TSE Code：4585

Supplementary Documents of Business Results for First Six Months of Fiscal Year 2016 ending Dec.31, 2016

Tatsuyoshi Hirano
Chairman & CEO

July 29, 2016

Addressing Unmet Medical Needs
UMN Pharma Inc.

Contents

- Business Results for First Six Months of FY2016
  - Summary of Consolidated Financial Results & Strategic Plan to Reinforce Financial Position
  - Consolidated Financial Data
  - R&D Progress
- Consolidated Financial Forecasts for FY2016 (Update)
- Mid-Term Business Plan FY2016－FY2019 *

*Disclosed on May 25, 2016

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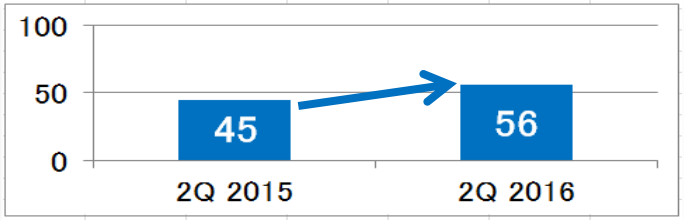
Summary of Consolidated Financial Results for First Six Months of FY2016 vs FY2015

－Loss for first six months of FY2016 reduced as R&D expenses for UMN-0502 peaked out

－Net assets turned negative at June 30, ‘16 as the production prolonged / related costs recognized

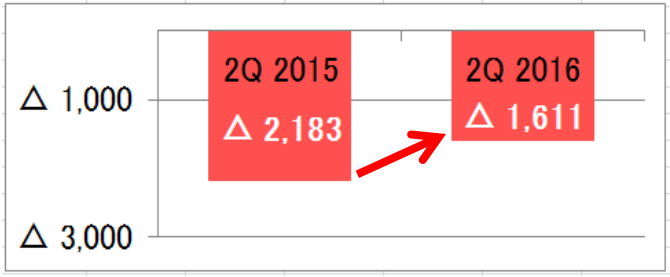
(Millions of Yen)

Net Sales



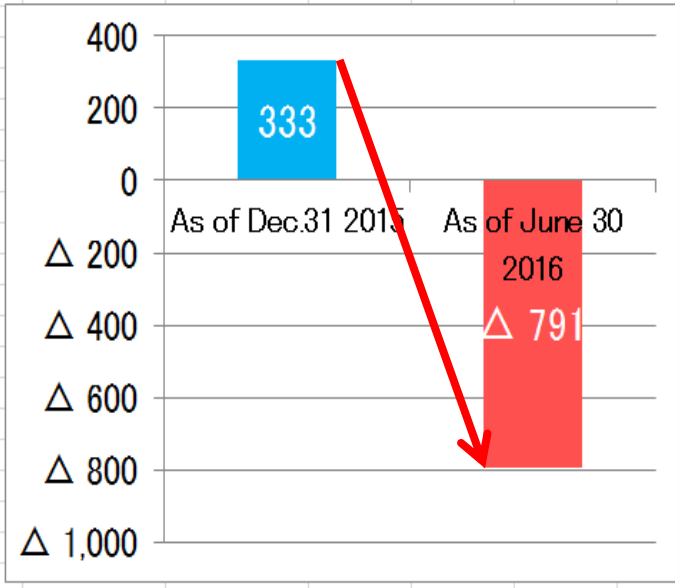
- Sales from Biopharmaceutical Contract Manufacturing Business (BCMO) slightly increased

Profit attributable to owners of Parent



- R&D expenses for UMN-0502 peaked out
- Additional thorough streamlining of costs
- Part of loss temporarily posted attributable to owners of UMN recovered by capital investment to UNIGEN from the minority

Net Assets



- Decision not to start commercial production this season made us recognize additional expenses, which had been booked on B/S as work in process
- As the above loss overweighed additional capital from UMN’s financing underway, consolidated net assets turned negative as of June 30, 2016
- No revision necessary for the consolidated financial forecasts for FY2016, disclosed on May 25, 2016, as the total expenses for FY2016 are projected to be unchanged

Plan to Reinforce the Consolidated Financial Position during FY2016 ending Dec.31, 2016

－Secure posting UMN-0502 related sales / Streamline expenses additionally & thoroughly

