

Presentation Material

Expansion of Cosmetic Raw Materials Business

November 18, 2022



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1. Cosmetic Raw Materials Business Strategy

2. Development of Cosmetic Raw Materials

3. Development of Cosmetic ODM

4. Summary

*ODM: Original Design Manufacturing To design, develop, and manufacture products under the brand of contractors

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*ODM: Original Design Manufacturing To design, develop, and manufacture products under the brand of contractors

Core Technologies

Material

- Natural oil and fat derivatives
- EO/PO* derivatives
- Biocompatible polymers
- Plant extracts
- Surfactants
- Oil-base materials

Inherent technology

- High purity
- High functionality
- Material design
- Formulation design
- Material analysis capability

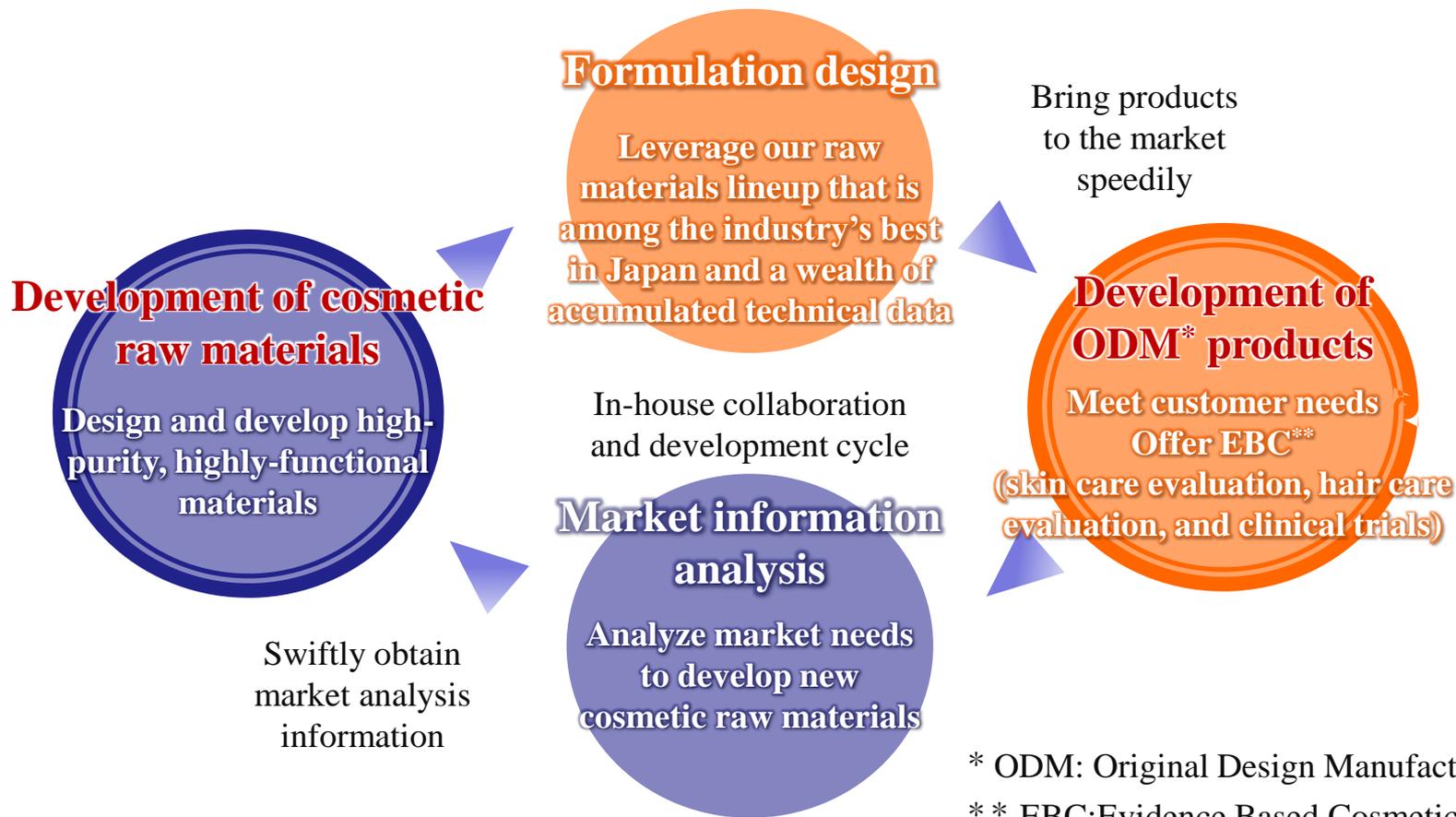
Evaluation technology

- Skin care evaluation
 - Moisturizing properties
 - Permeability
 - UV protection
 - Effects on skin
- Hair care evaluation
 - Detergency
 - Foam
 - Effects on hair

