

# Fiscal Year Ending March 2019 (147th Business Year) 2Q Quarter Financial Analyst Meeting

November 20, 2018





## **Contents of Today's Presentation**

- Summary of 2nd Quarter Consolidated Business Performance for Fiscal Year Ending March 31, 2019
- Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019
- Future Business Environment and Mediumand Long-term Business Strategies

Noriyuki Negoro, President and CEO





Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

Future Business Environment and Medium- and Long-term Business Strategies

## **Summary of 2nd Quarter Business Performance**

Summary of 2nd Quarter Consolidated Business Performance for Fiscal Year Ending March 31, 2019

SHOFU

Positive factors Negative factors



Net Sales totaled 12,179 million yen (an increase of 4.1%)

Domestic net sales totaled 6,679 million yen (a decrease of 1.4%)

- Domestic sales in the dental business decreased by 2.5% due to sluggish sales of all product lines resulting from the intensified competition in the market, despite sales contribution from the new product that was introduced to the market during the previous fiscal year.
- Domestic sales in the nail care business increased by 7.4% due to sales driven by existing flagship brands of gel nail products, the new brand and the brand for general consumers.

Overseas net sales totaled 5.500 million ven (an increase of 11.6%)

- Overseas sales in the dental business increased by 14.4% due to an increase in sales in all regions and a positive foreign exchange effect linked to the depreciation of the ven.
- Overseas sales in the nail care business decreased by 13.2% due to a sharp decrease in sales in Taiwan where competitors are taking increasingly aggressive actions, despite favorable sales in America.
- Operating income totaled 784 million yen
- Owing to the effect of an increase in sales and an improvement in the cost of sales ratio, operating income increased by 5.7%, despite an increase in selling, general and administrative expenses resulting from active investment in R&D and sales promotion activities.
- Ordinary income totaled 782 million yen, and current income totaled 546 million yen
- Ordinary income decreased by 8.3% YoY due to a negative foreign exchange effect. Net income, after deducting tax expenses, decreased by 14.1%.



\* "Net income" figures are figures for "Net income attributable to owners of parent" after the application of the Accounting Standard for Business Combinations, etc.

# Summary of 2nd Quarter Business Performance

SHOFU INC.

Summary of 2nd Quarter Consolidated Business
 Performance for Fiscal Year Ending March 31, 2019

Sales increased and profits decreased compared to the previous period/ Net sales decreased and net income increased compared to the forecast.

Units: millions of yen, %

SHOFU

	Fiscal March 2018 (2Q Results) (% of sales)	Fiscal March 2019 (2Q Forecast) (% of sales)	Fiscal March 2019 (2Q Results) (% of sales)	Change from Previous Period (% change)	Change from Forecast (% change)
Sales	11,701	12,550	12,179	478	-370
	(100.0)	( 100.0)	( 100.0)	(4.1)	( -3.0)
(Domestic sales)	6,773	7,179	6,679	-94	-500
(Demestic suits)	( 57.9)	( 57.2)	( 54.8)	( -1.4)	( -7.0)
(Overseas sales)	4,927	5,370	5,500	572	130
(everseus suites)	( 42.1)	( 42.8)	( 45.2)	(11.6)	( 2.4)
Operating income	742	639	784	42	145
	( 6.3)	( 5.1)	( 6.4)	( 5.7)	( 22.8)
Ordinary income	853	589	782	-71	192
	(7.3)	( 4.7)	( 6.4)	( -8.3)	( 32.6)
Net income	635	346	546	-89	199
Net income	( 5.4)	( 2.8)	( 4.5)	( -14.1)	( 57.6)
Net income per share	40.01yen	21.80yen	34.35yen	-5.66yen	12.55yen
Return on equity	2.8%	_	2.3%	-0.5P	_
Foreign exchange rates					
US dollar	111.42	105.00	110.07	-1.35	5.07
Euro	126.63	130.00	129.88	3.25	-0.12
Pound sterling	144.38	150.00	146.49	2.11	-3.51
Renminbi	16.42	16.50	17.05	0.63	0.55

<sup>\*</sup> Based on the results of the first half ended on September 30, 2019, diluted net income per share for the fiscal year ending March 2019 was 34.12 yen.

## Sales by Product Category (Comparison with Previous Pariod)

Summary of 2nd Quarter Consolidated Business
 Performance for Fiscal Year Ending March 31, 2019

SHOFU

Unit: millions of yen

Figures in parentheses represent percentage changes; unit: %

	Fiscal March 2018	Fiscal March 2019	Cange from previous period			
	(2Q Results)	(2Q Results)			Domestic	Overseas
Artificial teeth	1,948	2,150	201	( 10.3)	-38	239
Abrasives	1,983	2,072	88	( 4.5)	-12	101
Metal products	123	120	-2	( -2.3)	-2	-0
Chemical products	2,326	2,500	173	( 7.5)	-25	198
Cements and others	988	1,072	84	( 8.5)	-16	100
Equipment and others	3,071	3,013	-57	( -1.9)	-55	-2
Dental business total	10,441	10,929	487	( 4.7)	-149	637
Nail care business	1,210	1,198	-12	( -1.0)	53	-65
Other	49	51	2	( 4.9)	2	0
Total	11,701	12,179	478	(4.1)	-94	572

\*The effect of foreign currency fluctuations (U.S. dollar (USD), Euro (EUR), British pound (GBP), Chinese yuan (CNY) and New Taiwan dollar (NTD)) on overseas net sales was +64 million yen. (Dental business +68 million yen, Nail care business -3 million yen)

# Sales by Product Category (Comparison with Forecast)

Summary of 2nd Quarter Consolidated Business Performance for Fiscal Year Ending March 31, 2019

SHOFU

Unit: millions of yen Figures in parentheses represent percentage changes; unit: %

	Fiscal March 2019	Fiscal March 2019	Cange from Forecast		
	(2Q Forecast)	(2Q Results)		Domestic	Overseas
Artificial teeth	2,095	2,150	54 (2	.6) -57	112
Abrasives	1,980	2,072	92 (4	.6) - <mark>26</mark>	118
Metal products	135	120	<b>-14</b> (-11	.0) -14	-0
Chemical products	2,513	2,500	-13 (-0	.5) -75	62
Cements and others	1,059	1,072	12 (1	.2) -36	48
Equipment and others	3,328	3,013	-315 (-9	.5) -207	-107
Dental business total	11,114	10,929	-184 (-1	.7) -418	234
Nail care business	1,380	1,198	<b>-182</b> (-13	.2) -78	-104
Other	55	51	-4 (-7	.6) -4	0
Total	12,550	12,179	-370 (-3	.0) -500	130

<sup>\*</sup>The effect of foreign currency fluctuations (U.S. dollar (USD), Euro (EUR), British pound (GBP), Chinese yuan (CNY), Indian Rupee (INR) and New Taiwan dollar (NTD)) on overseas net sales was +91 million yen.

## **Domestic Sales**

Positive factors Negative factors

- Dental business: <u>Year on year decrease of 149 million</u> <u>yen (-2.5%)</u>
  - Dental filing composite resin and new CAD/CAM-related products contributed to sales.
  - Sales of artificial teeth, chemical products and other existing flagship products decreased.
- Nail care business: <u>Year on year increase of 53 million</u> yen (+7.4%)
  - Sales were driven by existing and new brands of gel nail products and the brand for general consumers.
- Other businesses: <u>Year on year increase of 2 million</u> yen (+4.9%)
- Principal new products launched during recent fiscal year (dental business)
  - Dental filling composite resin BEAUTIFUL Flow Plus X (Chemical products)
  - Digital oral imaging device

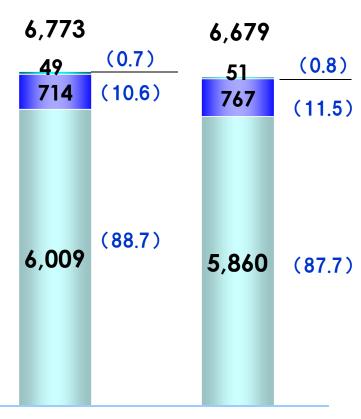
**EyeSpecial C-III** (Equipment and others)

- Digital impression molding device
  - TRIOS3 oral scanner (Equipment and others)
- Resin material for dental cutting processing SHOFU BLOCK HC HARD (Equipment and others)

Summary of 2nd Quarter Consolidated Business
 Performance for Fiscal Year Ending March 31, 2019

SHOFU

Unit: Millions of yen; figures in parentheses represent the percentage of the total



Fiscal March 2018 Fiscal March 2019 2Qresults 2Qresults

■ Dental ■ Nail care ■ Other

#### **Overseas Sales**

Summary of 2nd Quarter Consolidated Business Performance for Fiscal Year Ending March 31, 2019

SHOFU

Positive factors Negative factors

- North America and Latin America: Year-on-year increase of 85 million yen (+6.3%)
  - Flagship chemical products, abrasives and nail care business remained strong.

Local currency basis: Year on year increase of 102 million yen (+7.5%)

- Europe: Year-on-year increase of 130 million yen (+6.7%)
  - Chemical products and artificial teeth remained robust. Local currency basis: Year on year increase of 80 million yen (+4.1%)
- Asia and Oceania: Year-on-year increase of 356 million yen (+21.9%)
  - In China, sales of almost all product lines, mainly flagship artificial teeth remained strong.
  - In other Asian markets, sales of all product lines. mainly artificial teeth remained strong. Sales in the nail care business dropped sharply in Taiwan.

Local currency basis: Year on year increase of 324 million yen (+19.9%)

China: Year on year increase of 280 million yen (+35.2%)

Elsewhere in Asia: Year on year increase of 76 million yen (+9.1%)

(Dental business) Overseas sales ratio of 46.4%

(42.4% for the same guarter of the previous fiscal year; 46.0% after adjustment for fluctuations of foreign currency exchange rates) Unit: Millions of yen; figures in parentheses represent the percentage of the total

4,927	5,500	5,500 5,435	
1,121	1,986	1,954	Asia and Oceania
1,630 (33.1)	(36.1)	(36.0)	
1,933 (39.2)	2,063 (37.5)	2,013 (37.0)	Europe
1,364	1,449	1,467	North and Latin America
(27.7)	(26.4)	(27.0)	

Fiscal Year Fiscal Year Fiscal Year 2018 2019 2019 2Q results 2Q Results 2Q Results after adjustment for foreign

currency translation

\* The results of the quarter under review after adjustment for fluctuations of foreign currency exchange rates have been calculated based on the same exchange rates used for the results of **SHOFU INC.** the fiscal year ended March 2018.

# Performance by Segment (Sales and Operating Income)

Summary of 2nd Quarter Consolidated Business Performance for Fiscal Year Ending March 31, 2019

SHOFU

Unit: millions of yen. Figures in parentheses represent percentage of sales and percentage changes (unit: %)

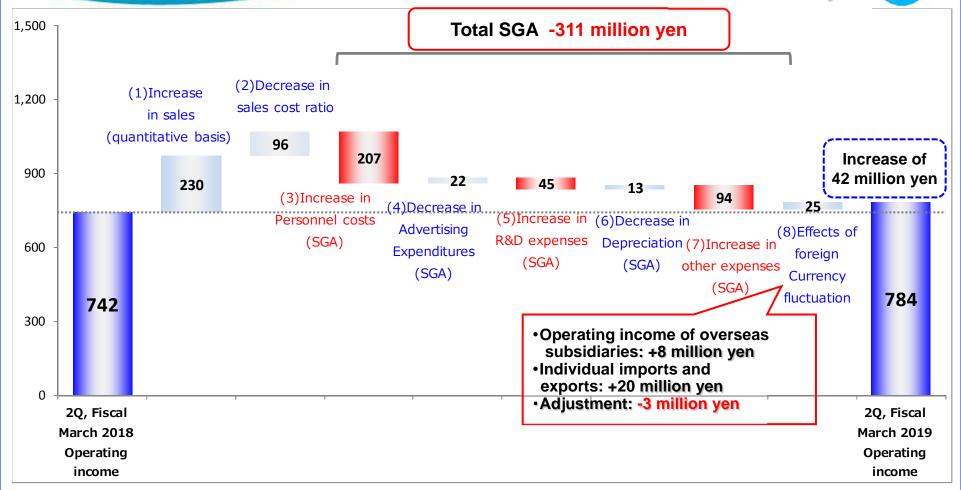
		Fiscal March 2018 (2Q Results) Amount (% of sales)	Fiscal March 2019 (2Q Forecast) Amount (% of sales)	Fiscal March 2019 (2Q Results) Amount (% of sales)	Change from Previous Period	Change from Forecast
Dental	Net Sales	10,442	11,114	10,929	487	-184
	Operating expenses	9,724	10,524	10,126	402	-397
	Operating income	717	589	802	85	213
	(operating income margin)	( 6.9)	( 5.3)	( 7.3)		
Nail care	Net Sales	1,210	1,380	1,198	-12	-181
	Operating expenses	1,196	1,337	1,228	31	-109
	Operating income	13	42	-29	-43	-72
	(operating income margin)	(1.1)	(3.1)	( -2.5)		
Other	Net Sales	52	55	55	3	0
	Operating expenses	43	48	46	2	-1
	Operating income	8	7	9	0	1
	(operating income margin)	( 16.8)	( 13.4)	( 16.2)		
Total before	Net Sales	11,705	12,550	12,183	478	-366
consolidation	Operating expenses	10,965	11,910	11,401	436	-509
adjustment	Operating income	739	639	781	42	142
aajusiirieiii	(operating income margin)	( 6.3)	(5.1)	( 6.4)		
Consolidated	Net Sales	11,701	12,550	12,179	478	-370
	Operating expenses	10,958	11,910	11,394	436	-516
	Operating income	742	639	784	42	145
	(operating income margin)	( 6.3)	( 5.1)	( 6.4)		



Summary of 2nd Quarter Consolidated Business
 Performance for Fiscal Year Ending March 31, 2019







\*The contributing factors in items (1) to (7) do not incorporate the effects of fluctuations of foreign currency exchange rates.

