

May 21, 2020

## FY 2019 (Ended March 2020) Results & Financial Position

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## **Summary**



**New coronavirus pandemic** 

Despite record results with higher sales and income for the first three quarters, both sales and income decreased due to impacts from the COVID-19 coronavirus pandemic (net sales decreased 6.2 billion yen and operating income decreased 4.2 billion yen).

Record sales in Japan, the Americas, Europe, and other Asian countries

Record sales were achieved in all key regions other than China, which was impacted by the coronavirus pandemic.

Record-breaking Medical Systems sales

Net sales broke previous records due to strong sales of mobile X-ray systems for the coronavirus pandemic and angiography systems.

**TMP** recovery

TMP sales were stagnant in the first half, but increased 28 % (excluding exchange rate effects) year-on-year in the second half, due to a recovery in semiconductor capital equipment investments.



### Statement of Income

• Net sales: 385.4 billion yen (5.8 billion yen or 1 % year-on-year decrease)

Impact of coronavirus pandemic: -6.2 billion yen

• Operating income: 41.8 billion yen (2.6 billion yen or 6 % year-on-year decrease)

Impact of coronavirus pandemic: -4.2 billion yen

		Full-Y	ear ear	YoY		
	Units: Billions of yen	FY 2019	FY 2018	Changes	Percent Increase/ Decrease	
	Net Sales	385.4	391.2	- 5.8	-1%	
sss ts	Operating Income	41.8	44.5	- 2.6	-6%	
Business Results	Operating Margin	10.9%	11.4%	-0.5pt	_	
Bu S	Ordinary Income	42.7	45.5	- 2.8	-6%	
	Profit Attributable to Owners of Parent	31.8	32.5	- 0.8	-2%	

ange tes	Average Rate: USD (Yen)	108.8	111.0	- 2.2	-2%
Exch	Euro (Yen)	120.9	128.4	- 7.5	-6%

<u> </u>	R&D Expenses	16.9	16.6	+0.3
Major estme	CAPEX	17.7	21.7	- 4.0
Inv	(Depreciation and Amortization)	13.3	11.5	+1.8

#### **Exchange Rate Effect**

Net sales: -5.4 billion yen Operating income: -1.6 billion yen

#### **Foreign Exchange Sensitivity**

(Billions of yen)

	Net Sales	Operating Income
USD	1.2	0.4
EUR	0.2	0.07

Note: Changes in accounting standards increased depreciation and amortization by about 0.6 billion yen. (Lease standard changed from loan amount to depreciation and amortization expense.)

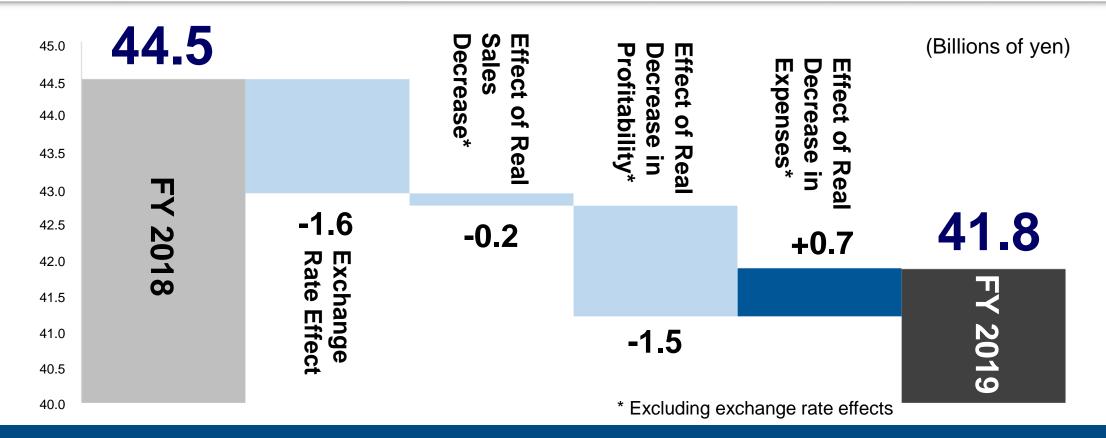


## **Causes of Decreased Operating Income**

 Exchange rate effect: -1.6 billion yen Due to 2 % higher US dollar and 6 % higher euro than the previous year