－Raise additional capital through the financing activities underway

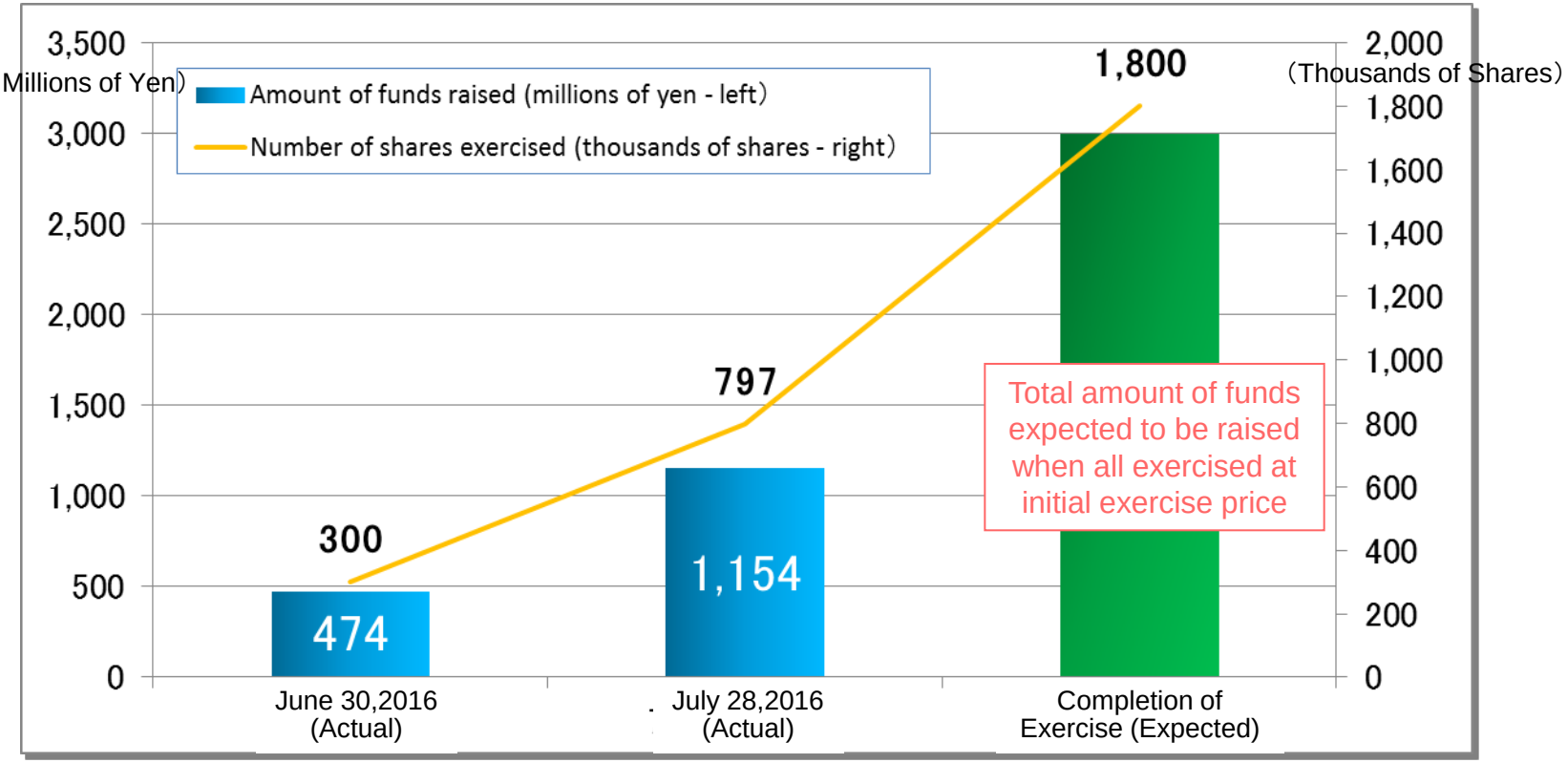
Post Additional Sales	➢ Secure posting sales from UMN-0502 and In-House pipelines ➢ Increase Sales from BCMO（※）Business （※）Biopharmaceutical Contract Manufacturing Organization
Minimize Loss Attributable to Owners of Parent	➢ Streamline expenses additionally & thoroughly ➢ Committed : Further Cost Reduction of ¥200 Mil (minimum), compared to those in the financial forecasts for FY2016 (disclosed on May 25, 2016)
Reinforce Financial Position	➢ Additional capital expected from the financing activities underway, reinforcing the consolidated financial position

Net Assets Projected to Turn Positive by the End of FY2016

Current Status of Financing through #19 Warrants with Provision for Revising Exercise Price, Allotted to Evolution Biotech Fund issued on June 13, 2016

- Number of Dilutive Share on Issuance of #19 Warrants : 1,800,000 shares
  (Ratio to Total Number of Share Outstanding : 18.8%)
- Initial Exercise Price @¥1,719 per share / Minimum Exercise Price @¥945 per share
- Completion of Exercise of 1,800,000 shares within 61 trading days Committed by the Allottee with Committment to Exercise at least 100,000 shares every 5 trading days

Status of Exercise of #19 Warrants and Funds Raised as of July 28, 2016



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Summary of Consolidated Financial Results for First Six Months of FY2016

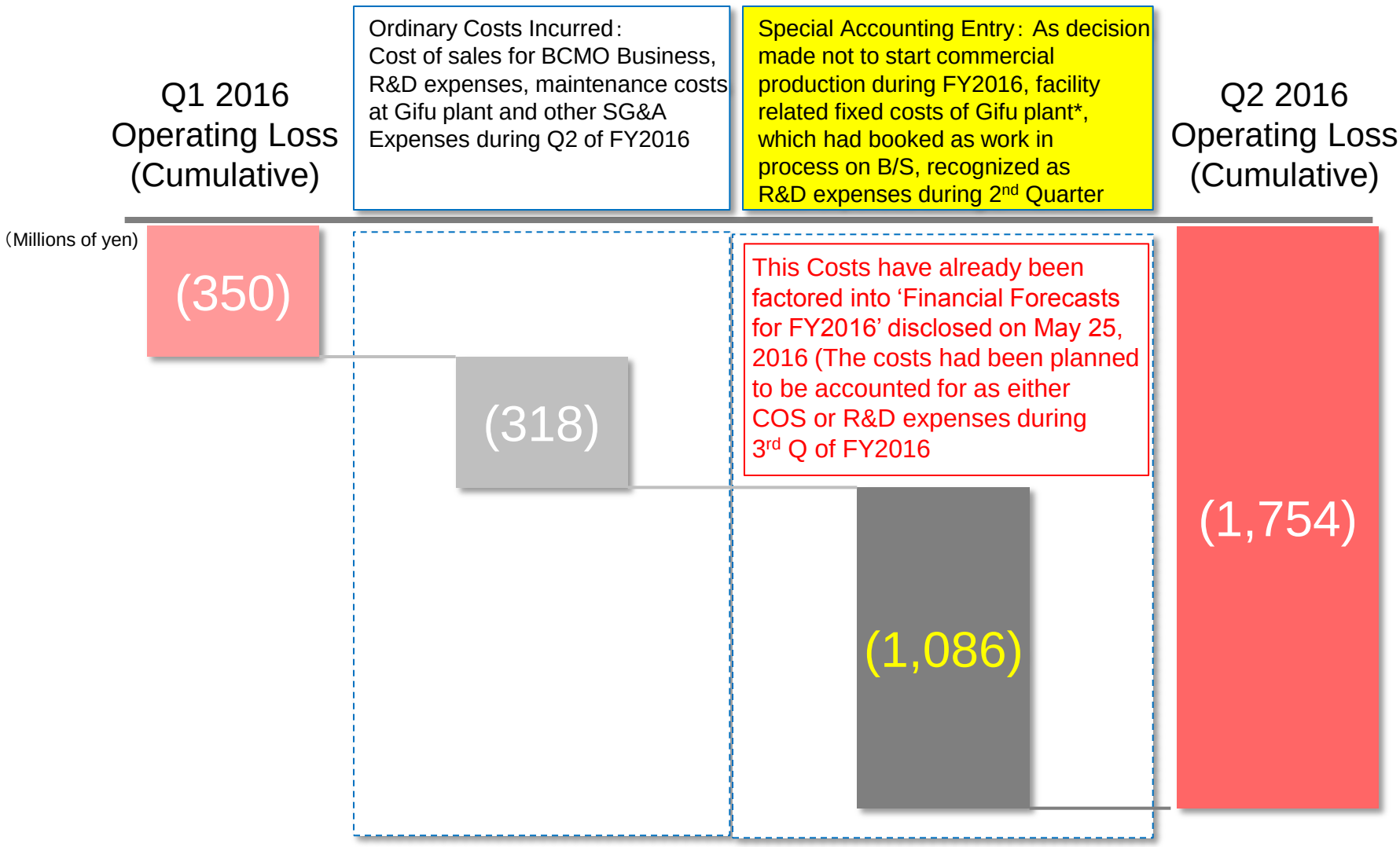
(From January 1 through June 30, 2016)

