



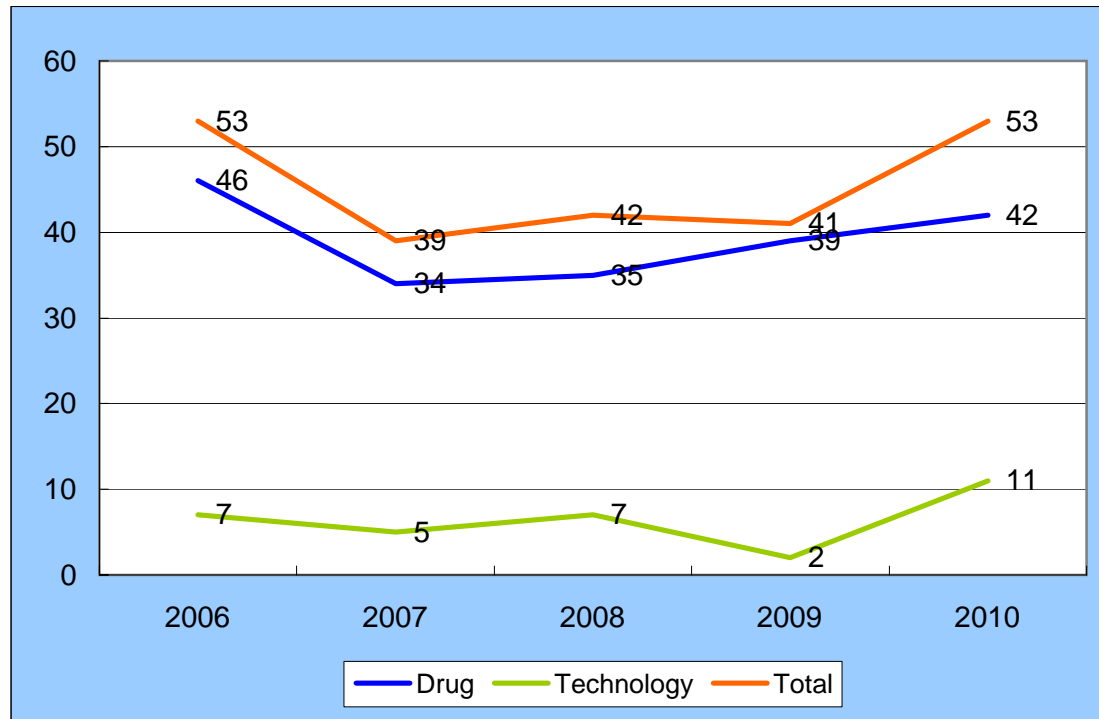
## **Trend of Partnering in Japan (2006-2010)**

**May 2011**

**Biolink International, Inc.**

Partnering Total (2006-2010)

	2006	2007	2008	2009	2010
Drug	46	34	35	39	42
Technology	7	5	7	2	11
Total	53	39	42	41	53



Compiled by Biolink International, Inc.

Partnering in 2010

	Total	1Q	2Q	3Q	4Q
Drug Total	42	5	12	10	15
Licensing to Japan	31	5	9	8	9
Licensing from Japan	11	0	3	2	6
Technology Total	11	1	1	2	7
Licensing to Japan	7	1	0	1	5
Licensing from Japan	4	0	1	1	2
Total	53	6	13	12	22
Licensing to Japan	38	6	9	9	14
Licensing from Japan	15	0	4	3	8

Compiled by Biolink International, Inc.