• Lower profitability: -1.5 billion yen Due to segment mix changes and other factors

• Lower expenses: +0.7 billion yen Due to reduction in controllable costs





## Sales and Income by Business Segment

AMI: Both sales and income decreased

- AMI: Analytical & Measuring Instruments, MED: Medical Systems, IM: Industrial Machinery, AE:Aircraft Equipment
- Despite record results with higher sales and income for the first three quarters, Q4 was impacted by the coronavirus.
- MED: Both sales and income increased
- Sales were strong for mobile X-ray systems used to diagnose pneumonia and angiography systems, and expenses were successfully reduced.
- IM: Both sales and income decreased
- TMP sales improved in the second half, but not enough to compensate for lower sales in the first half. Hydraulic equipment sales also stagnated.
- AE: Both sales and income increased
- Sales increased for transport aircraft equipment for the Ministry of Defense and small/medium commercial aircraft equipment.

			Net Sales			Operating Income					Operating Margin			
				YoY					YoY				Yo	Υ
Units: Billions of yen	FY 2019	FY 2018	Changes	Percent Increase/ Decrease	Excluding Exchange Rate Effects	FY 2019	FY2018	Changes	Percent Increase/ Decrease	Excluding Exchange Rate Effects	FY 2019	FY2018	Increase/ Decrease	Excluding Exchange Rate Effects
AMI	236.2	241.4	-5.2	-2%	-1%	35.8	38.8	-3.0	-8%	-5%	15.1%	16.1%	-0.9pt	-0.8pt
MED	70.2	69.1	+1.1	+2%	+3%	3.2	2.3	+0.9	+37%	+47%	4.5%	3.4%	+1.2pt	+1.4pt
IM	43.0	45.4	-2.4	-5%	-4%	3.7	4.5	-0.8	-18%	-11%	8.5%	9.8%	-1.3pt	-0.7pt
AE	30.0	27.3	+2.7	+10%	+11%	0.8	0.1	+0.7	+565%	+555%	2.6%	0.4%	+2.2pt	+2.2pt
Other	6.0	8.0	-2.0	-25%	-10%	1.2	1.4	-0.2	-13%	-13%	15.4%	14.1%	+1.3pt	+1.3pt
Adjustments						-2.8	-2.6	-0.2	-					
Total	385.4	391.2	-5.8	-1%	-0%	41.8	44.5	-2.6	-6%	-2%	10.9%	11.4%	-0.5pt	-0.3pt

#### Impacts of Coronavirus Pandemic

- AMI: Net sales decreased 4.2 billion yen in China and 2.1 billion yen in regions other than China, for a total decrease of 6.3 billion yen.
- MED: Net sales increased 1.1 billion yen due to special demand for mobile X-ray systems and other factors.
- IM: Net sales decreased 0.9 billion yen due to effects on TMP installations and other factors.
- **AE:** Impacts were minimal.

Note: Net sales are external sales and operating margins are calculated by dividing external plus internal sales by operating income.



(1) FY 2019

**Financial Position** 

(2) FY 2019

Results by Business Segment

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Forecast



### **Analytical & Measuring Instruments Net Sales by Model**

- Key models: 126.6 billion yen; -0.9 billion yen (-1 %) • +1 % excluding exchange rate effects Net sales decreased 9 % in China (-7 % excluding exchange rate effects), but LC sales were strong in Japan and India, MS sales were strong in Japan, and GC sales were strong in Japan and North America.
- Other models: 109.6 billion yen; -4.3 billion yen (-4 %) • -2 % excluding exchange rate effects Testing machine sales compensated for lower capital investments by manufacturers and for a reactionary decline after special demand for environmental monitoring instruments in China the previous year, resulting in a 4 % decrease.
- AM sales: 76.3 billion yen; +3.0 billion yen (+4 %)

AM sales ratio: 32 %; +2 points

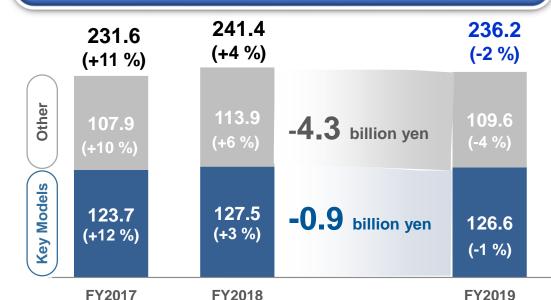
(AM: Aftermarket)

• Key models: Liquid chromatographs (LC),

mass spectrometers (MS),

gas chromatographs (GC)

#### **Analytical & Measuring Instruments Net Sales (billion yen)**



(Values in parentheses are yen-basis year-on-year percent change.)

