

Development of novel therapeutic agents for refractory BRAF mutation-positive colorectal cancer

Principal Investigator

Department of Gastroenterological Surgery, Graduate School of Medicine, Osaka University

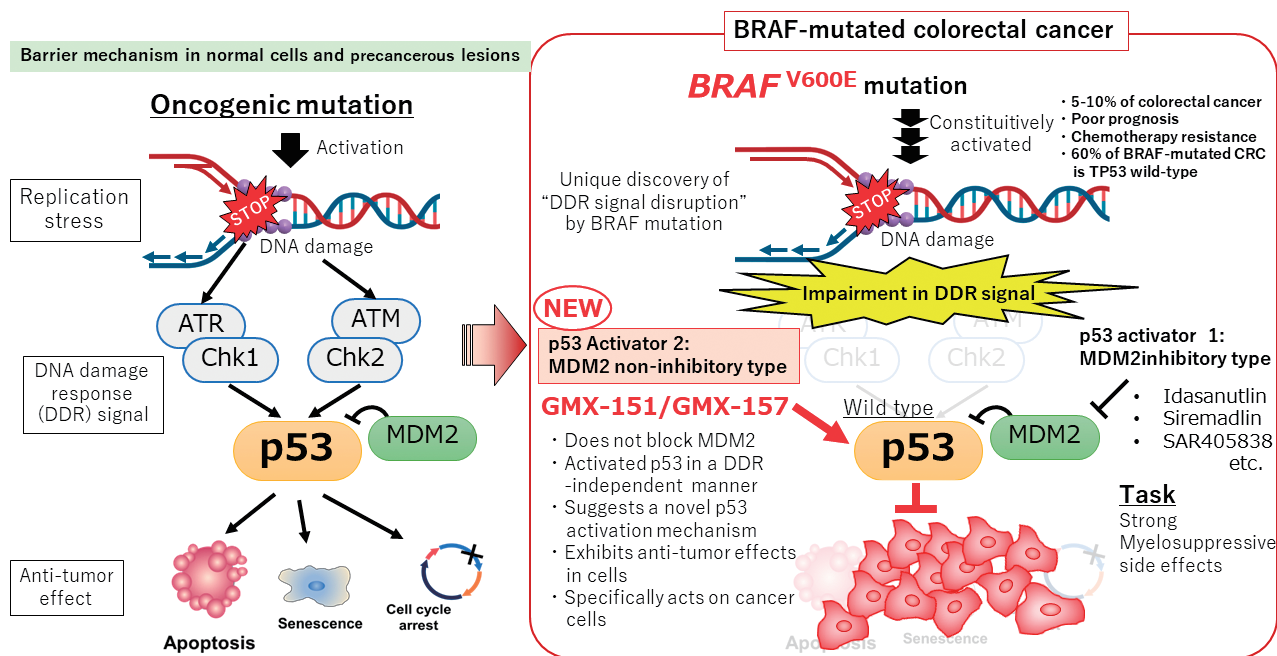
Faculty of Medicine Lecturer Hidekazu TAKAHASHI

Project Outline

BRAF mutated colorectal cancer progresses rapidly and has a very poor prognosis with a median survival of 9 months for advanced recurrence, even if all currently conceivable therapeutic drugs are used in combination. In recent years, this has also become a social issue due to the increase in patients of the working-age population. At the start of this project, we clarified that p53 activation is effective against refractory BRAF-mutant colorectal cancer.

As stated in the "10-Year Strategy for Cancer Research" by the Ministry of Health, Labour and Welfare (MHLW), therapeutic strategy that promotes p53 activation have not been realized, despite many years of research and development and established tumor-suppressing effects. Almost current p53 activators target and inhibit its negative regulator MDM2, and have strong myelosuppressive adverse effects, making clinical application difficult. We originally developed the screening system and discovered novel p53-activating compounds GMX-151 and GMX-157. These compounds are new types of p53 activators that do not inhibit MDM2, and we believe that their successful development will lead to the world's first practical application of p53 activation therapy.

However, as our compounds have weak activities, we need the cooperation of companies in order to quickly proceed the analysis for clinical application. Your cooperation in chemical expansion of our compounds may lead to dramatic progress in drug development.



Target disease: BRAF-mutant refractory colorectal cancer

Patent Information: None

Technology features: New compound (anti-tumor drug)

Marketability, development challenges: Requires pharmaceutical support, including synthetic development.