

## *Biomarkers of Response to Anti EGFR Therapy in Colorectal Cancer*

### **ABSTRACT:**

The anti-EGFR antibodies cetuximab and panitumumab have been demonstrated to be efficient in the treatment of irinotecan-resistant and chemorefractory metastatic colorectal cancer (mCRC) respectively. However, these costly and potentially toxic treatments are efficient in a few proportion of patients. It is so necessary to identify markers able to better define whose patients will benefit from these treatments. The major potential molecular predictive markers of response to cetuximab and/or panitumumab are involved more or less directly in the EGF signaling pathway. Among them, *KRAS* mutations, *EGFR* gene copy number and, more recently, expression of PTEN protein and of epiregulin and amphiregulin gene are those that appear to be the most relevant and which will have to be evaluated in future clinical trials to be validated before being incorporated in therapeutic strategy of CRC.