242,938	174,883	15,153
Other agents	18,919	17,103	0.2	9,995	7,108	1,816
Alkaloidal narcotics	16,300	16,300	0.2	16,300	—	—
Non-alkaloidal narcotics	8,901	8,901	0.1	4,128	4,773	—

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 3.63%	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	Metabolic 13.2%	Antineoplastics 12.0%	CNS 11.6%	Cardiovascular 11.1%	Blood forming organs 8.1%	Biologicals 5.8%	Gastrointestinals 5.7%	in vitro Diagnostics 4.7%	Chemotherapeutic 4.5%	Hormones 3.1%
2020	Metabolic 14.7%	Antineoplastics 12.3%	CNS 11.1%	Cardiovascular 10.9%	Blood forming organs 7.8%	Biologicals 6.4%	Gastrointestinals 5.9%	in vitro Diagnostics 4.6%	Hormones 4.5%	Dermatological 2.9%
2021	Metabolic 15.9%	Antineoplastics 13.6%	Cardiovascular 10.8%	CNS 10.0%	Blood forming organs 7.5%	Biologicals 6.4%	Gastrointestinals 5.7%	in vitro Diagnostics 5.6%	Hormones 3.4%	Dermatological 2.9%
2022	Metabolic 14.9%	Antineoplastics 14.3%	Cardiovascular 9.9%	CNS 9.7%	Blood forming organs 6.9%	Biologicals 6.4%	in vitro Diagnostics 6.3%	Gastrointestinals 5.6%	Chemotherapeutic 4.2%	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%
2024	Metabolic 15.8%	Antineoplastics 14.2%	CNS 10.3%	Cardiovascular 7.7%	Biologicals 7.7%	Blood forming organs 7.3%	Gastrointestinals 5.2%	in vitro Diagnostics 4.5%	Chemotherapeutic 4.4%	Hormones 3.6%

Note: 1. 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.  
 2. 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).  
 3. 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/105-1c.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	2024
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	360,743	362,211	328,128	367,584	406,768	433,738
	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	4.2
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	4,528,212
	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	44.2
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	17,678
	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	0.1	0.1	0.2	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	754,470
	Share (%)	9.3	8.6	7.9	6.0	5.8	6.2	6.2	6.6	6.6	6.3	6.6	7.1	7.0	6.2	7.4	7.8	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	203,394
	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	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	1,543,643
	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	15.1
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	395,757
	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	3.4	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	456,953
	Share (%)	3.9	5.1	4.5	4.4	4.6	4.8	5.4	6.1	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	22,135
	Share (%)	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.3	0.2	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	220,901
	Share (%)	2.4	2.4	1.9	2.0	2.6	2.3	2.4	2.2	2.2	2.3	2.4	2.4	1.9	2.0	1.9	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	12,949
	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	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	226,996
	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	2.2
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	1,431,670
	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	14.0
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	10,248,495
	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	100.0

Note:

- 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.
  - \*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/105-1c.html>



## A. Pharmaceutical Industry Outlook

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## R&amp;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
2024	16,607	1,221	7.9	11.01

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>

# R&D Expenditures of Leading Pharmaceutical Manufacturers (Japan) A-7-2

Company	Fiscal Year																			
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Expenditures (JPY mil.)																				
Takeda	169,645	193,301	275,788	453,046	296,392	288,874	281,885	324,292	343,300	382,100	345,927	312,303	325,461	368,298	492,381	455,833	526,087	633,325	729,924	730,227
Astellas	142,076	167,945	134,463	159,058	195,570	217,325	189,840	181,954	214,600	206,600	225,700	208,129	220,781	208,682	224,226	224,489	246,010	276,128	294,187	327,651
Daiichi Sankyo	158,716	170,662	163,472	184,539	196,802	194,330	185,052	183,047	189,700	190,700	208,700	214,347	236,046	203,711	197,465	227,353	260,228	341,570	365,169	435,965
Otsuka Holdings	103,703	105,255	101,804	135,900	151,848	164,671	159,229	192,364	249,010	172,851	201,010	168,818	175,558	216,140	215,789	216,841	232,299	275,230	307,804	314,233
Chugai	50,058	54,609	54,243	53,225	55,315	54,702	55,856	55,107	74,280	80,800	83,800	85,011	92,947	99,202	107,942	117,850	137,299	149,626	174,868	181,440
Eisai	93,249	108,296	225,427	156,106	179,082	145,030	125,142	120,377	130,544	131,907	122,307	112,478	139,579	144,844	140,116	150,299	171,738	172,999	169,021	171,633
Kyowa Kirin	32,875	33,342	34,109	48,389	34,979	44,210	47,961	44,808	43,682	47,737	51,604	53,822	49,155	48,591	53,511	52,312	57,679	62,896	72,106	103,544
Ono pharma.	34,066	35,383	38,986	38,400	39,716	42,938	44,382	45,441	48,600	41,503	43,576	57,787	69,106	70,008	66,611	62,528	75,957	95,497	112,377	150,007
Tanabe Pharma	78,447	75,758	72,335	73,122	83,081	65,784	70,241	66,530	70,405	69,600	75,293	64,783	79,083	86,533	79,400	72,600	96,900	87,800	63,000	66,500
Shionogi	32,256	37,455	40,290	52,822	51,808	50,921	53,599	53,021	51,924	48,870	49,787	59,907	59,945	68,325	47,949	54,249	72,996	102,392	102,640	108,612
Sumitomo Pharma	29,636	40,869	47,266	52,818	51,371	68,159	56,890	59,844	69,804	71,304	82,033	80,819	86,928	102,365	115,112	132,682	94,903	131,858	112,637	49,865
Santen Pharma.	13,971	13,663	12,941	18,457	14,123	13,221	17,225	16,719	19,040	17,477	19,990	22,786	24,398	23,759	23,341	24,112	26,377	28,297	25,416	24,103
Tsumura	4,856	4,829	4,368	3,958	3,770	4,123	4,565	4,904	5,949	6,252	5,968	6,087	6,048	5,926	6,270	6,631	7,313	7,594	8,288	8,355
Hisamitsu Pharma.	11,961	9,935	11,234	9,615	10,447	13,809	14,758	12,662	13,924	13,718	14,965	14,378	15,076	13,032	10,504	10,766	10,613	9,785	8,614	10,903
Nippon Shinyaku	10,071	8,200	7,898	7,853	8,440	8,967	9,414	9,049	9,530	8,968	9,739	14,903	13,221	16,701	13,994	16,104	22,863	24,135	31,676	34,341
Kyorin Pharma.	10,107	8,609	10,826	10,531	11,807	12,495	13,964	11,059	11,359	13,514	13,019	13,569	14,243	10,790	10,987	9,703	8,897	10,903	8,019	10,514
Mochida Pharma.	8,676	8,253	8,589	8,760	9,589	11,642	13,959	12,519	11,961	11,777	13,454	15,226	11,912	13,003	11,884	10,849	12,295	13,283	12,554	11,676
Kaken Pharma.	6,045	6,533	6,808	7,696	7,873	6,853	6,592	6,302	7,045	7,615	5,883	6,450	8,152	10,261	6,418	6,736	8,420	15,789	12,543	18,725
Zeria Pharma.	6,774	5,772	5,387	5,128	5,866	5,281	5,308	5,630	7,465	9,882	8,579	8,459	7,332	6,832	6,343	5,412	4,789	3,456	3,727	4,107
Kissei Pharma.	10,574	10,472	11,361	11,556	10,786	12,037	10,043	10,312	11,298	14,488	14,106	13,877	14,179	15,711	10,767	9,626	10,363	10,391	9,474	12,889
Change (%)																				
Takeda	119.9	113.9	142.7	164.3	65.4	97.5	97.6	115.0	105.9	111.3	90.5	93.0	104.2	113.2	133.7	92.6	115.4	120.4	115.3	100.0
Astellas	111.3	118.2	80.1	118.3	123.0	111.1	87.4	95.8	117.9	96.3	109.2	92.2	106.1	94.5	107.4	100.1	109.6	112.2	106.5	111.4
Daiichi Sankyo	109.3	107.5	95.8	112.9	106.6	98.7	95.2	98.9	103.6	100.5	109.4	102.7	110.1	86.3	97.0	115.1	114.5	131.3	106.9	119.4
Otsuka Holdings	119.6	101.5	96.7	133.5	111.7	108.4	96.7	120.8	129.4	69.4	116.3	84.0	104.0	123.1	99.8	100.5	107.1	118.5	111.8	102.1
Chugai	103.9	109.1	99.3	98.1	103.9	98.9	102.1	98.7	134.8	108.8	103.7	101.4	109.3	106.7	108.8	109.2	116.5	109.0	116.9	103.8
Eisai	119.1	116.1	208.2	69.2	114.7	81.0	86.3	96.2	108.4	101.0	92.7	92.0	124.1	103.8	96.7	107.3	114.3	100.7	97.7	101.5
Kyowa Kirin	122.1	101.4	102.3	141.9	72.3	126.4	108.5	93.4	97.5	109.3	108.1	104.3	91.3	98.9	110.1	97.8	110.3	109.0	114.6	143.6
Ono pharma.	111.2	103.9	110.2	98.5	103.4	108.1	103.4	102.4	107.0	85.4	105.0	132.6	119.6	101.3	94.9	93.9	121.5	125.7	117.7	133.5
Tanabe Pharma	100.2	96.6	95.5	101.1	113.6	79.2	106.8	94.7	105.8	98.9	108.2	100.3	122.1	109.4	91.8	91.4	133.5	90.6	71.8	99.9
Shionogi	109.7	116.1	107.6	131.1	98.1	98.3	105.3	98.9	97.9	94.1	101.9	120.3	100.1	114.0	70.2	113.1	134.6	140.3	100.2	105.8
Sumitomo Pharma	169.9	137.9	115.7	111.7	97.3	132.7	83.5	105.2	116.6	102.1	115.0	98.5	107.6	117.8	112.4	115.3	71.5	138.9	85.4	44.3
Santen Pharma.	110.7	97.8	94.7	142.6	76.5	93.6	130.3	97.1	113.9	91.8	114.4	114.1	107.1	97.4	98.2	103.3	109.4	107.3	89.8	94.8
Tsumura	90.4	99.4	90.5	90.6	95.3	109.4	110.7	107.4	121.3	105.1	95.5	102.0	99.4	98.0	105.8	105.8	110.3	103.8	109.1	100.8
Hisamitsu Pharma.	165.6	83.1	113.1	85.6	108.7	132.2	106.9	95.8	110.0	98.5	109.1	96.1	104.9	86.4	80.6	102.5	96.6	92.2	88.0	126.6
Nippon Shinyaku	118.7	81.4	96.3	98.4	107.5	106.2	105.0	86.1	105.3	94.1	108.6	153.0	88.7	126.3	83.8	115.1	142.0	105.6	131.2	108.4
Kyorin Pharma.	79.6	85.2	125.8	97.3	112.1	105.8	111.8	79.2	102.7	119.0	96.3	104.2	105.0	75.8	101.8	88.3	91.7	122.5	73.5	131.1
Mochida Pharma.	85.6	95.1	104.1	102.0	109.5	121.4	119.9	89.7	95.5	98.5	114.2	113.2	78.2	109.2	91.4	91.3	113.3	108.0	94.5	93.0
Kaken Pharma.	96.4	108.1	104.2	113.0	102.3	87.0	96.2	95.6	111.8	108.1	77.3	109.6	126.4	125.9	62.5	105.0	125.0	187.5	79.4	149.3
Zeria Pharma.	103.4	85.2	93.3	95.2	114.4	90.0	100.5	106.1	132.6	132.4	86.8	98.6	86.7	93.2	92.8	85.3	88.5	72.2	107.8	110.2
Kissei Pharma.	106.9	99.0	108.5	101.7	93.3	111.6	83.4	102.7	109.6	128.2	97.4	98.4	102.2	110.8	68.5	89.4	107.7	100.3	91.2	136.0
R&D/Sales (%)																				
Takeda	14.0	14.8	20.1	29.5	20.2	20.4	18.7	20.8	20.3	21.5	19.1	18.0	18.4	17.6	15.0	14.3	14.7	15.7	17.1	15.9
Astellas	16.2	18.2	13.8	16.5	20.1	22.8	19.6	18.1	18.4	16.6	16.4	15.9	17.0	16.0	17.2	18.0	19.0	18.2	18.3	17.1
Daiichi Sankyo	17.1	18.4	18.6	21.9	20.7	20.1	19.7	18.3	17.0	20.7	21.2	22.4	24.6	21.9	20.1	23.6	24.9	26.7	22.8	23.1
Otsuka Holdings	13.8	12.3	11.0	14.2	14.0	14.6	13.8	15.8	17.1	14.1	13.9	14.1	14.2	16.7	15.5	15.2	15.5	15.8	15.2	13.5
Chugai	15.3	16.7	15.7	16.3	12.9	14.4	15.0	14.1	17.5	17.5	16.8	17.3	17.4	17.1	15.7	15.0	13.7	11.9	15.7	15.5
Eisai	15.5	16.1	30.7	20.0	22.3	18.9	19.3	21.0	21.7	24.1	22.3	20.9	23.3	22.5	20.1	23.3	22.7	23.2	22.8	21.7
Kyowa Kirin	9.3	9.4	8.7	10.5	11.3	10.7	14.0	13.4	12.8	14.3	14.2	15.7	13.9	14.0	17.5	16.4	16.4	15.8	16.3	20.9
Ono pharma.	22.9	25.0	26.7	28.1	29.2	31.7	30.4	31.3	33.5	30.6	27.2	23.6	26.4	24.3	22.8	20.2	21.0	21.4	22.4	30.8
Tanabe Pharma	19.2	18.7	17.7	17.6	20.5	16.1	17.3	15.9	17.1	16.8	17.4	15.3	18.2	20.4	20.9	19.2	25.1	16.4	14.4	14.4
Shionogi	16.4	18.8	18.8	23.2	18.6	18.0	20.1	18.7	17.9	17.8	16.1	17.7	17.4	14.4	14.4	18.3	21.8	24.0	25.0	24.8
Sumitomo Pharma	12.1	15.6	17.9	20.0	17.3	18.0	16.2	17.2	18.0	19.2	20.3	19.6	18.6	22.3	23.8	25.7	16.9	23.7	35.8	12.5
Santen Pharma.	14.2	13.6	12.5	18.2	12.8	11.9	15.1	14.0	12.8	10.8	10.2	11.5	10.8	10.2	9.7	9.7	9.9	10.1	8.4	8.0
Tsumura	5.4	5.3	4.6	4.4	4.1	4.4	4.8	4.6	5.4	5.7	5.3	5.3	5.1	4.9	5.1	5.1	5.6	5.4	5.5	4.6
Hisamitsu Pharma.	11.7	9.0	9.4	7.7	8.0	10.1	10.7	8.9	9.2	8.8	9.2	9.9	10.2	9.1	7.5	9.4	8.8	7.6	6.1	7.0
Nippon Shinyaku	18.7	14.6	13.3	12.5	13.4	14.1	14.0	12.9	12.5	11.2	11.6	15.1	13.0	14.6	12.0	13.2	16.6	16.7	21.4	21.4
Kyorin Pharma.	13.6	11.2	13.4	11.6	11.8	12.0	13.5	10.3	10.2	11.9	10.9	11.8	12.9	9.5	10.0	9.4	8.4	9.6	6.7	8.1
Mochida Pharma.	12.3	11.1																		

