Anexelekto /MER Tyrosine Kinase inhibitor ONO-7475 growth arrests and kills FMS-Like Tyrosine Kinase 3-Internal Tandem Duplication Mutant Acute Myeloid Leukemia cells by diverse mechanisms

Peter P. Ruvolo, Huaxian Ma, Vivian R. Ruvolo, Xiaorui Zhang, Hong Mu, Wendy Schober, Ivonne Hernandez, Miguel Gallardo, Joseph Khoury, Jorge Cortes, Michael Andreeff, and Sean M. Post

Disclosures: 1. Ono Pharmaceutical Company Ltd., Osaka, Japan provided drug. The work was supported in part by funds from Ono Pharmaceutical Company Ltd. to Peter Ruvolo. Work utilized the MDACC Flow Core and MDACC RPPA Core which are both funded by the National Institutes of Health grant CA-016672. 2. No income or compensation for work performed was received by any of the authors. 3. No patents are planned.

Contributions: PPR oversaw the project, performed experiments and wrote the manuscript; HMa, VRR, HMu, WS, IH, MG, and XZ performed experiments, JK analyzed pathology specimens; JC and MA provided advice on experimental design and contributed to writing the manuscript, SMP oversaw the animal study, performed experiments and helped write the manuscript.