OncoTherapy Science, Inc. August 23, 2016

Publication of a paper describing the anti-cancer effect of a MELK inhibitor OTS167 on multiple myeloma cells

An article that described the ability of OTS167 to impair the growth of multiple myeloma stem cells as well as multiple myeloma cells has been published in *Blood Cancer Journal* by a research group of Dr. Rosebeck, Prof. Jakubowiak and our collaborator Prof. Nakamura's group in the University of Chicago.

Treatment with proteasome inhibitors and immunomodulatory drugs has improved the mortality rate of multiple myeloma, but the majority of patients becomes refractory to currently available therapeutics and there is no additional treatment option for relapsed and refractory multiple myeloma patients.

This paper showed that MELK expression is upregulated in newly-diagnosed multiple myeloma samples and inhibition of MELK by OTS167 is potently and specifically suppressed the growth of malignant plasma cells derived from multiple myeloma patients and myeloma cell lines. Furthermore, treatment with OTS167 effectively killed chemoresistant myeloma cells. In addition, OTS167 also significantly prevented regrowth of malignant plasma cells derived from presumptive myeloma stem cells. These data indicated that OTS167 has a possibility as a new treatment option in multiple myeloma.

The paper has been published online in *Blood Cancer Journal*. http://www.nature.com/bcj/journal/v6/n8/full/bcj201671a.html