* EO/PO = ethylene oxide/propylene oxide

Cosmetic Raw Materials Business Strategy

Virtuous cycle of cosmetic raw materials and ODM products

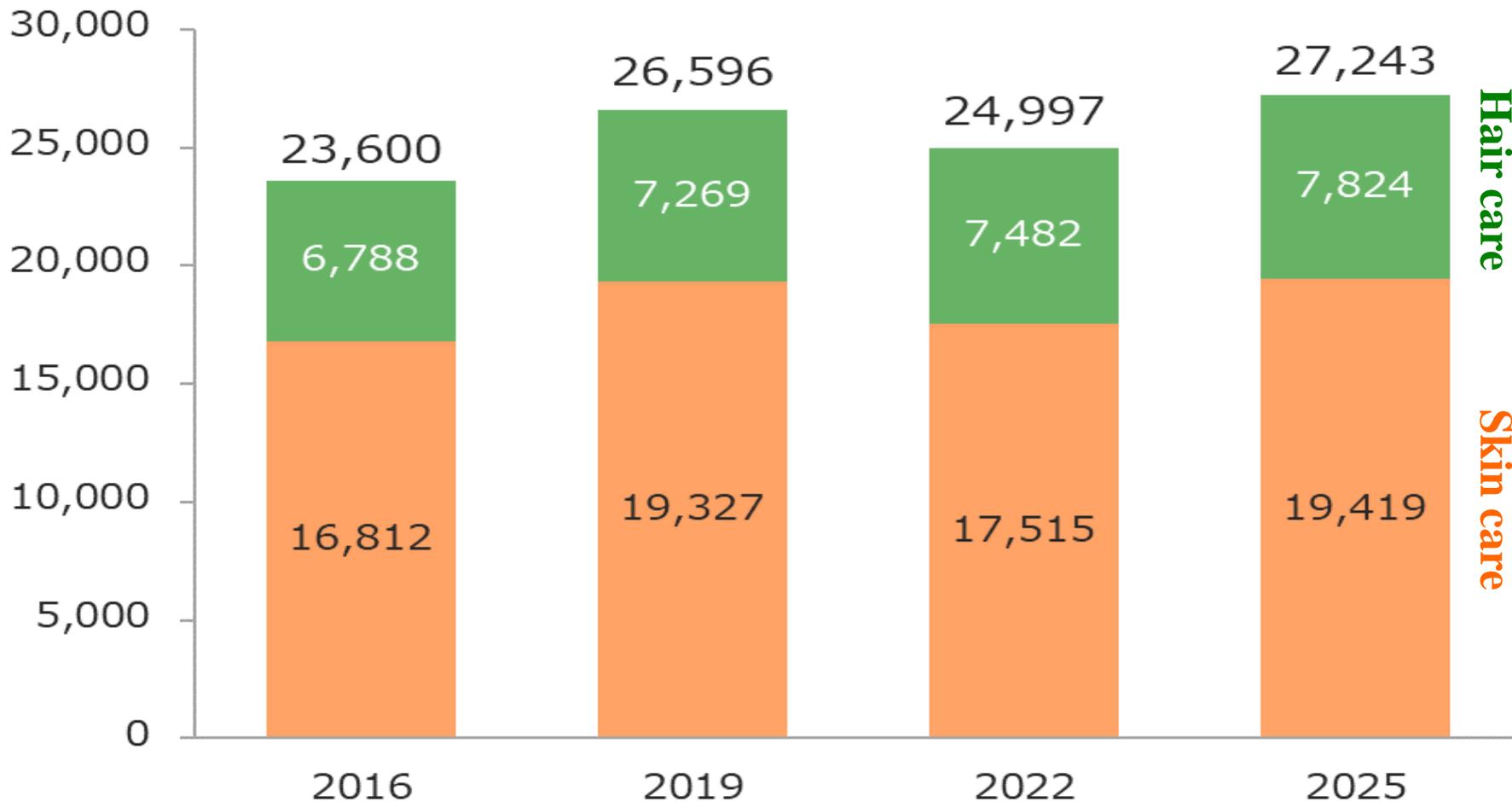


* ODM: Original Design Manufacturing

** EBC: Evidence Based Cosmetics

Domestic Skin Care and Hair Care Markets

Unit: billion yen



*Estimation by NOF based on Euromonitor

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Cosmetic Raw Materials

Cosmetic Solution Designer

Development of high-performance raw materials
Development of new applications and formulations

Cosmetic raw materials

Cosmetics Industry

Planning

Design and development

Raw materials

Formula

Packaging material

Manufacturing

Sale

We will help develop new cosmetic products that you want to create, meeting your exact needs.

Diversification of Our Main Cosmetic Raw Materials

Market	Appealing aspect	Our main cosmetic raw materials
Skin care	Skin aging care	PROTEOGLYCAN(PLANT), LIPIDURE[®], CERACUTE[®]
	Sensitive skin care	LIPIDURE [®]
	Water-based cleansing	WILBRIDE [®] , SOLUBULE [®]
	Short-time care	SOLUBULE [®]
	Pore care	EUCALYPTUS EXTRACT [™] , UNIOX [®]
	Dense foam	NONION [™] LT , LUMINOVEIL [®]
	Anti-pollution	PROTEOGLYCAN(PLANT), LIPIDURE [®]
Hair care	Hair aging care	WILBRIDE[®], CERACUTE[®], SOFTILT[®]
	Scalp care	DIAPON [®]
	Non-silicon	ACROBUTE [®] , ALFEEL [®]
	Volume of foam	NONION [™] DL, LUMINOVEIL [®]

New Proposals for the Cosmetics Market

Appealing aspect	Function	Cosmetic raw materials
<p>Skin aging care</p>	<ul style="list-style-type: none"> • Pore tightening • Enhanced skin tone 	<p>PROTEOGLYCAN (PLANT) [Polymeric glycoprotein]</p>
	<ul style="list-style-type: none"> • Skin elasticity improvement 	<p>LIPIDURE® [Biocompatible polymers]</p>
<p>Hair aging care</p>	<ul style="list-style-type: none"> • Improvement of gloss • Hair strength improvement 	<p>WILBRIDE® [Amino acid derivatives]</p>

Expansion of the aging care market

- Spreading from the middle-aged to young adults and men
- Addition of quasi-drug indications

Cosmetic Raw Materials | Skin Aging Care

PROTEOGLYCAN(PLANT)

👉 Key points

- **Plant-derived proteoglycan**

Extracted from gum arabic. NOF is the first in the world to commercialize this product.

- **Effect of accelerating epidermal cell proliferation**

Activates epidermal metabolism.

