

ANSORP HAP Project

the 3rd Investigator Meeting

November 28, 2008
Grand Hyatt, Taipei, Taiwan

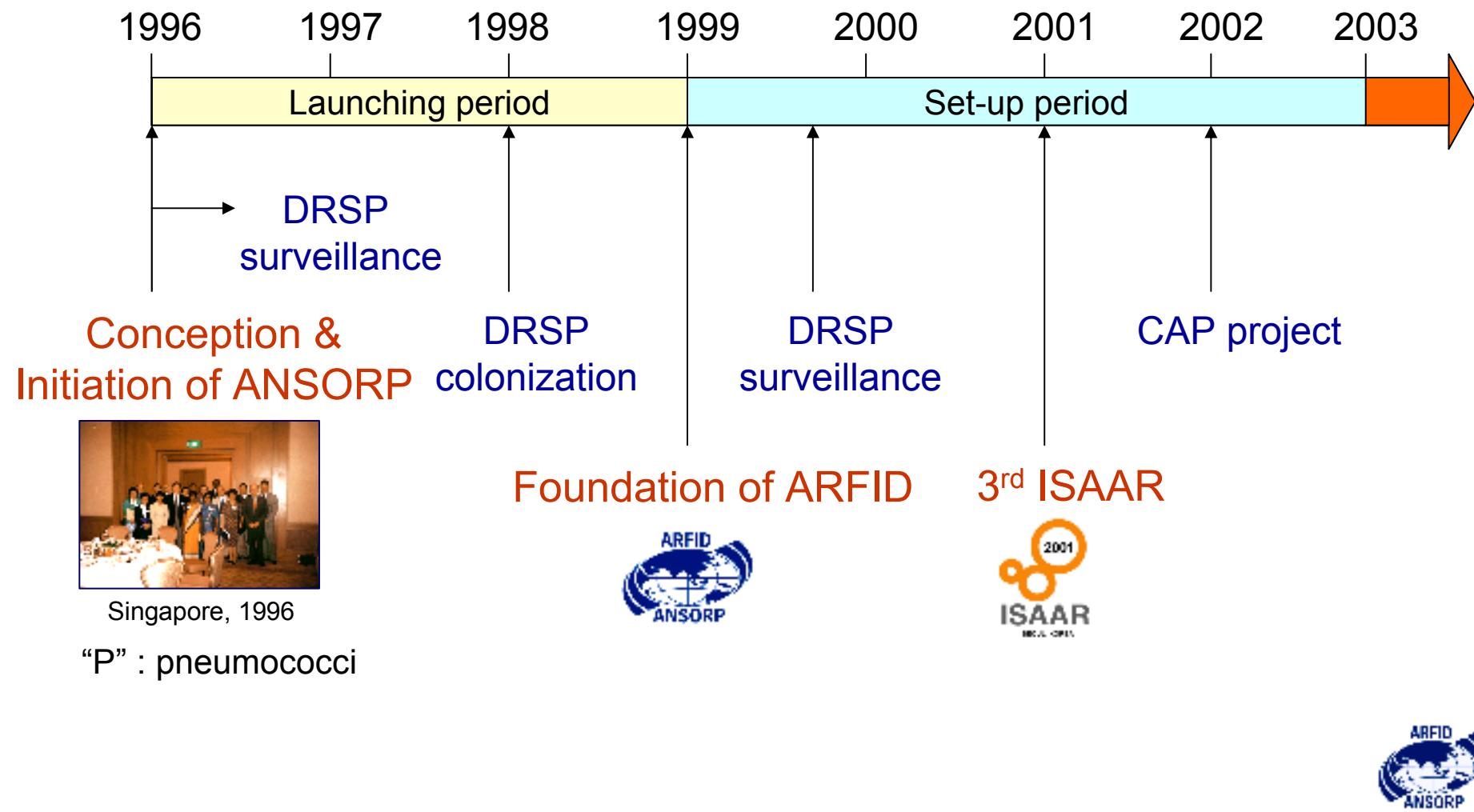
Jae-Hoon Song, MD, PhD

Asian-Pacific Research Foundation for Infectious Diseases (ARFID)
Asian Network for Surveillance of Resistant Pathogens (ANSORP)
Samsung Medical Center, Seoul, Korea

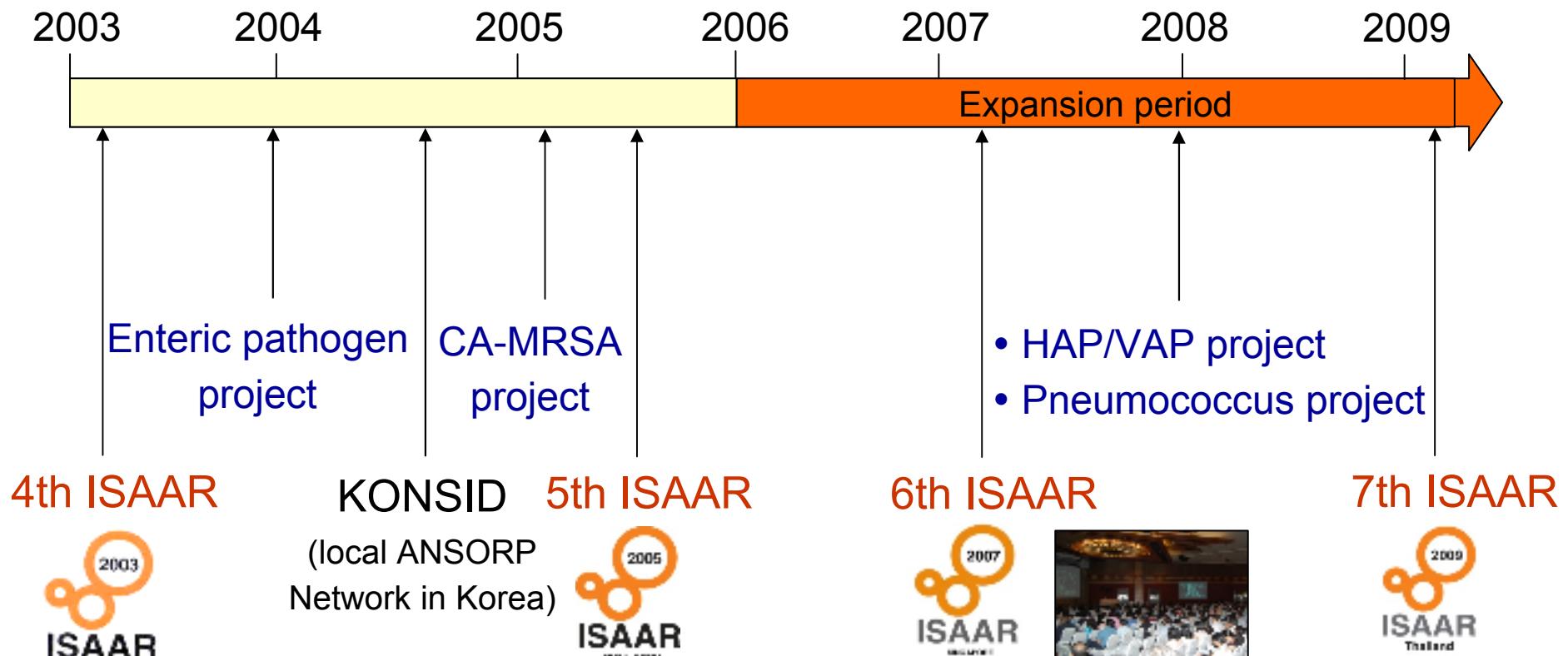
A prospective multinational surveillance of HAP and VAP in adults in Asian countries : *etiology, clinical outcome, and impact of antimicrobial resistance*

- Prospective, multicenter, observational study on HAP/VAP among adults in Asian countries with focus on antimicrobial-resistant organisms
- Microbiologic evaluation and clinical analysis based on the review of the medical records

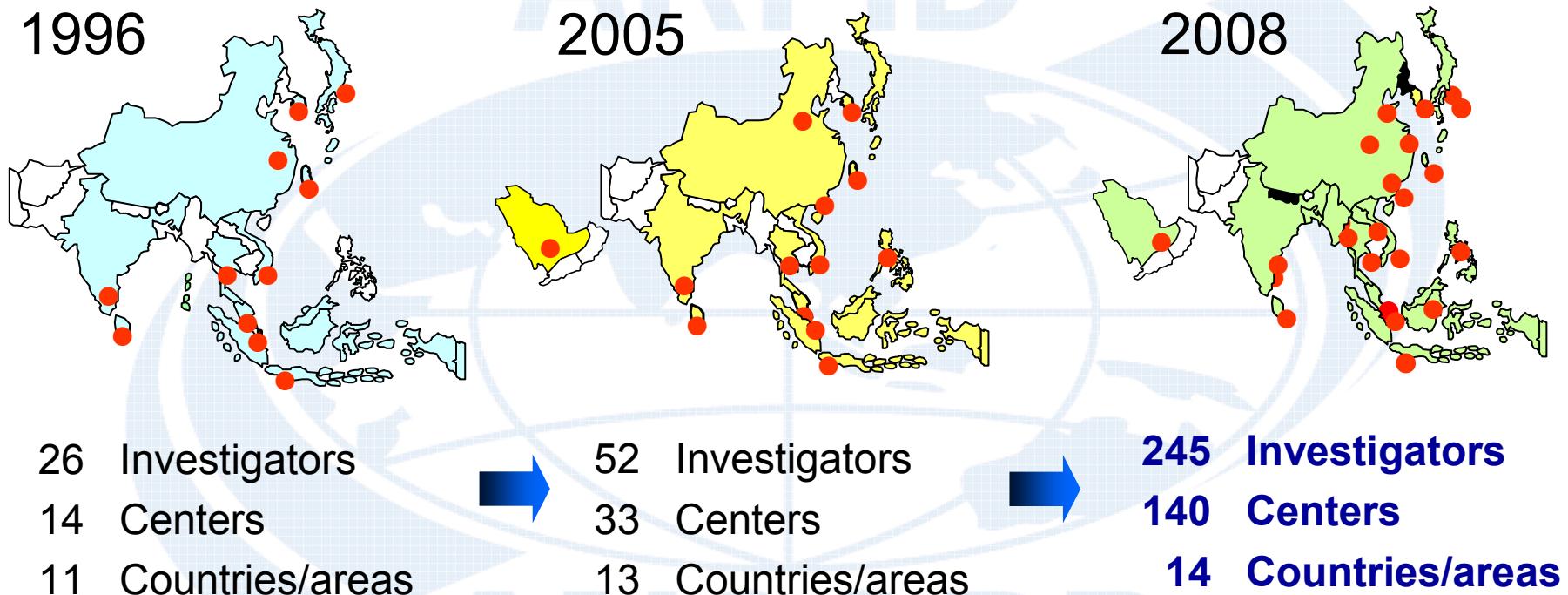
History of ANSORP



History of ANSORP



ANSORP System



Current ANSORP System

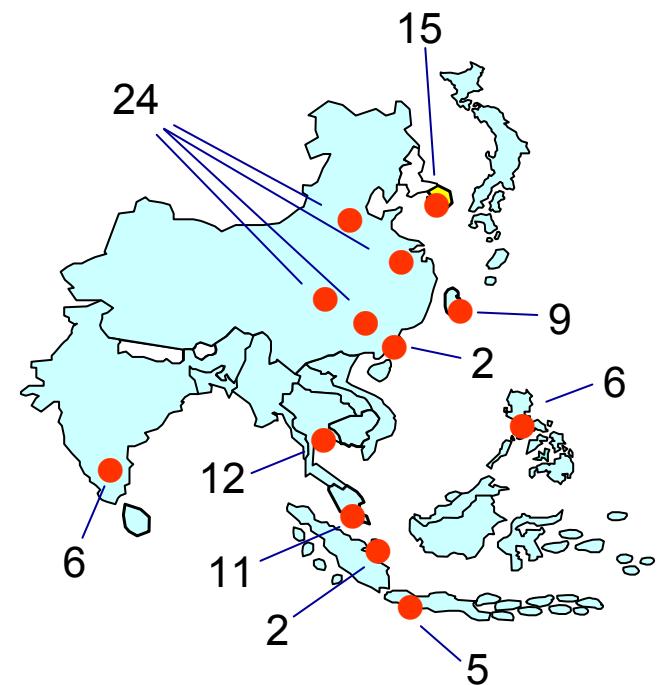
As of November 2008

	Country	No. of cities	No. of centers	No. of investigators
Far East section	Korea	9	18	27
	China	15	37	78
	Hong Kong	1	2	4
	Taiwan	6	8	10
	Japan	1	1	3
Southeast Asia section	Thailand	4	5	7
	Singapore	1	3	9
	Malaysia	12	17	45
	Indonesia	3	5	16
	Vietnam	1	10	10
Southwest Asia / Middle East section	Philippines	5	7	7
	India	9	15	16
	Sri Lanka	6	11	11
	Saudi Arabia	1	1	2
14 countries/areas		74	140	245



Participating Investigators and Centers

Country	Local organizer	Coordinating center	No. of centers	No. of investigators
Korea	Jae-Hoon Song	Samsung Medical Center	15 (3)*	24 (3)*
China	Hui Wang	Peking Union Medical College	16 (3)	28 (6)
	Shaoguang Huang	Ruijin Hospital	8 (0)	18 (0)
Hong Kong	Thomas So	Princess Margaret Hospital	2 (0)	4 (0)
Taiwan	Po-Ren Hsueh	National Taiwan Univ. Hosp.	9 (3)	10 (3)
Thailand	Visanu Thamlikitkul	Siriraj Hospital	12 (7)	14 (7)
Philippines	Celia Carlos	Research Institute for Tropical Medicine	6 (0)	6 (0)
Malaysia	Rohani Yasin	Institute for Medical Research	11 (0)	37 (0)
Singapore	Hsu Li Yang	National Univ. Hospital	2 (0)	7 (0)
Indonesia	Latre Buntaran	Children's and Maternity, Harapan Kita Hospital	5 (0)	16 (0)
India	M.K. Lalitha	Madras Medical Mission	6 (0)	7 (0)
TOTAL		ANSORP (Non-ANSORP)	76 (16)	171 (19)



171 (19)* Investigators
 92 (16)* Centers
 10 Countries

*Non-ANSORP centers and members



Objectives of the Investigator Meeting

- To check current status of the project
- To discuss current problems & solutions
- To make future plans



Schedule of the Investigator Meeting

9:00 AM – 12:00 PM

	Moderator : Jae-Hoon Song (Organizer, ANSORP)																		
08:30 am – 09:00 am	Registration																		
09:00 am – 09:15 am	Introduction Jae-Hoon Song (Organizer, ANSORP)																		
09:15 am – 09:30 am	Overview of the Current Status of the Project Doo-Ryeon Chung (Samsung Medical Center, Korea)																		
09:30 am – 12:00 pm	Presentation by all ANSORP Local Organizers <table><tbody><tr><td>Korea</td><td>So Hyun Kim (ARFID)</td></tr><tr><td>China-Shanghai</td><td>Ni Lei (Ruijin Hospital)</td></tr><tr><td>Hong Kong</td><td>Thomas So (Princess Margaret Hospital)</td></tr><tr><td>Taiwan</td><td>Po-Ren Hsueh (National Taiwan University Hospital)</td></tr><tr><td>Singapore</td><td>Li Yang Hsu (National University of Singapore)</td></tr><tr><td>Thailand</td><td>Visanu Thamlikitkul (Siriraj Hospital)</td></tr><tr><td>India</td><td>M. K. Lalitha (Madras Medical Mission)</td></tr><tr><td>Malaysia</td><td>Rohani Md Yasin (Institute for Medical Research)</td></tr><tr><td>Indonesia</td><td>Latre Buntaran (Children's and Maternity, Harapan Kita Hospital)</td></tr></tbody></table>	Korea	So Hyun Kim (ARFID)	China-Shanghai	Ni Lei (Ruijin Hospital)	Hong Kong	Thomas So (Princess Margaret Hospital)	Taiwan	Po-Ren Hsueh (National Taiwan University Hospital)	Singapore	Li Yang Hsu (National University of Singapore)	Thailand	Visanu Thamlikitkul (Siriraj Hospital)	India	M. K. Lalitha (Madras Medical Mission)	Malaysia	Rohani Md Yasin (Institute for Medical Research)	Indonesia	Latre Buntaran (Children's and Maternity, Harapan Kita Hospital)
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12:00 pm – 01:00 pm	Lunch																		

Schedule of the Investigator Meeting

1:00 PM – 2:00 PM

Moderator : Jae-Hoon Song (Organizer, ANSORP)

01:00 pm – 02:00 pm Discussion

All Participants

02:00 pm Closing Remarks

Jae-Hoon Song (Organizer, ANSORP)



