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These findings suggest that targeting acetate metabolism through ACS52 inhibitors has the potential to safely and effectively treat a wide range of patients with cancer.

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Dual Inhibition of MEK and AXL Targets Tumor Cell Heterogeneity and Prevents Resistant Outgrowth Mediated by the Epithelial-to-Mesenchymal Transition in NSCLC

Jessica M. Konen, B. Leticia Rodriguez, Aparna Padhye, Joshua K. Ochieng, Laura Gibson, Lixia Diao, Natalie W. Fowlkes, Jared J. Fradette, David H. Peng, Robert J. Cardnell, Jeffrey J. Kovacs, Jing Wang, Lauren A. Byers, and Don L. Gibbons

This study shows that a novel combination of MEK and AXL inhibitors effectively bypasses EMT-mediated drug resistance in KRAS/p53-mutant non–small cell lung cancer by targeting EMT subpopulations, thereby preventing tumor cell survival.

Targeting the IRAK1–S100A9 Axis Overcomes Resistance to Paclitaxel in Nasopharyngeal Carcinoma

Lizhen Liu, Sailan Liu, Peng Deng, Yujing Liang, Rong Xiao, Lin-Quan Tang, Jinghong Chen, Qiu-Yan Chen, Peiyong Guan, Shu-Mei Yan, Xiangliang Huang, Jing Han Hong, Jianfeng Chen, Yichen Sun, Bin Tean Teh, Qiang Yu, Hai-Qiang Mai, and Jing Tan

Deregulation of the IRAK1–S100A9 axis correlates with poor prognosis, contributes to chemoresistance in nasopharyngeal carcinoma, and can be targeted by pacritinib to overcome chemoresistance in nasopharyngeal carcinoma.

ABOUT THE COVER

Cancer is a heterogeneous disease with extensive genetic complexity. The circles in the middle represent a normal cell with germline variations. In cancer, germline variants can affect the tumor mutational burden, both of which contribute to the emergence of different types of cancer cells. For details, see article by Sun and colleagues on page 1230.