



TSE Code : 4585

Supplement Documents for Financial Results for First half of FY 2015 Ending Dec.31, 2015

Tatsuyoshi Hirano
Chairman & CEO

July 31, 2015



Addressing Unmet Medical Needs
UMN Pharma Inc.

- Revised Financial Forecasts for FY2015 *
*Disclosed on June 5, 2015
- Financial Results for First half of FY2015
- R&D Progress during First half of FY2015
- Business Progress during First half of FY2015
- Update : Mid-Term Business Plan FY2015—FY2018 *
*Disclosed on February 13, 2015

- Revised Financial Forecasts for FY2015 *

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Revised Financial Forecasts for FY2015 (disclosed on June 5, 2015)

- Approval of UMN-0502 is expected to take more time than initially assumed
- Decided not to start commercial production of UMN-0502 from 2015-16 season



(Millions of yen) Except for per share data	Initial Forecasts for FY2015 disclosed Feb.13 (Consolidated)	Revised Forecasts for FY2015 disclosed June.5 (Consolidated)	Change (fractions dropped)		Remarks
Net sales	5,224	2,254	(2,969)	(56.8)%	• Due to cancelled commercial production of UMN-0502
Cost of sales	4,241	344	(3,897)	-	• On cancellation of commercial production, fixed costs of Gifu plant, initially planned as COS, charged as R&D expenses, while reducing related variable costs
R&D expenses	1,018	2,950	+1,932	-	• Fixed costs of Gifu plant charged as R&D expenses, initially planned as COS • Minimize maintenance costs of Gifu plant
Other SG&A expenses	843	657	(185)	-	• Some of labor costs of Gifu plant charged to R&D expenses, initially planned as SGA
Operating income	(878)	(1,697)	(818)	-	
Ordinary income	(1,025)	(1,844)	(818)	-	
Net income attributable to minority interest	-	-	-	-	• 50% of UNIGEN's net loss, ¥(1,024) Mil, attributable to the minority interest, is temporarily accounted for as UMN's consolidated net loss, due to A/C rule
Net income	(1,033)	(1,852)	(818)	-	
Net income per share	¥(108.14)	¥(193.54)			

- Revised Financial Forecasts for FY2015 *

*Disclosed on June 5, 2015

- **Financial Results for First half of FY2015**

- R&D Progress during First half of FY2015

- Business Progress during First half of FY2015

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Summary of Consolidated Financial Results for 1st half of FY2015

(From January 1 through June 30, 2015)



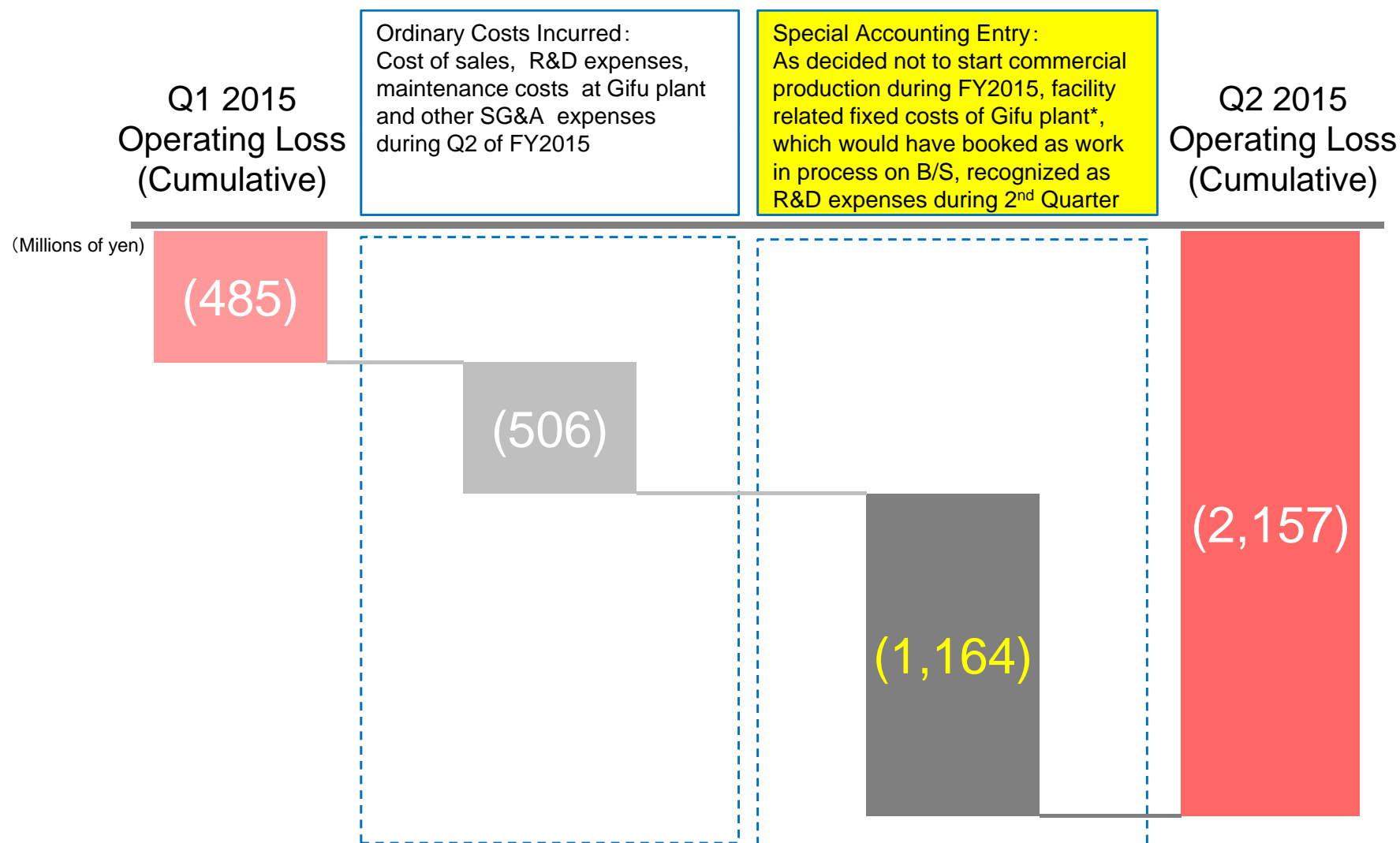
— Comparison to the corresponding term of previous FY —