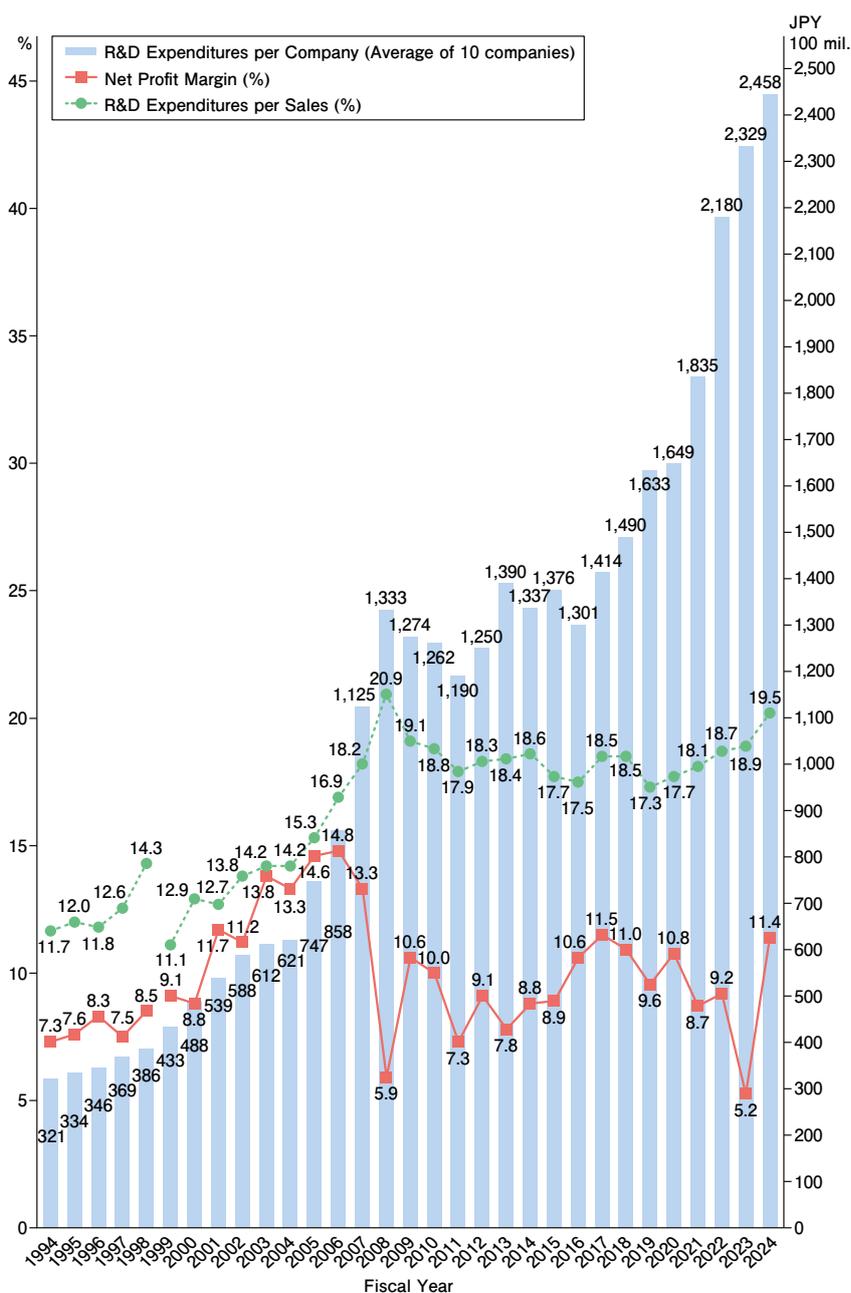
## R&D Expenditures of Leading Pharmaceutical Manufacturers (Worldwide) A-7-3

