KURARAY CO., LTD.

Management Briefing

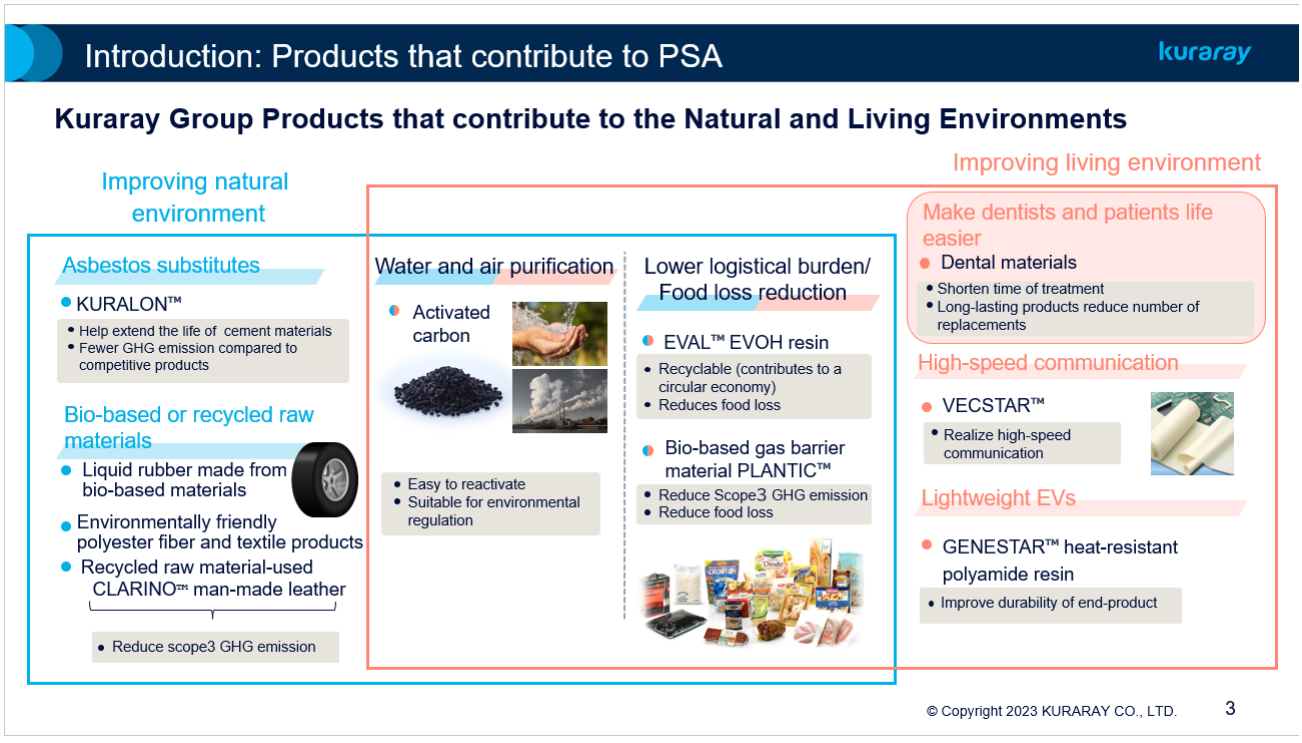
Session 2. Dental business and its strategy

Presenters:

Nobuhiko Takai　Director and Managing Executive Officer
President, Functional Materials Company

Satoshi Yamaguchi　General Manager of Medical Division,
President of Kuraray Noritake Dental Inc.

