

ANSORP Pneumococcus Project

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**

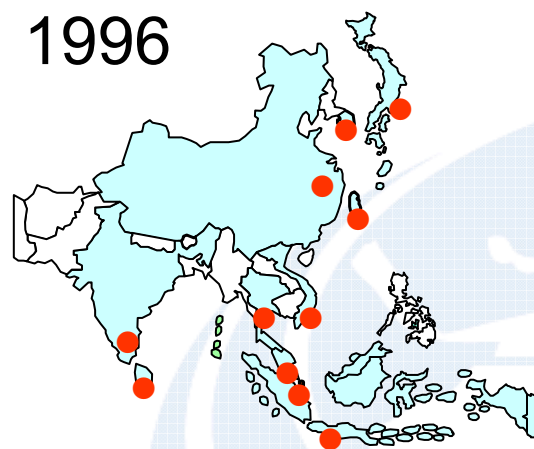
ANSORP Pneumococcus Project

Prospective, hospital-based, multinational surveillance on antimicrobial resistance and serotypes of *S. pneumoniae* and disease burden of pneumococcal infections in Asian countries in the era of pneumococcal conjugate vaccine

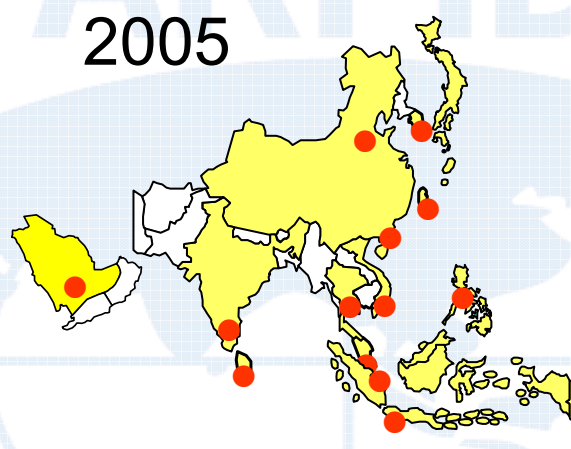
- Prospective, multicenter, hospital-based, active surveillance study on *S. pneumoniae* in Asian countries with focus on seroepidemiology and antimicrobial resistance
- Microbiologic evaluation and clinical analysis based on the review of the medical records



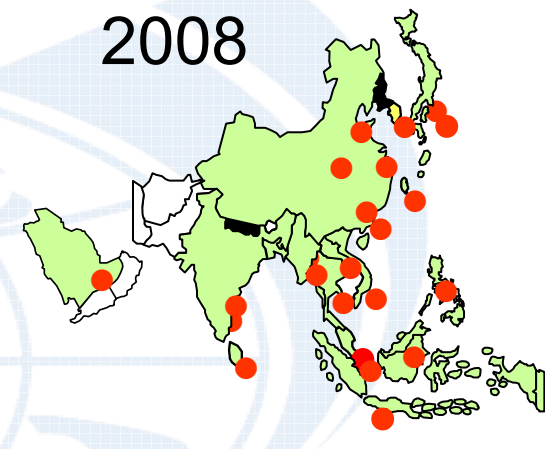
Current ANSORP Network



26 Investigators
14 Centers
11 Countries/areas



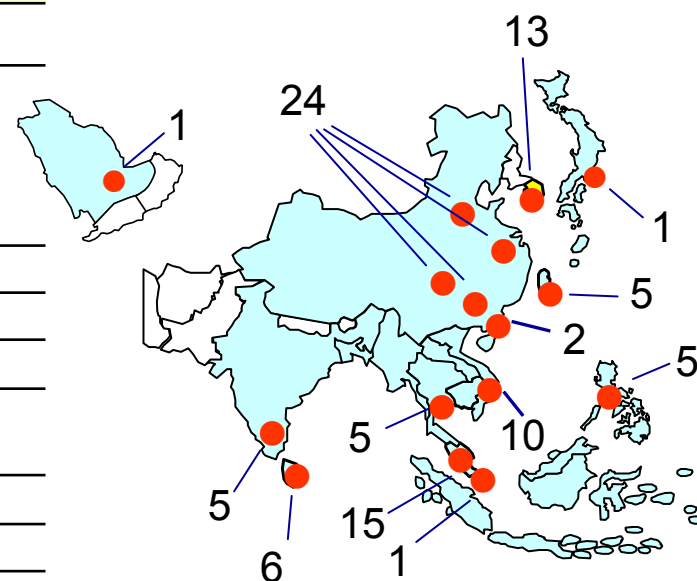
52 Investigators
33 Centers
13 Countries/areas



245 Investigators
140 Centers
14 Countries/areas

Participating Investigators and Centers

Country	Local organizer	Coordinating center	No. of centers	No. of investigators
Korea	Jae-Hoon Song	Samsung Medical Center	13	22
China	Hui Wang	Peking Union Medical College	9	15
	Yong Hong Yang	Beijing Children's Hospital	12	26
	Quan Lu	Shanghai Children's Hospital, Jiao-Tong University	3	9
Hong Kong	Thomas So	Princess Margaret Hospital	2	4
Taiwan	Po-Ren Hsueh	National Taiwan Univ. Hosp.	5	8
Thailand	Visanu Thamlikitkul	Siriraj Hospital	5	7
Philippines	Celia Carlos	Research Institute for Tropical Medicine	5	5
Malaysia	Rohani Yasin	Institute for Medical Research	15	38
Singapore	David Lye	Tan Tock Seng Hospital Singapore	1	12
India	M.K. Lalitha	Madras Medical Mission	5	5
Sri Lanka	Jennifer Perera	University of Colombo	5	5
Vietnam	Van Pham Hung	University of Medicine and Pharmacy	10	10
Japan	Nobuyuki Shimono	Kyushu University Graduate School of Medical Sciences	1	3
Saudi Arabia	Atef M. Shibl	King Saud University Hospital	1	2
TOTAL			92	171



171 Investigators
92 Centers
13 Countries



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

2:30 PM – 5:30 PM

Moderator : Jae-Hoon Song (Organizer, ANSORP)

02:30 pm – 02:45 pm Introduction Jae-Hoon Song (Organizer, ANSORP)

02:45 pm – 03:00 pm Overview of the Current Status of the Project

Doo-Ryeon Chung (Samsung Medical Center, Korea)

03:00 pm – 05:00 pm Presentation by all ANSORP Local Organizers

Korea So Hyun Kim (ARFID)

Hong Kong Thomas So (Princess Margaret Hospital)

Taiwan Po-Ren Hsueh (National Taiwan University Hospital)

Thailand Visanu Thamlikitkul (Siriraj Hospital)

India M. K. Lalitha (Madras Medical Mission)

Malaysia Rohani Md Yasin (Institute for Medical Research)

Sri Lanka Jennifer Perera (University of Colombo)

Saudi Arabia Atef Shibl (King Saud University Hospital)

05:00 pm – 05:30 pm Discussion All Participants

05:30 pm Closing Remarks Jae-Hoon Song (Organizer, ANSORP)

**Prospective, hospital-based, multinational surveillance
on antimicrobial resistance and serotypes of
Streptococcus pneumoniae and disease burden of
pneumococcal infections in Asian countries in the era of
pneumococcal conjugate vaccine**

Overview of the Current Status

**Investigator Meeting : November 28, 2008
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Aims of the study

- **Primary objectives**

- To investigate the **seroepidemiology of pneumococcal diseases** in Asian countries in the beginning of pneumococcal conjugate vaccine (PCV) era
- To investigate the current status in **antimicrobial resistance of *S. pneumoniae*** in Asian countries in the beginning of PCV era

Study period

February, 2008 ~ March, 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	13	13
China, Beijing-Adults	Wang Hui	9	9
Beijing-Pediatrics	Yong Hong Yang	12	12
Shanghai-Pediatrics	Shaoguang Huang	3	1*
Hong Kong	Thomas So	2	2
Taiwan	Po-Ren Hsueh	5	2
Thailand	Visanu Thamlikitkul	5	1
Singapore	Li Yang Hsu	1	0
Philippines	Celia Calros	5	5
Malaysia	Rohani Md Yasin	15	8
India	M.K. Lalitha	5	2
Sri Lanka	Jennifer Perera	5	4
Vietnam	Pham Hung Van	10	?
Japan	Nobuyuki Shimono	1	1
Saudi Arabia	Atef Shibl	1	1
TOTAL		92	61 + α (66%)

**Data as of June 30*



Enrollment status : Overview

(as of November 22)

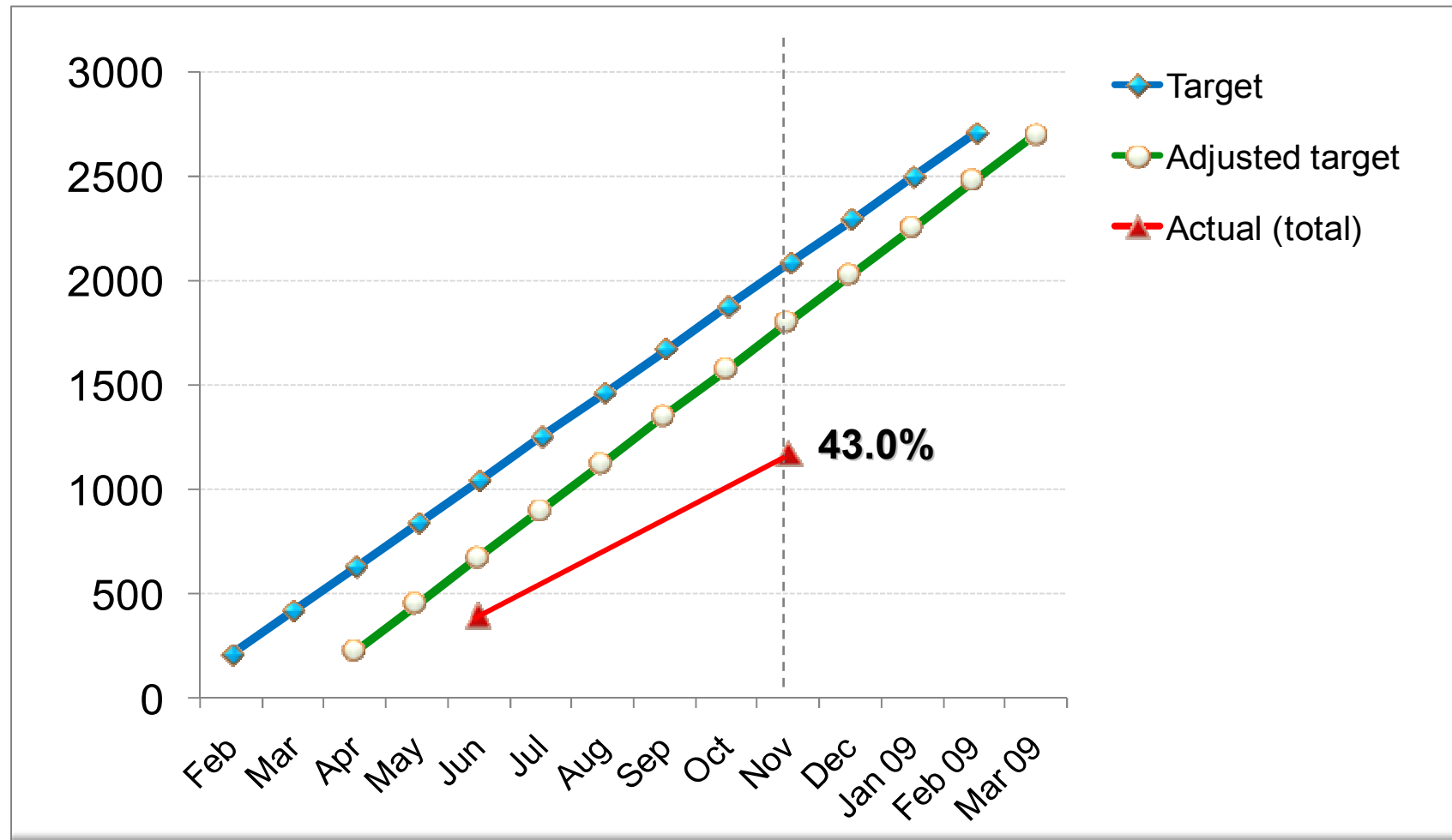
Country	Target No. of cases	Total No. of cases enrolled	%
Korea	400	173	43.3
China, Beijing-Adults	200	111	55.5
Beijing-Pediatrics	300	208	69.3
Shanghai-Pediatrics	100	10	10*
Hong Kong	100	152	152
Taiwan	200	259	130
Thailand	200	80	40
Singapore	50	0	0
Philippines	200	29	14.5
Malaysia	200	15	7.5
India	200	4	2
Sri Lanka	200	10	5
Vietnam	200	42	21
Japan	50	12	24
Saudi Arabia	100	56	56
TOTAL	2700	1161	43.0

*Data as of June 30



Enrollment status : Overview

(as of November 22)



