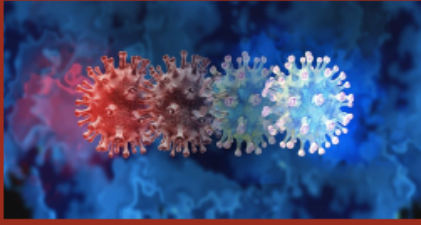


**UNIVERSITY OF SANTO TOMAS**  
 DEPARTMENT OF INTERNAL MEDICINE – SECTION OF RHEUMATOLOGY  
*in partnership with*  
**Lupus Academy and Philippine Rheumatology Association**



**LUPUS**  
**and COVID-19**

Lupus Academy Roadshow

**8:00-10:00 AM (GMT +8) Saturday 20 November 2021 via ZOOM**

by: Wendell Oliver P. Española, MD, *UST Rheumatology Fellow*

There is certainly more to Lupus and COVID-19 than meets the eye. The latest virtual activity last November 20, 2021 unleashed the latest in the interplay between these 2 conditions with high yield presentations by high caliber international and local speakers known for their prowess in their respective fields of specialization. Attended by over 280 participants consisting of medical students, trainees and consultants, this timely educational rendition was organized by the University of Santo Tomas (UST) Section of Rheumatology in partnership with Lupus Academy and the Philippine Rheumatology Association.

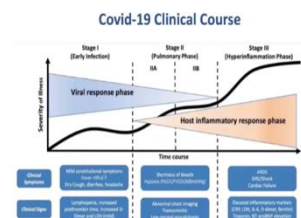
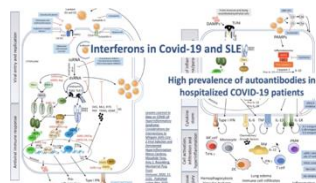
The activity was hosted by director and scriptwriter Dr. Sandra V. Navarra, Chief of Rheumatology at UST Hospital, and co-hosted by Dr. Julie T. Li-Yu, Chief of Rheumatology at UST



Faculty of Medicine and Rheumatology. Young rheumatologist Dr. Evan Glenn Vista offered a refreshing start with an excellent presentation on the “Convergent pathways of lupus and COVID-19”. He discussed the clinical course of COVID-19 and emphasized the role of interferon in both diseases and how cytokine storm syndrome (CSS) sets in. He illustrated how patients with overlapping autoimmune diseases, systemic lupus erythematosus, systemic juvenile idiopathic arthritis, adult-onset still’s disease, malignancies, and post- CAR (Chimeric Antigen Receptor) therapy are prone to CSS. Two important questions relevant to the pandemic were addressed by Dr. Vista: Does established autoimmunity predispose to severe COVID-19? Can SARS-CoV2 infection triggers de novo immunity? He presented the intricate molecular etiopathogenesis and pathologic mechanism related to viral infection such as COVID-19. Highlighting the study by Chang et. al. which concluded that serum antibodies in COVID-19 patients recognize antigens targeted in rare connective tissue disease and antigens associated with pathogenicity, he stressed that autoantibodies are triggered by SARS-CoV-2 infection and new onset IgG autoantibodies are temporarily associated with anti-SARS-CoV-2 IgG responses. He presented a heat map showing that there was a high prevalence of autoantibodies in hospitalized COVID-19 patients. He also mentioned that SARS-CoV2 shares some characteristics features with other viruses that trigger autoimmunity. He proceeded to discuss interferons as an important component in the divergent pathways in COVID-19 and SLE.



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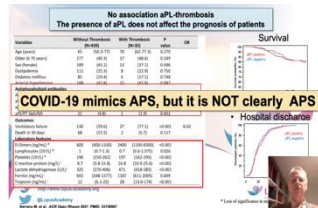
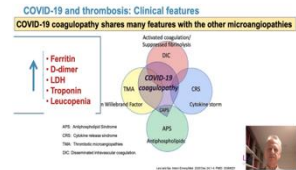
The next presentation entitled “Hypercoagulability Conundrum” ventured into the relationship of COVID-19, thrombosis and antiphospholipid antibodies, delivered by world renowned international speaker Professor Ricard Cervera from the Department of Autoimmune Disease at Hospital Clinic in Barcelona, Spain. Prof. Cervera delved into the pathophysiology of COVID-19 and thrombosis, seamlessly illustrating how COVID-19 coagulopathy shares many features with other

**“Hypercoagulability conundrum”  
COVID-19, thrombosis and antiphospholipid antibodies**



**Professor Ricard Cervera, MD, PhD, FRCP**  
Department of Autoimmune Diseases  
Hospital Clinic, Barcelona, Spain

microangiopathies. He cited the study of Serrano et. al which concluded that the presence of antiphospholipid antibodies does not affect the prognosis of patients and that COVID-19 mimics APS but it is not clearly APS. This was supplemented by the presentation of Dr. Leonid D. Zamora, a budding young rheumatologist, that focused on the role of anticoagulation for severe COVID-19. He pointed out that prompt use of anticoagulant therapy specifically heparin is of paramount importance in patients with severe COVID-19. He presented the latest algorithm for anticoagulation in COVID-19 patients from the Philippine Society of Vascular Medicine (PSVM) as well as the PADUA prediction score for risk in VTE in hospitalized patients, emphasizing that prophylactic anticoagulation be initiated



in all hospitalized moderate to critically-ill COVID-19 patients. Thromboprophylaxis should also be considered for mild COVID -19 patients with moderate to high risk of developing VTE and routine assessment for VTE risk and bleeding risk must be done before safely recommending post discharge thromboprophylaxis.

