OncoTherapy Science, Inc.
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Publication of a scientific paper about liquid biopsy

OncoTherapy Science, Inc. (President & CEO: Jae-Hyun Park; hereinafter, "OncoTherapy") announces the publication of the results from collaborative study at the subsidiary company, Cancer Precision Medicine, Inc. (CPM) with Itabashi Medical System (IMS) Group and Eil, Inc., regarding the detection of cancer-derived mutated circulating tumor DNA (ctDNA) after surgery of colorectal and gastric cancer by liquid biopsy and the early detection of tumor recurrence. The study results have been published in *Oncotarget*. (https://www.oncotarget.com/article/27682/text/)

In this collaborative study, the examination of the ctDNA mutation in plasma samples obtained from 154 colorectal cancer (CRC) and 46 gastric cancer (GC) patients revealed the followings:

1) The overall detection rate of mutated ctDNA in pre-operative plasma samples by next generation sequencing-based panel assay was 72%, and panel-based screening identified 207 and 47 mutations from CRC and GC patients, respectively.
2) In droplet digital PCR analysis of post-operative plasma samples of 77 patients, detection of mutated ctDNA was earlier than the corresponding imaging diagnosis in all of 6 patients who showed the tumor recurrences after surgery.
3) Patients with positive post-operation ctDNA level showed significant shorter recurrence-free survival compared to the patients with negative ctDNA level.

These findings suggested that liquid biopsy aids in identifying the patients at high risk of post-operative recurrence, and serial screening of ctDNA would allow to monitor the early detection of tumor recurrence.