

INDONESIA RESEARCH PARTNERSHIP ON INFECTIOUS DISE

INA-RESPOND Secretariat

Badan Litbangkes, Kemenkes RI, Building 4, 5th Floor, Jl. Percetakan Negara No. 29, Jakarta, 10560. Phone: +62 21 42879189 Email: <u>INA.Secretariat@ina-respond.net</u> Website: <u>www.ina-respond.net</u>

In This Issue

Site Preparation Visit for RS Persahabatan was conducted this week and we are excited to see the site's performance. Read other updates on our TRIPOD study in the Study Update section.

Did you know Hepatitis C Virus (HCV) is a bloodborne virus with similar mode of transmissions with the Human Immunodeficiency Virus (HIV)? Learn more about their treatment and the drug-drug interactions (DDIs) in this edition!

Newsletter October 2017



Indonesia Research Partnership on Infectious Disease (INA-RESPOND) Manuscript Writing Week

The INA-RESPOND network's 2nd Manuscript Writing Week (MWW) was held from 25-29 September 2017 at Double Tree Hotel and Convention, Cikini, Jakarta. AFIRE study enrollment ended in June 2016 with the total of 1,486 subjects included in the final analysis. The objective of this MWW is to prepare papers from AFIRE study results for publications. More than 53 participants from INA-RESPOND network, including representatives from NIHRD and US-NIAID attended the event. the MWW was a big success and went smoothly. The Scientific Coordinator, dr. Herman, was very excited seeing the tremendous

> enthusiasm of the participants in writing the manuscripts. Thank you to all participants for the dedication, cooperation, and support. Hopefully, we will have good-quality papers to publish after this MWW. Read more about how this event went in this edition!

> > Page 7

Games of Authorship: Is It You, Us, or Them?

Researchers are mostly evaluated based on their publications. However, to be an author is not as easy as it seems. There may be some conflicts to get our name up there. Read more in this edition!

"Fifty-seven authors, and neither one of us was included."

Save The Date

Important Events & Meetings

4 Oct PBMC Training @site 520

11-14 OctUnion Meeting @Guadalajara, Mexico3 NovNIAID Symposium



October Birthday

2 Oct	Dr. Debby Intan Permatasari	INA101 RA Site 540
5 Oct	Ms. Linda Oktabriana	Lab Technician Site 580
6 Oct	Ms. Utami Pratiwi	Nurse INA102 Site 560
7 Oct	Dr. Venty Muliana Sari	Secretariat
10 Oct	Dr. Wang Erna	INA102 RA Site 560
11 Oct	Ms. Ni Nyoman Eriyanti	Lab Technician Site 520
15 Oct	Dr. Ninny Meutia Pelupessy	INA101 PI Site 550
16 Oct	Dr. Dwiyanti Puspitasari	INA101 Co-PI Site 570
20 Oct	Dr. Abu Tholib Aman, MSc, PhD, SpMK	SC Member at Site 580
21 Oct	Dr. Nurhayana Sennang	INA101 Co-PI Site 550
26 Oct	Dr. Syndi Siahaan	INA101 RA Site 510
28 Oct	Ms. Tri Kusuma Wardhani	Lab Technicaian Site 560

Announcement

INA-PROACTIVE (INA-04) protocol version 1.0 dated 27 Sep 2017 and its corresponding CRF and ICF were submitted on 4 Oct 2017 for ethical review at NIHRD IRB. We are now drafting the MOP and SOP; and preparing the sites as well as making preparations to conduct an Investigator Meeting in January 2018

We would also like to wish dr. Andra Pranata (TRIPOD Research Assistant, site 570) and dr. Venty Muliana Sari happy moments with your new born babies.





INA-RESPOND Study Updates

By:

Ms. Maria Intan Josi

TRIPOD (INA102) Updates

Screening and Enrollment

By the end of September 2017, the site team has enrolled 102 subjects. Site 570 – RSUD dr Soetomo, Surabaya is the top recruiter with 30 subjects. Enrollment progress by the end of September 2017 can be seen in the graphic below:

Protocol Amendment (TRIPOD Protocol Study ver 4.0 and ver 5.0)

Ethical Approval from NIHRD for Protocol version 4.0 has been received. Also, local EC approval at site 560 and 570 has been obtained. These approvals indicate that the sites are ready to begin the implementation of Protocol ver 4.0. Therefore, INA-RESPOND Secretariat gave RA Call Training for these changes on 05 Oct 2017. However, site 580 (RSUP dr. Sardjito, Jogjakarta) and 520 (RS Sanglah, Denpasar) have not implemented the new protocol version since the local Ethic Approval has not been obtained.

