

# SSG-003 (Drugs for Glaucoma): Summary

## **SSG-003 offers a new approach to glaucoma treatment.**

SSG-003 (API: 2ccPA) is a candidate glaucoma treatment with a new mechanism of action, ATX inhibition.

- Unlike existing drugs, whose primary action is to inhibit aqueous humor production and promote outflow, this drug targets to inhibit trabecular meshwork fibrosis (sclerosis) itself and fundamentally improve the aqueous humor outflow pathway.
- Because it has a different mechanism of action from existing glaucoma treatments, a synergistic effect is expected when used in combination.
- Furthermore, in addition to its intraocular pressure-lowering effect, autotaxin's potential to protect optic nerve cells is also being studied, suggesting it may not only lower intraocular pressure but also slow the progression of glaucoma.

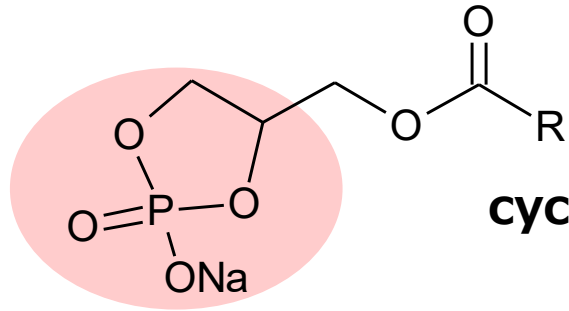
# SANSHO Development Pipeline

	Non-clinical to Pre-clinical	Phase I	Phase II
Orthopedics		SSO-001 (OA*)	
Respiratory Medicine	SSI-002 (IPF**)		
Ophthalmology	SSG-003 (Glaucoma)		
Dermatology	SSD-004 (Scleroderma) SSH-005 (Hypotrichosis)		

\*Osteoarthritis

\*\*Idiopathic pulmonary fibrosis

# Conversion of cPA to chemically stable derivatives



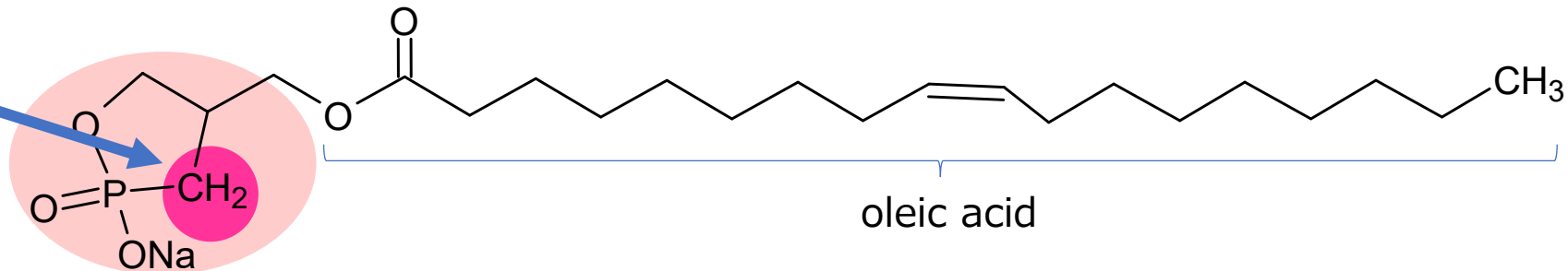
Various fatty acids such as linoleic acid, palmitic acid, and oleic acid

**cyclic Phosphatidic Acid (cPA, R=C:16~22)**

Improved in vivo stability by converting oxygen (O) to methylene (CH<sub>2</sub>)



