CAF/20/01 - Identifying and validating predictive <u>B</u>iomarkers in advanced o<u>E</u>sophageal adenocarcinoma – a springboard to <u>REAL</u>istic medicine (BE-REAL)

Oesophageal adenocarcinoma (OAC) commonly presents at an advanced and thus incurable stage. Within the UK, Scotland has the highest incidence (972 cases/100,000 people in 2017). Chemotherapy is the main treatment, with side effects a significant feature. Side effects reduce quality of life and mean not all patients can receive chemotherapy. There is no accurate way to predict who will get side effects. Despite treatment, most patients will die within 12 months of diagnosis.

There are a small group of patients (~10%) with long-term control and therefore improved survival and quality of life. The reason for this is unknown. If a reason for this sensitivity to chemotherapy can be found, it may allow a reduction in chemotherapy dose with subsequent reduction in side effects, improvement in quality of life and treatment of more patients.

Previous research suggests the reason may lie in how the cancer repairs itself. I want to investigate this on a bigger scale, using existing samples from a trial in older, frailer patients with OAC. I want to develop a way to predict side effects and identify a test, after diagnosis, to enable a more individual treatment decision that will improve patient quality of life and reduce toxicity.