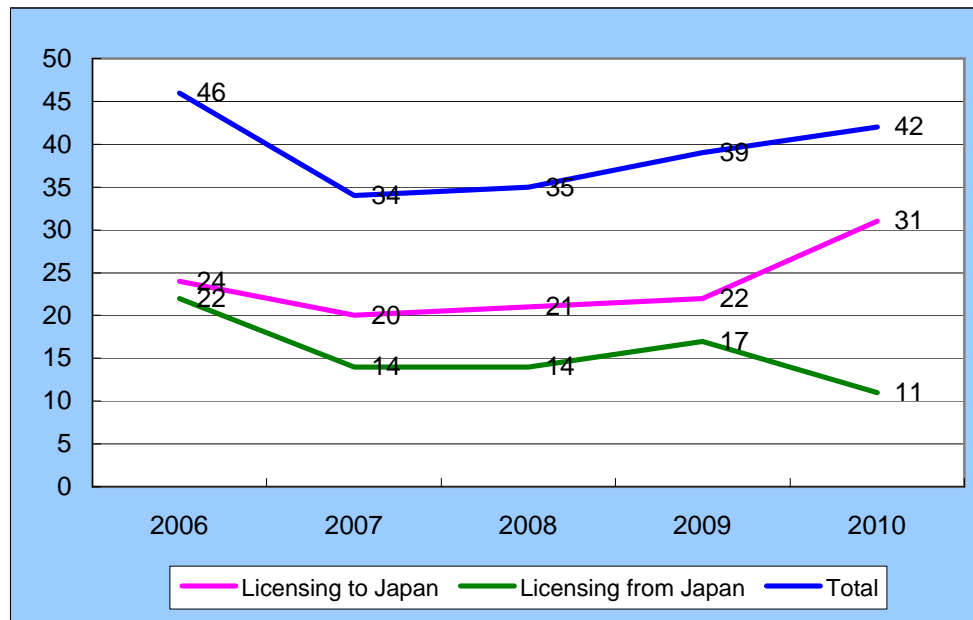
[Breakdown by Therapeutic Group in 2010](#)

	Ranking	2010	
		No. of In/Out-Licensing	%
1	Cancer & Cancer Relates	7	16.7
2	Infection, HIV	5	11.9
3	Ophthalmologic Disease	4	9.5
4	Kidney, Urinary Disease	4	9.5
5	Alzheimer, CNS Disease	4	9.5
6	Hyperlipemia, Hematologic Disease	3	7.1
7	Cardiovascular Disease	2	4.8
8	Digestive Disease	2	4.8
9	Psychiatric Disease	2	4.8
10	Immunology	2	4.8
	Others	7	16.7
	Total	42	100.0

Complied by Biolink International, Inc.

Drug Partnering Total (2006-2010)

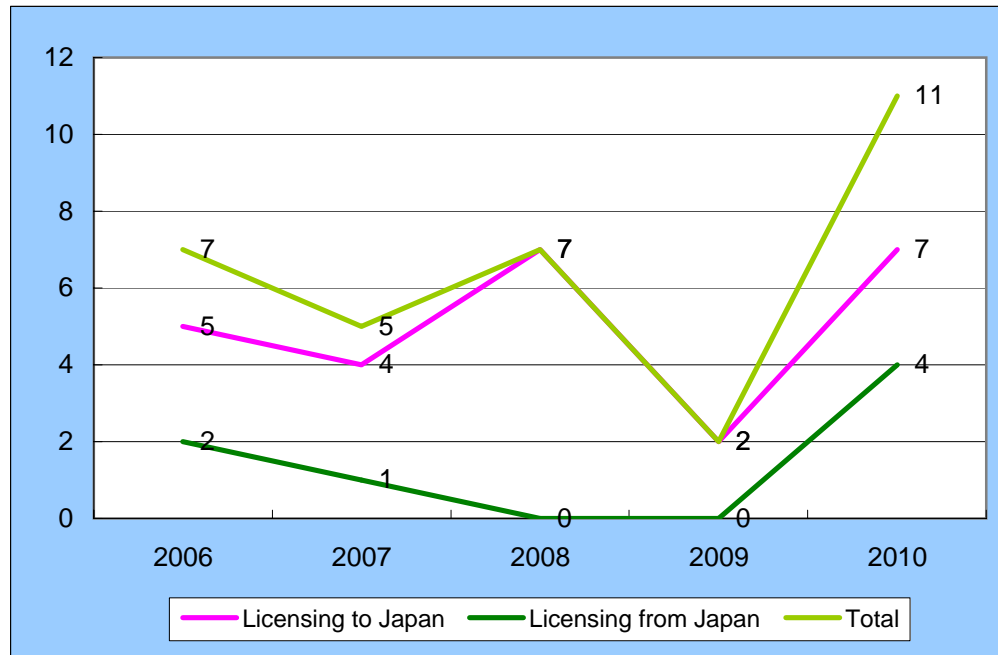
	2006	2007	2008	2009	2010
Licensing to Japan	24	20	21	22	31
Licensing from Japan	22	14	14	17	11
Total	46	34	35	39	42



Compiled by Biolink International, Inc.