**Conversion to chemically stable derivative**

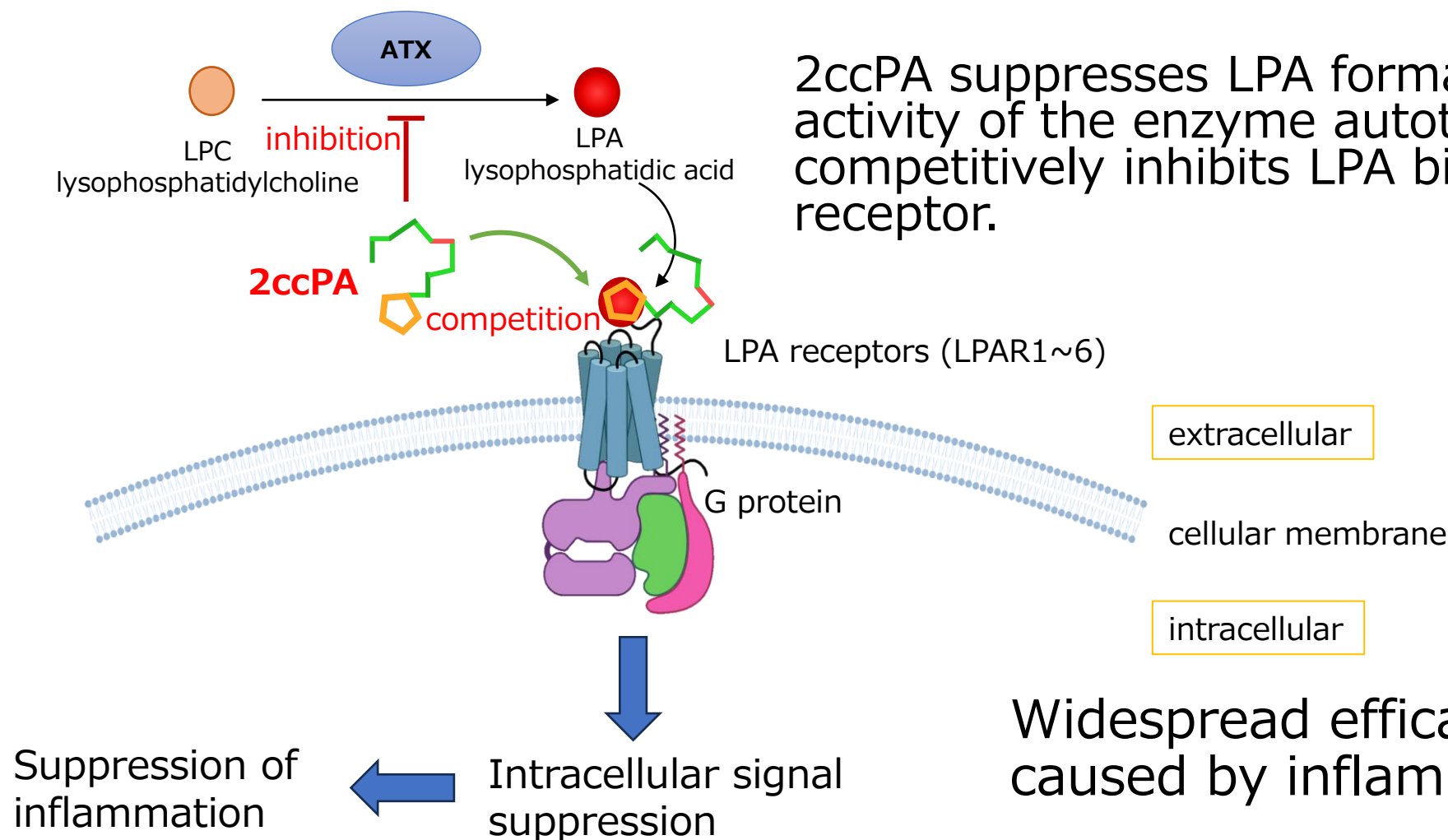


**2-carba-cyclic phosphatidic acid (2ccPA)**

Oleic acid is selected as the fatty acid

# Unique mechanism of action of 2ccPA

2ccPA suppresses LPA formation by inhibiting the activity of the enzyme autotaxin (ATX) and competitively inhibits LPA binding to the LPA receptor.

