

## Reference information

# Research & development

### Pipeline of prescription pharmaceuticals (Clinical studies)

Generic name	Brand name/dev. code	Indication	Original/licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
Levofloxacin (0.5%)	Cravit	Bacterial conjunctivitis	Daiichi Sankyo	Japan						Apr-00
	Quixin			USA						Nov-00
	Ofraqix			Europe						May-02
Levofloxacin + prednisolone A	DE-094	Infectious keratitis	Daiichi Sankyo	USA						

Characteristics: Fluoroquinolone antibacterial agent. Levofloxacin + prednisolone A is a combination treatment with steroids.

Generic name	Dev. code	Indication	Original/licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
Tafluprost	DE-085	Glaucoma/ Ocular hypertension	Co-development with Asahi Glass	Japan						Jul-06
				Europe						Apr-07
				USA						

Characteristics: Prostaglandin derivative treatment for glaucoma and ocular hypertension. In Japan, a comparison study demonstrated its non-inferiority to latanoprost and we filed for manufacturing and marketing approval for glaucoma and ocular hypertension. In Europe, applied for approval in April, 2007 based on the results of 1) the sub-analysis of the comparison study demonstrated its non-inferiority to latanoprost although it did not demonstrate its non-inferiority to latanoprost for the primary analysis, and 2) another comparison study demonstrated non-inferiority to timolol maleate ophthalmic solution. In the USA, we will decide our future development plan based on the study results and marketability.

Generic name	Dev. code	Indication	Original/licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
Diquafosol tetrasodium	DE-089	Corneal and conjunctival epithelial disorder associated with dry eye, etc.	Inspire Pharm.	Japan						

Characteristics: A treatment for corneal and conjunctival epithelial disorder mostly associated with dry eye, etc. that stimulates the ocular surface to secrete tear fluid and components. Expected to be used in combination with existing treatments.

Generic name	Dev. code	Indication	Original/licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
Olmesartan	DE-092	Glaucoma/ Ocular hypertension	Daiichi Sankyo	Japan						
				USA/Europe		pilot study				

Characteristics: The angiotensin II receptor antagonist. In Japan, Europe and the USA, the Phase II studies did not demonstrate clear dose-response, and therefore we decided to suspend clinical studies. We are now conducting the phase II pilot study in Europe with different formulation.

Generic name	Dev. code	Indication	Original/licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
Lomerizine HCl	DE-090	Glaucoma	Nippon Organon	Japan						

Characteristics: A new type of oral glaucoma treatment studied for inhibiting the progression of visual field defects. The only calcium antagonist in development as a glaucoma treatment. Compared with NMDA receptor antagonists, fewer systemic side effects are expected, thus having excellent safety. Marketed by Nippon Organon as a migraine treatment.

Generic name	Dev. code	Indication	Original/licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
(Undetermined)	DE-096	Rheumatoid arthritis	Original	Japan						
		Diabetic Macular Edema		Japan						

Characteristics: An oral TNF inhibitor. As a result of P2 in Japan, it was determined that formulation improvement would be necessary in order to improve and get more stable absorption of the study drug from the digestive tract; studies to improve the oral formulation is ongoing.

Generic name	Dev. code	Indication	Original/licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
Gefarnate	DE-099	Corneal and conjunctival epithelial disorder associated with dry eye, etc.	Original	Japan						

Characteristics: Treats corneal and conjunctival epithelial disorder mostly associated with dry eye, by stimulating the secretion of mucin and accelerating the corneal epithelial migration. Preservative-free eye ointment that can be used in combination with existing drugs.

Generic name (USA)	Dev. code	Indication	Original/in-licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
Rivoglitazone	DE-101	Corneal and conjunctival epithelial disorder associated with dry eye, etc.	Daiichi Sankyo	USA						

Characteristics: It is expected to show a potent effect on corneal and conjunctival epithelial disorder mostly associated with dry eye, etc. by directly acting on the corneal and conjunctival epithelial cells. It has an action mechanism which differs from any other existing treatment or drug candidate in development. The compound is currently under development by Daiichi Sankyo as an oral anti-diabetic drug in the USA.

Generic name (USA)	Dev. code	Indication	Original/in-licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
(Undetermined)	DE-102	Diabetic Macular Edema	Co-development with Oakwood (USA)	Japan		(Phase I / IIa)				

Characteristics: A steroid microsphere product for a sustained release injection. Animal studies demonstrated sustained efficacy when injected around the injected area. In order to produce sterile microsphere in commercial scale, we collaborate with Oakwood Laboratories (USA).