Company	Currency	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
		Expenditures																			
Pfizer	USD mil.	7,442	7,599	8,089	7,945	7,845	9,413	9,112	7,870	6,678	8,393	7,690	7,872	7,657	8,006	8,650	9,405	13,829	11,428	10,873	10,930
Merck (USA)	USD mil.	3,848	4,783	4,883	4,805	5,845	10,991	8,467	8,168	7,503	7,180	6,704	10,124	10,208	9,752	9,872	13,558	12,245	13,548	30,531	17,938
Johnson & Johnson	USD mil.	6,312	7,125	7,680	7,577	6,986	6,844	7,548	7,665	8,183	8,494	9,046	9,095	10,554	10,775	11,355	12,159	14,714	14,603	15,085	17,232
AbbVie	USD mil.	1,821	2,255	2,506	2,688	2,744	3,724	2,618	2,778	2,855	3,297	4,285	4,366	4,982	10,329	6,407	6,557	7,084	6,510	7,675	12,791
AstraZeneca	USD mil.	3,379	3,902	5,162	5,179	4,409	5,318	5,523	5,243	4,821	5,579	5,997	5,890	5,757	5,932	6,059	6,213	9,736	9,762	10,935	13,583
Roche	CHF mil.	5,705	6,590	7,598	7,904	8,896	10,026	8,326	9,552	9,270	9,895	9,581	11,532	11,292	12,092	12,774	13,009	14,799	16,023	14,200	15,304
Novartis	USD mil.	4,846	5,321	6,430	7,217	7,469	9,070	9,583	9,332	9,852	9,943	9,116	9,039	8,972	9,074	9,402	8,980	9,540	9,996	11,371	10,022
Bristol-Myers Squibb	USD mil.	2,746	2,991	3,282	3,585	3,647	3,566	3,839	3,904	3,731	4,534	5,920	4,940	6,411	6,345	6,148	11,143	11,354	9,509	9,299	11,159
Eli Lilly	USD mil.	3,026	3,129	3,487	3,841	4,327	4,884	5,021	5,278	5,531	4,734	4,796	5,244	5,282	5,307	5,595	6,086	7,026	7,191	9,313	10,991
Sanofi	EUR mil.	4,044	4,430	4,537	4,575	4,583	4,401	4,811	4,922	4,770	4,824	5,259	5,172	5,472	5,894	6,018	5,529	5,692	6,706	6,728	7,394
Novo Nordisk	DKK mil.	5,085	6,316	8,538	7,856	7,864	9,602	9,628	10,897	11,733	13,762	13,608	14,563	14,014	14,805	14,220	15,462	17,772	24,047	32,443	48,062
GlaxoSmithKline	GBP mil.	3,136	3,457	3,327	3,681	4,106	4,457	4,009	3,968	3,923	3,450	3,560	3,628	4,476	3,893	4,568	5,098	5,278	5,488	6,223	6,401
Amgen	USD mil.	2,314	3,366	3,266	3,030	2,864	2,894	3,167	3,380	4,083	4,297	4,070	3,840	3,562	3,737	4,116	4,207	4,819	4,434	4,784	5,964
Gilead Sciences	USD mil.	-	-	-	-	914	1,073	1,229	1,760	2,120	2,854	3,014	5,098	3,734	5,018	9,106	5,039	5,363	4,977	5,718	5,907
Boehringer Ingelheim	USD mil.	1,360	1,574	1,730	2,109	2,215	2,453	2,516	2,795	2,743	2,654	3,004	3,112	3,078	3,164	3,462	3,696	4,127	5,047	5,220	6,212
Bayer	EUR mil.	1,886	2,297	2,578	2,653	2,746	3,053	2,932	3,013	3,190	3,574	4,329	4,678	4,504	5,246	5,342	7,126	5,412	6,572	5,371	6,209
Teva	USD mil.	369	495	581	786	802	933	1,095	1,356	1,427	1,395	1,525	2,111	1,848	1,213	1,010	997	967	838	953	998
CSL	USD mil.	119	162	215	251	269	348	363	427	466	463	614	645	702	832	922	1,001	1,156	1,235	1,430	1,359
Viatriis Inc	USD mil.	-	-	-	-	275	282	295	401	508	582	672	827	783	705	640	555	751	662	805	809
Biogen	USD mil.	748	718	925	1,072	1,283	1,249	1,220	1,335	1,444	1,893	2,013	1,973	2,254	2,597	2,281	3,991	2,501	2,231	2,462	2,042
Change (%)																					
Pfizer	%	96.9	102.1	106.4	98.2	98.7	120.0	96.8	86.4	84.9	125.7	91.6	102.4	97.3	104.6	108.0	108.7	147.0	82.6	95.1	100.5
Merck (USA)	%	96.0	124.3	102.1	98.4	121.6	188.0	77.0	96.5	91.9	95.7	93.4	151.0	100.8	95.5	101.2	137.3	90.3	110.6	225.4	58.8
Johnson & Johnson	%	121.3	112.9	107.8	98.7	92.2	98.0	110.3	101.6	106.8	103.8	106.5	100.5	116.0	102.1	105.6	107.1	121.0	99.2	103.3	114.2
AbbVie	%	107.3	123.8	111.1	107.3	102.1	135.7	-	106.1	102.8	115.5	130.0	101.9	114.1	207.3	62.0	102.3	108.0	91.9	117.9	166.7
AstraZeneca	%	88.9	115.5	132.3	100.3	85.1	120.6	103.9	94.9	92.0	115.7	107.5	98.2	97.7	103.0	102.1	105.2	156.7	100.3	112.0	124.2
Roche	%	99.0	115.5	115.3	104.0	112.6	101.5	83.0	114.7	97.0	106.7	96.8	120.4	97.9	107.1	105.6	101.8	113.8	108.3	88.6	107.8
Novartis	%	115.2	109.8	120.8	112.2	103.5	121.4	105.7	97.4	105.6	100.9	91.7	99.2	99.3	101.1	110.8	95.5	106.2	104.8	113.8	88.1
Bristol-Myers Squibb	%	99.0	108.9	109.7	109.2	101.7	97.8	107.7	101.7	95.6	121.5	130.6	83.4	129.8	99.0	97.1	181.2	101.9	83.8	97.8	120.0
Eli Lilly	%	112.4	103.4	111.4	110.2	112.7	112.9	102.8	105.1	104.8	85.6	101.3	109.3	100.7	100.5	110.8	108.8	115.4	102.3	129.5	118.0
Sanofi	%	109.8	109.5	102.4	100.8	100.2	96.0	109.3	102.3	96.9	101.1	109.0	101.8	105.8	107.7	102.1	91.9	102.9	117.8	100.3	109.9
Novo Nordisk	%	116.8	124.2	135.2	92.0	100.1	122.1	100.3	113.2	107.7	117.3	98.9	107.0	96.2	105.6	96.0	108.7	114.9	135.3	134.9	148.1
GlaxoSmithKline	%	110.5	110.2	96.2	110.6	111.5	108.5	89.9	99.0	98.9	87.9	103.2	101.9	123.4	87.0	117.3	111.6	103.5	104.0	113.4	102.9
Amgen	%	114.1	145.5	97.0	92.8	94.5	101.0	109.4	106.7	120.8	105.2	94.7	94.3	92.8	104.9	110.1	102.2	114.5	92.0	107.9	124.7
Gilead Sciences	%	-	-	-	-	126.6	114.2	114.5	143.2	120.5	134.6	105.6	169.1	73.2	134.4	181.5	55.3	106.4	92.8	114.9	103.3
Boehringer Ingelheim	%	110.4	115.7	109.9	121.9	105.0	110.7	102.6	111.1	98.1	96.8	113.2	103.6	98.9	102.8	91.4	106.8	111.7	122.3	103.4	119.0
Bayer	%	89.5	121.8	112.2	102.9	103.5	111.2	96.0	102.8	105.9	112.0	121.1	108.1	96.3	116.5	104.6	133.4	75.9	121.4	81.7	115.6
Teva	%	109.1	134.1	117.4	135.3	102.0	116.3	117.4	123.8	105.2	97.8	102.5	138.4	87.5	65.6	83.3	98.7	97.0	86.7	113.7	104.7
CSL	%	107.5	135.5	133.1	116.8	107.0	129.1	104.5	117.5	109.3	99.2	132.7	105.1	108.8	118.4	110.8	108.6	115.5	106.8	115.8	95.0
Viatriis Inc	%	-	-	-	-	86.8	102.5	104.6	136.1	126.5	114.5	115.5	123.1	94.7	89.9	90.8	86.7	135.3	88.2	121.6	100.4
Biogen	%	109.0	96.1	128.8	115.9	119.7	97.3	97.7	109.5	108.2	131.1	106.3	98.0	114.2	115.2	87.8	175.0	62.7	89.2	110.3	82.9
R&D/Sales (%)																					
Pfizer	%	14.5	15.7	16.7	16.5	15.7	13.9	13.5	13.3	12.9	16.9	15.7	14.9	14.6	14.9	16.7	22.4	17.0	11.4	18.6	17.2
Merck (USA)	%	17.5	21.1	20.2	20.1	21.3	23.9	17.6	17.3	17.0	17.0	17.0	25.4	25.4	23.1	21.1	28.2	25.1	22.9	50.8	28.0
Johnson & Johnson	%	12.5	13.4	12.6	11.9	11.3	11.1	11.6	11.4	11.5	11.4	12.9	12.7	13.8	13.2	13.8	14.7	15.7	15.4	17.7	19.4
AbbVie	%	8.2	10.0	9.7	9.1	8.9	10.6	15.0	15.1	15.2	19.4	18.7	17.0	17.7	31.5	19.3	14.3	12.6	11.2	14.1	22.7
AstraZeneca	%	14.1	14.7	17.5	16.4	13.4	16.0	16.4	18.7	18.8	21.4	24.3	25.6	25.6	26.9	24.8	23.3	26.0	22.0	23.9	25.1
Roche	%	16.1	15.7	16.5	17.3	18.1	21.1	19.6	21.0	19.8	20.8	19.9	22.8	20.3	21.3	20.8	23.2	23.6	25.3	24.2	25.3
Novartis	%	15.0	14.8	16.2	17.4	16.9	17.9	16.4	16.5	17.0	17.1	18.2	18.6	18.3	17.1	19.8	18.0	18.5	19.8	25.0	19.9
Bristol-Myers Squibb	%	12.9	17.1	17.0	17.4	19.4	18.3	18.1	22.2	22.8	28.6	35.7	25.4	30.9	28.1	23.5	26.2	24.5	20.6	20.7	23.1
Eli Lilly	%	20.7	19.9	18.7	18.8	19.8	21.2	20.7	23.4	23.9	24.0	24.0	24.7	23.1	21.6	25.1	24.8	24.8	25.2	27.3	24.4
Sanofi	%	14.8	15.6	16.2	16.6	15.6	14.5	14.4	14.1	14.5	14.3	14.2	14.2	15.6	16.5	16.7	14.8	15.1	14.8	15.6	18.0
Novo Nordisk	%	15.1	16.3	20.4	17.2	15.4	15.8	14.5	14.0	14.0	15.5	12.6	13.0	12.5	13.2	11.7	12.2	12.6	13.6	14.0	16.6
GlaxoSmithKline	%	14.5	14.9	14.6	15.1	14.5	15.7	14.6	15.0	14.8	15.0	14.9	13.0	14.8	12.6	13.5	15.0	15.5	18.7	20.5	20.4
Amgen	%	19.2	23.6	22.1	20.2	19.6	19.2	20.3	19.6	21.9	18.8	18.8	16.7	15.6	15.7	17.6	16.5	18.5	16.8	17.0	17.8
Gilead Sciences	%	-	-	-	-	13.0	13.5	14.7	18.1	18.9	11.5	9.2	16.8	14.3	22.7	40.6	20.4	19.6	18.2	21.1	20.5
Boehringer Ingelheim	%	14.3	14.9	15.8	18.2	17.4	19.5	19.1	19.0	19.5	19.9	20.3	19.6	17.0	18.1	11.3	18.9	20.0	20.9	20.4	23.2
Bayer	%	6.9	7.9	8.0	8.1	8.8	8.7	8.0	7.6	7.9	8.5	9.2	9.8	12.9	13.3	12.3	17.2	12.3	13.0	11.3	13.3
Teva	%	7.0	5.9	6.2	7.1	5.8	5.8	6.0	6.7	7.0	6.9	7.8	9.6	8.3	6.4	6.0	6.0	6.1	5.6	6.0	6.0
CSL	%	5.7	6.0																		