# Financial Condition: Major Balance Sheet Accounts

Summary of 2nd Quarter Consolidated Business
 Performance for Fiscal Year Ending March 31, 2019

SHOFU

#### Unit: millions of yen

	Fiscal March 2018	2Q,Fiscal March 2019	Change	Major contributors to changes, special notes
Cash and deposits	5,733	5,380	-352	Decrease in cash and deposits
Notes and bills receivable, trade accounts receivable	3,285	3,116	-169	Increase in accounts receivable - trade
Inventory	5,871	6,470		Increase in merchandises
Securities, investment securities	6,669	6,647	-22	Decrease in investment securities due to market value fluctuations
Others	9,330	9,319	-10	
Total Assets	30,890	30,933	42	
Long-term and short-term borrowings	1,486	1,239	-246	Decrease in long-term loans payable
Reserve for retirement benefits and directors' retirement benefits	221	227	6	
Others	5,026	4,890		Decrease in deferred tax liabilities and income taxes payable
Total Liabilities	6,733	6,357	-376	
Total net assets	24,157	24,576	419	Increase in foreign currency translation adjusutment and retained earnings
Total Liabilities and net assets	30,890	30,933	42	
Shareholders' equity ratio	77.8%	79.1%	1.3P	
Shareholders' equity per share	1,512yen	1,538yen	26yen	

# Capital Investments, Depreciation Expenses, R&D Expenses, etc.

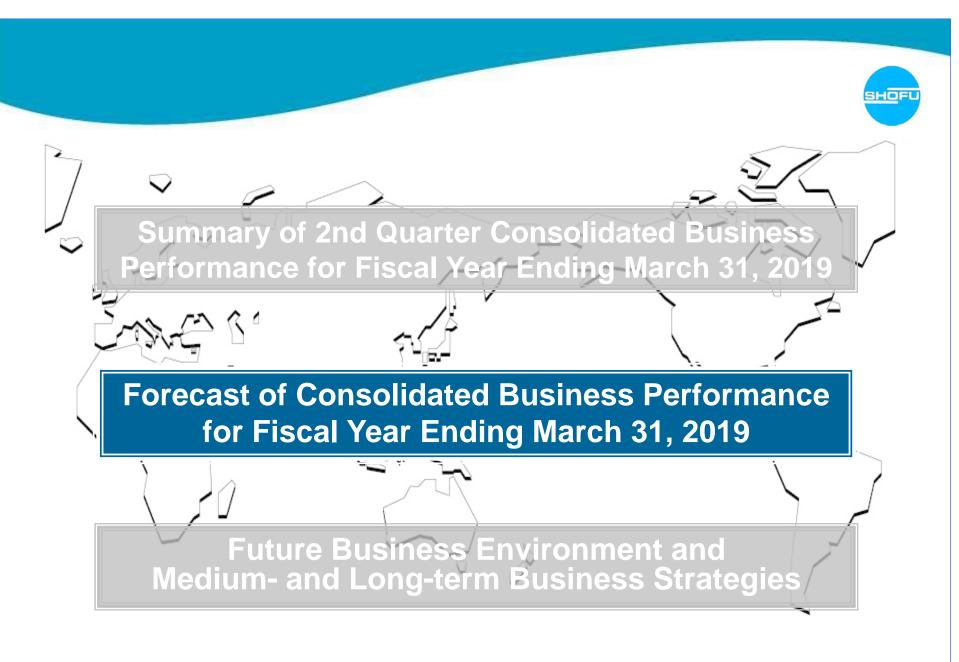
Summary of 2nd Quarter Consolidated Business Performance for Fiscal Year Ending March 31, 2019

Unit: millions of yen

	Fiscal March 2018 (2Q Results)	Fiscal March 2019 (2Q Forecast)	Fiscal March 2019 (2Q Results)	Change from Previous Period	Change from Forecast
Capital investment	321	644	511	189	-133
Depreciation expenses	465	471	425	-40	-46
(of which amortization of goodwill)	52	54	42	-10	-12
R&D expenses	692	822	739	47	-83
Foreign exchange rates					
US dollar	111.42	105.00	110.07	-1.35	5.07
Euro	126.63	130.00	129.88	3.25	-0.12
Pound sterling	144.38	150.00	146.99	2.61	-3.01
Renminbi	16.42	16.50	17.05	0.63	0.55

<sup>•</sup> The foreign exchange rates given are those in effect at the average of each term; conversions of items in the financial statements of overseas subsidiaries all use average rates.

SHOFU



# Overview of Forecast of Business Performance for the Year

 Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

Positive factors





**○** Net sales will total 25,725 million yen (an increase of 7.1%)

Domestic net sales will total 14,453 million yen (an increase of 5.9%)

- In the dental business, we expect sales to increase by 4.4% (+531 million yen) due to the development of activities to supply information to dental care workers, as well as the promotion of sales activities focused on flagship areas.
  - <New product sales: 3,019 million yen, or 18.1% of non-consolidated net sales>
- •In the nail care business, we expect sales to increase by 17.3% (+250 million yen) due to the promotion for increase of sales centered on new brand which was introduced to the market in the previous fiscal year, and flagship product line of gel nail products.

Overseas net sales will total 11,271 million yen (an increase of 8.6%)

- In the dental business, sales are expected to increase by 8.8% (+822 million yen) due to the continued expansion of our sales network, strengthened partnerships with other companies, and accelerated business development overseas.
- In the nail care business, sales are expected to increase by 6.8% (+71 million yen) as we strengthen sales activities in the American and Taiwan markets.
- Operating income will total 1,737 million yen (an increase of 16.0%). Ordinary income will total 1,630 million yen (an increase of 4.2%). Net income will total 1,109 million yen (an increase of 26.4%).
- Although selling, general and administrative expenses will increase due to proactive investment of sales activities, effects of higher sales are expected to cause operating income to increase by 16.0%.
- •With the absence of effect of foreign exchange profit and impairment loss of goodwill which occurred in the previous fiscal year, ordinary income increased by 4.2% and net income increased by 26.4%.
  - \* "Net income" figures are figures for "Net income attributable to owners of parent" after the application of the Accounting Standard for Business Combinations, etc.

SHOFU

## **Comparison of Major Statistics**

➡ Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

#### **○** Net sales and Net income increased compared to fiscal March 2018

Units: millions of yen, %

SHOFU

	Fiscal March 2018 Business Performance (% of sales)		Fiscal March 2019 Forecast (% of sales)		Change From Previous Period (% change)	
Net sales	24,031	( 100.0)	25,725	( 100.0)	1,694	(7.1)
(Domestic sales)	13,652	( 56.8)	14,453	( 56.2)	800	( 5.9)
(Overseas sales)	10,378	( 43.2)	11,271	( 43.8)	893	(8.6)
Operating income	1,497	( 6.2)	1,737	( 6.8 )	240	( 16.0)
Ordinary income	1,565	( 6.5)	1,630	( 6.3)	65	( 4.2)
Net income	877	( 3.7)	1,109	( 4.3)	231	( 26.4)
Net income per share	55.20y	en en	69.77	/en	14.57yen	
Return on shareholders' equity	3.8%	ó	4.6%		0.8P	
Foreign exchange rates						
US dollar	110.81		105.00		-5.81	
Euro	129.45		130.00		0.55	
Pound sterling	147.27		150.00		2.73	
Renminbi	16.64		16.50			

\* "Net income" figures are figures for "Net income attributable to owners of parent" after the **SHOFU INC.** application of the Accounting Standard for Business Combinations, etc.

## Sales by Product Category

➡ Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

<u>sho</u>fu

Unit: millions of yen Figures in parentheses represent percentage changes; unit: %

	Fiscal March 2018	Fiscal March 2019	Cange from previous period			d
	(Results)	(Forecast)			Domestic	Overseas
Artificial teeth	4,077	4,352	274	( 6.7)	50	223
Abrasives	4,006	4,114	108	( 2.7)	43	65
Metal products	247	271	24	( 9.7)	23	0
Chemical products	4,770	5,163	393	( 8.2)	105	287
Cements and others	2,044	2,170	126	( 6.2)	71	54
Equipment and others	6,300	6,728	427	( 6.8)	236	191
Dental business total	21,446	22,800	1,353	( 6.3)	531	822
Nail care business	2,485	2,806	321	( 12.9)	250	71
Other	98	117	18	(19.2)	18	_
Total	24,031	25,725	1,694	(7.1)	800	893

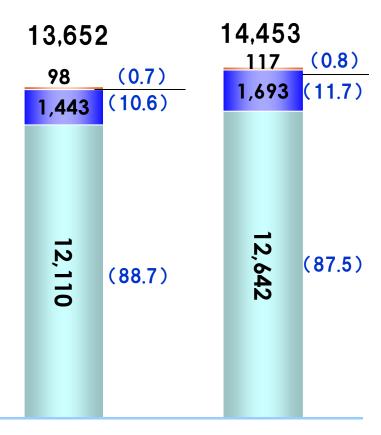
<sup>•</sup> Overseas sales decreased by 154 million yen due to the effect of foreign currency fluctuations (US dollar, euro, pound sterling, renminbi, New Taiwan dollar, Indian Rupee). (Dental business -144 million yen, Nail care business -10 million yen)

#### **Domestic Net Sales**

➡ Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

- Dental business:
  - Year-on-year increase of 531 million yen (+4.4%)
    - we will enhance our sales promotion activities in our major focus areas and provide information activities towards dental professionals.
- **♦ Nail care business:** 
  - Year-on-year increase of 250 million yen (+17.3%)
    - we will promote sales increase of new brand and flagship product lines of gel nail products.
- ♦ Other businesses: Year-on-year increase of 18 million yen (+19.2%)
- Principal new products launched during recent fiscal year.
  - Dental filling composite resin
     BEAUTIFUL Flow Plus X (Chemical products)
  - Digital oral imaging device
     EyeSpecial C-III (Equipment and others)
  - <u>Digital impression molding device</u>
     <u>TRIOS3 oral scanner</u> (Equipment and others)
  - Resin material for dental cutting processing
     SHOFU BLOCK HC HARD (Equipment and others)

Unit: Millions of yen; figures in parentheses represent the percentage of the total



Fiscal March 2018 Fiscal March 2019
Results Forecast

■ Dental ■ Nail care ■ Other

18

SHOFU

SHOFU INC.

#### **Overseas Net Sales**

◆ Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

## Unit: millions of yen; figures in parentheses represent component ratio (%)

## SHOFU

19

#### → Summary

- Despite the negative effects of foreign currency fluctuations (-154 million yen), net sales overall are expected to increase by 8.6% due to strong performances in all regions.
- Growth rates by region

\*Figures in parentheses indicate the growth rate on local currency basis.

North and Latin America +0.6% (+ 6.0%)
Europe +9.7% (+ 9.1%)
China +11.9% (+12.9%)
Asia (Other) +14.6% (+15.7%)

#### → Foreign exchange rates

USD1=JPY105.00

(JPY110.81 in the previous fiscal year)

(Effect: -171 million yen)

EUR1=JPY130.00

(JPY129.45 in the previous fiscal year)

(Effect: +17 million yen)

RMB1=JPY16.50

(JPY16.64 in the previous fiscal year)

(Effect: -16 million yen)

♦ (Dental business) Overseas sales ratio

44.6% (43.5% in the previous fiscal year)

(44.9% after foreign currency translation adjustment)

11,426 11.271 10.378 Asia and 4.108 4.072 Oceania (36.0)(36.1)3.594 (34.6)Europe 4,523 4.548 4.147 (39.6)(40.4)(40.0)North and Latin America 2.794 2.635 2.651 (23.5)(25.4)(24.4)Fiscal Year 2018 Fiscal Year 2019 Fiscal Year Results **Forecast** 2019 Forecast after adjustment

\* The fiscal March 2019 forecast after adjustment for foreign currency translation has been translation has been translation calculated based on the same foreign exchange rates used for the fiscal March 2018 results.