Currently, we are waiting for protocol ver 5.0 to be approved. Protocol Version 5.0 has been submitted on 4 October 2017 to Ethic NIHRD. In Version 5.0, we add RSUP H. Adam Malik Medan as one of our TRIPOD sites. We welcome RSUP H. Adam Malik Medan as part of our team.

Site 590 - RSUP Persahabatan

Good news! Site Preparation Visit was held on 4-5 October 2017 at RSUP Persahabatan. This SPV was attended by Principal Investigator (Dr. dr. Erlina Burhan, SpP K), Co-Investigator 1 (dr. Diah Handayani, SpP), Co- Investigator 2 (dr. Budi Haryanto, SpP), Research Assistant (dr. Ika Fajarwati), nurses, and Lab technician.

The SPV was conducted to give a better



*Site Number code:

520 – RSUP Sanglah, Denpasar 560 – RSUP dr Kariadi, Semarang 570 – RSUD dr Soetomo, Surabaya 580 – RSUP dr Sardjito, Yogyakarta

understanding about protocol version 4.0, and documents that will be used for its implementation, such as CRF version 5.0, SDW version 4.0 and ICF version 4.0.

Site 550 -RSUP dr. Wahidin Sudirohusodo

Good news comes from site 550! Protocol version 4.0 was submitted on 29 September 2017. While waiting for approval from site 550's local EC, we will prepare the site for SPV. Dr. Kartika and dr. Syukri will be the Research Assistants at site 550.

Enrolled patients towards target recruitment

By the end of September 2017, each site has done their best to achieve the target enrollment. During the recruitment stage, the challenges of one site could be different to another.

Although our target is to recruit 1,357 subjects, but up until now we only have 86 subjects enrolled, we need to bear in our mind that the study has been going on for 8 months. Recruitment period for TB study is 2 years and we've got less than 1,5 years left to recruit subjects. On the bright side, we are glad that site 590 has been opened and that site 550 will open soon. However, we still need to catch up the number of subjects because our target is still far.

Comic Corner

Games of Authorship: Is It You, Us, or Them?

By: dr. Aly Diana

Again, 'publish or perish'! This term is extremely more often heard in the research or education institutions, at least around me. As researchers and academia are highly evaluated based on their publications, being an author of scientific journals, especially in high impact factor or accredited international journals has become a part of recent life style. Somehow, being such author is not always an easy business and with every business, there are some 'hidden' conflicts behind.

"Fifty-seven authors, and neither one of us was included."

The most common conflict is to 'select' people who will be the authors of a paper(s) from a research project. The recommended practice is to discuss it beforehand, from the starting point of the project. List the names of people who have rights to be the authors and send an e-mail to everybody involved. It will help in reminding all the authors-to-be, that they have the responsibilities to work with the paper and need to intellectually contribute to keep their rights as authors until the paper has been published for real.

The decision whether individual names or group name will be used, should also be discussed in the initial state. Group authorship is becoming more common and more journals have regulations for this. For example, the editors of JAMA have outlined 2 group authorship models: 1) Authorship in which each person in the group meets the authorship criteria, in which case the group is listed as the author, with the caveat that editors may require at least 1 co-author to assume the role of content guarantor; 2) Authorship in which a select subgroup of the whole is listed in the by line on behalf of the whole. MEDLINE citation also has a clear guideline and support group authorship.

As a sweet reminder, these are the criteria of authorship, as suggested by International Committee of Medical Journal Editors (ICMJE): 1) Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND 2) Drafting the work or revising it critically for important intellectual content; AND 3) Final approval of the version to be published; AND 4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. These authorship criteria are intended to give the status of authorship for those who deserve credit and can take responsibility for the work. It is important to notice that these criteria are not intended to disqualify colleagues by denying their opportunity to meet criterion #s 2 or 3. Therefore, all individuals who meet the first criterion should have the opportunity to participate in the review, drafting, and final approval of the manuscript. However, at the end, the failure to meet all four criteria for authorship will put the individual(s) in acknowledgement.

becomes obvious that It honorary/courtesy/gift and auest authorship are totally unethical. Gift authorship has been defined as authorship based solely on a tenuous affiliation with a study. Some examples are senior figures (e.g. heads of department, heads of lab, etc.) whose names are added to curry favour (or because it is expected) or a colleague whose name is added on the understanding that s/he will do the same, regardless of the contribution to his/her research, but simply to swell the publication lists). Guest authorship has been defined as authorship based solely on an expectation that inclusion of a particular name will improve the chances that the study will be published or increase the perceived status of the publication, without any substantial contribution.

