Haematologica HAEMATOL/2018/194688 Version 4 PYK2/FAK inhibitors reverse hypoxia-induced drug resistance in multiple myeloma

Barbara Muz, Maurizio Buggio, Feda Azab, Pilar de la Puente, Mark Fiala, Mahesh V. Padval, David T. Weaver, Jonathan A. Pachter, Ravi Vij, and Abdel Kareem Azab

Disclosures: COI: The material in this manuscript is original, has not been previously published and has not been submitted for publication elsewhere while under consideration. Dr. Azab receives research support from Glycomimetics Inc, Arch Oncology and Cantex Pharmaceuticals; and is the founder and owner of Targeted Therapeutics LLC and Cellatrix LLC; however, these have no contribution to this study. Moreover, Dr. Azab received research funding to partially support this study from Verastem Inc. Mahesh V. Padval, David T. Weaver, and Jonathan A. Pachter are employees and shareholders of Verastem, Inc. Other authors state no conflicts of interest. Funding: The study was supported partially by a research grant from Verastem, Inc. and by the award from the National Center for Advancing Translational Sciences (NCATS) of the National Institutes of Health (NIH) and the National Cancer Institute of the NIH under (U54CA199092). The content is solely the responsibility of the authors and does not necessarily represent the official view of the NIH.

Contributions: B.M. designed the study, performed experiments, analyzed and interpreted the data, and wrote the manuscript. M.B., F.A, P.P., M.F., M.V.P. and D.T.W. performed experiments and interpreted the data. J.A.P. and R.V. rationalized the study and revised the manuscript. A.K.A. rationalized, designed and supervised the study, analyzed and interpreted the data, and wrote the manuscript. All authors reviewed and approved the manuscript.