



ICR – Cancer Lecture Series Seminar



“Targeting mutant KRAS driven lung tumors: MAPK pathway and cell cycle”

Monica Musteanu

**Centro Nacional de Investigaciones Oncologicas (CNIO),
Madrid**

Almost one third of all lung adenocarcinomas harbour KRAS oncogenes. Most efforts to block KRAS oncogenic signalling have focused on targeting its downstream kinases. Yet, as of today, no selective drugs have been approved to treat these malignancies. Using a new generation of genetically engineered mouse tumour models we have recently identified Raf1 as a KRAS downstream effector whose ablation leads to tumour reduction with acceptable toxicities. Unfortunately, pharmacological validation with existing compounds did not mimic the genetic data. In addition, since we observed that targeting only one signalling molecule is not sufficient to induce complete tumour regressions, we are currently seeking to find a suitable combination partners whose inactivation would cooperate with Raf1 ablation and enhance its therapeutic activity.

Sanclemente, M. et al. c-RAF Ablation Induces Regression of Advanced Kras/Trp53 Mutant Lung Adenocarcinomas by a Mechanism Independent of MAPK Signaling. *Cancer cell* 33, 217-228 e214 (2018).

**Venue: Lecture Hall Container, Institute of Cancer Research (ICR),
Borschkegasse 8a, 1090 Vienna**

Time: June 14th, 2019, 13.00

Host: Robert Eferl