- **Unique moisturizing mechanism “Wattle Blossom Model”**

The unique petal structure of plant-derived proteoglycan contributes to its excellent moisturizing effect.

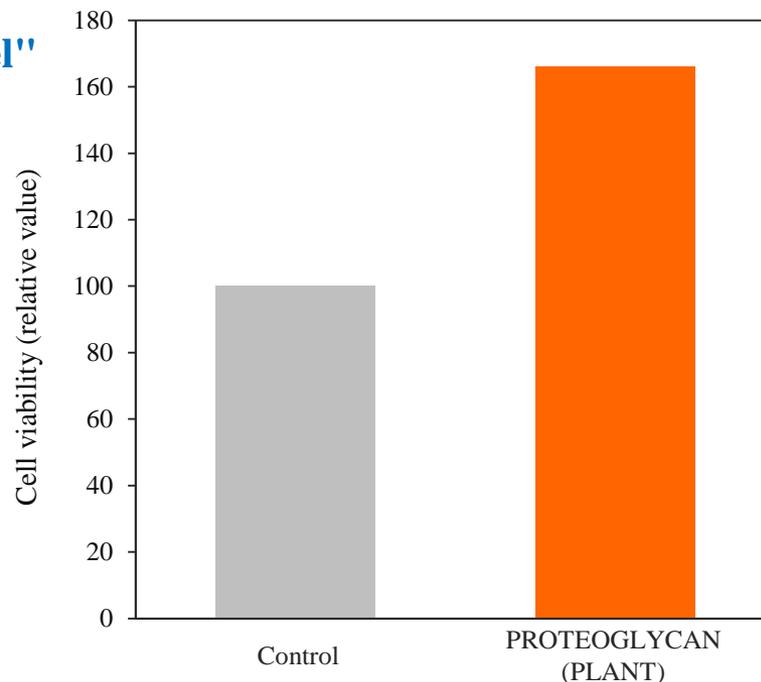
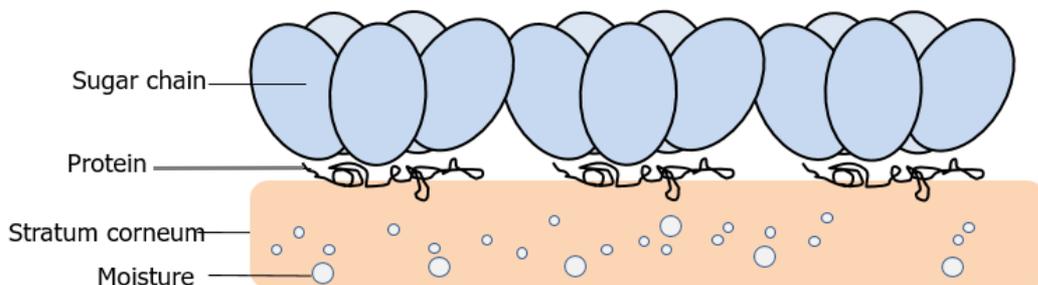
INCI name: Soluble Proteoglycan

Effect of accelerating epidermal cell proliferation

<Test method>

A 0.25% solution of the sample and DMEM medium containing 0.5% serum were added to epidermal cells. After culturing the cells for 72 hours, the number of cells was counted.

“Wattle Blossom Model”



Cosmetic Raw Materials | Skin Aging Care

LIPIDURE[®] HM

Key points

- **Our proprietary biocompatible polymer**

Protects skin from various environmental stresses.

- **Repairs damaged skin and alleviates irritation**

An enhanced barrier function with a ceramide production enhancing effect.

- **Outstanding moisturizing power**

Moisturizing effect about twice as strong as hyaluronic acid.

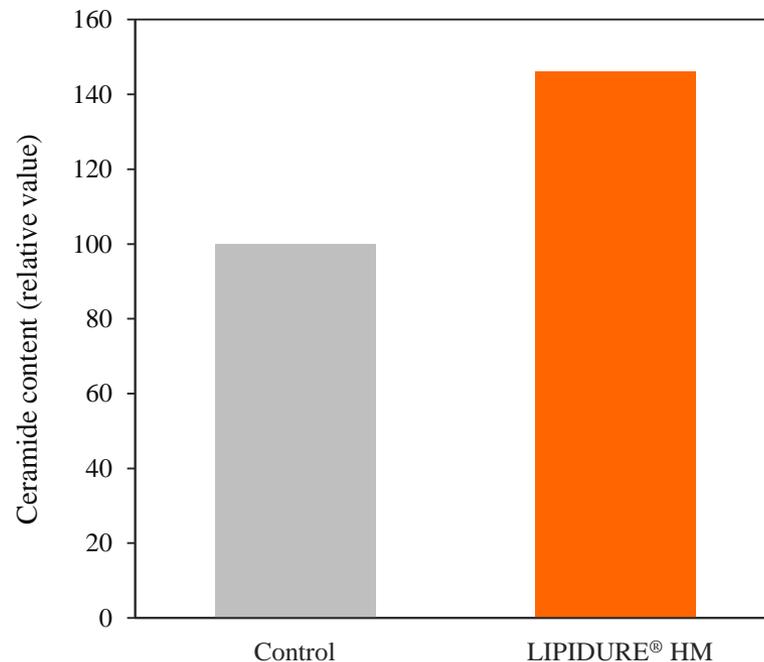


INCI name: Polyphosphorylcholine Glycol Acrylate

Ceramide production enhancing effect

<Test method>

An aqueous solution of the sample (0.25%) was added to a three-dimensional cultured human epidermal model from the stratum corneum side. After culturing the epidermis for 7 days, its ceramide content was quantified.



