Novel Biomarkers and Agents to Screen Molecular-Targeted Therapeutics for Hepatic Metastasis from Gastric Cancer

**Background:**
Gastric cancer (GC) is one of the most common malignancies and the third leading cause of cancer related death worldwide. Hepatic metastasis and relapse contribute to the high incidence of GC-related fatalities, and represent a frequent and crucial problem for oncologists.

**Technology Overview:**
Nagoya University researchers conducted transcriptome analysis using a next-generation sequencing platform and identified major facilitator superfamily domain containing 4 (MFSD4) as a candidate biomarker for hepatic metastasis of GC. MFSD4 expression in gastric tissues may represent a useful biomarker for identification of patients at high risk for hepatic recurrence, metastasis, or both.

**Figure 1:** Clinical implications of the levels of MFSD4 mRNA in GC tissues.
A. ROC curve analysis of the value of MFSD4 expression levels for predicting hepatic metastasis. The optimal cutoff value = 0.006. B. The levels of MFSD4 mRNA in the corresponding adjacent noncancerous tissues and GC tissues according to disease stage and recurrence patterns. C. The cumulative incidence of hepatic recurrence was significantly lower in the high MFSD4 group.

**Further Details:**
Oncotarget, Kanda *et al.*, 2016

**IP Status:**
An international patent application PCT/JP2016/063956 has been filed.

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