



ANSORP NOW

CONTENTS:

- 1. ANSORP & APFID's activities in 2014
- 2. Current status of ANSORP projects
- 3. Interesting papers
- 4. 10th ISAAR in Songdo, Korea in May 2015

Dear ANSORP Investigators

Greetings from Seoul!

I hope all ANSORP investigators are doing well.

This is the 2014 December issue of ANSORP NOW. It provides update information and current status of ANSORP activities. "ANSORP NOW" is a monthly newsletter, delivered to all ANSORP investigators by e-mail and website of APFID (www.apfid.org).



Please read this ANSORP NOW carefully to update our international collaboration. If you have any ideas, opinions, or issues that can be shared with other ANSORP investigators, please send us e-mails or FAX.

I always appreciate your active participation in the ANSORP activities.

Wishing you and your family a happy holiday season and the New Year filled with joy and happiness. I am sending my best personal regards to all of you!

> Jae-Hoon Song, MD, PhD Organizer, ANSORP Founder & Chairman, APFID

Contact Information

Jae-Hoon Song, MD, PhD Organizer, ANSORP / Chairman, APFID Samsung Medical Center Tel: 82-2-3410-0320, FAX: 82-2-3410-0041 E-mail: ansorp@gmail.com or songjh@skku.edu

Doo Ryeon Chung, MD, PhD Project Lead, ANSORP Samsung Medical Center Tel: 82-2-3410-0323, FAX: 82-2-3410-0041 E-mail: iddrchung@gmail.com or drchung@skku.edu

So Hyun Kim, DVM, PhD Project Manager, ANSORP Asia Pacific Foundation for Infectious Diseases FAX: 82-2-3410-6667 Tel: 82-2-3410-6826, E-mail: shkim@apfid.org or shkim.ansorp@gmail.com

ANSORP & APFID's activities in 2014

We would like to take the opportunity to thank all the ANSORP members for their contribution and present some selected activities of ANSORP and APFID performed in 2014.

- Feb 23-24: APEC HWG meeting was held in Ningbo, China and APEC project entitled "Enhancing health security in APEC-International campaign program to control AMR in the AP region" which was successfully completed with the development of "Campaign 4" was presented at the meeting.
- Mar 18-19: WHO technical consultation meeting on global AMR surveillance was held in Geneva, Switzerland. On behalf of ANSORP, Dr. So Hyun Kim attended the meeting and has been participating in the AMR surveillance working group since the meeting.
- Apr 30 : WHO's first "Global Report on AMR surveillance" was released. ANSORP contributed this WHO report by providing ANSORP surveillance study data which represent the current status of AMR in the Asian region.



For All, For Life



ANSORP & APFID's activities in 2014 (continued)

 Aug 12-15: The 4th APEC High-Level Meeting on Health and Economy and APEC HWG meeting were held in Beijing, China. Dr. Jae-Hoon Song was invited as a speaker and panelist for the session on AMR and healthcare-associated infections and discussed the capacity building efforts to design/implement/report AMR surveillance.

Also, new project entitled "Enhancing health security in APEC-implementation of international campaign program to control AMR" was approved as a self-funded APEC project at the APEC HWG meeting.

Oct 1: The WHO released the first draft of the "Global action plan on AMR". ANSORP also contributes to WHO global action plan on AMR. Dr. Jae-Hoon Song and Dr. Visanu Thamlikitkul (Thailand) are participating the AMR-STAG members.

• Nov 7: "The APEC guideline to tackle AMR in the AP region", which was prepared by APFID in collaboration with countries in the APEC region based on the results of the serial APEC projects performed since 2010, was published.



Current status of ANSORP studies

A prospective, hospital-based, multicenter surveillance on antimicrobial resistance and serotypes of *S. pneumoniae* in hospitalized patients with invasive pneumococcal diseases or pneumonia in Asia (*Sponsored by Pfizer*)

- Principle Investigator : Dr. Jae-Hoon Song, Samsung Medical Center, Korea
- The purpose of the study is to investigate the serotype distribution of *S. pneumoniae* isolates from the adult patients over 50 years with invasive pneumococcal diseases or community-acquired pneumonia in the PCV era.
- The study has been started since Dec 2013 (Nov 2012 in Korea) and is supposed to be completed by Nov 2015.
- Seven countries (Korea, China, Indonesia, Malaysia, Philippines, Singapore, and Thailand) are participating in the study.
- About 180 cases have been enrolled in Korea so far.
 Thailand and Philippines have started case enrollment while invitation of centers which are willing to join the study and IRB approval process in some centers are in progress in the other countries.

A multicenter, multinational serosurvey study for pertussis among children 10-18 years old in Asia

(Sponsored by Sanofi-Pasteur)

- Principle Investigators:
 Dr. Cheng-Hsun Chiu, Chang-Gung Children's Hospital,
 Taiwan & Dr. Yae-Jean Kim, Samsung Medical Center,
 Korea
- The purpose of the study is to perform a serosurvey of *Bordetella pertussis* infections among children to measure the anti-pertussis toxin IgG levels and describe their distribution among children aged 10-18 years old in Asia.
- The study has been started since Oct 2013 and is supposed to be completed by Sep 2015.
- Ten centers in seven countries/areas (Korea, China, Japan, Taiwan, Thailand, Sri Lanka, and India) are participating in the study.
- About 1320 cases have been enrolled (64% of target enrollment), 950 serum samples have been sent to the central lab in Seoul, Korea, and about 40% of them were serologically tested so far.
- The ELISA test of serum samples collected in China and India will be also performed soon.