# Performance by Segment (Net Sales and Operating Income)

⇒ Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

SHOFU

Unit: millions of yen. Figures in parentheses represent percentage of sales and percentage changes (unit: %)

		Fiscal March 2018 (Results)  Amount (% of sales)	Fiscal March 2019 (Forecast) Amount (% of sales)	Change from Previous Period
Dental	Net Sales	21,447	22,800	1,353
	Operating expenses	20,037	21,224	1,187
	Operating income (operating income margin)	1,410 (6.6)	1,575	165
Nail care	Net Sales	2,486	2,806	320
	Operating expenses	2,422	2,661	238
	Operating income (operating income margin)	63 (2.5)	145 ( 5.2)	82
Other	Net Sales	105	117	12
	Operating expenses	87	101	13
	Operating income	17	16	-1
	(operating income margin)	( 16.8)	(13.7)	
Total before	Net Sales	24,038	25,725	1,686
consolidation	Operating expenses	22,547	23,987	1,439
adjustment	Operating income	1,491	1,737	246
aajosiirieiii	(operating income margin)	( 6.2)	( 6.8)	
Consolidated	Net Sales	24,031	25,725	1,694
	Operating expenses	22,533	23,987	1,454
	Operating income	1,497	1,737	240
	(operating income margin)	( 6.2)	( 6.8 )	

SHOFU INC.

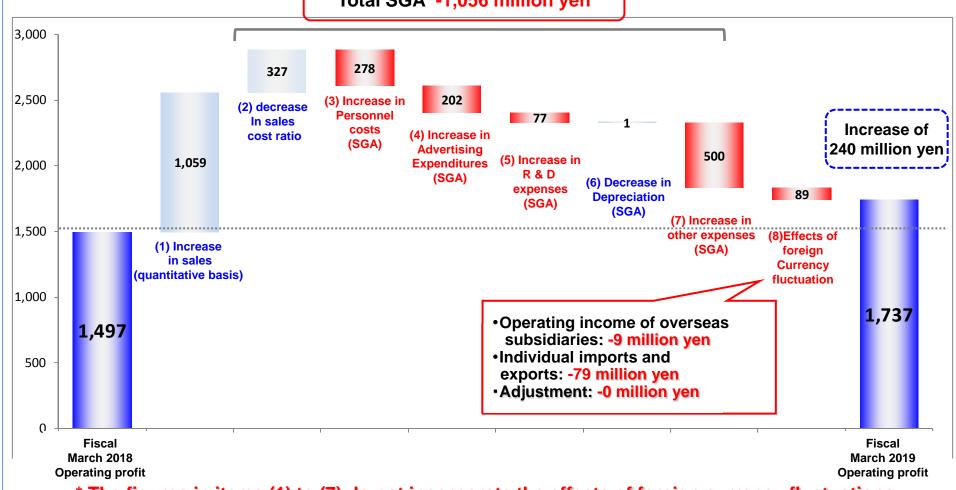


 Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

Unit: millions of yen

SHOFU

Total SGA -1,056 million yen



\* The figures in items (1) to (7) do not incorporate the effects of foreign currency fluctuations.

SHOFU INC.

# Impact of Foreign Exchange Fluctuations

⇒ Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

#### Forecast for Fiscal March 2019

(Unit: millions of yen)

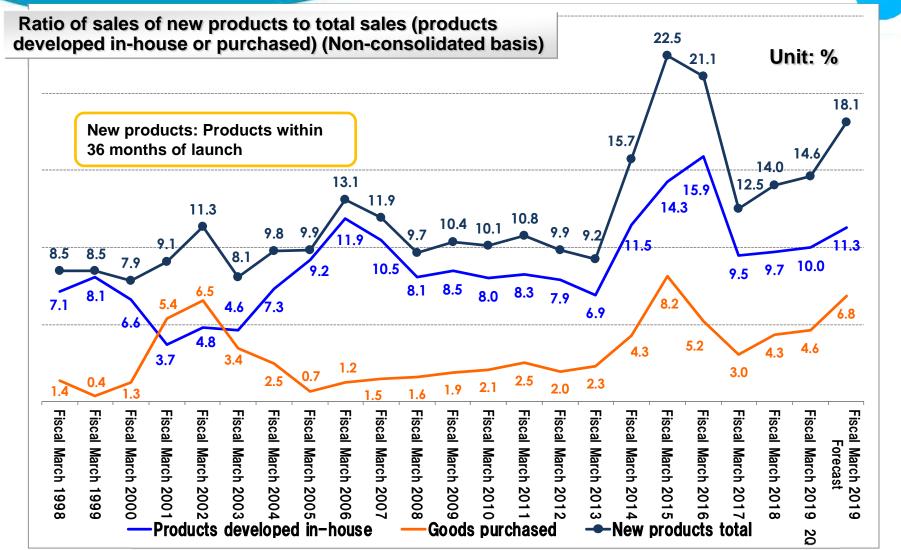
SHOFU

	Foreign exchange rate		Impact on consolidated business performance		Per yen of y	en strength
	Fiscal March 2018 actual	Fiscal March 2019 estimate	Sales	Operating income	Sales	Operating income
US Dollar	110.81	105.00	-171	-78	-29	-12
Euro	129.45	130.00	17	4	-32	-5
GBP	147.27	150.00	7	0	-2	0
RMB	16.64	16.50	-16	-15	-117	-59

• The foreign exchange rates given are those in effect at the average of each term; SHOFU INC. conversions of items in the financial statements of overseas subsidiaries all use average rates. 22

#### Trends for Sales Ratio of New Products

➡ Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019



SHOFU INC.

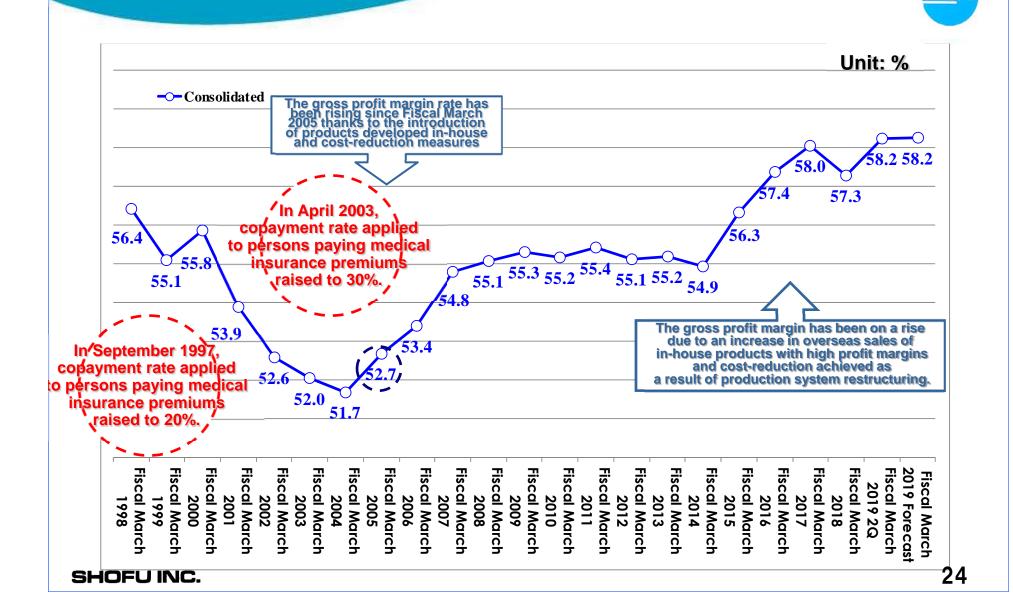
SHOFU

<sup>\*</sup> Major goods purchased: Johnson & Johnson products, EMS ultrasonic scalers and root canal treatment equipment (reamers/files)

#### **Trends for Gross Profit Margin Rates**

➡ Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

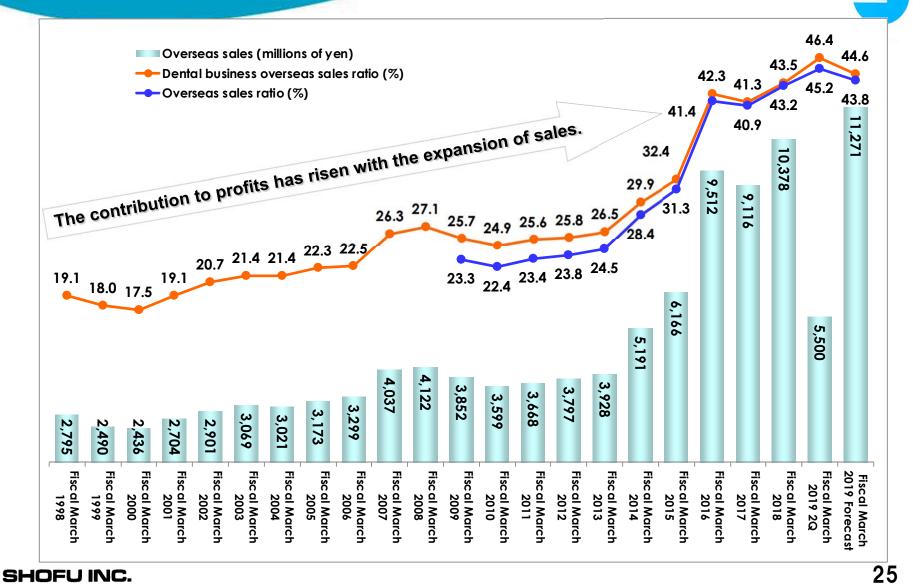
SHOFU



# Trends for Overseas Sales and Overseas Sales Ratios

◆ Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019







Summary of 2nd Quarter Consolidated Business Performance for Fiscal Year Ending March 31, 2019

Forecast of Consolidated Business Performance for Fiscal Year Ending March 31, 2019

Future Business Environment and Medium- and Long-term Business Strategies

## **Business Environment Awareness**

 Future Business Environment and Mediumand Long-term Business Strategies



#### **Domestic dental market**

- Rising demand in aesthetic and preventive fields
- Decrease in population and occurrence of cavities
- Maintenance of a certain market scale
- Significant growth is unlikely

#### **Overseas dental market**

- Existence of enormous market centered on developed nations
- Economic growth and rising living standards in regions worldwide, particularly developing nations
- Demand for dental care increasing dramatically

## Vision for our company: Medium-to Long-term Basic Policy

 Future Business Environment and Mediumand Long-term Business Strategies

SHOFU

Strive to expand the overseas business by dramatically shifting the allocation of management resources to overseas markets.



- Group net sales: 50 billion yen <Domestic sales: 17 billion yen; overseas sales: 33 billion yen>
- ➤ Group operating income: 7.5 billion yen (Operating profit margin: 15%)

Pursue globalization in every department, function (R&D, production, and sales), personnel, and by extension the company's overall management.

# Fiscal 2018 to 2020 Medium-term Puture Busines and Long-term Management Plan: Company-wide targets

 Future Business Environment and Mediumand Long-term Business Strategies



Company-wide targets for fiscal March 2021

- Group net sales: 29.2 billion yen
  - <Domestic sales:13.5billion yen; overseas sales:12.2 billion yen; Nail care business sales:3.3 billion yen>
    <Overseas sales ratio in the dental business : 50%>
- ➤ Group operating income: 2.34 billion yen (Operating profit margin: 8.0%)
- > ROE 6.0%

#### Key issues in order to achieve goals

R&D	✓ Development and introduction of new products that match the local demands	Promotion of M&As
Production	✓ Relocation of production base and expansion of offshore production	(business tie-ups,
Sales	✓ Improvement of our sales network / Realignment of sales offices ✓ Establishment of domestic and international academic networks	technology partnerships, business
HR	✓ Development of human resources and securing the skilled employees	acquisitions)

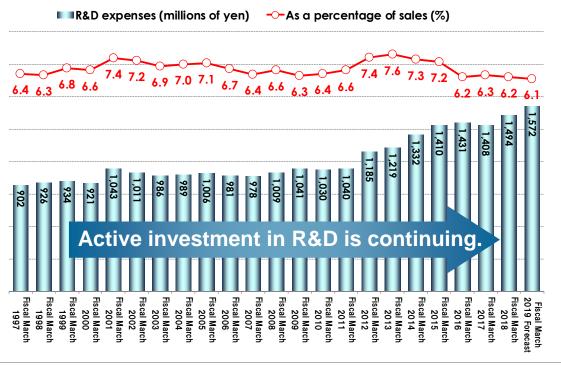
# Specific Efforts – Research and Development

 Future Business Environment and Mediumand Long-term Business Strategies

#### ♦ Development and introduction of new products that match the local demands

- Developing products with a worldwide vision
- Developing new products for regions' middle-class and high-volume segments
- Developing products with the goal of creating markets in new fields

Trend in R&D investment



SHOFL

## Specific Efforts – Production

Future Business Environment and Mediumand Long-term Business Strategies

Relocation of production base and expansion of offshore production

Further expand the market share of our time-honored specialties such as artificial teeth and abrasives by enhancing price competitiveness and reducing costs.

Effectively utilizing existing domestic factories

#### **Domestic manufacturing Group companies**



Shiga Shofu (Shiga)



kyoto (Kyoto)

Expanding overseas production



Shofu products Nail Labo (Saitama)

- Principal issues and purpose of repositioning of production
  - 1) limited productions capacity of SHOFU **Headquarters**
  - 2) high production costs in Japan
  - 3) currency fluctuations
  - 4) high shipping costs for hazardous and heavy goods
  - 5) better delivery service to users
  - 6) high tariff

#### **Overseas manufacturing Group companies**



Shanghai Shofu Dental Materials Co., Ltd. (China)



Advanced Healthcare Ltd. (UK)



Merz Dental GmbH.(Germany)



SHOFL

## Specific Efforts - Production

 Future Business Environment and Mediumand Long-term Business Strategies

## Relocation of production base and expansion of offshore production

Split up Promech's dental business to Shoken

Nail Labo absorbed Promech

Aimed for stabilization of management base and business efficiency

Relocation and expansion of Shoken Changed the company name to SHOFU PRODUCTS KYOTO INC.