**Anticoagulation for Severe COVID-19**



**Leonid D. Zamora, MD**  
Asst. Professor in Medicine, University of Santo Tomas  
Faculty of Medicine & Surgery  
Asst. training officer, Section of Rheumatology UST Hospital  
(completing) Masteral studies in Molecular Medicine

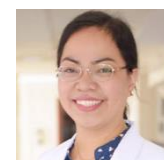
Sustaining the momentum of the program was the highly interesting data presented by Professor Eloisa Bonfa on the impact of distinct therapies on antibody response to SARS-CoV-2 vaccine in systemic lupus erythematosus. Professor Bonfa is the Chief of Rheumatology of the University of Sao Paulo Medical School in Sao Paulo Brazil, the largest end referral for rheumatology in the country. Brazil, being one of the badly hit countries of this pandemic, learning from their experience is tantamount to understanding more about COVID-19 especially their experience on vaccine roll-out. Their study showed that CoronaVac has moderate immunogenicity and similar seroconversion rate among lupus patients as that seen with mRNA and adenovirus vaccine. Prof Bonfa stressed that vaccine type may not be a major factor for immunogenicity in lupus patients. She also pointed out that glucocorticoids and mycophenolate mofetil were the most important factors that interfered with immunogenicity in lupus patients. Overall, there were no safety issues with CoronaVac in their lupus cohort. To further address “Covid-19 vaccine FAQs (frequently asked questions)” were Associate Prof. Maria Rhona Bergantin, virologist and chief of Infectious Diseases at UST Faculty of Medicine and Surgery, and Dr. Ma. Theresa M. Collante, pediatric rheumatologist at UST Hospital currently completing masteral studies in Public Health-Epidemiology.



**Professor Eloisa Bonfa, MD, PhD**  
Chief of Rheumatology  
University of São Paulo Medical School, São Paulo, Brazil

**Impact of distinct therapies on antibody response to SARS-CoV-2 vaccine in systemic lupus erythematosus**

E.F.N. Yuki, E.F. Borba, S.G. Pasoto, L.P. Seguro, M. Lopes, C.G.S. Saad, A.C. Medeiros-Ribeiro, C.A. Silva, D.C.O. Andrade, L.V.K. Kupa, L. Betancourt, I. Bertoglio, J. Valim, C. Hoff, F.F.C. Formiga, T.P. Nascimento, E.G. Kallas, N.E. Alkawa, E. Bonfa



Prof. Sandra Navarra then briefly shared the UST experience on COVID-19 infections among lupus patients, showing the higher number of moderate to severe COVID-19 infection among unvaccinated lupus patients. On the other hand, she shared compelling case reports by the UST Rheumatology fellows of immune mediated reactions to SARS-CoV-2 vaccine among patients with autoimmune inflammatory rheumatic diseases particularly lupus. In an attempt to “Strike a balance” in consideration of all these relevant issues,

#### Lupus & COVID-19 | University of Santo Tomas

- SARS-CoV-2 infection in SLE patients

Española WD, Torres-Morado D, Zamora LD, Navarra SV

- Immune mediated reactions to SARS-CoV2 vaccine among patients with AIIRD

Luceño V, Daleon P, Guevarra E, Navarra SV



Dr. Juan Javier Lichauco, chief of rheumatology at St. Luke’s Medical Center and president of the Philippine Rheumatology Association, reviewed the convergent pathways of lupus and COVID-19 infection emphasizing the risk factors associated with worse outcome from these conditions. He stressed that steroids and MMF specifically blunt the magnitude of immune response to COVID-19 vaccine and that timing of vaccination in relation to immunomodulating therapy can prove crucial. With the ongoing pandemic, the vaccine roll-out and the need to achieve herd immunity, growing reports of autoimmune phenomenon post COVID-19 vaccine poses a continuing challenge, citing the reports that flares involved new organ systems not previously observed among these patients. Although Dr. Lichauco strongly pointed out that SLE patients cannot be compared to the general population, he did reiterate that current guidelines state that beyond known allergies to vaccine components, there are no known additional contraindications to COVID-19 vaccination for AIIRD patients.

The 2-hour virtual learning experience highlighted the added illness burden on our lupus patients during this pandemic. Though many questions continue to seek answers, the forum reinforced the importance of keeping abreast with science and continuing awareness of ‘living’ guidelines developed by experts and policy-makers, and applying these to each **individual** patient and situation.

## Acknowledgments

UST Rheumatology Fellows: Dr. Danilyn Torres Morado, Dr. Eric Ranniel Guevarra, Dr. Peter Paolo Daleon, Dr. Wendell Oliver Española, Dr. Vincent Luceño.

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