Demographic and clinical characteristics : Overview

		% of cases
Age	Mean	23.7 yrs
	Median	61.0 yrs
	≤ 5 years	23.8%
Sex	Male	63.0%
Healthcare -associated factor	Yes	37.0%
	No	62.1%
	Unknown	0.9%
Previous use of antibiotics	Yes	38.3%
	No	47.6%
	Unknown	14.1%
Pneumococcal vaccination	Yes	1.3%
	No	39.2%
	Unknown	59.5%

**Data were analyzed using available CRFs of 227 from Korea (129), China-Beijing-Adult (75), Taiwan (16), Sri Lanka (7) as of November 22.*

Specimen source of the isolates: Overview

Country	Specimen source*										Total No.
	SP	CSF	BL	PL	AS*	SY	SN	ME	PUS	OT	
Korea	82 [†]	9 [†]	34 [†]	4 [†]	2	0	1	5	4 [†]	1	142 [†] (129)
China	74	0	1	0	0	0	0	0	0	0	75
Taiwan	12	0	1	0	0	0	0	0	3	0	16
Sri Lanka	1	0	5	0	0	0	0	1	0	0	7
Total No. of cases	169 [†]	9 [†]	41 [†]	4 [†]	2	0	1	6	7 [†]	1	240 [†] (227)
%	70.4	3.8	17.1	1.7	0.8	0	0.4	2.5	2.9	0.4	

* SP, sputum; CSF, CSF; BL, blood; PL, pleural fluid; AS, ascitic fluid; SY, synovial fluid; SN, sinus aspirate; ME, middle ear fluid; PUS, pus or open drainage; OT, others

[†] Some of *S. pneumoniae* isolates were cultured from more than two sources

Invasive isolates: 26.3%



Category of Infection: Overview

(as of November 22)

Country	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Korea	134	11	3	4	3	1	3	3	7	4	173
China	293	2	9	3	-	-	-	-	-	12	319 (+10)
Hong Kong	150	-	2	-	-	-	-	-	-	-	152
Taiwan	16	-	-	-	-	-	3	-	-	-	19 (+240)
Thailand											39
Singapore	-	-	-	-	-	-	-	-	-	-	0
Philippines	18	-	-	2	-	1	-	1	-	5	27 (+2)
Malaysia											15
India											4
Sri Lanka	5	-	4	-	-	-	-	-	1	-	10
Vietnam											42
Japan											12
Saudi Arabia	23	8	18	-	-	-	-	3	4	-	56
Total No. of cases (%)	639 (84.5)	21 (2.8)	36 (4.8)	9 (1.2)	3 (0.4)	2 (0.3)	6 (0.8)	7 (0.9)	12 (1.6)	21 (2.8)	756 (1120)

* PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others



Common regimen – initial empirical therapy : Overview

Antibiotic regimen	% of cases
Penicillins only	11.0
+ Cephalosporins +/- other agents	11.9
+ Quinolones +/- other agents	2.6
+ Macrolides +/- other agents	3.5
Cephalosporins only	18.1
+ Quinolones	2.6
+ Glycopeptides +/- other agents	4.8
+ Macrolides +/- other agents	15.0
Quinolones only	8.7
Macrolides only	1.8

**Data were analyzed using available CRFs of 227 from Korea (129), China-Beijing-Adult (75), Taiwan (16), Sri Lanka (7) as of November 22.*



Antimicrobial treatment outcome : Overview

	% of cases
Initial response (72 h after antimicrobial therapy)	
Improvement	74.0
Failure	15.4
Death - due to pneumonia	1.8
- due to other reason	0.4
30 day mortality	
Cure	81.9
Death - due to pneumococcal infection	3.5
- due to other reason	0.9
Fever duration** Mean	2.6 days
Median	2.0 days

**Data were analyzed using available CRFs of 227 from Korea (129), China-Beijing-Adult (75), Taiwan (16), Sri Lanka (7) as of November 22.*

*** N=135*



Serotypes of *S. pneumoniae* – PCV7 : Overview

Serotype	Korea (n=165)		Hong Kong (n=118)		Vietnam (n=42)		Taiwan (n=11)		Sri Lanka (n=7)		Total (n=343)	
	No. of isolates	%	No. of isolates	%	No. of isolates	%	No. of isolates	%	No. of isolates	%	No. of isolates	%
19F	28	17.5	27	22.1	11	25.0	6	46.2	2	28.6	74	21.6
23F	6	3.8	20	16.4	12	27.3	1	7.7	-	-	39	11.4
6B	10	6.3	10	8.2	3	6.8	1	7.7	2	28.6	26	7.6
14	11	6.9	8	6.6	3	6.8	1	7.7	2	28.6	25	7.3
9V	10	6.3	-	-	-	-	-	-	-	-	10	2.9
4	5	3.1	1	0.8	-	-	-	-	-	-	6	1.7
18C	1	0.6	3	5	-	-	-	-	-	-	4	1.2
Total	71	43.0	69	58.5	29	69.0	9	81.8	6	85.7	184	53.6

*Serotyping was performed using 343 isolates from Korea (165), Hong Kong (118), Taiwan (11), Vietnam (42), and Sri Lanka (7), which was submitted to the central lab as of October 31.



Serotypes of *S. pneumoniae* – Non-PCV7 : Overview

Serotype	Korea		Hong Kong		Vietnam		Taiwan		Sri Lanka		Total	
	No. of isolates	%	No. of isolates	%	No. of isolates	%	No. of isolates	%	No. of isolates	%	No. of isolates	%
1	1	0.6	-	-	1	2.3	-	-	-	-	2	0.6
3	7	4.4	1	0.8	-	-	1	7.7	-	-	9	2.6
5	1	0.6	-	-	-	-	-	-	-	-	1	0.3
7	2	1.3	1	0.8	-	-	-	-	-	-	3	0.9
6A	12	7.5	5	4.1	2	4.6	-	-	-	-	19	5.5
9A	-	-	-	-	-	-	-	-	-	-	0	0
9N	-	-	-	-	-	-	-	-	-	-	0	0
10	-	-	-	-	-	-	-	-	-	-	0	0
11	7	4.4	4	3.3	1	2.3	-	-	-	-	12	3.5
12	2	1.3	-	-	-	-	-	-	-	-	2	0.6
13/28	5	3.1	-	-	-	-	-	-	-	-	5	1.5
15	8	5.0	2	1.6	-	-	-	-	-	-	10	2.9
16.36.37	1	0.6	-	-	1	2.3	-	-	-	-	2	0.6
17	-	-	3	2.5	-	-	-	-	-	-	3	0.9
18B	-	-	-	-	1	2.3	-	-	-	-	1	0.3
19A	17	10.6	5	4.1	-	-	1	7.7	-	-	23	6.7
20	1	0.6	2	1.6	1	2.3	-	-	-	-	4	1.2
22	1	0.6	2	1.6	-	-	-	-	-	-	3	0.9
23A	3	1.9	-	-	-	-	-	-	-	-	3	0.9
23B	0	0	-	-	-	-	-	-	-	-	0	0
24.31.40	2	1.3	-	-	-	-	-	-	-	-	2	0.6
27.32.41	-	-	-	-	-	-	-	-	-	-	0	0
33	2	1.3	-	-	-	-	-	-	-	-	2	0.6
NT	22	8	24	19.7	6	13.6	-	-	1	14.3	53	15.5

*Serotyping was performed using 343 isolates from Korea (165), Hong Kong (118), Taiwan (11), Vietnam (42), and Sri Lanka (7), which was submitted to the central lab as of October 31.



Antimicrobial resistance in *S. pneumoniae* - Korea

	Susceptibility of isolates to antimicrobials (%)												
	PEN*	AMOX	AUG2	AXO	FUR	ERY	AZI	CLA	LEV	MOX	GAT	CLD	SXT
Resistant	1.2	2.9	8.6	1.7	66.7	79.3	77.0	72.4	4.1	1.2	4.1	70.8	53.2
MIC ₉₀ (n=157)	2	4	4 / 2	1	8	128	32	32	1	0.12	0.5	>32	>32/608
Intermediate	1.7	14.4	16.7	2.3	3.4	2.9	2.9	4.0	0.6	2.9	0.6	0.6	11.1
Susceptible	97.1	82.7	74.7	96.0	29.9	17.7	20.1	23.6	95.3	95.9	95.3	28.6	35.7

* MIC ≤2 µg/mL S
 4 µg/mL I
 ≥8 µg/mL R

In vitro antimicrobial susceptibility tests were performed using 171 isolates from Korea submitted to the central lab as of October 31.



Susceptibility of *S. pneumoniae* to tigecycline - Korea

	Concentration of tigecycline (µg/ml)			
	<0.03	0.06	0.12	0.25
No. of isolates	159	10	1	1
%	93.0	5.8	0.6	0.6

**In vitro antimicrobial susceptibility tests were performed using 171 isolates from Korea submitted to the central lab as of October 31.*



**Prospective, hospital-based, multinational surveillance
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pneumococcal infections in Asian countries in the era of
pneumococcal conjugate vaccine**

Korea



Investigator meeting : November 28, 2008
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Participating Centers : Korea

Total number of centers in Korea: 13

Target number of Pneumococcal cases in Korea: 400

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Seoul	K01	Samsung Medical Center	Jae-Hoon Song	Y	30
			Nam Yong Lee Kyong Ran Peck Doo Ryeon Chung Cheol-In Kang Yae Jean Kim Kwan Soo Ko		
Seoul	K03	Kangbuk Samsung Hospital	Joon-Sup Yeom	Y	6
Seoul	K11	Konkuk University Hospital	Hyun Kyun Ki	Y	3
Seoul	K04	Kyunghee University Hospital	Jun Seong Son	Y	7
Daejeon	K07	Chungnam National University Hospital	Yeon-Sook Kim	Y	13
Cheonan	K15	Dankook University Hospital	Ji-Young Rhee	Y	21
Gwangju	K08	Chonnam National University Hospital	Sook In Jung Kyung Hwa Park	Y	35
Daegu	K06	Kyungpook National University Hospital	Shin-Woo Kim Hyun Ha Chang	Y	4
Daegu	K16	Daegu Fatima Hospital	Ki Tae Kwon	Y	16
Daegu	K14	Keimyung University Dongsan Medical Center	Seong Yeol Ryu	Y	4
Busan	K05	Dong-A University Hospital	Hyuck Lee Dong Sik Jung	Y	2
Jinju	K17	Gyeongsang National University Hospital	Sang Taek Heo	Y	5
Jeju	K13	Cheju National University Hospital	Sang Yop Shin	Y	27

TOTAL NUMBER OF CASES ENROLLED (%) 173 (43.3)

Enrolled cases : Korea

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Samsung Medical Center	20	2	1	3	2	0	1	0	0	1	30
Kangbuk Samsung Hospital	1	0	0	1	1	0	0	2	1	0	6
Konkuk University Hospital	2	1	0	0	0	0	0	0	0	0	3
Kyunghee University Hospital	7	0	0	0	0	0	0	0	0	0	7
Chungnam National University Hospital	10	1	0	0	0	1	0	1	0	0	13
Dankook University Hospital	20	0	1	0	0	0	0	0	0	0	21
Chonnam National University Hospital	24	4	0	0	0	0	1	0	4	2	35
Kyungpook National University Hospital	4	0	0	0	0	0	0	0	0	0	4
Daegu Fatima Hospital	10	2	1	0	0	0	0	0	2	1	16
Keimyung University Dongsan Medical Center	3	1	0	0	0	0	0	0	0	0	4
Dong-A University Hospital	2	0	0	0	0	0	0	0	0	0	2
Gyeongsang National University Hospital	4	0	0	0	0	0	1	0	0	0	5
Cheju National University Hospital	27	0	0	0	0	0	0	0	0	0	27
Total No. of cases	134	11	3	4	3	1	3	3	7	4	173

