



TDR clinical R&D Fellows' Conference report

Administrative Section: 1. Fellow: Surname: VU Name: **Quoc Dat** Title/Position: Dr. Full postal address: Sanofi-aventis Singapore Pte.Ltd 6 Raffles Quay #18-00 Singapore 048580 Phone: (+65) 6431 2365 Mobile: (+65) 84 26 33 50 quocdat181@yahoo.com e-mail: 2. Event title: The 7th World Congress of the World Society for Pediatric Infectious Diseases (WSPID 2011) 3. Host /Organisation: The World Society for Pediatric Infectious Diseases (WSPID) 4. Event dates: November 16-19, 2011 Fellow: Vu Quoc Dat

28 November 2011

Signature:

Date:

Progress report of the training:

1) Objectives for attending this conference (1 page max)

This conference provides specialists a world forum for sharing the latest knowledge and receiving updates on the treatment and prevention of pediatric infectious diseases.

- Reviewing the clinical management of some important infectious diseases
- Update the information of challenging infectious and tropical diseases in developing countries
- Increase in the knowledge of current novel vaccine development and the important for the developing countries

2) Agenda of the conference

Day 1	-	Exotic and common diseases of the Asia-Pacific
	•	A high global burden efficiently reduced through expanded vaccination
	-	Global burden of respiratory syncytial virus and clinical updates
	-	Strategies to reduce the burden of rotavirus gastroenteritis and pertussis
	•	Meningococcal disease in children
Day 2	-	Pneumonia
	•	Accelerating movement of new vaccines into under-resourced areas of the world
	-	Treatment of invasive fungal infections in children and neonates
	-	Pediatric vaccines
	•	Prevention meningococcal disease
Day 3	-	Vaccines for developing countries
	-	Viral Infections in Children
	-	Pediatric urinary tract infection - management and prevention in 2011
	•	Pneumococcal disease and pneumococcal conjugate vaccines
Day 4	•	Group A Streptococcal infections
	•	Dengue: global burden, updates on immunopathogenesis and new classification
	•	Emerging infections
	•	Molecular approaches to diagnosis in host & bug
	•	Neonatal infections

3) Did attendance to this conference meet the needs you originally described? Please explain your answer in either way (1 page max)

Yes. My needs were met through the oral presentations, lecture and poster presentations.

- Update clinical management of infectious diseases:
 - Manifestation and antiviral medications for the management of influenza in children
 - Treatment of invasive fungal infections: candidiasis and aspergillosis
 - Imaging diagnosis and management of urinary tract infection in children

- Revised classification of dengue cases
- The information of challenging infection in developing countries: Rotavirus, respiratory syncytial virus, influenza, Dengue, meningococcal diseases, streptococcal infection, and hand foot mouth disease.
- Increase in the knowledge of safety and efficacy of vaccines: rotavirus, influenza, conjugate meningococcal vaccine and pneumococcal vaccine.

4) Please highlight what was the most important/useful information you learnt during the conference (1 page max)

- Update on vaccines and vaccine preventable diseases:
 - Oral live-attenuated human rotavirus vaccine (HRV): Post-licensure effectiveness data from high- and middle-income countries have found HRV to be effective against severe rotavirus gastroenteritis and also demonstrating herd immunity.
 - Pertussis vaccine: the epidemiology of pertussis has apparently changed with higher reported cases in adolescents and adults. The booster vaccinations need to be considered.
 - Meningococcal vaccine: invasive meningococcal disease still is a worldwide public health challenge. The conjugate vaccines were introduced.
- The challenges of meeting the 4th millennium development goal of reducing child mortality:
 - Burden of neonatal sepsis in resource poor setting
 - Vaccines for developing countries
- Respiratory infection in child
 - Specific characteristics of influenza in child
 - The burden of respiratory syncytial virus related to lower respiratory infection
 - Re-emphazed the key strategies for pneumonia control: (1) case management with IMCI at all levels, (2) vaccination, (3) improvement of nutrition/low birth weight, (4) control of indoor air pollution, and (5) prevention and management of HIV infection.
- Dengue manifestations and classification:
 - The increased reported dengue cases with neurological manifestations.
 - The changes of IFN-inducible protein-10 (IP-10) and ferritin in severe dengue
 - Usefulness and applicability of the revised dengue case classification (WHO 2009 Guideline) in reducing dengue cases could not be classified by previous classification.
- The promising development of proteomic and genomic techniques for clinical application in diagnosis of infectious diseases:
 - Instead of the identification of pathogen, the microarray technology is developing to measure the differences in the host gene expression for diagnosis of respiratory infection.
 - The study of applying gene expression and proteomic method to understand pathophysiology and diagnosis of TB is on going.

5) What ideas/recommendations did you bring back? (1 page max)

The clinicians in developing countries should be encouraged and supported to perform and publish the research of local emerging/re-emerging diseases. These will help to identify quickly the changes in the pattern of diseases, including epidemiology and clinical manifestations, and to improve the clinical management.

- In turn, it will provide the evidence to policymakers to decide the most costeffectiveness strategies for public health in their resource-limited settings.
- Vaccination has been proven as a powerful and effective tool against many infectious diseases. The clinician should pay more attention to vaccines in their medical practices. Also, the pharmaceutical industries and international organizations should support to expand the immunization program with available licensed vaccines and help to increase the accessibility of new vaccines in developing countries to reduce morbidity and mortality in this area.
- In clinical setting, the guidelines for diagnosis and treatment of infectious diseases should be developed and updated regularly. This is important for the developing countries where the report of antibiotic resistant has been increased while viral causes could contribute to a significant proportion of respiratory and gastro-intestinal infections in children.

6) How will you incorporate them in your research or training activities? (1 page max)

- Currently, I involve in the immunogenicity, safety and efficacy trials of dengue vaccine. The update on immunopathogenesis and classification of dengue case will help me a lot for my fellowship.
- The reported changes in epidemiology and clinical manifestations of many infectious diseases suggest that the research in my country should to be designed to meet the health care needs of population, to surveillance the emerging and re-emerging diseases. The issues of emerging/re-emerging pathogens were raised by foreign investigators should be considered for the future research in our country.
- The updated knowledge of management of infectious diseases in will be used in medical practices.

7) How could others benefit from the conference? (1 page max)

 Information of various infectious diseases publications and up coming conferences.

8) Would you recommend other grantees attend this conference?

Yes, I would recommend this conference to grantees who are interested in pediatric infectious diseases and vaccines.