(Millions of yen)	1 st half FY2014 - Actual - (Consolidated)	1 st half FY2015 - Actual - (Consolidated)	Change		Remarks
Net sales	1,078	45	(1,033)	(95.8)%	Received a milestone payment from Astellas for submission of NDA for approval of UMN-0502 during 1 st half of FY2014
Cost of sales	166	20	(146)	(87.9)%	Royalty payable to Protein Sciences Corporation regarding above mentioned reception of a milestone payment recorded during 1 st half of FY2014
R & D expenses	2,431	1,955	(475)	(19.6)%	Supplies expenses decreased as PQ/PV trial operation executed during 1 st FY2014 ¥(609) Mil, <u>Fixed costs booked as work in process on B/S transferred as R&D expenses +777 Mil (+α)</u> , Outsourcing expenses ¥(114) Mil
Other SG&A expenses	277	227	(50)	(18.3)%	Administrative expenses decreased mainly due to reduction of labor costs, taxes and dues
Operating Income	(1,796)	(2,157)	(360)	- %	Operating loss widened as decreased net sales overweigh reduction of expenses
Ordinary Income	(1,967)	(2,186)	(218)	- %	
Net Income	(1,677)	(2,183)	(505)	- %	Net loss of UNIGEN for 1 st half was ¥ (1,822) Mil —50% of UNIGEN's net loss, ¥(911) Mil attributable to the minority interest, is temporarily accounted for as UMN's consolidated net loss, due to accounting rule

Major Factor of Widened Operating Loss during 2nd Quarter of FY2015



—Fixed costs at Gifu plant of ¥1,164 mil., which would have booked as work in process on B/S for COS if commercial production started during FY2015, 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 FY2015



- Net Sales : Reception of a milestone payment from Astellas during 2nd half of FY2015 is assumed on expected approval of UMN-0502
- Losses : Losses exceed the full year forecasts as we expect above mentioned sales during 2nd half

(Millions of yen) Except for per share data	FY2015 (Full Year) - Forecasts* - (Consolidated)	1 st half FY2015 - Actual - (Consolidated)	Progress on Full Year Forecasts	Remarks
Net sales	2,254	45	2.0%	Reception of a milestone payment from Astellas on approval UMN-0502 is assumed during 2nd half
Operating income	(1,697)	(2,157)	- %	Operating loss exceeds the full year forecasts as we expect above mentioned sales during 2nd half
Ordinary income	(1,844)	(2,186)	- %	Ordinary loss exceeds the full year forecasts as we expect above mentioned sales during 2nd half
Net income	(1,852)	(2,183)	- %	Net loss exceeds the full year forecasts as we expect above mentioned sales during 2nd half
Net income per share	¥(193.54)	¥(228.17)		

* Revised financial forecasts disclosed on June.5, 2015

Consolidated Balance Sheets as of June30, 2015 vs. Dec.31, 2014



- Total assets decreased ¥900 Mil to ¥11,981 Mil
- Raw materials & supplies increased ¥1,144 Mil in preparation for the commercial manufacturing

(Millions of yen*)

Account	FY2014 (as of Dec.31,2014)	1 st half FY2015 (as of June30,2015)	Change*	Remarks
Assets				*fractions dropped
Current assets				
Cash on hands/banks	2,080	1,176	(903)	
Raw materials/supplies	348	1,493	+1,144	Raw materials & supplies increased in preparation for the commercial manufacturing for 2015-16 season ※Will be used for 2016-17 season
Work in process	338	14	(324)	Fixed costs recorded for COS for 2015-16 season transferred to R&D expenses
Others	429	350	(79)	
Total current assets	3,197	3,034	(162)	
Fixed assets				
Tangible fixed assets	9,170	8,460	(709)	
Intangible fixed assets	245	210	(35)	
Investment & others	268	275	+7	
Total fixed assets	9,685	8,947	(737)	
Total Assets	12,882	11,981	(900)	

Consolidated Balance Sheets as of June30, 2015 vs. Dec.31, 2014 (continued)



- Account payable increased ¥396 Mil due to increased purchase of raw materials and supplies
- Total Liability increased ¥1,269 Mil to ¥10,446 Mil due to increased short-term loan

(Millions of yen*)

Account	FY2014 (as of Dec.31,2014)	1 st half FY2015 (as of June30,2015)	Change*	Remarks
Liability				*fractions dropped
Current liability				
Account payable-trade	—	891	+891	Due to purchase of raw materials and supplies for commercial production
Short term loan	600	1,500	+900	Borrowing for working capital
Long-term loan due within one year	336	858	+522	Repayment of long-term syndicated loan begins from 4 th Quarter of FY2015
Account payable-others	607	112	+496	A/P regarding purchase of materials & supplies for PQ/PV during FY2014 (paid)
Others	255	340	+84	
Total current liability	1,798	3,701	1,903	
Fixed liability				
Long term loan	6,329	5,763	(565)	Current portion of the loan transferred
Lease obligations	457	405	(52)	
Other	591	575	(15)	
Total fixed liability	7,377	6,744	(633)	
Total Liability	9,176	10,446	+1,269	

Consolidated Balance Sheets as of June30, 2015 vs. Dec.31, 2014 (continued)



— Total Net assets decreased ¥2,169 Mil to ¥1,535 Mil due to Net loss incurred

— Due to Net loss incurred, ratio of Net assets to Total assets down to 12.8% (substantially 25.0%**)

(Millions of yen*)