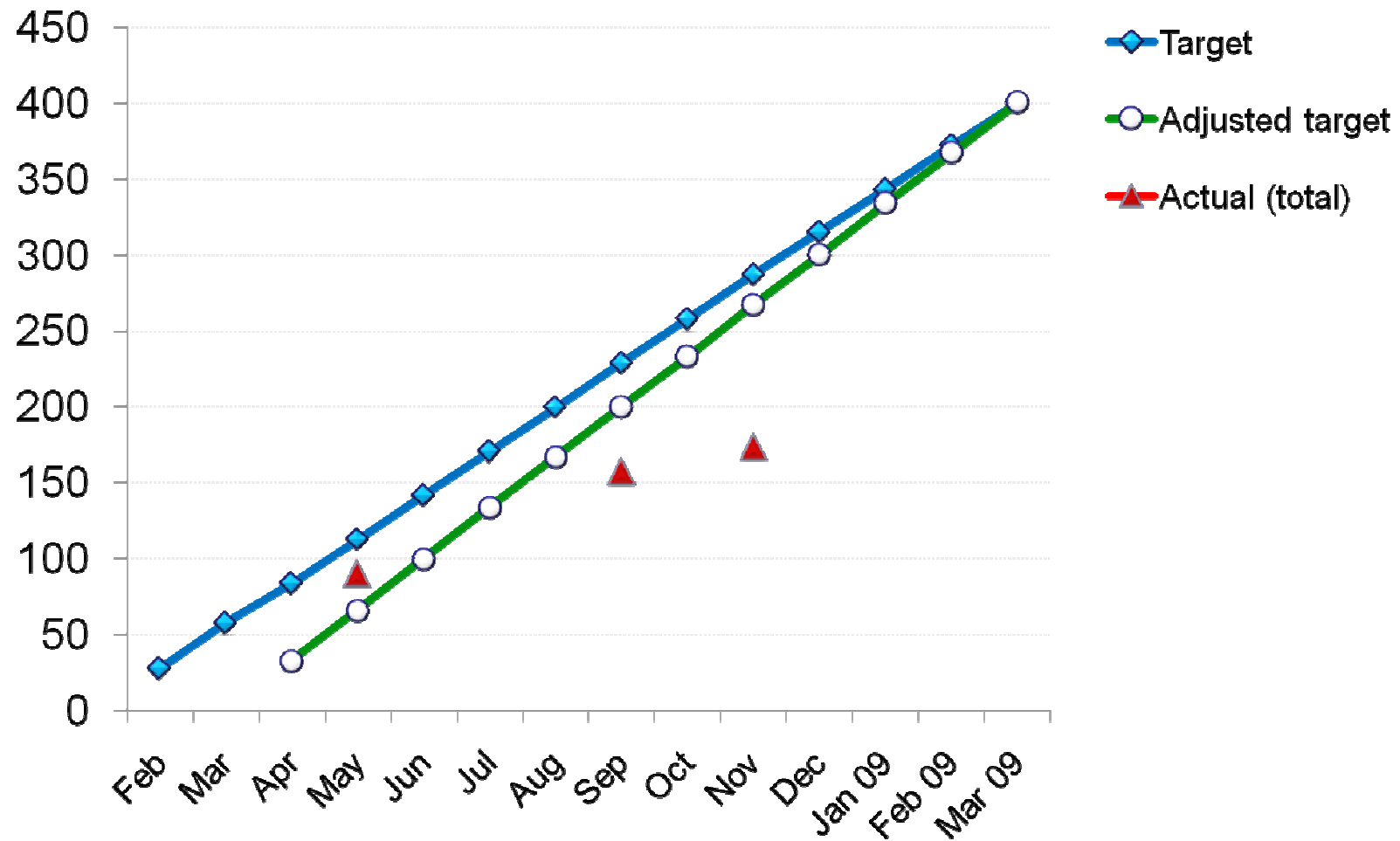
* *PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others*

Target and Actual Enrollment: Korea

	Target	Adjusted Target*	Actual
Feb	28		
Mar	58		
Apr	84	33	
May	113	66	90
Jun	142	100	
Jul	171	134	
Aug	200	167	
Sep	229	200	157
Oct	258	233	
Nov	287	267	173
Dec	315	300	
Jan 09	343	334	
Feb 09	372	367	
Mar 09	400	400	

* 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 : Delayed
 - 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

**Prospective, hospital-based, multinational surveillance
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pneumococcal conjugate vaccine**

China, Beijing-Adult Network



Investigator meeting : November 28, 2008
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Participating Centers : China, Beijing-Adult Network

Total number of centers in China, Beijing-Adult Network: 9

Target number of Pneumococcal cases in China, Beijing-Adult Network: 200

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Beijing	C-B05	Peking Union Medical College Hospital	Hui Wang	Y	22
Beijing	C-B02	Beijing Chaoyang Hospital (Capital University of Medical Sciences)	Bin Cao	Y	8
Beijing	C-B16	Beijing Hospital	Yunjian Hu Tieying Sun	Y	3
Guangzhou	C-B17	Guangzhou Institute of Respiratory Diseases	Rongchang Chen	Y	9
Hangzhou	C-B18	First Affiliated Hospital of College of Medicine, Zhejiang University	Yunsong Yu Jianying Zhou	Y	8
Hangzhou	C-B19	Second Affiliated Hospital of College of Medicine, Zhejiang University	Rong Zhang	Y	5
Wuhan	C-B20	Tongji Hospital of Tongji Medical College, Huazhong University of Sciences and Technology	Ziyong Sun Shengdao Xiong	Y	31
Shenyang	C-B21	Shengjing Hospital of China Medical University	Yong Liu Li Zhao	Y	18
Shenyang	C-B22	The First Hospital China Medical University	Yunzhuo Chu Baiyi Chen Xiaochun Ma	Y	7

TOTAL NUMBER OF CASES ENROLLED (%) 111(55.5)

Enrolled cases : China, Beijing-Adult Network

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Peking Union Medical College Hospital	21	-	-	-	-	-	-	-	-	1	22
Beijing Chaoyang Hospital (Capital University of Medical Sciences)	8	-	-	-	-	-	-	-	-	-	8
Beijing Hospital	3	-	-	-	-	-	-	-	-	-	3
Guangzhou Institute of Respiratory Diseases	9	-	-	-	-	-	-	-	-	-	9
First Affiliated Hospital of College of Medicine, Zhejiang University	8	-	-	-	-	-	-	-	-	-	8
Second Affiliated Hospital of College of Medicine, Zhejiang University	5	-	-	-	-	-	-	-	-	-	5
Tongji Hospital of Tongji Medical College, Huazhong University of Sciences and Technology	27	-	1	-	-	-	-	-	-	3	31
Shengjing Hospital of China Medical University	10	-	2	-	-	-	-	-	-	6	18
The First Hospital China Medical University	5	-	-	-	-	-	-	-	-	2	7
Total No. of cases	96	-	3	-	-	-	-	-	-	12	111

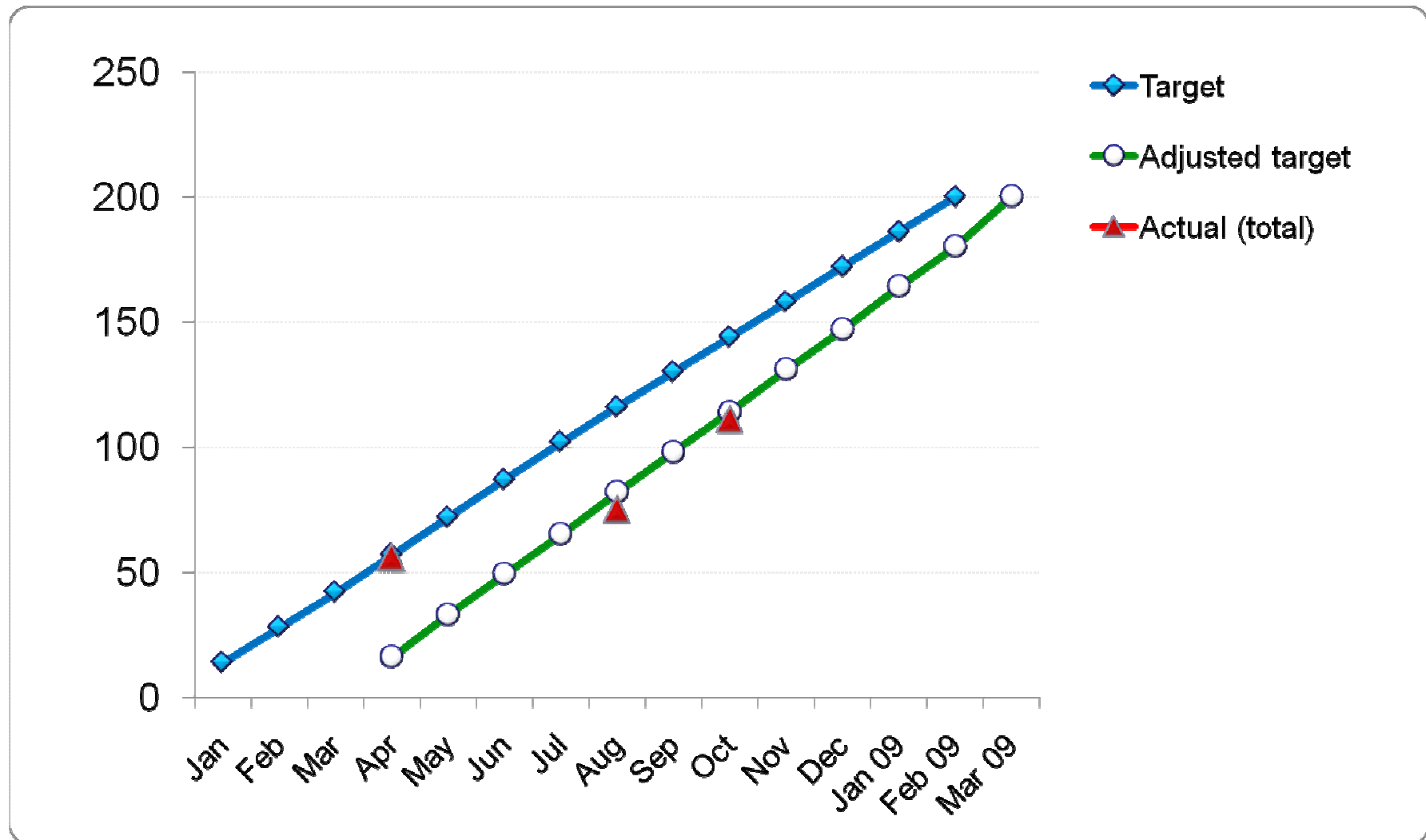
* *PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others*

Target and Actual Enrollment: China, Beijing-Adult Network

	Target	Adjusted Target*	Actual
Feb	14		
Mar	28		
Apr	42		
May	57	19	56
Jun	72	37	
Jul	87	55	
Aug	102	73	
Sep	116	91	75
Oct	130	109	
Nov	144	127	111
Dec	158	145	
Jan 09	172	163	
Feb 09	186	181	
Mar 09	200	200	

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: China, Beijing-Adult Network



Discussion points : China, Beijing-Adult Network

- IRB approval :
- Enrollment of cases :
 - Expected date, all centers activated: June,2008
 - Expected enrollment rate: 20 cases/month
 - Expected date, last subject enrolled: Mar, 2009
- Sample transport : Feb 2009
- Communication with participating centers : yes
- Other issues :

**Prospective, hospital-based, multinational surveillance
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China, Beijing-Pediatric Network



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Participating Centers : China, Beijing-Pediatric Network

Total number of centers in China-Beijing Pediatric Network: 12

Target number of Pneumococcal cases in China-Beijing Pediatric Network: 300

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Beijing	C-B01	Beijing Children's Hospital	Yonghong Yang	Yes	26
			Xuzhuang Shen Sangjie Yu Kaihu Yao Yinghui Hu		
Shanghai	C-B07	Pediatric Hospital of Fudan University	Libo Wang Chuangqing Wang	Yes	26
Guangzhou	C-B08	Guangzhou Children's Hospital	Li Deng Qiulian Deng	Yes	0
Chongqing	C-B06	Chongqing Children's Hospital (Chongqing University Medical Sciences)	Yuan Chen Ying Huang Lan Liu	Yes	21
Beijing	C-B09	Capital Institute of Pediatrics	Huizhong Chen Luoping Wang	Yes	12
Hefei	C-B10	Anhui Medical University Affiliated Hospital	Yating Wang Yuanghong Xu	Yes	15
Nanjing	C-B11	Nanjing Children's Hospital (Nanjing University of Medical Sciences)	Deyu Zhao Huiyun Wang	Yes	21
Shenyang	C-B12	Shengjing Hospital Affiliated to China Medical University	Yunxiao Shang Yong Liu	Yes	23
Chengdu	C-B13	Chengdu Children's Hospital	Cilin Wang	Yes	10
Wulumuqi	C-B14	First Affiliated Hospital of Xinjiang Medical University	Peiru Xu Ping Ji	Yes	16
Suzhou	C-B15	Suzhou University Pediatric Hospital	Wei Ji Yunfang Ding	Yes	11
Shenzhen	C-B28	Shenzhen Children's Hospital	Yuejie Zheng	Yes	27

TOTAL NUMBER OF CASES ENROLLED (%) 208 (69.3)

Enrolled cases : China, Beijing-Pediatric Network

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Beijing Children's Hospital	25	-	-	1	-	-	-	-	-	-	26
Pediatric Hospital of Fudan University	22	1	1	2	-	-	-	-	-	-	26
Guangzhou Children's Hospital	-	-	-	-	-	-	-	-	-	-	0
Chongqing Children's Hospital (Chongqing University Medical Sciences)	20	-	1	-	-	-	-	-	-	-	21
Capital Institute of Pediatrics	12	-	-	-	-	-	-	-	-	-	12
Anhui Medical University Affiliated Hospital	14	-	-	-	-	-	-	-	-	-	15
Nanjing Children's Hospital (Nanjing University of Medical Sciences)	21	-	-	-	-	-	-	-	-	-	21
Shengjing Hospital Affiliated to China Medical University	20	1	2	-	-	-	-	-	-	-	23
Chengdu Children's Hospital	10	-	-	-	-	-	-	-	-	-	10
First Affiliated Hospital of Xinjiang Medical University	16	-	-	-	-	-	-	-	-	-	16
Suzhou University Pediatric Hospital	11	-	-	-	-	-	-	-	-	-	11
Shenzhen Children's Hospital	26	-	1	-	-	-	-	-	-	-	27
Total No. of cases	197	2	6	3	-	-	-	-	-	-	208

