Event description:

The immune system weakens with age and this concept is named "immunosenescence". Immunosenescence contributes to a reduced ability to respond to natural infections but also to develop optimal immunity following administration of some vaccines. Indeed, while vaccines against tetanus, diphtheria, pertussis and hepatitis have demonstrated immunogenicity and acceptable safety profiles in older adults, some other vaccines have only limited efficacy.

As the population of countries ages, an increasing proportion of adults are therefore at increased risk of infectious diseases including those that are preventable by vaccination. Although a number of vaccines are currently recommended for older adults, vaccination coverage in this particular group remains low.

Fortunately, novel technology has facilitated the development of new and/ or improved vaccines for adults that could significantly contribute to the implementation of healthy aging strategies.

A large panel of renowned immunologists, microbiologists, vaccinologists, public health experts, infectious diseases specialists, and geriatricians will share their clinical experience with vaccine-preventable disease in older patients and explain the mechanisms of immunosenescence and the impact of immune aging on vaccination, but also provide the latest developments in vaccine science that may improve the efficacy of vaccines in this age group.

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ISIRV-IMR 2018 SINGAPORE

7 - 9 March 2018

Masterclass in Vaccinology: VACCINATION AND HEALTHY AGING

10 March 2018 12.00 - 18.15

UPDATED VENUE

Jubilee Ballroom, Level 4 Four Points by Sheraton, Riverview, Singapore

FOR HEALTHCARE PROFESSIONAL ONLY Singapore Medical Council accredits 4 CME points for this event

Registration fee: 80.00 Singapore dollars For online registration, please visit website: www.isirv.org For inquiries, email: admin@isirv-imrp.org

| Time | Module & summary of content | Speaker(s) & affiliation | | | | |
|--------------------------------|---|--|--|---------------|---------------------------------------|--|
| 12:00 - 13:20 13:20 - 13:30 | Lunch | | | 15:50 - 16:45 | 15:50 - 16:45 | 15:50 - 16:45 How to improve the efficacy of |
| | Welcome and introduction | Gavin SMITH Professor, Programme in Emerging Infectious Disease, Duke-NUS Medical School, Singapore | | | | Contribution of herd immunity to protection of older adults (principles, example of influenza vaccination of young |
| 13:30 - 14:10 | What is immunosenescence? | | | | | children to provide herd immunity for older adults) |
| | A healthy immune system (short summary: how immune system controls infections, innate immune response, adaptive immune response) | OOI Eng Eong Professor & Deputy Director, Programme in Emerging Infectious Disease, Duke-NUS Medical School, Singapore | | | | Higher vaccine doses (influenza, zoster) |
| | Biological age: an immunologist | Lisa F.P. NG Sr. Principal Investigator, Laboratory of Microbial Immunity, A*STAR, Singapore | | | | Alternative delivery routes |
| | biological age) | | | | | Adjuvants (mechanisms of action, aluminium, MF59, GSK adjuvant systems, etc.) |
| | associated with age (effects of age on | | | | | Q&A |
| | the various compartments of the immune system) Q&A | All speakers | | | 16:45 - 18:10 | 16:45 - 18:10 Case studies – Clinical expert's opinion (list of indicative topics that could be covered by clinicians) |
| 14:10 - 15:25 | Impact of immunosenescence on | | | | Challenges in preventing pneumococcal | |
| | vaccination Why vaccinate older adults (vaccines recommended in older age groups, rationale of vaccines usually | Limin WIJAYA Sr. Consultant, Dept. Infectious Diseases, SGH, Singapore Woo-Yun SOHN South East Asia Cluster Medical Lead, GSK Vaccines Philippe BUCHY Director, Scientific Affairs & Public Health, GSK Vaccines Michael NISSEN Director, Scientific Affairs & Public Health, GSK Vaccines | | | | disease in older adults |
| | Immune response to vaccination in older adults (normal immune response to vaccination vs reduced immune response to vaccines in elderly) | | | | Shingles – clinical case report | |
| | Immunosenescence and the experience with Hepatitis A and Hepatitis B vaccines (disease burden, clinical particularities, immunogenicity and efficacy of vaccines | | | | | Tetanus, diphtheria and pertussis in older adults: what are the risks? |
| | Immunosenescence and experience with influenza vaccines (disease burden, clinical particularities, immunogenicity | | | | | Influenza – Impact of influenza disease on older adults with and without particular underlying diseases |
| | and efficacy of vaccines in older adults) Immunosenescence and response to inactivated and live-attenuated zoster | | | | | How to improve vaccination uptake in older adults? A clinician's perspective |
| | vaccines (disease burden, clinical particularities, immunogenicity and efficacy of vaccines in older adults) | | | | | Q&A |
| | | | | | 18:10 - 18:15 | 18:10 - 18:15 Closure |
| 15:25 - 15:50 | Q&A Tea break | All speakers | | | | |