

Autoantibody panel for early diagnosis of colorectal cancer (P-1255)

Key facts

- Autoantibody marker panel for diagnosis and stratification of colorectal cancer
- Based on a cohort of screening colonoscopy participants of the BliTz study between 2005-2013, including approx. 6,800 participants
- High sensitivity i.e. 90% for early stage CRC

Abstract

Sigmoidoscopy and colonoscopy, the current gold standards for detection of CRC in the distal and total colorectum, respectively, are limited by several disadvantages, such as high costs, limited resources and poor compliance. So other cost-effective and sensitive methods for the early detection of colorectal cancer are urgently needed and very important from the health economic standpoint. Using blood samples the invention offers an autoantibody set that can be used as a diagnostic tool for diagnosis and stratification of colorectal cancer.

The Technology and Development Stage

Using biological (blood) samples from a screening colonoscopy study including approx. 6800 participants a core panel of 4 proteins was identified without substantial loss of predictive power. Sensitivity of this core marker set was 26% (95% CI, 13–45%) for early stage CRC at a specificity of 90% (95% CI, 83–94%).

Applications and Commercial Opportunity

DKFZ is looking for a commercial partner for further development of the marker panel alone or in combination with other markers towards clinical application

Inventors

The investigators are: Hongda Chen, Julia Butt, Dirk Jäger, Inka Zörnig, Stefan Eichmüller, Tim Waterboer, Michael Pawlita and Hermann Brenner from DKFZ and University Clinic of Heidelberg

Scientific Reference:

“Prospective evaluation of 64 serum autoantibodies as biomarkers for early detection of colorectal cancer in a true screening setting.” By Chen H, Werner S, Butt J, Zörnig I, Knebel P, Michel A, Eichmüller SB, Jäger D, Waterboer T, Pawlita M, Brenner H. published in [Oncotarget](#). 2016 Feb 19. doi: 10.18632/oncotarget.7500.

Intellectual Property

A priority patent application “Serum autoantibodies as biomarkers for early detection of colorectal cancer” EP 16151350.2 has been filed at the Europe Patent Office January 14, 2016.

Further Information

No other public information is currently available, but further information (speaking with the inventor) is available under a signed Confidential Disclosure Agreement (CDA).

DKFZ Contact:

For further information, including a CDA, please contact:

Dr. Frieder Kern
Deutsches Krebsforschungszentrum
Technology Transfer Office T010
Email: F.Kern@dkfz.de
Tel.: +49-(0)6221-42-2952
Fax: +49-(0)6221-42-2956