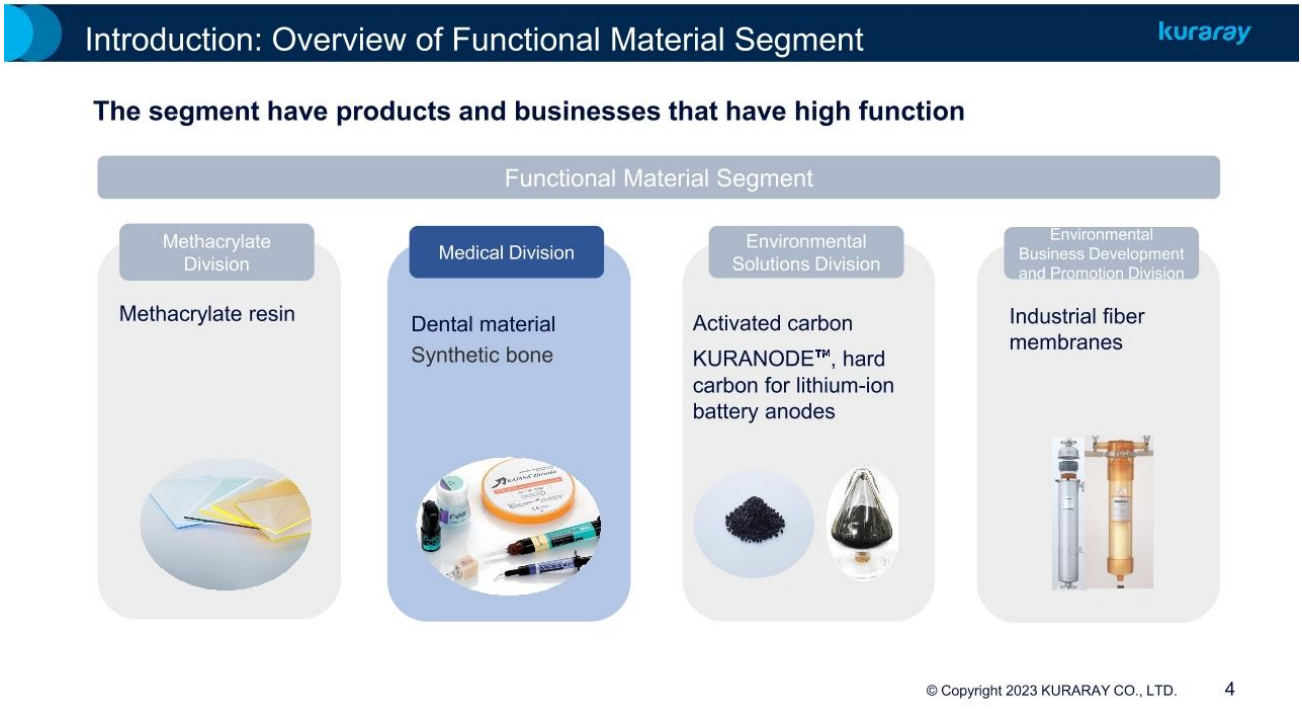
December 18, 2023



Takai: My name is Takai, President of Functional Materials Company. Today, I would like to introduce our dental business, which has been growing at a high rate in recent years, from our Functional Materials segment. The dental business is being developed globally, centered on our subsidiary, Kuraray Noritake Dental Inc. For an overview, I, Takai, will provide an explanation, while Yamaguchi, who concurrently serves as the General Manager of the Medical Division and President of Kuraray Noritake Dental Inc., will provide more details later.

First of all, I will briefly explain the positioning of the dental business in the Kuraray Group.

This slide shows examples of Kuraray Group products that were evaluated as contributing to the natural and living environment based on the PSA, Portfolio Sustainability Assessment analysis introduced in the Medium-Term Management Plan, PASSION 2026. The dental business contributes to the improvement of the living environment by shortening treatment time and reducing the risk of re-treatment due to the longer service life of the products.



We are developing four major functional products and businesses in the Functional Materials segment to which dental materials belong. The Methacrylate Division manufactures and sells methacrylic resins with excellent optical properties. The Environmental Solutions Division provides solutions such as water and air purification using activated carbon.

The Environmental Business Development and Promotion Division manufactures and sells industrial fiber membranes that enable efficient wastewater reuse. Finally, our dental materials business, which we will introduce today, is being developed in the Medical Division.

Our dental materials business began in 1973 with the study of introducing a painless treatment system. In 1978, we began selling dental adhesives and fillers, and since then, we have sold a number of products, mainly adhesives featuring high adhesive strength. In 2012, the Company merged with Noritake Dental Supply Co., Limited., which had been selling dental ceramics and has since expanded its business. One of the strengths of our dental materials business is that we handle a wide range of dental materials of high quality and performance, spanning both organic and inorganic materials.

This concludes my explanation. From this point on, I would like to ask General Manager Yamaguchi to provide an explanation. Mr. Yamaguchi, please begin.

Overview of Kuraray Noritake Dental Inc.