## Trends of R&amp;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	7.8	18.4
2014	1,337	8.8	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
2024	2,458	11.4	19.5



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 (Tanabe Pharma), Sumitomo Pharma, Shionogi, Ono, Otsuka Holdings, and Kyowa Kirin

2. Consolidated basis since 1999.

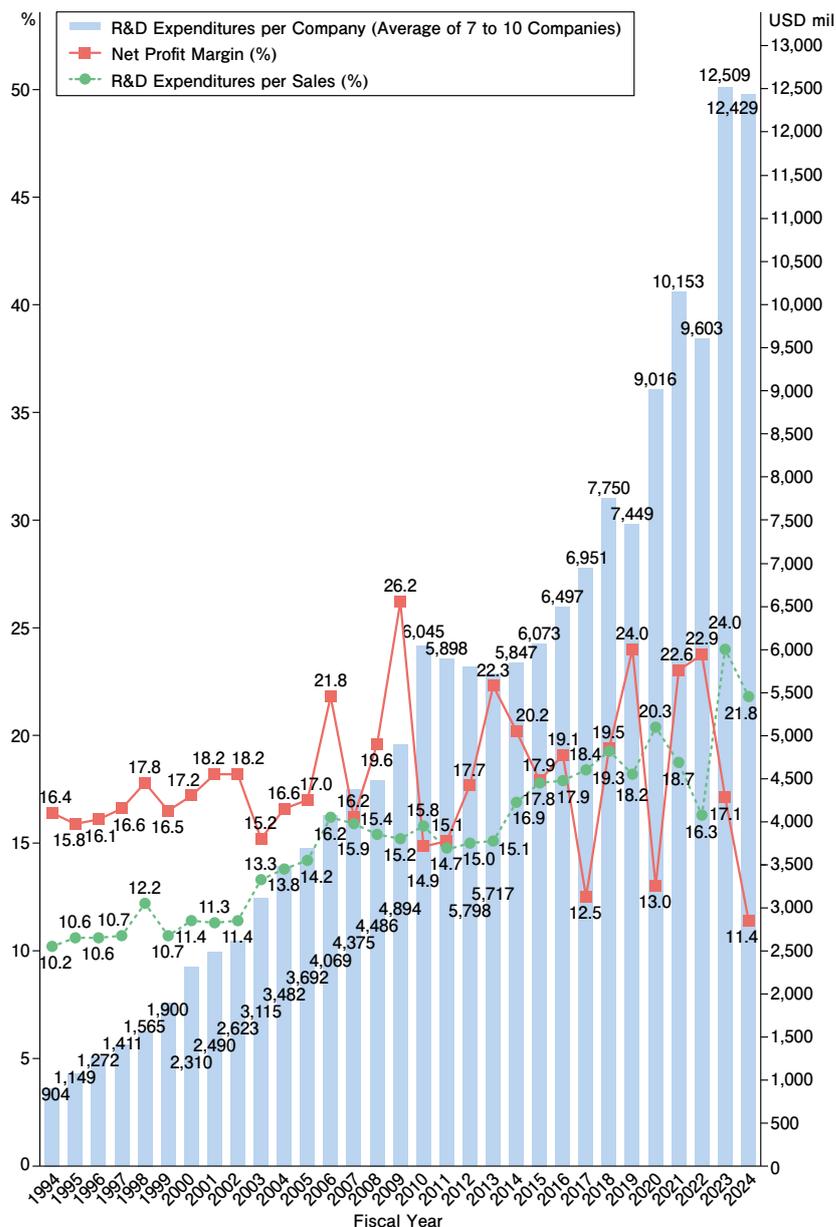
3. Chugai had an irregular 9 months financial result (Apr.-Dec.) in FY2003

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	11.4
2000	2,310	18.2	11.4
2001	2,490	18.2	11.4
2002	2,623	15.2	13.3
2003	3,115	16.6	13.8
2004	3,482	17.0	14.2
2005	3,692	19.6	15.9
2006	4,069	26.2	15.2
2007	4,375	15.1	16.2
2008	4,486	17.7	15.4
2009	4,894	15.0	15.8
2010	5,045	22.3	15.2
2011	5,898	15.1	14.9
2012	5,798	17.7	15.0
2013	5,717	20.2	15.1
2014	5,847	17.9	16.9
2015	6,073	19.1	17.8
2016	6,497	18.4	18.2
2017	6,951	19.5	19.3
2018	7,449	12.5	18.7
2019	7,750	13.0	20.3
2020	9,016	22.6	16.3
2021	10,153	22.9	17.1
2022	9,603	24.0	21.8
2023	12,509	11.4	24.0
2024	12,429	11.4	21.8



Note:

- 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&amp;D Expenditures as a Percentage of Sales by Industry (Japan)

A-7-6

(Unit: %)

