Research Hotline

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The abstracts of the recent research information appearing in Vol.10 No.1-3 of "AIST TODAY" are introduced here, classified by research areas. For inquiry about the full article, please contact the author via e-mail.

Life Science and Biotechnology

Glycobiomarker test can evaluate progression of liver fibrosis by chronic hepatitis A paradigm shift by development of glycobiomarkers on problem-oriented medical diagnosis

Hepatitis C-type virus (HCV) infection is known to be a main cause of chronic hepatitis (CH), resulting in liver cirrhosis and subsequent hepatocellular carcinoma. Regarding the current therapy on the diseases to eliminate HCV infection using interferon, instead of liver biopsy test, a new clinical test using blood samples has been required to establish the estimation of liver fibrosis. By intensive cooperation, we have developed glycobiomarkers that can evaluate the progression of liver fibrosis in patients with CH using blood samples. Our new biomarkers are expected to reduce overall burden of medical care by decreasing frequency of liver biopsy, and by cutting health care costs. Additionally, the biomarkers are expected to be useful in foreign countries where the prevalence of HCV infection is the same as, or more than Japan. Furthermore, it is expected to accelerate the development of antifibrotics for CH patients.

Thus, the development of glycobiomarkers proposes a paradigm shift on therapeutic approaches based on medical diagnosis of HCV infection.

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Evaluation of liver fibrosis stage of chronic hepatitis patients using glycobiomarker

