The FCCU evaluates individuals and families who are at an increased risk of developing cancer at an early age, genetic susceptibility to colorectal cancer is a key area focus for the FCCU’s research activities. Familial or hereditary forms of colorectal cancer, early-onset colorectal cancer (EOCC), and synchronous or metachronous colorectal tumours are our main topics of interest. We have continued the characterisation of EOCC; on the premise that the carcinogenic mechanism and the progression of these tumours may differ in comparison with late-onset colorectal cancer (LOCC) (FIGURE). The APC gene status, wild-type or mutated, seems to be a marker of prognosis in colorectal cancer with microsatellite instability (MSI), but the prognosis would have a different sign in EOCC and LOCC. In MSI-EOCC, the worst prognosis was associated with APC-mutated tumours and distal location. However, in the MSI-LOCC group, the worst prognosis was observed among proximally located tumours with APC-wild type. These results not only continue to suggest a different behaviour according to the age of onset, but also define different groups in relation to the tumour location.

During 2016 the FCCU has maintained a fruitful relationship with AEAS. Several members of the association have received genetic counselling in our consultancy, and the study of sarcoma predisposition genes (mainly TP53, FBN1 and CIN82A2) was also carried out in our laboratory. These activities are part of our ongoing collaborations with cancer patients associations. Recently, we have designed a new survey that will be distributed among members of the AEAS with the aim of identifying those families with an increased susceptibility to cancer.