Technology License Total (2006-2010)

	2006	2007	2008	2009	2010
Licensing to Japan	5	4	7	2	7
Licensing from Japan	2	1	0	0	4
Total	7	5	7	2	11



Compiled by Biolink International, Inc.

Licensing to Japan by Therapeutic Group (2006-2010)

Ranking by 2010		2010		2009		2008		2007		2006	
		No. of In-Licensing	%	No. of In-Licensing	%	No. of In-Licensing	%	No. of In-Licensing	%	No. of In-Licensing	%
1	Cancer & Cancer Relates	7	22.6	7	31.8	3	14.3	4	20.0	7	29.2
2	Infection, HIV	3	9.7	2	9.1	1	4.8	1	5.0	2	8.3
3	Kidney, Urinary Disease	3	9.7	0	0.0	0	0.0	0	0.0	1	4.2
4	Alzheimer, CNS Disease	2	6.5	2	9.1	2	9.5	3	15.0	0	0.0
5	Psychiatric Disease	2	6.5	1	4.5	2	9.5	2	10.0	1	4.2
6	Hyperlipemia, Hematologic Disease	2	6.5	0	0.0	0	0.0	1	5.0	4	16.7
7	Cardiovascular Disease	2	6.5	0	0.0	0	0.0	1	5.0	1	4.2
	Others	10	32.3	10	45.5	13	61.9	8	40.0	8	33.3
	Total	31	100.0	22	100.0	21	100.0	20	100.0	24	100.0

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Licensing from Japan by Therapeutic Group (2006-2010)

Ranking by 2010	2010		2009		2008		2007		2006	
	No. of Out-Licensing	%	No. of Out-Licensing	%	No. of Out-Licensing	%	No. of Out-Licensing	%	No. of Out-Licensing	%
1 Ophthalmologic Disease	3	27.3	0	0.0	0	0.0	0	0.0	0	0.0
2 Infection, HIV	2	18.2	3	17.6	0	0.0	2	14.3	3	13.6
3 Alzheimer, CNS	2	18.2	0	0.0	1	7.1	0	0.0	0	0.0
4 Hyperlipemia, Hematologic Disease	1	9.1	0	0.0	0	0.0	0	0.0	0	0.0
5 Digestive Disease	1	9.1	0	0.0	1	7.1	0	0.0	2	9.1
6 Kidney, Urinary Disease	1	9.1	4	23.5	0	0.0	0	0.0	0	0.0
7 Immunology	1	9.1	1	5.9	1	7.1	2	14.3	1	4.5
Others	0	0.0	9	52.9	11	78.6	10	71.4	16	72.7
Total	11	100.0	17	100.0	14	100.0	14	100.0	22	100.0

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**Number of Partnering Deals by Company (2010)**

	Total	Drug		Technology	
		No. of In-Licensing	No. of Out-Licensing	No. of In-Licensing	No. of Out-Licensing
Total	54	32	11	7	4
Kyowahakko Kirin	6	1	2	0	3
Astellas	5	3	0	2	0
Eisai	5	3	1	1	0
Takeda	5	4	0	1	0
Ono	4	3	0	1	0
Nippon Kayaku	4	3	1	0	0
Nippon Shinyaku	3	3	0	0	0
Shionogi	3	2	1	0	0
Asahi Kasei Pharma	2	1	1	0	0
Asuka	2	1	1	0	0
Kissei	2	2	0	0	0
Mochida	2	2	0	0	0
Otsuka	2	1	1	0	0
Tanabe Mitsubishi	2	0	1	1	0
Chugai	1	1	0	0	0
Daiichi Sankyo	1	0	0	1	0
Dainippon Sumitomo	1	1	0	0	0
Kyorin	1	0	1	0	0
Santen	1	1	0	0	0
Teijin Pharma	1	0	1	0	0
Toray	1	0	0	0	1

(Includes research collaborations)