– Comparison to the corresponding term of the previous Fiscal Year –

(Millions of yen)	1st half FY2015 - Actual - (Consolidated)	1st half FY2016 - Actual - (Consolidated)	Change		Remarks
Net sales	**45**	**56**	+11	+24.3%	Sales from Biopharmaceutical Contract Manufacturing Business (BCMO) stayed slight increase
Cost of sales	**20**	**16**	(3)	(17.9)%	
R&D expenses	**1,955**	**1,577**	(377)	(19.3)%	R&D expenses reduced as UMN-0502 related expenses peaked out & the maintenance costs at Gifu plant streamlined
Other SG&A expenses	**227**	**216**	(10)	(4.7)%	SG&A expenses restrained at the same level as overall cost-watching activities continued
Operating Income	**(2,157)**	**(1,754)**	+402	- %	
Ordinary Income	**(2,186)**	**(1,861)**	+324	- %	
Profit attributable to Non-controlling interests	**—**	**(250)**	+250	- %	A part of loss, which should have been accounted for as non-controlling interest but temporarily posted as loss attributable to owners of UMN in the previous FY due to accounting rule, recovered by capital investment to UNIGEN from the non-controlling business partner
Profit attributable to Owners of Parent	**(2,183)**	**(1,611)**	+571	- %	50% of net loss of UNIGEN for 1st half of FY2016, ¥(834) Mil, which should be accounted for as loss attributable to the minority interest, was temporarily accounted for as loss attributable to owners of parent due to accounting rule

Major Factor of Widened Operating Loss during 2nd Quarter of FY2016

－Fixed costs at Gifu plant of ¥1,086 mil., which had been booked as work in process on B/S for COS assuming commercial production starts during FY2016, recognized as R&D expenses



* Facility related fixed costs of Gifu plant : Depreciation, Repairs and maintenance expense, Tax and dues, rental expense and Insurance fee.

Degree of Current Progress to Full Year Financial Forecasts for FY2016

- Net Sales : Progress remained low as UMN-0502 related sales during 2nd half of FY2016 assumed
- Incomes : Higher progress due to 'Special Accounting Entry' shown on the previous page, in which facility related fixed costs on B/S were recognized as expenses earlier than initially planned

(Millions of yen) Except for per share data	FY2016 (Full Year) **- Forecasts* -** (Consolidated)	1st half FY2016 **- Actual -** (Consolidated)	Progress on Full Year Forecasts	Remarks
Net sales	2,044	**56**	2.7%	Posting UMN-0502 related sales assumed during 2nd half of 2016
Operating income	(2,315)	**(1,754)**	75.8%	Due to recognition of expenses of facility related fixed costs at UNIGEN Gifu plant, which were initially planned to be accounted for during 2nd half of FY2016 (Please refer to Page 9)
Ordinary income	(2,608)	**(1,861)**	71.4%	Same as above
Profit attributable to Owners of Parent	(2,366)	**(1,611)**	68.1%	Same as above
Basic Earnings per share	¥(246.68)	**¥(167.62)**		

***** Financial forecasts disclosed on May.25, 2016 – Lower range of the forecasts without commercial production of UMN-0502

Consolidated Balance Sheets as of June30, 2016 vs. Dec.31, 2015

－Total assets increased ¥839 Mil to ¥12,647 Mil

－Raw materials & supplies increased ¥355 Mil in preparation for the commercial manufacturing

(Millions of yen, fractions dropped)

Account	FY2015 (as of Dec.31,2015)	1st half FY2016 (as of June30,2016)	Change	Remarks
Assets				
Current assets				
Cash on hands/banks	842	**654**	(187)	
Raw materials / supplies	1,685	**2,041**	+355	
Others	776	**260**	(515)	
Total current assets	3,303	**2,956**	(347)	
Fixed assets				
Tangible fixed assets				
Buildings and structures	4,680	**4,484**	(196)	
Machinery and equipment	2,555	**2,235**	(320)	
Lease assets	426	**372**	(53)	
Others	474	**2,269**	+1,795	Additional capital investment (Gifu)
Intangible fixed assets	171	**135**	(35)	
Investment & others	196	**194**	(2)	
Total fixed assets	8,504	**9,691**	+1,187	
Total Assets	11,808	**12,647**	+839	

Consolidated Balance Sheets as of June30, 2016 vs. Dec.31, 2015 (continued)

－Short term loan increased ¥2,400 Mil as construction to enhance capacity at Gifu plant progresses

－Long term loan decreased ¥547 Mil as repayment of Tranche A Syndicated loan made as scheduled

(Millions of yen, fractions dropped)

Account	FY2015 (as of Dec.31,2015)	1st half FY2016 (as of June30,2016)	Change	Remarks
Liability				
Current liability				
Short term loan	3,600	**6,000**	+2,400	Borrowing for additional capital investment at UNIGEN Gifu plant to enhance capacity
Long-term loan due within one year	1,119	**1,100**	(18)	
Account payable	425	**592**	+166	
Others	185	**209**	+24	
Total current liability	5,330	**7,902**	+2,572	
Fixed liability				
Long term loan	5,210	**4,663**	(547)	Repayment of Syndicated Loan Tranche A
Lease obligations	351	**296**	(55)	
Other	582	**577**	(4)	
Total fixed liability	6,144	**5,537**	(607)	
Total Liability	11,474	**13,439**	+1,965	

Consolidated Balance Sheets as of June30, 2016 vs. Dec.31, 2015 (continued)

－Total net assets stood at ¥(791) Mil as of June 30, 2016 as Net loss of UNIGEN overweighed additional capital from UMN's financing underway. Net assets turn positive by end of FY2016 projected

(Millions of yen, fractions dropped)

