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### NEWS IN BRIEF

- Highlighted research articles
- Important news stories affecting the community
- Q&A: Robert Comis and Mitchell Schnall on Trials

### NEWS IN DEPTH

- Immunotherapy Network Launches First Trial
- A Genetic Snapshot of Small Cell Lung Cancer
- Desmoplasia: A Response or a Niche?

### RESEARCH WATCH

- Selected highlights of recent articles of exceptional significance from the cancer literature

### ONLINE

- For more News and Research Watch, visit Cancer Discovery online at http://CDnews.aacrjournals.org

### VIEWS

- In The Spotlight
- Whole-Genome Sequencing and Cancer Therapy: Is Too Much Ever Enough?
- A Genetic Snapshot of Small Cell Lung Cancer
- Desmoplasia: A Response or a Niche?

### RESEARCH ARTICLES

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- Commentary on Dahlman et al., p. 791
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### PRÉCIS

- Non-V600E BRAF mutations that are sensitive to MEK inhibition occur in 8% of “BRAF–wild-type” melanomas.
- Small cell lung cancer cells express significantly higher levels of PARP1 than non-small cell lung cancer cells and are highly sensitive to PARP inhibition.

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**In The Spotlight**

Whole-Genome Sequencing and Cancer Therapy: Is Too Much Ever Enough?

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**RESEARCH ARTICLES**

**Paracrine Signaling between Carcinoma Cells and Mesenchymal Stem Cells Generates Cancer Stem Cell Niche via Epithelial–Mesenchymal Transition**

K. Räsänen and M. Herlyn

**Commentary on Li et al., p. 840**

**Investigating Metformin for Cancer Prevention and Treatment: The End of the Beginning**

M.N. Pollak

**BRAF L597 Mutations in Melanoma Are Associated with Sensitivity to MEK Inhibitors**


**Précis:** Non-V600E BRAF mutations that are sensitive to MEK inhibition occur in 8% of “BRAF–wild-type” melanomas.

**Proteomic Profiling Identifies Dysregulated Pathways in Small Cell Lung Cancer and Novel Therapeutic Targets Including PARP1**


**Précis:** Small cell lung cancer cells express significantly higher levels of PARP1 than non-small cell lung cancer cells and are highly sensitive to PARP inhibition.
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CD36 Repression Activates a Multicellular Stromal Program Shared by High Mammographic Density and Tumor Tissues ............ 826
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Cancer-Stimulated Mesenchymal Stem Cells Create a Carcinoma Stem Cell Niche via Prostaglandin E2 Signaling .................... 840
H-J. Li, F. Reinhardt, H.R. Herschman, and R.A. Weinberg
Précis: Bidirectional signaling between tumor cells and associated mesenchymal stem cells promotes EMT and enhances cancer stem cell formation.

Correction
Correction: Gene Signatures Associated with Mouse Postnatal Hindbrain Neural Stem Cells and Medulloblastoma Cancer Stem Cells Identify Novel Molecular Mediators and Predict Human Medulloblastoma Molecular Classification ......................... 856

For more News and Research Watch, visit Cancer Discovery online at http://CDnews.aacrjournals.org. Online-only News stories include the following:

• TCGA Findings Spotlight Drivers for Colorectal Cancer
• Kyprolis Gains Accelerated Approval for Multiple Myeloma
• Novel Biostatistics May Speed Access to Pediatric Drugs
• Method Yields Single-Cell Transcriptomes
• A Better Way to Grow Tumor-Initiating Cells?
• Ultrasound System Finds Tumor Blood Vessels

ON THE COVER
Dahlman and colleagues identified a \(BRAF^{L597R}\) mutation in an aggressive \(BRAF^{V600E}\)-negative melanoma, and found that as many as 8% of melanomas classified clinically as "BRAF wild type" may actually harbor other less common \(BRAF\) exon 15 mutations. Importantly, these mutants led to increased MEK/ERK signaling that was readily suppressed by MEK inhibitors, suggesting that patients with these less common \(BRAF\) mutations may also benefit from MEK inhibitor therapy. Indeed, one such patient with metastatic melanoma enrolled in a phase I trial of an allosteric MEK inhibitor experienced a sustained partial response, indicating that expanded \(BRAF\) mutational testing may benefit additional patients. For details, please see the article by Dahlman and colleagues on page 791.