Industry / Fiscal Year	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
All Industries*	2.78	2.73	3.01	3.08	2.99	2.93	3.11	3.31	3.22	3.28	3.27	3.33	3.28	3.46	3.33	3.30	3.39	3.41	3.36	3.06	2.90	3.08	3.24
Agriculture, Forestry & Fisheries	0.50	0.43	0.58	0.75	0.83	0.88	1.72	2.69	4.24	3.57	1.91	2.29	2.10	2.48	2.19	2.09	2.24	2.03	2.31	1.59	1.66	1.53	2.87
Mining, Quarrying & Gravel Extraction	1.13	0.98	0.99	1.29	0.88	0.59	0.72	0.81	0.83	0.33	0.34	0.38	0.39	0.33	0.36	0.31	0.35	0.43	0.41	0.32	0.31	1.51	2.99
Construction	0.54	0.45	0.48	0.40	0.40	0.36	0.41	0.47	0.43	0.43	0.41	0.41	0.36	0.36	0.28	0.41	0.48	0.52	0.57	0.50	0.41	0.47	0.54
Manufacturing	3.36	3.43	3.70	3.87	3.65	3.62	3.92	4.09	3.93	4.14	4.11	4.15	4.11	4.31	4.25	4.11	4.18	4.28	4.41	4.03	3.94	4.05	4.19
Food	0.98	0.99	1.01	1.30	1.20	0.99	1.01	1.03	1.07	1.14	1.05	1.14	0.87	1.02	1.02	1.10	1.08	1.23	0.86	0.88	0.92	0.76	0.78
Textiles	1.76	1.76	2.17	2.43	2.14	2.84	3.55	4.06	3.80	3.81	4.55	4.07	4.18	4.06	3.12	2.73	2.71	3.06	3.85	3.48	3.51	3.15	3.85
Pulp, Paper& Paper Products	0.88	0.90	0.98	1.24	1.17	1.01	0.93	0.87	0.92	0.99	0.82	0.61	0.87	0.77	0.87	0.86	0.72	0.87	1.17	1.03	1.08	0.72	1.10
Publishing, Printing & Allied Industries	-	-	-	1.35	1.87	1.48	1.45	1.29	1.28	1.29	1.07	1.07	0.91	0.90	0.99	0.90	1.04	1.05	0.96	1.13	1.14	1.14	1.38
Pharmaceuticals	8.02	8.03	8.60	10.01	10.95	12.11	11.74	11.66	12.02	11.96	11.81	11.70	12.21	11.93	10.04	11.10	11.05	10.08	9.68	10.06	9.73	10.26	11.01
Chemicals	4.89	5.30	5.36	3.92	3.10	3.13	3.66	3.85	3.56	3.81	3.93	3.64	3.59	3.97	4.25	3.95	4.03	4.27	3.63	3.77	3.72	3.82	3.85
Industrial Chemicals	4.01	4.08	3.64	3.48	2.63	2.84	3.43	3.54	3.31	3.45	3.53	3.16	3.27	3.59	3.93	3.93	3.89	4.37	3.53	3.48	3.39	3.43	3.61
Oils & Paints	3.90	4.47	4.43	4.18	3.96	3.07	3.35	3.58	3.48	3.53	3.82	4.28	3.70	4.16	4.40	4.03	4.07	4.10	3.96	3.84	4.04	3.73	3.82
Other Chemicals	4.06	4.75	5.11	5.03	4.16	4.06	4.71	5.11	4.41	5.12	5.20	4.54	4.51	4.86	4.87	3.95	4.34	4.20	3.63	4.52	4.40	5.10	4.51
Petroleum & Coal Products	0.64	0.54	0.24	0.22	0.25	0.22	0.22	0.27	0.26	0.22	0.20	0.19	0.19	0.26	0.31	0.28	0.25	0.29	0.38	0.29	0.30	0.30	0.35
Plastic Products	2.37	2.64	2.38	2.09	2.64	2.46	2.50	2.46	2.61	3.01	3.07	2.92	3.08	2.67	2.35	2.56	2.98	3.02	3.18	2.57	2.45	2.60	2.47
Rubber Products	3.20	3.37	3.64	4.31	3.99	3.61	4.06	4.47	3.84	3.48	3.70	3.93	3.94	4.24	4.01	4.10	4.17	4.01	4.45	4.70	4.14	3.67	4.14
Ceramics, Stone & Clay Products	2.60	2.39	2.48	2.32	2.01	2.38	2.84	3.11	2.67	3.22	3.25	3.09	2.71	2.12	2.59	3.26	3.36	3.16	3.49	3.29	2.95	3.27	2.47
Iron & Steel	2.33	1.96	1.64	1.05	1.01	1.03	0.97	1.39	1.29	1.38	1.18	1.19	1.24	1.51	1.59	1.42	1.32	1.57	1.43	0.93	0.79	0.86	1.06
Non-ferrous Metals & Products	1.80	2.35	2.37	1.77	1.57	1.33	1.99	1.97	2.12	1.93	1.94	1.93	1.73	1.86	1.93	1.44	1.69	1.90	1.82	1.00	1.28	1.43	1.32
Metal Products	1.60	1.35	1.70	1.89	1.18	1.55	1.06	1.00	1.60	1.45	1.31	1.33	1.31	1.07	1.40	1.38	1.29	1.37	0.98	1.31	1.37	1.39	1.34
General Machinery	2.99	3.26	3.93	3.99	3.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Machinery & Tools for Production	-	-	-	-	-	3.17	3.74	4.51	3.88	3.55	3.79	3.92	3.53	3.79	4.07	3.57	4.32	4.36	4.60	4.02	3.94	4.93	4.48
Machinery & Tools for Institutional Use	-	-	-	-	-	6.97	8.25	9.43	8.42	8.76	8.63	8.81	8.77	8.96	8.85	9.26	9.26	8.81	8.84	7.58	7.24	7.32	4.73
Electric Component, Devices, Electric Circuit	-	-	-	5.81	5.38	5.01	5.83	5.65	4.54	6.39	5.88	5.49	5.34	5.23	5.19	4.79	5.37	5.67	6.87	6.40	6.65	7.52	7.46
Electric Machinery	-	-	-	4.72	4.98	4.88	5.68	6.11	5.48	5.98	6.34	6.21	6.01	6.02	5.67	5.79	6.31	6.68	5.20	4.83	4.68	4.93	5.18
Electronic Equipment & Electric Measurements	-	-	-	4.48	5.22	8.53	8.89	8.58	8.80	8.03	8.65	8.54	6.29	9.67	7.39	8.54	8.29	8.54	8.43	7.13	7.23	7.66	7.50
Other Electric Machinery	-	-	-	4.81	4.91	4.38	5.21	5.70	5.04	5.66	6.02	5.87	5.95	5.54	5.43	5.42	6.04	6.43	4.70	4.40	4.22	4.47	4.74
Information & Telecommunications Equipment	-	-	-	6.65	6.29	6.09	6.57	6.29	5.81	6.44	6.63	6.29	6.26	6.29	6.72	6.39	6.14	5.88	6.10	7.03	6.67	6.74	6.45
Transportation Equipment	3.65	3.34	3.90	4.47	4.31	4.44	4.95	4.47	4.49	4.60	4.51	4.77	5.08	5.15	4.99	4.95	4.96	5.04	6.54	6.03	5.65	5.48	6.14
Motor Vehicles & Its Accessories	3.73	3.46	4.09	4.72	4.48	4.62	5.22	4.76	4.68	4.78	4.69	4.91	5.25	5.29	5.11	5.06	5.10	5.21	6.85	6.30	5.90	5.69	6.45
Other Transport Equipment	3.20	2.74	2.86	1.50	1.62	1.74	1.73	1.36	1.88	1.90	1.96	2.60	2.63	3.12	3.12	3.38	3.12	2.78	3.20	2.49	2.02	2.05	1.91
Precision Instruments	5.94	5.16	6.34	7.69	7.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Manufacturing	1.21	1.50	1.70	2.04	1.84	1.84	1.82	2.09	2.32	2.49	2.41	2.75	2.01	1.87	1.53	1.65	2.21	2.18	1.69	1.94	2.08	2.22	1.98
Information & Communication	-	-	-	2.16	1.88	1.69	2.18	1.99	1.96	2.06	2.20	1.87	2.17	2.60	2.53	1.92	2.05	1.84	1.36	1.42	1.57	1.32	1.40
Information Services	-	-	-	5.79	3.23	2.58	2.14	2.74	2.95	2.99	2.93	2.53	1.82	2.32	2.33	2.18	2.63	1.89	2.00	2.22	2.29	1.78	1.93

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.
- All Industries\*: Excluding special public corporations, independent administrative institutions (IAIs), and finance and insurance industries.

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&amp;D Expenditures by Industry and Type (Japan)

A-7-7

FY2024

(Unit: %)

Industry	Basic Research	Applied Research	Development
All Industries	6.9	15.4	77.8
Agriculture, Forestry & Fisheries	18.0	2.5	79.6
Mining, Quarrying & Gravel Extraction	1.0	4.1	94.9
Construction	7.3	19.3	73.4
Manufacturing	7.0	15.9	77.1
Food	12.4	22.2	65.4
Textiles	13.9	42.5	43.6
Pulp, Paper & Paper Products	3.8	9.3	86.9
Publishing, Printing & Allied Industries	18.5	28.4	53.1
Pharmaceuticals	19.5	21.2	59.4
JPMA*	14.9	12.1	73.1
Chemicals	9.6	25.0	65.3
Petroleum & Coal Products	1.5	11.9	86.6
Plastic Products	14.2	19.5	66.2
Rubber Products	5.0	20.1	74.9
Ceramics, Stone & Clay Products	9.2	22.0	68.8
Iron & Steel	9.4	23.5	67.0
Non-ferrous Metals & Products	6.9	25.0	68.2
Metal Products	1.3	6.0	92.7
General Machinery	9.3	9.5	81.2
Machinery & Tools for Production	3.2	15.2	81.7
Machinery & Tools for Institutional Use	6.4	9.0	84.6
Electric Component, Devices, Electric Circuit	1.4	19.4	79.2
Electric Machinery	3.3	26.9	69.8
Electronic Equipment & Electric Measurements	1.4	10.1	88.5
Other Electric Machinery	3.9	31.9	64.2
Information & Telecommunications Equipment	4.9	21.2	73.8
Transportation Equipment	5.2	7.5	87.3
Motor Vehicles & its Accessories	5.1	7.5	87.4
Other Transport Equipment	9.8	6.3	84.0
Other Manufacturing	2.9	34.3	62.7
Information & Communication	1.3	5.9	92.8
Information Services	1.9	5.5	92.6

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 21 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&amp;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	
	2024	15,687.9	7,298.4	10,608.8	28,588.5	2,816.5	8,082.6	73,082.7	31,261.3	104,344.0	
	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			
2024		21.5	10.0	14.5	39.1	3.9	11.1	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	
	2024	15.0	7.0	10.2	27.4	2.7	7.7	70.0	30.0	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
2020 ~ 2024	422,373	153	46	13	1 : 2,761	1 : 9,182	1 : 32,490

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
2024	19	83,378	18	6	3
Total		2,796,677	907	375	123

#### 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
2024	19	7	3	1	19	7	3	2
Total		143	39	12		185	27	16

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

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## Number of Patents for Drugs in Japan

A-8-1

Year	No. of Patents for Drugs (A)			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%
2024	7,312	1,764	5,548	200,284	3.65%

Note :

1. The total number of patents :

Until 1995, the total number of examined patent publications

From 1997, the number of granted patent publications

2. 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
2024	229	1,130	252	40	49	1,700

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 :

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.)