Account	FY2015 (as of Dec.31,2015)	1st half FY2016 (as of June30,2016)	Change	Remarks
Net Assets				
Shareholders' equity				
Common stock	8,697	**8,934**	+236	Due to exercise of #19 Warrants
Capital surplus	8,366	**8,603**	+236	Same as above
Retained earnings	(16,730)	**(18,342)**	(1,611)	Due to net loss Profit attributable to owners of parent incurred during first six months of FY2016
Treasury stock	(0)	**(0)**	－	
Total Shareholders' equity	333	**(803)**	(1,137)	
Accumulated other comprehensive income				
Unrealized holding gains on securities	－	**－**	－	
Total accumulated other comprehensive income	－	**－**	－	
Subscription rights to shares	－	**12**	+12	Issuing price of #19 Warrants paid
Non-controlling interests	－	**－**	－	Cumulative loss of UNIGEN attributable to non-controlling interests but temporarily accounted for as UMN's consolidated net loss amounts ¥(2,521) Mil
Total Net assets	333	**(791)**	(1,125)	Total Net assets would have stood at positive of ¥1,729 Mil as of June 30, 2016 if the above mentioned loss were accounted for as loss attributable to non-controlling interests
Total Liabilities & Net Assets	11,808	**12,647**	+839	

Consolidated Cash Flows for 1st half of FY2016 vs 1st half of FY2015

－Cash outflows for operating activities shrank as R&D activities for UMN-0502 peaked out

－Cash outflows for investing activities increased to ¥1,807 Mil to enhance capacity of Gifu plant

(Millions of yen, fractions dropped)

Account	1st half FY2015	1st half FY2016	Change	Remarks
Cash flows from operating activities				
Net loss before income taxes & minority interests (-)	(2,186)	**(1,861)**	+324	
Depreciation	762	**619**	(142)	
Income from grants	(76)	**(65)**	+10	
Other	(171)	**464**	+636	
Subtotal	(1,672)	**(843)**	+828	
Subsidy received	76	**65**	(10)	
Other	(104)	**(110)**	(6)	
Net cash provided by (used in) operating activities	(1,700)	**(888)**	+811	Cash outflow for operating activities shrank considerably
Cash flows from investing activities				
Purchase of tangible fixed assets	(14)	**(1,809)**	(1,794)	Additional Investment to enhance capacity at Gifu plant
Other	(8)	**2**	+10	
Net cash provided by (used in) investing activities	(22)	**(1,807)**	(1,784)	Due to capital investment to enhance capacity at Gifu plant

Consolidated Cash Flows for 1st half of FY2016 vs 1st half of FY2015 (continued)

－Secured necessary cash through financing activities during first six months of FY2016 :
Short term loan under Syndicated loan Tranche B, issuance & exercise of #19 Warrants, etc.

(Millions of yen, fractions dropped)

Account	1st half FY2015	1st half FY2016	Change	Remarks
Cash flows from financing activities				
Net increase (decrease) in short-term loan	900	**2,400**	+1,500	Increased borrowing under Syndicated loan Tranche B commitment line
Net increase (decrease) in long-term loan	(43)	**(565)**	(522)	Repayment during 1st half of FY2015
Proceeds from issuance of common stock	13	**463**	+450	Issuance & exercise of #19 Warrant resolved by the Board of Directors of UMN on May 25, 2016
Proceeds from capital investment from un-controlling shareholder of UNIGEN	－	**248**	+248	Proceeds from capital investment to UNIGEN by IHI in March, 2016
Others	(49)	**(37)**	+12	
Net cash provided by (used in) financing activities	819	**2,508**	+1,688	Secured cash outflows for operating and investing activities by financing activities
Net increase (decrease) in cash and cash equivalents	(903)	**(187)**		
Cash and cash equivalents at beginning of the period	2,080	**842**		
Cash and cash equivalents at end of the period	1,176	**654**	(522)	

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Current Progress of R&D pipeline (as of June 30, 2016)

Name	Target Disease	Area	Est. Size
Flublok®	Seasonal Influenza Vaccine	USA (PSC) Approved	170 Mil. Doses
UMN-0502	Seasonal Influenza Vaccine	Japan	60 Mil. Doses
		China・Korea・Taiwan・Hong Kong・Singapore	50 Mil. Doses
UMN-0501	Pandemic Influenza Vaccine	Japan	N.A.
		China・Korea・Taiwan・Hong Kong・Singapore	N.A.
UMN-0901	Pandemic Influenza Vaccine	Japan	N.A.
		China・Korea・Taiwan・Hong Kong・Singapore	N.A.
UMN-2003/2002	Norovirus / Rotavirus Vaccine	World markets	Over US$800 Million

Concentration on Review Process & Preparation for Commercial Production Continued

- Accommodate Review Process for Approval of UMN-0502 by MHLW / PMDA

- Conduct Trial Production of Drug Substances and Related Assays using strains of both 2015/16 season and 2016/17 season, in preparation for Commercial Production

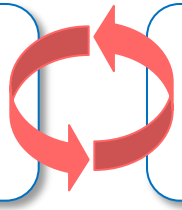
UMN-2002 (Norovirus Vaccine) : Update
－Conducting Joint Research to decide Optimum Candidates for Development

Collaborative Research Agreement with Daiichi Sankyo

【Summary of terms】
- UMN provides Daiichi-Sankyo with recombinant norovirus VLP* antigen exclusively
- Daiichi Sankyo conducts basic research to determine the possibility of developing the vaccine
- UMN grants Daiichi Sankyo the right to negotiate exclusively further partnership during the collaborative research agreement period

* VLP = Virus Like Particle

Daiichi-Sankyo
Passion for Innovation. Compassion for Patients.™

・Conduct research to determine possibility to develop norovirus vaccine with VLP antigen ・Conduct preliminary tests for development		・Provide recombinant norovirus VLP antigen produced by BEVS ・Conduct process development for manufacturing

【Current progress as of June 30,2016】
- Optimization of manufacturing process of VLP antigen being under way by UMN assuming further development
- Joint research to decide Optimum Candidates for Development being in execution utilizing data and knowledge acquired to date

Zika virus infection

- Zika is spread to people primarily through the bite of an infected Aedes species mosquito.
- Many people infected with Zika will have no symptoms or mild symptoms, but in a small number of cases, Guillain-Barre syndrome (GBS) is also very likely triggered by Zika.
- Zika infection during pregnancy can cause a serious birth defect called microcephaly and other severe fetal brain defects.
- Director-General of The World Health Organization (WHO) declared a Public Health Emergency of International Concern about Zika virus and its suspected link to birth defects on 1 February 2016.