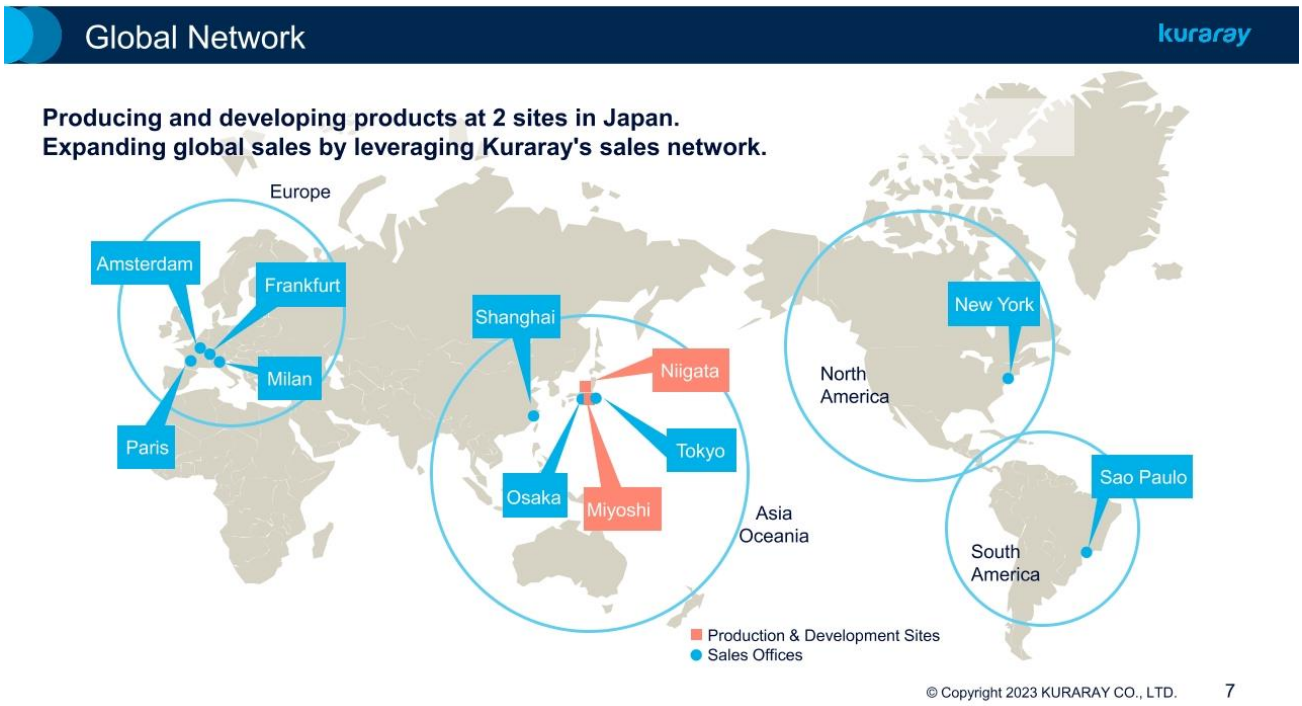
- Kuraray Noritake Dental Inc. commenced operations following the integration of Kuraray Medical Inc. and Noritake Dental Supply Co., Limited on April 1, 2012
- Investment ratio: 66.7% from Kuraray Co., Ltd. and 33.3% from Noritake Company Ltd.
- Principal businesses:
  Development, production and sale of dental bonding agents, fillings, porcelains, CAD/CAM materials, etc.
- Capital: ¥300 million
- Representative: Mr. Satoshi Yamaguchi

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Yamaguchi: I, Yamaguchi, will give an explanation from here regarding the dental material business and its strategy.

This slide is an overview of Kuraray Noritake Dental Inc. As Takai explained earlier, Kuraray Noritake Dental Inc. was established through the merger of Kuraray Medical Inc. and Noritake Dental Supply Co., Limited.