## Number of Published PCT Applications for Biopharmaceuticals 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
2024	193	995	94	655	150	2,087

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

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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 <sup>th</sup> 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 <sup>th</sup> 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
2024	192		394	5,442	462	119	185

## Regenerative Medical Products

Fiscal Year	Initial Notification	Notification of n <sup>th</sup> 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
2024	16	22	276	26	4	2

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	132	9.2	23	8.5	101	10.0
2023	136	10.1	41	8.4	92	10.9
2024	99	9.0	37	8.1	61	10.5

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 2024.  
(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
2024	63	31	59

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 2024

Company	Total	Approval in 2024
Pfizer	56	7
Sanofi	45	2
MSD	41	0
Takeda	39	6
GlaxoSmithKline	38	1
Novartis	38	1
Janssen	31	3
Chugai	30	2
AstraZeneca	29	4
Bayer	26	0
Daiichi Sankyo	24	1
Astellas	22	1
Eli Lilly	22	3
Bristol-Myers Squibb	19	3
Ono	18	0
Kyowa Kirin	16	0
Shionogi	16	1
Novo Nordisk	16	1
Tanabe Pharma	15	0
Otsuka	14	1
Sumitomo Pharma	13	0
AbbVie	12	0
Eisai	12	1
Boehringer Ingelheim	12	0
Kyorin Pharma	10	0
Taiho	9	0
FUJIFILM Toyama Chemical	9	0
Meiji Seika Pharma	9	1
KM Biologics	8	0
Nippon Shinyaku	8	0
UCB	8	1
Amgen	7	2
Kissei	6	0
Teijin Pharma	6	0
Biogen	6	1
Biken	6	1
Kaken Pharma.	5	0
Kowa	5	0
Sanwa Kagaku	5	0
Taisho Pharma.	5	0
Maruho	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
2024	0	0	360	360	0	0	279	279

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	7,450	3,568	2,078	26	13,122
2024	7,264	3,567	2,060	26	12,917
2025	6,904	3,439	1,974	27	12,344

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

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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
2024	81.09	61.44	42.03	19.47	87.13	67.48	47.88	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			2001			2024		
		Male	Female	Period	Male	Female	Period	Male	Female	Period
Asia	Japan	75.54	81.30	1988	78.07	84.93	2001	81.09	87.13	2024
	Israel	73.53	76.99	1985	76.1	80.5	1995-1999	80.79	84.82	2018-2022
	India	55.60	55.20	1980-1985	60.4	61.8	1993-1997	68.6	71.4	2016-2020
	Indonesia	54.60	57.40	1985-1990	63.3	67.0	1995-2000	70.32	74.21	2024
	Korea	62.70	69.07	1978-1979	71.71	79.22	1999	80.6	86.4	2023
	China	67.98	70.94	1985-1990	69.63	73.33	2000	75.37	80.88	2020
Europe	Iceland	75.04	80.38	1985-1986	77.6	81.4	1999-2000	80.9	84.3	2024
	Italy	71.40	78.10	1983	75.8	82.0	1999	81.436	85.495	2024
	UK	71.80	77.74	1983-1985	75.13	79.98	1998-2000	78.82	82.77	2021-2023
	Austria	70.40	77.36	1985	75.41	81.21	2000	79.44	84.23	2023
	Netherlands	73.69	80.24	1988	75.3	80.6	2000	80.31	83.33	2023
	Switzerland	73.60	80.30	1985-1986	76.5	82.5	1998	82.2	85.8	2023
	Sweden	74.16	80.30	1987	77.38	82.03	2000	82.29	85.35	2024
	Czech Republic	67.25	74.71	1985	71.7	78.4	2000	77.15	83.14	2024
	Denmark	71.80	77.60	1987	74.34	78.98	1999-2000	79.85	83.68	2023-2024
	Germany	71.81	78.37	1985-1987	74.44	80.57	1997-1999	78.17	82.99	2021-2023
	Norway	72.75	79.55	1987	76.21	81.53	2001	81.59	84.8	2024
	Finland	70.49	78.72	1986	74.6	81.5	2001	79.64	84.76	2024
	France	71.52	79.70	1986	75.0	82.5	1999	80.04	85.6	2024
	Russia	64.15	73.27	1985-1986	58.3	71.7	1995	68.04	78.74	2023
North America	USA	71.50	78.30	1987	73.9	79.4	1999	75.8	81.1	2023
	Canada	71.88	78.98	1980-1982	76.3	81.7	1999	79.25	83.79	2021-2023
	Mexico	62.10	66.00	1979	69.5	75.5	1995-2000	72.4	78.9	2024
South America	Argentina	65.43	72.12	1975-1980	68.4	75.6	1990-1992	74.90	81.44	2020
	Brazil	62.30	67.60	1985-1990	64.6	72.3	1999	73.14	79.67	2023
Africa	Egypt	52.29	61.97	1985-1990	65.1	69.0	1996	69.1	74.1	2024
	South Africa	57.51	63.48	1985-1990	51.5	58.1	1995-2000	60.0	65.6	2022
Oceania	Australia	72.32	76.83	1985	76.6	82.0	1998-2000	81.07	85.11	2021-2023
	New Zealand	70.97	76.83	1985	75.7	80.8	1998-2000	80.3	83.65	2022-2024

Source: Ministry of Health, Labour and Welfare, Abridged Life Table(1988, 2001, 2024)  
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
2024	5.7	13.3	△ 7.6	1.8	0.9

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				2024			
		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	<sup>(2024)</sup> 5.7	<sup>(2024)</sup> 13.3	<sup>(2024)</sup> 1.8	<sup>(2024)</sup> 0.9
	Israel	26.9	5.7	31.0		<sup>(2024)</sup> 18.6	<sup>(2024)</sup> 5.3	<sup>(2023)</sup> 2.7	<sup>(2023)</sup> 1.7
	India	<sup>(1960 ~ 65)</sup> 44.0	8.2	86.5		<sup>(2020)</sup> 19.5	<sup>(2020)</sup> 6.0	<sup>(2023)</sup> 24.5	<sup>(2023)</sup> 17.3
	Indonesia	<sup>(1960 ~ 65)</sup> 46.5	21.9	83.9		<sup>(2010)</sup> 25.3	<sup>(2010)</sup> 5.2	<sup>(2023)</sup> 17.0	<sup>(2023)</sup> 10.5
	Korea	39.6	12.4			<sup>(2023)</sup> 4.5	<sup>(2023)</sup> 6.9	<sup>(2023)</sup> 2.3	<sup>(2023)</sup> 1.2
	China	<sup>(1960 ~ 65)</sup> 33.8	13.6			<sup>(2023)</sup> 6.4	<sup>(2023)</sup> 7.9	<sup>(2023)</sup> 4.5	<sup>(2023)</sup> 2.8
Europe	Iceland	28.0	6.6	17.5		<sup>(2024)</sup> 11.2	<sup>(2024)</sup> 6.8	<sup>(2023)</sup> 1.9	<sup>(2023)</sup> 1.3
	Italy	18.4	9.6	43.9	23.9	<sup>(2023)</sup> 6.4	<sup>(2023)</sup> 11.4	<sup>(2023)</sup> 2.3	<sup>(2023)</sup> 1.6
	UK	17.5	11.5	22.5	16.0	<sup>(2023)</sup> 9.6	<sup>(2023)</sup> 9.7	<sup>(2023)</sup> 4.0	<sup>(2023)</sup> 2.7
	Austria	17.9	12.7	37.5	24.6	<sup>(2024)</sup> 8.4	<sup>(2024)</sup> 9.7	<sup>(2023)</sup> 2.6	<sup>(2023)</sup> 2.0
	Netherlands	20.8	7.7	17.9	13.5	<sup>(2023)</sup> 9.2	<sup>(2023)</sup> 9.5	<sup>(2023)</sup> 3.5	<sup>(2023)</sup> 2.6
	Switzerland	17.6	9.7	21.1	16.1	<sup>(2023)</sup> 8.9	<sup>(2023)</sup> 8.0	<sup>(2023)</sup> 3.5	<sup>(2023)</sup> 2.8
	Sweden	13.6	10.0	16.0	13.4	<sup>(2023)</sup> 9.5	<sup>(2023)</sup> 9.0	<sup>(2023)</sup> 2.0	<sup>(2023)</sup> 1.4
	Czech Republic	13.4	9.2	23.5	13.1	<sup>(2024)</sup> 7.7	<sup>(2024)</sup> 10.3	<sup>(2023)</sup> 2.1	<sup>(2023)</sup> 1.3
	Denmark	16.6	9.5	21.5	16.1	<sup>(2024)</sup> 9.6	<sup>(2024)</sup> 9.6	<sup>(2023)</sup> 3.0	<sup>(2023)</sup> 1.8
	Germany	17.5	11.6	33.8	23.2	<sup>(2024)</sup> 8.1	<sup>(2024)</sup> 12.1	<sup>(2023)</sup> 3.1	<sup>(2023)</sup> 2.3
	Norway	17.3	9.1	18.9	11.7	<sup>(2024)</sup> 9.7	<sup>(2024)</sup> 8.0	<sup>(2023)</sup> 1.9	<sup>(2023)</sup> 1.3
	Finland	18.5	9.0	21.0	14.4	<sup>(2024)</sup> 7.8	<sup>(2024)</sup> 10.4	<sup>(2023)</sup> 1.8	<sup>(2023)</sup> 1.3
	France	17.9	11.4	27.4	17.7	<sup>(2024)</sup> 9.5	<sup>(2024)</sup> 9.5	<sup>(2023)</sup> 3.4	<sup>(2023)</sup> 2.8
	Russia	24.9	7.1	32.6		<sup>(2024)</sup> 8.4	<sup>(2024)</sup> 12.4	<sup>(2023)</sup> 3.7	<sup>(2023)</sup> 1.7
North America	USA	23.8	9.5	26.0	18.7	<sup>(2024)</sup> 10.6	<sup>(2024)</sup> 9.0	<sup>(2023)</sup> 5.5	<sup>(2023)</sup> 3.4
	Canada	26.3	7.8	27.3		<sup>(2023)</sup> 8.8	<sup>(2023)</sup> 8.1	<sup>(2023)</sup> 4.4	<sup>(2023)</sup> 3.4
	Mexico	41.7	11.5	74.2	<sup>(1970)</sup> 28.1	<sup>(2023)</sup> 15.8	<sup>(2023)</sup> 6.0	<sup>(2023)</sup> 10.8	<sup>(2023)</sup> 7.6
South America	Argentina	23.0	8.7	62.4		<sup>(2023)</sup> 9.9	<sup>(2023)</sup> 7.6	<sup>(2023)</sup> 8.2	<sup>(2023)</sup> 5.0
	Brazil	<sup>(1960 ~ 65)</sup> 42.1	10.2			<sup>(2022)</sup> 11.8	<sup>(2022)</sup> 7.0	<sup>(2023)</sup> 12.5	<sup>(2023)</sup> 7.6
Africa	Egypt	43.0		<sup>(1979)</sup> 76.4		<sup>(2023)</sup> 17.5	<sup>(2022)</sup> 5.8	<sup>(2023)</sup> 16.2	<sup>(2023)</sup> 9.3
	South Africa	40.2	14.8			<sup>(2023)</sup> 13.6	<sup>(2021)</sup> 10.1	<sup>(2023)</sup> 24.4	<sup>(2023)</sup> 11.7
Oceania	Australia	22.4	8.6	20.2	14.6	<sup>(2023)</sup> 10.8	<sup>(2023)</sup> 6.9	<sup>(2023)</sup> 3.1	<sup>(2023)</sup> 2.3
	New Zealand	26.5	8.8	22.6	13.5	<sup>(2024)</sup> 11.0	<sup>(2024)</sup> 7.1	<sup>(2023)</sup> 4.0	<sup>(2023)</sup> 2.7