A prospective multinational surveillance of HAP and VAP in adults in Asian countries : *etiology, clinical outcome, and impact of antimicrobial resistance*

Overview of the Current Status

ANSORP

Investigator Meeting : November 28, 2008
Grand Hyatt, Taipei, Taiwan

Aims of the study

- **Primary objectives**

- To investigate the **prevalence of bacterial pathogens of HAP & VAP among adults** in Asian countries
- To get relevant **database for the treatment guideline of HAP & VAP in Asian countries**



Study period

January ~ December, 2008

→ Will be extended to July, 2009



Status of activated centers : Overview

(as of November 22)

Country	Local Organizers	Total No. of centers	No. of active centers
Korea	Jae-Hoon Song	15	15
China, Beijing	Wang Hui	16	5*
Shanghai	Shaoguang Huang	8	6*
Hong Kong	Thomas So	2	2
Taiwan	Po-Ren Hsueh	9	1*
Thailand	Visanu Thamlikitkul	12	12
Singapore	Li Yang Hsu	2	1
Philippines	Celia Calros	6	5
Malaysia	Rohani Md Yasin	11	8
India	M.K. Lalitha	6	5
Indonesia	Latre Buntaran	5	5
TOTAL		92	65 (71%)

*Data as of September 30



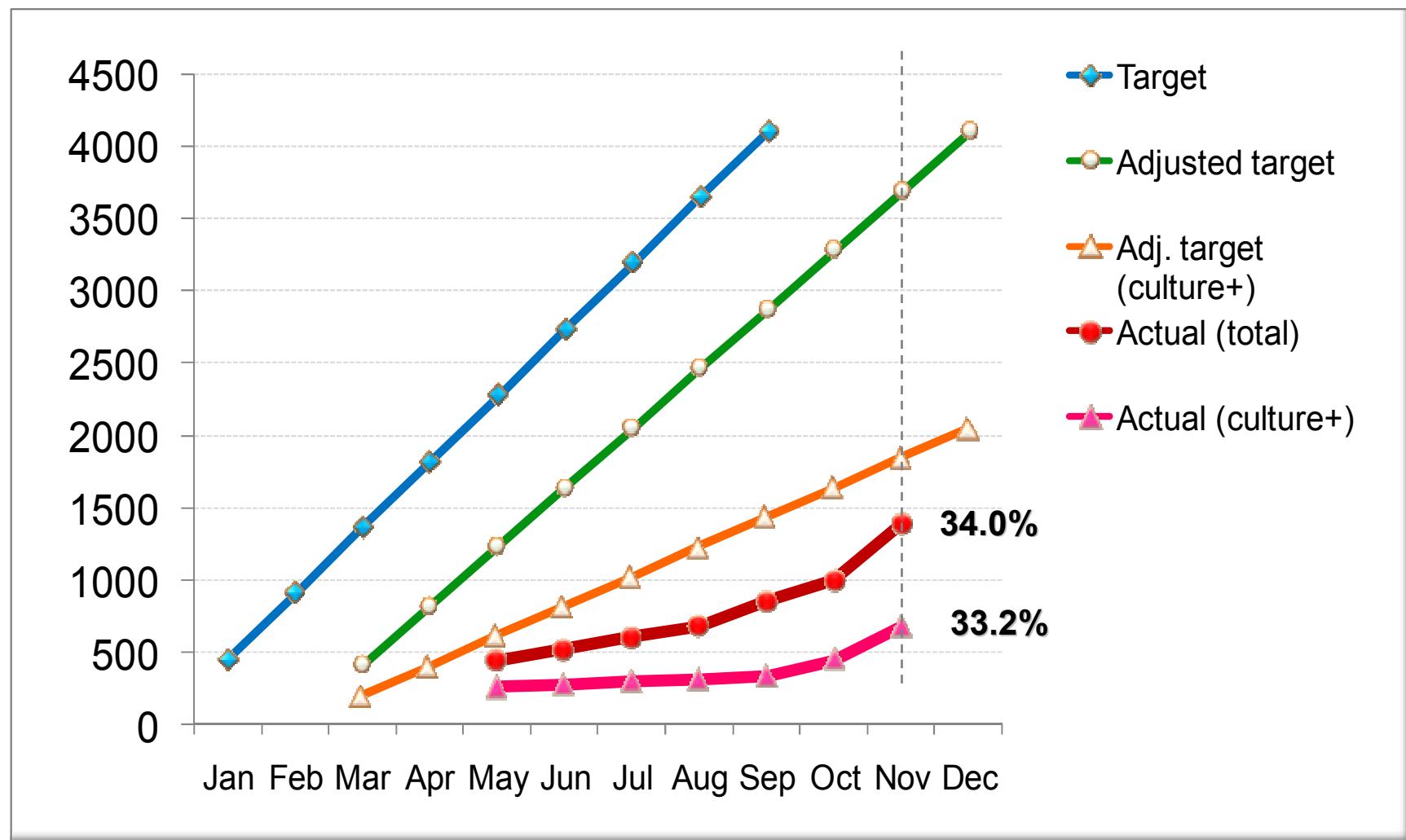
Enrollment status : Overview

(as of November 22)

Country	Target		HAP		VAP		Total	
	Total No. of cases	No. of culture+ cases	Total No. of cases enrolled	No. of culture+ cases	Total No. of cases enrolled	No. of culture+ cases	Total No. of cases enrolled	No. of culture+ cases
Korea	200	100	163	97	43	39	206 (103%)	136 (136%)
China, Beijing	700	350	94	64	39	32	133 (19%)	96 (27%)
	300	150	36	24	13	13	49 (16%)	
Hong Kong	200	100	101	57	13	10	114 (57%)	67 (67%)
Taiwan	800	400	-	-	-	-	16 (2%)	
Thailand	800	400	74	58	184	164	258 (32%)	222 (56%)
Singapore	200	100	0	0	16	16	16 (8%)	
Philippines	250	125	25	6	13	8	38 (15%)	14 (11%)
Malaysia	250	125	10	3	15	11	25 (10%)	14 (11%)
India	200	100	21	21	17	16	38 (14%)	37 (37%)
Indonesia	200	100	15	13	14	14	30 (15%)	27 (27%)
TOTAL	4100	2050	376	245	324	284	923 / 1392 (34.0%)	681 (33.2%)

Enrollment status : Overview

(as of November 22)



Pathogens : Overview

(as of November 22)

Country	HAP					VAP					Total				
	Definite	Probable	Possible	total isolates	total cases	Definite	Probable	Possible	total isolates	total cases	Definite	Probable	Possible	total isolates	total cases
Korea	5	14	78	97	163	2	6	7	15	43	7	20	86	112	206
China, Beijing	4	10	66	80	94	5	3	41	49	39	9	13	107	129	133
China, Shanghai	5	9	16	29	36	0	14	7	21	13	5	23	23	51	49
Hong Kong	3	0	66	69	101	1	0	13	14	13	4	0	79	83	114
Taiwan	-	-	-	-	-	-	-	-	-	-	-	-	-	25	16
Thailand	5	13	70	88	74	7	67	148	222	184	12	80	218	310	258
Singapore	0	0	0	0	0	0	4	8	12	16	0	4	8	12	16
Philippines	0	5	9	14	25	0	3	4	7	13	0	8	13	21	38
Malaysia	0	2	2	4	10	0	3	9	12	15	0	5	11	16	25
India	21	0	0	21	21	16	0	0	16	17	37	0	0	37	38
Indonesia	0	3	17	20	13	2	3	13	18	14	2	6	30	38	27
TOTAL	43	56	324	423	537	33	103	250	386	367	76	159	574	809	904
%	10.2	13.2	76.6			8.5	26.7	64.8			9.4	19.7	71.0		*

* The number of enrolled cases in Taiwan was excluded.

Demographic and Clinical characteristics : Overview

		Patients with HAP or VAP	
		HAP (n=456)	VAP (n=212)
Age	Mean	61.8 y	61.2 y
	Median	71.6 y	70.0 y
Sex	Male	69.1%	63.2%
Surgical patients		25.0%	25.9%
Location			
	ICU	29.1%	72.6%
	Non-ICU ward	70.6%	26.9%
Time of onset			
	Mean days of onset	18.5 days	15.8 days
	Median days of onset	13 days	7 days
within 4 days of hospitalization		14.0%	14.6%

* Data were analyzed using CRFs among the available CRFs of 678 cases from Korea (142), China (182), Thailand (111), Hong Kong (214), Malaysia (18), Singapore (5), and Indonesia (6) as of November 22. Among the 678 cases, CRFs of 10 cases, which were not categorized as HAP or VAP, were excluded.

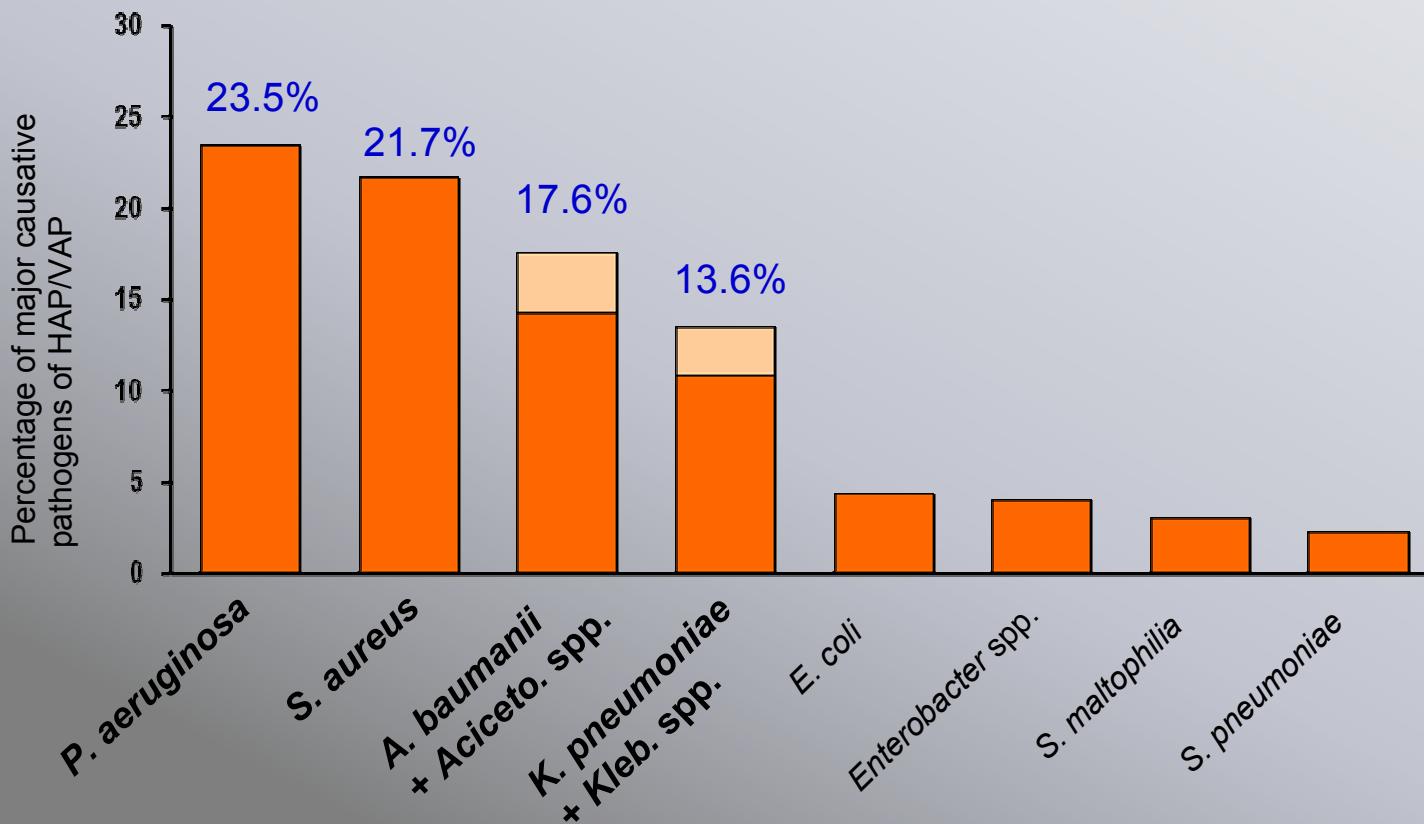


Major causative pathogens of HAP/VAP : Overview

Rank	Korea (n=111)	China (n=178)	Taiwan (n=25)	Thailand (n=105)	Hong Kong (n=191)	Malaysia (n=11)	Singapore (n=9)	India (n=7)	Indonesia (n=10)
1	S. au (39.3 %)	A.baum (23.9 %)	K. pn (28 %)	A.baum (31.1 %)	P. aeru (25.1 %)	K. pn (33.3 %)	P. aeru (33.3 %)	Acinetobacter spp. (42.9%)	K. pn (41.7 %)
2	P. aeru (20.5 %)	S. au (21.1 %)	P. aeru (20 %)	P. aeru (25.5 %)	S. au (17.8 %)	S. au (25 %)	K. pn (22.2 %)	P. aeru (28.6%)	P. aeru (25 %)
3	K. pn (10.7 %)	P. aeru (16.5 %)	A.baum (16 %)	K. pn (17.0 %)	Klebsiella spp. (13.6 %)	A.baum (16.7 %)	S. malto (22.2 %)	K. pn (14.3%)	Acinetobacter spp. (8.3 %)
4	A.baum (8.9 %)	K. pn (9.2 %)	S. malto (12 %)	S. au (15.1 %)	Acinetobacter spp. (8.9 %)	P. aeru (8.3 %)	E. cloacae (11.1 %)	S. malto (14.3%)	S. au (8.3 %)
5	S. pn (4.5 %)	E. coli (6.4 %)	S. au (8 %)	E. coli (3.8 %)	H. inf (8.4 %)				E. aero (8.3%)

* Data were analyzed using available CRFs of 678 cases and 469 isolates from Korea (142 CRFs; 111 isolates), China (182 CRFs), Taiwan (25 isolates), Thailand (111 CRFs; 105 isolates), Hong Kong (214 CRFs; 191 isolates), Malaysia (18 CRFs; 11 isolates), Singapore (5 CRFs; 9 isolates), India (7 isolates), and Indonesia (6 CRFs; 10 isolates) submitted to the central lab as of November 22.

Major causative pathogens of HAP/VAP : Overview



Incidence of HAP/VAP by major pathogens: Overview

Pathogen	% of isolates	
	HAP (n=269)	VAP (n=169)
Gram-positive cocci	30.6	19.0
<i>S. aureus</i>	22.1	17.7
<i>S. pneumoniae</i>	4.7	0.4
Gram-negative bacilli	63.1	73.5
<i>P. aeruginosa</i>	17.4	28.8
<i>A. baumanii</i>	13.9	19.5
<i>K. pneumoniae</i>	11.7	13.3
<i>E. coli</i>	6.6	3.1
<i>S. maltophilia</i>	0.9	4.0

* Data were analyzed using available CRFs of 438 culture-positive cases from Korea, China, Thailand, Hong Kong, Malaysia, Singapore, and Indonesia as of November 22.



Etiology of HAP/VAP by time of onset : Overview

Pathogen	% of isolates in HAP		% of isolates in VAP	
	Early-onset (n=49)	Late-onset (n=217)	Early-onset (n=43)	Late-onset (n=122)
Gram positive cocci	22.2	33.6	27.6	17.6
<i>S. aureus</i>	20.4	23.1	24.1	15.9
<i>S. pneumoniae</i>	1.9	6.0	1.7	0
Gram negative bacilli	74.1	61.9	69.0	74.7
<i>P. aeruginosa</i>	18.5	17.2	22.4	31.2
<i>A. baumannii</i>	20.4	12.7	17.2	19.4
<i>K. pneumoniae</i>	13.0	10.8	15.5	12.9
<i>E. coli</i>	7.4	7.1	1.7	3.5
<i>S. maltophilia</i>	0	1.1	3.4	5.3
<i>H. influenzae</i>	5.6	5.6	0	0

* Data were analyzed using available CRFs of 438 culture-positive cases from Korea, China, Thailand, Hong Kong, Malaysia, Singapore, and Indonesia as of November 22.



Etiology of HAP/VAP by hospital location : Overview

Pathogen	% of isolates in HAP		% of isolates in VAP	
	ICU (n=96)	Non-ICU (n=173)	ICU (n=124)	Non-ICU (n=43)
Gram positive cocci	29.1	31.3	20.2	16.9
<i>S. aureus</i>	25.6	21.2	17.3	16.9
<i>S. pneumoniae</i>	1.7	7.2	0.6	0
Gram negative bacilli	65.8	64.4	70.0	78.0
<i>P. aeruginosa</i>	15.4	17.8	29.5	27.1
<i>A. baumannii</i>	20.5	11.1	16.8	25.4
<i>K. pneumoniae</i>	9.4	13.0	13.3	13.6
<i>E. coli</i>	7.7	6.7	1.7	6.8
<i>S. maltophilia</i>	0.9	1.4	5.2	3.4
<i>H. influenzae</i>	2.6	7.2	0	0

* Data were analyzed using available CRFs of 438 culture-positive cases from Korea, China, Thailand, Hong Kong, Malaysia, Singapore, and Indonesia as of November 22.



