**CANCER RESEARCH**

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Zunyu Xiao, Aaron T. Mayer, Tomomi W. Nobashi, and Sanjiv S. Gambhir

ICOS ImmunoPET is a promising strategy to noninvasively predict and monitor immunotherapy response.

See related commentary, p. 2975
Inactivation of the Prolyl Isomerase Pin1 Sensitizes BRCA1-Proficient Breast Cancer to PARP Inhibition
Man-Li Luo, Fang Zheng, Wenying Chen, Zhi-Mei Liang, Gurushankar Chandramouly, Jianan Tan, Nicholas A. Willis, Chun-Hau Chen, Mateus de Oliveira Taveira, Xiao Zhen Zhou, Kun Ping Lu, Ralph Scully, Gerburg M. Wulf, and Hai Hu
PARP inhibitors has been limited to treat homologous recombination-deficient tumors. All-trans retinoic acid, by inhibiting Pin1 and destabilizing BRCA1, extends benefit of PARP inhibitors to patients with homologous recombination-proficient tumors.
See related commentary, p. 2977

Targeting Hippo-Dependent and Hippo-Independent YAP1 Signaling for the Treatment of Childhood Rhabdomyosarcoma
This study elucidates the signaling pathways that regulate the oncogenic protein YAP1 and identifies a combination therapy to target these pathways in the childhood tumor rhabdomyosarcoma.

ABOUT THE COVER
Chemotherapy causes inflammatory changes, such as IL8 upregulation in tumors, inducing a drug transporter, ABCB1, expression in tumor endothelial cells. This causes drug resistance in tumor blood vessels. It is possible that tumor endothelial cells can survive during chemotherapy and keep providing a gateway for cancer metastasis. Targeting ABCB1 in tumor endothelial cells, or IL8 inhibition, represents a novel strategy to overcome cancer drug resistance. For details, see article by Kikuchi and colleagues on page 2996.