How to prevent Zika virus infection

- There is no vaccine to prevent Zika and the best way to prevent diseases is to protect yourself from mosquito bites.
- Many corporations and agencies are developing Zika virus vaccines globally

World Health Organization

'The vision for the Decade of Vaccines (2011–2020) is of a world in which all individuals and communities enjoy lives free from vaccine-preventable diseases.' (The Global Vaccine Action Plan endorsed in 2012)

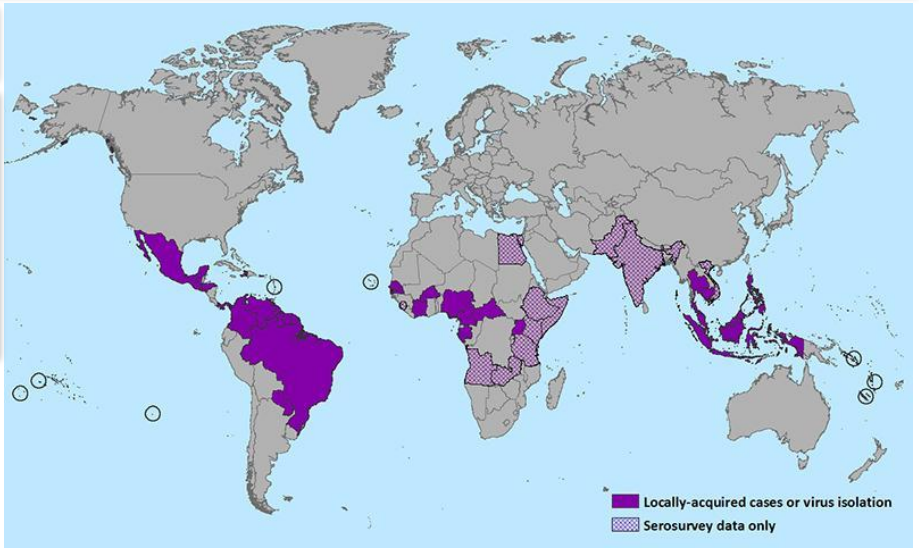


Figure : Countries that have past or current evidence of Zika transmission
Source : US CDC. Zika virus http://www.cdc.gov/zika/

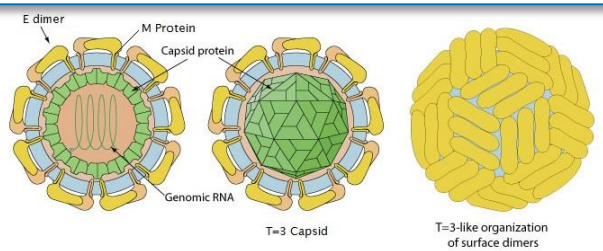
Signed Agreement for Joining PSC's 'International Zika Vaccine Consortium' – Significance & Development Plan of Zika Virus Vaccine

Significance of Developing Zika Virus Vaccine for UMN Group

- Achieving our Mission, 'Making significant contribution to improving the health and quality of life of people around the world', through development, manufacturing and delivery of Zika virus vaccine, which has been recognized as a threat to international public health.
- Expanding Business Opportunities by enhancing public awareness of UMN Group as global manufacturing and supply base for vaccines of emerging infectious disease / re-emerging infectious disease

Development Plan of Zika Virus Vaccine

- Similar vaccine candidates produced at Protein Sciences against West Nile Virus and Japanese Encephalitis Virus, which are close relatives of the Zika virus, have previously been shown to neutralize their respective viruses in preclinical studies.
- Minimizing development risk by collaborating with global business partners shown in the next page.
- As social need and urgency for developing Zika vaccine were heightened, large scale clinical trials would not be necessary for the approval.



The Structure of Zika Virus

Zika Virus : Structure, Epidemiology, Pathogenesis, Symptoms, Laboratory Diagnosis and Prevention

Concept of Consortium

Feasibility：

Basic immunogenicity has already been confirmed with similar vaccine candidates, which are close relatives of the Zika virus and produced at Protein Sciences Corporation (PSC) applying its proprietary BEVS platform technology and which have previously been shown to neutralize their respective viruses in preclinical studies.

Rationality：

Costs for Development would be funded by Each partner's reasonable efforts to secure non-dilutive funding for Vaccine development from governmental agencies and other international agencies.

UMN Group would seek to expand its business opportunity through making Gifu plant function as global manufacturing and supply base of various vaccines for infectious diseases.

Signed Agreement for Joining PSC's 'International Zika Vaccine Consortium' – Participants of Consortium & Roles

Participants of Consortium & Roles

Protein Sciences Corporation	Sinergium Biotech	Mundo Sano (NPO)	Some more participants expected	UMN Pharma
USA US bio-venture corporation that has a proprietary BEVS platform technology, which can be used to produce high-quality recombinant protein-based vaccines and biopharmaceuticals	Argentina Argentinean biotech company focused on the development, manufacturing and marketing of different vaccines.	Argentina Non-profit organization with activities in Argentina, Spain and Africa, whose vision is to transform the reality of the populations affected by neglected diseases.	Several corporations and entities are considering to participate in 'International Zika Vaccine Consortium'	Japan Japanese bio-venture focused on development, manufacturing and marketing of innovative prophylactic vaccines.
・Manufacturing process, supply of clinical material, establish plan for development to secure approval ・Exclusive right to develop, manufacture and sell the vaccine in territories such right be given	Exclusive right to develop, manufacture and sell the vaccine in its respective home market or territories such right be given			・Exclusive right to develop, manufacture and sell the vaccine in territories such right be given ・Establish large-scale production process ・Function as global manufacturing base (exporting)

Paths to Establishing 'International Zika Vaccine Consortium'

—'Partnership' will be formally established among final participants after agreed upon 'the Vaccine Development Plan' submitted by PSC and other terms and conditions

Kick Off Meeting (During August 2016)

- Deliberate and Negotiate among the participants upon :
  - Vaccine Development Plan
  - Business Plan
  - Roles and Responsibilities to be assumed
  - Rights and Opportunities to be acquired
  - Budgets and Operation of the Consortium, etc.

AGREED

NOT AGREED

Refund of Prepaid Contribution

Partnership Agreement for the Consortium（September 2016 expected）

- Establish Consortium / Launch Development

Update：Exporting Flublok® Drug Substances Produced at Gifu to US
－Started Trial Manufacturing in full scale (21,000L) at Gifu plant in July in order for PSC to collect data for its sBLA submission to FDA

Current Status as of July 29, 2016

PSC

- Type C meeting (a preparatory Q&A meeting between Food and Drug Administration (“FDA”) and an applicant before submitting application) between PSC and FDA was held on April, 2016, where the necessary steps to obtain the licensure from FDA for Gifu plant as a manufacturing facility of Flublok® drug substance were discussed and confirmed.
- PSC has been continuously contacting FDA about more details of sBLA.

