

TCS/21/25 - Dissecting the transcriptomic and phenotypic reprogramming of myeloid cells that mediate chemoresistance in cholangiocarcinoma.

Cholangiocarcinoma (CCA) is an aggressive disease for which therapeutic options are limited. Although some CCA patients show poor response to chemotherapy, a sub-group of patients who have long term benefit from anticancer therapies does exist. We will study the group of patients with a durable response to therapy and we will compare them with patients whose tumours grow quickly during chemotherapy to understand what makes the treatment effective. Our previous studies suggest that drug response in CCA depends not only on cancer cells, but also on the surrounding non-cancer cells, especially a subtype called myeloid cells. Here, we will investigate how myeloid cells differ between responders and non-responders to chemotherapy; we will grow these myeloid cells with mini-tumour replica established directly from patients' cancers and we will assess how the myeloid cells can change the way cancer cells respond to chemotherapy drugs.