Antimicrobial resistance in *S. aureus*

Country	Resistant rate of isolates to antimicrobials (%)								
	PEN	OXA	CIP	CD	ERY	VAN	TEI	TET	SXT (1:19)
Total (n=99)	96.9	76.8	73.7	45.5	72.7	0	0	59.6	10.1
Korea (n=44)	97.7	81.8	75	70.5	77.3	0	0	61.4	0
Thailand (n=16)	100	56.3	56.3	37.5	56.3	0	0	56.3	37.5
Hong Kong (n=34)	97.1	82.4	85.3	20.6	79.4	0	0	61.8	2.9
Taiwan (n=1)	100	100	100	100	100	0	0	100	100
Malaysia (n=3)	66.7	66.7	33.3	0	33.3	0	0	33.3	33.3
Indonesia (n=1)	100	0	0	0	0	0	0	0	0

**In vitro* antimicrobial susceptibility tests were performed using 469 isolates submitted to the central lab as of October 31.



Antimicrobial resistance in *P. aeruginosa*

Country	Resistant rate of isolates to antimicrobials (%)											MDR (%)
	GEN	CAZ	CTX	CPM	AZT	IMI	MRP	CIP	P/T	CL	PB	
Total (n=112)	8.9	27.7	57.1	22.3	32.1	19.6	11.6	15.2	33.9	0.9	0	31.3
Korea (n=23)	8.7	30.4	60.9	17.4	30.4	26.1	26.1	21.7	47.8	0	0	39.1
Thailand (n=28)	10.7	28.6	64.3	39.3	3.6	28.6	14.3	21.4	14.3	0	0	21.4
Hong Kong (n=48)	6.3	22.9	52.1	14.6	35.4	10.4	4.2	8.3	29.2	2.1	0	29.2
Taiwan (n=5)	0	80	100	40	60	40	0	0	100	0	0	80
Singapore (n=3)	0	0	0	0	0	0	0	0	0	0	0	0
India (n=2)	50	50	50	50	0	50	50	50	50	0	0	50
Indonesia (n=2)	50	0	50	0	0	0	0	50	50	0	0	50

*In vitro antimicrobial susceptibility tests were performed using 469 isolates submitted to the central lab as of October 31.



Antimicrobial resistance in *Acinetobacter* spp.

Country	Resistant rate of isolates to antimicrobials (%)											MDR / PDR (%)
	GEN	CAZ	CTX	CPM	IMI	MRP	CIP	P/T	SXT	CL	PB	
Total (n=72)	62.5	70.8	70.8	69.4	58.3	59.7	77.8	70.8	63.9	0	0	70.8 / 38.9
Korea (n=11)	36.4	45.5	45.5	45.5	18.2	18.2	54.5	45.5	45.5	0	0	45.5 / 18.2
Thailand (n=34)	85.3	94.1	94.1	91.2	91.2	92.1	94.1	88.2	79.4	0	0	94.1 / 61.8
Hong Kong (n=17)	35.3	47.1	47.1	41.2	23.5	29.4	70.6	52.9	47.1	0	0	47.1 / 5.9
Taiwan (n=4)	50	50	50	50	25	25	50	50	50	0	0	50 / 25
India (n=3)	100	100	100	100	100	100	100	100	100	0	0	100 / 100
Malaysia (n=2)	0	0	0	50	50	50	0	50	0	0	0	0
Indonesia (n=1)	100	100	100	100	0	0	100	100	100	0	0	100 / 0

*In vitro antimicrobial susceptibility tests were performed using 469 isolates submitted to the central lab as of October 31.



Antimicrobial resistance in *Klebsiella* spp.

Country	Resistant rate of isolates to antimicrobials (%)											MDR (%)
	AMP	GEN	CAZ	CTX	CPM	AZT	IMI	MRP	CIP	P/T	SXT	
Total (n=74)	100	27	39.2	33.8	24.3	37.8	2.7	1.4	24.3	18.9	39.2	41.9
Korea (n=12)	100	41.7	75.0	41.7	33.3	66.7	0	0	41.7	41.7	16.7	75
Thailand (n=18)	100	50.0	72.1	61.1	50.0	77.8	11.1	50.0	5.6	27.8	77.8	77.8
Hong Kong (n=26)	100	7.7	3.8	7.7	3.8	3.8	0	0	3.8	0.4	19.2	7.7
Taiwan (n=7)	100	14.3	28.6	28.6	0	28.6	0	0	14.3	28.6	42.9	28.6
India (n=1)	100	100	100	100	100	100	0	0	100	100	100	100
Malaysia (n=4)	100	0	0	0	0	0	0	0	0	0	0	0
Indonesia (n=4)	100	25	50	50	50	50	0	0	25	0	50	50
Singapore (n=2)	100	50	50	100	50	50	0	0	0	0	100	50

*In vitro antimicrobial susceptibility tests were performed using 469 isolates submitted to the central lab as of October 31.



Antimicrobial Susceptibility of isolates to Ceftobiprole

No. of isolates	Concentration of ceftobiprole ($\mu\text{g/ml}$)											
	≤ 0.03	0.06	0.12	0.25	0.5	1	2	4	8	16	32	>32
S. aureus	-	-	-	18	16	10	55*	-	-	-	-	-
(n=99) %	-	-	-	18.2	16.2	10.1	55.6	-	-	-	-	-
Pseudomonas spp.	1	-	-	2	1	26	28	19	14	11	1	9**
(n=112) %	0.9	-	-	1.8	0.9	23.2	25.0	17.0	12.5	9.8	0.9	8.0
Acinetobacter spp.	-	-	3	8	6	2	-	-	-	3	4	46**
(n=72) %	-	-	4.2	11.1	8.3	2.8	-	-	-	4.2	5.6	63.9
Klebsiella spp.	39	4	1	1	1	1	-	-	-	1	-	26**
(n=74) %	52.7	5.4	1.4	1.4	1.4	1.4	-	-	-	1.4	-	35.1

* MIC₉₀

** Among the isolates with MIC > 32 $\mu\text{g/ml}$, 8 *P. aeruginosa*, 46 *Acinetobacter* spp. (26 isolates: PDR), and 26 *Klebsiella* spp. were MDR.

Common regimen – initial empirical therapy : Overview

Antibiotic regimen	% of cases in HAP		% of cases in VAP	
	Early-onset (n=66)	Late-onset (n=381)	Early-onset (n=58)	Late-onset (n=149)
Penicillins only	23.4	36.2	30.1	15.5
+ Quinolones +/- oth.	7.8	3.9	1.8	-
+ Glycopeptides +/- oth.	3.1	2.2	-	2.1
+ Aminoglycosides +/- oth.	-	1.7	1.8	2.8
Cephalosporins only	26.6	16.3	19.6	16.9
+ Quinolones +/- oth.	7.8	3.3	5.4	4.9
+ Carbapenems +/- oth.	1.6	0.6	3.6	1.4
+ Glycopeptides +/- oth.	1.6	1.9	3.6	2.1
+ Clindamycin +/- oth.	4.7	3.9	-	7.0
Carbapenems only	3.1	4.7	3.6	9.2
+ Glycopeptides +/- oth.	3.1	1.1	1.8	6.3
Quinolones only	4.7	10.8	1.8	3.5
Glycopeptides only	-	2.2	3.6	2.8
Colistin only	-	0.6	3.6	6.3

*Data were analyzed using available CRFs of 678 cases from Korea (142), China (182), Thailand (111), Hong Kong (214), Malaysia (18), Singapore (5), and Indonesia (6) as of November 22.

Antimicrobial treatment outcome : Overview

	% of cases in HAP		% of cases in VAP	
	Early-onset	Late-onset	Early-onset	Late-onset
Initial response (72 h after antimicrobial therapy)				
Improvement	60.6	60.6	55.4	49.0
Failure	25.8	28.6	31.0	35.6
Death - due to pneumonia	7.6	7.3	10.3	6.7
- due to other reason	1.5	1.1	3.4	-
End-of-treatment response (48 h after the end of antimicrobial therapy)				
Cure	60.6	64.3	51.7	52.3
Failure	3.0	4.2	5.2	6.7
Death - due to pneumonia	6.3	10.0	8.6	16.8
- due to other reason	3.0	2.1	12.1	7.4
30 day mortality				
Cure	37.9	48.8	46.6	44.3
Death - due to pneumonia	10.6	21.0	8.6	17.4
- due to other reason	3.0	5.5	12.1	10.1

*Data were analyzed using available CRFs of 678 cases from Korea (142), China (182), Thailand (111), Hong Kong (214), Malaysia (18), Singapore (5), and Indonesia (6) as of November 22.



Microbiological data before antibiotic therapy for HAP/VAP

Assessment of pathogen

- Definite pathogen
- Probable pathogen
- Possible pathogen

Assessment of pathogen

- **Definite pathogen**
 - Bacterial isolates from blood culture matching the results from culture of the lower respiratory tract specimens
 - Bacterial isolates from pleural fluid culture (*excluding drainage fluid from chest tube indwelling for >24 hours prior to collection*)



Assessment of pathogen

- **Probable pathogen**

- Bacterial isolates from the culture of blind bronchial/tracheal aspirates with $\geq 10^5$ CFU/ml in a quantitative culture or
- Bacterial isolates from the culture of bronchoscopic BAL with $\geq 10^4$ CFU/ml in a quantitative culture or
- Bacterial isolates from the culture of PSB specimens with $\geq 10^3$ CFU/ml in a quantitative culture or
- Urinary antigen test positive for *S. pneumoniae* (if checked) or
- Urinary antigen test positive for *Legionella pneumophila* (if checked)
- Bacterial isolates from blood cultures that do not match with culture results of respiratory tract specimens, but if no other primary sources of bacteremia were identified



Assessment of pathogen

- **Possible pathogen**
 - Bacterial isolates from the culture of lower respiratory tract specimens meeting the criteria for adequate sputum specimen
(WBC $\geq 25/\text{LPF}$ and epithelial cell $< 10/\text{LPF}$)

Common regimen by major pathogens : Overview

Pathogen	Antibiotic regimen	% of cases
<i>S. aureus</i> (n=115)	Penicillins only	20.9
	+ Quinolones / + Glycopeptides	1.7 / 4.3
	Cephalosporins only	18.3
	+ Quinolones / + Carbapenems	6.1 / 2.6
	/ + Glycopeptides	/ 2.6
	Quinolones only	6.1
	Carbapenems only	7.0
<i>P. aeruginosa</i> (n=125)	Glycopeptides only	7.8
	Penicillins only	23.8
	+ Quinolones	1.5
	Cephalosporins only	17.7
	+ Quinolones +/- other agents	6.2
	Quinolones only	6.2
	Carbapenems only / + Glycopeptides +/- oth.	4.6 / 4.6

*Data were analyzed using available CRFs of 678 cases from Korea (142), China (182), Thailand (111), Hong Kong (214), Malaysia (18), Singapore (5), and Indonesia (6) as of November 22.



Common regimen by major pathogens : Overview

Pathogen	Antibiotic regimen	% of cases
<i>A. baumanii</i> (n=93)	Penicillins only	22.6
	+ Quinolones & Glycopeptides	1.1
	Cephalosporins only	19.4
	+ Quinolones / + Carbapenems	4.3 / 3.2
	/ + Glycopeptides +/- other agents	/ 3.2
	Quinolones only	3.2
	Carbapenems only	7.5
<i>K. pneumoniae</i> (n=71)	Colistins only / + Tigecycline	7.5 / 1.1
	Penicillins only	35.5
	+ Quinolones +/- other agents	3.9
	Cephalosporins only	13.2
	+ Quinolones / + Clindamycin	5.3 / 5.3
	Carbapenems only / + Glycopeptides + Quinolones & Glycopeptides	7.9 / 2.6 1.3

*Data were analyzed using available CRFs of 678 cases from Korea (142), China (182), Thailand (111), Hong Kong (214), Malaysia (18), Singapore (5), and Indonesia (6) as of November 22.



Antimicrobial treatment outcome by major pathogens

	% of cases in HAP & VAP			
	<i>S. aureus</i>	<i>P. aeruginosa</i>	<i>A. baumanii</i>	<i>K. pneumoniae</i>
Initial response (72 h after antimicrobial therapy)				
Improvement	48.9	48.5	48.4	49.3
Failure	32.3	40.8	39.8	28.0
Death - due to pneumonia	3.8	4.6	8.6	8.0
- due to other reason	0.8	-	-	-
End-of-treatment response (48 h after the end of antimicrobial therapy)				
Cure	53.4	53.1	49.5	50.7
Failure	2.3	7.7	8.6	-
Death - due to pneumonia	9.0	13.1	9.7	18.7
- due to other reason	4.5	3.1	6.5	1.3
30 day mortality				
Cure	42.1	44.6	33.3	42.7
Death - due to pneumonia	12.8	15.4	14.0	21.3
- due to other reason	4.5	4.6	8.6	2.7

*Data were analyzed using available CRFs of 678 cases from Korea (142), China (182), Thailand (111), Hong Kong (214), Malaysia (18), Singapore (5), and Indonesia (6) as of November 22.



Antimicrobial resistance in MRSA & MSSA

	Total		Korea		Thailand		Hong Kong		Taiwan		Malaysia		Indonesia	
	MRSA (n=76 / 77%)	MSSA (n=23 / 23%)	MRSA (n=36)	MSSA (n=8)	MRSA (n=9)	MSSA (n=7)	MRSA (n=28)	MSSA (n=6)	MRSA (n=1)	MSSA (n=0)	MRSA (n=2)	MSSA (n=0)	MRSA (n=0)	MSSA (n=1)
Resistant rate of isolates to antimicrobials (%)	PEN	100	78.3	100	30.4	100	26.1	100	21.7	100	0		4.3	
	CIP	92.1	13	42.1	4.3	11.8	0	35.5	8.7	1.3	1.3	0	0	
	CD	57.9	4.3	40.8	0	7.9	0	7.9	4.3	1.3	0	0	0	
	ERY	88.2	17.4	42.1	8.7	11.8	0	32.9	8.7	1.3	0	0	0	
	VAN	0	0	0	0	0	0	0	0	0	0	0	0	
	TEI	0	0	0	0	0	0	0	0	0	0	0	0	
	TET	71.1	21.7	35.5	0	9.2	8.7	23.7	13	1.3	1.3	0	0	
	SXT (1:19)	10.5	34.8	0	0	7.9	26.1	0	8.7	1.3	1.3	0	0	

*In vitro antimicrobial susceptibility tests were performed using 469 isolates submitted to the central lab as of October 31.