UNIGEN

- Trial Manufacturing in full scale (21,000L) at Gifu plant started in July in order for PSC to collect data for its sBLA submission to FDA under PSC’s instruction.
- Final number of Lots necessary for Trial Manufacturing would be decided by further discussion between PSC and FDA.
- Preparation for the Regulatory Inspection of Gifu plant by FDA is being under way.

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Consolidated Financial Forecasts for FY2016 ending Dec.31, 2016

As decided not to start commercial production this season, forecasts would result in lower range
Losses would be less than lower ranges below as additional streamlining of expenses being planned

(Millions of yen) Except for per share data fractions dropped	FY2015 (Consolidated)	FY2016 (Consolidated)		Major factors of the differences between the two cases : forecasts when commercial production starts or when not
		Without UMN-0502 Commercial Production	**With** UMN-0502 Commercial Production	
Net sales	202	2,044	2,428	UMN-0502:Without commercial production, net sales would be lower range of the forecasts.
Cost of sales	52	316	2,179	
R&D expenses	2,933	3,598	2,085	Costs of Flublok® DS production for FDA application, Fixed costs at Gifu plant without production.
Other SG&A expenses	424	445	445	
Operating Income	(3,207)	(2,315)	(2,282)	No material affect on incomes without commercial production.
Ordinary Income	(3,390)	(2,608)	(2,575)	
Profit attributable to Owners of Parent	(3,390)	(2,366)	(2,332)	¥(250) mil charged as non-controlling interests taken out of Owner's loss
Basic Earnings per share	¥(354.16)	¥(246.68)	¥(243.22)	

・The above forecasts are based on an assumption that the approval for UMN-0502 by MHLW would be obtained during FY2016. Depending on the progress of the review process for approval, actual financial results may differ materially..

Forecasts for FY2016：Cost of Sales, R&D & Other SG&A Expenses

- As UMN-0502 Commercial Production was decided not to start during FY2016, the relevant costs of sales will be charged as R&D expenses
- Costs of trial production of Flublok® drug substances for FDA application be charged as R&D expenses

Breakdown costs (Millions of yen)	FY2013 Actual（Cons.）	FY2014 Actual（Cons.）	FY2015 Actual（Cons.）	FY2016 Forecasts（Cons.）	
				Without UMN-0502 Commercial Production	**With** UMN-0502 Commercial Production
Cost of sales	27	173	52	**316**	2,179
R&D expenses	3,925	4,270	2,933	**3,598**	2,085
Other SG&A expenses	562	607	424	**445**	445
Total of SG&A expenses	4,488	4,877	3,357	**4,043**	2,531
Depreciation	1,404	※1,873 ※ for lease 106	※1,524 ※ for lease 107	**※1,494** ※ for lease 107	※1,494 ※ for lease 107

	Point	Details
Cost of Sales (COS)	COS would fluctuate depending on whether commercial production would start or not	➢ Without UMN-0502 Commercial Production during FY2016, the relevant costs will be charged as R&D expenses
R&D and other SG&A expenses	Costs for US Project (supplying Flublok® drug substances (DS) to the US market) are included	➢ Costs for trial production of Flublok® DS for FDA application included ➢ Costs for UMN-0502 review process, UMN-2002 project, etc.

Growth Strategy：Paths & Goals to be Achieved through FY2020
－Establish Position as Global Bio-Pharma by Leveraging BEVS Platform

Global Business Expansion, taking advantage of Accumulated Know-how of Large -scale, Bio-Pharmaceutical Manufacturing Technology

Develop Novel Vaccines, including UMN-2002, by Further Leveraging BEVS Platform, so as to Address Unmet Medical Needs

Export UMN-0502 Drug Substances Manufactured at Gifu Plant to U.S. and Asian Markets, making full use of Capacity

Establish Revenue Base on UMN-0502 in Japan

Develop +α Growth Driver

Establish No.1 Position as Global Bio-Pharma

2015 2016 2017 2018 2019 2020

Critical Challenges to be Addressed in order to Achieve our Strategic Goals by FY2020

- Expansion of manufacturing capacity and enhancement of manufacturing efficiency at Gifu plant in order to meet expected future demands of UMN-0502 in Japan / Flublok® in the US
- Global deployment of our in-house pipelines
- Aggressively seek for promising seeds, technologies and IP's for our sustainable and accelerated Growth

FY2016 Top Priority ：Establish Revenue Base on UMN-0502 in Japan
－Concentrate the resources on review process for approval

Establish Revenue Base on UMN-0502 in Japan

Concentrate All the Resources on the following

Accommodate Review Process for Approval of UMN-0502 by MHLW / PMDA

Accommodate GMP Compliance Inspection at Gifu Plant by MHLW / PMDA

Strengthen cost competitiveness－Cost Reduction / Yield efficiency improvement
－ including switch to improved Cell Bank which PSC has already introduced －

FY2016 Top Priority : Overseas Development

－ Accelerate actions so as to start exporting Flublok® to US from 2017-18 Season

Export UMN-0502 (Flublok®) Drug Substances Manufactured at Gifu Plant to U.S. and Asian Markets, making full use of Capacity

U.S. Market

Goal : Start exporting Flublok® to US from 2017-18 Season

	Current status	Important issues to be addressed	
UNIGEN	Started trial production of Flublok® DS for FDA application, preparation for FDA inspection, and cGMP literacy training at Gifu plant under way	Transfer Flublok® DS produced at Gifu to PSC, preparation for FDA inspection, further enhancement of practical cGMP literacy, etc. at Gifu plant	Regulatory inspection of Gifu plant by FDA
PSC	Reflecting FDA Type C meeting held on April 7,2016 between PSC and FDA, now obtaining relevant data with close discussion between PSC & FDA	Acquisition of relevant data necessary for Biologic License Application (BLA) to FDA, and drawing up the documents	Regulatory inspection of Gifu plant by FDA , submission of application for the licensure to FDA
Coacting	Reached agreement on basic terms such as production schedule, logistics, commercial terms, etc. on Feb.12,2016	PSC and UNIGEN shall enter into; 'Supply Agreement for Drug Substance of Flublok®' and 'Quality Agreement'	

Korean Market

Preparing for Documents / Investigational drug for PIII clinical study in Korea

- Planning to provide Ildong Pharmaceutical Co., Ltd. with related documents
- Preparing for supply of investigational drug for expected PIII clinical study

FY2016 Top Priority：Make Alliance on In-House Pipelines
－Powerfully step forward on-going in-house pipelines into alliance

Develop Novel Vaccines, including UMN-2002, by Further Leveraging BEVS Platform, so as to Address Unmet Medical Needs

UMN-2002

Continuing to carry out the research to verify the possibility with Daiichi Sankyo under the joint research agreement

- Finalize the manufacturing process for drug substance in order to advance to the next step as early as possible.
- Further advances beyond the next step would be discussed between the two companies for earlier agreement.

