

OncoTherapy Science, Inc.

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Publication for possible biomarkers of OTS167, MELK inhibitor

The mechanism of our small molecule inhibitor OTS167 targeting protein kinase MELK (Maternal Embryonic Leucine-zipper Kinase) was reported by our research development group in OncoTherapy Science (OTS) in a collaboration with Prof. Yusuke Nakamura in The University of Chicago.

MELK is known to be highly expressed in various types of cancer and play critical roles in maintenance of cancer stem cells. OTS is currently conducting clinical studies of OTS167 in the United States and Australia. In this study, we demonstrated the molecular mechanism of action of OTS167 as well as possible biomarkers in preclinical mouse models. OTS167 treatment reduced the protein level of downstream target molecules and stem cell markers as well as MELK itself in cancer tissues. Hence, these biomarkers are expected to predict responses to the drug.

Based on the results in this manuscript, we plan to evaluate and confirm baseline changes of candidate biomarkers during our clinical studies.

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=7685> )