Account	FY2014 (as of Dec.31,2014)	1 st half FY2015 (as of June30,2015)	Change*	Remarks
Net Assets				*fractions dropped
Shareholders' equity				
Common stock	8,688	8,695	+6	Due to exercise of stock option
Capital surplus	8,357	8,364	+6	Same as above
Retained earnings	(13,340)	(15,523)	(2,183)	Due to net loss incurred during 1 st half of FY2015
Treasury stock	(0)	(0)	—	
Total Shareholders' equity	3,705	1,535	(2,169)	
Accumulated other comprehensive income				
Unrealized holding gains on securities	—	—	—	
Total accumulated other comprehensive income	—	—	—	
Stock subscription rights	—	—	—	
Minority interests	—	—	—	Cumulative net loss of UNIGEN attributable to the minority interest but temporarily accounted for as UMN's consolidated net loss is ¥(1,461) Mil
Total Net assets	3,705	1,535	(2,169)	**Ratio of net assets to total assets is 25.0% if taking above mentioned loss attributable to minority interests into account
Total Liabilities & Net Assets	12,882	11,981	(900)	

July 31, 2015

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Consolidated Cash Flows for 1st half of FY2015 vs 1st half of FY2014

- Cash flows from operating activities turned negative in preparation for commercial production
- With capital investment peaked out, cash outflows for investment activities shrank



(Consolidated, millions of yen, fractions dropped)	1 st half FY2014	1 st half FY2015	Change	Remarks
Cash flows from operating activities				
Net loss before income taxes & minority interests (-)	(1,720)	(2,186)	(466)	
Depreciation	935	762	(173)	
Income from grants	(2,213)	(76)	+2,137	Grant from METI during 1 st half of FY2014
Advanced depreciation deduction	1,966	—	(1,966)	
Other	1,251	(171)	(1,422)	Purchase of materials and supplies for commercial production
Subtotal	219	(1,672)	(1,891)	
Grants received	2,216	76	(2,140)	
Other	(155)	(104)	+50	
Net cash provided by (used in) operating activities	2,280	(1,700)	(3,980)	
Cash flows from investing activities				
Purchase of tangible fixed assets	(2)	(14)	(12)	
Purchase of intangible fixed assets	(3)	(0)	+2	
Other	0	(7)	(7)	
Net cash provided by (used in) investing activities	(4)	(22)	(17)	

Consolidated Cash Flows for 1st half of FY2015 vs 1st half of FY2014 (continued)

—Funds necessary for commercial production for 2016—17 season will be secured by debt financing, such as bank loans



(Consolidated, millions of yen, fractions dropped)	1 st half FY2014	1 st half FY2015	Change	Remarks
Cash flows from financing activities				
Net increase (decrease) in short-term loan	(14)	900	+914	Increased borrowing for working capital during 1 st half FY2015
Net increase (decrease) in long-term loan	(4,888)	(43)	+4,845	Repayment during 1 st half of FY2014
Proceeds from issuance of common stock	18	13	(5)	
Repayments of lease obligations	(46)	(49)	(3)	
Net cash provided by (used in) financing activities	(4,930)	819	+5,750	
Net increase (decrease) in cash and cash equivalents	(2,655)	(903)	(1,752)	
Cash and cash equivalents at beginning of the period	4,267	2,080	(2,187)	
Cash and cash equivalents at end of the period	1,612	1,176	(435)	Funds necessary for commercial production for 2016—17 season will be secured by debt financing

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Status of R&D pipeline (as of June 30, 2015)



— Stage for each In-house pipeline has not been changed since Feb.2015

Name	Target Disease	Area	Est. Size	Discovery	Pre-Clinical	PI	PII	PIII	NDA	Launch
Flublok®	Seasonal Influenza Vaccine	USA (PSC) Approved	150 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 90 Bil. Yen							

= Completed
 = Ongoing
 = Preparing

Results of Phase III Clinical Trials of UMN-0502 Made Public

— At Symposium of Japanese Society of Chemotherapy on June 5, 2015



Summary of Phase III clinical trials data of UMN-0502,

Immunogenicity

- High HI* antibody titer by subcutaneous inoculation was demonstrated.
- Non-inferiority of the recombinant seasonal flu HA vaccine UMN-0502 in comparison to the ETIV** in terms of immunogenicity was shown at trials for both adult and elderly. In addition, statistical significance was indicated at the post analysis.
- HI antibody titer also increased in case of intramuscular inoculation in the same way.

Safety

- No major safety problem was observed in both case of subcutaneous and intramuscular inoculation.
- Incidence ratio of adverse event was the same as ETIV**.

*HI: Hemagglutinin inhibition

**ETIV: Trivalent inactivated egg-grown influenza vaccine

Presenter : Dr. Hideaki Nagai, Center of respiratory, National hospital organization Tokyo national hospital

Clinical trials presented : 3 clinical trials as follows,

Name of clinical trials	Population	Purpose	Design	Usage and dosage	Number of Subjects
Study of UMN-0502(ASP7374) for Adult	Adult: Healthy volunteers aged from 20 to 64 years	Verification of immunogenicity and safety Not inferiority compared to ETIV*	Randomized controlled, Double-blind, Parallel Group Study	UMN-0502 : subcutaneous inoculation, 45µg/seed ETIV** : subcutaneous inoculation, 15µg/seed Single dose-administration.	900
Study of UMN-0502(ASP7374) for Elderly	Elderly: Healthy volunteers aged 65 and over	Same as above	Same as above	Same as above	1,060
Safety assessment for intramuscular inoculation	Adult: Healthy volunteers aged 61 and over	Verification of immunogenicity and safety	Non randomized, open-label study	UMN-0502 (Trivalent) : 45µg/seed, intramuscular inoculation	55

Topline Data of Clinical Study of Flublok® released by PSC* (June, 2015)

—Flublok® (Quadrivalent) is more effective than the traditional egg-based flu vaccine



- Showing that Flublok® (Quadrivalent) outperformed a traditional egg-based quadrivalent inactivated flu vaccine in preventing the flu during 2014-2015 season, based on the data statistically significant
 - 31% more people were protected by the Flublok® than by the traditional egg-based flu vaccine
- The release strongly supports the results of three PIII clinical trials for UMN-0502 (ASP7374) presented on the previous page (P16)

*Protein Sciences Corporation (PSC) is a vaccine development and protein production company based in Meriden, CT, USA, from which UMN is granted a license for Flublok® (UMN0502) for the territories of Japan, China, Korea, Hong Kong, Taiwan and Singapore.

