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Lewis C. Cantley, PhD, and José Baselga, MD, PhD, Editors-in-Chief

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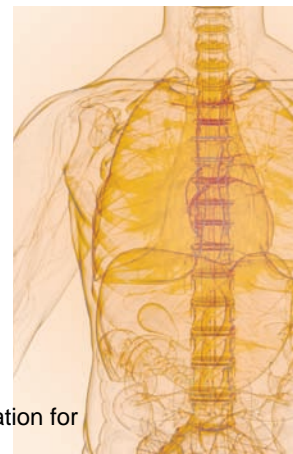
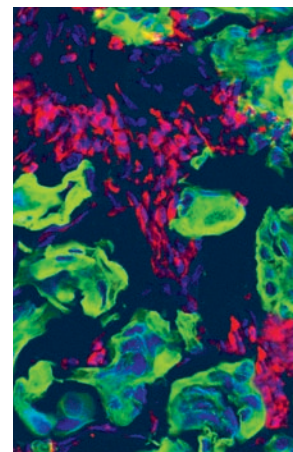
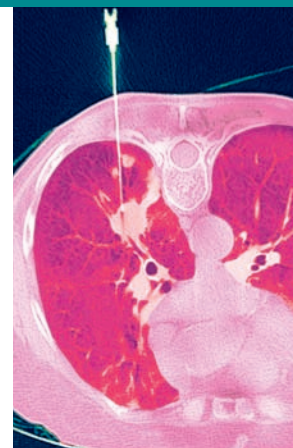
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X-S. Wang, S. Shankar, S. M. Dhanasekaran, B. Ateeq, A. T. Sasaki, X. Jing, D. Robinson, Q. Cao, J. R. Prensner, A. K. Yocum, R. Wang, D. F. Fries, B. Han, I. A. Asangani, X. Cao, Y. Li, G. S. Omenn, D. Pflueger, A. Gopalan, V. E. Reuter, E. R. Kahoud, L. C. Cantley, M. A. Rubin, N. Palanisamy, S. Varambally, and A. M. Chinnaiyan

Précis: The first oncogenic gene fusion of KRAS is identified in metastatic prostate cancer.



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*E. S. Kim, R. S. Herbst, I. I. Wistuba,
J. J. Lee, G. R. Blumenschein Jr, A. Tsao,
D. J. Stewart, M. E. Hicks, J. Erasmus Jr,
S. Gupta, C. M. Alden, S. Liu, X. Tang,
F. R. Khuri, H. T. Tran, B. E. Johnson,
J. V. Heymach, L. Mao, F. Fossella,
M. S. Kies, V. Papadimitrakopoulou,
S. E. Davis, S. M. Lippman, and W. K. Hong*

Précis: Phase II results from the BATTLE trial demonstrate the potential of personalized therapy for lung cancer.

**Leukocyte Complexity Predicts
Breast Cancer Survival and
Functionally Regulates Response
to Chemotherapy 54**

*D. G. DeNardo, D. J. Brennan, E. Rexhepaj,
B. Ruffell, S. L. Shiao, S. F. Madden, W. M.
Gallagher, N. Wadhvani, S. D. Keil, S. A. Junaid,
H. S. Rugo, E. S. Hwang, K. Jirström, B. L. West,
and L. M. Coussens*

Précis: Tumor immune microenvironment plays an important role in the response to chemotherapy.

**A Novel Two-Stage, Transdisciplinary
Study Identifies Digoxin as a Possible
Drug for Prostate Cancer Treatment 68**

*E. A. Platz, S. Yegnasubramanian, J. O. Liu,
C. R. Chong, J. S. Shim, S. A. Kenfield,
M. J. Stampfer, W. C. Willett, E. Giovannucci,
and W. G. Nelson*

Précis: The cardiac glycoside digoxin is identified as a possible therapeutic for prostate cancer.

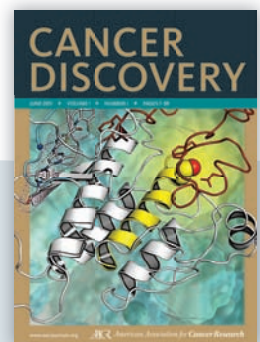
**Mutations in the DDR2 Kinase
Gene Identify a Novel Therapeutic
Target in Squamous Cell Lung
Cancer 78**

▶ *P. S. Hammerman, M. L. Sos, A. H. Ramos, C. Xu,
A. Dutt, W. Zhou, L. E. Brace, B. A. Woods, W. Lin,
J. Zhang, X. Deng, S. M. Lim, S. Heynck, M. Peifer,
J. R. Simard, M. S. Lawrence, R. C. Onofrio,
H. B. Salvesen, D. Seidel, T. Zander, J. M. Heuckmann,
A. Soltermann, H. Moch, M. Koker, F. Leenders,
F. Gabler, S. Querings, S. Ansen, E. Brambilla,
C. Brambilla, P. Lorimier, O. T. Brustugun, Å. Helland,
I. Petersen, J. H. Clement, H. Groen, W. Timens,
H. Sietsma, E. Stoelben, J. Wolf, D. G. Beer,
M. S. Tsao, M. Hanna, C. Hatton, M. J. Eck,
P. A. Janne, B. E. Johnson, W. Winckler, H. Greulich,
A. J. Bass, J. Cho, D. Rauh, N. S. Gray, K-K. Wong,
E. B. Haura, R. K. Thomas, and M. Meyerson*

Précis: DDR2 kinase is identified as a therapeutic target in squamous cell lung cancer, a disease for which no targeted therapies currently exist.

**ON THE
COVER**

A structural model shows dasatinib bound to the discoidin domain receptor 2 (DDR2) kinase. Hammerman and colleagues identified DDR2 as a potential therapeutic target in a subset of lung squamous cell carcinomas (SCC). They also found that dasatinib inhibited DDR2, and they observed a clinical response in one patient. These findings warrant further clinical evaluation of this drug and target in a subset of SCC patients. For details, please see the article by Hammerman and colleagues on page 78.



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Cancer Discov 2011;1:OF4-89.

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