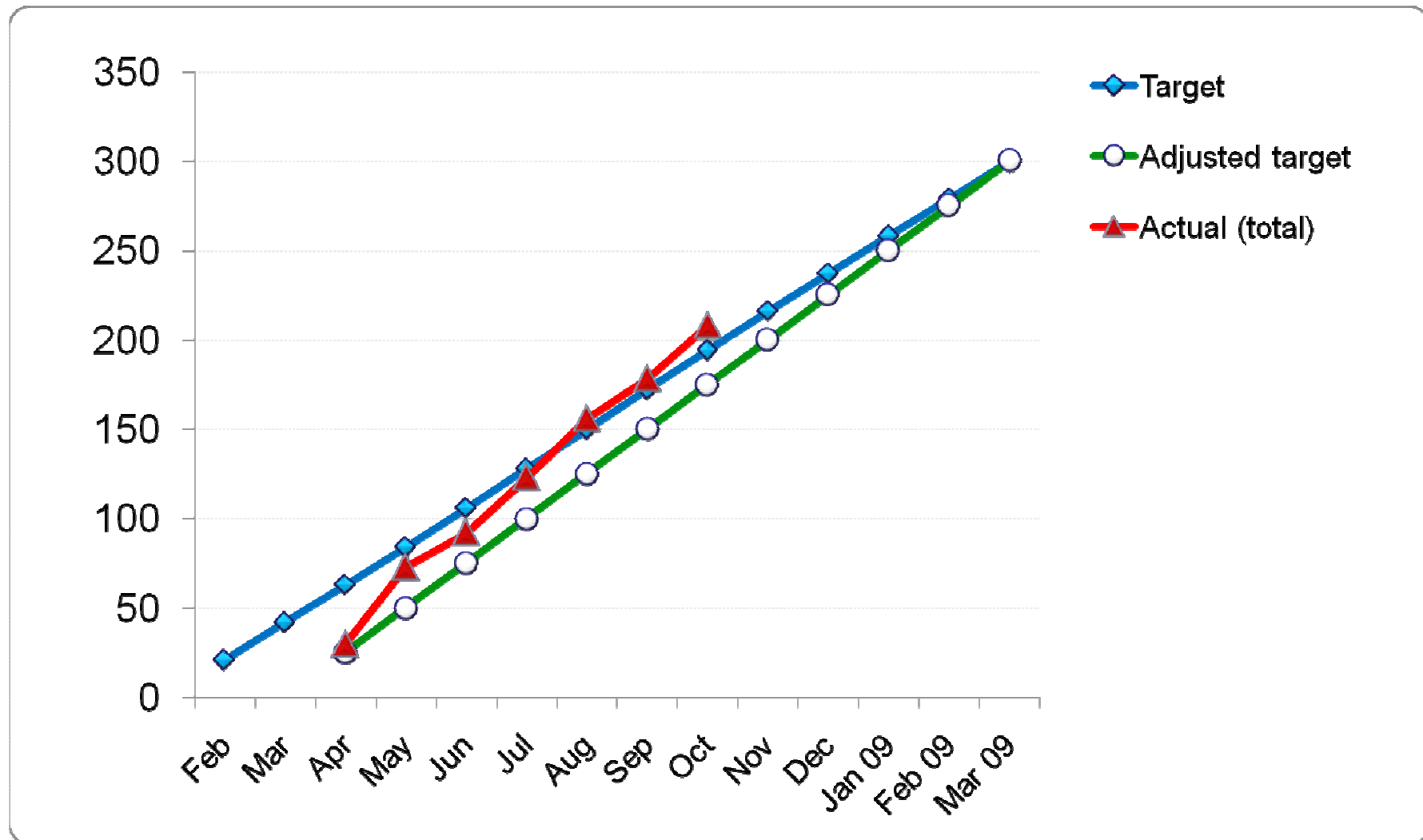
* *PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others*

Target and Actual Enrollment: China, Beijing-Pediatric Network

	Target	Adjusted Target*	Actual
Feb	21		
Mar	42		
Apr	63	25	30
May	84	50	73
Jun	106	75	92
Jul	128	100	123
Aug	150	125	156
Sep	172	150	178
Oct	194	175	208
Nov	216	200	
Dec	237	225	
Jan 09	258	250	
Feb 09	279	275	
Mar 09	300	300	

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: China, Beijing-Pediatric Network



Discussion points : China, Beijing-Pediatric Network

- IRB approval :
- Enrollment of cases :
 - Expected date, all centers activated:
 - Expected enrollment rate: cases/month
 - Expected date, last subject enrolled: 300
- Sample transport :
- Communication with participating centers :
- Other issues :

**Prospective, hospital-based, multinational surveillance
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pneumococcal conjugate vaccine**

China, Shanghai-Pediatric Network



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

Participating Centers : China, Shanghai-Pediatric Network

Total number of centers in China-Shanghai Pediatric Network: 3

Target number of Pneumococcal cases in China-Shanghai Pediatric Network: 100

(as of June 30)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Shanghai	C-S03	Shanghai Children's Hospital, Jiao-Tong University	Quan Lu	Y	10
			Min Lu Yan Wang Hong Zhang		
Shanghai	C-S36	Shanghai Children's Medical Center, Jiao-Tong University	Yun-fang Zhou Pei Zhang	N	0
Shanghai	C-S37	Shanghai Xinghua Hospital	Jian-xing Zhu Li-juan Xie Ying Liu	N	0
TOTAL NUMBER OF CASES ENROLLED (%)					10 (10.0)

Enrolled cases : China, Shanghai-Pediatric Network

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Shanghai Children's Hospital, Jiao-Tong University											10
Shanghai Children's Medical Center, Jiao-Tong University	-	-	-	-	-	-	-	-	-	-	-
Shanghai Xinghua Hospital	-	-	-	-	-	-	-	-	-	-	-
Total No. of cases											10

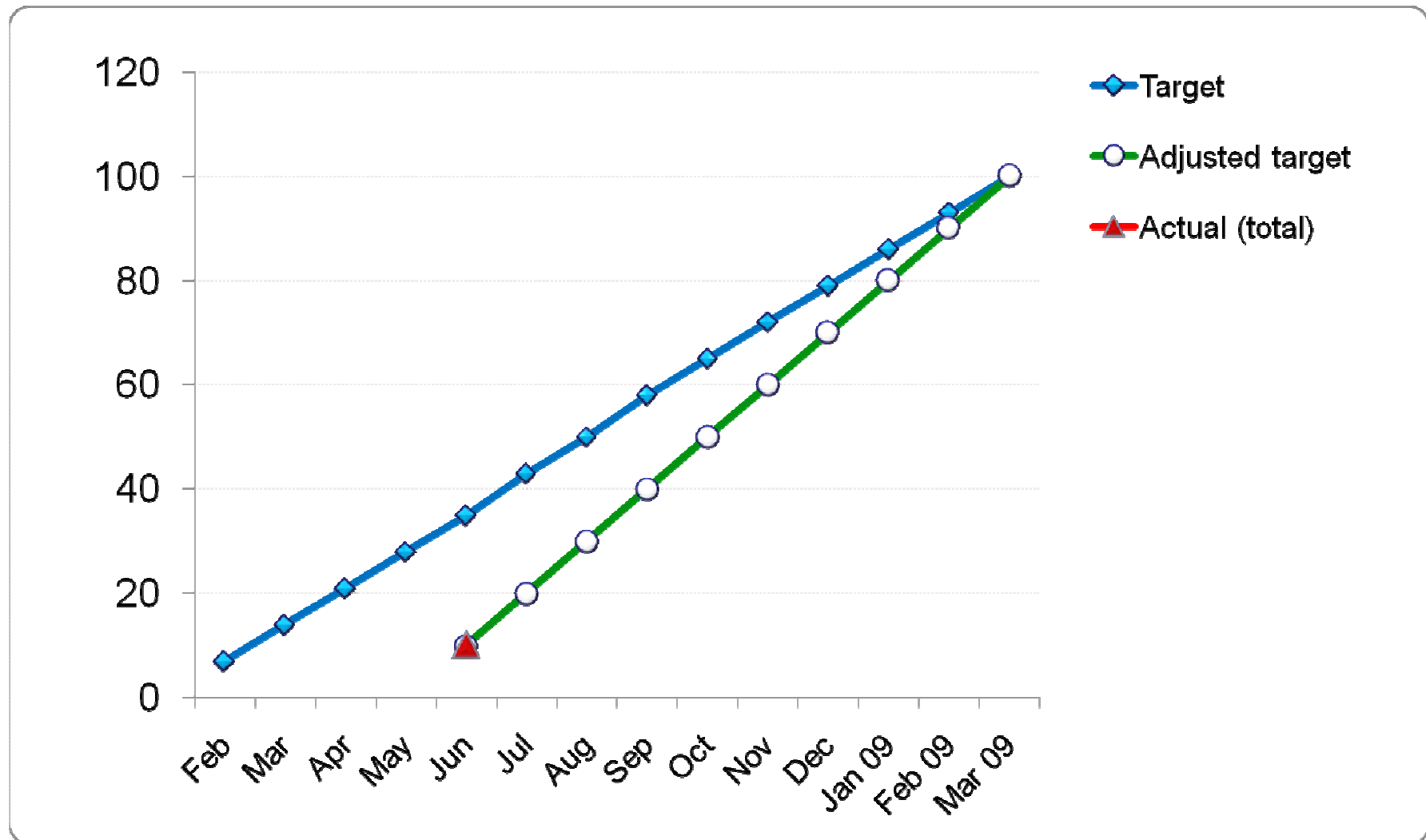
* PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others

Target and Actual Enrollment: China, Shanghai-Pediatric Network

	Target	Adjusted Target*	Actual
Feb	7		
Mar	14		
Apr	21		
May	28		
Jun	35	10	10
Jul	43	20	
Aug	50	30	
Sep	58	40	
Oct	65	50	
Nov	72	60	
Dec	79	70	
Jan 09	86	80	
Feb 09	93	90	
Mar 09	100	100	

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: China, Shanghai-Pediatric Network



Discussion points : China, Shanghai-Pediatric Network

- 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 :

**Prospective, hospital-based, multinational surveillance
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pneumococcal conjugate vaccine**

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 Pneumococcal cases in Hong Kong: 100

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Hong Kong	HK01	Princess Margaret Hospital	Thomas So	Y	100[66]
			Tak Keung Ng		
			Wing-kin To		
Hong Kong	HK02	Yan Chai Hospital	Wai-keung Kwan	Y	52[34]
TOTAL NUMBER OF CASES ENROLLED (%)					152

Enrolled cases : Hong Kong

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Princess Margaret Hospital	98	-	2	-	-	-	-	-	-	-	100
Yan Chai Hospital	52	-	-	-	-	-	-	-	-	-	52
Total No. of cases	152	-	2	-	-	-	-	-	-	-	152

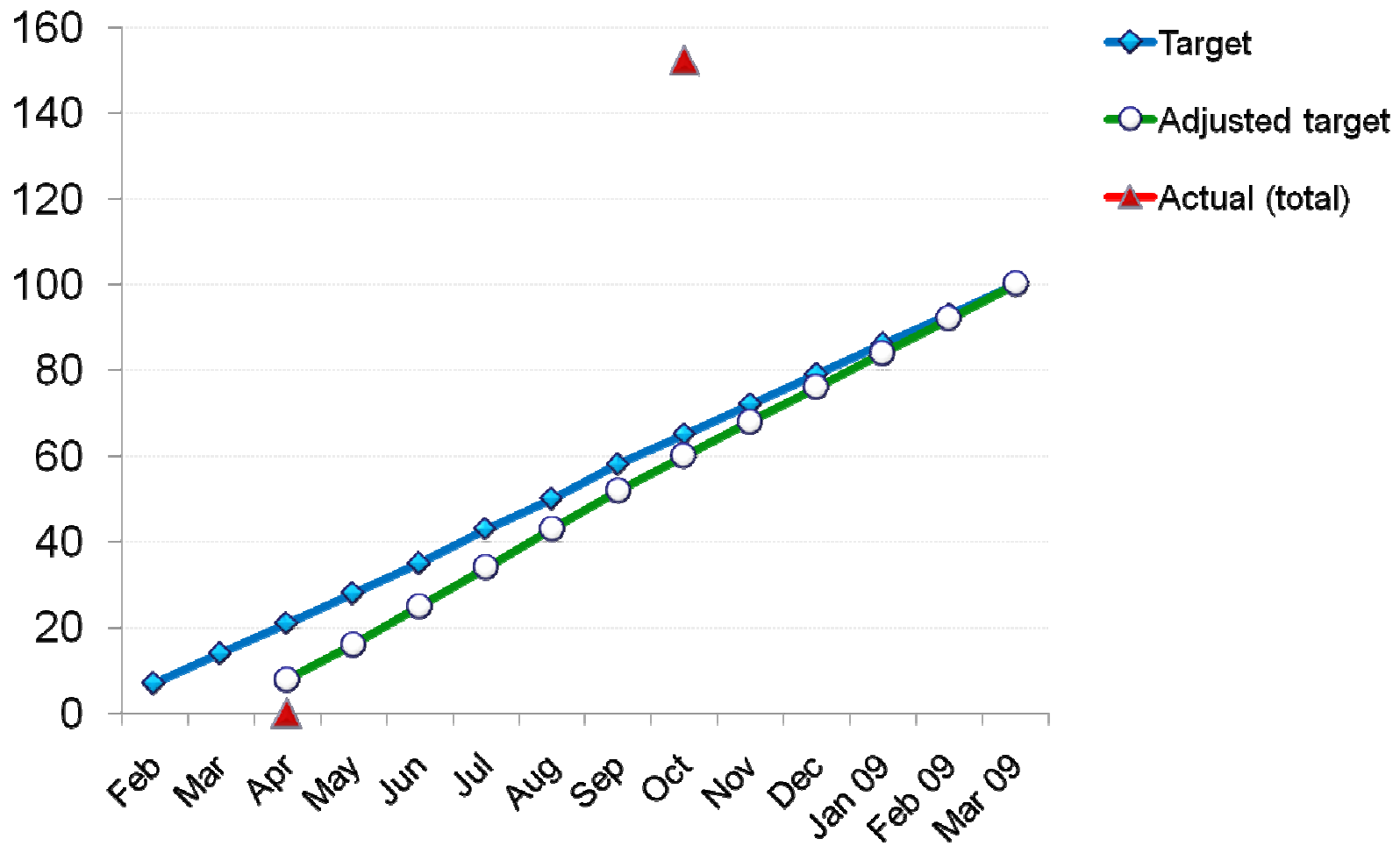
* *PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others*