Cosmetic Raw Materials | Hair Aging Care

WILBRIDE[®] R-PL

Key points

- **Hair repair amino acid derivative**

A proprietary cosmetic raw material with improved permeability into hair, which is developed based on the model of arginine, a hair repair ingredient.

- **Repairs the inside of hair**

Improves hair strength by acting on the inside of hair.
Provides damaged hair with gloss.

- **A natural touch**

Provides hair with a soft and smooth touch and makes hair easier to style.



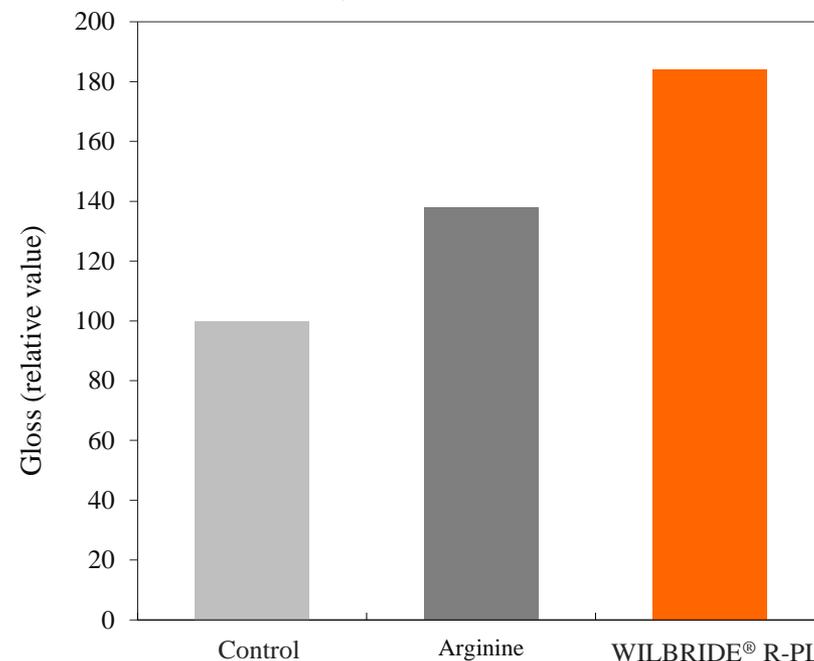
INCI name: PPG*-2 Arginine

*PPG: Polypropylene Glycol

Effect of repairing the inside of hair

<Test method>

Damaged hair was soaked in an aqueous solution of each sample (2%) at 25°C for 1 hour, then dried using a hair dryer and measured for gloss.



Dedicated Websites for Cosmetic Raw Materials

Cosmetic Lounge.com

NOF Cosmetic Lounge.com

NOF CORPORATION

In Japanese and English
Added **Chinese**

Elements of Cosmetics

A Reference to the cosmetic Ingredients made by NOF

What's New

2020/03/31 The homepage has been redesigned.

