



Santen Pharmaceutical Co., Ltd.

## **MHLW Grants Approval for “COSOPT<sup>®</sup> Combination Ophthalmic Solution”**

(®: Registered Trademark of Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Whitehouse Station, N.J., U.S.A.)

April 16, 2010-- Santen Pharmaceutical Co., Ltd. (Osaka, Japan, Akira Kurokawa, President and CEO; hereafter, “Santen”) announced today, that Banyu Pharmaceutical Co., Ltd. (Tokyo, Japan, President and Representative Director: Mark Timney; hereafter “Banyu”) has obtained manufacturing and marketing approval for its glaucoma and ocular hypertension treatment drug “COSOPT<sup>®</sup> Combination Ophthalmic Solution” (generic name: dorzolamide hydrochloride-timolol maleate). COSOPT<sup>®</sup> Combination Ophthalmic Solution is a combination ophthalmic solution which contains TRUSOPT<sup>®</sup> Ophthalmic Solution 1% (Generic name: dorzolamide hydrochloride), a carbonic anhydrase inhibitor (CAI) and TIMOPTOL<sup>®</sup> Ophthalmic Solution 0.5% (generic name: timolol maleate), a beta-adrenergic receptor blocking agent. Santen and Banyu have entered into a co-promotion agreement (hereafter “Co-promotion Agreement”) earlier this year.

COSOPT<sup>®</sup> Combination Ophthalmic Solution is a combination ophthalmic solution developed by Merck & Co., Inc., Whitehouse Station, N.J., U.S.A., for treatment of glaucoma and ocular hypertension. After being approved in Mexico in 1998, it has been marketed in about 90 countries including the U.S.A. ※ Now it is the most widely used combination ophthalmic solution for treatment of glaucoma and ocular hypertension in the world.

※ Outside Japan, the concentration of the combination is dorzolamide hydrochloride at 2%, and timolol maleate at 0.5%.

In Japan, COSOPT<sup>®</sup> Combination Ophthalmic Solution was developed by Banyu, who has now obtained manufacturing and marketing approval. Pursuant to the Co-promotion Agreement, entered into between Santen and Banyu on March 2, 2010, Santen will market the product, and promotion activities will be conducted by collaboration of Banyu and Santen.

Glaucoma is a disorder of the optic nerve caused mainly by elevated IOP which, if left untreated and in the worst case, can result in blindness. It is one of the leading causes of visual impairment such as decreased visual acuity and blindness. Because optic nerve damage and visual field damage caused by glaucoma are essentially progressive and irreversible, early detection and early treatment is of paramount importance. A basic treatment method is the lowering of IOP, which needs to be controlled over a long period of time.

Although numerous IOP-lowering agents are used in glaucoma drug therapy, it is often difficult to obtain adequate IOP-lowering effect with only one drug, and a concomitant therapy using 2 or more drugs have become common. However, when using multiple ophthalmic drugs concomitantly, it becomes necessary to make frequent instillations and take intervals between different drugs, which make it difficult for glaucoma patients to continue dosing in an appropriate manner (decreased compliance in topical instillation). Cosopt<sup>®</sup> Combination Ophthalmic Solution is a combination of two components, carbonic anhydrase inhibitor (CAI) and beta-adrenergic receptor blocking agent, both of which inhibit production of the aqueous humor (cause for IOP elevation), and show superior IOP-lowering effect with just one formulation. Compared to concomitant therapy, daily instillation frequency is decreased, and improvement in instillation compliance can be expected.

## ■ Summary of Cosopt® Combination Ophthalmic Solution

### Indications and Use

In case treatment with other glaucoma drugs is insufficient in patients with the following disease:

Glaucoma, ocular hypertension;

Precautions related to indications and use: Monotherapy treatment should be prioritized.

### Dosage and Administration

Topical instillation, one drop at a time, twice daily

#### **Characteristics**

- A combination ophthalmic solution of dorzolamide hydrochloride 1% and timolol maleate 0.5%
- Superior IOP-lowering effect

Clinical study results in Japan showed its effect to be significantly superior to TIMOPTOL® monotherapy, and equivalent to concomitantly use of TIMOPTOL® and TRUSOPT®.

- Effect of timolol is fully exerted.

The effect of timolol is fully exerted by twice daily topical instillation.

- Well tolerated.

In clinical studies in Japan, no new adverse drug reactions with combination ophthalmic solution were observed.

## ■ About Glaucoma

Glaucoma is a disease in which optic nerve (ocular nerve which sends visual information to the brain) is damaged, thereby causing gradual narrowing of the visual field. Elevated IOP is considered to be a major cause of optic nerve damage, and therefore IOP lowering is considered the most effective treatment method for maintaining visual function. In Japan, 70 percent of the patients suffer from “Normal Tension Glaucoma (NTG)”, in which symptoms such as decreased visual field is seen even though the IOP level is within a normal range. Progression of NTG can also be delayed by IOP lowering.

### About Santen

As a unique pharmaceutical company specializing in ophthalmic and anti-rheumatic/ bone and joint disease field, Santen contributes to maintaining people's eyesight and health. We apply our efforts in certain areas of expertise, mainly ophthalmology, in order to contribute to (the quality of life of) the patient and their loved ones, and society as a whole. For details please access: <http://www.santen.com/>

### About Banyu

Banyu Pharmaceutical Co. Ltd. is a subsidiary of Merck & Co., Inc., Whitehouse Station, N.J., U.S.A., a global research-driven pharmaceutical company. Banyu lives on a belief that medicine is for the people and develops, manufactures and markets world-class medicines and vaccines that improve quality of life. For details, please access <http://www.banyu.co.jp/>.

**About Merck & Co., Inc., Whitehouse Station, N.J., U.S.A.**

Today's Merck is working to help the world be well. Through our medicines, vaccines, biologic therapies, and consumer and animal products, we work with customers and operate in more than 140 countries to deliver innovative health solutions. We also demonstrate our commitment to increasing access to healthcare through far-reaching programs that donate and deliver our products to the people who need them. Merck. Be Well. For more information, visit [www.merck.com](http://www.merck.com).

**Note on Forward-looking Statements for Santen**

Information provided in this press release contains so-called "Forward-looking Statements". The realizations of these forecasts are subject to risk and uncertainty from various sources. Therefore, please note that the actual results may differ significantly from the forecasts. Business performance and financial condition are subject to the effects of change in regulations made by the governments of in Japan and other nations concerning medical insurance, drug pricing and other systems, and to fluctuations in market variables such as interest rates and foreign exchange rates.

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