Target and Actual Enrollment: Hong Kong

	Target	Adjusted Target*	Actual
Feb	7		
Mar	14		
Apr	21	8	Start
May	28	16	
Jun	35	25	
Jul	43	34	
Aug	50	43	
Sep	58	52	
Oct	65	60	152
Nov	72	68	
Dec	79	76	
Jan 09	86	84	
Feb 09	93	92	
Mar 09	100	100	?250

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: Hong Kong



Discussion points : Hong Kong

- IRB approval : 10 March 2008
- Enrollment of cases :
 - All centers activated: since 10 Apr 2008
 - Expected enrollment rate: 20-30 cases/month
 - Expected date of last subject enrolled: ~ 250 in a 12 month period, i.e. by April 2009
- Sample transport : ~ 120 isolates sent to central lab in mid October 2008
- Communication with participating centers : good

**Prospective, hospital-based, multinational surveillance
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Taiwan



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

Participating Centers : Taiwan

Total number of centers in Taiwan: 5

Target number of Pneumococcal cases in Taiwan: 200

(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	240
Taoyuan	TW02	Chang-Gung Memorial Hospital (Chang Gung Children's Hospital)	Cheng-Hsun Chiu Lin-Hui Su Ping-Cherng Chiang	Y	19
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

TOTAL NUMBER OF CASES ENROLLED (%) 259 (129.5)

Enrolled cases : Taiwan

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
National Taiwan University Hospital	-	-	-	-	-	-	-	-	-	-	240
Chang-Gung Memorial Hospital (Chang Gung Children's Hospital)	16	0	0	0	0	0	3	0	0	0	19
Kaohsiung Chang Gung Memorial Hospital	-	-	-	-	-	-	-	-	-	-	-
National Cheng Kung University Hospital	-	-	-	-	-	-	-	-	-	-	-
Chung-ho Memorial Hospital, Kaohsiung Medical University	-	-	-	-	-	-	-	-	-	-	-
Total No. of cases	16	0	0	0	0	0	3	0	0	0	19 (259)

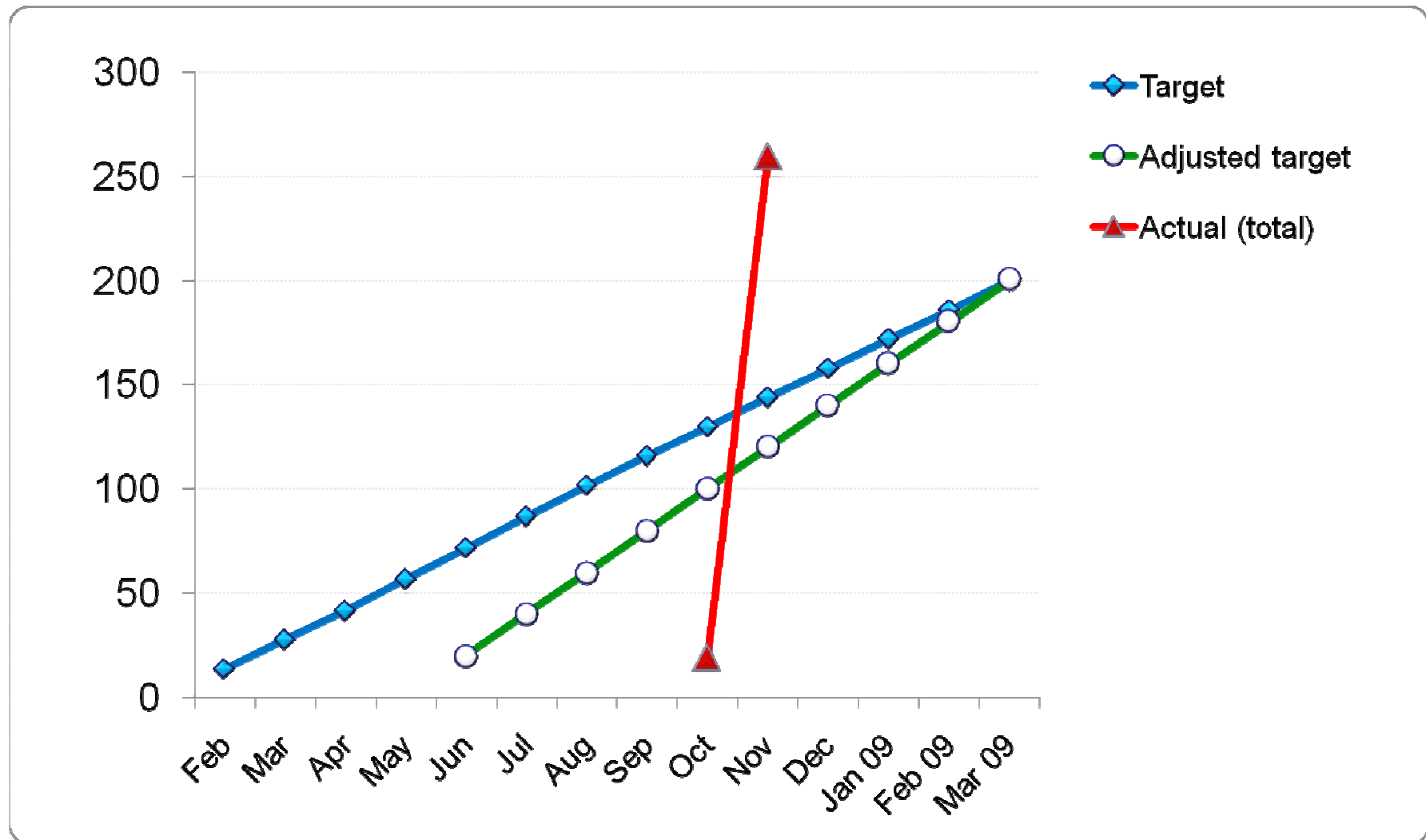
* PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others

Target and Actual Enrollment: Taiwan

	Target	Adjusted Target*	Actual
Feb	14		
Mar	28		
Apr	42		
May	57		
Jun	72	20	
Jul	87	40	
Aug	102	60	
Sep	116	80	
Oct	130	100	19
Nov	144	120	259
Dec	158	140	
Jan 09	172	160	
Feb 09	186	180	
Mar 09	200	200	

* Starting since the date when the first subject 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 :

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Thailand

Visanu Thamlikitkul

Siriraj Hospital, Bangkok

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

Thailand : Participating Centers

Total number of centers in Thailand: 5

Target number of Pneumococcal cases in Thailand: 200

(as of October 31)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Bangkok	01	Siriraj Hospital	Visanu Thamlikitkul Pattarachai Kiratisin	Y	80
Bangkok	02	Chulalongkorn University Hospital	Anan Chongthaleong Chanchai Sittipunt		
Khon Kaen	03	Khon Kaen Univerity Hospital	Piroon Mootsikapun		
Chiang Mai	04	Chiang Mai University Hospital	Prasit Tharavichitkul		
Songkla	05	Songkla University Hospital (Prince of Songkla University)	Sarayut Lucien Geater		

TOTAL NUMBER OF CASES ENROLLED **80**
(40%)

Thailand : Enrolled cases

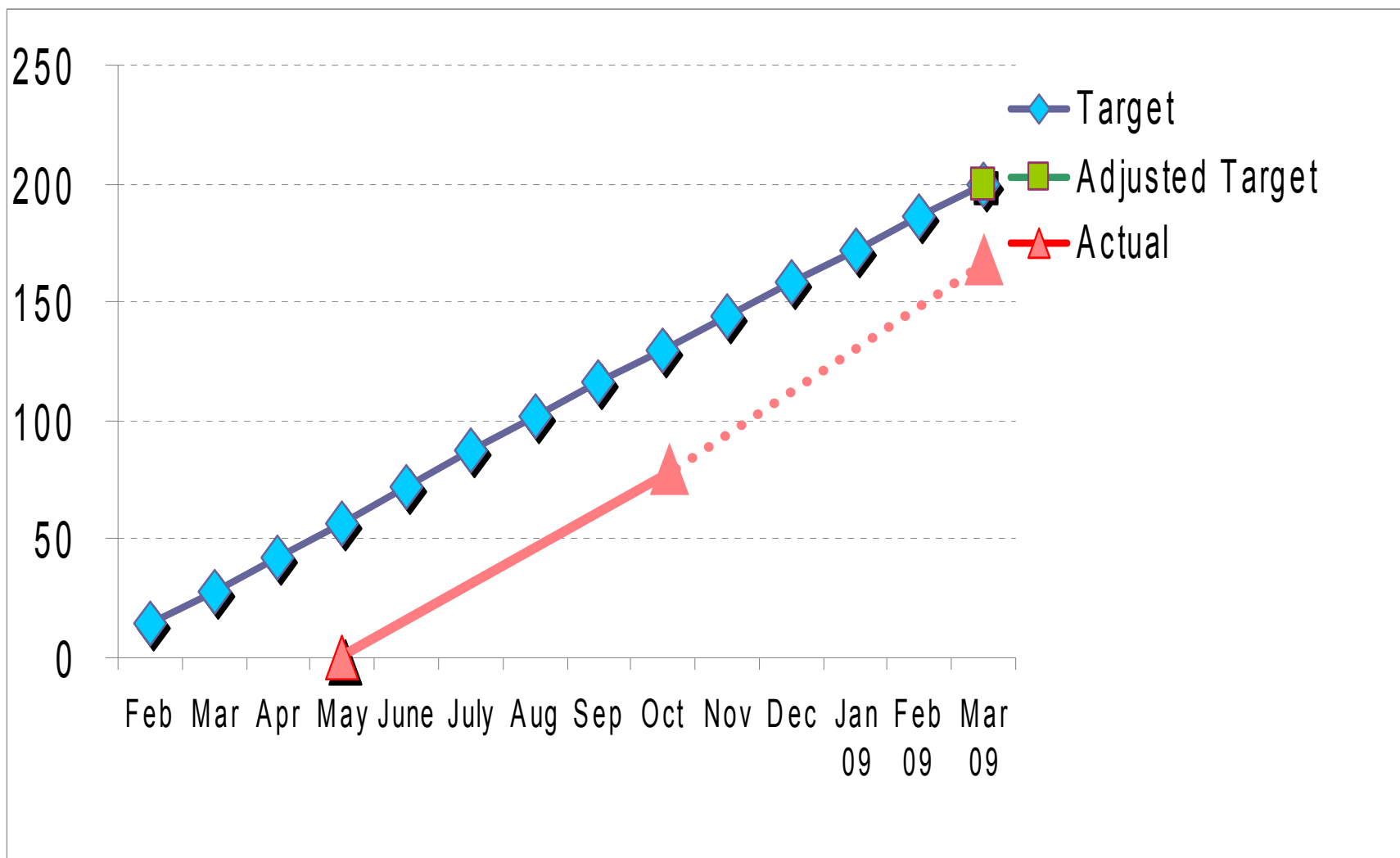
Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Siriraj Hospital	40	2	19				2	6	6	5	80
Chulalongkorn University Hospital											
Khon Kaen Univerity Hospital											
Chiang Mai University Hospital											
Songkla University Hospital											
Total No. of cases											80

* PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others

Thailand : Target and Actual Enrollment

Month	Target	Adjusted Target	Actual
Feb	14		
Mar	28		
Apr	42		
May	57		
Jun	72	20	39
Jul	87	40	
Aug	102	60	
Sep	116	80	
Oct	130	100	80
Nov	144	120	
Dec	158	140	
Jan 09	172	160	
Feb 09	186	180	
Mar 09	200	200	E ~ 160