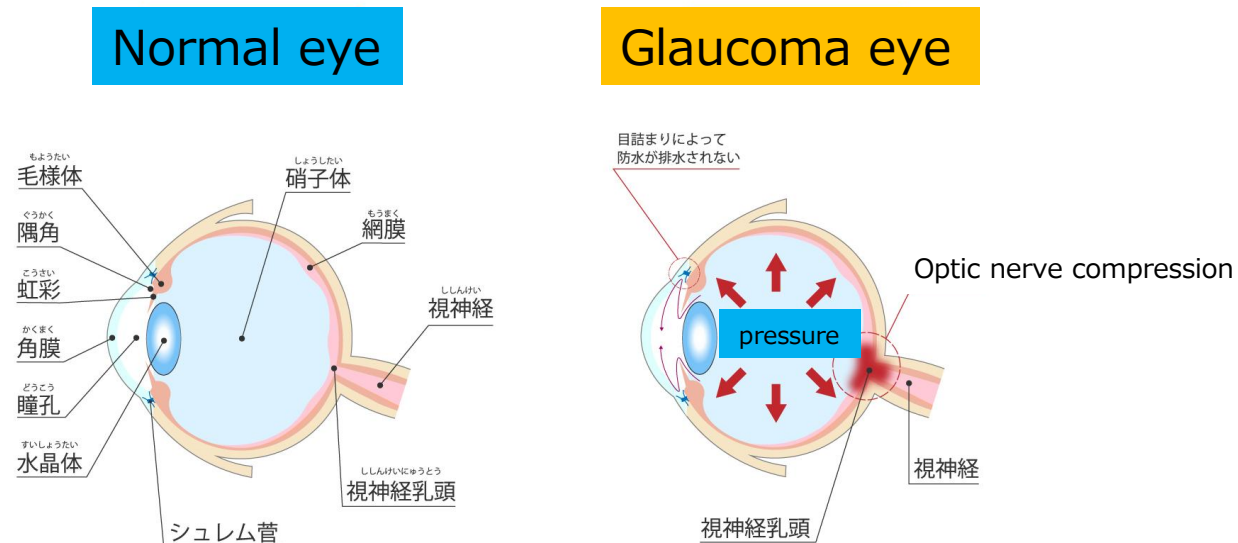


Widespread efficacy in diseases caused by inflammation

# Development of the treatment for Glaucoma (SSG-003)

- What is glaucoma?

A disease in which the pressure inside the eye (intraocular pressure) increases due to various factors, causing the optic nerve at the back of the eye to compress, atrophy, and narrow the field of vision, possibly resulting in blindness.
- SSG-003 (2ccPA) was confirmed to have an intraocular pressure lowering effect. A patent for the use is under application.

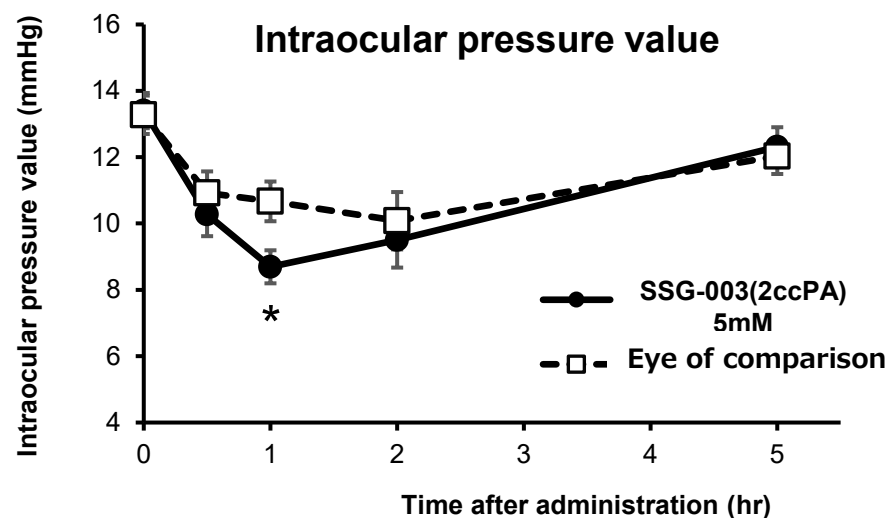


# Investigation of Intraocular Pressure-Lowering Effect of SSG-003 (2ccPA)

- A single instillation of 2ccPA saline solution into one eye of the animals was administered, and the intraocular pressure was compared with that of the control eye (saline-administered eye).

## In Normal-IOP (intraocular pressure) white rabbits

- A statistically significant decrease in intraocular pressure was observed at 1 hour after administration.



## In Hypertensive pigmented rabbits

- A statistically significant decrease in intraocular pressure were observed at 1 and 2 hours after administration.

