DISCOVERY IN CONTEXT: LEVERAGING MULTIDIMENSIONAL GliOBLASTOMA DATASETS TO IDENTIFY TARGETABLE REGULATORY NETWORKS

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MECHANISMS OF BRCA1 TUMOR SUPPRESSION

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A CENTRAL ROLE FOR RAF → MEK → ERK SIGNALING IN THE GENESIS OF PancreATIC DuctAL AdENOCARCINOMA


PRÉCIS: Pancreatic ductal adenocarcinomas harboring KRAS mutations are dependent on RAF signaling and are sensitive to MEK inhibition.

FIRST-IN-HUMAN TRIAL OF A STAT3 DECOY OLIGONUCLEOTIDE IN HEAD AND NECK TUMORS: IMPLICATIONS FOR CANCER THERAPY


PRÉCIS: Intratumoral injection of a STAT3 decoy oligonucleotide safely reduced target gene expression in a phase 0 clinical trial, and chemical modification may enable systemic delivery.

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ON THE COVER
Sen and colleagues conducted an exploratory, first-in-human phase 0 trial that showed that intratumoral injection of a STAT3 decoy oligonucleotide during tumor resection surgery could safely reduce STAT3 target gene expression in head and neck squamous cell carcinomas (HNSCC). Modification of the STAT3 decoy by linkage or circularization of the 2 strands increased its stability in vitro, which facilitated systemic administration of the STAT3 decoy in vivo. Intravenous injection of a cyclic STAT3 decoy, but not the parental decoy, decreased STAT3 target gene expression in HNSCC xenografts and significantly suppressed tumor growth. For details, please see the article by Sen and colleagues on page 694.