Subsidiarization of Merz Dental GmbH, a German artificial teeth Manufacturer

New production base in Europe

Completed new plant in the SHOFU headquarters

SHOFL

March, 2013

<u>July, 2014</u>

**April**, 2015

March, 2017

FY 2013/3

FY 2014/3

FY 2015/3

FY 2016/3

FY 2017/3

FY 2018/3

March, 2014

**January**, 2015

September, 2015

Completed CAD/CAM processing center at Shoken

<u>;</u>-----

Completed new plant at Shiga SHOFU

Established CAD/CAM processing company in Germany

(Digital Dental Services GmbH)

SHOFU INC.

\*We are gradually developing production bases in other important countries and regions.

## Specific Efforts – Sales

Future Business Environment and Mediumand Long-term Business Strategies

#### SHOFU

#### ♦Improvement of our sales network

- Develop a network of overseas distributors.
- **♦**Realignment of sales offices
  - Establish new overseas sales bases.
- **♦** Establishment of domestic and international academic networks
  - Build an organization that can advertise the company's products and services directly to users.
  - Enhance and expand MDR\* activities. \*Medical dental representative

>Enhance academic

>Improve our customer service activities

#### [ Overseas sales Group companies ]





**Shofu Dental** Corporation (U.S.A.)

Shofu Dental **GMBH** (Germany)







Shofu Dental **Trading (Shanghai)** Co., Ltd., (China)

**Shofu Dental Asia-Pacific** PTE (Singapore)

Merz Dental **GmbH.(Germany)** 

#### [ Other overseas bases ]

Sales company: Mexico, Brazil, India : England, Taiwan, Italy Sales base

>Speed up the product registration work

SHOFU INC.

## Specific Efforts – Sales

 Future Business Environment and Mediumand Long-term Business Strategies

## SHOFU

#### **♦**Realignment of sales offices

Incorporated Sales Branch in Singapore (SHOFU Dental Asia-Pacific Pte. Led.)

**April**, 2013

Established Sales Company for Dental Implant in Japan Entry into the Implant business (SHOFU BIOFIX Inc.)

Established Sales Branch in Italy

**April**, 2015

S

Established Sales Branch in Taiwan

May, 2015

Established
Sales Company
in India
(SHOFU Dental
India Pvt. Ltd.)

**April, 2017** 

FY 2013/3

FY 2014/3

FY 2015/3

FY 2016/3

FY 2017/3

FY 2018/3

June, 2014

Established
Sales Company
in Mexico
(SHOFU Mexico
S de R.L. de C. V.)

**April**, 2015

.....

Subsidiarization of Merz Dental GmbH, a German artificial teeth Manufacturer January, 2017

Established
Sales Company in Brazil
(SHOFU Dental Brasil
Comercio De Produtos
Odontologicos Ltda.)

......

\* We are planning to establish sales bases in other important countries / regions.

# Trends for Sales by Region -North and Latin America, Europe

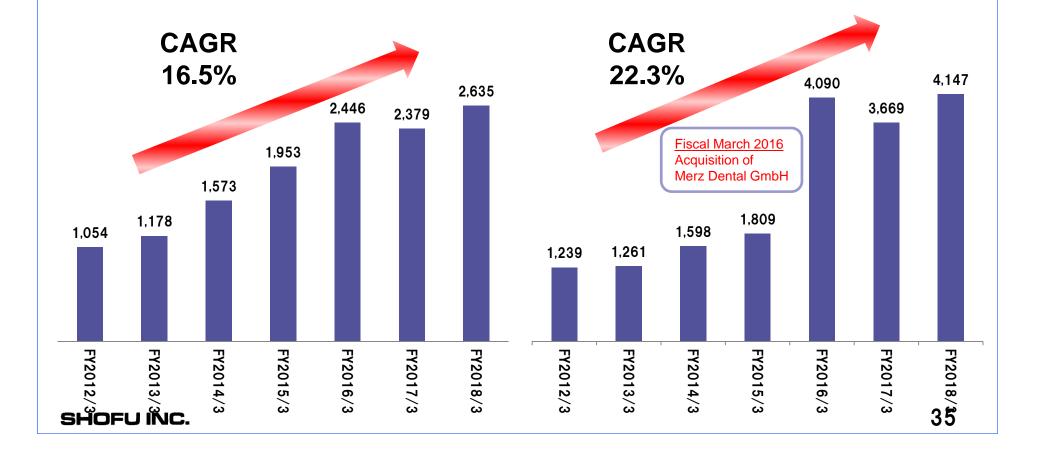
 Future Business Environment and Mediumand Long-term Business Strategies

Unit: millions of yen

SHOFU



**Europe Sales** 



# Trends for Sales by Region -China, Elsewhere in Asia

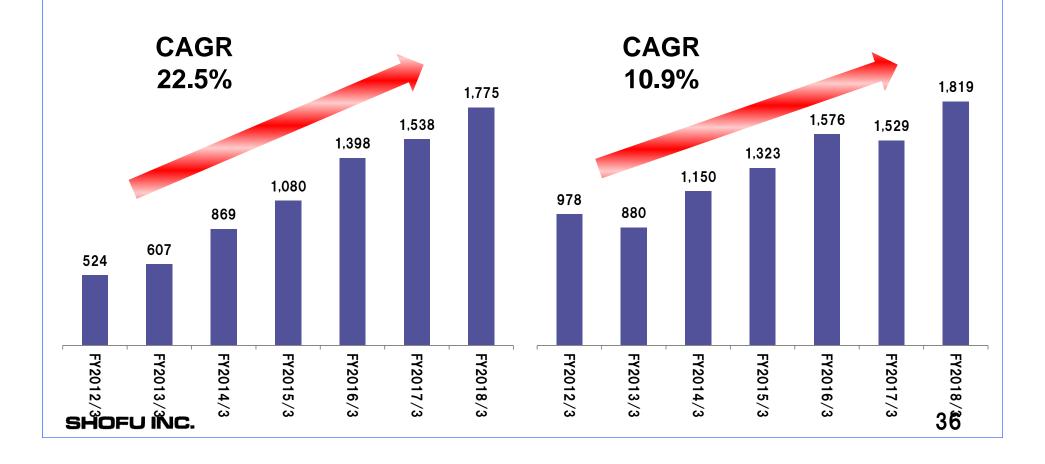
 Future Business Environment and Mediumand Long-term Business Strategies

Unit: millions of yen

SHOFU

#### **China Sales**

# Elsewhere in Asia Sales



## Specific Efforts - MiCD Project

 Future Business Environment and Mediumand Long-term Business Strategies



### **MiCD Project**

(Minimally Invasive Cosmetic Dentistry)

Supporting the development of cosmetic dental treatment that delivers cosmetic results while minimizing surgical intervention of cavity lesion\_



Increasing sales of filling and restorative dental materials

Improved cost effectiveness

Enhance image as a company that promotes state-of-the-art medicine





Developing and supplying MiCD products

Promoting products and services to patients

# Specific Efforts – Nail Care Business

 Future Business Environment and Mediumand Long-term Business Strategies

### Basic Policy

- Work to expand the nail care business by taking advantage of the R&D and production engineering capabilities the company has developed in the dental materials business.
- Ensuring profitability by improvement of in-house products ratio
- Expanding sales channels in overseas markets
  - U.S., Europe, Taiwan, South Korea, China

### Specific Efforts

- ♦ Capturing share in the LED gel market with improved Presto
- Improving competitiveness and profitability by integrating operations from product planning to sales
- ♦ Released self nail gel nail "by Nail Labo" (August 2014)
- ♦ Established joint venture in Taiwan (December 2014), began operation in January 2015
- Launched new "ageha Gel" brand of gel nail products for nail salons





SHOFL



## Medium-term Management Plan – Principle Targets

 Future Business Environment and Mediumand Long-term Business Strategies

SHOFU

\*\*\*\*Record Unit: Millions of yen, %

	i	Fiscal March 2018 (Results)		Mid-term Management Plan				
				Fiscal March 2019		Fiscal March 2020		Fiscal March 2021
Net sales	*	24,031	*	25,725	*	27,419	*	29,264
(Change from Previous Period)		(7.7%)		(7.1%)		(6.6%)		(6.7%)
(Domestic sales)	*	13,652	*	14,453	*	15,085	*	15,700
(Change from Previous Period)	ļ	(3.5%)		(5.9%)		(4.4%)		(4.1%)
(Overseas sales)	*	10,378	*	11,271	*	12,333	*	13,563
(Change from Previous Period)		(13.8%)		(8.6%)		(9.4%)		(10.0%)
Operating income		1,497		1,737	*	2,056	*	2,341
(Persentage of sales)		(6.2%)		(6.8%)		(7.5%)		(8.0%)
Ordinary income		1,565		1,630	*	1,946	*	2,234
(Persentage of sales)		(6.5%)		(6.3%)		(7.1%)		(7.6%)
Net income		877	*	1,109	*	1,370	*	1,596
(Persentage of sales)		(3.7%)		(4.3%)		(5.0%)		(5.5%)
Dental business Overseas sales ratio	*	43.5%	*	44.6%	*	46.0%	*	47.6%

\* "Net income" figures are figures for "Net income attributable to owners of parent" after the application of the Accounting Standard for Business Combinations, etc.

# Medium-term Management Plan by Segment (Sales and Operating Income)

 Future Business Environment and Mediumand Long-term Business Strategies



Unit: Millions of yen, %

	Fiscal March 2018 (Results)		Mid-Term Management Plan					
			Fiscal March 2019		Fiscal March 2020		Fiscal March 2021	
	Amount	%	Amount	%	Amount	%	Amount	%
Dental business	21,447	89.2	22,800	88.6	24,227	88.4	25,787	88.1
Nail care business	2,486	10.3	2,806	10.9	3,068	11.2	3,343	11.4
Other businesses	105	0.4	117	0.5	123	0.5	133	0.5
Net sales	24,038	100.0	25,725	100.0	27,419	100.0	29,264	100.0
Dental business	1,410	6.6	1,575	6.9	1,867	7.7	2,070	8.0
Nail care business	63	2.5	145	5.2	169	5.5	243	7.3
Other businesses	17	16.8	16	13.7	18	15.3	27	20.5
Operating income	1,491	6.2	1,737	6.8	2,056	7.5	2,341	8.0

### Medium-term Management Plan Capital Investments, Depreciation Expenses, R&D Expenses

 Future Business Environment and Mediumand Long-term Business Strategies

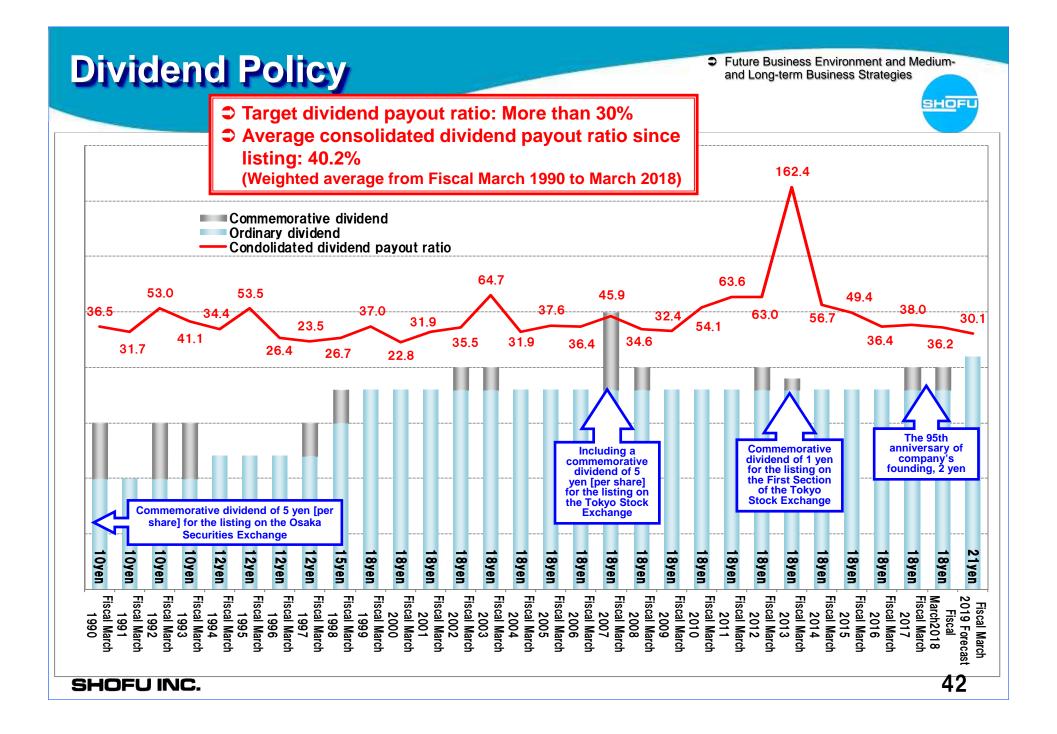
**Unit: Millions of yen** 

SHOFL

	Fiscal	Mid-Term Management Pla			
	March 2018 (Results)	Ficsal March 2019	Ficsal March 2020	Ficsal March 2021	
Capital investment	710	1,080	967	967	
Depreciation expenses (of which goodwill amortization)	975 108	1,003 108	1,003 108	1,003 108	
R&D expenses	1,494	1,572	1,596	1,604	

<sup>•</sup> The foreign exchange rates given are those in effect at the average of each term; conversions of items in the financial statements of overseas subsidiaries all use average rates.