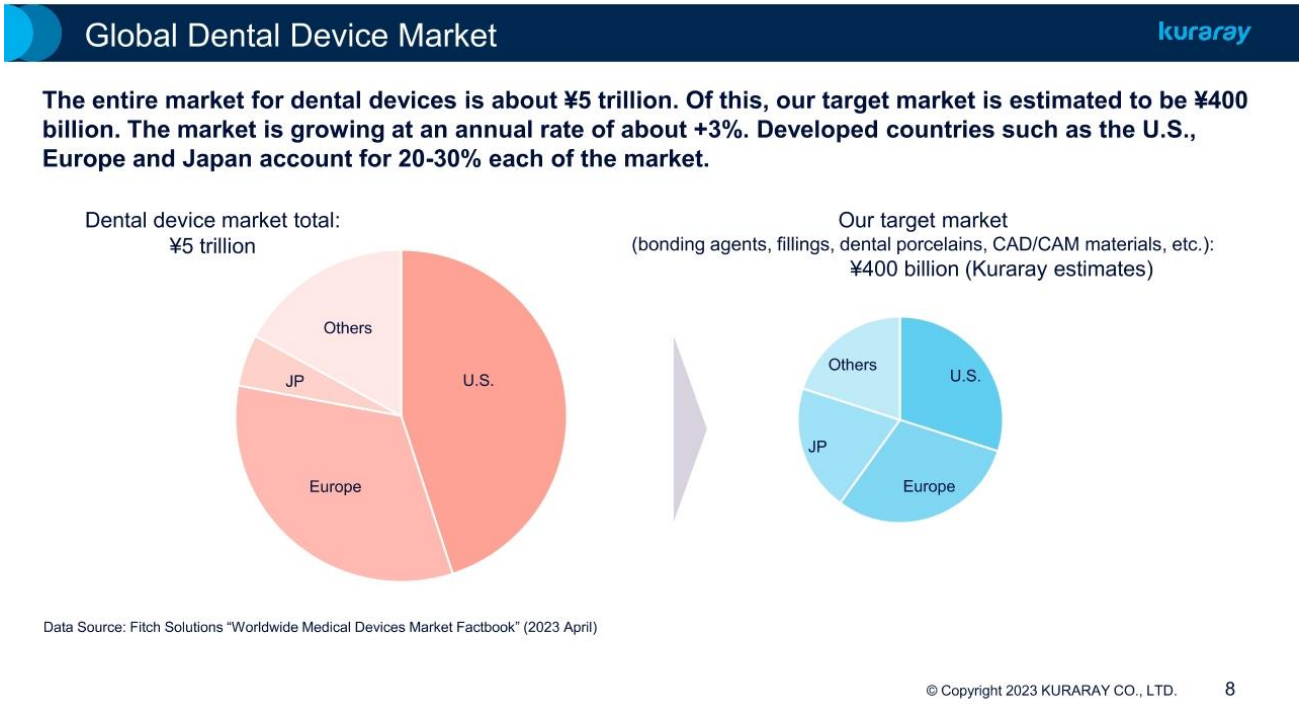
There has been no change in the nature of our business since the merger. Our business activities range from producing and selling dental materials and equipment, specifically adhesives and fillers for dental materials, dental porcelain materials, and CAD/CAM materials for dental applications. I have served as President since 2021.



Next, I would like to briefly explain our global network.

All of our products are manufactured and developed in Japan. We produce and develop our products at our two factories in Niigata and Miyoshi and then distribute them globally.

We utilize Kuraray's sales network to sell our products and have sales offices in the regions marked in blue. In Japan, we have sales offices in Tokyo and Osaka. In other parts of Asia, we have a sales office in Shanghai for the Chinese market. In Europe, we have four sales offices in Frankfurt, Amsterdam, Milan, and Paris. On the other hand, in North America, we are located in New York. In South America, we have a base in Sao Paulo. We have established bases in these places and are developing our business globally.



Next, here is a description of what we do in the global dental products market.

The overall dental products market is approximately JPY5 trillion. Of this market, the market we are targeting is approximately JPY400 billion. Although there have been ups and downs during the COVID-19 period, we believe that the market has been growing at a stable rate of about 3% per year in recent years.

As for the size of the market, the United States, Europe, and Japan are the major markets, each of which we estimate accounts for 20% to 30% of the market.



I would like to introduce two pages from here that we consider to be our strengths.

First, the integration of Kuraray Medical and Noritake Dental Supply has resulted in a wide range of organic and inorganic materials, which can be considered a synergistic effect.

As you can see in the figure below, the organic materials in blue were originally from Kuraray. And for inorganic materials, originally, Noritake was the one that promoted the features of each product. But now that we have been integrated, we are able to offer a total solution as the main material used for treatment.

In particular, the upper row says “treatment by crown.” Crowns and bridges are to cover teeth, and many materials are used even though metal is common in Japan. It is originally metal, recently white composite resins and ceramics have become available. When they are actually placed in the patient’s mouth, they are attached with a material called cement. However, since there are many different types of crowns, the procedure for cementing them together is quite complicated, and we have received a number of questions from dentists.

We provide total solutions to these problems, so we are now able to provide more detailed information on the features and ease of use of various products, saying that it is best to use this cement when using this material in this way.

Indicated at the bottom of the page is a treatment using fillings, which means that when a cavity is still small. Instead of drilling out the tooth and taking a mold as it is, a bonding agent is placed on the tooth, and a composite resin in the form of a paste is filled in and hardened by exposing the tooth to light. This is a typical treatment method, and since Kuraray originally provided this bonding agent and composite resin, there are no major changes in this area.