# Key Models

Other

## **Analytical & Measuring Instruments**



**Testing Machine** 



**TOC Analyzer** 



Spectrophotometer



X-Ray Fluorescence **Spectrometer** 



Nexera Liquid Chromatograph



LCMS-9030



Nexis GC-2030



GCMS-QP2020 NX



## **Analytical & Measuring Instruments Net Sales by Region**

• Japan: +1 % Net sales increased 6 % on strong sales of LC and other key models, but sales decreased for other models, due to capital equipment investment reluctance in electrical goods, transport equipment, and other fields. Record-breaking net sales exceeded 100 billion yen level.

• Outside Japan: -2 % Sales decreased significantly in China, due to impacts from US-China trade frictions and the coronavirus pandemic. Record sales achieved in North America, Europe, and other Asian countries (local currency basis).

• Overseas sales ratio: 59 %; -1 point year-on-year

	FY 2019	FY 2018	Increase/ Decrease	Percent Increase/ Decrease	Excluding Exchange Rate Effects	Overview
Japan	100.8	99.7	+1.1	+1 %	+1 %	<ul> <li>Sales were strong for key models in food safety, pharmaceuticals, and government markets.</li> <li>Sales decreased for other models, due to capital equipment investment reluctance and other factors.</li> </ul>
China	47.9	55.5	-7.6	-14 %	-12 %	<ul> <li>Sales increased for pharmaceuticals.</li> <li>Capital equipment investment stagnated due to US-China trade frictions.</li> <li>Environmental measuring instruments sales decreased significantly due to a reactionary decline after the special demand during the previous year.</li> <li>The coronavirus pandemic restricted business activities.</li> </ul>
North America	26.2	25.6	+0.6	+3 %	+5 %	LC and ICP-MS sales were strong for functionally-enhanced foods.
Europe	24.7	25.0	-0.3	-1 %	+5 %	<ul> <li>In Russia, MS sales were strong for food safety.</li> <li>In Western Europe, LCMS sales were strong for clinical use.</li> </ul>
Other Asian Countries	26.8	25.7	+1.2	+4 %	+6 %	In India, LC and MS sales recovered for pharmaceuticals and contract analysis.



## **Analytical & Measuring Instruments Ratio of Net Sales by Market**

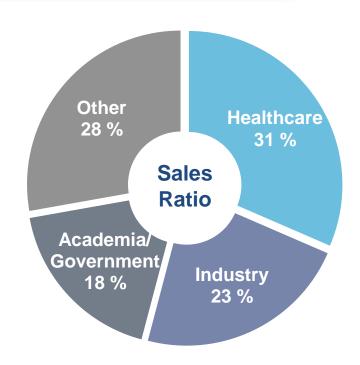
• Academia/government: Academia measures were successful in the U.S. and government sales were strong, but sales decreased

significantly in China.

• Industry: Sales for electrical goods decreased significantly due to US-China trade frictions and other factors.

• Healthcare: Sales for pharmaceuticals and clinical applications remained strong, but sales decreased significantly in China.

#### **Ratio of Net Sales by Market**



Markets and Main Industries	YoY	Overview
Academia/Government	Flat	<ul> <li>In the U.S., academia sales increased significantly due to successful academia (SPARQ) measures.</li> <li>In China, sales decreased significantly.</li> </ul>
Industry	-2 %	<ul> <li>Sales decreased significantly in the electrical industry.</li> <li>In other Asian countries, sales decreased for transport equipment.</li> </ul>
Healthcare • Pharmaceuticals • Foods • Healthcare institutions • Contract analysis business	-3 %	<ul> <li>Sales remained strong for pharmaceuticals and clinical.</li> <li>In North America, sales increased for functionally-enhanced foods.</li> <li>In China, sales decreased significantly, except for pharmaceuticals.</li> </ul>