<sup>\*</sup>Capital investment, depreciation expenses and R&D expenses above are recorded only for those realized at this moment. Profit plan includes certain strategy investment expenses.





Forecasts in this document are based on information and data available at the time of release as well as on assumptions concerning uncertain factors that might affect the company's future business performance. Depending on various factors, actual business performance could differ substantially from the forecasts contained in this document.

### SHOFU INC.

11 Kamitakamatsu-cho, Fukuine, Higashiyama-ku, Kyoto 605-0983, Japan

Phone: +81-75-561-1112 Fax: +81-75-561-1227

URL: http://www.shofu.co.jp

E-mail: ir@shofu.co.jp

**Contact: Corporate Planning Department** 







SHOFU INC.



The pages below are provided only for your reference. The information on these pages will not be covered in the financial analysis meeting.









## **Company Profile**



•	Company name	SHOFU Inc.	(As of September 30, 2018)
	Representative	Noriyuki Negoro, President and CEO	
•	Address	11 Kamitakamatsu-cho, Fukuine, Higashi	yama-ku, Kyoto 605-0983, Japan
•	Date of establishment	May 15, 1922	
•	Capital	4,474,646,614 yen	
•	Listed exchanges	First Section of Tokyo Stock Exchange	
•	Number of employees	443 (entire group: 1154, including 546 in o	overseas subsidiaries)
•	Business	Manufacture and sale of dental materials	and equipment
•	Main customers	Dental institutions (via sales agencies)	
	Number of group	17 (four in Japan, thirteen overseas) Dental companies: 14 (three in Japan, e	eleven overseas)
	companies	Nail care companies: 3 (one in Japan, t	wo overseas)
101	FU INC.		46

### **Main Products**



The company manufactures and markets a wide range of dental materials and equipment.

### **Artificial teeth products**

Artificial tooth and implant materials

Porcelain teeth, porcelain powder, resin teeth

### **Abrasives products**

Materials for removing diseased areas and polishing crowns

Diamond abrasive

- Carborundum abrasive
- Silicon polisher
- Other carving and polishing materials
- Industrial grinding and polishing materials

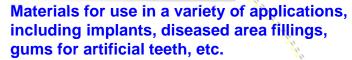
### **Metal products**

Materials for use as dental crowns and as the base for implants

- Alloys for casting, silver alloys
- Other metals

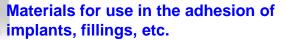






- **Synthetic resins**
- Impression materials
- **Waxes**

### **Cement products**, other



- **Dental cements**
- **Dental stones and investments**

### Machinery, equipment & other products

Equipment and appliances for dental treatment and procedures

- **Dental equipment**
- Products for oral care and infection prevention
- **Orthodontic materials**
- Health and beauty equipment
- Other equipment and appliances



The company's products are designed for use in dental care and treatment.

Please refer to "Product Profiles" attached to this document.

47

## **Corporate History (1)**



• 1922	Shofu Dental Manufacturing Co., Ltd. founded and commenced the manufacture and sale of Japan's first artificial teeth.
• 1963	Shofu shares listed on the over-the-counter market.
• 1971 <b>~</b> 1978	Established sales subsidiaries in the U.S. and West Germany. Started overseas production (in Taiwan). Established Shiga Shofu Inc. as a manufacturing facility for resin teeth.
• 1983	Changed the company name to SHOFU Inc. Commenced management reforms.
• 1989	Shofu's shares listed on the Second Section of the Osaka Securities Exchange (in November).
• 1990 <b>~</b> 1997	Purchased a British research & development and manufacturing company. Founded a sales subsidiary in the U.K. Obtained the UK GMP (Good Manufacturing Practice Certificate. Obtained a CE marking certificate.
• 1996	Founded Promech Inc. Established Liaison Office in Shanghai, China.
• 1997	Established the industry's largest research facility as a part of a project to commemorate Shofu's 75th anniversary.
· 2002~	Celebrated the 80th anniversary of its founding. Established Liaison Office in Beijing, China
2003	Obtained ISO 14001 (Environmental Management System) certification (both for the headquarters and all group companies).
	Established Shanghai Shofu Dental Materials Co., Ltd., a production facility in China.
• 2005	Acquired Shoken Inc. as a wholly owned subsidiary through a share exchange.
	Established Shofu Dental Supplies (Shanghai) Co., Ltd., a sales facility in China.

#### SHOFU INC.

## **Corporate History (2)**

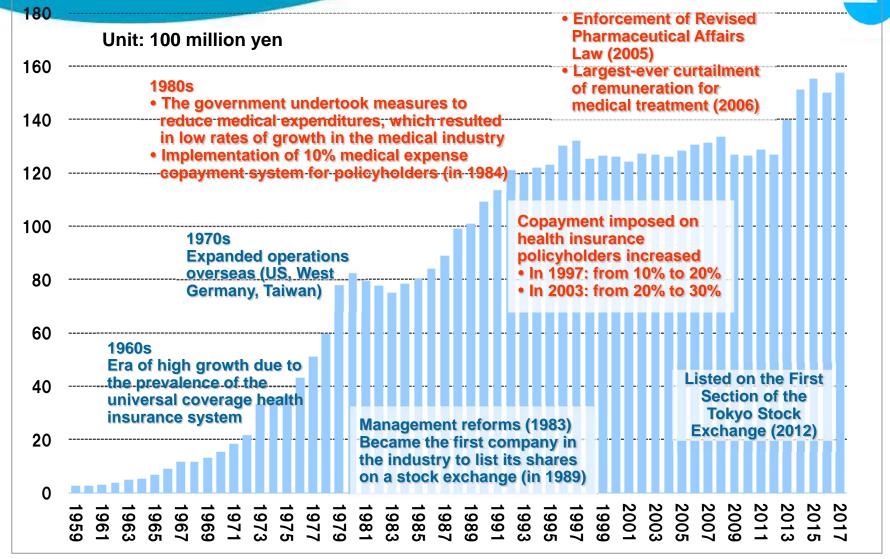


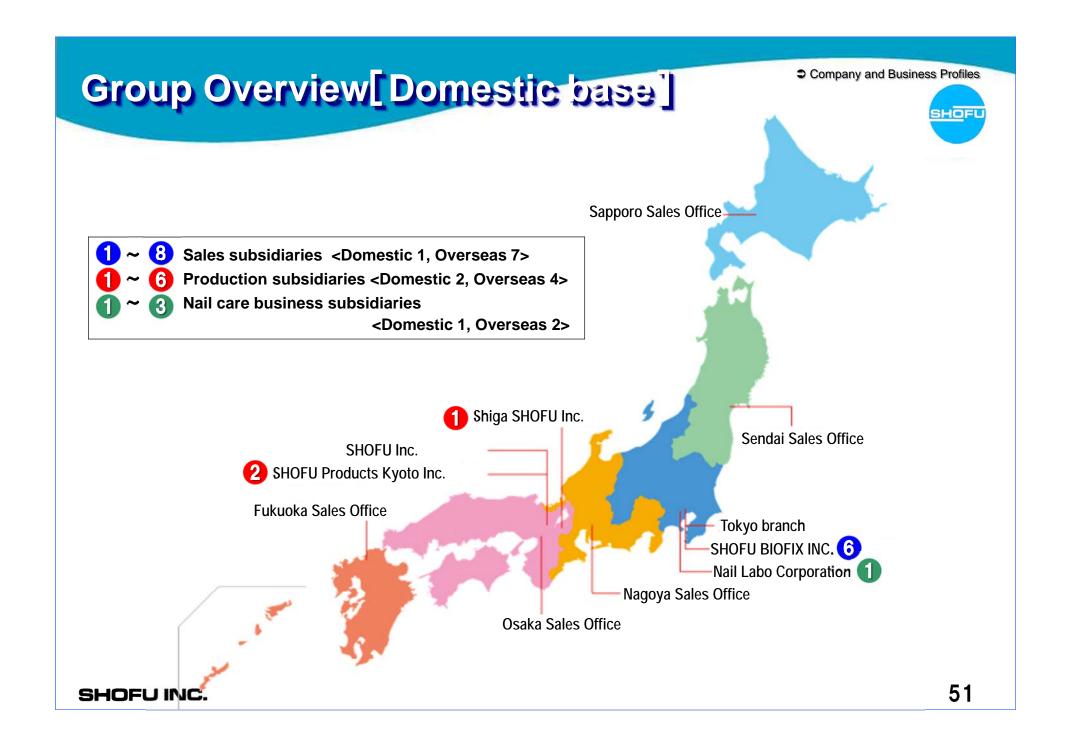
· 2006	Training Center designed to promote customers service completed (in August).
• 2007	Celebrated the 85th anniversary of its founding. Shofu's shares listed on the Second Section of the Tokyo Stock Exchange (in February).
· 2008	Acquired and turned Nail Labo Co., Ltd. into a subsidiary.
	Acquired 1.6 million of the company's own shares in accordance with the purchase of the company's own shares scheme in the J-NET market of the Osaka Securities Exchange.
• 2009	Reached basic agreement concerning business and capital partnership with Mitsui Chemicals, Inc., and Sunmedical Co., Ltd.
	Transferred 1.8 million shares of treasury stock to Mitsui Chemicals, Inc., through a third-party allocation.
· 2010	Shofu Dental Trading (Shanghai) Co., Ltd., is established in China.
• 2012	Celebrated the 90th anniversary of its founding. Listed on the First Section of the Tokyo Stock Exchange.
• 2013	Promech Inc. is split up, with Shoken Inc. taking over its dental businesses and Nail Labo Co,. Ltd., absorbing the company and its remaining operations.
	The Singapore Sales Office is incorporated as the local corporation SHOFU Dental ASIA-Pacific Pte.Ltd.
• 2014	Established joint venture in Taiwan between Nail Labo Co., Ltd. and a local sales distributor.
• 2015	Acquired shares and made Merz Dental GmbH. a subsidiary. Established SHOFU BIOFIX INC.
• 2017	Established a subsidiary in Brazil
	Established a subsidiary in India



Company and Business Profiles

SHOFU

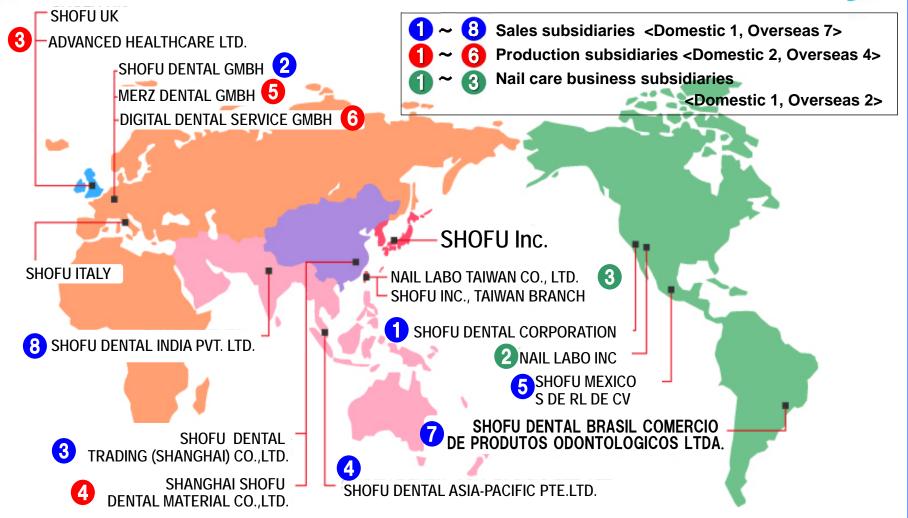




#### Company and Business Profiles

## Group Overview Overseas base



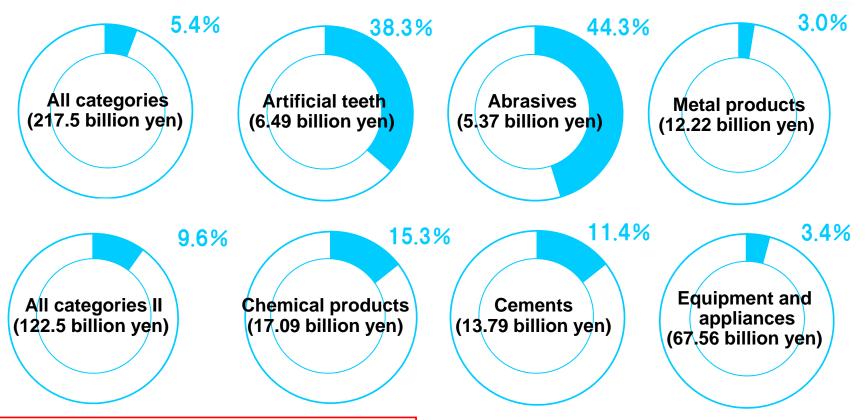


### **Sales Channels** Company and Business Profiles SHOFU **Domestic** Wholesale **Dealers** schools agents customers **Agents** SHOFU Inc. institutions, **Orthodontic materials Dental** treatment **Overseas** and and North America, Latin America, Europe, China, Other Asia, services **Patients** Oceania **Distributors** Local sales Dental subsidiaries each Korea, Taiwan