Closing remark: Authorship of our papers reflects trust and integrity. Although the violation of the authorship criteria most likely will not put anybody in jail, let's exercise the good practice.



Drug-Drug Interactions and HIV-HCV Coinfection

By: dr. Dona Arlinda, MD

Hepatitis C Virus (HCV) is a bloodborne virus with similar mode of transmissions with the Human Immunodeficiency Virus (HIV). Both HCV and HIV infections are commonly found among injecting drug users through shared-needle practice. Both infections can also be sexually transmitted and found among heterosexuals and men who have sex with men (MSM).

Acute HCV infection will resolve spontaneously in about 20% of cases. The remaining 80% will slowly progress to chronic hepatitis, which may lead to liver cirrhosis, hepatocellular carcinoma, end-stage liver disease, or liver-related death. Coinfections of HIV-HCV are associated with faster rate of fibrosis, higher rate of cirrhosis, and increased liver-related mortality compared to HCV monoinfection (Fig. 1). Several factors may contribute to acceleration of fibrosis in HIV-HCV coinfection, such as CD4 count less than 200 cells/mm³, alcohol consumption, and older age at time of HCV acquisition.

Treatment for HCV infection evolved from a simple regimen of interferon (IFN) back in 1986 to a combination of peginterferon and ribavirin (PegIFN/RBV). However, these regimens were associated with poor rate of sustained virologic response (SVR), especially in HIV-HCV-coinfected patients. Direct-acting Antivirals (DAAs) are the newer class of oral agents which selectively target HCV replication cycle and markedly increase the rate of SVR to over 90%. Examples of DAA drugs include HCV protease inhibitors simeprevir, grazoprevir, (e.g. paritaprevir), nucleoside/nucleotide polymerase inhibitors (e.g. sofosbuvir), non-nucleoside polymerase inhibitors (e.g. setrobuvir), non-structural protein 5A (NS5A) inhibitors (e.g. daclatasvir, ledipasvir, dasabuvir, elbasvir. ombitasvir). These oral agents have duration reduced the of HCV treatment, the number of pills, and the frequency of drug taking per day (Fig. 2). In Indonesia, DAA drugs can be freely accessed in selected hospitals in certain provinces. The available DAAs

in Indonesia include: Daclatasvir/ Sofosbuvir, Ledipasvir/Sofosbuvir, and Simeprevir/Sofosbuvir.

Although DAAs have sparked new light in the treatment of HCV monoinfection, significant drug-drug interactions (DDIs) problem may arise in the COadministration of DAAs with other drugs, such as with antiretroviral for HIV, tuberculosis, antimycobacterial for antihypertensive, antidepressant, etc. Most DAAs are either substrates, inhibitors, or inducers of cytochrome P450 (CYP450), P-glycoprotein (P-gp), or organic anion-transporting polypeptide (OATP). Cytochrome P450 is a group of enzymes that metabolizes most medications. P-glycoprotein and OATP are drug transporters which play a role









in the influx or efflux of drug molecules. The resulting drug-drug interactions may occur in pharmacokinetic or pharmacodynamic level, i.e. increased or decreased plasma drug concentration or having synergistic or antagonistic effects. Thus, careful DAAs dose adjustment might be needed in

most cases.

The available DAAs in Indonesia share the same features of drug-drug interactions. Simeprevir is distributed by intestinal OATP and metabolized by hepatic CYP450 3A (CYP3A). It is also an inhibitor of both OATP and P-gp, and mild inhibitor of intestinal CYP3A and CYP1A2. Sofosbuvir and Ledipasvir are the substrates of P-gp. Ledipasvir has little to no effect on CYP450 enzymes. Daclatasvir is metabolized by CYP3A4 and is a substrate of P-gp and a moderate inhibitor of OATP1B1 and Pgp. The commonly used drugs which can interact with the DAAs available in Indonesia are listed in Table 1. It is recommended that patients' current medications must be thoroughly reviewed for potential drug interactions prior to DAA use.

Selected references:

Di Martino V, Rufat P, Boyer N, et al. The influence of human immunodeficiency virus coinfection on chronic hepatitis C in injection drug users: a long-term retrospective cohort study. Hepatology 2001;34:1193-9.