A prospective multinational surveillance of HAP and VAP in adults in Asian countries

Korea



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : Korea

Total number of centers in Korea: 15 (including 3 non-ANSORP centers)

(as of November 14)

Target number of HAP/VAP cases in Korea: 200

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Seoul	K01	Samsung Medical Center	Jae-Hoon Song Nam Yong Lee Kyong Ran Peck Doo Ryeon Chung Cheol-In Kang Yae Jean Kim Kwan Soo Ko	Y	40
Seoul	K03	Kangbuk Samsung Hospital	Joon-Sup Yeom	Y	0
Seoul	K11	Konkuk University Hospital	Hyun Kyun Ki	Y	6
Seoul	K04	Kyunghee University Hospital	Jun Seong Son	Y	6
Daejon	K07	Chungnam National University Hospital	Yeon-Sook Kim	Y	10
Cheonan	K15	Dankook University Hospital	Ji-Young Rhee	Y	11
Gwangju	K08	Chonnam National University Hospital	Sook In Jung Kyung Hwa Park	Y	46
Daegu	K06	Kyungpook National University Hospital	Shin-Woo Kim Hyun Ha Chang	Y	4
Daegu	K16	Daegu Fatima Hospital	Ki Tae Kwon	Y	21
Busan	K05	Dong-A University Hospital	Hyuck Lee Dong Sik Jung	Y	10
Busan	K12	Inje University Busan Paik Hospital	Chisook Moon	Y	0
Jeju	K13	Cheju National University Hospital	Sang Yop Shin	Y	17
Seoul	K101	Korea University Anam Hospital	Min-Ja Kim	Y	15
Seoul	K102	Severance Hospital, Yonsei University	Jun Yong Choi	Y	14
Seoul	K103	Kangnam St. Mary's Hospital, The Catholic University of Korea	Sang Il Kim	Y	6

TOTAL NUMBER OF CASES ENROLLED (%) 206 (103%)

Enrolled cases : Korea

(as of November 14)

	HAP	VAP	Total
Total No. of enrolled cases (%)	163 (79.1)	43 (20.9)	206
No. of culture-positive cases (%)	97 (59.5)	39 (90.7)	136 (66.0)

Enrolled cases : Korea

Centers	HAP		VAP		Total	
	No. of cases	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
Samsung Medical Center	34	18 (52.9)	6	5 (83.3)	40	23 (57.5)
Kangbuk Samsung Hospital	0	0	0	0	0	0
Konkuk University Hospital	5	3 (60.0)	1	0	6	3 (50.0)
Kyunghee University Hospital	6	4 (66.7)	0	0	6	4 (66.7)
Chungnam National University Hospital	7	6 (85.7)	3	3 (100)	10	9 (90.0)
Dankook University Hospital	6	4 (66.7)	5	5 (100)	11	9 (81.8)
Chonnam National University Hospital	29	18 (62.1)	17	15 (88.2)	46	33 (71.7)
Kyungpook National University Hospital	4	1 (25.0)	0	0	4	1 (25.0)

Enrolled cases : Korea

Centers	HAP		VAP		Total	
	No. of cases	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
Daegu Fatima Hospital	21	6 (28.6)	0	0	21	6 (28.6)
Dong-A University Hospital	9	8 (88.9)	1	1 (100)	10	9 (90.0)
Inje University Busan Baek Hospital	0	0	0	0	0	0
Cheju National University Hospital	14	12 (85.7)	3	3 (100)	17	15 (88.2)
Korea University Anam Hospital*	12	8 (66.7)	3	3 (100)	15	11 (73.3)
Severance Hospital, Yonsei University*	11	4 (36.4)	3	3 (100)	14	7 (50.0)
Kangnam St. Mary's Hospital, The Catholic University of Korea*	5	5 (100)	1	1 (100)	6	6 (100)

Pathogens: Korea

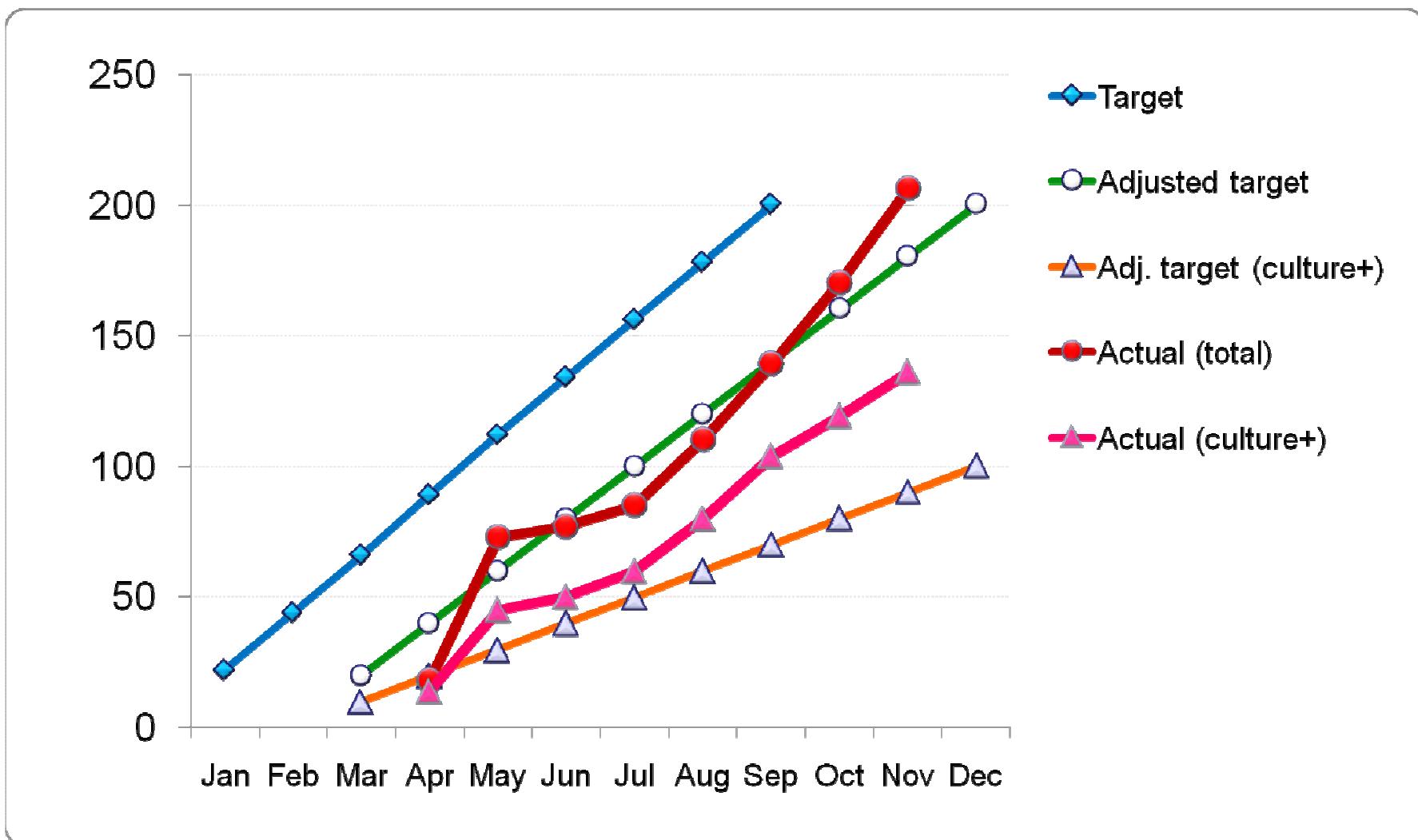
Species	HAP				VAP				Total No. (%)
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	Total No. (%)	
<i>Staphylococcus aureus</i>	1	2	36	39 (40.2)	2	6	7	15 (38.5)	54 (39.7)
<i>Pseudomonas aeruginosa</i>	0	2	13	15 (38.5)	0	4	3	7 (17.9)	22 (16.2)
<i>Klebsiella pneumoniae</i>	0	2	10	12 (12.4)	0	1	2	3 (7.7)	15 (11.0)
<i>Acinetobacter baumanii</i>	0	3	7	10 (10.3)	0	2	2	4 (10.3)	14 (10.3)
<i>Enterobacter cloacae</i>	0	0	1	1	0	0	0	0	1
<i>Enterobacter aerogenes</i>	0	0	1	1	0	0	0	0	1
<i>Escherichia coli</i>	1	2	2	5	0	0	0	0	5
<i>Stenotrophomonas maltophilia</i>	0	0	1	1	0	2	0	2	3
<i>Streptococcus pneumoniae</i>	1	0	7	8	0	0	0	0	8
Others	2	3	0	5	0	1	7	8	13
Total No. (%)	5 (5.2)	14 (14.4)	78 (80.4)	97 (71.3)	2 (5.1)	16 (41.0)	21 (53.8)	39 (28.7)	136

Target and Actual Enrollment: Korea

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	22				
Feb	44				
Mar	66	20	10		
Apr	89	40	20	18	14
May	112	60	30	73	45
Jun	134	80	40		
Jul	156	100	50	85	
Aug	178	120	60		
Sep	200	140	70	139	104
Oct		160	80		
Nov		180	90	206	136
Dec		200	100		

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: Korea



Discussion points : Korea

- IRB approval : **No specific issue**
- Enrollment of cases : **No problem**
 - Expected date, all centers activated:
 - Expected enrollment rate: cases/month
 - Expected date, last subject enrolled:
- Sample transport : **No issue**
- Communication with participating centers : **No problem**
- Other issues : **None**

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

China : Beijing Network



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : Beijing Network, China

Total number of centers in China-Beijing Network: 16 (including 3 non-ANSORP centers)

Target number of HAP/VAP cases in China-Beijing Network: 700

(as of September 30)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Beijing	C-B05	Peking Union Medical College Hospital	Hui Wang	Y	24
Beijing	C-B02	Beijing Chaoyang Hospital (Capital University of Medical Sciences)	Bin Cao	Y	23
Beijing	C-B16	Beijing Hospital	Yunjian Hu Tieyijng Sun	N	0
Guangzhou	C-B17	Guangzhou Institute of Respiratory Diseases	Rongchang Chen	N	0
Guangzhou	C-B23	First Affiliated Hospital of Sun Yatsen University	Canmao Xie	N	0
Hangzhou	C-B18	First Affiliated Hospital of College of Medicine, Zhejiang University	Yunsong Yu Jianying Zhou	N	0
Wuhan	C-B20	Tongji Hospital of Tongji Medical College, Huazhong University of Sciences and Technology	Ziyong Sun Shengdao Xiong	N	0
Shenyang	C-B21	Shengjing Hospital of China Medical University	Yong Liu Li Zhao	N	0
Shenyang	C-B22	The First Hospital China Medical University	Yunzhuo Chu Baiyi Chen Xiaochun Ma	N	0
Tianjin	C-B24	Tianjin Medical University General Hospital	Zhidong Hu	N	0
Shenzhen	C-B25	Shenzhen People's Hospital	Weiyuan Wu Qiu Chen	Y	8
Shanghai	C-B26	Zhongshan Hospital of Fudan University	Bijie Hu Wensong Xia	Y	36
Xi'an	C-B27	The first affiliated Hospital of the School of Medicine, Xi'an Jiaotong University	Lei Chun'e Lan Yang	N	0
Ji Nan	C-B101	Shandong Provincial Hospital	Yong Wang Shujuan Jiang	N	0
Beijing	C-B102	General Hospital of Chinese PLA (301 Hospital)	Youning Liu Liangan Chen	N	0
Jiangsu	C-B103	General Hospital of Nanjing PLA	Shao Haifeng Yi Shi	Y	42
TOTAL NUMBER OF CASES ENROLLED (%) 133 (19.0)					

Enrolled cases : Beijing Network, China

(as of September 30)

	HAP	VAP	Total
Total No. of enrolled cases (%)	94 (70.7)	39 (29.3)	133 (243)*
No. of culture-positive cases (%)	64 (68.1)	32 (82.1)	96 (72.2)

* Total number of cases enrolled as of November 25

Enrolled cases : Beijing Network, China

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
Peking Union Medical College Hospital	8 (33.3)	7 (87.5)	16 (66.6)	16 (100)	24	23 (95.8)
Beijing Chaoyang Hospital (Capital University of Medical Sciences)	18 (78.3)	7 (38.9)	5 (21.7)	3 (60.0)	23	10 (43.5)
Beijing Hospital	-	-	-	-	-	-
Guangzhou Institute of Respiratory Diseases	-	-	-	-	-	-
First Affiliated Hospital of Sun Yatsen University	-	-	-	-	-	-
First Affiliated Hospital of College of Medicine, Zhejiang University	-	-	-	-	-	-
Tongji Hospital of Tongji Medical College, Huazhong University of Sciences and Technology	-	-	-	-	-	-
Shengjing Hospital of China Medical University	-	-	-	-	-	-

Enrolled cases : Beijing Network, China

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
The First Hospital China Medical University	-	-	-	-	-	-
Tianjin Medical University General Hospital	-	-	-	-	-	-
Shenzhen People's Hospital	7 (87.5)	6 (85.7)	1 (12.5)	1 (100)	8	7 (87.5)
Zhongshan Hospital of Fudan University	27 (75.0)	12 (44.4)	9 (25.0)	5 (55.6)	36	17 (47.2)
The first affiliated Hospital of the School of Medicine, Xi'an Jiaotong University	-	-	-	-	-	-
Shandong Provincial Hospital*	-	-	-	-	-	-
General Hospital of Chinese PLA (301 Hospital)*	-	-	-	-	-	-
General Hospital of Nanjing PLA*	33 (78.6)	33 (100)	9 (21.4)	8 (88.9)	42	41 (97.6)

Pathogens: Beijing Network, China

Species	HAP (n=64)*				VAP (n=32)*				Total No. (%)
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	Total No. (%)	
<i>Pseudomonas aeruginosa</i>	1	2	14	17 (21.3)	1	0	14	15 (30.6)	32 (24.8)
<i>Staphylococcus aureus</i>	0	1	13	14 (17.5)	3	3	9	15 (30.6)	29 (22.5)
<i>Acinetobacter baumanii</i>	1	1	14	16 (20.0)	0	0	9	9 (18.4)	25 (19.4)
<i>Klebsiella pneumoniae</i>	0	0	6	6 (7.5)	0	0	2	2 (4.1)	8 (6.2)
<i>Escherichia coli</i>	0	0	5	5 (6.3)	0	0	2	2 (4.1)	7 (5.4)
<i>Enterobacter cloacae</i>	0	3	3	6 (7.5)	0	0	1	1 (2.0)	7 (5.4)
<i>Stenotrophomonas matophilia</i>	0	0	1	1	0	0	0	0	1
<i>Streptococcus pneumoniae</i>	0	0	1	1	0	0	0	0	1
Others	2	3	9	14	1	0	4	5	19
Total No. (%)	4 (5.0)	10 (12.5)	66 (82.5)	80 (62.0)	5 (10.2)	3 (6.1)	41 (83.7)	49 (38.0)	129

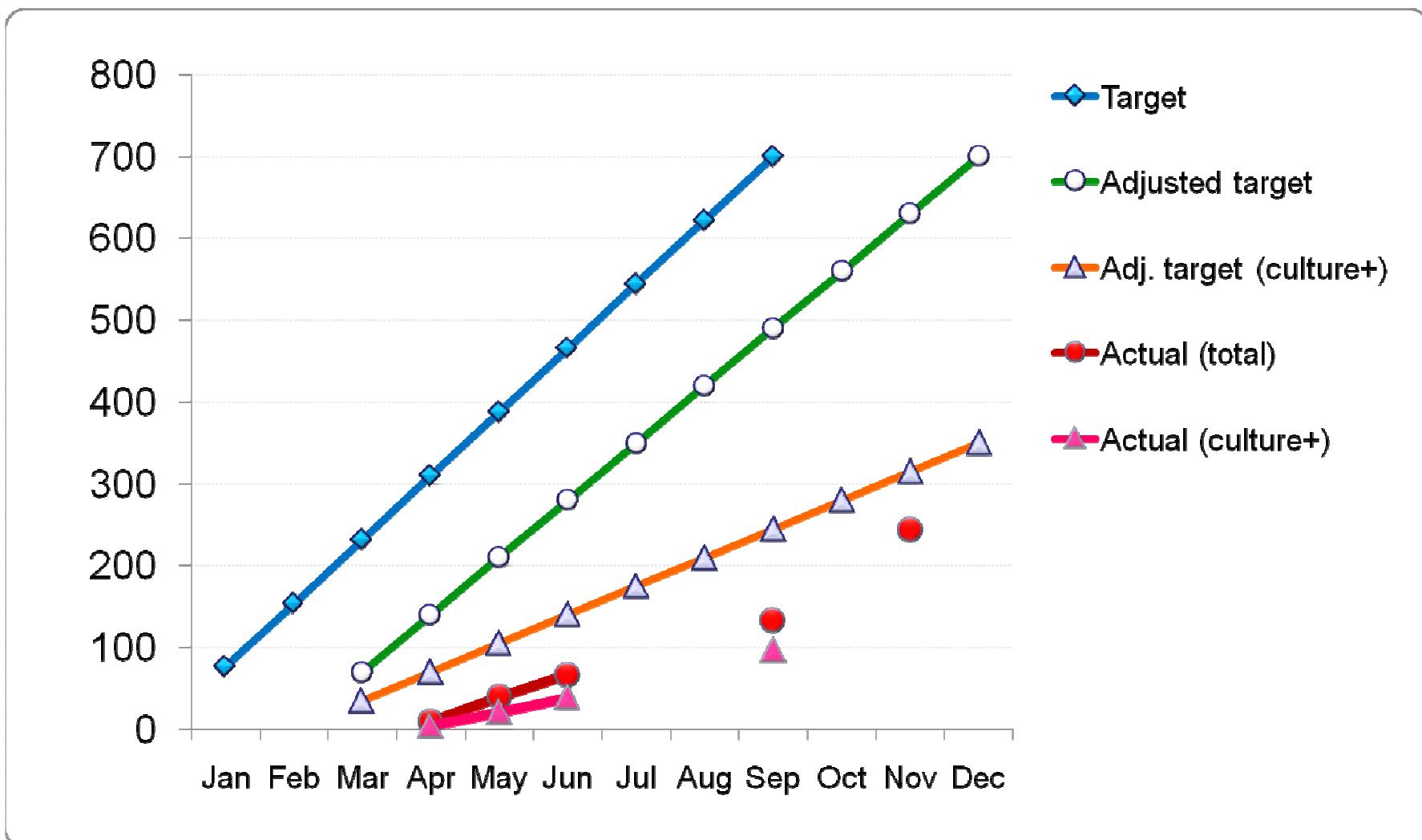
* Number of culture-positive cases

Target and Actual Enrollment: Beijing Network, China

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	77				
Feb	154				
Mar	232	70	35		
Apr	310	140	70	10	5
May	388	210	105	40	22
Jun	466	280	140	67	39
Jul	544	350	175		
Aug	622	420	210		
Sep	700	490	245	133	96
Oct		560	280		
Nov		630	315	243	
Dec		700	350		

* Starting since the date when the first subject was enrolled.

