

## **ASM/14/11 - Stability of polyomics signatures in RA to facilitate to clinical practice – STABILITY – RA**

Stratification of treatment of RA represents a current, global and ambitious goal. New diagnostics and biomarker prognostics are in advanced stages of development across a range of 'omic techniques. At this time no RA studies have systematically examined the impact of simple clinical factors such as sample timing and stability, diurnal rhythm, diet, fasting state on the performance of polyomic datasets in an integrated manner. Provision of this information would offer a step change towards facilitating the introduction of pragmatic sample handling of polyomics-based biomarkers in routine practice. We propose an intensive study of the polyomic profile in patients with active RA to compare the stability of the transcriptome, proteome, serum and urine metabolome over time. We will thereby directly bridge the gap between the development of diagnostic / prognostic biomarkers and their adoption into clinical practice and thus accelerate the implementation of stratified approaches within NHS in Scotland.