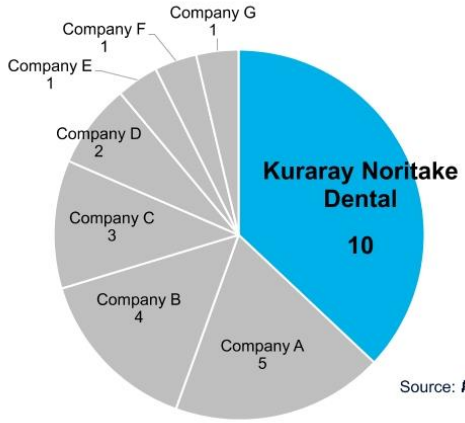
The integration has enabled us to provide more appropriate information to dental clinics and technicians regarding this type of treatment.

Our Strength

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Highly evaluated by REALITY, independent dental material evaluation agency in the U.S.

Number of products obtaining **REALITY** "FIVE STAR AWARD (Highest Rating)" in Bond, Cement and Composite Resin category

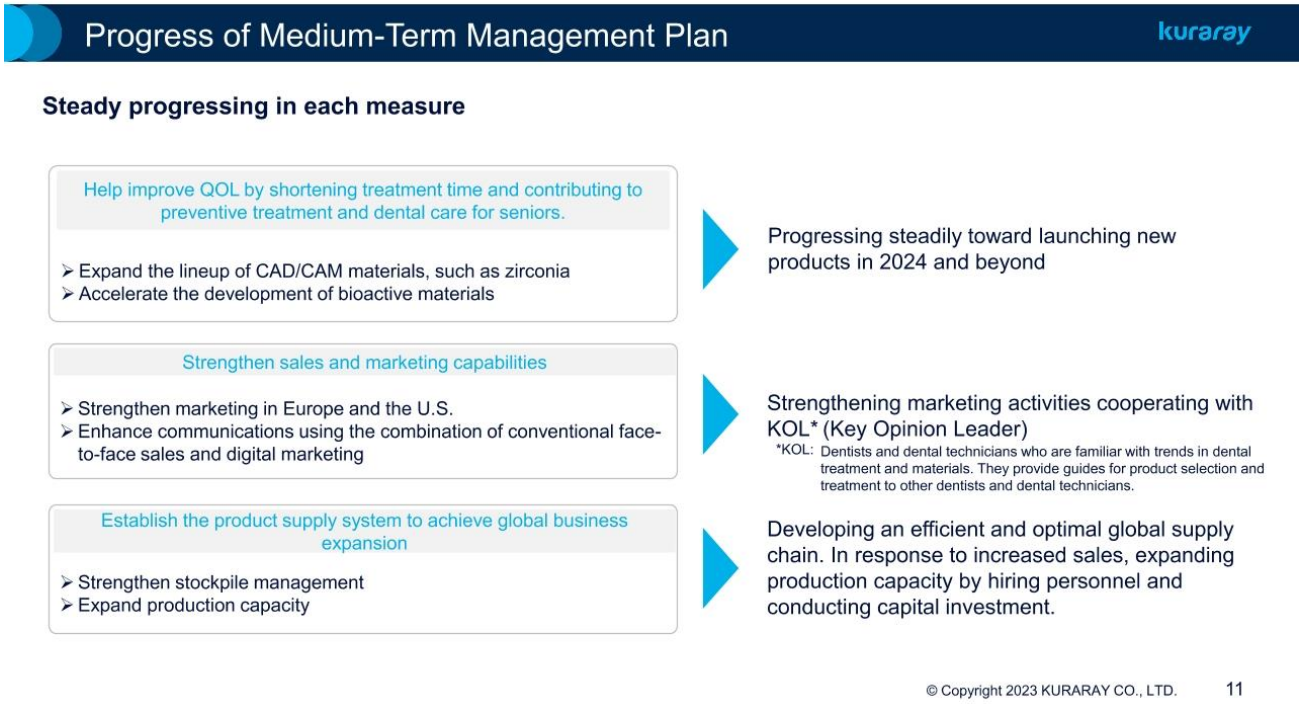


Source: *REALITY* RATINGS & REVIEWS

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Another feature is that the data shown here is provided by REALITY, an independent evaluation organization for dental materials in the United States. The company is run by a group of dentists, about 25 of whom are well-known dentists, who analyze various products from different companies and rate them on their potential applications, features, clinical usability, packaging, ease of use, ease of understanding the instruction manuals, and other details. The five-star rating is the highest rank. This does not include the crowns, but only the evaluation of organic materials.