Target and Actual Enrollment: Beijing Network, China



Discussion points : Beijing Network, China

- IRB approval :
- Enrollment of cases :
 - Expected date, all centers activated:
 - Expected enrollment rate: cases/month
 - Expected date, last subject enrolled:
- Sample transport :
- Communication with participating centers :
- Other issues :

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

China : Shanghai Network



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : Shanghai Network, China

Total number of centers in China-Shanghai Network: 8

Target number of HAP/VAP cases in China-Shanghai Network: 300

(as of September 30)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Shanghai	C-S04	Ruijin Hospital	Shaoguang Huang Yuxing Ni Qijian Chen	Y	14
Shanghai	C-S28	Shanghai 9th People's Hospital	Kangde Sun Longnv Zhou	Y	4
Shanghai	C-S29	Shanghai 6th People's Hospital	Yanqun Jiang Ce Shen	Y	7
Shanghai	C-S30	Shanghai 1th People's Hospital	Xing Ding Xin Zhou	Y	3
Shanghai	C-S32	Luwan Branch, Ruijin Hospital	Junhai Yan Mingjie Xiang	Y	4
Shanghai	C-S33	Minhang Central Hospital of Shanghai	Yang Sun Xueping Wen	N	0
Shanghai	C-S34	The People's Hospital of Shanghai Pudong New area	Ruizhong Wang Feng Xi	Y	17
Shanghai	C-S35	Xin Hua hospital of Shanghai	Ying Liu Fengfeng Han Guo Xuejun	N	0
TOTAL NUMBER OF CASES ENROLLED (%)					49 (16.3)

Enrolled cases : Shanghai Network, China

(as of September 30)

	HAP	VAP	Total
Total No. of enrolled cases (%)	36 (73.5)	13 (26.5)	49
No. of culture-positive cases (%)	24 (66.7)	13 (100)	37 (75.5)

Enrolled cases : Shanghai Network, China

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
Ruijin Hospital	8 (57.1)	7 (87.5)	6 (42.9)	6 (100)	14	13 (92.9)
Shanghai 9th People's Hospital	4 (100)	3 (75.0)	0	0	4	3 (75.0)
Shanghai 6th People's Hospital	6 (85.7)	4 (66.7)	1 (14.3)	1 (100)	7	5 (71.4)
Shanghai 1th People's Hospital	3 (100)	3 (100)	0	0	3	3 (100)
Luwan Branch, Ruijin Hospital	3 (75.0)	2 (66.7)	1 (25.0)	1 (100)	4	3 (75.0)
Minhang Central Hospital of Shanghai	-	-	-	-	-	-
The People's Hospital of Shanghai Pudong New area	12 (70.6)	5 (41.7)	5 (29.4)	5 (100)	17	10 (58.8)
Xin Hua hospital of Shanghai	-	-	-	-	-	-

Pathogens: Shanghai Network, China

Species	HAP (n=24)*				VAP (n=13)*				Total No. (%)
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	Total No. (%)	
<i>Staphylococcus aureus</i>	3	2	4	9 (60.0)	0	3	3	6 (40.0)	15 (29.4)
<i>Acinetobacter baumanii</i>	0	2	8	10 (66.7)	0	3	2	5 (33.3)	15 (29.4)
<i>Pseudomonas aeruginosa</i>	0	0	1	1 (14.3)	0	4	2	6 (85.7)	7 (13.7)
<i>Klebsiella pneumoniae</i>	1	2	0	3 (75.0)	0	1	0	1 (25.0)	4 (7.8)
<i>Escherichia coli</i>	0	2	0	2	0	1	0	1	3
<i>Stenotrophomonas maltophilia</i>	0	0	1	1	0	1	0	1	2
<i>Enterobacter aerogens</i>	0	0	1	1	0	0	0	0	1
<i>Haemophilus influenzae</i>	0	0	1	1	0	0	0	0	1
Others	1	1	0	2	0	1	0	1	3
Total No. (%)	5 (16.7)	9 (30.0)	16 (53.3)	30 (58.8)	0 (0)	14 (66.7)	7 (33.3)	21 (41.2)	51

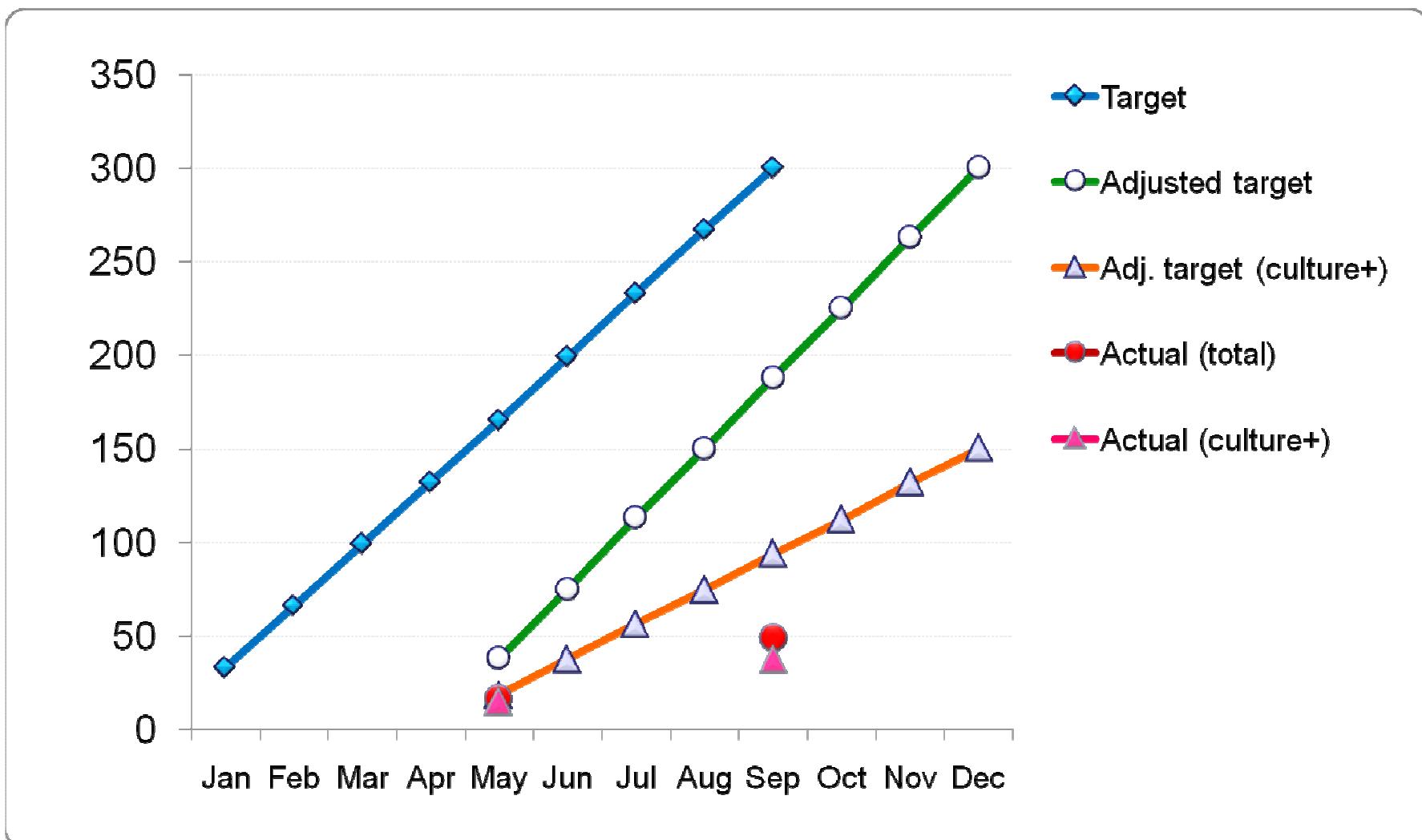
* Number of culture-positive cases

Target and Actual Enrollment: Shanghai Network, China

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	33				
Feb	66				
Mar	99				
Apr	132				
May	165	38	19	17	15
Jun	199	75	38		
Jul	233	113	57		
Aug	267	150	75		
Sep	300	188	94	49	37
Oct		225	112		
Nov		263	132		
Dec		300	150		

* Starting since the date when the first subject was enrolled.

Target and Actual Enrollment: Shanghai Network, China



Discussion points : Shanghai Network, China

- IRB approval :
- Enrollment of cases :
 - Expected date, all centers activated:
 - Expected enrollment rate: cases/month
 - Expected date, last subject enrolled:
- Sample transport :
- Communication with participating centers :
- Other issues :

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

Hong Kong



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : Hong Kong

Total number of centers in Hong Kong: 2

(as of November 14)

Target number of HAP/VAP cases in Hong Kong: 200

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Hong Kong	HK01	Princess Margaret Hospital	Thomas So Tak Keung Ng Wing-kin To	Yes	229
Hong Kong	HK02	Yan Chai Hospital	Wai-keung Kwan	Yes	114
TOTAL NUMBER OF CASES ENROLLED (%)					343 (172)

Enrolled cases : Hong Kong[YCH]

(as of November 14)

	HAP	VAP	Total
Total No. of enrolled cases (%)	101(89.6)	13(11.4)	114
No. of culture-positive cases (%)	57(56.4)	10(76.9)	67(58.8)

Enrolled cases : Hong Kong

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
Princess Margaret Hospital					229	170 (74.2)
Yan Chai Hospital	101 (89.6)	57 (56.4)	13 (11.4)	10 (76.9)	114	67 (58.8)

Pathogens: Hong Kong[YCH]

Species	HAP (n=57)*				VAP (n=10)*				Total No. (%)
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	Total No. (%)	
<i>Staphylococcus aureus</i>	2	0	9	11 (100)	0	0	0	0 (0)	11 (13.3)
<i>Acinetobacter baumanii</i>	0	0	4	4 (100)	0	0	0	0 (0)	4 (4.8)
<i>Pseudomonas aeruginosa</i>	0	0	19	19 (76.0)	1	0	5	6 (24.0)	25 (30.1)
<i>Klebsiella pneumoniae</i>	0	0	8	8 (66.7)	0	0	4	4 (33.3)	12 (14.5)
<i>Escherichia coli</i>	0	0	4	4 (80.0)	0	0	1	1 (20.0)	5 (6.0)
<i>Streptococcus pneumoniae</i>	0	0	3	3	0	0	1	1	4
<i>Haemophilus influenzae</i>	0	0	11	11	0	0	0	0	11
Others	1	0	8	9	0	0	2	2	13
Total No. (%)	3 (4.3)	0 (0)	66 (95.7)	69 (83.1)	1 (7.1)	0 (0)	13 (92.9)	14 (16.9)	83

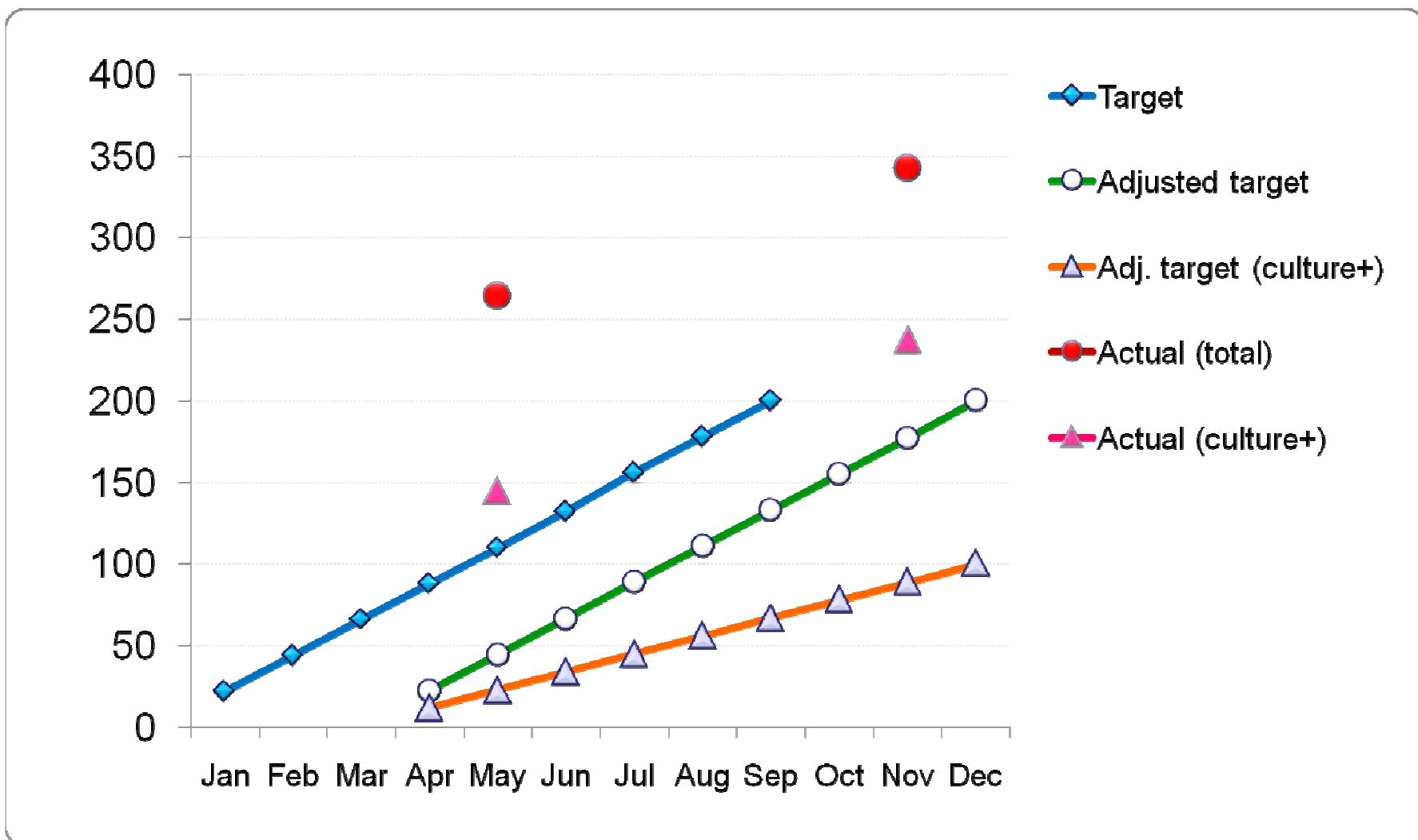
* Number of culture-positive cases

Target and Actual Enrollment: Hong Kong

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	22				
Feb	44				
Mar	66				
Apr	88	23	12		
May	110	45	23		
Jun	132	67	34		
Jul	156	89	45		
Aug	178	111	56		
Sep	200	133	67		
Oct		155	78		
Nov		177	89	343	237
Dec		200	100		

* Starting since the date when the first subject was enrolled.

