



INSTITUTE OF

Cellular Medicine

Institute Research Student Seminars

Speakers: Rihab Gam & Thomas Hellyer

Venue: Seminar room L2.5, 2nd floor, William Leech Building, Medical School

Date and time: Wednesday 21st January 2015 at 12.30

Rihab Gam will present:

"MICA genotype, serum and gene expression level effects on the outcome of HSCT"

Graft-versus-host disease (GvHD) is a serious complication of allogeneic haematopoietic stem cell transplantation (allo-HSCT). The immunopathology of GvHD involves secretion of proinflammatory cytokines with subsequent expression of danger signals by the affected tissues. MHC class I chain-related gene A (MICA), is a stress induced molecule that acts as danger signal to alert NK and $\alpha\beta$ or $\gamma\delta$ CD8 T cells through engagement of the activating

NKG2D receptor. We investigated MICA genotype together with serum and mRNA expression levels in the development and progression of GvHD.

Key words: GvHD, biomarker, allo-HSCT

Thomas Hellyer will discuss:

"Rapid novel biomarker-based exclusion of ventilator-associated pneumonia"

Ventilator-associated pneumonia (VAP) is a common nosocomial infection in the intensive care unit. Since VAP has an increased mortality and morbidity, patients with suspected VAP are treated with antibiotics at the point of suspicion. However only approximately 30% of this group of patients will go on to have infection confirmed suggesting that antibiotics are overused and there is scope to improve antibiotic stewardship. We have conducted a multi-centre validation study of a novel biomarker-based test that can exclude VAP with high certainty. Whether this new diagnostic tool can ultimately lead to a change in prescription practice and improve antibiotic stewardship is the focus of our ongoing randomised controlled trial.

Key words: biomarker, pneumonia, randomised controlled trial



Chair: Marco Sillipo