Outline of Clinical trials comparing Flublok® to a traditional egg-based flu vaccine

Purpose	Verification of the efficacy of the prevention for influenza of Flublok® (Quadrivalent) in comparison to the egg-based quadrivalent inactivated flu vaccine
Design	Number of subjects : Approximately 9,000 Age : 50 and older Design : Randomized controlled, Double-blind, Parallel Group Study
Primary end point	Comparison of Number of subjects with rtPCR-confirmed influenza-like illness

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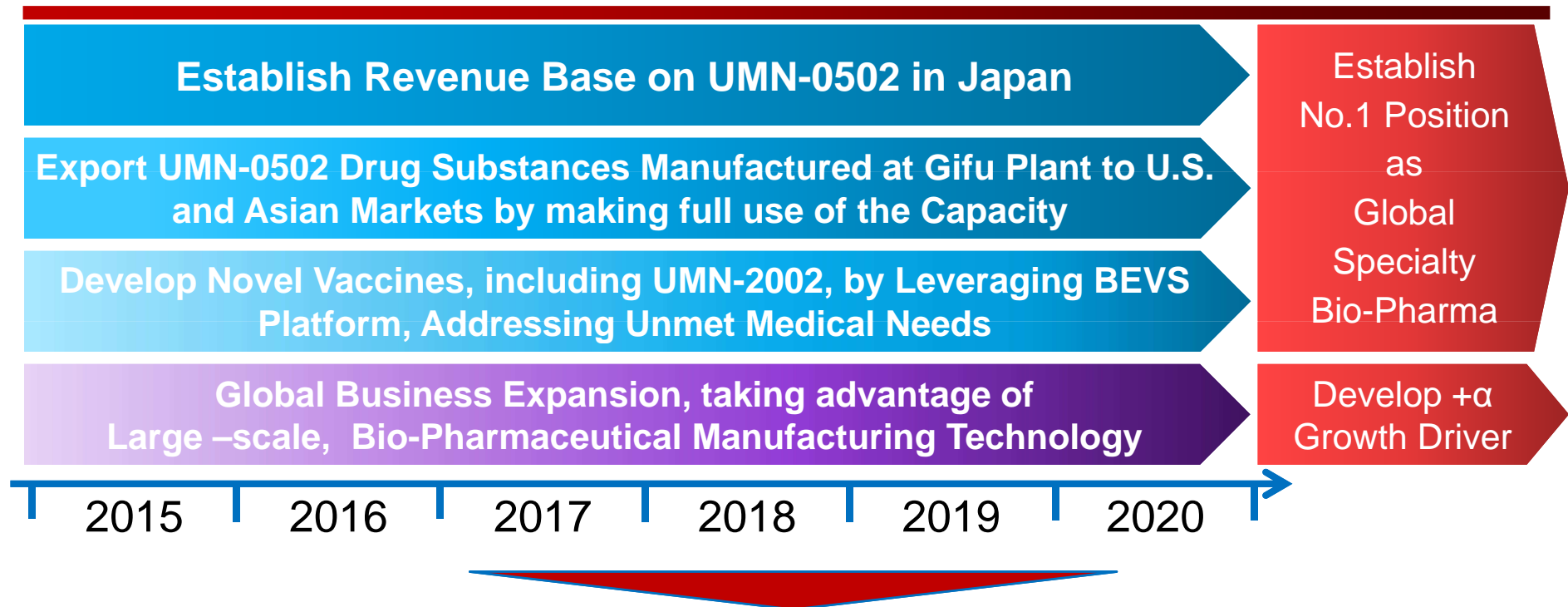
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Growth Strategy : Paths & Goals to be Achieved through FY2020

— Establish Position as Global Bio-Pharma by Leveraging BEVS Platform



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

- Expansion of Manufacturing Capacity at Gifu plant to Meet Expected Future Demands
- Global Deployment of In-House Pipeline
- Seeking for Novel seeds, Technologies and IPs for our Sustainable and Accelerated Growth

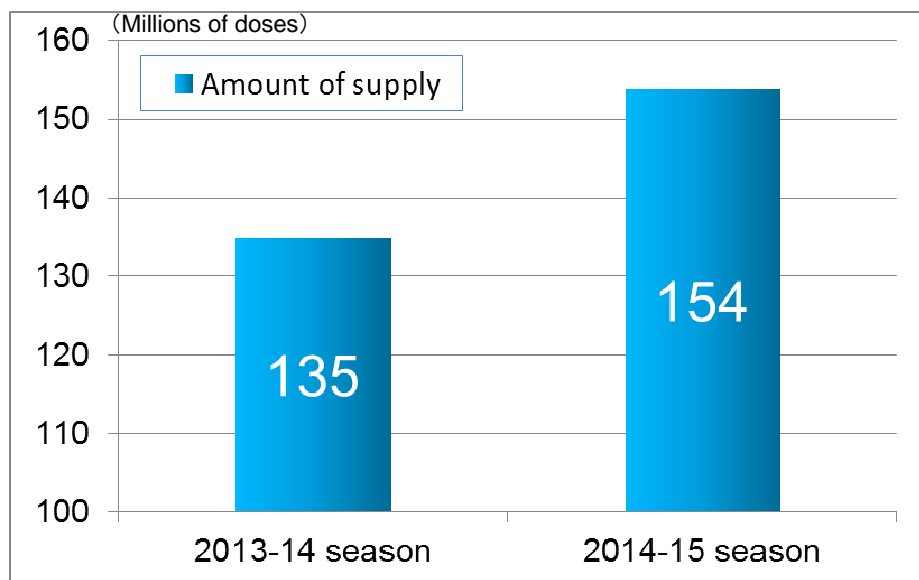
Potential of Flublok® in the US Market being Promising