Target and Actual Enrollment: Hong Kong



Discussion points : Hong Kong

- IRB approval : on 10 March 2008
- Enrollment of cases :
 - All centers activated: 1 Apr 2008
 - Enrollment rate: 100 cases/month
 - Last subject enrolled: 2 July 2008
- Sample transport to central lab in Seoul: Completed in mid October 2008
- Communication with participating centers : Good
- Other issues : Completion of CRF & database

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

Taiwan



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : Taiwan

Total number of centers in Taiwan: 9 (including 3 non-ANSORP centers)

Target number of HAP/VAP cases in Taiwan: 800

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Taipei	TW03	National Taiwan University Hospital	Po-Ren Hsueh	Y	16
Kaohsiung Hsien	TW01	Kaohsiung Chang Gung Memorial Hospital	Jien-Wei Liu	N	0
Tainan	TW05	National Cheng Kung University Hospital	Wen-Chien Ko Jiunn-Jong Wu	N	0
Kaohsiung	TW06	Chung-ho Memorial Hospital, Kaohsiung Medical University	Yen-Hsu Chen	N	0
Taichung	TW07	China Medical University Hospital	Jen-Hsien Wang	N	0
Changhua	TW08	Changhua Christian Hospital	Chun-Eng Liu	N	0
Taipei	TW101	Taipei Veterans General Hospital	Cheng-Yi Liu	N	0
Taipei	TW102	Mackay Memorial Hospital	Chun-Ming Lee	N	0
Taipei	TW103	TRI-service General Hospital	Feng-Yee Chang	N	0
TOTAL NUMBER OF CASES ENROLLED (%)					16 (2.0)

Enrolled cases : Taiwan

(as of November 14)

	HAP	VAP	Total
Total No. of enrolled cases (%)			16
No. of culture-positive cases (%)			15 (93.8)

Enrolled cases : Taiwan

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
National Taiwan University Hospital					16	15 (93.8)
Kaohsiung Chang Gung Memorial Hospital						
National Cheng Kung University Hospital						
Chung-ho Memorial Hospital, Kaohsiung Medical University						
China Medical University Hospital						
Changhua Christian Hospital						
Taipei Veterans General Hospital*						
Mackay Memorial Hospital*						
TRI-service General Hospital*						

Pathogens: Taiwan

Species	HAP (n=)*			VAP (n=)*			Total No. (%)	
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	
<i>Staphylococcus aureus</i>								1 (4.0)
<i>Acinetobacter baumanii</i>								4 (16.0)
<i>Pseudomonas aeruginosa</i>								5 (20.0)
<i>Klebsiella pneumoniae</i>								7 (28.0)
<i>Escherichia coli</i>								2 (8.0)
<i>Stenotrophomonas maltophilia</i>								3
<i>Enterobacter cloacae</i>								1
Others								2
Total No. (%)								25

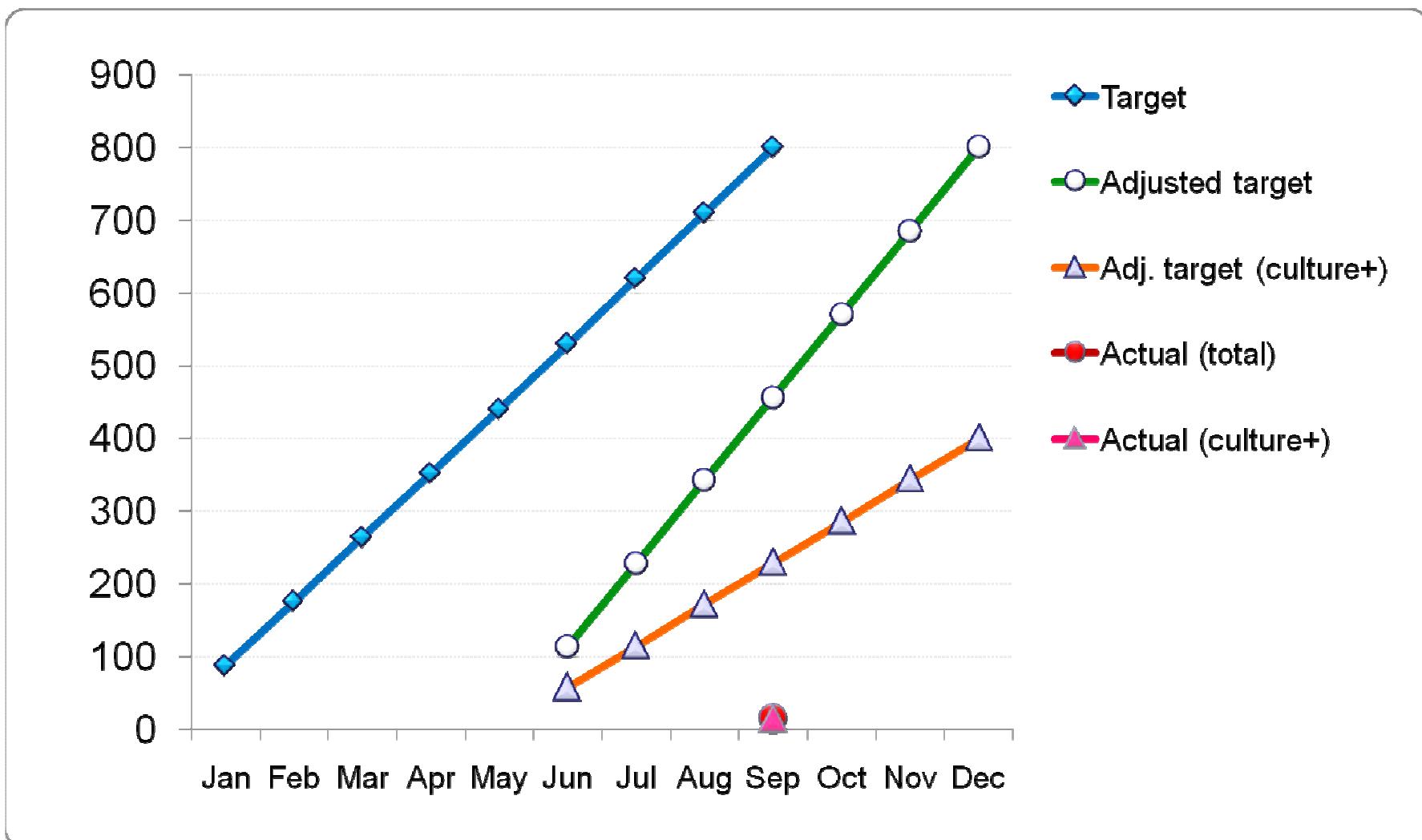
* Number of culture-positive cases

Target and Actual Enrollment: Taiwan

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	88				
Feb	176				
Mar	264				
Apr	352				
May	440				
Jun	530	115	58		
Jul	620	229	115		
Aug	710	343	172		
Sep	800	457	229	16	15
Oct		571	286		
Nov		685	343		
Dec		800	400		

* Starting since the date when the first subject was enrolled.

Target and Actual Enrollment: Taiwan



Discussion points : Taiwan

- IRB approval :
- Enrollment of cases :
 - Expected date, all centers activated:
 - Expected enrollment rate: cases/month
 - Expected date, last subject enrolled:
- Sample transport :
- Communication with participating centers :
- Other issues :

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

Thailand

**Visanu Thamlikitkul
Siriraj Hospital, Bangkok
(Country Coordinator)**



**Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan**

Thailand
(as of November 14, 2008)

- Total Enrolled Patients 388
- Total Completed CRFs 258

(at Siriraj coordinating center)

	HAP	VAP	Total
Total No. of Completed CRFs	74 (29%)	184 (71%)	258 (100%)
Total No. of Culture +ve cases	58 (78%)	164 (89%)	222 (86%)

Thailand : 12 Participating Centers

Code	Hospital	Total Enrolled	Total completed CRFs	HAP	VAP
01	Siriraj Hospital	101 (26%)	93	24 (26%)	69 (74%)
02	Chulalongkorn Hospital	25 (6%)	8	1 (13%)	7 (87%)
03	Maharaj ChiangMai	88 (23%)	56	24 (43%)	32 (57%)
04	Srinakarind (KKU)	17 (4%)	15	2 (13%)	13 (87%)
05	Prince of Songkla U.	26 (7%)	9	3 (33%)	6 (67%)
06	Air force	22 (6%)	11	2 (18%)	9 (82%)
07	Chonburi Hospital	58 (15%)	44	4 (9%)	40 (91%)
08	Chest	2 (0.5%)	2	2 (100%)	0
10	Saraburi	5 (1%)	3	1 (33%)	2 (67%)
11	SWU	22 (6%)	17	11 (65%)	6 (35%)
12	Maharat, Nakhon Ratchasima	17 (4%)	0	0	0
13	Bumrungrad Hospital	5 (1%)	0	0	0
Total		388	258	74 (29%)	184 (71%)

Thailand : Microbiological Diagnosis

	HAP (n=58)	VAP (n=164)	Total (n=222)
Definite	2 (3%)	3 (2%)	5 (2%)
Probable	9 (16%)	50 (30%)	59 (27%)
Possible	47 (81%)	111 (68%)	158 (71%)

Thailand : Pathogens (per 222 cases)

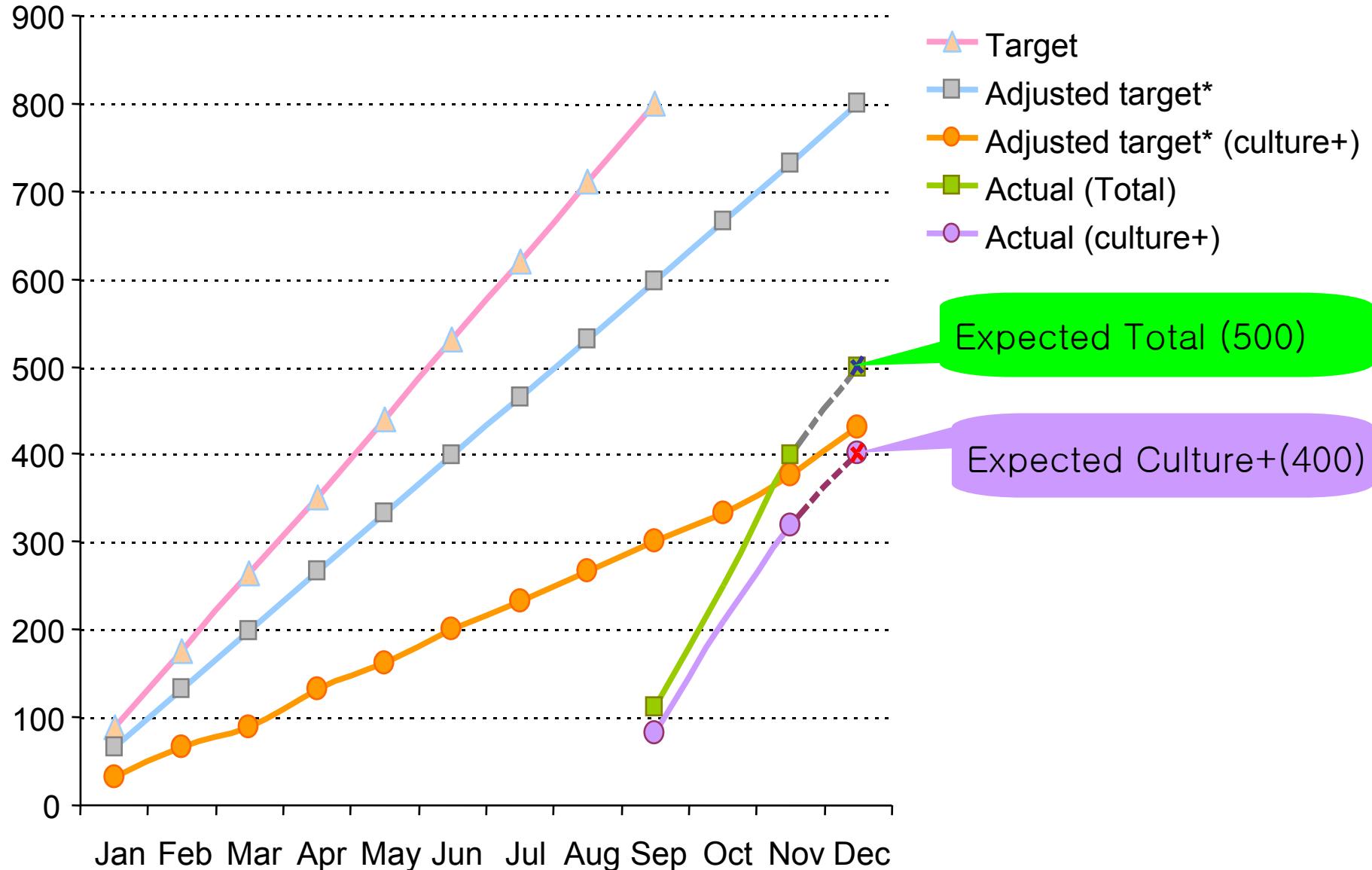
Species	HAP (n=58)*				VAP (n=164)*				Total
	Definite	Probable	Possible	Total	Definite	Probable	Possible	Total	
<i>A. baumannii</i>	2	3	15	20 (34%)	2	28	57	87 (53%)	107 (48%)
<i>P. aeruginosa</i>	0	1	18	19 (33%)	0	19	32	51 (31%)	70 (32%)
<i>K. pneumoniae</i>	2	5	14	21 (36%)	3	11	25	39 (24%)	60 (27%)
<i>S. aureus</i>	0	2	4	6 (10%)	0	8	3	11 (7%)	17 (8%)
<i>E. coli</i>	0	0	7	7 (12%)	0	0	10	10 (6%)	17 (8%)
<i>S. maltophilia</i>	0	0	2	2	0	0	0	0	2
<i>S. pneumoniae</i>	0	0	1	1	0	0	1	1	2
Others	1	2	9	12	2	1	20	23	35

* Number of culture-positive cases

Thailand : Target and Actual Enrollment

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	88	66	33		
Feb	176	133	67		
Mar	264	199	89		
Apr	352	266	133		
May	440	332	161		
Jun	530	399	200		
Jul	620	465	232		
Aug	710	532	266		
Sep	800	598	300	111	83
Oct		665	332		
Nov		731	366	388	~333
Dec		800	400	E ~ 500	E ~ 400

Thailand : Target and Actual Enrollment



Thailand : Discussion Points

- IRB approval : No
- Enrollment of cases :
 - All centers activated
 - Expected enrollment rate: 30 - 60 cases/month
 - Expected date, last subject enrolled: Dec 08 ?
- Sample transport : Paper works
- Communication with participating centers :
via Janssen Cilag (Thailand)
- Other issues : some cases had no pathogens

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

Singapore



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : Singapore

Total number of centers in Singapore: 2

Target number of HAP/VAP cases in Singapore: 200

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Singapore	Si02	National University Hospital	Hsu Li Yang Paul Ananth Tambyah Su Gin Douglas Chan Raymond Lin	Y	16
Singapore	Si03	Tan Tock Seng Hospital Singapore	David Lye Leo Yee Sin Prabha Krishnan	N	0
TOTAL NUMBER OF CASES ENROLLED (%)					16 (8%)

Enrolled cases : Singapore

(as of November 14)

	HAP	VAP	Total
Total No. of enrolled cases (%)	0	16	16
No. of culture-positive cases (%)	0	16 (100)	16 (100)

Enrolled cases : Singapore

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
National University Hospital	0	0	16 (100)	16 (100)	16	16 (100)
Tan Tock Seng Hospital Singapore	-	-	-	-	-	-

Pathogens: Singapore

Species	HAP (n=0)*				VAP (n=0)*				Total No. (%)
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	Total No. (%)	
<i>Pseudomonas aeruginosa</i>	0	0	0	0	0	1	4	5	5 (41.7)
<i>Klebsiella pneumoniae</i>	0	0	0	0	0	0	3	3	3 (25.0)
<i>Stenotrophomonas maltophilia</i>	0	0	0	0	0	1	1	2	2 (16.7)
<i>Enterobacter cloacae</i>	0	0	0	0	0	1	0	1	1
Others	0	0	0	0	0	1	0	1	1
Total No. (%)	0	0	0	0	0 (0)	4 (33.3)	8 (66.7)	12 (100)	12

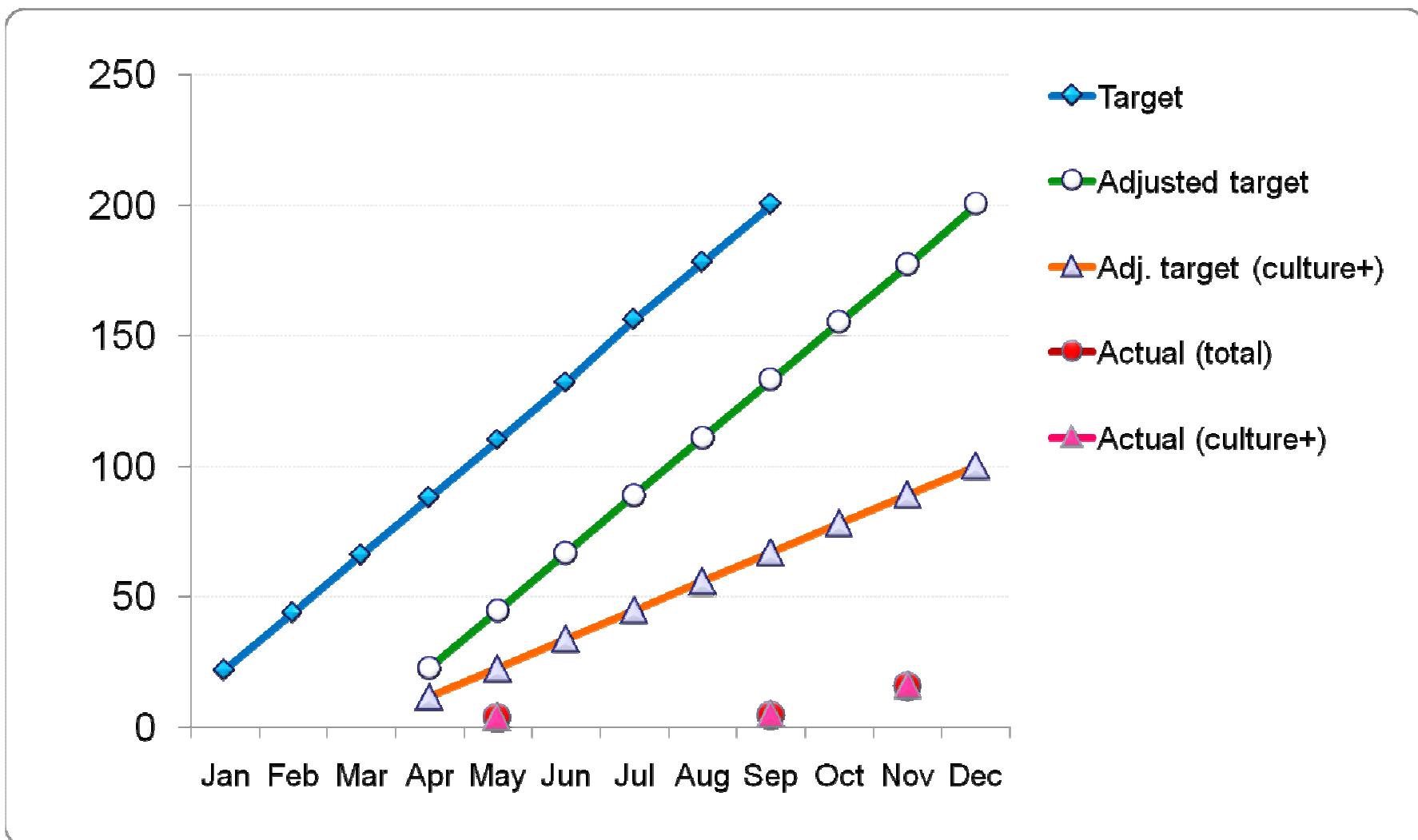
* Number of culture-positive cases

Target and Actual Enrollment: Singapore

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	22				
Feb	44				
Mar	66				
Apr	88	23	12		
May	110	45	23	4	4
Jun	132	67	34		
Jul	156	89	45		
Aug	178	111	56		
Sep	200	133	67	5	5
Oct		155	78		
Nov		177	89	16	16
Dec		200	100		

* Starting since the date when the first subject was enrolled.