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

UN 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	2022	2023	2024	
No. of Deaths	970,331	982,379	1,014,951	1,028,602	1,083,796	1,084,460	1,108,334	1,142,407	1,141,865	1,197,014	1,253,066	1,256,359	1,268,436	1,273,025	1,290,510	1,308,158	1,340,557	1,362,470	1,381,093	1,372,755	1,439,856	1,569,050	1,576,016	1,605,298
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	1,956	1,893	2,306	2,204	2,087	1,909	1,845	1,664	1,587	1,461
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	373,068	373,365	373,584	376,425	378,385	381,505	385,797	382,504	384,099
Stomach	49,958	49,213	49,535	50,562	50,311	50,415	50,897	50,160	50,017	50,136	49,830	49,129	48,632	47,904	46,681	45,546	45,227	44,192	42,931	42,319	41,624	40,711	38,771	37,866
Liver	34,311	34,637	34,089	34,510	34,268	33,682	33,599	33,665	32,725	32,765	31,875	30,690	30,175	29,544	28,890	28,335	27,116	25,925	25,264	24,839	24,102	22,908	22,464	
Trachea, Bronchus & Lung	55,034	56,405	56,720	59,922	62,063	63,255	65,808	66,849	67,583	69,813	70,293	71,518	72,734	73,396	74,382	73,860	74,127	74,328	75,394	75,985	76,212	76,663	75,762	75,565
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	14,945
Hypertensive disease	5,857	5,621	5,597	5,706	5,835	5,810	6,144	6,264	6,223	6,760	7,023	7,165	6,932	6,832	6,726	6,843	6,970	9,581	9,549	10,003	10,223	11,665	11,396	11,791
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	226,277
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	109,553	109,896	108,186	106,552	102,978	104,595	107,481	104,533	102,808
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	80,171
Hepatic disease	15,848	15,490	15,737	15,885	16,430	16,267	16,195	16,288	15,969	16,216	16,390	15,980	15,930	15,692	15,669	15,780	17,019	17,275	17,273	17,688	18,017	18,896	18,638	18,849
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	29,661
Senility without psychosis	22,140	22,692	23,449	24,126	26,360	27,784	30,724	35,975	36,670	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	206,882
Accidents	39,496	38,643	38,714	38,193	39,863	39,270	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	45,689
Suicides	29,375	29,949	32,109	30,247	30,553	29,921	30,827	30,229	30,707	29,554	28,886	26,433	26,063	24,417	23,152	21,021	20,468	20,031	19,425	20,243	20,291	21,252	21,037	19,594
Total	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	1334.5
Deaths per 100,000 population	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	1.2
Tuberculosis	238.8	241.7	245.4	253.9	268.3	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	319.3
Malignant Neoplasms	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	31.5
Stomach	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	18.7
Liver	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	62.8
Trachea, Bronchus & Lung	9.6	10.0	10.2	10.8	11.1	11.1	11.5	11.5	11.4	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	12.4
Diabetes	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	5.7	7.7	7.7	8.1	8.3	9.6	9.4	9.8
Hypertensive 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	188.1
Heart disease (excluding hypertensive heart 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	85.5
Cerebrovascular disease	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	66.6
Pneumonia	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	15.7
Hepatic 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	24.7
Renal disease	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	98.5	107.3	123.8	147.1	156.7	172.0
Senility without psychosis	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	38.0
Accidents	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	18.8	16.4	16.1	15.7	16.4	16.5	17.4	17.4	16.3
Suicides																								

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	8.12	11.39
2022	466,967	3.7	373.7	4.2	8.23	11.40
2023	480,915	3.0	386.7	3.5	8.08	10.99

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	2023	
Australia	..	8,075	19,868	40,920	44,113	48,389	50,897	58,208	57,957	61,281	66,608	71,188	74,080	79,173	85,096	87,619	94,544	106,967	113,246	121,735	124,584	130,024	133,202	149,254	168,128	179,687	..	..
% of GDP	..	5.8	6.5	7.6	7.7	7.9	8.1	8.2	8.0	8.1	8.4	8.5	8.5	8.4	8.5	8.7	8.7	8.8	8.9	9.0	9.1	9.1	9.3	10.3	10.7	10.5	9.9	..
Austria	1,295	5,866	11,379	22,793	23,332	25,401	26,231	27,967	28,673	30,174	31,531	33,516	34,203	35,730	36,633	38,817	40,582	41,713	43,076	45,864	47,339	49,311	53,423	56,133	66,854	69,625	70,289	..
% of GDP	..	4.9	7.1	7.7	9.4	9.5	9.6	9.8	9.7	9.6	9.6	9.8	10.3	10.3	10.3	10.4	10.3	10.4	10.5	10.5	10.6	10.5	10.6	11.4	12.2	11.2	11.2	..
Belgium	1,444	5,840	12,975	23,565	24,738	27,321	30,198	32,252	32,621	33,700	35,158	37,988	41,085	43,482	45,294	47,712	50,081	51,807	54,614	57,144	59,058	61,816	66,778	70,346	75,936	80,666	84,554	..
% of GDP	..	3.9	6.2	7.1	8.0	8.2	8.3	8.2	8.3	8.2	8.1	8.1	8.6	8.6	8.4	8.6	8.6	8.6	8.6	8.9	9.0	9.1	10.0	10.9	11.5	11.3	10.7	10.8
Canada	5,942	19,412	47,069	75,198	81,408	86,493	92,217	99,731	106,144	113,441	121,867	127,810	132,509	141,296	145,183	150,901	155,685	161,135	165,840	182,527	189,306	198,143	203,421	236,105	264,071	267,703	282,410	..
% 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	10.1	10.4	10.5	10.4	10.3	10.8	11.1	10.9	10.9	10.9	13.0	12.4	11.1	11.2	..
Denmark	..	4,083	7,410	12,528	13,252	14,578	14,678	15,784	16,339	17,876	19,460	20,763	22,183	23,666	23,765	24,752	25,364	25,902	26,829	28,033	29,476	30,745	32,890	35,845	40,487	39,317	38,982	..
% of GDP	..	8.5	8.0	8.1	8.4	8.7	8.9	9.0	9.1	9.2	9.3	9.5	10.6	10.6	10.4	10.5	10.3	10.3	10.4	10.3	10.1	10.1	10.2	10.7	10.7	9.5	9.5	..
France	9,947	36,444	84,869	163,337	176,023	194,303	189,708	198,275	205,672	216,436	229,033	239,345	250,347	262,293	271,322	282,278	301,311	308,576	312,709	330,918	336,868	344,230	372,360	397,081	433,861	456,883	468,209	..
% of GDP	..	5.2	6.8	8.1	9.6	9.8	10.1	10.2	10.2	10.4	10.3	10.5	10.5	10.5	11.2	11.2	11.5	11.6	11.5	11.6	11.4	11.3	11.2	12.1	12.2	11.8	11.5	..
Germany	15,416	55,896	108,982	235,109	244,492	263,269	270,321	275,242	277,911	288,116	302,329	317,895	333,274	353,644	365,042	379,997	397,823	415,623	430,939	464,907	490,982	517,921	563,818	612,421	674,107	719,643	708,207	..
% of GDP	..	5.7	8.1	8.0	9.8	9.8	10.0	10.2	10.0	10.1	10.0	9.8	10.0	10.0	10.8	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2	11.4	12.5	12.7	12.4	11.7
Ireland	343	1,623	2,642	6,964	8,254	9,511	10,305	11,416	12,868	13,682	14,888	16,357	17,485	18,475	19,155	19,916	19,759	19,473	20,266	21,747	22,644	23,878	26,032	28,317	31,792	35,175	37,324	..
% of GDP	..	4.9	7.5	5.6	5.9	6.4	6.7	7.0	7.2	7.6	7.5	7.8	8.1	8.5	8.9	8.8	8.8	8.9	9.2	9.1	7.3	6.9	6.7	6.6	7.0	6.4	6.0	6.6
Italy	..	72,253	115,649	122,628	130,820	131,196	141,381	145,161	154,739	157,535	173,602	184,041	183,973	184,154	185,385	188,306	199,446	205,611	211,320	226,853	239,375	260,703	279,972	285,923	..	..	..	..
% of GDP	..	..	7.0	7.5	7.7	7.8	8.1	8.3	8.4	8.1	8.5	8.9	8.8	8.9	8.8	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.6	8.6	9.6	9.3	8.9	8.4
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	574,069	545,285	559,136	575,857	589,693	612,603	682,441	747,645	..	..
% of GDP	..	4.3	6.1	5.7	7.0	7.2	7.4	7.5	7.7	7.7	7.8	8.1	9.0	9.0	9.1	10.5	10.7	10.7	10.8	10.7	10.7	10.7	11.0	11.5	12.1	12.3	..	
Korea	625	3,495	15,179	33,716	39,759	40,999	48,700	52,011	57,164	64,425	70,550	77,294	85,015	95,010	100,586	105,510	109,104	114,479	129,534	137,765	145,460	159,449	174,696	187,548	212,588	239,467	237,170	..
% of GDP	..	2.5	3.3	3.5	3.7	4.2	3.9	4.5	4.4	4.6	5.0	5.2	5.7	5.8	5.9	6.0	6.1	6.2	6.5	6.6	6.8	7.1	7.7	8.0	8.3	8.8	8.5	..
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	4,117	4,476	4,780	..
% of GDP	..	..	4.8	5.3	5.9	6.4	6.8	7.0	7.3	7.1	6.6	6.2	6.2	6.2	6.0	5.3	5.2	5.2	5.1	5.1	5.1	5.1	5.3	5.5	5.8	5.6	5.7	..
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	83,486	86,784	90,004	94,468	102,480	113,648	128,284	133,049	136,130	..
% of GDP	..	..	7.0	7.7	8.0	8.6	9.0	9.1	9.1	9.0	9.0	9.2	9.0	9.2	10.1	10.1	10.5	10.5	10.2	10.1	9.9	9.9	9.9	11.0	11.1	10.0	9.8	..
Norway	598	2,484	5,772	12,550	13,267	15,381	15,738	16,785	17,295	18,478	20,306	21,955	22,579	23,359	24,593	26,145	27,866	29,320	29,722	30,906	32,899	34,501	36,942	38,844	42,670	46,565	..	..
% of GDP	..	4.0	5.4	7.1	7.7	8.0	8.3	8.8	8.3	7.9	8.0	7.9	8.0	8.9	8.7	8.7	8.9	8.9	9.3	10.1	10.5	10.2	10.0	10.4	11.4	9.8	7.9	..
Portugal	387	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	26,394	27,306	29,068	29,937	32,231	35,294	36,915	43,791	48,093	..
% of GDP	..	2.3	4.8	5.5	6.6	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	..
Spain	2,805	12,382	31,934	61,842	66,834	74,722	85,371	91,497	97,238	106,939	113,212	123,794	128,275	128,760	129,077	129,112	130,537	134,619	142,280	148,574	156,931	162,847	180,092	189,259	209,003	226,663	238,241	..
% of GDP	..	3.1	5.0	6.1	6.8	6.8	6.8	7.6	7.7	7.8	7.9	8.0	8.4	9.2	9.2	9.2	9.1	9.2	9.2	9.0	9.0	9.1	9.2	10.8	10.3	9.7	9.2	..
Sweden	2,188	7,464	12,749	19,488	21,340	23,516	23,948	24,941	25,373	27,251	29,410	31,365	31,954	31,998	42,221	44,735	45,560	47,365	49,289	51,228	52,799	55,483	59,534	62,832	68,922	73,162	77,592	..
% of GDP	..	5.4	7.7	7.2	7.3	7.9	8.2	8.3	8.1	8.2	8.0	8.2	8.8	8.3	10.5	10.8	11.0	11.1	10.9	11.0	11.0	11.0	11.1	11.0	11.4	11.3	10.9	11.3
Switzerland	2,018	6,070	14,343	23,902	25,704	28,316	28,731	30,355	30,537	31,677	34,716	37,512	39,180	39,719	41,611	44,511	48,083	50,167	52,819	55,888	56,740	58,223	63,084	65,832	73,046	79,778	82,674	..
% of GDP	..	4.8	6.4	7.6	9.1	9.5	10.1	10.2	10.1	9.6	9.4	9.5	10.1	10.0	10.1	10.3	10.6	10.7	11.0	11.2	11.4	11.2	11.4	12.0	12.0	11.6	11.7	..
UK	6,907	21,690	44,790	111,264	123,346	138,710	146,648	163,228	164,766	177,118	187,731	197,910	202,510	211,987	217,660	228,316	237,114	244,729	250,133	261,044	269,432	279,422	304,465	359,146	387,476	418,328	437,747	..
% of GDP	..	4.0	5.1	5.1	7.1	7.4	7.9	8.1	8.3	8.4	8.5	8.8	9.0	9.8	9.8	9.9	10.0	10.0	9.9	9.9	9.7	9.8	10.0	12.1	12.1	11.1	11.0	..
USA	67,044	235,473	670,174	1,280,346	1,393,446	1,529,567	1,6																					

## 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	8.12	358.8	38.0	25.3	12.7	50.0	21.6	28.3	11.6	0.4
2022	466,967	8.23	373.7	37.9	25.3	12.6	50.0	21.7	28.3	11.6	0.5
2023	480,915	8.08	386.7	37.5	24.8	12.7	50.2	22.0	28.2	11.8	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	4,538	42.9	31.9	10.9	34.1	17.1	6.3
2001	1,256	14.0	4,893	43.8	32.8	11.0	34.5	16.4	5.7
2002	1,365	14.9	5,325	43.9	32.7	11.1	34.6	16.1	5.5
2003	1,476	15.4	5,737	43.9	33.0	10.9	34.7	16.0	5.5
2004	1,582	15.5	6,081	44.4	33.4	11.0	34.5	15.7	5.4
2005	1,694	15.5	6,445	44.4	33.2	11.1	34.7	15.6	5.4
2006	1,805	15.7	6,819	44.9	34.4	10.5	34.2	15.4	5.5
2007	1,920	15.9	7,176	44.9	34.5	10.4	34.1	15.3	5.7
2008	2,006	16.3	7,392	46.0	35.8	10.2	33.8	15.0	5.2
2009	2,104	17.2	7,651	47.0	37.9	9.1	33.6	14.2	5.2
2010	2,180	17.2	7,885	47.4	38.5	9.0	33.2	13.9	5.5
2011	2,254	17.2	8,080	47.5	37.6	9.9	33.3	13.9	5.3
2012	2,347	17.1	8,341	47.3	37.0	10.3	33.2	13.8	5.7
2013	2,408	16.9	8,509	47.9	37.5	10.4	32.4	13.9	5.8
2014	2,532	17.1	8,921	48.4	38.5	9.9	32.3	13.6	5.7
2015	2,682	17.4	9,348	48.5	38.8	9.6	32.5	13.4	5.5
2016	2,806	17.7	9,709	48.0	38.6	9.4	32.8	13.4	5.8
2017	2,918	17.7	10,022	48.0	38.7	9.3	32.8	13.2	6.0
2018	3,042	17.6	10,457	48.0	38.9	9.2	32.7	13.2	6.0
2019	3,205	17.7	10,888	48.2	39.3	8.9	32.6	13.1	6.1
2020	3,406	19.7	12,036	52.1	44.2	7.8	30.0	12.1	5.9
2021	3,622	18.4	12,483	50.4	42.7	7.7	30.9	12.6	6.0
2022	3,806	17.6	13,020	49.8	42.0	7.8	31.7	12.9	5.6
2023	4,163	17.7	13,889	49.2	40.9	8.2	32.2	12.6	6.0
2024	4,510	18.0	14,775	48.8	39.9	8.9	32.6	12.3	6.3

Note :

1. '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.
2. 'Insurance Premium' includes only Private Health Insurance.
3. 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
2023	1,143,812	480,915	119,252	10.4	24.8

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](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	1,156.2	369.3	20.7	31.9
2003	2,140.4	1,475.6	486.9	22.7	33.0
2004	2,318.8	1,582.0	529.1	22.8	33.4
2005	2,479.4	1,693.6	563.0	22.7	33.2
2006	2,708.7	1,805.3	620.6	22.9	34.4
2007	2,784.3	1,920.3	661.8	23.8	34.4
2008	2,931.2	2,006.0	719.0	24.5	35.8
2009	3,997.8	2,104.5	798.0	20.0	37.9
2010	3,720.7	2,179.8	838.4	22.5	38.5
2011	3,818.8	2,253.9	848.1	22.2	37.6
2012	3,795.5	2,347.2	869.3	22.9	37.0
2013	3,684.9	2,407.9	902.8	24.5	37.5
2014	3,650.5	2,532.0	974.9	26.7	38.5
2015	3,758.6	2,681.9	1,041.4	27.7	38.8
2016	3,951.3	2,806.5	1,083.8	27.4	38.6
2017	3,980.7	2,918.3	1,129.0	28.4	38.7
2018	4,173.0	3,042.3	1,182.4	28.3	38.9
2019	4,529.2	3,205.3	1,258.8	27.8	39.3
2020	4,789.7	3,405.8	1,506.5	31.5	44.2
2021	7,249.5	3,621.6	1,546.1	21.3	42.7
2022	5,851.6	3,806.2	1,597.0	27.3	42.0
2023	6,371.8	4,162.8	1,704.2	26.7	40.9
2024	6,940.9	4,510.2	1,800.7	25.9	39.9

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	487,689	557,908	336,140	112,912	1,381,737
2023	455,799	563,936	335,192	115,915	1,354,928
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	35.3	40.4	24.3	8.2	100.0
2023	33.6	41.6	24.7	8.6	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	8.2	2.8	33.7
2023	10.4	12.9	7.7	2.7	31.0

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/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](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
2024	179,645	8,060	1,057	-	-	7,003	707	105,207	5,415	99,792	66,378	20	66,358	63,203
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
2024	145.1	6.5	0.9	-	-	5.7	0.6	85.0	4.4	80.6	53.6	-	-	51.1

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
2024	1,469,845	316,147	1,941	3,508	268,521	879,728	-	72,451	4,088	61	1,542,357
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
2024	1,187.3	255.4	1.6	2.8	216.9	710.6	-	58.5	3.3	0.0	1,245.8

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
2024	347,772	103,652	1,596,164	329,045
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
2024	281	84	1,289	266

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

<b>C1</b>	Exchange Rates .....	104
<b>C2</b>	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	2024
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	1.52
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	1.37
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	7.20
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	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	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	151.37
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	1,363.38
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	10.57
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	0.88
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	0.78
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	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, 2026)

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.
Mochida Pharma.	MOCHIDA PHARMACEUTICAL CO., LTD.
MSD	MSD K.K.
Nippon Chemiphar	NIPPON CHEMIPHAR CO., LTD.

Abbreviated Name	Official Name
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.
Taiho Pharma.	TAIHO PHARMACEUTICAL CO., LTD.
Taisho Pharma.	TAISHO PHARMACEUTICAL CO., LTD.
Takeda	TAKEDA PHARMACEUTICAL COMPANY LIMITED
Tanabe Pharma	Tanabe Pharma Corporation
Teijin Pharma	TEIJIN PHARMA LIMITED
Teikoku Seiyaku	TEIKOKU SEIYAKU CO., LTD.
Toa Eiyo	TOA EIYO LTD.
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.