Company and Business Profiles



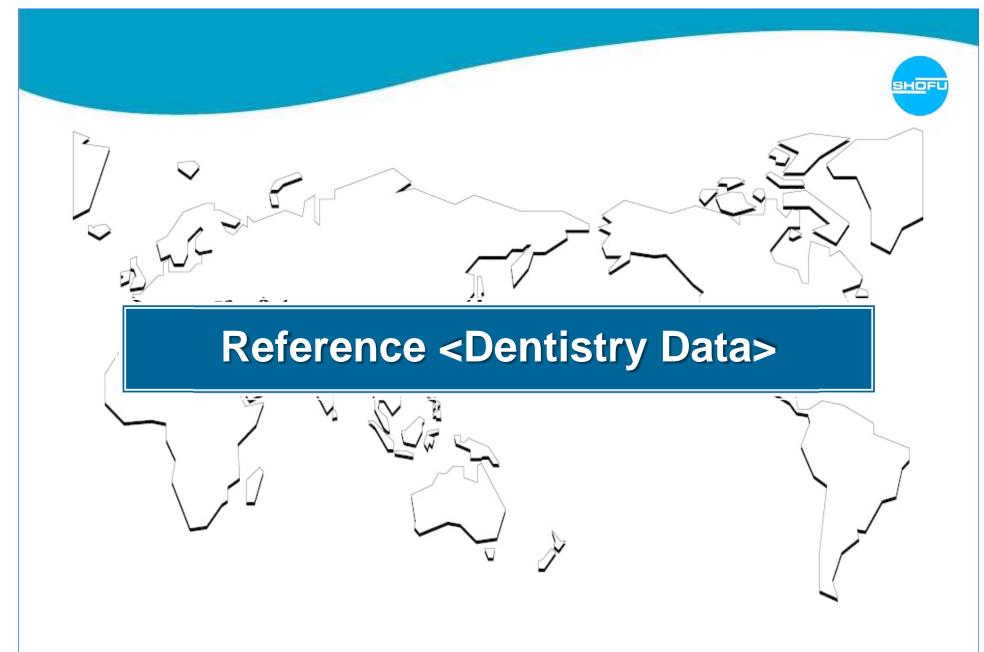


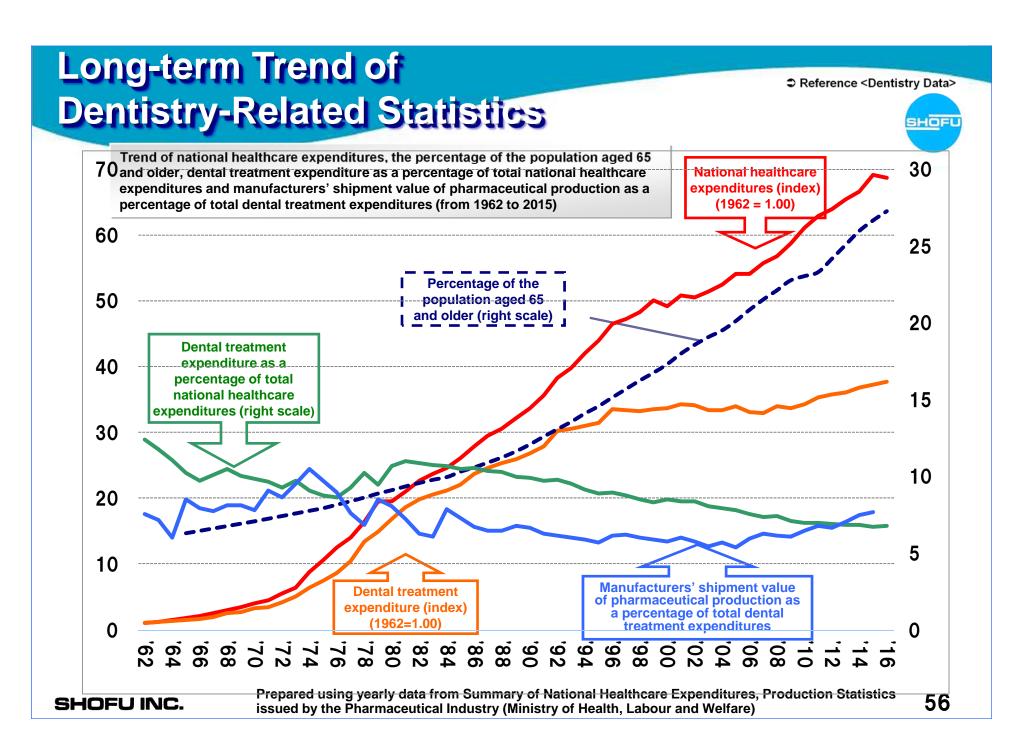
"All categories" includes "gold-silver-palladium alloy" and "machines and equipment for dental clinics." "All categories II" and other categories do not include "gold-silver-palladium alloy" and "machines and equipment for dental clinics."

Source: Production Statistics issued by the Pharmaceutical Industry (Manufacturers' shipment values), Ministry of Health, Labour and Welfare (Domestic data, Calendar Year 2015)
Figures in parentheses represent market size. (Figures rounded down to the nearest ten million yen)

54

SHOFU INC.



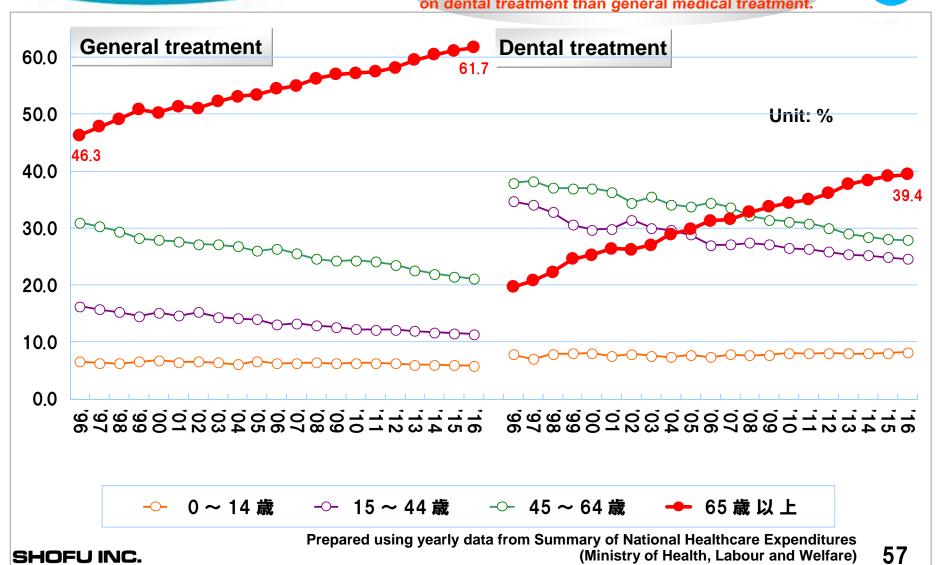


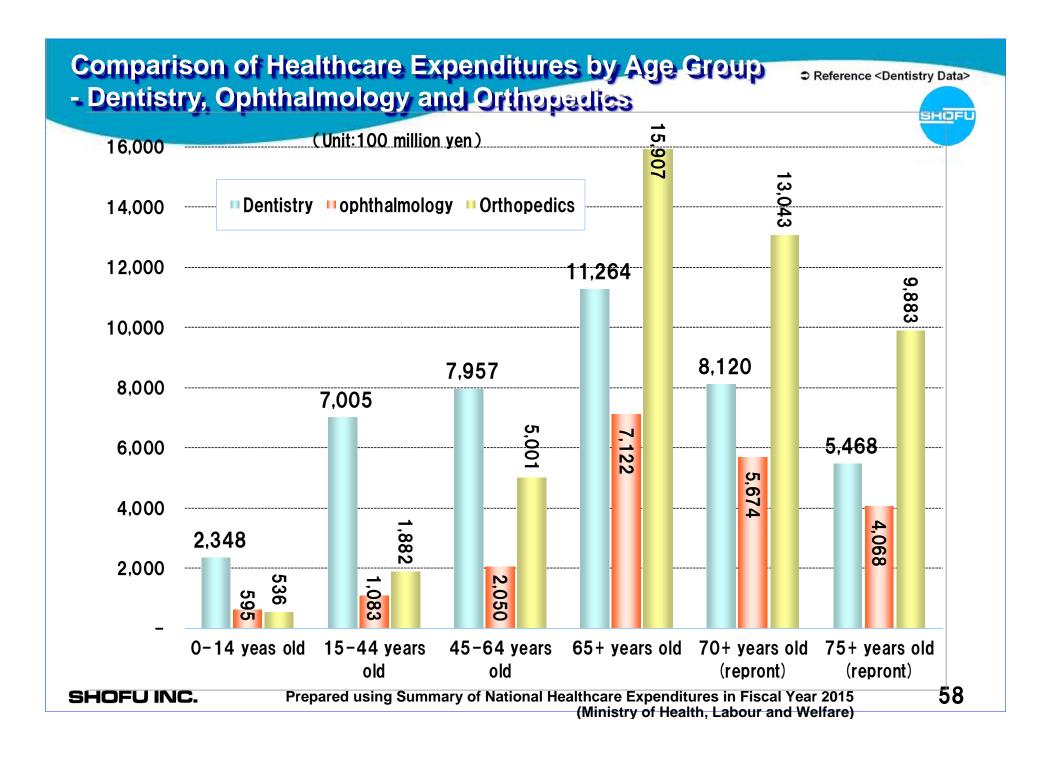
## Healthcare Expenditures by Age Group (Component Ratio)

➡ Reference < Dentistry Data >

SHOFU

People aged 65 years and older tend to place less importance on dental treatment than general medical treatment.