HCV DAA Drug Interactions. Topics in Antiviral Medicine 2015;23:2.

 Table 1. Drug-Drug Interactions among some available DAAs in Indonesia

 (Simplified from Topics in Antiviral Medicines, 2015)

Simeprevir		
Reduce Simeprevir Concentrations	Increase Simeprevir Concentrations	Concentrations increased by Simeprevir
 Anticonvulsants Carbamazepine Phenobarbital Phenytoin Antimycobacterials Rifampin Dexamethasone Non-nucleoside reverse transcriptase inhibitors (HIV ARV) Efavirenz Nevirapine 	 Antifungals Fluconazole Itraconazole Ketoconazole Boosted protease inhibitors (HIV ARV) Calcium channel blockers Diltiazem Verapamil 	 Antiarrhythmics Amiodarone Calcium channel blockers Amlodipine Nifeclipine Digoxin Erythromycin Sedative anxiolytics Midazolam oral Statins Atorvastatin 40 mg Simvastatin
Decrease Sofosbuvir Concentrations	Potential Interactions with Ledipasvir	
 Anticonvulsants Carbamazepine Phenobarbital Phenytoin Antimycobacterials Rifampin 	 Antineoplastics Colchicine Digoxin Calcium channel blockers Diltiazem Verapamil Statins Atorvastatin Simvastatin 	 Ciprofloxacin Methotrexate Nucleoside reverse transcriptase inhibitors (HIV ARV) Lamivudine Zidovudine



AFIRE Manuscript Writing Week

By: dr. M. Helmi Aziz

As we previously mentioned in the past newsletter editions, AFIRE study enrollment ended in June 2016 with the total of 1,486 subjects included in the final analysis. In light of this, INA-**RESPOND** network held a Manuscript Writing Week (MWW) for five days, starting from 25 to 29 September 2017 at the Double Tree Hotel, Jakarta. The event aimed to prepare papers from AFIRE study results for publications and was attended by 53 participants from INA-RESPOND network, including representatives from NIHRD and US-NIAID.

The AFIRE MWW was opened with a speech by Dr. Siswanto, MPH, DTM, followed by a presentation on Publication Policy by Prof. Dr. M Hussein Gasem, Ph.D., SpPD, KPTI. In the presentation, Prof. Gasem emphasized on how to arrange and decide authorship and what each author was responsible INA-RESPOND for in publications. Dr. Herman Kosasih briefly explained about AFIRE Dataset Afterwards, Dr. Chuen Yen Lau and Dr. Aaron Neal from NIAID-NIH, shared about what should be included in a manuscript and the process of publication. They also gave a few examples of published papers to give a better understanding of the audience.

In the next session, the participants were asked to sit in their designated groups. During the last steering committee meeting in August 2017, it was decided that the MWW participants would be grouped based on their interests. There were nine writing groups at AFIRE MWW. Seven groups focused on seven different pathogens (one pathogen per group): Dengue virus, Rickettsia, Salmonella typhi, Chikungunya virus, Leptospira, Seoul virus, and Influenza virus and other respiratory pathogen groups. One group focused on the Algorithm for Diagnostic Prediction in Six Most Common Diseases, and the last one focused on Increasing Diagnostic Capacity in Fever Management.

On the first day, each group was asked to determine the public health significance of their paper and potential target journals where the paper of interest should be submitted. On the second day, each group was scheduled to discuss statistics, tables, and figures. In addition, they were also asked to edit their first manuscript draft and do some data cleaning. The first draft was expected to be finished on the third day so that the next day, each group could practice peer reviewing other groups' paper and aave feedback to each other. On the last day, each group was supposed to present the work they had been working on for the last four days and then finalized it for submission.

During those five days of AFIRE MWW, the Dengue, Chikungunya, Salmonella typhi, and Leptospira groups were able to complete and gave comprehensive, descriptive data regarding epidemiology, clinical and virological/bacteriological aspects of the pathogens. It was very interesting to see the discrepancies between clinical diagnoses in the hospitals compared to the confirmed diagnosis from INA-RESPOND reference laboratory. For instance, none of the Chikungunya infected subjects have the initial diagnosis as Chikungunya infection and apparently, the missed diagnosis also occurred in Rickettsial infection.

