

## **CGA/17/19 - VALIDATING AND IMPROVING SERUM BIOMARKERS FOR LIVER CANCER SURVEILLANCE.**

Liver cancer is the second most common cause of cancer related death. For effective treatment, liver cancer must be detected early; however at this stage it is often asymptomatic. Surveillance via imaging alone is suboptimal and often supplemented by serum biomarker measurements. Absolute cut-off values for biomarkers at a population level are too inaccurate for widespread use. Previous work localised Lothian data indicates that individual-based changes of biomarkers aids in the early detection of Hepatocellular Carcinoma. We will analyse additional larger datasets using state-of-the-art biostatistical approaches to optimise and validate automated serum biomarker analysis to improve early diagnoses.