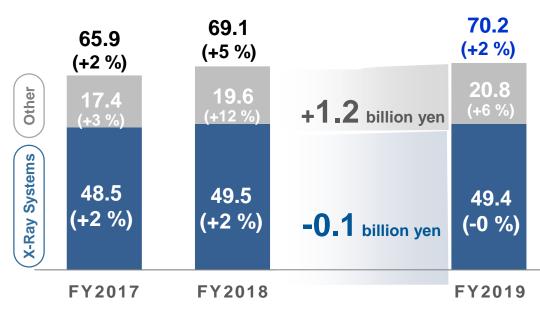
## Medical Systems Net Sales by Model

- X-ray systems: 49.4 billion yen; -0.1 billion yen (-0 %) +1 % excluding exchange rate effects
  Sales of angiography systems and mobile X-ray systems expanded globally. Sales of general radiography and fluoroscopy systems decreased outside Japan.
- Other: 20.8 billion yen; +1.2 billion yen (+6 %) New clinical market developed.
- AM sales: 21.4 billion yen; +0.9 billion yen (+4 %)

• +7 % excluding exchange rate effects

AM sales ratio: 30 %; Flat

#### Medical Systems Net Sales (billion yen)



(Values in parentheses are yen-basis year-on-year percent change.)

#### **Medical Systems**





## **Medical Systems Net Sales by Region**

• Japan: +7 %

Sales of angiography systems and mobile X-ray systems drove results.

· Sales of angiography systems increased in India.

departments in Bangladesh and Malaysia the previous year.

• Outside Japan: -4 %

Sales slowed in the EU, the U.S., and China.

• Overseas sales ratio: 39 % Decreased 3 points (year-on-year).

	FY 2019	FY 2018	Increase/ Decrease	Percent Increase/ Decrease	Excluding Exchange Rate Effects
Japan	43.1	40.2	+2.9	+7 %	+7 %
North America	7.3	8.1	-0.9	-11 %	-9 %
China	5.2	5.8	-0.6	-10 %	-9 %
Europe	3.7	4.3	-0.6	-14 %	-9 %
Other Asian Countries	5.2	5.3	-0.1	-2 %	-0 %

Overview
<ul> <li>Sales of angiography systems for cardiac interventional procedures were strong and market share increased.</li> <li>Demand for mobile X-ray systems increased due to the coronavirus pandemic.</li> </ul>
Sales of angiography systems increased, but decreased for general radiography systems after demand stimulated by measures to promote shifting to digital technology continued to subside.
<ul> <li>Competition with domestic Chinese manufacturers intensified due to incentives for domestic products.</li> <li>Demand for mobile X-ray systems increased due to the coronavirus pandemic.</li> </ul>
Sales of fluoroscopy and angiography systems decreased due to intensifying competition and market stagnation in Eastern Europe.

• Sales decreased due to a reactionary decline after large projects for health

Overview



### **Industrial Machinery**

• TMP: 17.1 billion yen; -0.4 billion yen (-3 %)

Sales slowed in the first half, but recovered in the second half due to increased semiconductor capital investments.

• Hydraulic: 12.7 billion yen; -0.6 billion yen (-5 %)

Demand for forklifts and small construction machinery decreased in North America and China.

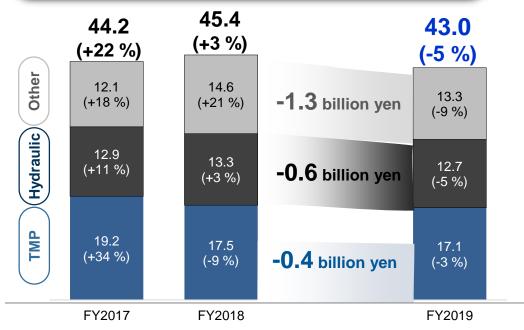
• Other: 13.3 billion yen; -1.3 billion yen (-9 %)

Sales of glass winders to electrical manufacturers in China decreased due to capital equipment investment reluctance and other factors.