Another interesting discussion was spotted in the Salmonella typhi group. There was a lively discussion on how to analyze results from the subjective semiquantitative Tubex test and the Salmonella typhi IgM and IgG ELISA assays.. Regarding leptospira, although the AFIRE study did not perform Microscopic Agglutination Test (MAT), which is the gold standard for leptospira diagnosis, AFIRE study did capture several subjects with leptospira by







Group discussions during MWW

observing seroconversion of IgM and IgG antibodies and detecting leptospira genome in blood and urine samples. We propose alternative method for detecting leptospira infection as MAT is not possible to be conducted at the hospitals.

Seoul virus, a member of Hantaviruses, was found from two subjects in two different cities with hemorrhagic and liver disturbances with mild renal involvement. The finding of Seoul virus, which is rodent-borne, highlights the important fact that rodents in Indonesia could carry other diseases than leptospira. There was another interesting finding from the Influenza and Other Respiratory Pathogen groups; clinicians in Indonesia should also pay attention to influenza virus as it was prevalent and caused severe illness or death particularly in younger and older age group. Other pathogens such as *Bordetella pertussis*, measles virus, adenovirus, Human Herpesvirus 6 (HHV-6), Respiratory Syncytial Virus (RSV), and human metapneumovirus (HMPV) were not captured since the diagnostic panels for those pathogens were not included in routine diagnostic panels in the hospitals.

The last two groups finished last because they had to combine all parameters from signs and symptoms to laboratory workup to create an algorithm for fever and to increase the diagnostic capacity for fever patients in the hospital. The fever algorithm was developed from rigorous statistics to distinguish dengue fever from the other five common diseases in the AFIRE study. As an alternative, another fever algorithm was developed to distinguish viral and bacterial infection using those clinical parameters, aimed at the rational use of antibiotics. The last group is preparing a recommendation on what kind of diagnostic tests are needed to be installed at the hospitals for a better clinical management that may reduce hospitalization days and mortality.

Quoting from the Scientific Coordinator, dr. Herman Kosasih, the MWW was a big success and ran smoothly. He was very surprised seeing the tremendous enthusiasm of the participants in writing the manuscripts. Thank you to all participants for the dedication and cooperation. Also, thank you to dr. Siswanto, Head of NIHRD Indonesia, Dr Cliff Lane, dr. Karyana, SC members, INA-RESPOND Secretariat, and US-NIAID (Aaron, Chuen-Yen, Jessy, Jason and Sophia) for the support and contributions. Hopefully, we will have goodguality papers to publish after this MWW.



The 17th Indonesian Congress of Pediatrics (KONIKA)

By:

Ms. Maria Intan Josie Ms. Maria Mila Erastuti Ms. Salfia Dian Lastari

KONIKA is the largest meeting in Indonesian Pediatric Society which is held every three years. It is an excellent forum to learn, discuss evidence-based knowledge in child, and share experiences, expertise, results of studies. The 17th Indonesia Congress of Pediatrics (KONIKA) was held in Yogyakarta from 6 to 11 August 2017. This congress was also held in conjunction with the 11th International Congress of Tropical Pediatrics. There were more than 1,000 participants who joined the congress, and from INA-RESPOND, Ms. Maria Mila Erastuti, Ms. Salfia Dian Lastari, and Ms. Maria Intan Josie, joined this congress from 8 to 11 August 2017.

The congress theme addresses the importance of "Implementing Advances in Pediatrics for Better Child Health". Topics related to sustainable development goals such as stunting, the first 1,000 days of life, immunization, adolescent health. and noncommunicable diseases were discussed here. The congress had breakfast meeting, plenary session, breakthrough parallel symposia, lunch symposia, and best research symposia, presentation/poster presentation. We decided to join the infectious disease because it was related to our studies such as Tuberculosis, Pneumonia, and HIV.

Currently, the Indonesia Pediatrics still have some burden in children infectious disease like HIV. New cases of HIV infecting young children are still increasing as presented by Dr. Aman B. Pulungan. Dr. Yulia Iriani said that WHO recommended universal Antiretroviral Therapy (ART) in all HIV-positive children and adolescents (<19 years)

ART has been given to all children below 5 years since 2014 in Indonesia. ART should be initiated in all children (<10 years) living with HIV, regardless of WHO clinical stage or at any CD4 cell counts. In adolescents (10-19 years), should be initiated in all ART adolescents with severe or advanced HIV clinical disease (WHO clinical stage 3 and 4) and adolescents with a CD4 count <350 cells/mm3. The other recommendation is that ART should be started in all TB patients living with HIV, regardless of CD4 cell count, and ART should be started in any child with active TB disease as soon as possible and within 8 weeks following the initiation of anti-tuberculosis treatment of the CD4 cell count and clinical state.