Generic name (USA)	Dev. code	Indication	Original/in-licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
(Undetermined)	DE-104	Glaucoma/ Ocular hypertension	Co-development with Ube Industries	USA						

Characteristics: A ROCK inhibitor co-development with Ube Industries for treatment of glaucoma and ocular hypertension which has a different action mechanism from other existing drugs. It is expected to show a strong IOP-reduction by promoting aqueous humor outflow by acting directly on trabecular meshwork cells.

Generic name (USA)	Dev. code	Indication	Original/in-licensor	Region	Ph I	Ph II	Ph III	NDA Filed	Approved	Launched
(Undetermined)	DE-103	Allergic conjunctivitis	Ono Pharmaceutical	Japan						

Characteristics: A PDE4 (Phosphodiesterase type 4) inhibitor for allergic conjunctivitis which has a different action mechanism from the existing drugs. Expected to be effective for allergic conjunctivitis through its inhibitory effect against PDE4.

## Reference information

# Research & development

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### Pipeline of prescription pharmaceuticals (In preparation for clinical trials)

Generic name	Brand name	Indication	Original/in-licensor
Bucillamine	Rimatil	Osteoarthritis (additional indication)	Original

Characteristics: Shown to be effective on joint inflammation caused by osteoarthritis.

### License out

Dev. code	Indication	Licensee	Status	in-licensor
DE-098 (Anti-APO-1 antibody)	Rheumatoid arthritis	Argenes	Phase I / IIa	Centocor

Characteristics: Joint injection that induces apoptosis in diseased joints of rheumatoid arthritis patients. Bulk pharmaceutical manufacturing process for actual production scale has been established. Santen granted the domestic development rights to Argenes, Inc. The compound had been in-licensed from Centocor. In Japan and Europe, the clinical study has been started. Santen continues to hold the marketing rights in Japan and the overseas marketing and development rights.

### Changes from July 31, 2007

[Progress]

Dev. code	Indication	Status change	Clinical trial, NDA filing, Launch Region
DE-103	Allergic conjunctivitis	In preparation for clinical trials to Phase I	Japan

# Pharmaceutical market in Japan

## Revision of National Health Insurance (NHI) drug prices

(%)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Industry average	-	-6.8	-4.4	-9.7	-	-7.0	-	-6.3	-	-4.2	-	-6.7	-
Ophthalmic drugs	-	-3.5	-1.8	-7.5	-	-6.2	-	-6.0	-	-2.7	-	-5.5	-
Santen	-	-2.6	-1.3	-7.2	-	-5.7	-	-6.0	-	-3.2	-	-5.3	-

(Compiled by Santen)

Revision of NHI drug prices: In Japan, drug prices are generally revised every two years to reflect their market price. The drugs marketed at lower market prices will bear larger reduction margins at the revision.

## Major healthcare reforms

	1997	Enforcement of the Revised Health Insurance System Law Increased contribution for insured employees (10% to 20%) Revision of the Insurance Law for Seniors Contribution: 500 yen/day for out-patients (up to four times a month) and 1,000 yen/day for in-patients
	2001	Revision of the Insurance Law for Seniors Contribution: fixed rate of 10% for out-patients and in-patients
April	2002	Reimbursed consulting fee for physicians were reduced by 2.7% on average Revision of prescription fee (two points are added for every prescription of generic drugs)
October	2002	Increased contribution for seniors (fixed amount system was abolished for a uniform fixed rate system of 10% contribution)
April	2003	Increased contribution for insured employees (20% to 30%)
April	2006	Revision of the prescription form from the standpoint of attempting environmental considerations of the generic use promotion
October	2006	Increased contribution for seniors (from the age of 70) who have a certain amount of income (20% to 30%)

**Market shares**

(Billions of yen)

Half year/year to	9/2005	3/2006	9/2006	3/2007	9/2007
Prescription ophthalmics	41.5% 107.0	40.9% 213.1	40.9% 105.7	39.7% 214.4	39.9% 107.5
Anti-rheumatic drugs	45.1% 12.0	45.2% 23.8	46.3% 11.7	46.3% 23.2	46.3% 12.0

Notes: - On an NHI drug price basis.

- Lower figures indicate market size.

- Anti-rheumatic drugs exclude immunosuppressants and biologic agents.