As written in blue, we currently have 10 products that have received five-star ratings and the company in the second place have five products with five-stars rating.. We are proud to say that our products have received high evaluations in these areas.



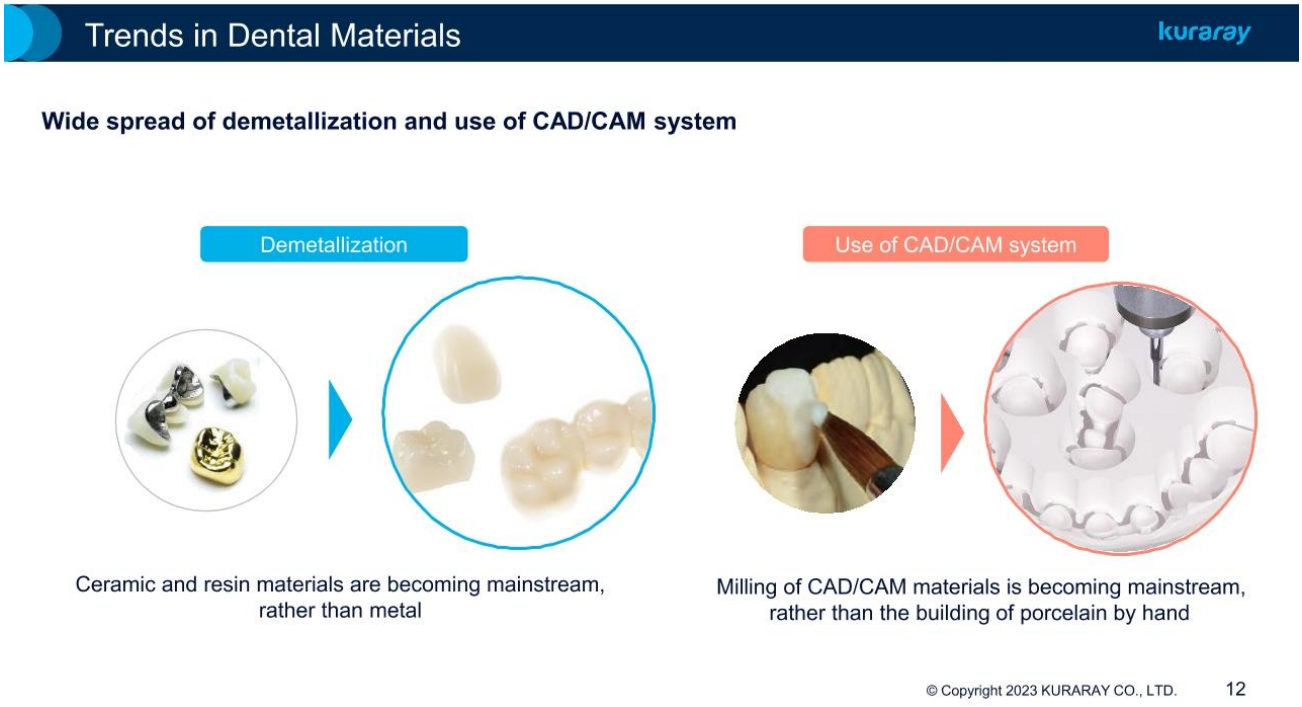
We have listed three major items as progress and measures in this Medium-Term Management Plan.

The first one is at the top. We have set forth to help improve QOL by shortening treatment time and contributing to preventive treatment and dental care for seniors; in other words, how many new products we are going to introduce here. Today, I have not yet reached the point where I can share with you what we are doing here, so I would like to ask your indulgence for the next time.

Next. Strengthening sales and marketing capabilities. As I mentioned earlier, we are quite confident in our products, but we have to focus on sales. We believe that we do not yet have the ability to provide information to dental clinics and technicians, so we are in the process of strengthening these areas.