• AM (TMP) sales: 3.6 billion yen; +0.3 billion yen (+8 %)

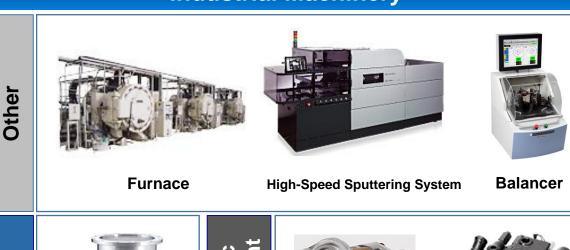
AM sales ratio: 21 %; +2 points

#### **Industrial Machinery Net Sales (billion yen)**



(Values in parentheses are yen-basis year-on-year percent change.)

#### **Industrial Machinery**











Hydraulic Gear Pump

**Control Valve** 



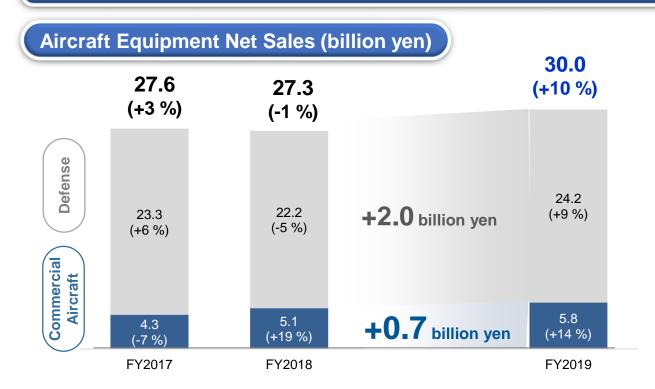
## **Aircraft Equipment**

• Commercial aircraft: 5.8 billion yen; +0.7 billion yen (+14 %)

Sales of aftermarket services and components for small and medium aircraft increased.

• Defense: 24.2 billion yen; +2.0 billion yen (+9 %)

Sales increased for the new transport aircraft and other models.



Power Drive Unit Gearboxes

Stabilizer Trim Actuator

Angle Gearbox

Flap Actuators

(Values in parentheses are yen-basis year-on-year percent change.)



(1) FY 2019

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Results by Business Segment

(3) FY 2020

**Forecast** 



## **Impacts of Coronavirus Pandemic**

•Business environment: Impacts from the coronavirus pandemic are predicted to continue through the end of

the fiscal year.

•Production activities: Production plants are almost operating normally in China, but are operating with

adjustments to personnel numbers in other countries.

#### **Business Environment**

 AMI: Analytical & Measuring Instruments, MED: Medical Systems, IM: Industrial Machinery, AE: Aircraft Equipment

			in. industrial macrimery, AL. Airoran Equipment				
Segment			Overview				
	Academia/ government	Good	Demand will expand due to increases in government stimulus spending programs and measures to strengthen research bases for infectious disease countermeasures.				
AMI	Healthcare	Good					
	Industry	Bad	Capital equipment investment will decrease in a broad range of fields, including automotive, steel, machinery, and chemicals, resulting in very difficult circumstances.				
MED	Mobile X-ray system	Good	Demand will expand due to coronavirus pandemic.				
MED	Other X-ray systems	Bad	Installations will stall for new medical equipment not related to the coronavirus.				
IM	TMP	Good	Semiconductor demand will expand due to increasing sophistication of communication and mobile devices.				
	Hydraulic	Bad	Demand will decrease for forklifts and small construction machinery.				
AE	Commercial aircraft	Bad	■ Demand will decrease due to decreased aircraft use.				

#### **Value Chain**

		Overview
R&D		<ul><li>Operations are maintained by teleworking.</li><li>Operations are mostly normal in China.</li></ul>
Production	on	<ul> <li>Operating with adjusted personnel numbers in countries other than China.</li> <li>Note: All plants are operating.</li> </ul>
Sales/Serv	/ice	<ul> <li>Operations are mostly normal in China.</li> <li>Telecommuting at operations in countries other than China.</li> <li>With many customers working from home as well, operations are being conducted via email and the Internet.</li> </ul>



### **Key Measures for FY 2020**

• Sales expansion: Expand businesses by offering infectious disease countermeasures to society, including for pharmaceuticals and clinical markets, and by strengthening recurring revenues.

In terms of specific regions, focus efforts in China, where recovery is occurring earlier than other regions.