—The sales could outperform the figures built in our Mid-Term Plan



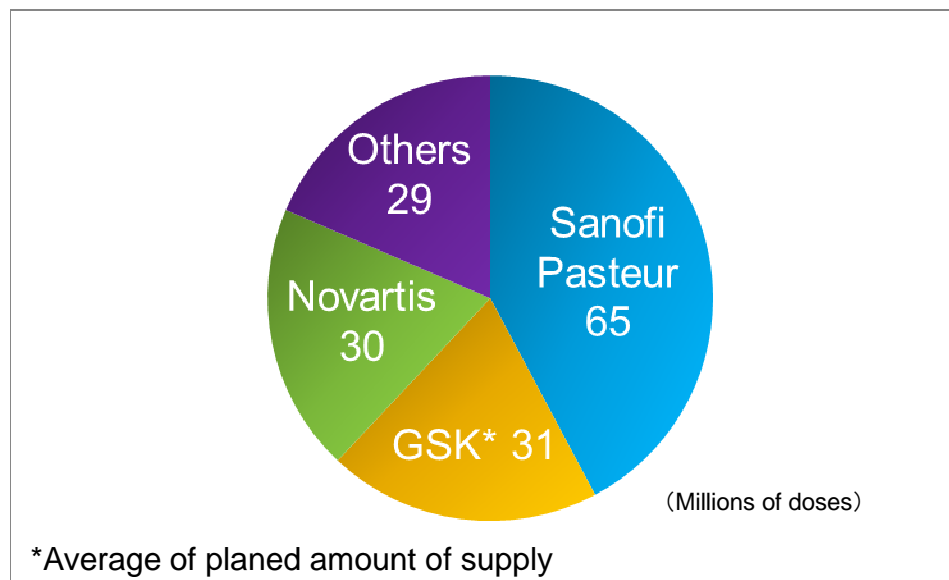
- New data of Flublok® (Quadrivalent), touched in the previous page, which shows superiority of Flublok® over the traditional egg-based vaccines in preventive effectiveness of flu suggests high potential of Flublok®, taking much higher market share in the US market, replacing the current vaccines
- Despite the Flublok®'s potential, current manufacturing capacity of PSC remains a small percent of that of Gifu Plant. Supply of Flublok® from Gifu Plan could trigger the penetration of Flublok® in the US market.

U.S. market data(amount of supply)



- Most of flu vaccine still remains traditional egg-derived
- About 50% of flu vaccine is now 'Quadrivalent'

Top 3 manufacturer in U.S. market



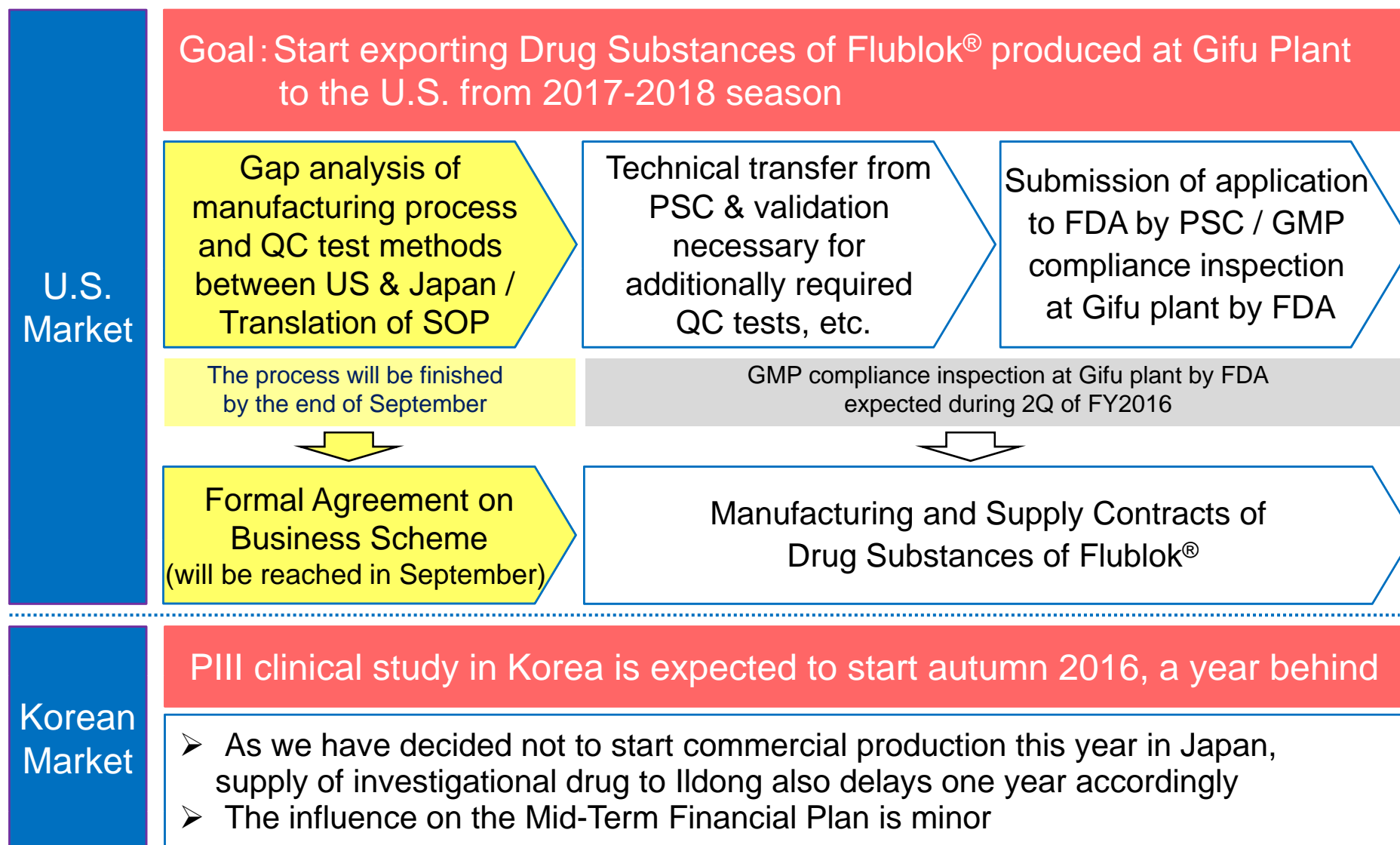
- Manufacturing capacity of PSC in the US remains some 500 thousands of doses in 2014-15 season, much smaller than that of Gifu plant

* * Novartis sold flu vaccine business to CSL (released on October, 2014))

Note : <http://www.cidrap.umn.edu/news-perspective/2014/07/us-flu-vaccine-supply-expected-top-150-million-doses>

Global Development : UMN-0502 for US & Korean Markets

— Formal agreement on exporting Flublok® to US will be reached in Sep.

