

## International Conference and Exhibtion on **Antibodies**

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## B cell targeted strategies

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Whith the evolution of biologic drugs in the last one and half decades, the treatment paradigm of autoimmune diseases experienced a dramatic shift that ultimately improved outcome in the setting of refractory illness. Targeting the antibody producing B lymphocyte at its different developmental stages represents one important approach nowadays in the treatment strategy of a multiplicity of autoimmune diseases especially rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE). The production and differentiation of the B cells passes through various developmental stages with the earliest identifiable precursor being the stem cells also known as the progenitor B-Cell, then pro-B, pre-B, immature B, virgin B-Cell and plasma cells. Therapeutic antibodies to cell surface receptors on B lymphocytes as well as their survival factors have been extensively tested with the anti-CD-20 therapy Rituximab being on top of the list used for refractory rheumatoid and in refractory systemic lupus particularly after failure of conventional immunosuppressive drugs, in addition to anti B lymphocyte survival factor anti-BLys like Atacicept and Belimumab, the recently approved biologic therapy for systemic lupus erythematosus. Other uprising B cell targeted strategies include Blisimod (A623) soluble and membrane bound BLyS, and Tabalumab (LY2127399) soluble and membrane BLyS, such novel drugs are being currently evaluated in SLE and RA.

## **Biography**

Reem Hamdy A Mohammed is a Assistant Professor of Rheumatology, graduated from the School of Medicine, Cairo University, MB, BSCh, 1995 excellent grades with honors. She finished her Master degree of Rheumatology and Rehabilitation in May 2000, and MD Rheumatology and Rehabilitation, PhD rheumatology, at Cairo University in 2004. She is recognized as international fellow by the American college of Rheumatology in 2011, nominated as Fellow by the Royal College of Physicians UK in May, 2014 and member of the American Association of Immunologists. As a rheumatologist, she is committed to disseminating evidence based knowledge in the field of rheumatology and autoimmune diseases to all her students, advancing research and academic standards in my organization. In the field of research, she shared in multiple researches in the field of autoimmune diseases many of which has been published in addition to sharing as an author in two book publications about vasculitis. She is also serving as an editor and reviewer in a number of Journals in the field of Rheumatology and Clinical Immunology.

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