• Profitability improvement: Reduce controllable expenses and manufacturing costs based on changes in the business environment,

reassess capital equipment investment plans, optimize personnel plans, and reassess the priority order for

**R&D** topics.

• AMI: Analytical & Measuring Instruments, MED: Medical Systems, IM: Industrial Machinery, AE: Aircraft Equipment

Sales Expansion	Measures	
	• Strengthen R&D and product/service development for infectious disease examination/diagnosis. (Implement infectious disease countermeasure project.)	
АМІ	<ul> <li>Capitalize on increased demand resulting from increased R&amp;D budgets and economic stimulus measures implemented in response to the coronavirus pandemic.</li> </ul>	
	• Expand sales of key models in pharmaceuticals, contract analysis, environmental measurement, and other fields in China, where economic activity is predicted to recover sooner than in other regions.	
	Strengthen businesses with recurring revenues.	
MED	• Expand sales of mobile X-ray systems.	
IVILD	Strengthen remote service/support operations.	
IM	Increase new adoption of TMPs in semiconductor manufacturing equipment.	
AE	<ul> <li>Increase sales from the new businesses (testing/inspection business and underwater optical wireless communication system).</li> </ul>	
Profitability Improvement	Key Measures	
Investment	Reassess capital equipment investments and optimize personnel plans.	
R&D • Assign a priority order to R&D topics.		
Other	Reduce manufacturing costs and controllable expenses.	



### **FY 2020 Forecast**

- Though the economic impact of the coronavirus pandemic may vary, effects are expected to continue through the end of the fiscal year and have a bigger impact than the 2008 global financial crisis.
- While continuing to operate organizations at more efficient levels, carefully monitor changing business conditions to accurately identify government policies in each region and trends in industries with increasing demand, and then ensure those result in improved results.

		Full-	Year	YoY		
	Units: Billions of yen	FY 2020	FY 2019	Changes	Percent Increase/ Decrease	
ılts	Net Sales	340.0	385.4	-45.4	-12%	
Results	Operating Income	22.0	41.8	-19.8	-47%	
	Operating Margin	6.5%	10.9%	-4.4pt	_	
Business	Ordinary Income	22.0	42.7	-20.7	-489	
ā	Profit Attributable to Owners of Parent	16.0	31.8	-15.8	-50%	
Exchange Rates	Average Rate: USD (Yen)	105.0	108.8	- 3.8	-3.5	
Exch Rai	Euro (Yen)	115.0	120.9	- 5.9	-4.8	
ents	R&D Expenses	16.0	16.9	-0.9		
Major Investments	CAPEX	12.0	17.7	-5.7	Note	
Inve	(Depreciation and Amortization)	15.0	13.3	+1.7		

#### **Exchange Rate Effect**

Net sales: -5.7 billion yen Operating income: -1.9 billion yen

#### Foreign Exchange Sensitivity

(Billions of yen)

	Net Sales	Operating Income
USD	1.2	0.4
EUR	0.2	0.07

Note: Changes in accounting standards increased depreciation and amortization by about 1.6 billion yen. (Lease standard changed from loan amount to depreciation and amortization expense.)



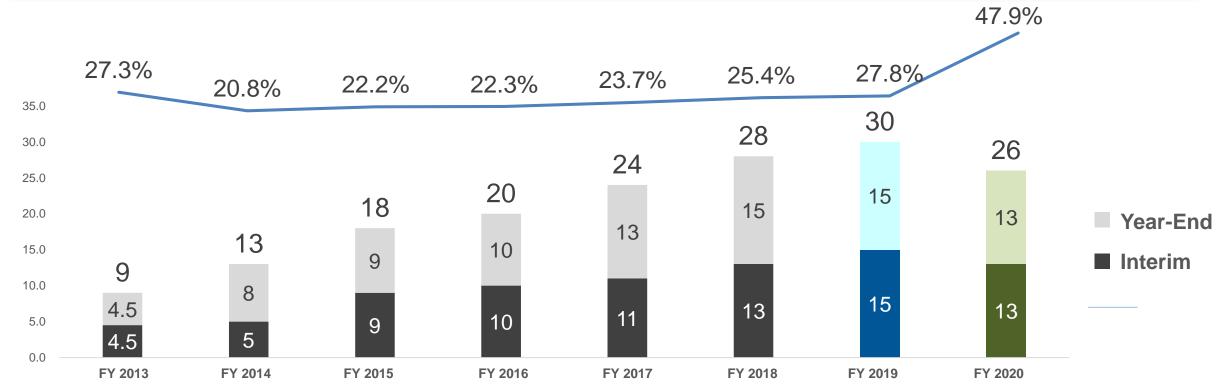
### **Dividends**

Policy: Aggressively invest in R&D and other growth and provide steady returns to stakeholders.

Dividends: FY 2020: 13 yen interim and 13 yen year-end, or 26 yen for the year (vs. 30 yen the previous year)

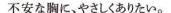
Despite expected 50 % lower profit in the fiscal year, dividends will be reduced only 13 % to 26 yen,

based on the above policy.



Note: FY 2019 values finalized after the annual shareholders' meeting.





島津製作所が開発した、乳がん検査技術。 検出器ホールに乳房を入れるだけで、 小さな乳がんの兆しまで見分ける 世界最先端技術です。









This document contains forward-looking statements. Forecasts of future business performance that appear in this document are predictions made by the company's management team that are based on information available when these materials were prepared and are subject to risks and uncertainties. Consequently, actual results may differ materially from the forecasts indicated above. Factors that may influence actual business performance include, but are not limited to, economic conditions within and outside Japan, changes in technologies in markets, and fluctuations in exchange rates.

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## **Supplementary Materials**



**Depreciation and Amortization** 

## **Statement of Income (Fourth Quarter)**

- Net sales: 106.3 billion yen (6.7 billion yen or 6 % year-on-year decrease)
- Operating income: 13.9 billion yen (3.0 billion yen or 18 % year-on-year decrease)

3.4

2.9

+0.5

		Q4	4	Yo	ρY
	Units: Billions of yen	FY 2019	FY 2018	Changes	Percent Increase/ Decrease
	Net Sales	106.3	113.0	- 6.7	-6%
sss ts	Operating Income	13.9	16.9	- 3.0	-18%
Business Results	Operating Margin	13.1%	15.0%	-1.9pt	_
Bu R	Ordinary Income	13.9	17.0	- 3.1	-18%
	Profit Attributable to Owners of Parent	10.4	13.0	- 2.7	-20%
Exchange Rates	Average Rate: USD (Yen)	109.0	110.2	- 1.3	-1.1%
Exch Ra	Euro (Yen)	120.1	125.2	- 5.0	-4.0%
10	R&D Expenses	4.8	4.8	+0	
or	<u> </u>				
Major vestments	CAPEX	5.8	7.8	- 2.0	

#### **Exchange Rate Effect**

Net sales: -0.8 billion yen Operating income: -0.4 billion yen

#### Foreign Exchange Sensitivity

(Billions of yen)

	Net Sales	Operating Income
USD	1.2	0.4
EUR	0.2	0.07



## Sales and Income by Business Segment (Fourth Quarter)

• AMI: Analytical & Measuring Instruments, MED: Medical Systems, IM: Industrial Machinery, AE: Aircraft Equipment

			Net Sales				Оре	erating Inc	come			Operating	g Margin	
				YoY					YoY				Yo	PΥ
Units: Billions of yen	FY 2019	FY 2018	Changes	Percent Increase/ Decrease	Excluding Exchange Rate Effects	FY 2019	FY 2018	Changes	Percent Increase/ Decrease	Excluding Exchange Rate Effects	FY 2019	FY 2018	Increase/ Decrease	Excluding Exchange Rate Effects
AMI	63.7	72.1	-8.4	-12%	-11%	10.6	14.2	-3.6	-25%	-24%	16.7%	19.8%	-3.0pt	-2.9pt
MED	19.9	20.0	-0.1	-1%	+0%	1.9	1.4	+0.5	+36%	+41%	9.6%	7.0%	+2.6pt	+2.1pt
IM	12.8	11.3	+1.5	+13%	+14%	1.5	1.2	+0.4	+33%	+39%	12.0%	10.2%	+1.8pt	+2.2pt
AE	8.8	8.0	+0.8	+10%	+10%	0.4	0.4	-0	-4%	+0%	4.2%	4.8%	-0.5pt	-0.4pt
Other	1.2	1.6	-0.4	-27%	-27%	0.4	0.6	-0.3	-43%	-43%	23.1%	31.5%	-8.4pt	-8.4pt
Adjustments						-0.9	-0.9	-0		_				
Total	106.3	113.0	-6.7	-6%	-5%	13.9	16.9	-3.0	-18%	-16%	13.1%	15.0%	-1.9pt	-1.6pt



## **Analytical & Measuring Instruments Year-on-Year Change for Key Models**

		FY 2	2017			FY 2	2018		FY 2019					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
All	+7%	+8%	+9%	+10%	+12%	+3%	+3%	+2%	-4%	+10%	+4%	-11%		
Key Models	+5%	+12%	+5%	+13%	+4%	+0%	+8%	+2%	+5%	+7%	+5%	-10%		

• Key models: Liquid chromatographs (LC), mass spectrometers (MS), gas chromatographs (GC)

Excluding exchange rate effects



## **Analytical & Measuring Instruments Year-on-Year Change in Net Sales by Region**

Country		FY2	017			FY2	018		FY 2019					
Country	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Japan	+11%	+1%	+15%	+8%	+15%	-1%	-4%	-1%	-12%	+21%	+0%	-5%		
North America	-9%	+7%	+11%	+30%	+17%	+14%	+9%	+3%	+4%	-5%	+16%	+4%		
Europe	+9%	+8%	-7%	-7%	+11%	+7%	+19%	+8%	+1%	+19%	+2%	-2%		
China	+14%	+20%	+13%	+14%	+10%	+6%	+3%	+9%	-8%	-4%	+4%	-40%		
Other Asian Countries	-7%	+9%	-8%	+13%	-2%	-1%	+13%	-2%	+19%	+11%	+8%	-10%		
India	-10%	+24%	-7%	+21%	+6%	-7%	+4%	-9%	+11%	-3%	+27%	-5%		

- Values for India are included in other Asian countries.
- Excluding exchange rate effects



### Medical Systems Year-on-Year Change in Net Sales by Region

Country		FY2	017			FY2	:018		FY 2019					
Country	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Japan	+9%	+0%	+1%	-11%	-1%	+16%	+19%	+6%	+6%	+30%	-2%	-5%		
North America	+2%	-9%	+10%	+19%	+17%	-3%	-33%	-24%	-24%	-17%	+5%	+7%		
Europe	-51%	-3%	+75%	+96%	+190%	+31%	+22%	-1%	-26%	-6%	+2%	-8%		
China	-1%	+3%	+22%	-7%	+1%	-14%	-5%	-15%	-33%	+5%	-26%	+13%		
Other Asian Countries	+22%	+34%	-8%	+24%	+11%	-2%	+45%	-28%	-8%	+3%	-16%	+34%		

Excluding exchange rate effects



## **Industrial Machinery Year-on-Year Change in Net Sales by Model**

		FY2	.017			FY2	.018		FY 2019					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
TMP	+59%	+34%	+30%	+16%	+14%	+0%	-15%	-29%	-25%	-26%	+10%	+48%		
Hydraulic Equipment	+11%	+9%	+15%	+7%	+6%	+1%	+4%	+1%	+2%	+1%	-12%	-5%		
Other	-7%	+13%	+20%	+37%	+92%	-9%	-1%	+36%	-37%	+19%	-11%	-1%		

Excluding exchange rate effects



## Aftermarket Business (AM) Sales Ratio

**Analytical & Measuring Instruments** 

		FY2	017			FY2	:018		FY 2019				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
YoY Change in AM Net Sales	+10%	+14%	+8%	+6%	+18%	+14%	+15%	+11%	+3%	+6%	+6%	-2%	
AM Ratio	30%	27%	28%	27%	31%	31%	31%	29%	34%	30%	32%	32%	

**Medical Systems** 

		FY2	017			FY2	018		FY 2019				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
YoY Change in AM Net Sales	+2%	+6%	+1%	+2%	+4%	-2%	+5%	+2%	+5%	+13%	-3%	+2%	
AM Ratio	33%	31%	31%	28%	32%	29%	30%	29%	35%	28%	31%	30%	

**TMP** 

		FY2	017			FY2	018		FY 2019					
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
YoY Change in AM Net Sales	-0%	+37%	+52%	+39%	+49%	+31%	+26%	+19%	+13%	+9%	-1%	+12%		
AM Ratio	11%	14%	13%	14%	14%	18%	20%	24%	22%	27%	18%	18%		