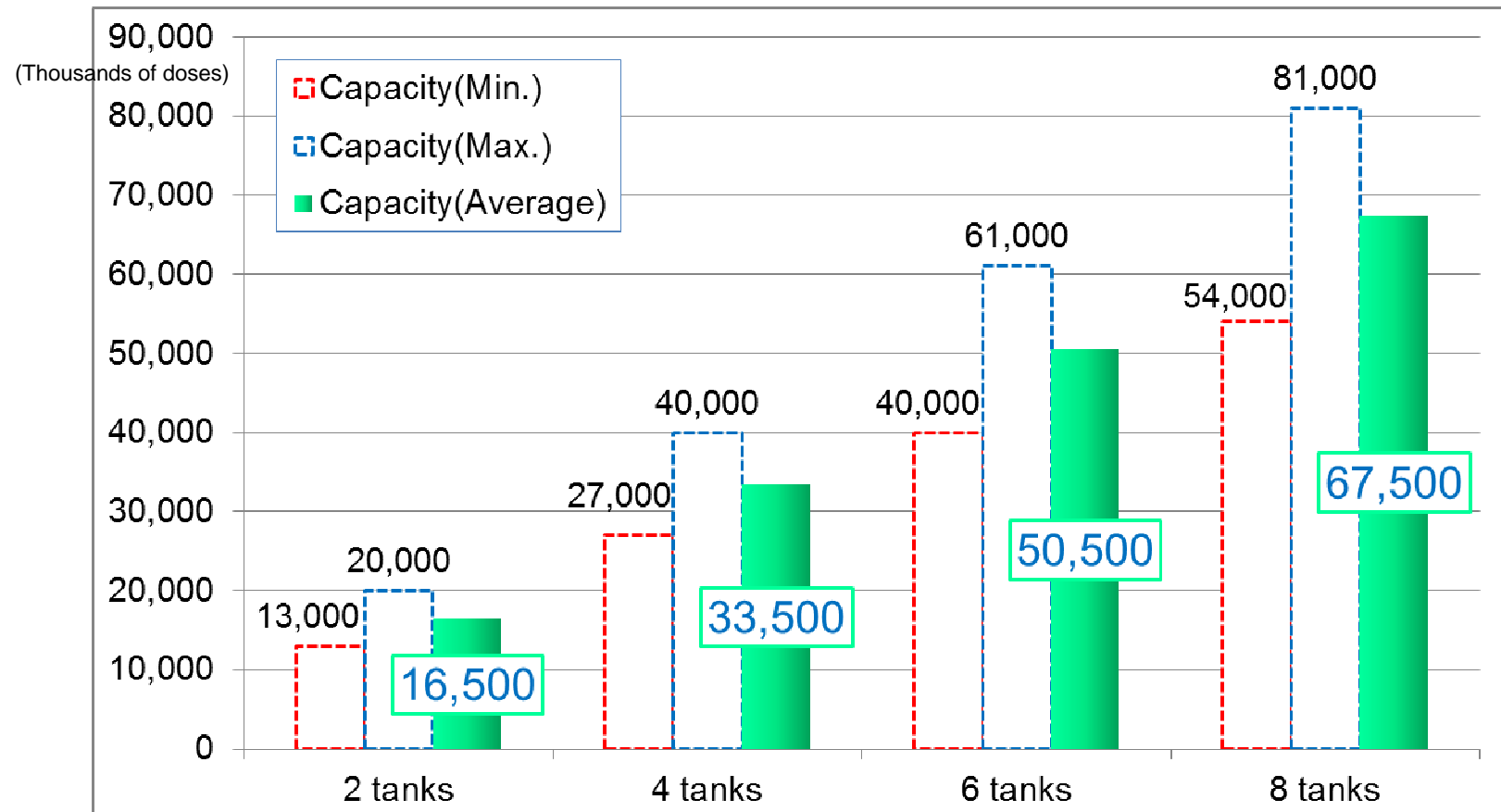


Manufacturing Capacity of Gifu Plant: Further Expansion Planned

— Secure enough capacity to meet expected demands both in Japan & US



- Enhance to capacity of four 18,000L tanks, up from current two tanks, is imperative to fill US demands.
- If more chances are foreseen, additional investment, over four 18,000L tanks, will be considered.



- Actual manufacturing volume depends upon such factors as yield of strains, period of operation, specifications of drug., etc. The expected manufacturing capacity takes such variable factors into account, but the actual figures could be different

