



Advancing a Precision Medicine Paradigm in metastatic Colorectal Cancer: Systems based patient stratification solutions.

What is COLOSSUS?

COLOSSUS is an EU-funded H2020 project that aims to provide new and more effective ways to classify patients with a difficult-to-treat subtype of metastatic colorectal cancer (microsatellite stable RAS mutant metastatic colorectal cancer or MSS RAS mt mCRC) and to develop new treatment options for them. Our ultimate goal is to deliver a personalised medicine approach for patients with MSS RAS mt mCRC that is currently not available.

Why carry out research into colorectal cancer?

Colorectal cancer is the third most common cancer in Europe with an estimated 420,000 cases and 150,000 related deaths in 2012. Of total CRC cases, it is thought that approximately 50-55 % involve RAS mutations.

Current treatment for RAS mt mCRC is primarily based on 5-fluoruracil based chemotherapy +/- bevacizumab. However, there are limited treatment options for patients with this type of cancer when they develop resistance to standard therapies. Targeting MSS RAS mt disease is difficult and has not evolved significantly in recent years.

What will COLOSSUS do?

The COLOSSUS consortium will study patient samples and apply advanced multi-omic computational modelling approaches to identify new MSS RAS mt specific subtypes. This strategy is designed to help us predict patient outcomes under standard treatment and to enable the design of more targeted and personalised regimens.

Newly described MSS RAS mt classifiers will be validated within the COLOSSUS translational trial – a multicentre study for advanced MSS RAS mt mCRC patients which will be conducted across Spain, Germany and Ireland.

Why is COLOSSUS important?

mCRC is a heterogeneous, highly prevalent disease, that inflicts substantial human costs and imposes a significant economic burden, both in a European and global context. Our research aims to address the need for more targeted and personalised treatment options, to benefit patients and their families, clinicians and health care systems and to deliver wider economic benefits.

Where can I find more about COLOSSUS?

To find out more about the Project log onto our website: colossusproject.eu. Different sections of the website will be of interest to researchers and clinicians, patients and the general public.

You can also follow us on Twitter [@COLOSSUSEU](https://twitter.com/COLOSSUSEU), on Facebook ([COLOSSUS Project](https://www.facebook.com/COLOSSUSProject)) or contact the Project Coordinator:

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COLOSSUS

Meet the Team

COLOSSUS involves 14 different partners from 8 different countries and brings together a multi-disciplinary team with expertise including: cancer immunology, systems biology, computational modelling, bioinformatics, omics analysis, clinical oncology/pathology, preclinical research/imaging, clinical trials, health economics and patient engagement. The organisations involved in the Project are set out below:



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