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Source: Santen analysis based on IMS data

Period: April 2005-Sept 2007; Unauthorized copy prohibited

**Market shares by therapeutic area - prescription ophthalmics**

(Billions of yen)

Half year/year to	9/2005	3/2006	9/2006	3/2007	9/2007
Anti-glaucoma	23.4% 39.7	23.2% 79.0	22.3% 39.9	22.1% 79.9	21.3% 41.3
Anti-infective	78.4% 14.1	78.3% 26.7	76.7% 13.7	76.1% 25.9	74.0% 13.4
Anti-allergy	25.7% 11.4	24.8% 24.6	27.8% 9.7	24.3% 24.7	25.0% 9.4
Agents for surgeries	42.8% 7.2	42.6% 14.4	42.9% 7.1	42.8% 14.1	43.2% 7.5
Corneal disease treatments	80.7% 12.5	80.7% 25.5	79.5% 13.1	79.3% 26.4	78.9% 14.0
Anti-cataract	59.6% 3.3	60.3% 6.5	61.9% 3.2	62.6% 6.3	65.4% 3.1
Corticosteroids	52.8% 5.8	52.6% 11.2	51.6% 5.5	51.4% 10.8	51.5% 5.2

Notes: - On an NHI drug price basis.

- Lower figures indicate market size.

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Source: Santen analysis based on IMS data

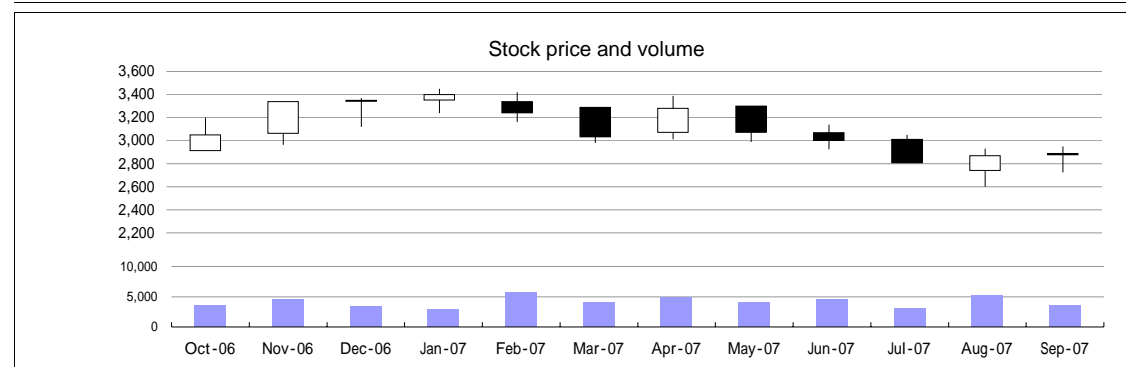
Period: April 2005-Sept 2007; Unauthorized copy prohibited

# Stock information

Stock price (Osaka Securities Exchange 1st market)

(Yen and thousand shares)

	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07
Stock price:												
Open	2,910	3,060	3,340	3,350	3,340	3,290	3,070	3,300	3,070	3,010	2,740	2,890
High	3,200	3,340	3,370	3,450	3,420	3,290	3,390	3,300	3,140	3,050	2,930	2,950
Low	2,910	2,965	3,120	3,240	3,160	2,980	3,010	2,990	2,925	2,805	2,600	2,725
End of month	3,050	3,340	3,350	3,400	3,240	3,030	3,280	3,070	3,000	2,805	2,870	2,875
Volume	3,559	4,596	3,335	2,946	5,777	4,116	4,855	4,081	4,567	3,135	5,161	3,621



## Major shareholders

As of September 30, 2007

Name	Number of shares Held	Percentage of voting rights
	Thousand shares	%
Japan Trustee Service Bank, Ltd.	6,529	7.5
Mita Sangyo Co., Ltd.	4,756	5.5
The Bank of Tokyo-Mitsubishi UFJ, Ltd.	4,296	4.9
Japan master Trust and Banking Co., Ltd.	3,967	4.6
Nippon Life Insurance Company	2,961	3.4
Northern Trust CO. (AVFC) Sub-account American Clients	2,853	3.3
The Silchester International Investors International Value Equity Trust	2,736	3.2
The Tokio Marine and Nichido Fire Insurance Co., Ltd.	2,668	3.1
Northern Trust CO. AVFC Re U.S. tax exempted Pension Funds	2,222	2.6
Trust and Custody Services Bank, Ltd.	1,929	2.2