Seasonal Influenza Vaccine Market in Japan: Steadily Growing

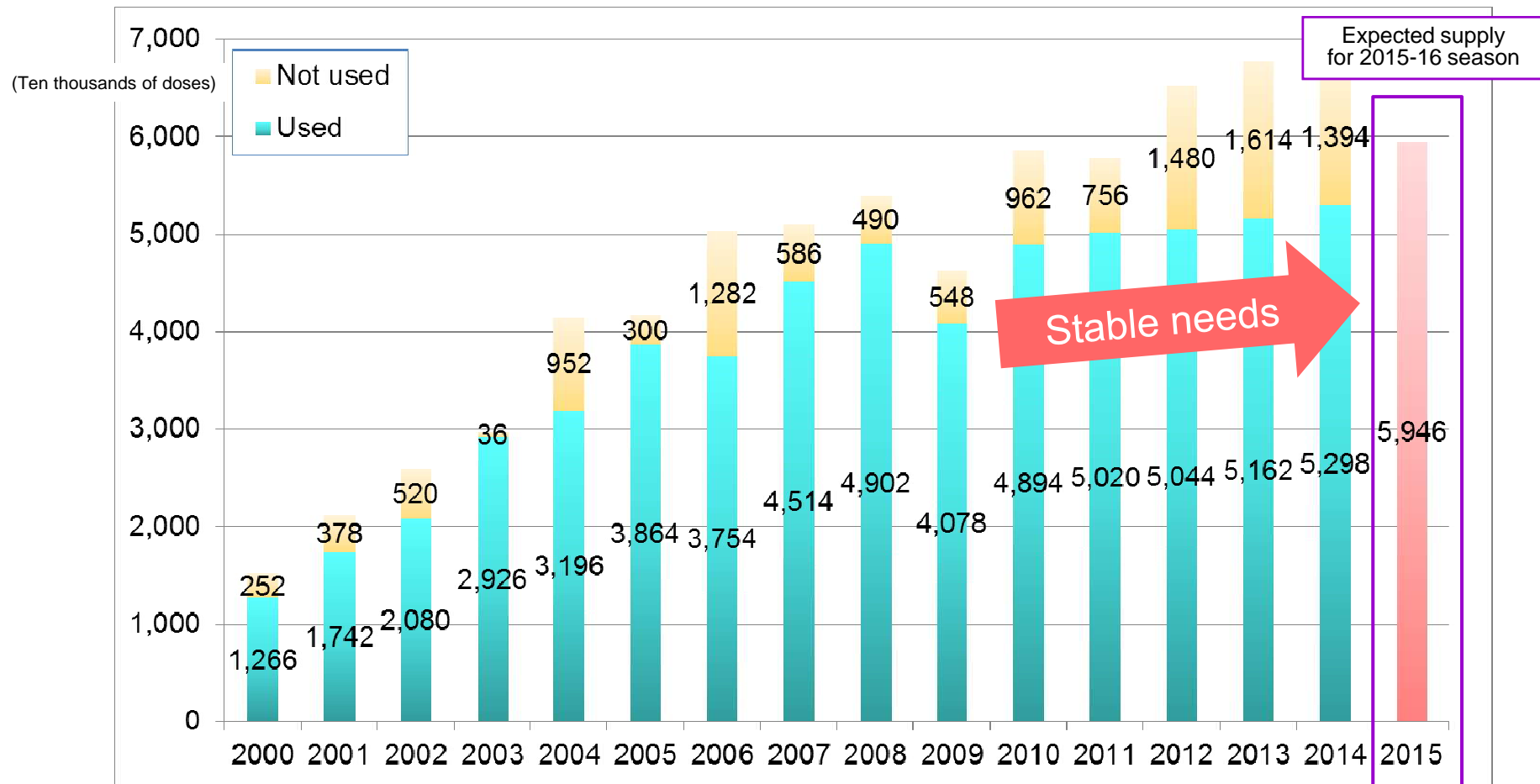
–Due to switch to Quadrivalent, supply capacity is expected to be down



- Market has been growing steadily : CAGR* of CY2010~CY2014 is approximately 2.0%.
- Supply capacity of current egg-based flu vaccine manufacturers is expected to be down as MHLW** has decided to switch to Quadrivalent flu vaccine from 2015-16 season.

* CAGR: Compound annual growth rate

** MHLW: Ministry of Health, Labour and Welfare



Note: <http://www.mhlw.go.jp/file/06-Seisakujouhou-10900000-Kenkoukyoku/0000090485.pdf>

Gifu Plant: Almost Ready for Commercial Manufacturing for Japan

— GMP compliance inspection conducted / Thorough cost reduction under way



Current Situation

- GMP Compliance Inspection by Japan's Authorities
 - GMP Compliance Inspection conducted in January, 2015
 - Answering to the inquiries from the Authorities completed
- Thorough cost reduction
 - Minimizing the costs of prolonged non-operational period (FY2015)
 - Continuously struggle to reduce variable & fixed costs to create value



UMN-2002 (Norovirus Vaccine) : Update

- Already provided Daiichi-Sankyo with VLP antigen produced by refined process
- Basic research conducted by Daiichi Sankyo



Collaborative Research Agreement with Daiichi Sankyo

【Summary of terms】

- UMN will provide Daiichi-Sankyo with recombinant norovirus VLP* antigen exclusively
- Daiichi Sankyo will conduct 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

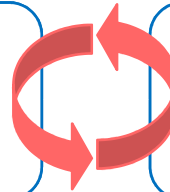
* VLP = Virus Like Particle



Passion for Innovation. Compassion for Patients.™



- Conduct research to determine possibility to develop norovirus vaccine with VLP antigen
- Conduct preliminary tests for development



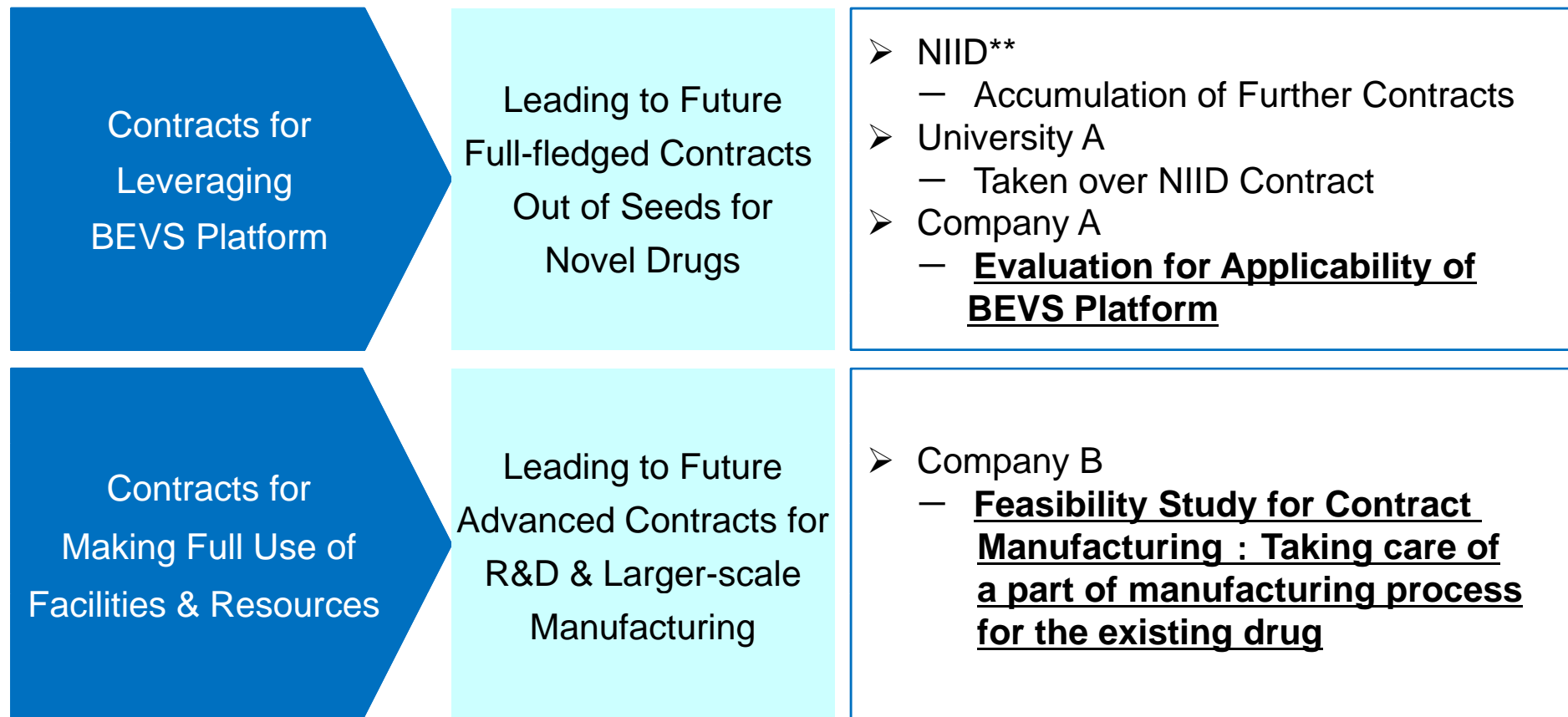
- Provide recombinant norovirus VLP antigen produced by BEVS
- Conduct process development for manufacturing

