OncoTherapy Science, Inc.

February 29, 2016

Publication of a paper describing the possible effect of a TOPK inhibitor OTS514 and a MELK inhibitor OTS167 on kidney cancer

Important biological roles of protein kinases TOPK (T-lymphokine-activated killer cell-Originated Protein Kinase) and MELK (Maternal Embryonic Leucine-zipper Kinase), which are targeted by our small molecule inhibitors OTS514 and OTS167, respectively, were reported by a collaboration between Prof. Yusuke Nakamura's group in The University of Chicago and our research development group in OncoTherapy Science (OTS).

TOPK and MELK are known to be up-regulated in various types of cancer including kidney cancer, while their expressions are hardly detectable in normal organs. OTS is currently working on preclinical studies of TOPK inhibitors including OTS514 and OTS964, and is conducting clinical trials of OTS167 in the United States and Australia.

In this study, the collaborative group demonstrated that OTS514 and OTS167 effectively down-regulated TOPK, MELK, and FOXM1 (one of the key transcriptional factors in cancer stem cells), and suppressed the kidney cancer cell growth. In addition, the combination of OTS514 and OTS167 additively worked and showed the very strong growth suppressive effect on kidney cancer cells.

Based on the results in this manuscript, we will accelerate the development of drugs targeting TOPK and plan further clinical development of OTS167.

The paper has been published online in the journal *Oncotarget*.
(http://www.impactjournals.com/oncotarget/index.php?journal=oncotarget&page=article&op=view&path%5B%5D=7755)