Thailand : Target and Actual Enrollment



Thailand : Discussion points

- **IRB approval : OK**
- **Enrollment of cases :**
 - **Expected date, all centers activated: NA**
 - **Expected enrollment rate: 10 - 20 cases/month**
 - **Expected date, last subject enrolled: March 2009**
- **Sample transport : None**
- **Communication with participating centers : NA**
- **Other issues : Some cases do not have isolates**

**Prospective, hospital-based, multinational surveillance
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pneumococcal conjugate vaccine**

Philippines



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

Participating Centers : Philippines

Total number of centers in Philippines: 5

(as of November 23)

Target number of Streptococcus pneumoniae cases in Philippines: 200

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	Sullian Naval	Y	5
Pasig	P03	The Medical City	Mediadora Sanieel	Y	13
Davao	P05	Davao Medical Center	Joanne Lobo	Y	1
Cebu City	P06	Vicente Sotto Memorial Hospital	Consuelo Malaga	Y	10
TOTAL NUMBER OF CASES ENROLLED (%)					29 (14.5)

Enrolled cases : Philippines

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Research Institute for Tropical Medicine											
The Lung Center of the Philippines	4										4
The Medical City	8					1		1			13 (not yet complete, 3 CRFs to follow)
Davao Medical Center										1	1
Vicente Sotto Memorial Hospital	6			2						4	10
Total No. of cases											29

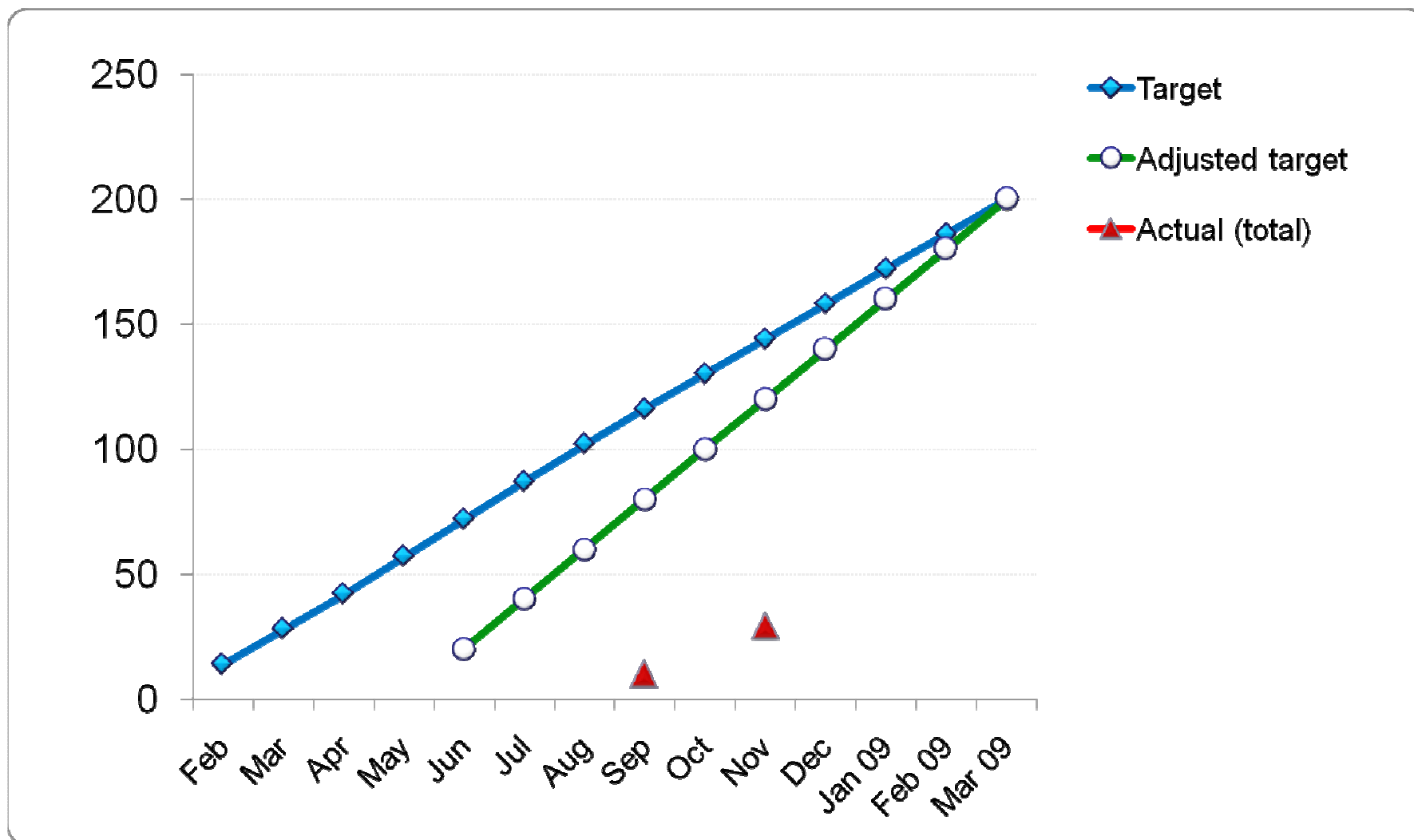
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Target and Actual Enrollment: Philippines

	Target	Adjusted Target*	Actual
Feb	14		
Mar	28		
Apr	42		
May	57		
Jun	72	20	
Jul	87	40	
Aug	102	60	
Sep	116	80	10
Oct	130	100	
Nov	144	120	29
Dec	158	140	
Jan 09	172	160	
Feb 09	186	180	
Mar 09	200	200	

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: Philippines



Discussion points : Philippines

- IRB approval : approval obtained from all site
- Enrollment of cases :
 - Expected date, all centers activated: July 16, 2008
 - Expected enrollment rate: cases/month
 - Expected date, last subject enrolled: hard to predict
- Sample transport : first batch on Nov. 26, 2008
- Communication with participating centers : more difficult to coordinate with sites outside of Metro Manila
- Other issues : Some laboratories do not use selective media for *Streptococcus pneumoniae* such as gentamicin blood agar plate which lowers the likelihood of identifying the organism

**Prospective, hospital-based, multinational surveillance
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Malaysia



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

Participating Centers : Malaysia

Total number of centers in Malaysia: 15

Target number of HAP/VAP cases in Malaysia: 200

(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	-	-
Serdang	M02	Universiti Putra Malaysia	Farida Jamal	N	0
Kuala Lumpur	M01	University Malaya Medical Centre	Adeeba Kamarulzaman Sasheela Vanar Rina Karunakaran	Y	0
Petraling Jaya	M05	Monash University Malaysia, School of Medicine and Health Sciences	Navaratnam Parasakthi	N	0
Kuala Lumpur	M06	Hospital Kuala Lumpur	Dato' Jeyaindran Sinnadurai Paras Doshi Shanti Rudra Deva Mohamad Nazri Aziz	Y	0
Seremban	M07	Hospital Seremban	Tan Kah Kee Abd. Jalil Mohamed	Y	0
Pulau Pinang	M08	Hospital Pulau Pinang	Dato' Abdul Razak Abdul Multalib Lean Chung Yee Dr. Nor Iza Abd Rahman Mohamad Azmi	N	0
Kelantan	M09	Hospital Kota Bharu	Mahiran Mustafa Nurahan Binti Maning Shaiful Azman Zakaria	Y	0
Ipoh	M10	Hospital Ipoh	Sabrina Sabihah Zahari	N	0
Kuching	M11	Hospital Sumum Sarawak	Patrick Guda a/l Benjamin	N	0

Participating Centers : Malaysia

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Sungai Buloh, Selangor	M12	Hospital Sungai Buloh	Christopher Lee Anuradha a/p Radhakrishnan Shanti a/p Ratnam Zubaidah Abdul Wahab Ariza Adnan	Y	8*
Pulau Pinang	M13	Hospital Queen Elizabeth	Lily Ng Timothy William Kausalia a/p Chinnaiah Azura Hussin	N	
Kuala Lumpur	M14	Hospital Selayang	Salbiah Hj Naw	Y	7
Kuala Lumpur	M15	University Kebansaan Medical Center	Nordiah awing Jalil	N	
Johor Bahru	M16	Hospital Sultanah Aminah	Dato' Subramaniam Balan Chua Hoch Hin Tan Cheng Cheng Ganeswrie Raj	Y	0
TOTAL NUMBER OF CASES ENROLLED (%)					15 (7.5)

Enrolled cases : Malaysia

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Institute for Medical Research	-	-	-	-	-	-	-	-	-	-	-
Universiti Putra Malaysia											
University Malaya Medical Centre											
Monash University Malaysia, School of Medicine and Health Sciences											
Hospital Kuala Lumpur											
Hospital Seremban											
Hospital Pulau Pinang											
Hospital Kota Bharu											

* *PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others*

Enrolled cases : Malaysia

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Hospital Ipoh											
Hospital Sumum Sarawak											
Hospital Sungai Buloh											8
Hospital Queen Elizabeth											
Hospital Selayang	3	-	3	-	-	-	-	-	-	1	7
University Kebansaan Medical Center											
Hospital Sultanah Aminah											
Total No. of cases	3	-	3	-	-	-	-	-	-	1	7 (15)

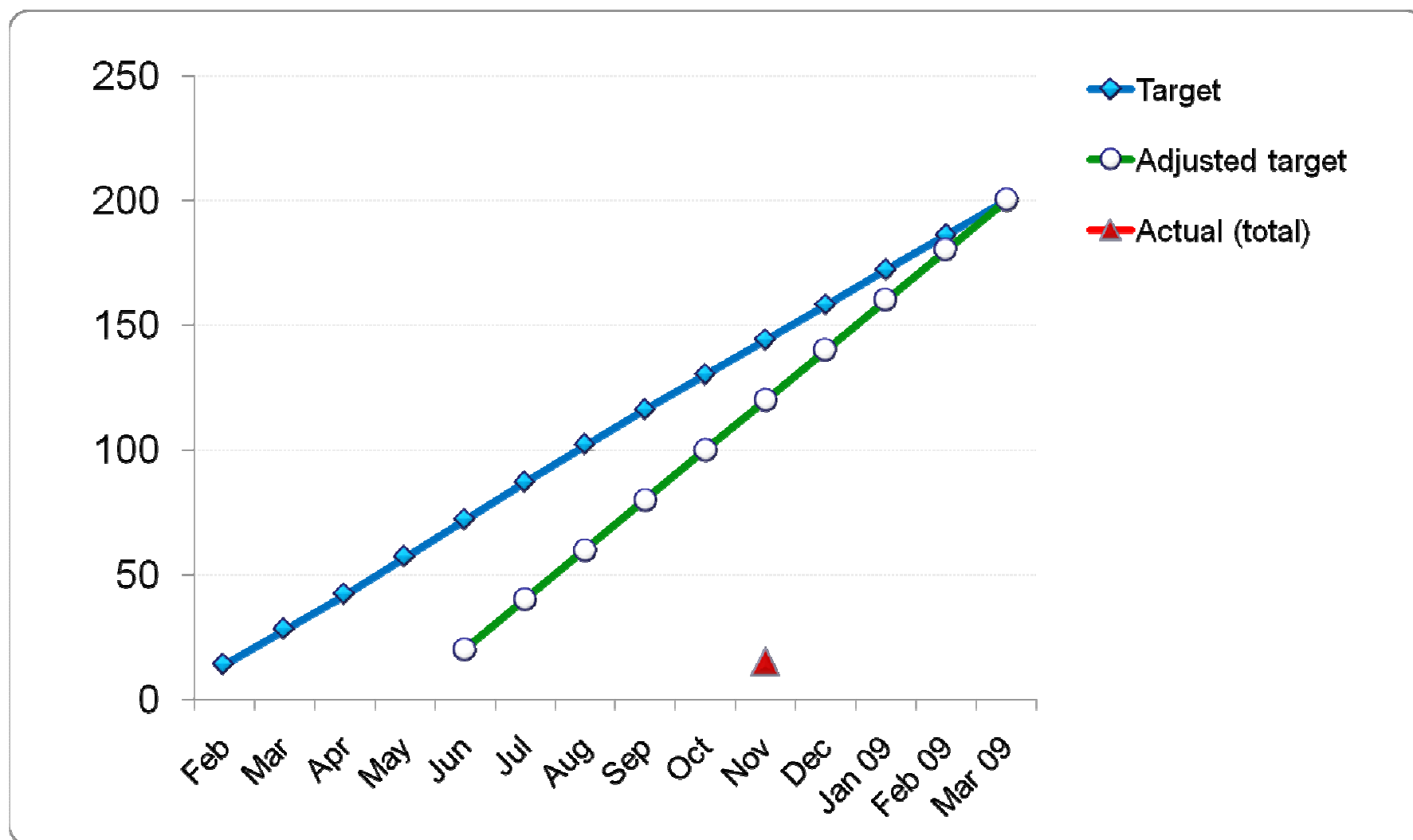
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Target and Actual Enrollment: Malaysia

