

SIgN Immunology Seminar

Prof Ronald P Taylor

Professor of Biochemistry and Molecular Genetics
University of Virginia School of Medicine



Cytotoxic Mechanisms of Immunotherapy: Harnessing Effector Functions of anti-Tumor Monoclonal Antibodies

Compelling evidence indicates that Type I CD20 mAbs rituximab and ofatumumab can only kill tumor cells when they utilize immune effector functions, which require Fc recognition of cell-bound mAbs. The opsonized cells can be killed via ADCC or phagocytosis by effector cells; alternatively, the opsonized cells can bind C1q and activate complement, promoting C3b deposition followed by downstream lysis via the membrane attack complex. We and others have found that saturation/exhaustion of these killing mechanisms at high tumor burdens can severely compromise therapies. These findings may have profound and general implications for the use of unmodified mAbs in cancer immunotherapy.

Host
Dr Alessandra
Nardin
Singapore
Immunology
Network, A*Star

Date
Thursday,
24 October 2013

Time
11am – 12pm

Venue
SIgN Seminar Room
Immunos Building
Level 4
Biopolis