Step up to Alliance ・ Search for Chance

Pursue possibilities to make existing contracts advance to alliance
・Search for Chance to Introduce New Pipelines

- Further progress on existing contracts, up to the next stage of development, considering patent application, etc.
- Assessing business values, seeking for possibilities of forming alliance
- Searching for chance to introduce new pipelines, by taking the chance to join 'International Zika Vaccine Consortium' led by PSC.

Contents

- Business Results for First Six Months of FY2016
  - Summary of Consolidated Financial Results & Strategic Plan to Reinforce Financial Position
  - Consolidated Financial Data
  - R&D Progress
- Consolidated Financial Forecasts for FY2016 (Update)
- Mid-Term Business Plan FY2016－FY2019 *

*Disclosed on May 25, 2016

Mid-Term Business Plan : Mission / Goals / Strategy
－ FY2019 Should Be 'Only Passing Point' for Sustainable Growth Beyond

＜Mission＞
Committed to making a significant contribution to improving
the health and quality of life of people around the world
through development, manufacturing and delivery of innovative vaccines,
functioning as a market-leading innovator in the field of vaccines

Goals

- Committed to reaching operating income of ¥4 billion during FY2019, which is still in the half way of our long-term profit goals of operating income of ¥8 billion from shipment of UMN-0502 DP(*1) for Japan and Flublok® DS(*2) for the US.
- Committed to realizing additional growth through commercialization of on-going in-house pipelines and further development of new drug candidates.

Strategy

- To secure long-term sustainable source of income by establishing stable revenue base in the field of vaccines as a category leader, in collaboration with PSC(*3) ,
- To create additional value through commercialization / partnerships on UMN-2002
- To develop new vaccine candidates and to approach novel technological platforms by further leveraging BEVS platform, so as to gain a foothold as the category leader.

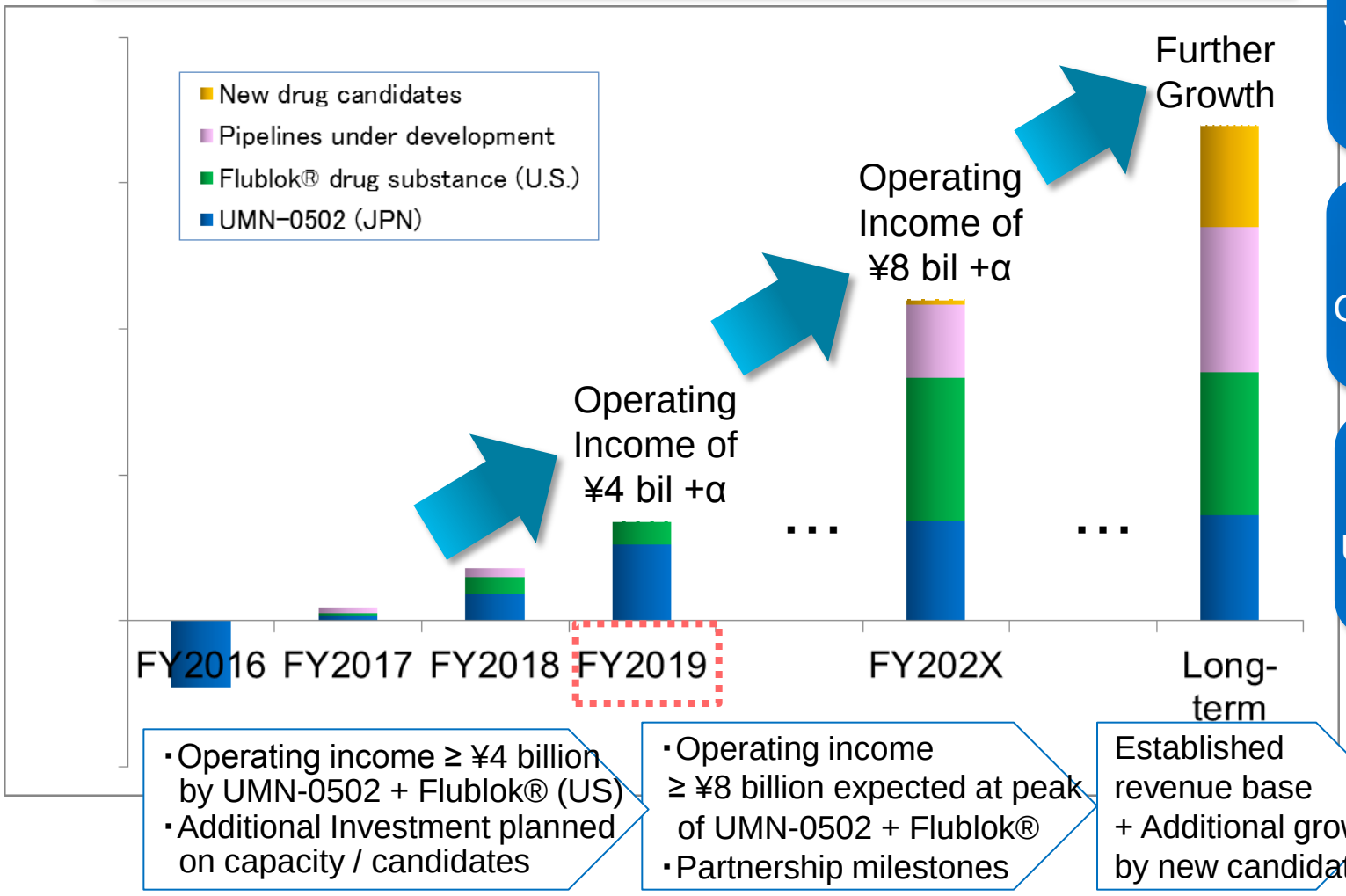
(*1) DP : drug product　(*2) DS : drug substance　(*3) PSC : Protein Sciences Corporation