	Target	Adjusted Target*	Actual
Feb	14		
Mar	28		
Apr	42		
May	57		
Jun	72	20	
Jul	87	40	
Aug	102	60	
Sep	116	80	
Oct	130	100	
Nov	144	120	15
Dec	158	140	
Jan 09	172	160	
Feb 09	186	180	
Mar 09	200	200	

* Starting since the date when the first subject 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 :

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India



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

Participating Centers : India

Total number of centers in India: 5

(as of November 14)

Target number of Pneumococcal cases in India: 200

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Chennai	I01	Madras Medical Mission	M.K. Lalitha	-	-
Chennai	I02	Apollo Hospital Chennai	M.A. Thiruranayaranan	N	0
New Delhi	I13	Sir Gangaram Hospital	Chand Wattal	N	0
Chennai	I14	Institute of Child Health	Saradha Suresh	N	0
Hyderabad	I15	Global Hospital	Ranganathan Iyer	Y	4
TOTAL NUMBER OF CASES ENROLLED (%)					4 (2.0)

Enrolled cases : India

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Madras Medical Mission	-	-	-	-	-	-	-	-	-	-	-
Apollo Hospital Chennai	-	-	-	-	-	-	-	-	-	-	-
Sir Gangaram Hospital	-	-	-	-	-	-	-	-	-	-	-
Institute of Child Health	-	-	-	-	-	-	-	-	-	-	-
Global Hospital											4
Total No. of cases											4

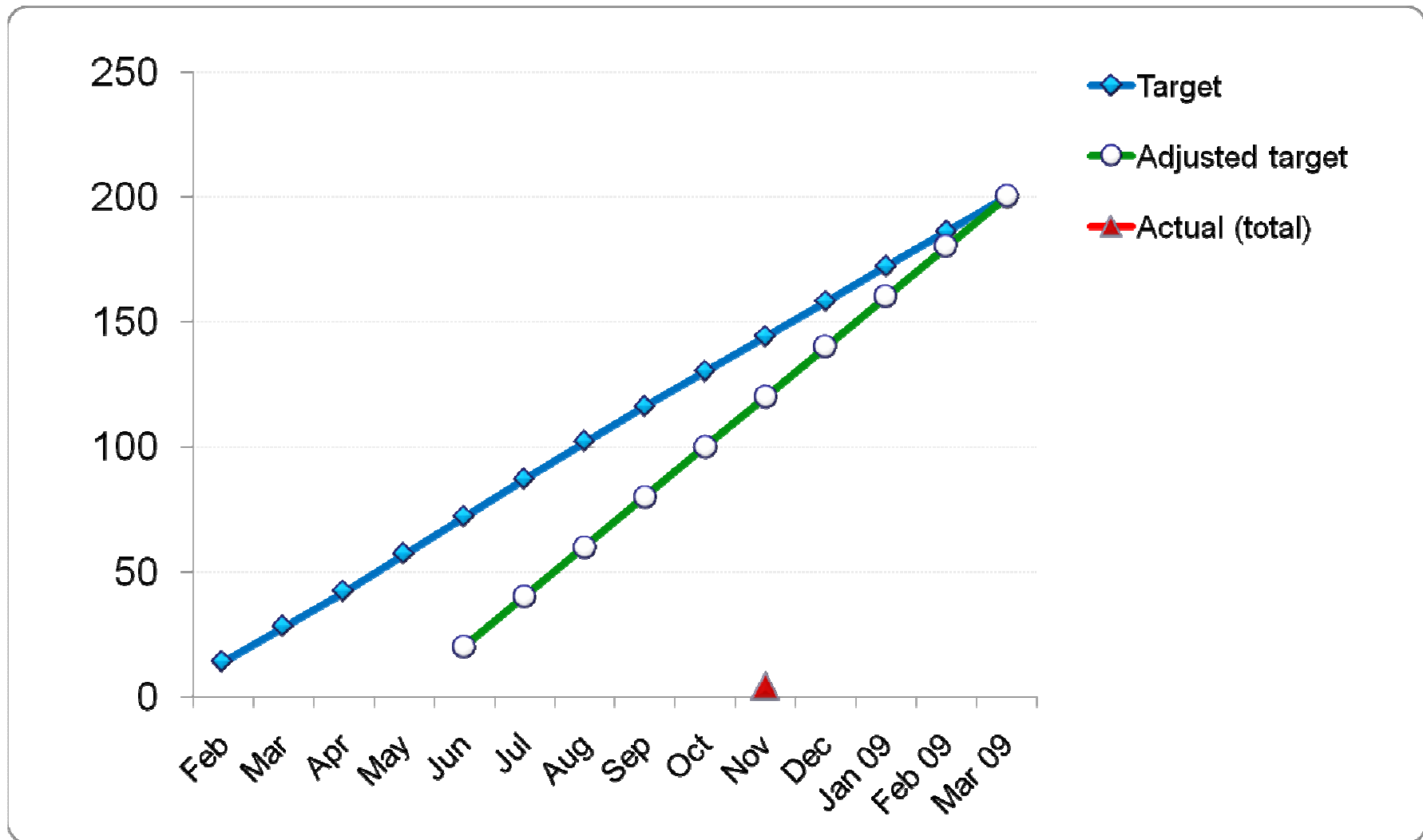
* PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others

Target and Actual Enrollment: India

	Target	Adjusted Target*	Actual
Feb	14		
Mar	28		
Apr	42		
May	57		
Jun	72	20	
Jul	87	40	
Aug	102	60	
Sep	116	80	
Oct	130	100	
Nov	144	120	4
Dec	158	140	
Jan 09	172	160	
Feb 09	186	180	
Mar 09	200	200	

* Starting since the date when the first subject 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 :

**Prospective, hospital-based, multinational surveillance
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pneumococcal conjugate vaccine**

Sri Lanka



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

Participating Centers : Sri Lanka

Total number of centers in Sri Lanka: 05

Target number of Pneumococcal cases in Sri Lanka: 200

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Colombo	SL01	University of Colombo	Jennifer Perera	Y	2
Nugegoda	SL05	Sri Jayewardenepura Hospital	Shalini Perera	Y	5
Peradeniya	SL06	Teaching Hospital Peradeniya	Vasanthi Thevanesam	Y	1
Colombo	SL09	Durdens Hospital	Enoka Corea	Y	2
Colombo	SL10	Asiri Hospital	S D Athokorala	N	0
TOTAL NUMBER OF CASES ENROLLED (%)					10 (5)

Enrolled cases : Sri Lanka

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
University of Colombo	1	-	1	-	-	-	-	-	-	-	-
Sri Jayewardenepura Hospital	3	0	1	0	0	0	0	0	1	0	5
Peradeniya Hospital	0	0	1	0	0	0	0	0	0	0	1
Durdens Hospital	1	0	1	0	0	0	0	0	0	0	2
Asiri Hospital	-	-	-	-	-	-	-	-	-	-	-
Total No. of cases	5	0	4	0	0	0	0	0	1	0	10

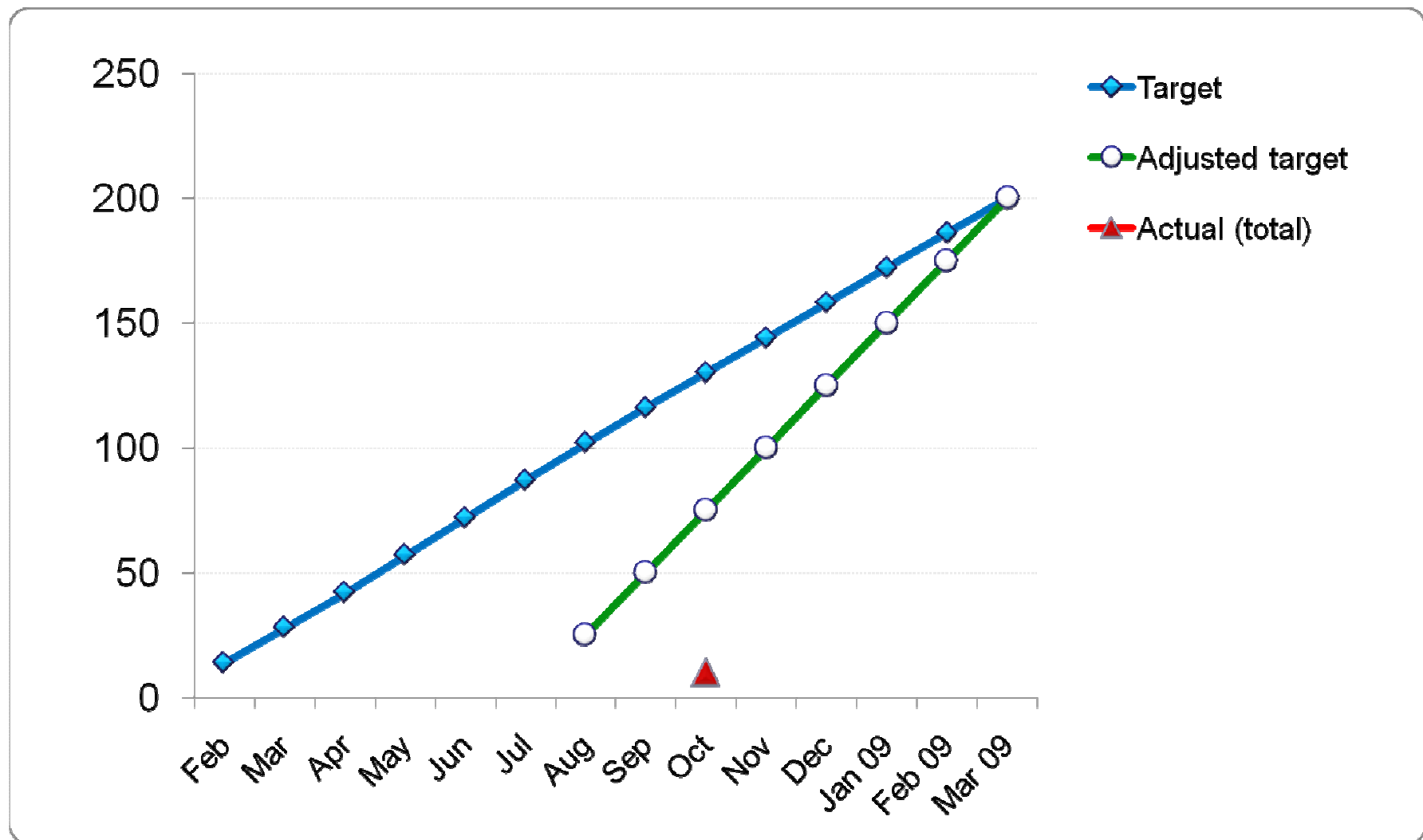
* PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others

Target and Actual Enrollment: Sri Lanka

	Target	Adjusted Target*	Actual
Feb	14		
Mar	28		
Apr	42		
May	57		
Jun	72		
Jul	87		
Aug	102	25	
Sep	116	50	
Oct	130	75	10
Nov	144	100	
Dec	158	125	
Jan 09	172	150	
Feb 09	186	175	
Mar 09	200	200	

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: Sri Lanka



Discussion points : Sri Lanka

- IRB approval : Approval obtained
- Enrollment of cases :
 - Expected date, all centers activated: 4 of 5 centres activated
 - Expected enrollment rate: 10 cases/month
 - Expected date, last subject enrolled: Not certain
- Sample transport : No issues
- Communication with participating centers : No issues
- Other issues : SAPNA Project ongoing since 2003, thus enrolled centres are limited

**Prospective, hospital-based, multinational surveillance
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Vietnam



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

Participating Centers : Vietnam

Total number of centers in Vietnam: 10

Target number of Pneumococcal cases in Vietnam: 200

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Ho Chi Minh City	V01	University of Medicine and Pharmacy	Pham Hung Van	Y	
Ho Chi Minh City	V02	Cho Ray Hospital	Tran Van Ngoc		
Ho Chi Minh City	V03	Nguyen Tri Phuong Hospital	Dung Le Tien		
	V04				
	V05				
	V06				
	V07				
	V08				
	V09				
	V10				

TOTAL NUMBER OF CASES ENROLLED (%) 42 (21)

* PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others

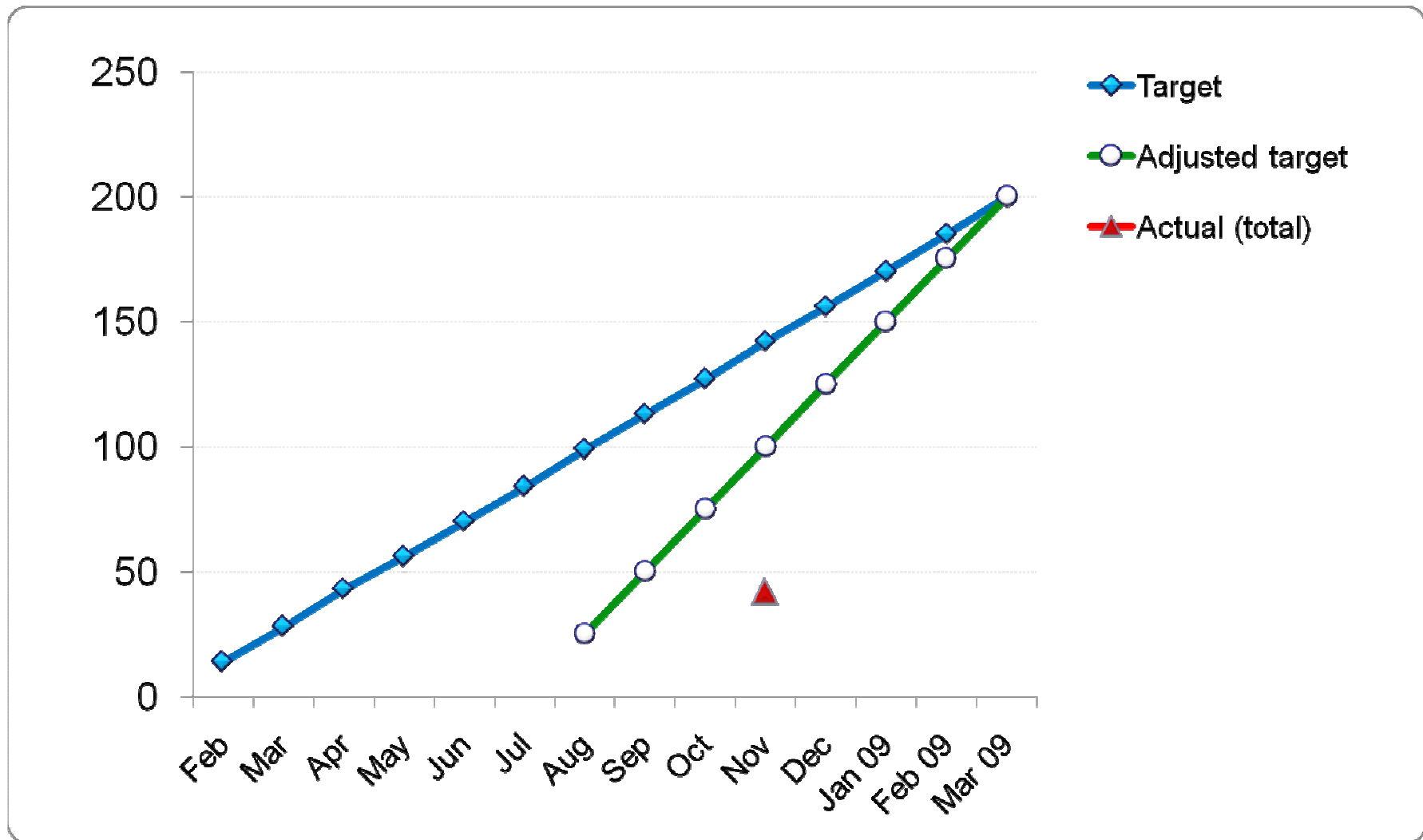
* PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others

Target and Actual Enrollment: Vietnam

	Target	Adjusted Target*	Actual
Feb	14		
Mar	28		
Apr	42		
May	57		
Jun	72	20	
Jul	87	40	
Aug	102	60	
Sep	116	80	
Oct	130	100	
Nov	144	120	42
Dec	158	140	
Jan 09	172	160	
Feb 09	186	180	
Mar 09	200	200	

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: Vietnam



Discussion points : Vietnam

- 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 :

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Japan



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

Participating Centers : Japan

Total number of centers in Japan: 1

Target number of Pneumococcal cases in Japan: 50

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Fukuoka	J01	Kyushu University Graduate School of Medical Sciences	Nobuyuki Shimono	Y	12
			Yujiro Uchida		
			Shoichi Imamura		
TOTAL NUMBER OF CASES ENROLLED (%)					12 (24)

Enrolled cases : Japan

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
Kyushu University Graduate School of Medical Sciences											12

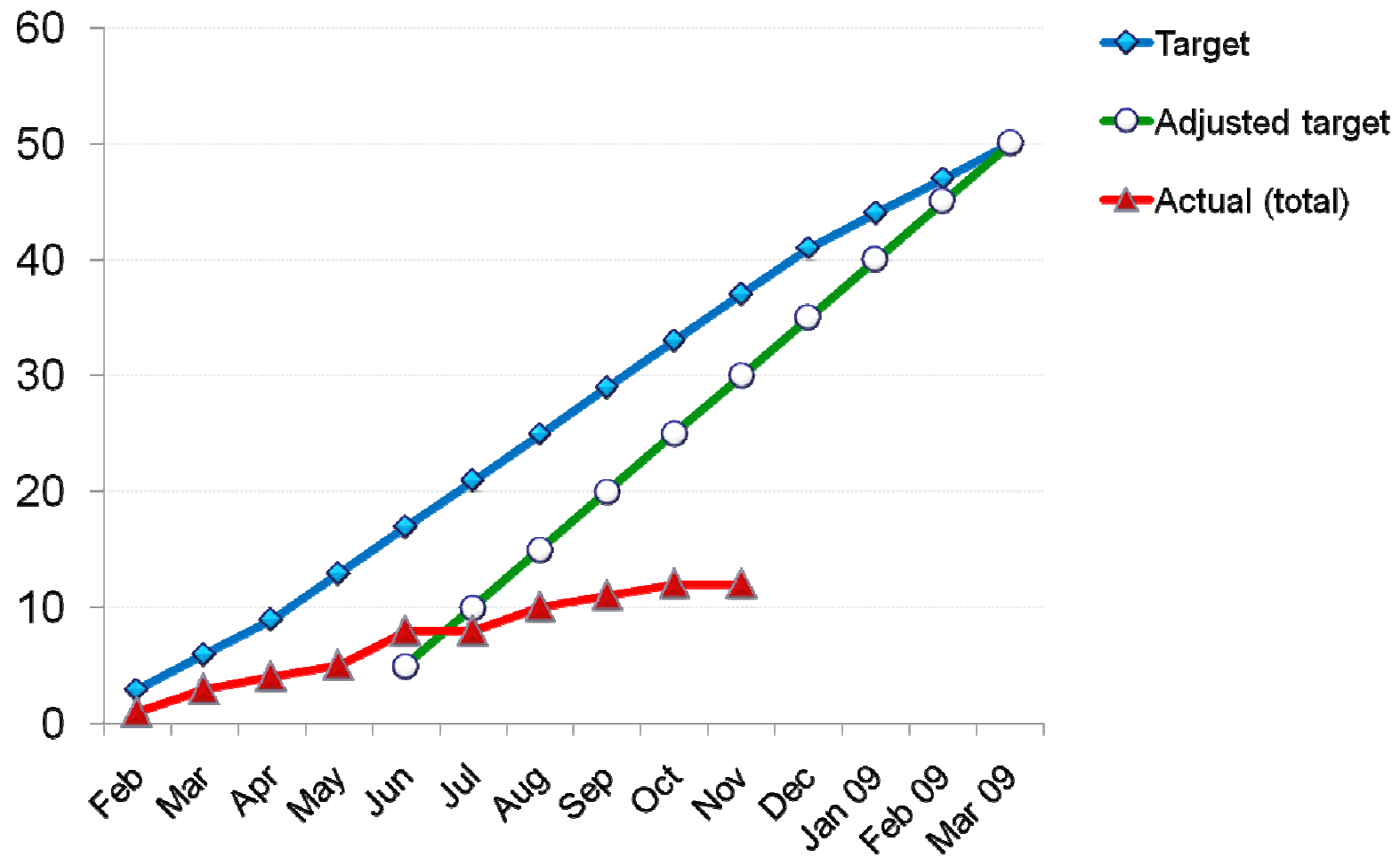
* *PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others*

Target and Actual Enrollment: Japan

	Target	Adjusted Target*	Actual
Feb	3		1
Mar	6		3
Apr	9		4
May	13		5
Jun	17	5	8
Jul	21	10	8
Aug	25	15	10
Sep	29	20	11
Oct	33	25	12
Nov	37	30	12
Dec	41	35	
Jan 09	44	40	
Feb 09	47	45	
Mar 09	50	50	

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: Japan



Discussion points : Japan

- 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 :

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Saudi Arabia



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

Participating Centers : Saudi Arabia

Total number of centers in Saudi Arabia: 1

Target number of Pneumococcal cases in Saudi Arabia: 100

(as of November 14)

City	Center Code	Center	Investigator	Active? (Yes / No)	No. of cases enrolled
Riyadh	SA01	King Saud University Hospital	Atef M. Shibl	Y	56
			Khalid Kattan		
TOTAL NUMBER OF CASES ENROLLED (%)					56 (56%)

Enrolled cases : Saudi Arabia

Centers	Category of infection*										Total
	PN	M	B	E	PT	AR	AB	S	OM	OT	
King Saud University Hospital	23	8	18	-	-	-	-	3	4	-	56

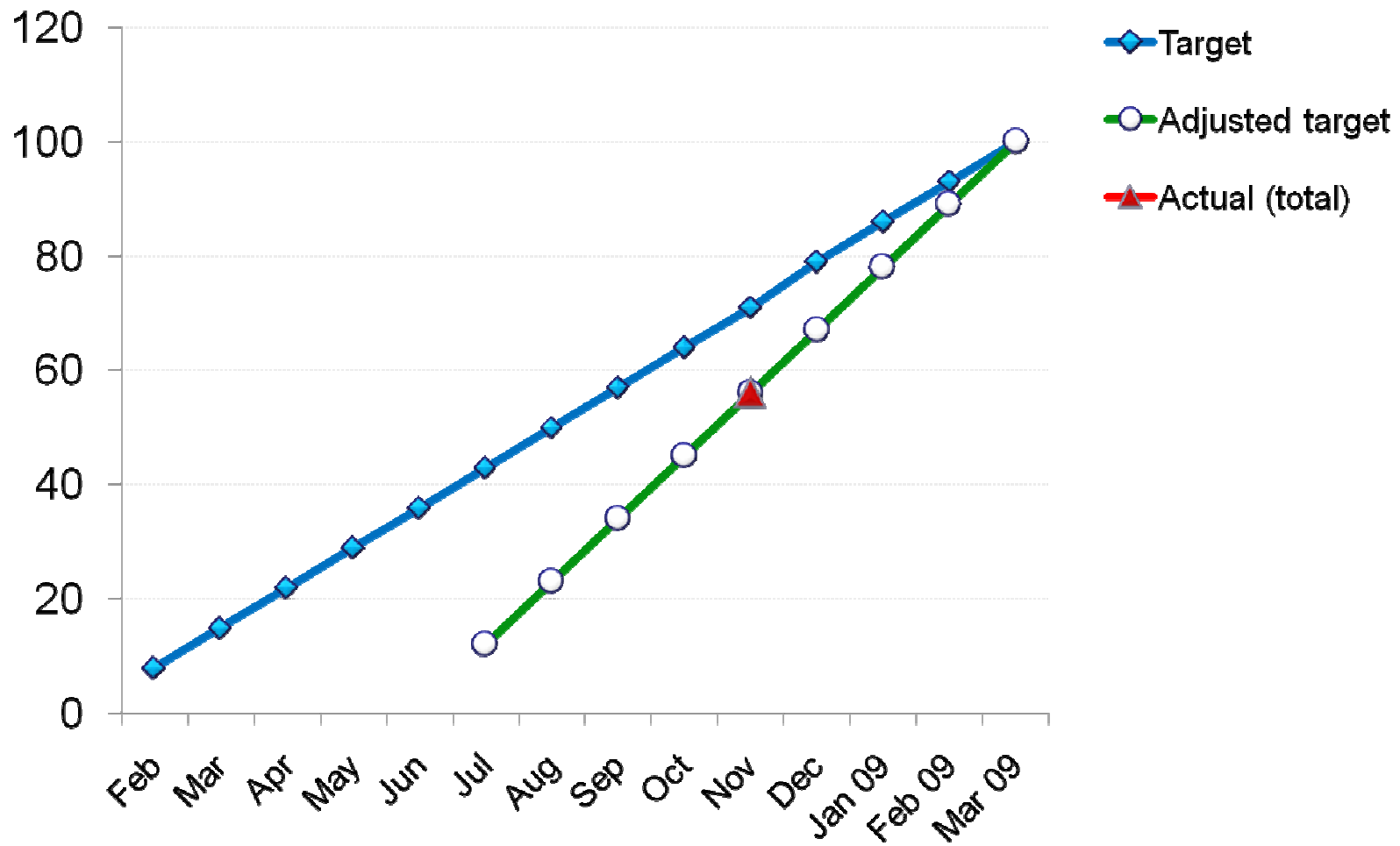
* PN, pneumonia; M, Meningitis; B, bacteremia; E, empyema; PT, peritonitis; AR, Arthritis; AB, deep abscess; S, sinusitis; OM, otitis media; OT, others

Target and Actual Enrollment: Saudi Arabia

	Target	Adjusted Target*	Actual
Feb	8		
Mar	15		
Apr	22		
May	29		
Jun	36		
Jul	43	12	
Aug	50	23	
Sep	57	34	
Oct	64	45	
Nov	71	56	56
Dec	79	67	
Jan 09	86	78	
Feb 09	93	89	
Mar 09	100	100	

* Starting since the date when the first subject enrolled

Target and Actual Enrollment: Saudi Arabia



Discussion points : Saudi Arabia

- 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 :