## Stock option

At half-year/year end	3/2003	3/2004	3/2005	3/2006	3/2007	9/2007
Stock option balance (thousand shares)	335	472.6	504.3	541	569.6	644.9
Granted in June 1998 - 106 thousand shares at 1,540 yen/share	62	62	35	27	24	24
Granted in June 1999 - 66 thousand shares at 2,480 yen/share	66	66	66	57.3	48	44
Granted in June 2000 - 60 thousand shares at 2,705 yen/share	60	60	60	58	48.2	46.2
Granted in June 2001 - 55 thousand shares at 2,299 yen/share	55	55	55	42.6	38.6	38.6
Granted in June 2002 - 92 thousand shares at 1,326 yen/share	92	92	72.5	53.7	32.1	32.1
Granted in June 2003 - 137.6 thousand shares at 1,176 yen/share	-	137.6	137.6	95	72.9	58.4
Granted in June 2004 - 78.2 thousand shares at 1,743 yen/share	-	-	78.2	78.2	73.9	72.1
Granted in June 2005 - 129.2 thousand shares at 2,480 yen/share	-	-	-	129.2	129.2	127.5
Granted in June 2006 - 102.7 thousand shares at 2,715 yen/share	-	-	-	-	102.7	102.7
Granted in June 2007 - 99.3 thousand shares at 3,050 yen/share	-	-	-	-	-	99.3

## Extinguishment of Treasury stock

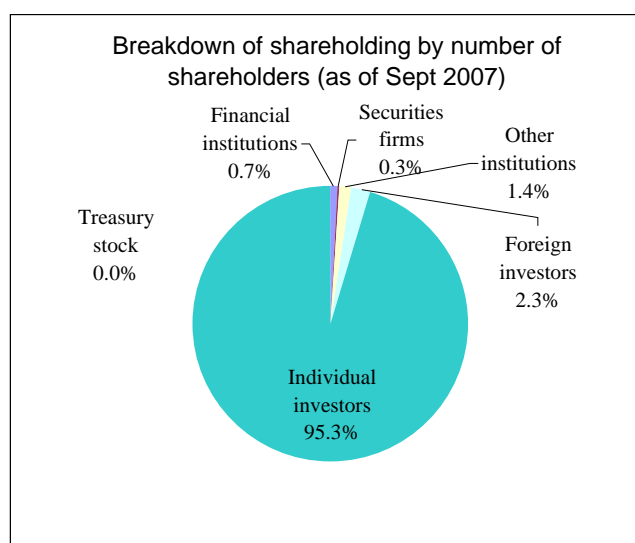
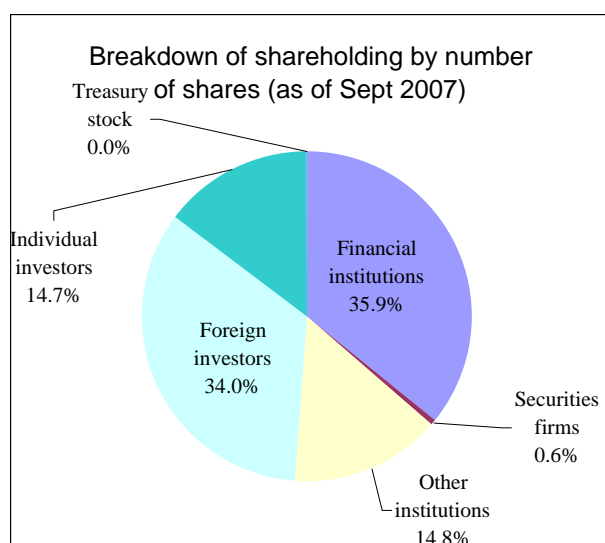
	3/2003	3/2004	3/2005	3/2006	3/2007	9/2007
An extinguished amount of money(millions of yen)	-	3,239	2,548	-	-	-
The number of the extinguished stocks(thousand stocks)	-	2,741	1,351	-	-	-

### Breakdown of shareholding by number of shares

At half-year/year end	9/2005		3/2006		9/2006		3/2007		9/2007	
	Thousand shares	Proportion (%)	Thousand shares	Proportion (%)	Thousand shares	Proportion (%)	Thousand shares	Proportion (%)	Thousand shares	Proportion (%)
Financial institutions	28,597	33.0	29,514	34.0	31,242	36.0	30,366	35.0	31,159	35.9
City & regional banks	4,655	5.4	4,659	5.4	4,646	5.3	4,628	5.3	4,702	5.4
Trust banks (concerned in trust works)	15,790	18.2	16,577	19.1	18,561	21.4	17,049	19.6	17,068	19.7
Life and non-life insurance	13,290		14,039		16,049		14,538		14,594	
Other financial institutions	8,021	9.3	8,004	9.2	7,898	9.1	8,470	9.8	9,111	10.5
Securities firms	129	0.1	274	0.3	135	0.2	217	0.3	278	0.3
Other institutions	747	0.9	865	1.0	1,129	1.3	1,486	1.7	488	0.6
Foreign investors	11,779	13.6	11,823	13.6	11,989	13.8	12,375	14.2	12,851	14.8
Individual investors	33,259	38.4	31,519	36.3	30,085	34.7	31,024	35.7	29,514	34.0
Treasury Stock	12,271	14.1	12,985	15.0	12,286	14.1	11,521	13.3	12,784	14.7
Total	41	0.0	45	0.1	46	0.1	50	0.1	53	0.0
Total	86,696	100.0	86,751	100.0	86,781	100.0	86,825	100.0	86,849	100.0