Growth Scenario

－Revenue base establishes on UMN-0502 in Japan & exporting drug substances from Gifu to US

－Additional growth expected on UMN-2002, with sustainable growth via development of new drug candidates

Committed to Realizing Further Growth beyond FY2020



Additional Value via Development of New Drug Candidates

Accelerate Growth through Commercialization of In-house Pipelines

Establish Revenue Base on UMN-0502 in Japan and Flublok® in US

- Operating income ≥ ¥4 billion by UMN-0502 + Flublok® (US)
- Additional Investment planned on capacity / candidates

- Operating income ≥ ¥8 billion expected at peak of UMN-0502 + Flublok®
- Partnership milestones

Established revenue base + Additional growth by new candidates

FY2016 - FY2019 Action Plan

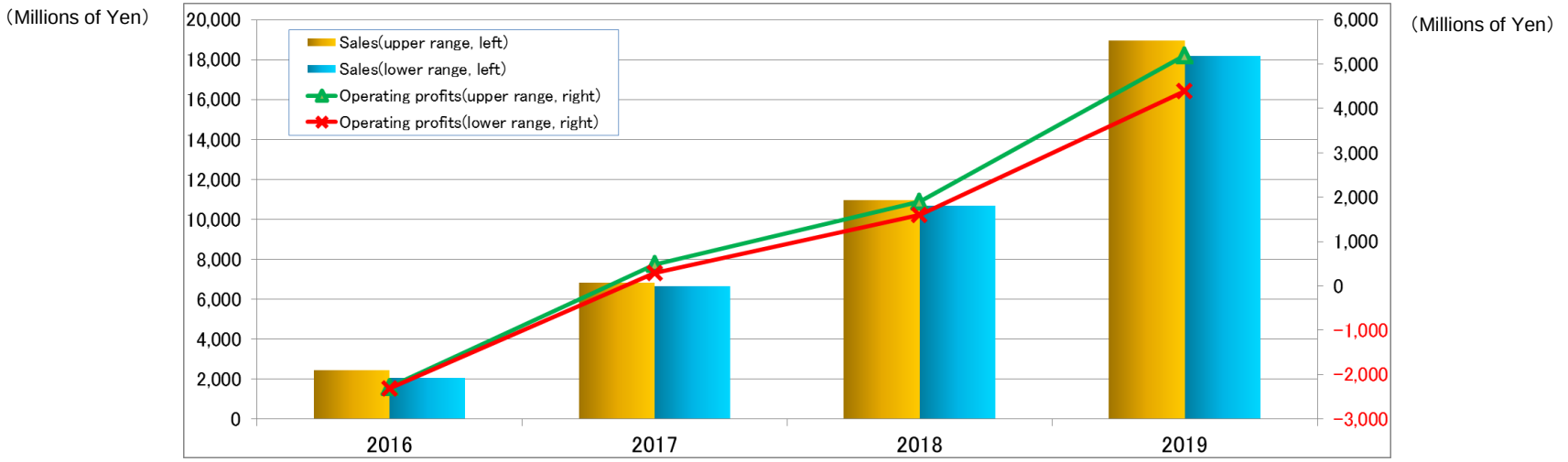
— Establish & strengthen core business to build robust revenue base

— Exploiting new area to create future additional value

		Detailed Activities for Mid-Term Business Plan FY2016 — FY2019
In-House Pipeline	UMN-0502 UMN-0501 UMN-0901	Japan ➢ Obtaining marketing approval & start commercial production during FY2017 or later ➢ Increase manufacturing capacity in order to meet projected future demands ➢ Strengthen cost competitiveness—Reduction of costs / Improvement of yield efficiency ➢ Consider possibility of additional indication of UMN-0502 into the age under 20 Overseas ➢ Start exporting Flublok® drug substances (DS) to US from 2017-18 Season ➢ Implement clinical development in South Korea, leading to start exporting DS from 2018
	UMN-2003/ 2002	➢ Steadily making progress on UMN-200X pipeline under research collaboration and formation of alliance
Biopharmaceutical contract manufacturing		➢ Make the existing contracts up to form an alliance, further up to future in-house pipeline
Development of human resources		➢ Strengthen HR function in order to secure future qualified management personnel ➢ Strengthen HR development / Ensure world-class HR
Management foundation		➢ Strengthen operating foundation for global business expansion ➢ Enhance Investors Relations function / Secure timely disclosure function

FY2016 - FY2019 Mid-term Business Plan：Financial Targets

- Delays in our past plans be caught up by accelerating and expanding Flublok®(US) Business
- Operating Income of ¥4 billion in FY2019, the last year of this plan, Committed, while additional financial results beyond the upper ranges shown below will be pursued



Consolidated (Millions of yen)	FY2016 (Dec.31,2016) Forecasts	FY2017 (Dec.31,2017) Mid-term Plan	FY2018 (Dec.31,2018) Mid-term Plan	FY2019 (Dec.31,2019) Mid-term Plan
Sales	2,044	6,632～6,832	10,661～10,961	18,157～18,957
Operating income	(2,315)	287～487	1,595～1,895	4,391～5,191
Ordinary income	(2,608)	174～374	1,475～1,775	4,333～5,133
Profits attributable to Owners of Parent	(2,366)	144～344	1,328～1,628	3,683～4,363

＜Disclosure of Mid-term Financial Target figures in a form of 'range'＞

・While UMN is now discussing future sales plan of UMN-0502 with Astellas and of Fulblok® with Protein Sciences Corporation, actual financial results may differ materially from what is forecasted depending on a number of important factors. So we have decided to disclose 'Mid-Term Financial Targets' mainly based upon our own analysis and forecasts in a form of range. UMN will quickly disclose revised figures after receiving more precise information or coming to know outcome / progress, if necessary.

Cautionary Statement Regarding Forward-Looking Information

This material includes forward-looking statements based on assumptions and beliefs in light of the information currently available to management and subject to significant risks and uncertainties.

Actual financial results may differ materially depending on a number of factors including adverse economic conditions, currency exchange rate fluctuations, adverse legislative and regulatory developments, delays in new product launch, pricing and product initiatives of competitors, the inability of the company to market existing and new pipelines effectively, interruptions in production, infringements of the company's intellectual property rights and the adverse outcome of material litigation.

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