Meetings International SciTechnol

Zarina Zainudeen et al., J Diagn Tech Biomed Anal 2018, Volume: 7
DOI: 10.4172/2469-5653-C2-014

International Conference on
CELL AND STEM CELL RESEARCH
&
International Conference on
MEDICAL AND SURGICAL NURSING

August 17-18, 2018
Singapore City, Singapore

B cell populations in the myasthenia thymus that bind rituximab (anti-CD20)

Zarina Zainudeen[1,2], **Kathrine Attfield**[1], **Nick Willcox**[1], **Aman Shah Majid**[3] and **Angela Vincent**[1]
[1]University of Oxford, UK
[2]Universiti Sains Malaysia, Malaysia
[3]Quest International University, Malaysia

Myasthenia gravis (MG) is associated with antibodies to the acetylcholine receptor (AChR). In early-onset myasthenia gravis (EOMG), the thymus contains multiple lymphocytic infiltrates with AChR-specific germinal centres. When placed in culture, thymic lymphocytes spontaneously produce AChR antibodies. These previous findings provide an opportunity to look in detail at the B cell targets and functions of therapeutic antibodies in a human autoimmune disease. The objective is to study rituximab, a chimeric immunoglobulin (Ig) G1 κ monoclonal antibody that binds a discontinuous conformational epitope on CD20, which is used for treatment of autoantibody-mediated diseases. Immunohistology and radioimmuno assay (RIA) were used to examine binding of biotin-conjugated rituximab to lymphocyte suspensions and to frozen sections of EOMG thymus, comparing antibodies to CD19, CD20 and CD138. Synagis, a humanized respiratory syncytial virus monoclonal antibody, used as negative control.

Biography

Zarina Zainudeen has completed MSc in Integrated Immunology and she is now in her final year of DPhil in Clinical Neurosciences from University of Oxford, UK. She is a lecturer and a clinical scientist at Advanced Medical and Dental Institute, University Science Malaysia (USM). Her main research focuses are primary immunodeficiency (PID), auto-immune diseases and immunotherapy.

zarinazainudeen@gmail.com
zarinazainudeen@yahoo.com

Notes: