**Clinical trial registration:** This study was not a clinical trial but only a retrospective evaluation of biological parameters on histological surgical specimens from subjects referred to the General Surgery Unit, University of Florence (Italy) and operated for Familial polyposis (FAP) associated duodenal carcinomas. The names of the patients were listed in the registers of either the surgical operation list and the Pathology Unit of the University of Florence (Italy). Control group was referred to outpatient Endoscopy Section of Gastroenterology Unit, University of Bari (Italy) and Pathology Unit of the same University. As required by Italian law, each patient gave written informed consent for endoscopic examination as well as surgical operation. Additionally, an oral consent to treat biological samples was obtained from each patient by a phone interview. No ethical committee approval was required because all invasive procedures had been performed according to the current clinical patient management.