The goals of antiretroviral therapy are to prevent and reduce morbidity and mortality, restore and/or preserve immune function as reflected by CD4cell measures, suppressing viral replication maximally and durably, prevent viral drug-resistance mutations, to minimize drug-related toxicity, to maintain normal physical growth and neurocognitive development, and to improve quality of life, as presented by Dr. Ketut Dewi Kumarawati. She said that treatment failure is identified when persistently detectable viral load exceeds 1000 copies/ml in 2 consecutive viral load measurements with 3 months interval with adherence support after at least 6 months using antiretroviral drugs. Clinical failure is a new recurrent WHO stage 3 or 4 condition after 6 months HAART. Immunologic failure is one of the four categories. Once a diagnosis of treatment failure is made, based on either virologic or nonvirologic criteria, patients are switched to second line therapy.

Dr. Aman B Pulungan said that TB affected 9.6 million people in 2014 in Indonesia, causing 1.2 million deaths. Indonesia ranked 2nd for the highest number of TB infection; meaning it accounts for 10% of all TB patients worldwide (WHO Global Tuberculosis 2015). The prevalence Report. dramatically increased from 272/100.000 population in 2013 to 647/100.000 population in 2014. There were some challenges in pediatric TB, such as less portion of funding compare WOT adult in National TB Program, difficult diagnosis of Pediatric TB (tuberculin, molecular rapid test and CXR are not always accessible), TB prevention (NIH prophylaxis) is not well implemented, comorbidities with HIV and other chronic illness, underreporting in private sectors and underestimating increased number of new TB cases.

Dr. Rina Triasih presented the update on the diagnosis and management of tuberculosis in children. She presented the new algorithm for TB in pediatrics. Children with at least one symptom of TB are asked to collect their sputum for rapid molecular test (Xpert MTB/RIF). Anti-Tuberculosis Drug (ATD) can be given to the patients if the result of Xpert MTB/RIF is positive, or when the pediatric TB score is more than 6. If the

score is less than 6, the patient won't receive TB treatment unless they have been in contact with other TB patient or their TST is positive.

Professor dr. Cissy B. Kartasasmita, SpA, MSc, "New PhD presented Vaccines Introduction Into The National Immunization Program". She explained based on the United Nations Children's Fund (UNICEF) Committing Child to Survival: Progress Α Renewed. Based on Progress Report 2015 (UNICEF, September

2015), there are 5.9 million under five deaths in 2015, 13 % mortality in post neonatal, and 3% mortality in neonatal caused by pneumonia. She also said Pneumonia is the main killer for children under five. Indonesia is one of the 10 countries with the highest number of under-age-of-five deaths in 2015, and 17% (25,000) of the number is due to Pneumonia.

Based on the data, Prof. Cissy said that we need pneumonia prevention and control for children under five. The Indonesian government, through the Ministry of Health, has developed a long-term, conservative plan aimed at preventing and reducing the death caused by pneumonia. The figure below shows the comprehensive multiyear plan for Pneumonia Diseases prevention:

Pneumonia Prevention and

One of the preventive measures the government will take to decrease the mortality rate of pneumonia in children to provide PCV under five is vaccination (Pneumococcal vaccine). Based on the recommendations by WHO on Report Meeting, April 2012 and Indonesia Technical Advisory Group on Immunization in 2016 recommend: "PCV vaccination should be included in national immunization program to increase child life survival, especially in countries with high under-five mortality rate." The government will demonstrate PCV 13 vaccine program on October 2017 at Primary Health Care (PHC), government and private hospitals, and private practices in West and East Lombok, with children of 2, 3, and 12 months age as the target populations.

The congress was very informative and proved to be such a successful meeting



Pneumococcal Disease Summit, Legian, 21 January 2017

in Indonesian Pediatric Society. Topics are useful for research development in future especially for Ina-RESPOND such as HIV, pneumonia and TB especially in pediatrics. And the top of that, we could establish some networks with our PI and PI candidate for our promising studies.

We thank INA-RESPOND for giving us the opportunity to take part in it. We hope we could join another congress in the future.

Top countries with Pneumonia



The United National Children's Fund (UNICEF). Committing to Child Survival: A progress Renewed Progress Report 2015. UNICEF, September 2015. <u>http://www.unicef.org/publications/index 83078.html</u> Source : WHO and Maternal and Child Epidemiology Estimation Group (MCCE) provisional estimates 2015.