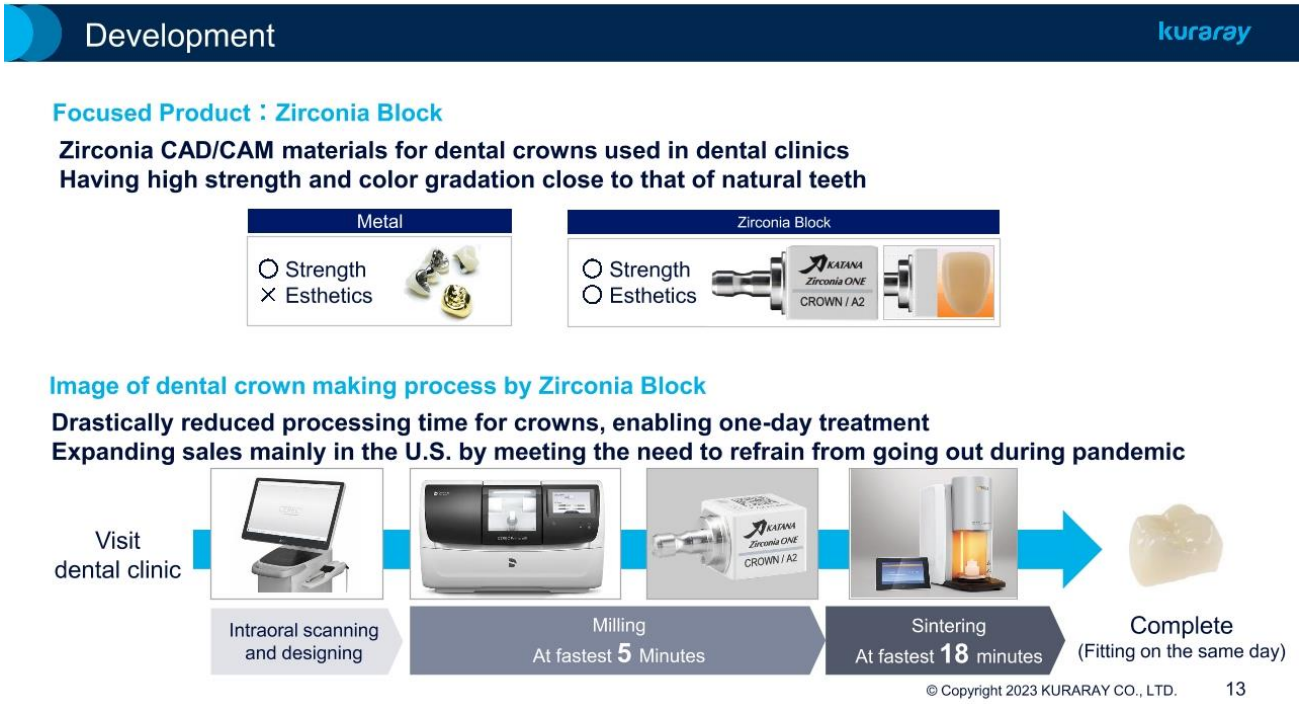
In the medical field, we often use the term “Key Opinion Leader”. They are very well-known doctors who are well-versed in clinical practice and materials and who provide information on various treatments and materials to practicing doctors and technicians. We are also strengthening our activities to introduce our products to these people as much as possible so that they will recommend our products to others when they communicate their information to the public.

The third point is to establish the product supply system to achieve global business expansion, and we are currently building a system for a global supply chain. We are also in the process of expanding our workforce and making capital investments. Today, I would like to explain two of these topics in a little more depth.



As I mentioned earlier, the trend in dental materials is moving away from metal. Metal is not aesthetically pleasing to the eye. Therefore, there is a demand for teeth to be repaired and filled with white materials.

Furthermore, in the 10 to 20 years, computers have been used more and more. For example, regarding the dental crown, a mold is taken, sent to a technician, and the metal is cast to make the crown. But nowadays computerization such as CAD/CAM is more common, the intraoral cavity is digitally scanned, and the scan is then directly imported into a computer, designed, and processed. We are developing products in line with these trends.



I would like to introduce a material called zirconia. Zirconia is well-known as an artificial diamond, but the one used as dental material is not transparent as diamond but white since its crystal structure is slightly different. Tooth is white, but not pure white, a little darker in the root and gum portions, but the upper part of the tooth, the incisal portion, is already highly transparent. If tooth color is out of alignment, people feel a sense of discomfort but we have created a gradation of transparency and color in zirconia and have been the first to market this material.

As for the image of the process of making a crown. We do not manufacture the machine. When a patient visits a dental clinic, the dentist scans the inside of the mouth. This is then loaded into a computer, and the type of crown or bridge to be made is designed on the computer. The zirconia blocks we provide are used for this process.

The cutting process takes about five minutes. Conventionally, glass ceramics are used, but we have introduced zirconia to this process. The zirconia is then sintered in the dental office and placed on the patient's teeth on the same day, in about an hour or so. This is what we are currently focusing on the most.