Interesting papers

Safety and clinical outcomes of carbapenem deescalation as part of an antimicrobial stewardship programme in an ESBL-endemic setting.

J Antimicrob Chemother. 2014 Dec 3. [Epub ahead of print]

Lew KY, Ng TM, Tan M, Tan SH, Lew EL, Ling LM, Ang B, Lye D, Teng CB.

ABSTRACT

OBJECTIVES: To evaluate the safety and clinical outcomes of patients who received carbapenem de-escalation as guided by an antimicrobial stewardship programme (ASP) in a setting where ESBL-producing Enterobacteriaceae are endemic.

METHODS: Patients receiving meropenem or imipenem underwent a prospective ASP review for eligibility for deescalation according to defined institutional guidelines. Patients in whom carbapenem was de-escalated or not de-escalated, representing the acceptance and rejection of the ASP recommendation, respectively, were compared. The primary outcome was the clinical success rate; secondary outcomes included the 30 day readmission and mortality rates, the duration of carbapenem therapy, the incidence of adverse drug reactions due to antimicrobials, the acquisition of carbapenem-resistant Gram-negative bacteria and the occurrence of *Clostridium difficile*-associated diarrhoea (CDAD).

RESULTS: The de-escalation recommendations for 300 patients were evaluated; 204 (68.0%) were accepted. The patient demographics and disease severity were similar. The clinical success rates were similar [de-escalated versus not de-escalated, 183/204 (89.7%) versus 85/96 (88.5%), P=0.84], as was the survival at hospital discharge [173/204 (84.8%) versus 79/96 (82.3%), P=0.58]. In the de-escalated group, the duration of carbapenem therapy was shorter (6 versus 8 days, P<0.001), the rate of adverse drug reactions was lower [11/204 (5.4%) versus 12/96 (12.5%), P=0.037], there was less diarrhoea [9/204 (4.4%) versus 12/96 (12.5%), P=0.037], there was a lower incidence of carbapenem-resistant Acinetobacter baumannii acquisition [4/204 (2.0%) versus 7/96 (7.3%), P=0.042] and there was a lower incidence of CDAD [2/204 (1.0%) versus 4/96 (4.2%), P=0.081].

CONCLUSIONS: This study suggests that the ASP-guided deescalation of carbapenems led to comparable clinical success, fewer adverse effects and a lower incidence of the development of resistance. This approach is safe and practicable, and should be a key component of an ASP.

Ventilator-associated pneumonia: present understanding and ongoing debates.

Intensive Care Med. 2015 Jan;41(1):34-48.

Nair GB, Niederman MS.

ABSTRACT

INTRODUCTION: Ventilator-associated pneumonia (VAP) is a common cause of nosocomial infection, and is related to significant utilization of health-care resources. In the past decade, new data have emerged about VAP epidemiology, diagnosis, treatment and prevention.

RESULTS: Classifying VAP strictly based on time since hospitalization (early- and late-onset VAP) can potentially result in undertreatment of drug-resistant organisms in ICUs with a high rate of drug resistance, and overtreatment for patients not infected with resistant pathogens. A combined strategy incorporating diagnostic scoring systems, such as the Clinical Pulmonary Infection Score (CPIS), and either a quantitative or qualitative microbiological specimen, plus serial measurement of biomarkers, leads to responsible antimicrobial stewardship. The newly proposed ventilatorassociated events (VAE) surveillance definition, endorsed by the Centers for Disease Control and Prevention, has low sensitivity and specificity for diagnosing VAP and the ability to prevent VAE is uncertain, making it a questionable surrogate for the quality of ICU care. The use of adjunctive aerosolized antibiotic treatment can provide high pulmonary concentrations of the drug and may facilitate shorter durations of therapy for multi-drug-resistant pathogens. A group of preventive strategies grouped as a 'ventilator bundle' can decrease VAP rates, but not to zero, and several recent studies show that there are potential barriers to implementation of these prevention strategies.

CONCLUSION: The morbidity and mortality related to VAP remain high and, in the absence of a gold standard test for diagnosis, suspected VAP patients should be started on antibiotics based on recommendations per the 2005 ATS guidelines and knowledge of local antibiotic susceptibility patterns. Using a combination of clinical severity scores, biomarkers, and cultures might help with reducing the duration of therapy and achieving antibiotic de-escalation.

If you need PDF version of the papers, please contact ANSORP Project Manager (Dr. So Hyun Kim, shkim@apfid.org).

10th International Symposium on Antimicrobial Agents and Resistance (ISAAR 2015) in Songdo, Korea in May 2015



We would like to cordially invite you to join the 10th International Symposium on Antimicrobial Agents and Resistance (ISAAR 2015), which will be held at Songdo ConventiA in Songdo, Korea from May 14 to 15, 2015.

Please visit <u>www.isaar.org</u> for updates to the program and additional information to enhance your participation in this important meeting on infectious diseases and antimicrobial resistance. We hope that many ANSORP investigators can join the ISAAR 2015 and celebrate the $10^{\rm th}$ anniversary of ISAAR.

IMPORTANT DATES

 Deadline for abstract submission 	March 2, 2015
Notice of acceptance of abstract	March 9, 2015
Deadline for early registration	March 15, 2015
Late registration deadline	April 20, 2015



We always appreciate your active contribution to ANSORP activities.

If you have any questions, or issues that can be shared with other ANSORP investigators, please let us know them at any time.