【Current progress / schedule as of June 30,2015】

- UMN has provided Daiichi-Sankyo with VLP antigen after further process development
- Daiichi-Sankyo conducts basic research

— Obtained additional 2 contracts during 2nd Quarter of FY2015

- The projects are scheduled to be concluded for the clients' acceptance later this year
 - Sales is expected to be posted during 2nd half of FY2015 or later



* BCMO : Biopharmaceutical Contract Manufacturing Organization

**NIID : The National Institute of Infectious Diseases

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Growth Strategy : Update

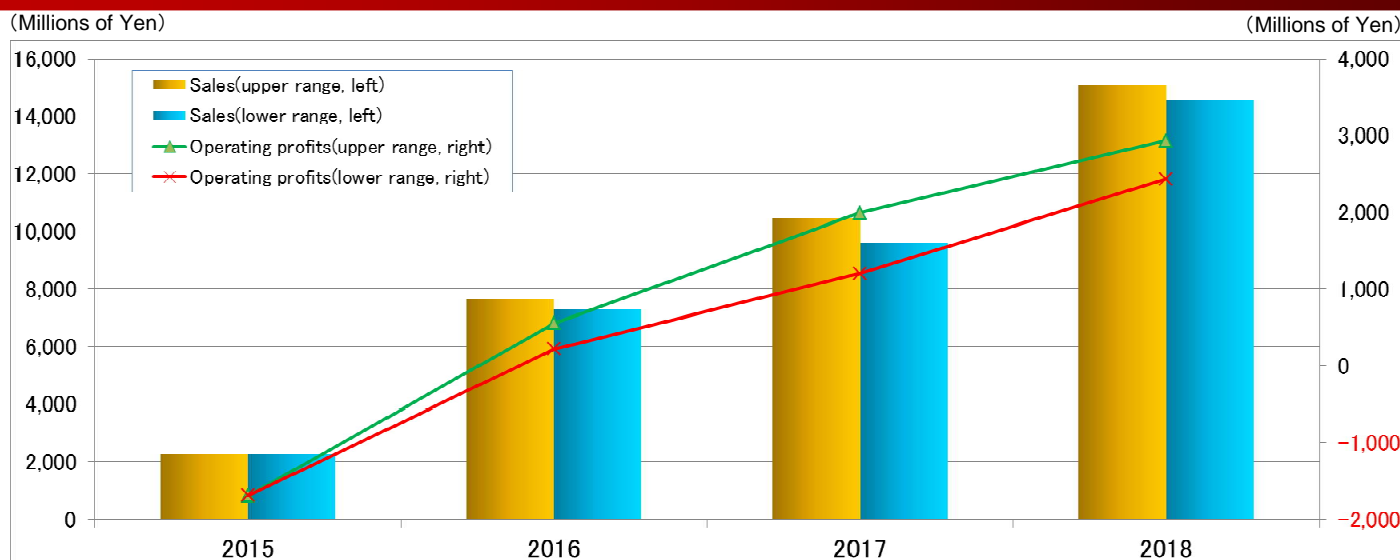
- Sales base establishes on UMN-0502 in Japan & exporting drug substances from Gifu to US
- Additional growth expected on UMN-2002 project, sustainable steady growth through BCMO business



FY2015 - FY2018 Mid-term Business Plan : Financial Targets



- Our Mid-term Growth Strategy from FY2016 onward Unchanged
- Fill past downward gap by beating Mid-term Financial Goals by taking in upside potential of US business



Consolidated (Millions of yen)	FY2014 (Dec.31,2014) Actual	FY2015 (Dec.31,2015) Forecasts	FY2016 (Dec.31,2016) Mid-term Plan	FY2017 (Dec.31,2017) Mid-term Plan	FY2018 (Dec.31,2018) Mid-term Plan
Sales	1,108	2,254	7,287~7,637	9,602~10,452	14,529~15,079
Operating income	(3,942)	(1,697)	220~555	1,200~1,990	2,431~2,936
Ordinary income	(4,249)	(1,844)	155~490	1,159~1,949	2,347~2,852
Net income	(3,961)	(1,852)	136~471	1,140~1,930	2,281~2,355

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

UMN and Astellas are still discussing future sales plan of UMN-0502. As for sales forecast other than UMN-0502, 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 would quickly disclose revised figures after receiving more precise information or coming to know outcome / progress, if necessary.



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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