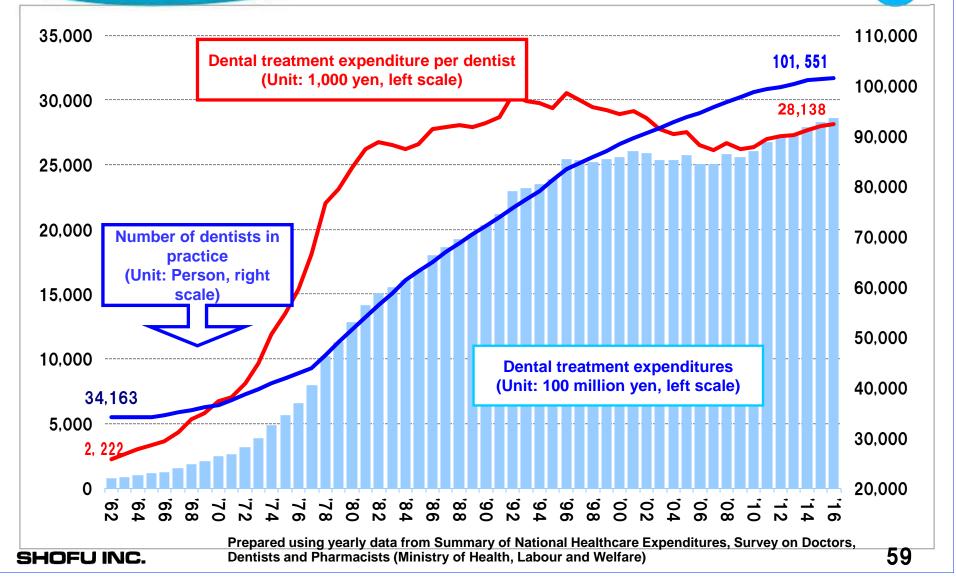


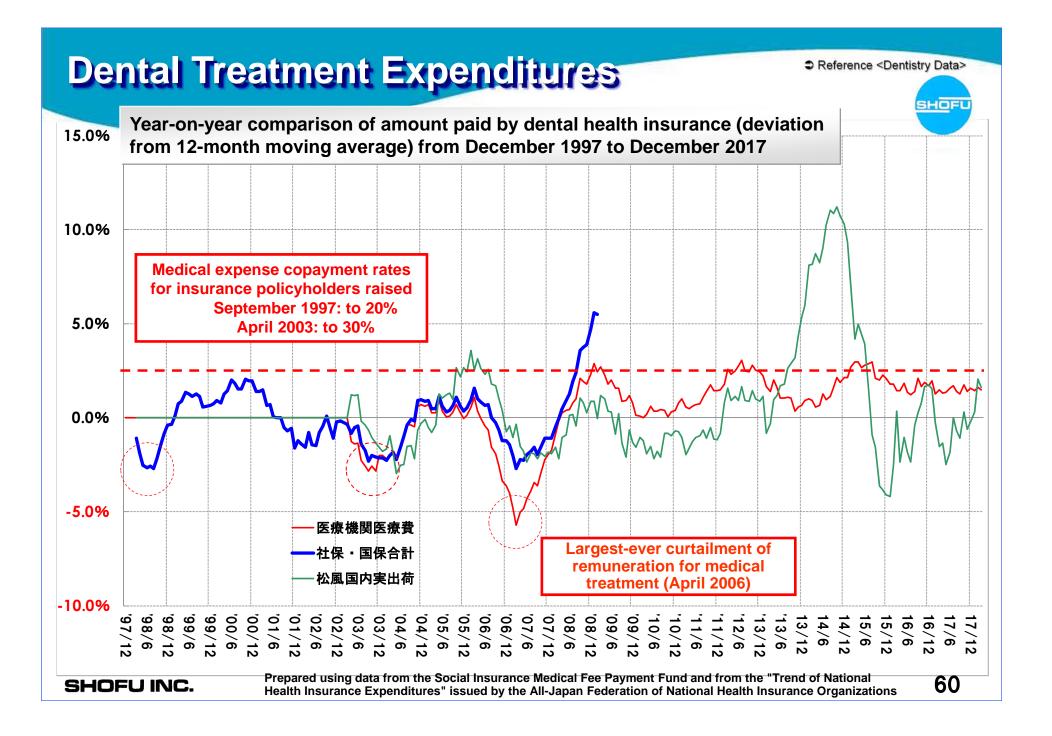


# Trend of the Number of Dentists and Dental Treatment Expenditure

➡ Reference < Dentistry Data >





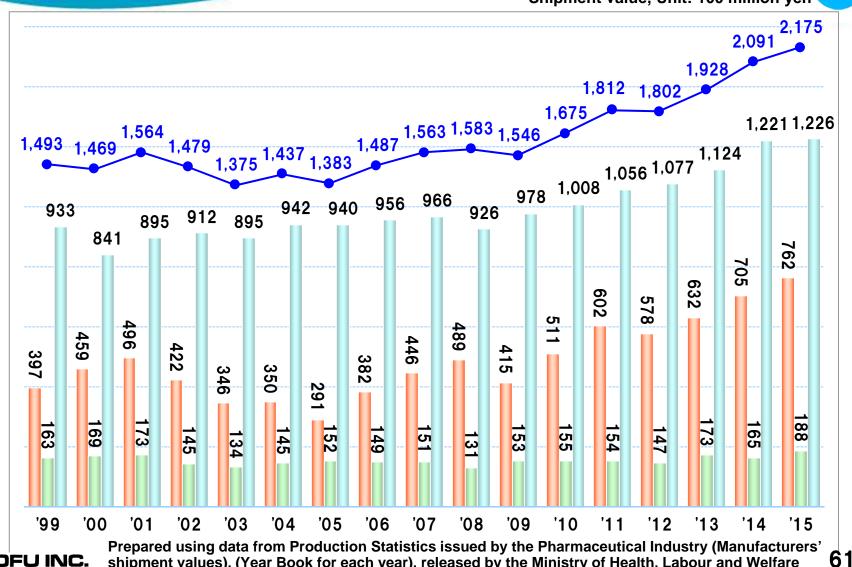




➡ Reference < Dentistry Data >

SHOFU





SHOFU INC.

shipment values), (Year Book for each year), released by the Ministry of Health, Labour and Welfare

#### ⇒ Reference < Dentistry Data>

# Systemic Diseases Caused by Caries and Periodonial Disease



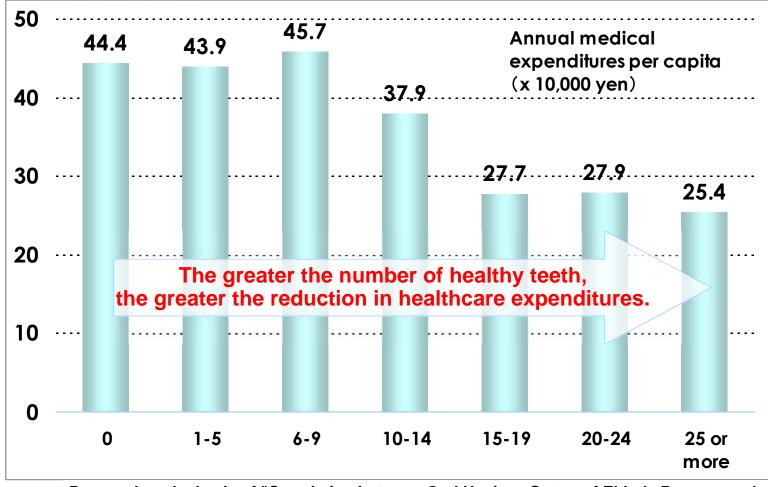
es		Entire body	Septicemia, Headache, Stiff shoulders, Malfunction of internal organs, Nutrition disorder
oral diseases		Pregnancy-related problems	Premature birth, Delivery of low birth weight babies
<u>[a]</u>	$ \Longleftrightarrow $	Diseases of the digestive and respiratory systems	Gastritis, Gastric ulcer, Aspiration pneumonia
and o	$ \Longleftrightarrow $	Diseases of the circulatory system	Endocarditis, Myocarditis, Arteriosclerosis
ental a		Skin diseases	Dermatitis
Der		Diseases related to metabolic disorder	Diabetes

(Reprinted from the "Archive of the 8020 and Enjoy Healthy Life" issued by Social Insurance Research Institute)

## Correlation between Number of Healthy Teeth and Healthcare Expenditures

⇒ Reference < Dentistry Data>





Prepared on the basis of "Correlation between Oral Hygiene Status of Elderly Persons and Healthcare Expenditures," a paper published in 2003 by Kazumune Arikawa, a full-time instructor at the Nihon University School of Dentistry at Matsudo Subjects surveyed: 954 persons aged 80 living independently (392 men, 562 women)

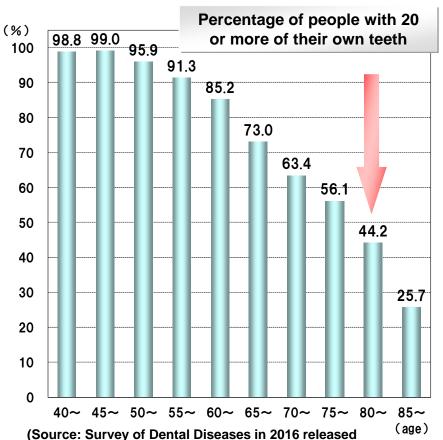
SHOFU INC.

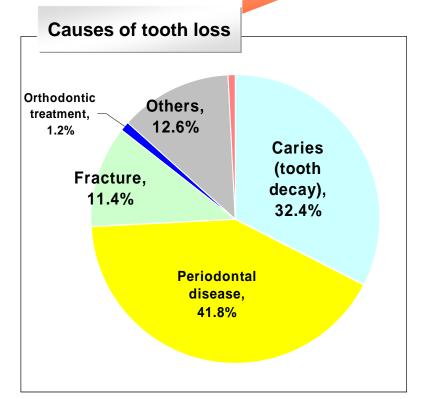
#### ⇒ Reference < Dentistry Data >

# The 8020 Movement and Changes in Dental Diseases



The primary target of "20% of the population achieving 8020" was reached in 2006.





(Survey by the 8020 Promotion Foundation in 2005)

(Source: Survey of Dental Diseases in 2016 released by the Ministry of Health, Labour and Welfare)

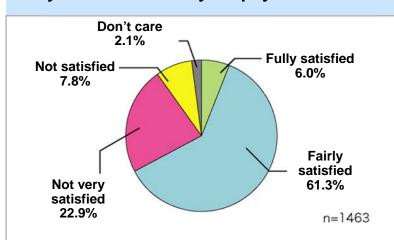
#### ⇒ Reference < Dentistry Data>

## **Perception of Dental** and Oral Health

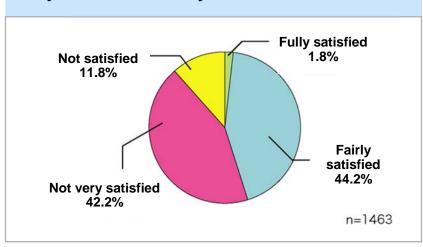
**Source: Fiscal 2007's Dental Equipment Industry Vision (References)** 



#### Are you satisfied with your physical health?



#### Are you satisfied with your oral health?



Do you actually receive regular dental care?

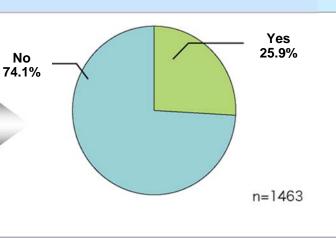
## Do you think it necessary to receive regular



### Potential demand

Yes 79.2%

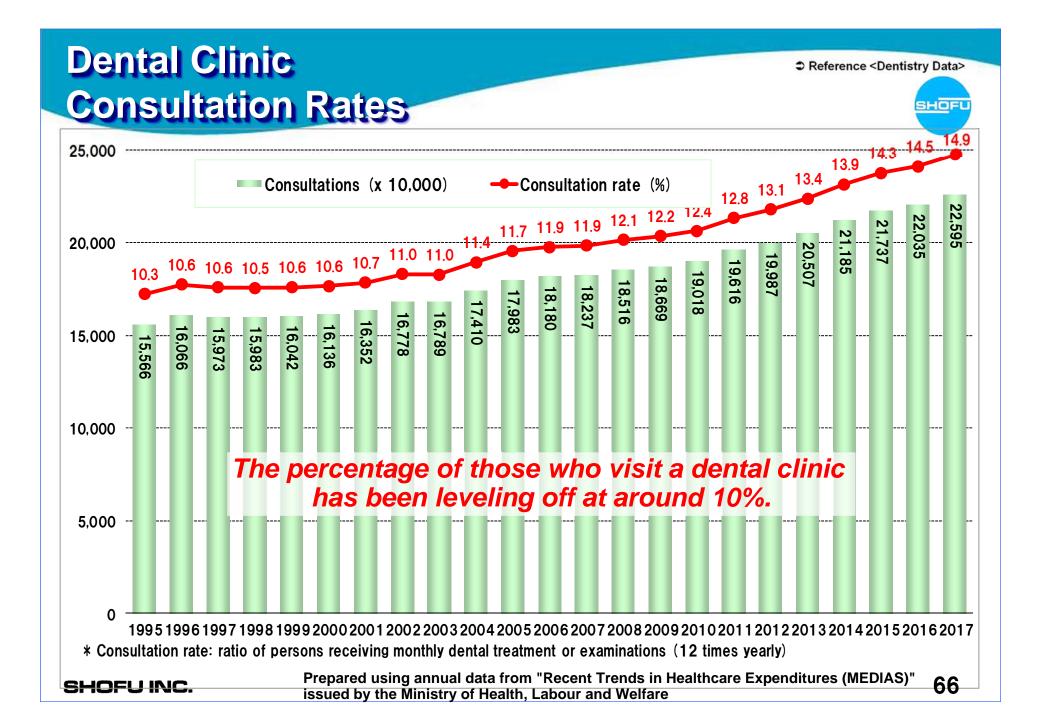
n=1463



SHOFU INC.

No 5.2%

65



# Trend in the North American Market



The public developed the habit of paying regular visits to dental clinics.  $\rightarrow$  Shortage of dentists

Increase in regular visits to dental clinics

→ Solution to the problem of oversupply of dentists

	North America	Japan
Percentage of those who make regular visits to dental clinics	54%	16%
Number of dentists (per 1,000 persons)	0.6 person	0.7 person
Population (per dentist)	1,670 person	1,430 person

WHO says that one dentist per 2,000 persons is the appropriate ratio.

#### Source:

- \* Health and Welfare Survey in 1999 conducted by the Ministry of Health, Labour and Welfare and a survey conducted by Colgate-Palmolive Company
- \* Consulted an article titled "Reasons for the Success of the Canadian Dental Community" (DH Style, September 2007) by Ken Yaegaki DDS Ph.D., Professor and head of the Department of Oral Health, Nippon Dental

## Relation between Dental Treatment

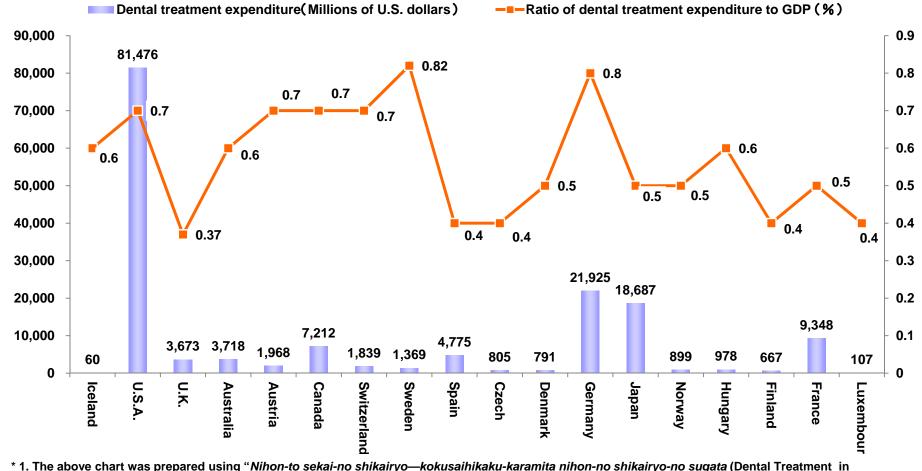
**Expenditure and GDP** 

⇒ Reference < Dentistry Data >

Although Japan's dental treatment expenditure is at a high level in international comparison, the ratio of Japan's dental treatment expenditure to GDR is in

Japan's dental treatment expenditure to GDP is in the middle range in international comparison.