Target and Actual Enrollment: Singapore



Discussion points : Singapore

- IRB approval : Pending in Tan Tock Seng Hospital
- Enrollment of cases :
 - Expected date, all centers activated:
 - Expected enrollment rate: 10 cases/month
 - Expected date, last subject enrolled:
- Sample transport :Nil
- Communication with participating centers :Nil
- Other issues :Recruitment slow in view of consent issues and staffing.

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

Philippines



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : Philippines

Total number of centers in Philippines: 5 (6th center just included)

(as of November 23)

Target number of HAP/VAP cases in Philippines: 250

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Manila	P01	Research Institute for Tropical Medicine	Celia Carlos	-	-
Quezon	P02	The Lung Center of the Philippines	Benilda Gal vez	Y	6
Pasig	P03	The Medical City	Marissa Alejandria	Y	25
Cebu	P04	Chong Hua Hospital	Elfleda Hernandez	Y	3
Davao	P05	Davao Medical Center	Allan Arreola	Y	4
Quezon	P06	Veterans Memorial Medical Center	Maria Paz Mateo	N	0
TOTAL NUMBER OF CASES ENROLLED (%)				38 (15.2)	

Enrolled cases : Philippines

(as of November 23)

	HAP	VAP	Total
Total No. of enrolled cases (%)	25 (65.8) (7 still to be completed)	13 (34.2) (still to be completed)	38
No. of culture-positive cases (%)	6 (24)	8 (61.5)	14 (36.8)

NOTE: Several CRFs or isolates have not been completed since patients are still being followed up.

Enrolled cases : Philippines

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
Research Institute for Tropical Medicine	-	-	-	-	-	-
The Lung Center of the Philippines	5	5	1	1	6 (1 of the 6 CRFs to follow)	6 (not yet complete)
The Medical City	16	7	2	3	18 (not yet complete, CRFs to follow)	10 (not yet complete)
Chong Hua Hospital	3	1	-	-	3	1
Davao Medical Center	1	-	3	4	4	4

Pathogens: Philippines

Species	HAP (n=6)*				VAP (n=8)*				Total No. (%)
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	Total No. (%)	
<i>Staphylococcus aureus</i>	-	-	-	-	-	1	-	1	1
<i>Acinetobacter baumanii</i>	-	-	-	-	-	-	-	-	-
<i>Pseudomonas aeruginosa</i>	-	1	2	3	-	-	1	1	4
<i>Klebsiella pneumoniae</i>	-	2	4	6	-	1	3	4	10
<i>Escherichia coli</i>	-	-	-	-	-	-	-	-	-
<i>Stenotrophomonas maltophilia</i>	-	-	-	-	-	-	-	-	-
<i>Enterobacter aerogens</i>	-	1	1	2	-	-	-	-	2
<i>Haemophilus influenzae</i>	-				-	-	-	-	-
Others	-	1	2	3	-	1	-	1	4
Total No. (%)	0	5	9	14	0	3	4	7	21

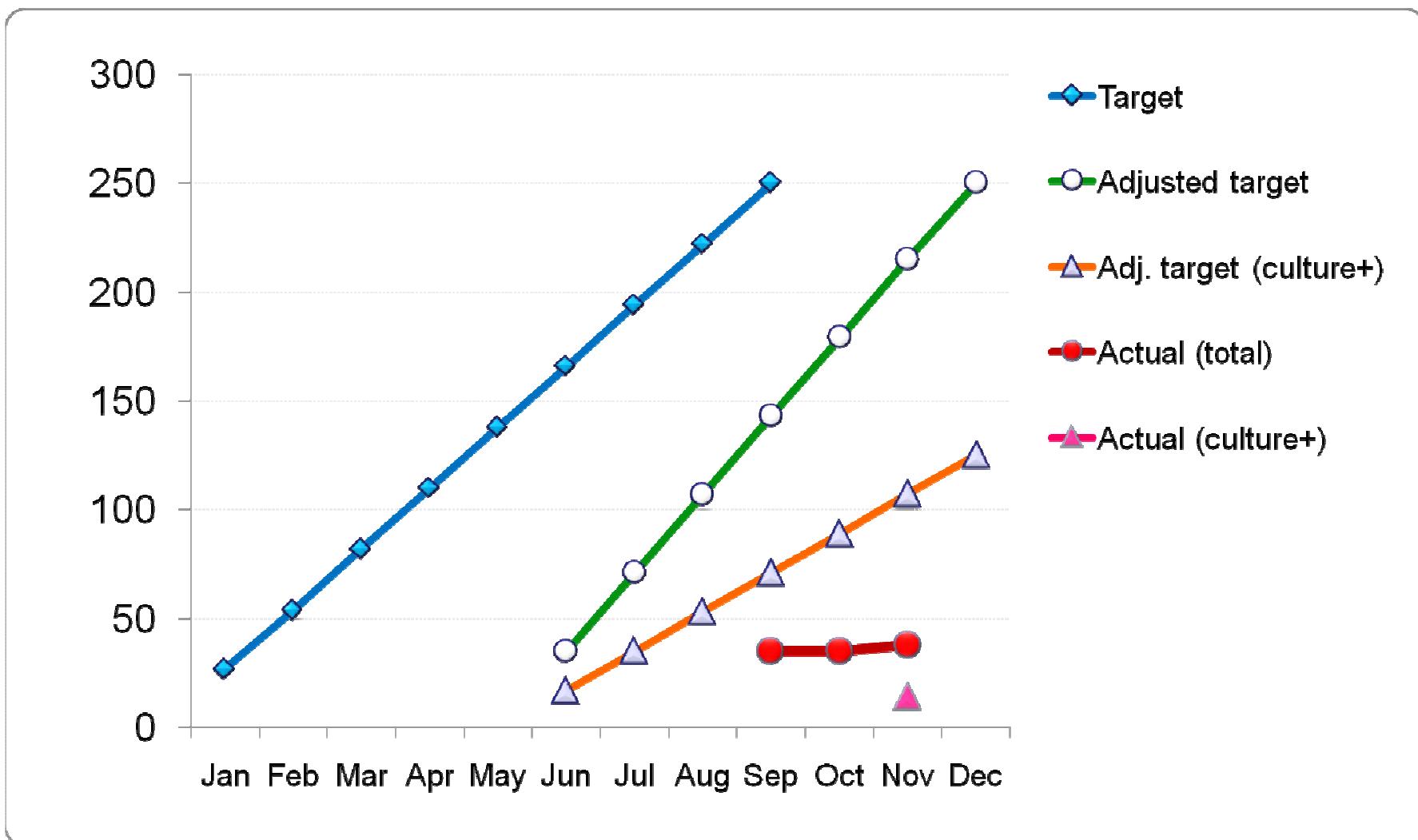
* Number of culture-positive cases

Target and Actual Enrollment: Philippines

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	27				
Feb	54				
Mar	82				
Apr	110				
May	138				
Jun	166	35	17		
Jul	194	71	35		
Aug	222	107	53		
Sep	250	143	71		
Oct		179	89		
Nov		215	107	38	14
Dec		250	125		

* Starting since the date when the first subject was enrolled.

Target and Actual Enrollment: Philippines



Discussion points : Philippines

- IRB approval : approved in all sites but processing took too long in some sites
- Enrollment of cases :
 - Expected date, all centers activated: July 17, 2008
 - Expected enrollment rate: cases/month
 - Expected date, last subject enrolled: hard to predict
- Sample transport : first batch to be transported on Nov. 26, 2008
- Communication with participating centers : difficult especially with sites outside of Metro Manila
- Other issues : A lab consultant initially agreed to participate but later withdrew. Seven bacterial isolates are not saved by the laboratory staff despite instructions given by investigator(s) thus these patients were deleted from the study.
- One more site added this November – Veterans Memorial Medical Center (**P06**)(1,000 bed capacity); Investigator - Dr. Maria Paz Mateo

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

Malaysia



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : Malaysia

Total number of centers in Malaysia: 11

Target number of HAP/VAP cases in Malaysia: 250

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Kuala Lumpur	M03	Institute for Medical Research	Rohani Md Yasin	-	-
			Norazah Ahmad		
Kuala Lumpur	M01	University Malaya Medical Centre	Adeeba Kamarulzaman Sasheela Vanar Rina Karunakaran	Y	6
Kuala Lumpur	M06	Hospital Kuala Lumpur	Dato' Jeyaindran Sinnadurai Paras Doshi Shanti Rudra Deva Mohamad Nazri Aziz	Y	2
Pulau Pinang	M08	Hospital Pulau Pinang	Dato' Abdul Razak Abdul Multalib Lean Chung Yee Dr. Nor Iza Abd Rahman Mohamad Azmi	Y	13
Kelantan	M09	Hospital Kota Bharu	Mahiran Mustafa Nurahan Binti Maning Shaiful Azman Zakaria	Y	0
Sungai Buloh, Selangor	M12	Hospital Sungai Buloh	Christopher Lee Anuradha a/p Radhakrishnan Shanti a/p Ratnam Zubaidah Abdul Wahab Ariza Adnan	Y	2
Kuala Lumpur	M15	University Kebansaan Medical Center	Nordiah awing Jalil	N	0

Participating Centers : Malaysia

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Johor Bahru	M16	Hospital Sultanah Aminah	Dato' Subramaniam Balan Chua Hoch Hin Tan Cheng Cheng Ganeswrie Raj	Y	7
Seremban	M17	Hospital Tuanku Jaafar	Dato' Wan Shaariah Mohd Yusof Jenny Thong May Geok Jaideep Singh Sidhu Suhaila Md Hanapiah	Y	6
Kuala Terengganu	M18	Hospital Tuanku Nur Zahira	Ahmad Kashfi Abd Rahman Mohd Ridhwan mohd Noor Fatimah Haslina Abdullah	Y	2
Kota Kinabalu	M13	Hospital Queen Elizabeth	Lily Ng Timothy William Kausalia a/p Chinnaiah Azura Hussin	N	0
TOTAL NUMBER OF CASES ENROLLED (%) 38 (15.2)					

Enrolled cases : Malaysia

(as of November 14)

	HAP	VAP	Total
Total No. of enrolled cases (%)	10 (40.0)	15 (60.0)	25
No. of culture-positive cases (%)	3 (21.4)	11 (78.6)	14 (56.0)

Enrolled cases : Malaysia

(as of November 14)

	HAP	VAP	NC	Total
Total No. of enrolled cases	10	15	13	38
No. of culture-positive cases	3	11	8	22

NC = CRF Not available yet

Enrolled cases : Malaysia

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
Institute for Medical Research	-	-	-	-	-	-
University Malaya Medical Centre	1 (16.7)	1 (100)	5 (83.3)	4 (80.0)	6	5 (83.3)
Hospital Kuala Lumpur	0	0	2 (100)	2 (100)	2	2 (100)
Hospital Pulau Pinang	8 (66.7)	2 (33.3)	4 (33.3)	2 (50.0)	12 (13)	4 (33.3)
Hospital Kota Bharu	-	-	-	-	-	-
Hospital Sungai Buloh	-	-	-	-	2	-
University Kebansaan Medical Center	-	-	-	-	-	-
Hospital Sultanah Aminah	-	-	-	-	7	-
Hospital Tuanku Jaafar	1(20.0)	0	4(80.0)	3(75.0)	5 (6)	3(60.0)
Hospital Tuanku Nur Zahira	-	-	-	-	2	-
Hospital Queen Elizabeth	-	-	-	-	-	-

Pathogens: Malaysia

Species	HAP (n=3)*				VAP (n=11)*				Total No. (%)
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	Total No. (%)	
<i>Pseudomonas aeruginosa</i>	0	0	0	0	0	0	2	2	2
<i>Staphylococcus aureus</i>	0	0	0	0	0	2	1	3	3
<i>Acinetobacter baumanii</i>	0	1	0	1	0	1	3	4	5
<i>Klebsiella pneumoniae</i>	0	1	1	2	0	0	1	1	3
Others	0	0	1	1	0	0	2	2	3
Total No. (%)	0 (0)	2 (50.0)	2 (50.0)	4 (44.4)	0 (0)	3 (33.3)	9 (66.6)	12 (55.6)	16

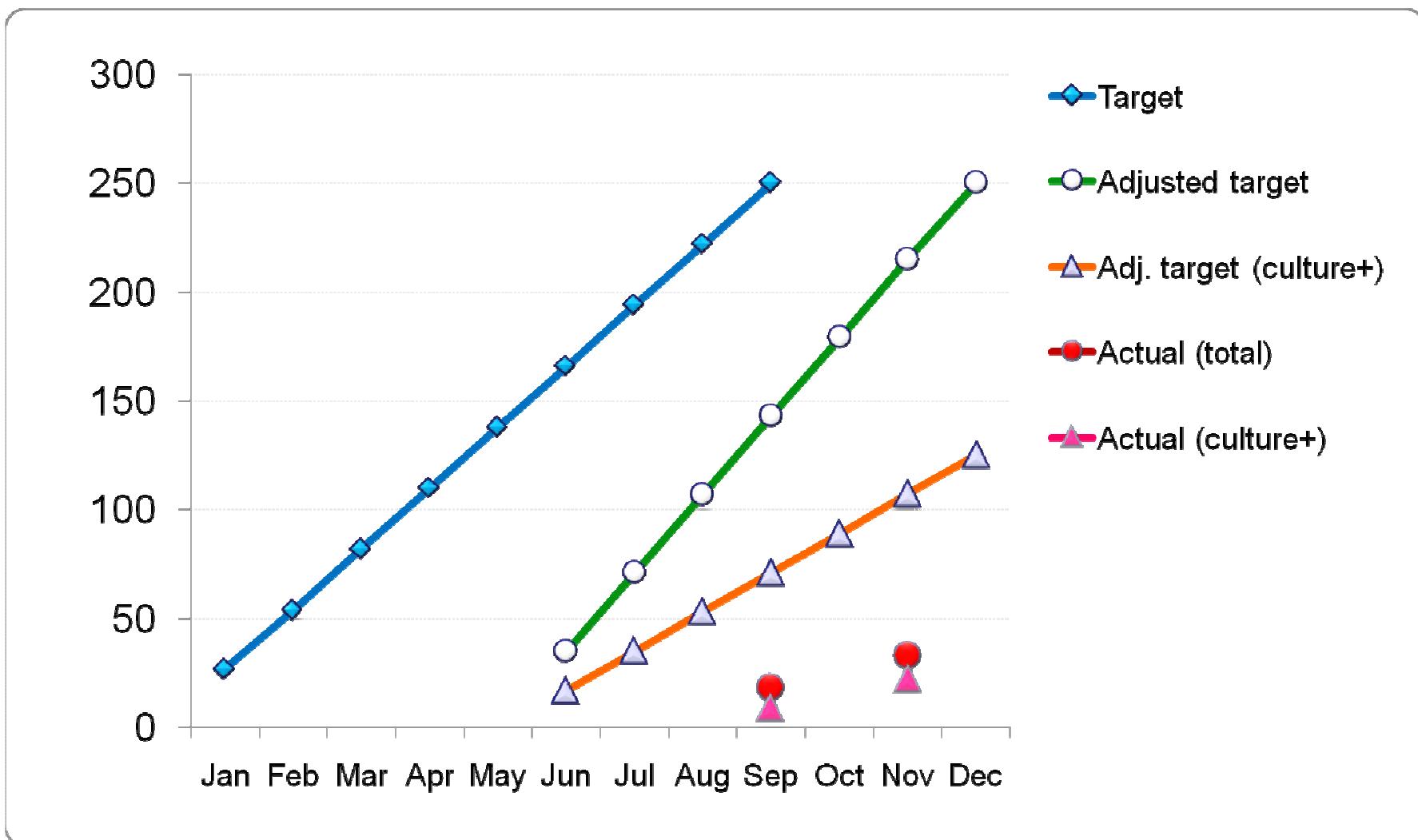
* Number of culture-positive cases

Target and Actual Enrollment: Malaysia

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	27				
Feb	54				
Mar	82				
Apr	110				
May	138				
Jun	166	35	17		
Jul	194	71	35		
Aug	222	107	53		
Sep	250	143	71	18	9
Oct		179	89		
Nov		215	107	38	22
Dec		250	125		

* Starting since the date when the first subject was enrolled.