Search by function

Search by formula

Skin Care >

Hair Care >

Cleansing >

Cleansing >

Face & Body Wash >

Lotion >

Skin Cream >

Shampoo >

Conditioner >

Search Cosmetic Ingredient

Search by Ingredient

Index

<https://www.nof.co.jp/contents/cosmeticlounge/index.html>

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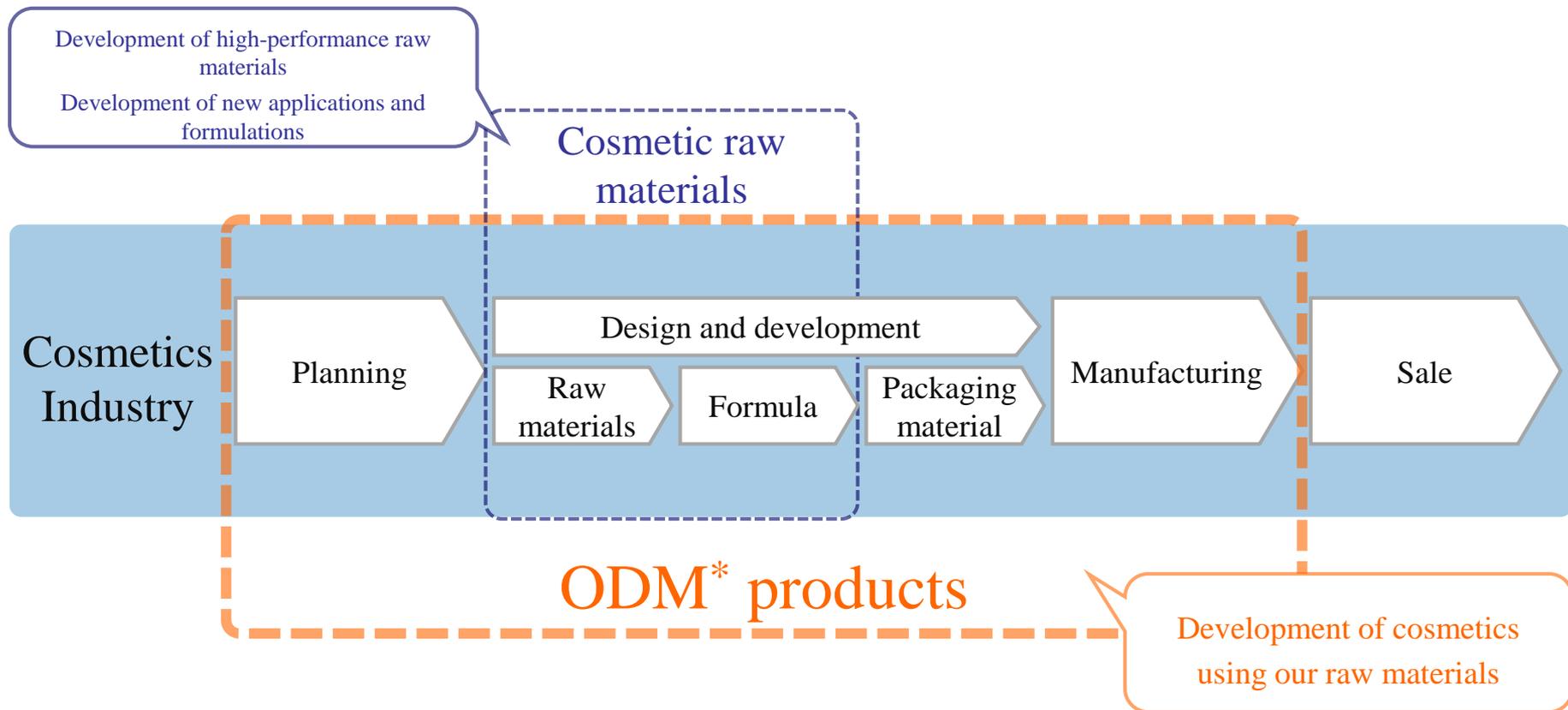
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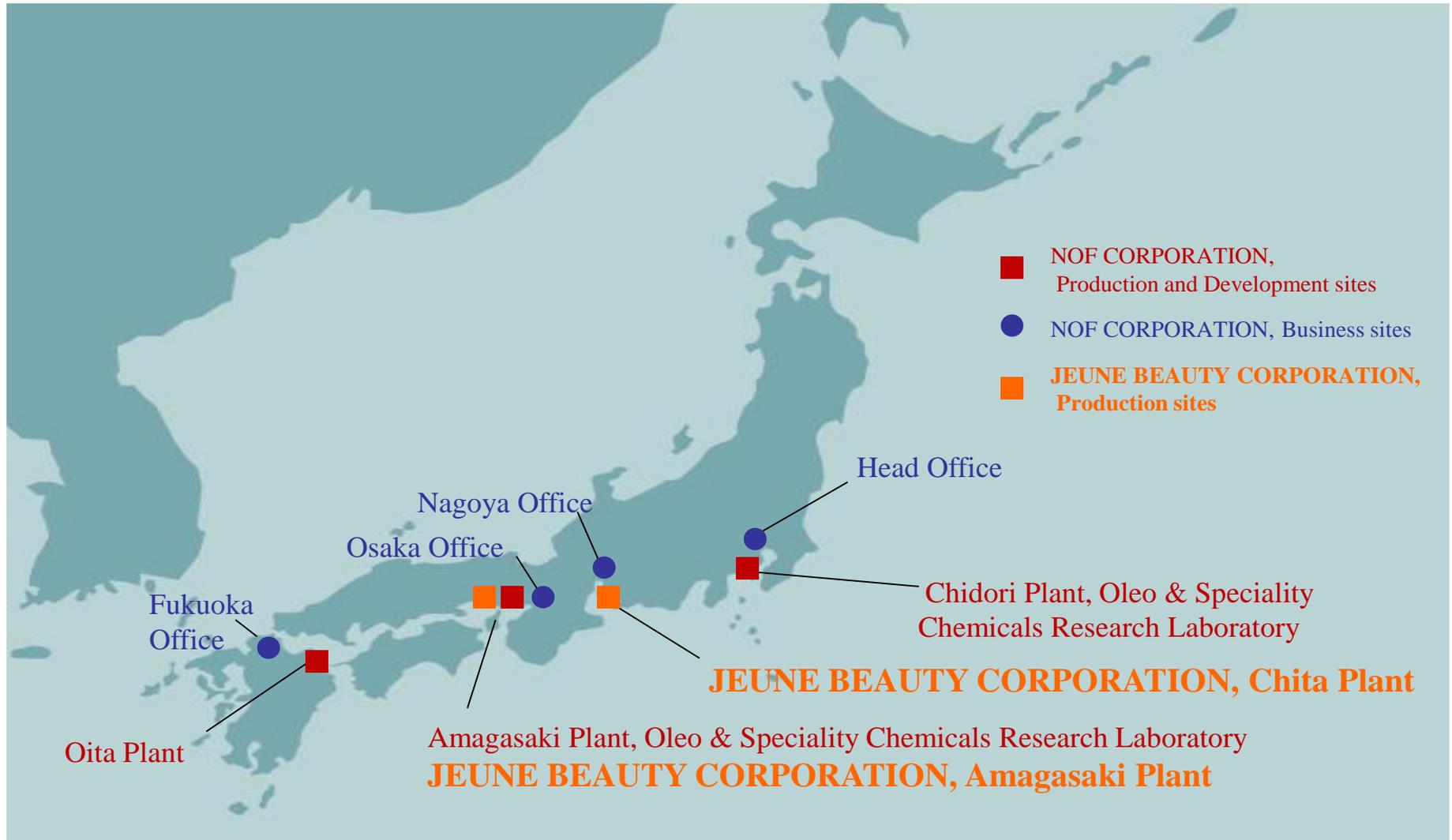
From Cosmetic Raw Materials to ODM Products

Cosmetic Solution Designer



*ODM: Original Design Manufacturing To design, develop, and manufacture products under the brand of contractors

Domestic Sites for Cosmetic Raw Materials and ODM Products



Development Sites for Cosmetic Raw Materials and ODM Products

Oleo & Speciality Chemicals Research Lab.
(Amagasaki)



- Cosmetic raw materials
Natural oil and fat derivatives, plant extracts,
Surfactants, Oil-base materials

- ODM products
Formulation design

Oleo & Speciality Chemicals Research Lab.
(Chidori)



- Cosmetic raw materials
EO/PO derivatives, Oil-base materials,
Biocompatible polymers

Production Sites for ODM Products

Company name: JEUNE BEAUTY CORPORATION

Founded: December 28, 1995

Contribution: NOF CORPORATION 100%

JEUNE BEAUTY CORPORATION Amagasaki Plant



- Cosmetics manufacturing licenses, quasi-drug manufacturing licenses
- ISO22716 (cosmetic GMP)
- Completed in July 1996 and expanded in October 2009 and March 2014.

JEUNE BEAUTY CORPORATION Chita Plant



- Cosmetics manufacturing licenses, quasi-drug manufacturing licenses
- ISO22716 (cosmetic GMP)
- Completed in July 2019
- Expansion scheduled for 2023

ODM Products | Skin Aging Care

Botanical Aging Care Serum

Key points

- **A luxurious formulation that only a cosmetic raw materials manufacturer can develop**

A luxurious formulation that has a high content of highly-functional moisturizing ingredient PROTEOGLYCAN (PLANT).

- **Makes skin supple, elastic, and glowing**

Makes skin healthy with naturally-derived ingredients.

- **Anti-pollution effect**

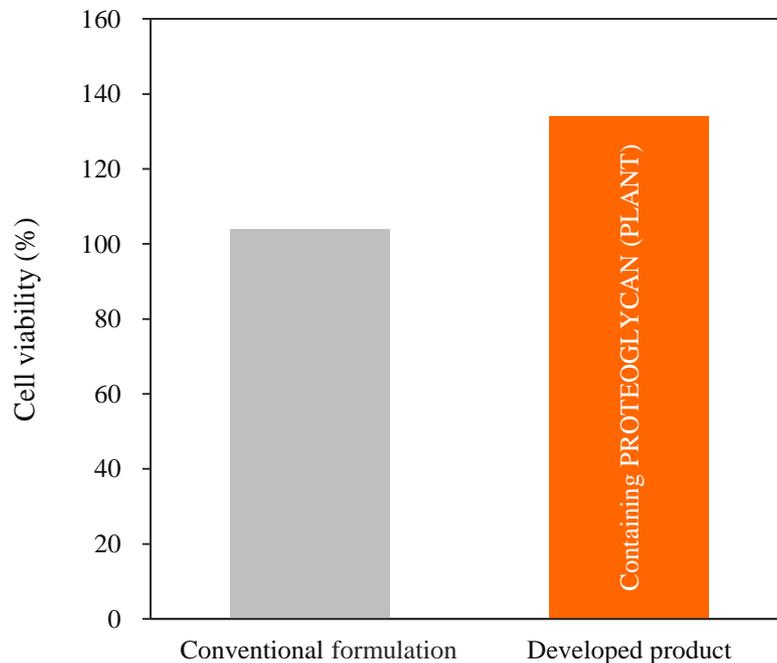
Protects skin from contact with atmospheric irritants.



Effect of accelerating epidermal cell proliferation
(Comparison with the conventional formulation)

<Test method>

The conventional formulation, the developed product and DMEM medium containing 0.5% serum were added to epidermal cells. After culturing the cells for 72 hours, the number of cells was counted. Before the addition = 100%.



ODM Products | Skin Aging Care

Highly moisturizing booster lotion

Key points

- **A luxurious formulation that only a cosmetic raw materials manufacturer can develop**

A luxurious formulation that has a high content of highly-functional moisturizing ingredient LIPIDURE® PMB.

- **Next morning, you will be impressed by your skin**

Permeates deeply into skin and retains moisture until the next morning.

- **A first step in skin care**

Takes your skin care to a higher level.

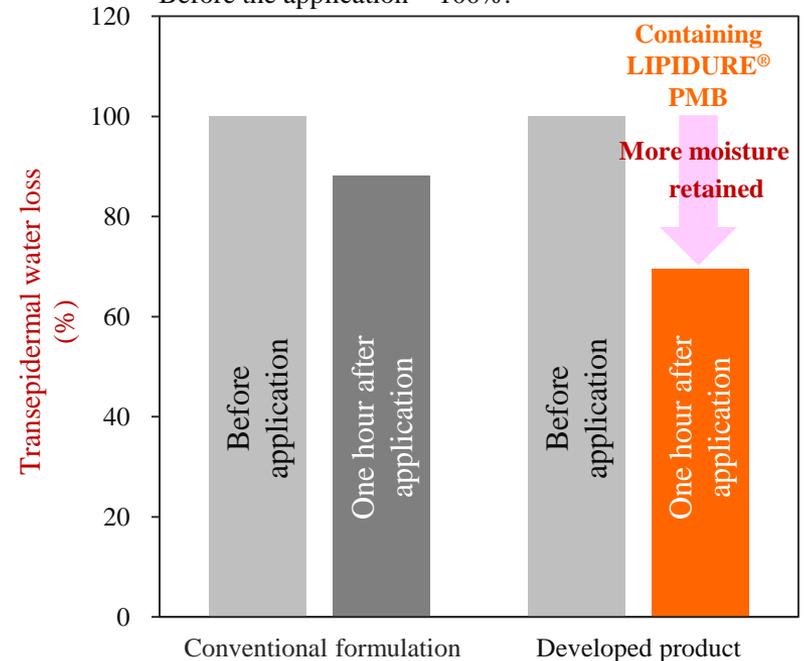


Transepidermal water loss (Comparison with the conventional formulation)

<Test method>

Five drops each of the conventional formulation and the developed product were applied on the inside of the left and right forearms. The transepidermal water loss was measured before the application and one hour after the application.

Before the application = 100%.



ODM Products | Hair Aging Care

Volume up mist

Key points

- **A luxurious formulation that only a cosmetic raw materials manufacturer can develop**

A luxurious formulation that has a high content of highly-functional ingredients CERACUTE®V and LIPIDURE®NA.