Japan and in the Rest of the World—Dental Treatment in Japan from the Perspective of International Comparison)," by Kento Taira (medical corporation Seiryokai) as reference.

<sup>2.</sup> The above data for each country is as of 2004 except for Sweden's data, which is as of 1992.

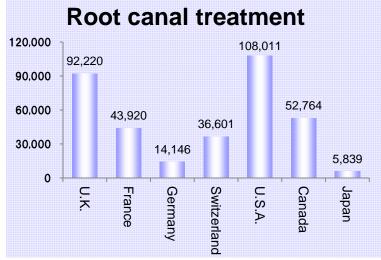
## International Comparison of Dental Treatment Expenditure (Unit Price of a Treatment Session)

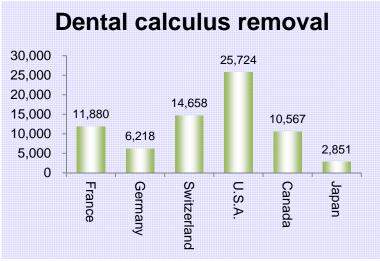
⇒ Reference < Dentistry Data>

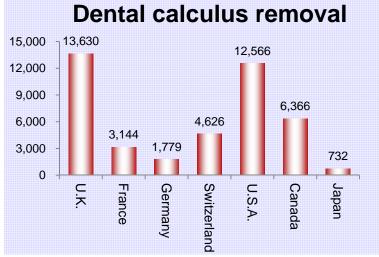
<u>Unit: yen</u>

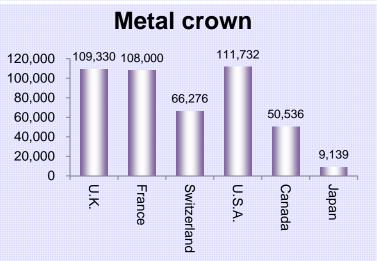


\*Japan:Unit price for a treatment session according to public healthcare insurance (⇒ The patient's payment obligation is 30% of the amounts below.)









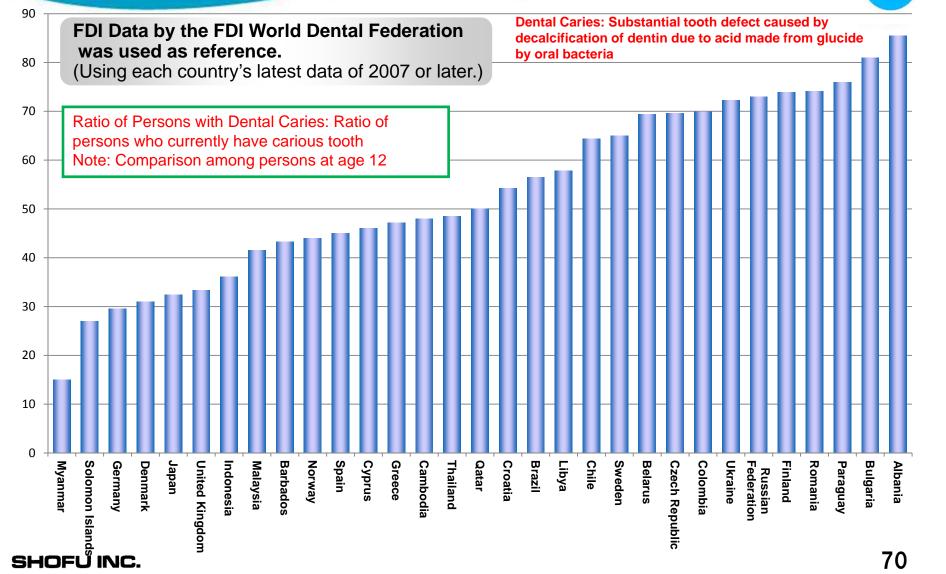
<sup>\*</sup> The above chart was prepared using material from "Iryo, kaigokyufuhi suikei-ni-tsuite (On the Estimate of Medical and Nursing Care Benefit Expenses)" by Professor Kawabuchi of the Graduate School of Tokyo Medical and Dental University (submitted to the 6th meeting of the Social Security Council of Japan on July 31, 2008).

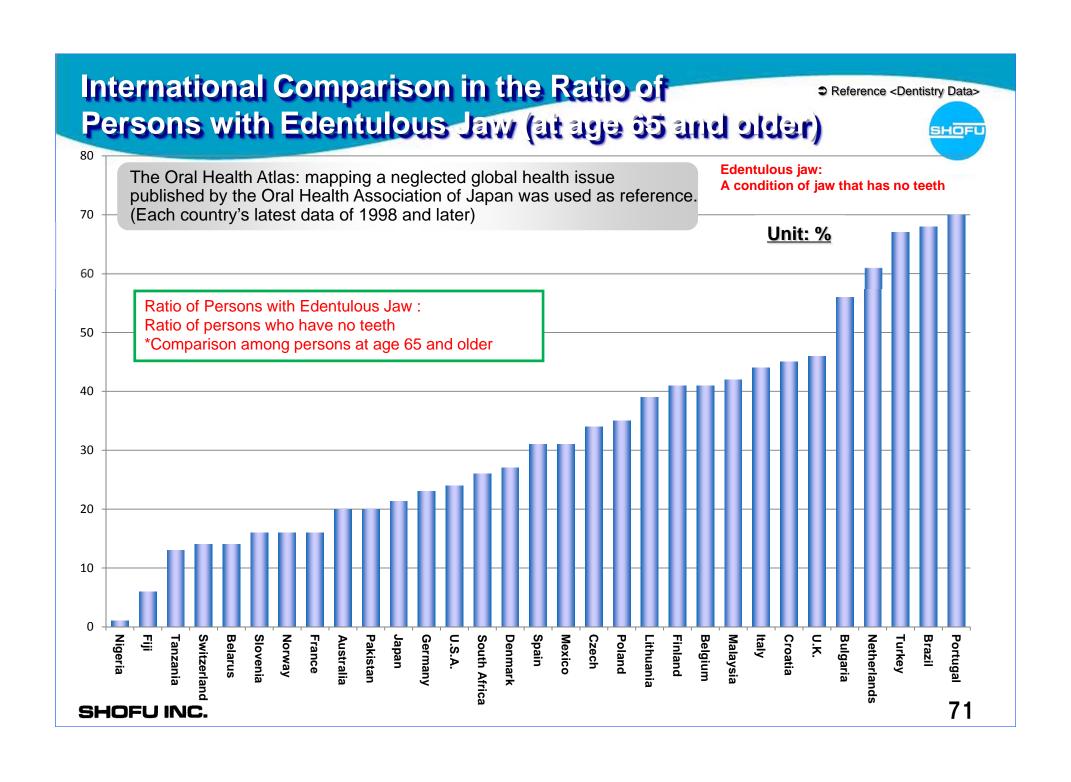


⇒ Reference < Dentistry Data>

Unit: %



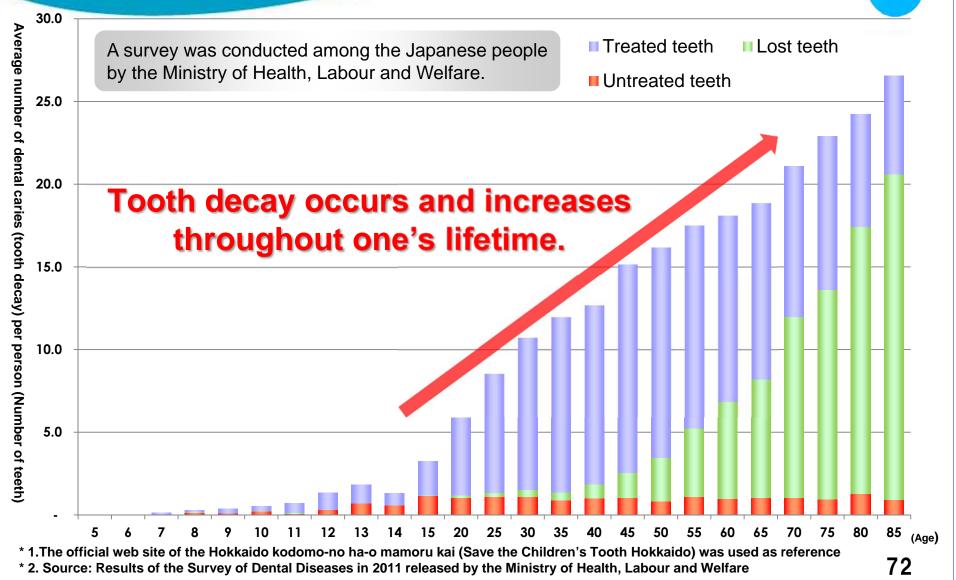


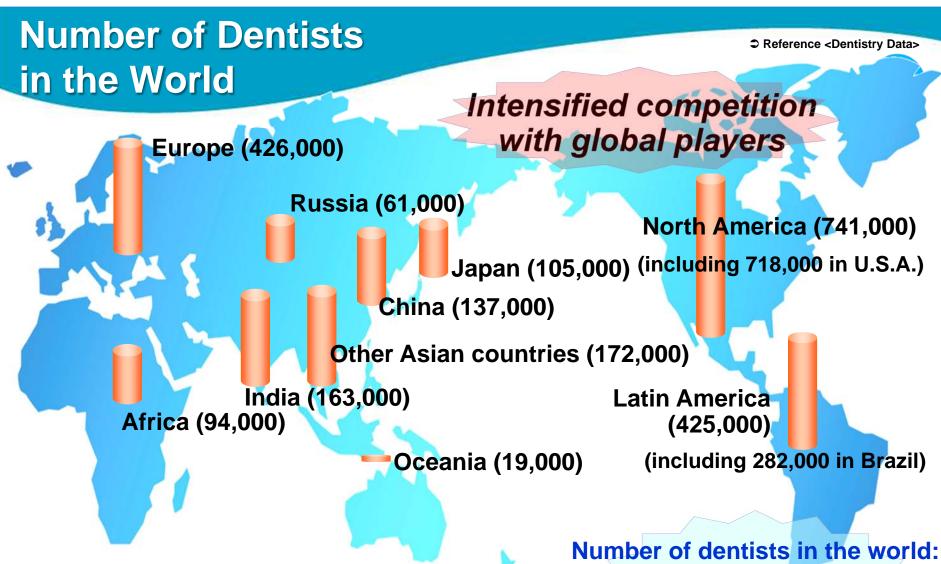


⇒ Reference < Dentistry Data>

## Factual Survey of Dental Diseases







**♦**Source:

Number of dentists & Estimated market size

-"The World Medical Markets Factbook 2015" (BMIResearch)

Approx. 2.35 million
Estimated market size:
Approx. 2.6 trillion yen

## Glossary (1)



Term	Meaning
Impression	An imprint of teeth and other intraoral areas, created with impression material. Based on the impression mould, plaster model can be produced, onto which prosthesis is fabricated. → Dental prosthetic (page 75)
Implant (treatment)	A treatment method to replace missing tooth. An artificial root is implanted into the bone, upon which a variety of dental prostheses can be placed. In addition to conventional prosthetic treatment, implant is a new option to restore mastication and esthetics.
Caries	Tooth decay.
Occlusion	The position of the teeth when the jaws are closed.
Composite resin	Synthetic resin to fill cavity and lesion, available in a variety of shades to make the restored area harmonious with surrounding teeth of each patient. It is often used to treat decay. $\rightarrow$ Resin (page 75)
Filling	To fill resin or cement after removing a decay to restore the affected area.
Aesthetic dentistry	A variety of treatment to enhance patient's esthetic appearance, including orthodontics and whitening.
Scaler	An instrument used to remove plaque and tartar accumulated on the tooth surface.
Dental floss	A thread used to remove plaque from the spaces between teeth.
Handpiece <b>HOFU INC.</b>	A handheld device to which small instruments for removing tooth decay, plaque, and tartar are attached. $\rightarrow$ Plaque (page 75)

## Glossary (2)



Term	Meaning	
Nail care	Care for fingernails and the surrounding area, including attachment of artificial nails. Nail care is widely considered an import part of personal grooming in many parts of the world, and it is also growingly popular among young women in Japan, which leads to a rapid growth of the market.	<b>y</b>
PMTC	PMTC stands for Professional Mechanical Tooth Cleaning. In PMTC, a dentist or hygienist uses machines and instruments to remove plaque tartar (calcified plaque), and other dental deposits (caused by smokin etc).	€,
Fluoride	A substance that accelerates re-calcification of the tooth surface and strengthens tooth structure (especially for enamel).	
Plaque	Calculus deposits. Bacteria living in plaque create acids and toxins, which cause decay and periodontal disease. Thus, removing plaque helps prevent dental disease and enhance oral health.	
Dental prosthetic	An artificial replacement of defective area. It includes fillings and crowns that restore patient's oral function and esthetic appearance.	
Bonding (material)	A material to bond composites to natural tooth (enamel and dentin).  → Composite resin (page 74)	
Resin	Synthetic high polymer. Resins are popularly used for dental restoratives.	
OFU INC.		7