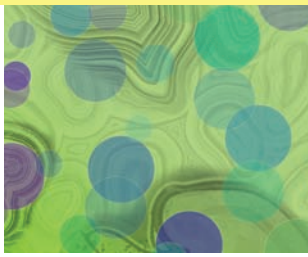
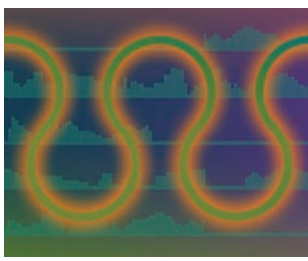
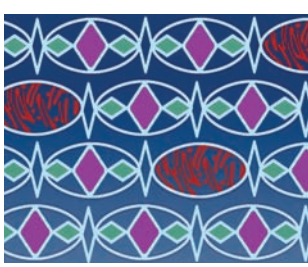
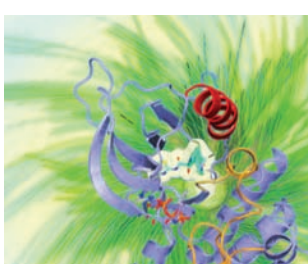
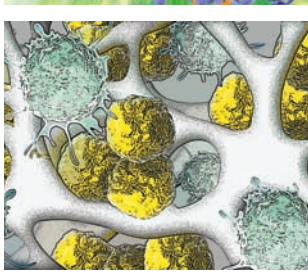
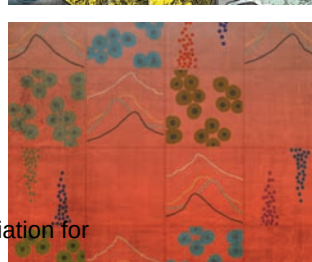
CANCER DISCOVERY

CONTENTS

JULY 2019 ▪ VOLUME 9 ▪ NUMBER 7

AC icon indicates AuthorChoice

For more information please visit http://www.aacrjournals.org

Corrections

ON THE COVER Chen, Glytsou, and colleagues performed a genome-wide CRISPR/Cas9 screen for genes whose inactivation would sensitize acute myeloid leukemia (AML) cells to venetoclax and identified regulators of mitochondrial organization and function, including the mitochondrial chaperonin CLPB. CLPB is elevated in AML and maintains mitochondrial cristae structure, whereas its loss promotes apoptosis by inducing cristae remodeling and mitochondrial stress responses. CLPB ablation synergized with venetoclax alone and in combination with azacitidine to inhibit AML growth. In a complementary study, Nechiporuk and colleagues performed a genome-wide CRISPR/Cas9 screen for genes whose inactivation confers venetoclax resistance in AML cells and identified members of the TP53–BAX apoptotic network. p53 and BAX expression were inversely correlated with venetoclax sensitivity in primary AML samples, and loss of p53 and BAX were associated with perturbed mitochondrial homeostasis and inhibition of a general mitochondrial stress response. Venetoclax-resistant *TP53*-mutant AML cells acquired a dependency on NTRK signaling for survival and were sensitive to TRK inhibitors. Together, these studies provide insights into biological mechanisms underlying responses to venetoclax in AML and suggest potential strategies to overcome venetoclax resistance. For details, please see the article by Chen, Glytsou, and colleagues on page 890 and the article by Nechiporuk and colleagues on page 910. Cover art by Yi Hu.

CANCER DISCOVERY

9 (7)

Cancer Discov 2019;9:OF10-981.