Target and Actual Enrollment: Malaysia



Discussion points : Malaysia

- IRB approval :
- Enrollment of cases :
 - Expected date, all centers activated:
 - Expected enrollment rate: cases/month
 - Expected date, last subject enrolled:
- Sample transport :
- Communication with participating centers :
- Other issues :

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

India



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : India

Total number of centers in India: 6

(as of November 14)

Target number of HAP/VAP cases in India: 200

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Chennai	I01	Madras Medical Mission	M.K. Lalitha	Y*	-
Vellore	I03	Christian Medical College and Hospital	Dilip Mathai Kurien Thomas	Y	NA@
Mumbai	I05	P. D. Hinduja Hospital	Camilla Rodrigues	Y	19
Chennai	I06	Sri Ramachandra Hospital	Padma Srikant	Y	6
Chennai	I02	Apollo Hospital Chennai	M.A. Thiruranayaranan	Y	13
New Delhi	I13	Sir Gangaram Hospital	Chand Wattal	N**	0
TOTAL NUMBER OF CASES ENROLLED (%)				28	

* Rate of HAP/VAP occurrence very low

** Unable to participate

NA@ Information not updated

Enrolled cases : India

(as of November 14)

	HAP	VAP	Total
Total No. of enrolled cases (%)	21 (55.3)	17 (44.7)	38
No. of culture-positive cases (%)	21 (100)	16 (94.1)	37 (97.3)

Enrolled cases : India

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
Madras Medical Mission	-	-	-	-	-	-
Christian Medical College and Hospital						
Hinduja Hospital	15 (78.9)	15 (100)	4 (21)	4 (100)	19	19 (100)
Sri Ramachandra Hospital	0	0	6 (100)	5 (83.3)	6	5 (83.3)
Apollo Hospital Chennai	6 (46.2)	6 (100)	7 (53.8)	7 (100)	13	13 (100)
Sir Gangaram Hospital						

Pathogens: India

Species	HAP (n=21)*				VAP (n=16)*				Total No. (%)
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	Total No. (%)	
<i>Staphylococcus aureus</i>									0
<i>Acinetobacter baumanii</i>	6			6	7			7	13
<i>Pseudomonas aeruginosa</i>	9			9	1			1	10
<i>Klebsiella pneumoniae</i>	2			2	1			1	3
<i>Escherichia coli</i>	1			1	1			1	2
<i>Stenotrophomonas maltophilia</i>	2			2					2
<i>Streptococcus pneumoniae</i>	1			1					1
<i>Haemophilus influenzae</i>									0
Others					6			6	6
Total No. (%)	21	0	0	21	16	0	0	16	37

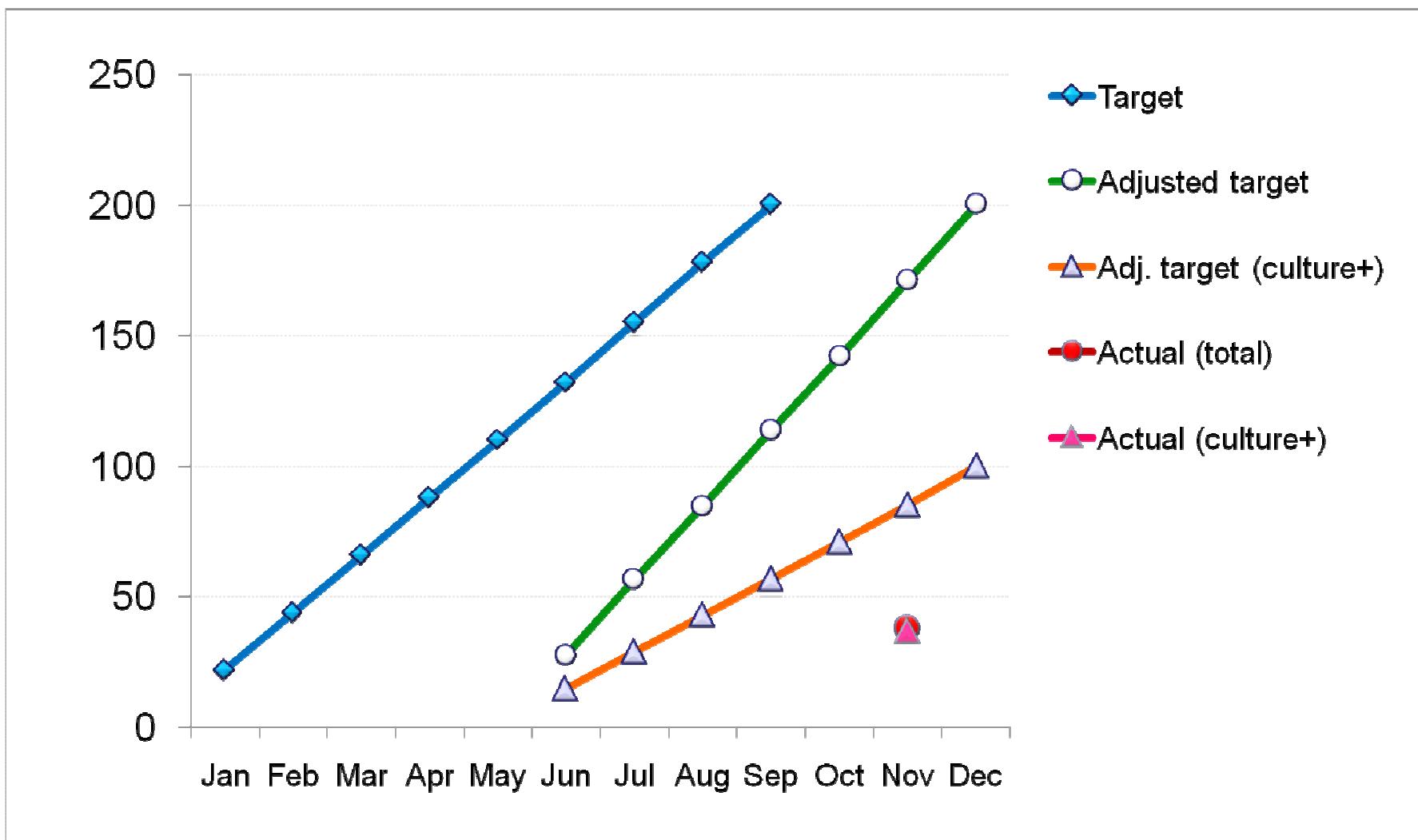
* Number of culture-positive cases

Target and Actual Enrollment: India

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	22				
Feb	44				
Mar	66				
Apr	88				
May	110				
Jun	132	28	15		
Jul	155	57	29		
Aug	178	85	43		
Sep	200	114	57		
Oct		142	71		
Nov		171	85	38	37
Dec		200	100		

* Starting since the date when the first subject was enrolled.

Target and Actual Enrollment: India



Discussion points : India

- IRB approval :
- Enrollment of cases :
 - Expected date, all centers activated:
 - Expected enrollment rate: cases/month
 - Expected date, last subject enrolled:
- Sample transport :
- Communication with participating centers :
- Other issues :

A prospective multinational surveillance of HAP and VAP in adults in Asian countries

Indonesia



Investigator meeting : November 28, 2008
Grand Hyatt Hotel, Taipei, Taiwan

Participating Centers : Indonesia

Total number of centers in Indonesia: 4

Target number of HAP/VAP cases in Indonesia: 200

(as of November 21)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Jakarta	In01	Children's and Maternity, Harapan Kita Hospital	Latre Buntaran	-	-
Jakarta	In03	RSCM (Cipto Mangunkusumo Hospital)	Djoko Widodo Herdiman Pohan Khie Chen Dalima Eddi Harijanto Martin Rumende	Y	11
Semarang	In04	RS-Karyadi	Agus Suryanto M. Hussein Gasem Eri Laksana Marwoto Hendro Wahyono	Y	7
Surabaya	In06	Dr Soetomo Hospital	Kuntaman Bambang Wahjuprajitno Ni Made Mertaniasih	Y	12
Jakarta	?	Pluit Hospital	Khie Chen Koeswojo	Y (Nov 10)	0
TOTAL NUMBER OF CASES ENROLLED				30	

Enrolled cases : Indonesia

(as of November 21)

	HAP	VAP	Total
Total No. of enrolled cases (%)	16 (53.3)	14 (46.7)	30 (100)
No. of culture-positive cases (%)	13 (81.2)	14 (100)	27 (90)

Enrolled cases : Indonesia

Centers	HAP		VAP		Total	
	No. of cases (%)	No. of culture-positive cases (%)	No. of cases (%)	No. of culture-positive cases (%)	No. of cases	No. of culture-positive cases (%)
Children's and Maternity, Harapan Kita Hospital	-	-	-	-	-	-
RSCM (Cipto Mangunkusumo Hospital)	7 (63.6)	4 (57.1)	4 (36.4)	4 (100)	11	8 (72,7)
RS-Karyadi	3 (42.8)	3 (100)	4 (57.2)	4 (100)	7	7 (100)
Dr Soetomo Hospital	6 (50)	6 (100)	6 (50)	6 (100)	12	12 (100)

Pathogens: Indonesia

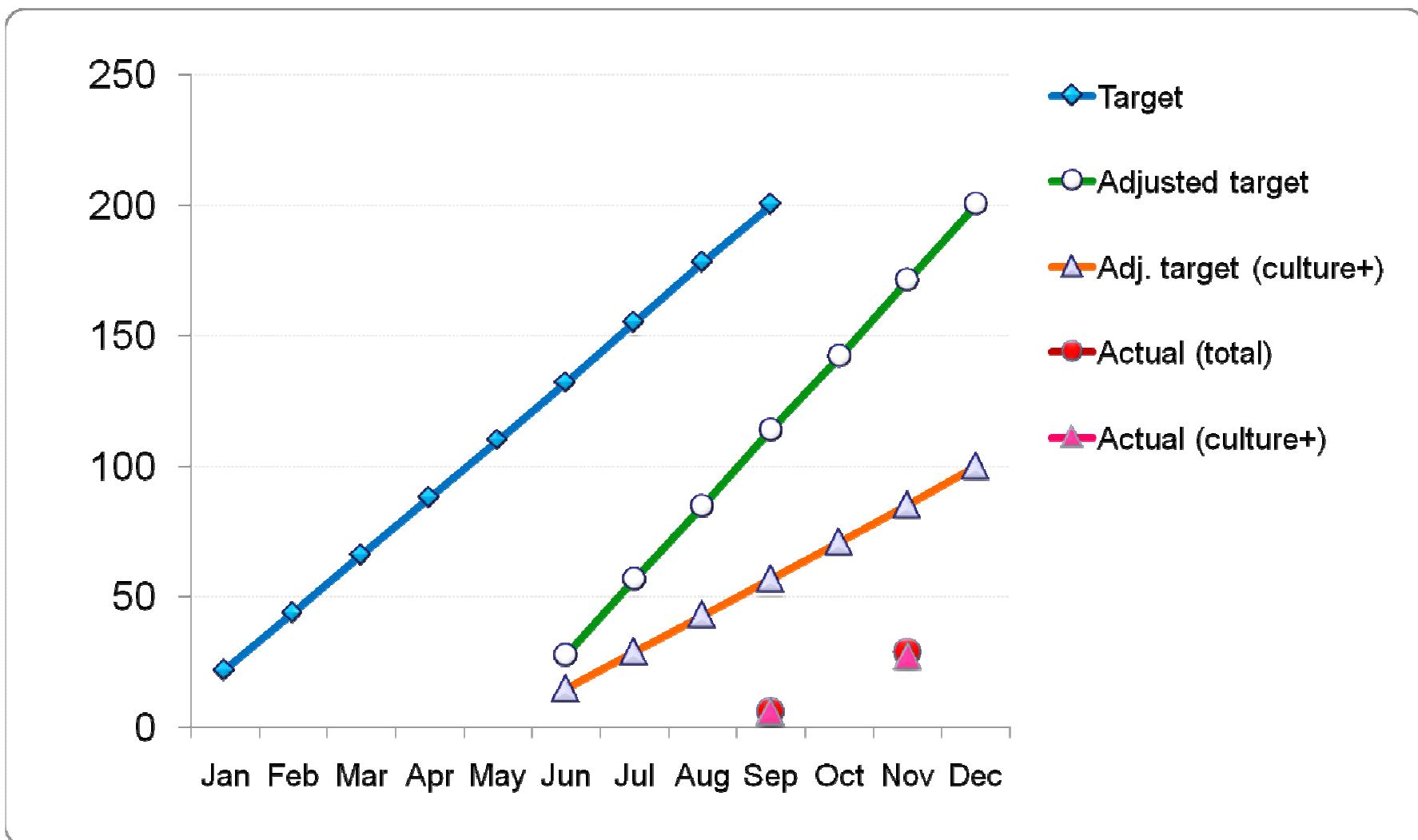
Species	HAP (n=)*				VAP (n=)*				Total No. (%)
	Definite	Probable	Possible	Total No. (%)	Definite	Probable	Possible	Total No. (%)	
<i>Staphylococcus aureus</i>	0	0	1	1	0	1	1	2	3
<i>Acinetobacter spp</i>	0	0	4	4	0	0	3	3	7
<i>Pseudomonas aeruginosa</i>	0	0	3	3	0	1	4	5	8
<i>Enterobacter aerogenes</i>	0	1	3	4	1	1	2	4	8
<i>E. coli</i>	0	0	2	2	0	0	0	0	2
<i>Klebsiella pneumoniae</i>	0	1	3	4	1	0	1	2	6
Others	0	1	1	2	0	0	2	2	4
Total No. (%)	0 (0)	3 (15)	17 (85)	20 (52.6)	2 (11.1)	3 (16.7)	13 (72.2)	18 (47.4)	38

Target and Actual Enrollment: Indonesia

	Target	Adjusted target*	Adjusted target* (culture+)	Actual (total)	Actual (culture+)
Jan	22				
Feb	44				
Mar	66				
Apr	88				
May	110				
Jun	132	28	15		
Jul	155	57	29		
Aug	178	85	43		
Sep	200	114	57	6	6
Oct		142	71		
Nov		171	85	30	27
Dec		200			

* Starting since the date when the first subject was enrolled.

Target and Actual Enrollment: Indonesia



Discussion points : Indonesia

- **IRB approval** : *One additional site approved and activated on Nov 10th (Pluit Hospital), 2 more sites are waiting approval (Royal Taruma and Gading Pluit Hospital)*
- **Enrollment of cases** :
 - Expected date, all centers activated: mid december (2 more sites)
 - Expected enrollment rate: *10 cases/month (from all activated sites)*
 - Expected date, last subject enrolled: *It will be difficult to meet 200 cases target → at the end of April will be maximum around 100 cases*
- **Sample transport** : *New regulation for isolates transport → MTA is difficult to be obtained .*
- **Communication with participating centers** : *no significant issue, also via ANSORP project manager and local JC*
- **Other issues** : *low incidence of eligible HAP/VAP cases ??*