ETM/414 - Towards a Predictive Molecular Taxonomy for Psoriatic Arthritis

Psoriatic arthritis (PsA) is a chronic inflammatory arthritis associated with significant comorbidity and reduced life expectancy. Despite recent improvements, current therapeutic strategies still lead to generally disappointing results. Patients often have dichotomous treatment responses, suggesting that discrete inflammatory pathways may operate across different tissue compartments. The marked clinical heterogeneity and broad spectrum of target tissue involvement in PsA represents arguably the major challenge in improving treatment and thus addressing unmet need. Herein we will test the hypothesis that a molecular signature can be derived from a combination of genomic and transcriptomic sequence analysis that will predict the phenotypic evolution in early PsA, with implications for intervention and stratification. Patients with new and recent onset PsA will be carefully phenotyped and baseline samples collected and sequenced. All participants will be reassessed at 6 and 12 months. This study builds on the success, collaboration and infrastructure of our established SERA study.