- **Improves hair strength**
- **Hairbrushing before going out becomes much easier**

Improves hair strength by repairing damaged hair.

Makes hair smooth by preventing hair breakage and split ends.



Tensile strength of hair
(Comparison with the conventional formulation)

<Test method>

The conventional formulation and the developed product were applied to prepared samples of damaged hair bundles. After letting them stand in a room at constant temperature and humidity for 16 hours, the tensile strength of the hair samples were measured.

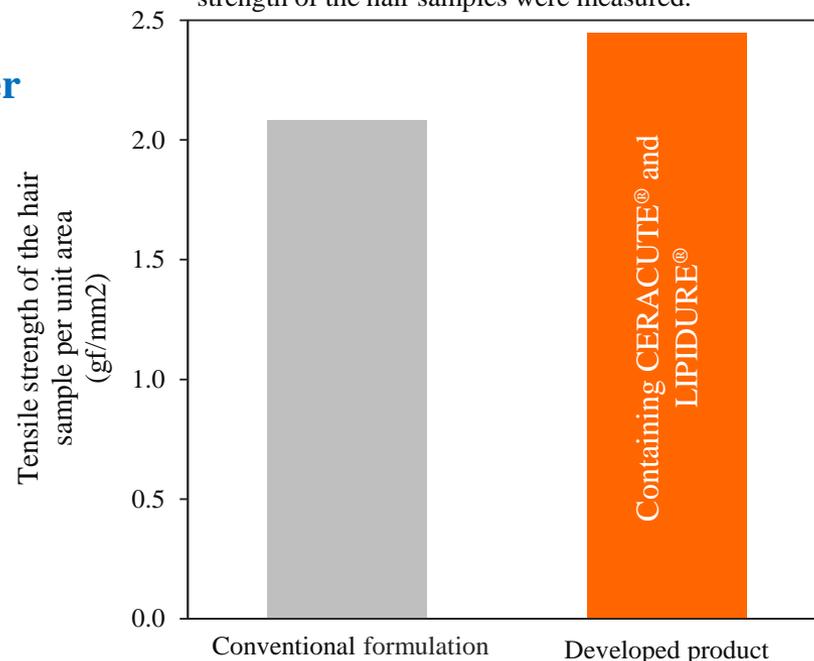


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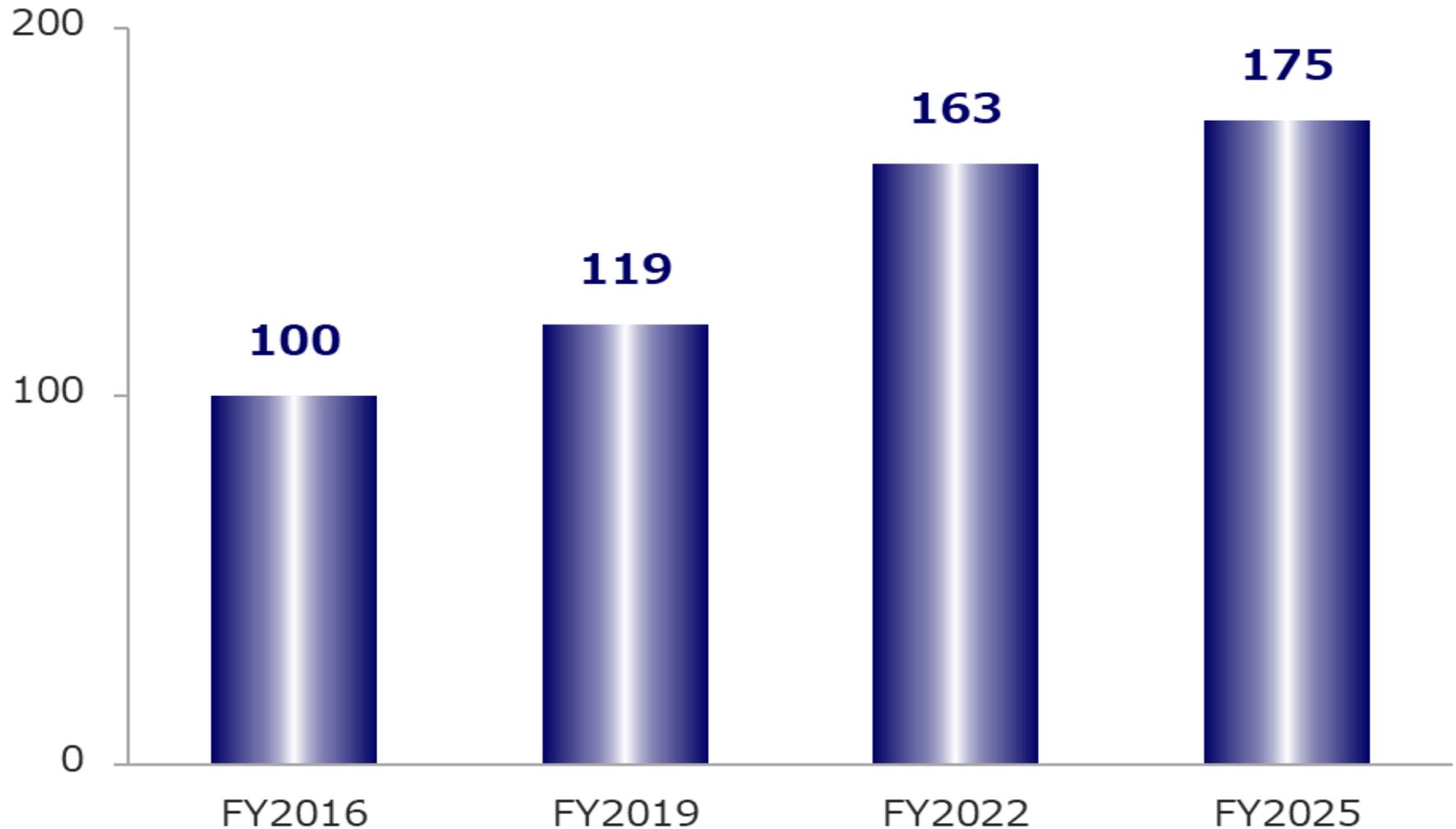
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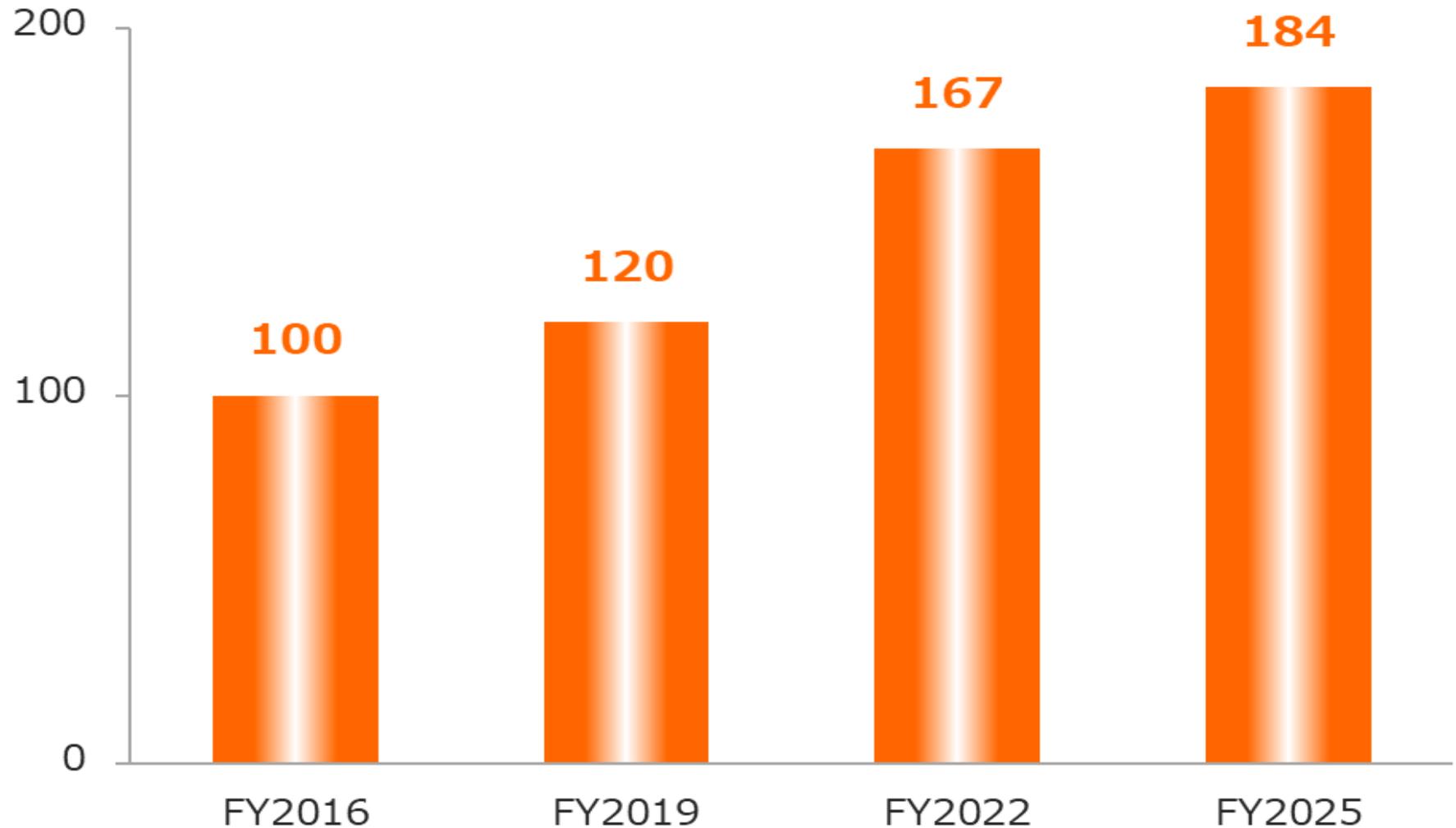
Sales Plan for Cosmetic Raw Materials Business (Index Number)

※FY2016 Actual= 100



Sales Plan for Cosmetic ODM Business (Index Number)

※FY2016 Actual= 100



Promotion to the Market

	Cosmetic raw materials	ODM products	2021-2023
Exhibit	✓	✓	PCHi (Personal Care and Homecare Ingredients) (China) /March 2021 and Scheduled for February 2023
	✓	✓	CITE JAPAN (Cosmetic Ingredients and Technology Exhibition)/May 2021
		✓	COSME Tech Tokyo/January 2022 and Scheduled for January 2023
Seminar	✓		JAPAN, WEB Seminar (120-150 persons)/November 2021
	✓		JAPAN, WEB Seminar/Scheduled for November 2022
	✓		CHINA, WEB Seminar (1000-1500 persons)/December 2021
	✓		CHINA, Face-to-face Seminar (20-30 persons)/August 2022

PCHi
at Shenzhen



CITE JAPAN
at Pacifico Yokohama



COSME Tech Tokyo
at Tokyo Big Sight



- This material is intended to provide an explanation of the company and its business, not to induce investment or any other action.
- The results forecasts presented in this document are based upon currently available information and assumptions deemed rational. A variety of factors could cause actual results to differ materially from forecasts.
- Please be aware that decisions regarding investments are the responsibility of the users themselves.
- Please note that, in this material, amounts less than ¥100 million have been rounded off.

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