### Breakdown of shareholding by number of shareholders

At half-year/year end	9/2005		3/2006		9/2006		3/2007		9/2007	
	Number of shareholders	Proportion (%)	Number of shareholders	Proportion (%)	Number of shareholders	Proportion (%)	Number of shareholders	Proportion (%)	Number of shareholders	Proportion (%)
Financial institutions	99	1.2	107	0.8	97	0.8	88	0.9	97	0.7
City & regional banks	10	0.1	10	0.1	8	0.1	7	0.1	10	0.1
Trust banks	51	0.6	52	0.4	49	0.4	44	0.4	37	0.3
Life and non-life insurance	28	0.4	32	0.2	27	0.2	26	0.3	34	0.2
Other financial institutions	10	0.1	13	0.1	13	0.1	11	0.1	16	0.1
Securities firms	28	0.3	31	0.2	27	0.2	37	0.4	42	0.3
Other institutions	178	2.1	236	1.7	214	1.8	133	1.3	172	1.4
Foreign investors	236	2.8	255	1.9	276	2.3	306	3.0	287	2.3
Individual investors	7,844	93.6	12,927	95.4	11,348	94.9	9,451	94.4	12,042	95.3
Treasury stock	1	0.0	1	0.0	1	0.0	1	0.0	1	0.0
Total	8,386	100.0	13,557	100.0	11,963	100.0	10,016	100.0	12,641	100.0



# News releases

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## News releases during April 2007-September 2007

For details, please refer to our Web site (<http://www.santen.co.jp/en/>).

- | (Date)        | (Summary)  |
|---------------|--|
| <b>2007</b>   |  |
| <b>2-Apr</b>  | <b>Santen to open its Shenyang Representative Office</b><br>Santen opened its Shenyang Representative Office in China on April 1, 2007. The new Shenyang office will serve the Northeastern China centering on Shenyang, enabling Santen to distribute its drug information and gather information on the medical needs accurately and timely in this region.  |
| <b>3-Apr</b>  | <b>Santen Oy submits Marketing Approval for Glaucoma and Ocular Hypertension Drug Candidate DE-085 (INN: Tafluprost)</b><br>Santen Oy, a wholly owned subsidiary in Finland, Tampere, submitted the marketing authorization application for glaucoma and ocular hypertension treatment DE-085 (INN: Tafluprost) to 13 countries in Europe on April 2, 2007 (Europe time). DE-085 is a prostaglandin drug candidate being studied for the reduction of the intraocular pressure in primary open angle glaucoma and ocular hypertension. |
| <b>9-Apr</b>  | <b>Santen to launch OTC Eye Drop Sante Uruoi Contact a</b><br>Santen launched an artificial tear type OTC eye drop Sante Uruoi Contact a on April 19, 2007. Sante Uruoi Contact a moistens your contact lenses and relieves dryness and discomfort caused by contact lenses. Both increasing the moistness of the eyes, and being mild to the eyes are high needs among users.   |
| <b>8-May</b>  | <b>Introduction of Countermeasures to Large-scale Purchases of the Corporation's Shares (Takeover Defense Measures)</b><br>Santen's Board of Directors on May 8, 2007 determined the specific content of the Countermeasures to Large-scale Purchases of the Corporation's Shares (Takeover Defense Measures). The content was approved at the 95th Annual General Meeting of Shareholders held on June 26, 2007.  |
| <b>10-May</b> | <b>Santen to Issue Stock Acquisition Rights to the Directors</b><br><b>Santen to Issue Stock Acquisition Rights to the Corporate Officers</b><br>Santen's Board of Directors on May 8, 2007 adopted a resolution to issue rights to subscribe for new shares as stock options without consideration to Santen directors and corporate officers. The resolution was approved at the 95th Annual General Meeting of Shareholders held on June 26, 2007.  |
| <b>22-May</b> | <b>Extension of Nara Research and Development Center</b><br>Santen's Board of Directors on May 22, 2007 determined that Santen would invest more in its laboratories at the Nara Research and Development Center (Ikoma City, Nara). Through the additional investment in R&D center, a Pharmaceutical development building and an Ancillary building will be constructed in order to integrate non-clinical functions and to secure space for R&D staff increase. This will enhance the changes to generate new drug candidates.      |