Product Development

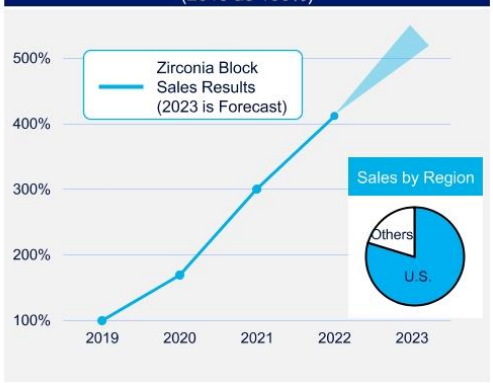
The market for CAD/CAM materials for dental clinics is expanding, mainly in the U.S..
Since the launch of the Zirconia Block, which has the high strength, high esthetics and short processing time, sales are expanding at an annual rate of +60%

Market size of CAD/CAM materials for clinics
(Blue part=Zirconia Block)



*All Market size are estimated by Kuraray.

Kuraray Noritake Dental's Zirconia Block Sales trend
(2019 as 100%)



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This product, the machine and system have penetrated the North American market the most. Currently, we estimate that 20% to 30% of dental clinics have this type of equipment.

So, as you can see in the graph on the left, the North American market is large. The white area here is in the circle is the conventional type, where glass ceramics are used, and this is where we first introduced esthetic zirconia. Zirconia was already in the market, but its transparency was low, and it was pure white. We introduced zirconia with the gradation I mentioned earlier.

As a result, since the product was launched in 2018, sales have been steadily increasing and are currently growing at an annual rate of over 60%. I believe that this type of treatment will continue to spread rapidly in the future, so we are focusing on development.

Capacity Expansion at Miyoshi Plant

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- To accelerate expansion of dental business, decided to invest in production capacity expansion for ceramic materials at Miyoshi Plant (Miyoshi City, Aichi Prefecture)

Investment Overview

- Location: Miyoshi City, Aichi Prefecture in Miyoshi Plant of Noritake
- Capacity Expansion: At most +250t/year, Total capacity 490t/year
  (Including future investment. Expansion by this time's investment is +60t/year, Total capacity 300t/year)
- Start of operation: Middle of 2026
- Investment amount: ¥2.2 billion
- Total floor area: about 12,000m^2



Ceramic materials

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This slide, which is the last topic for today, shows the capital investment in the Miyoshi Plant.

We have decided to invest in the capacity expansion of inorganic materials in the Miyoshi plant to accelerate the expansion of our dental materials business. with this investment, we expect to be able to increase production by up to 250 tons for a total annual production capacity of 490 tons. However, since we do not need to prepare all the facilities immediately, we have decided to invest JPY2.2 billion, add 60 tons to the capacity. The new facility will be able to double its current production capacity in the future.

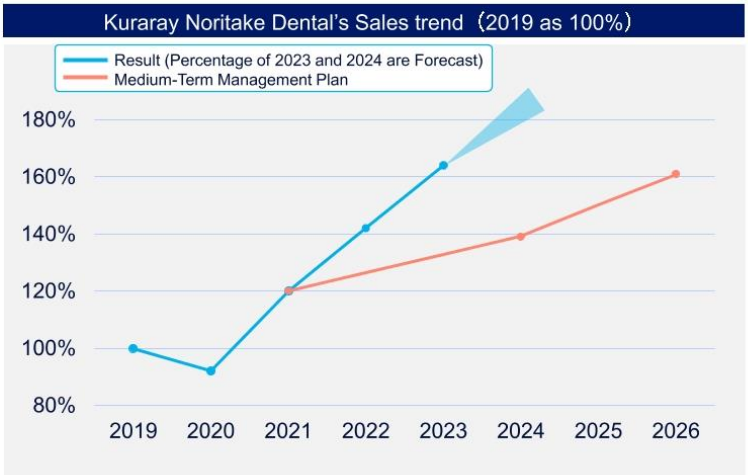
The total floor space will be 12,000 square meters. We intend to continue expanding our business in this manner.

Sales Overview

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During the period of Medium-Term Management Plan from 2022 to 2026, we are aiming for annual sales growth rate of +10% by expanding sales in the U.S. and Europe.

Regarding the progress of Medium-Term Management Plan, sales growth rate has been significantly exceeding +10%.



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Next slide, sales status. Our Medium-Term Management Plan calls for an annual growth rate of 10%, and at this point, sales are expanding at a much higher rate than 10%. With this momentum, we intend to continue expanding the market, focusing on zirconia and other products.



We will continue to produce high-quality products and promote product development so that dental clinics and their patients can enjoy a higher quality of life.

That is all. Thank you very much.