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[18F]-FLT Positron Emission Tomography Can Be Used to Image the Response of Sensitive Tumors to PI3-Kinase Inhibition with the Novel Agent GDC-0941
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Tools & Technologies
ABOUT THE COVER

Mitochondria is the powerhouse of cells (structure, green), supplying the majority of ATP that is essential for cell survival. However, cancer cells present a distinct glycolytic metabolism profile (Warburg effect), which is linked to the malignant transformation process. The emerging anti-VEGF therapy fights cancers by starving the energy supplement, but it was found to enhance the Warburg effect and induce even more aggressive phenotypes. Cancer cells with acquired resistance to anti-VEGF therapy display impaired mitochondria structure and hyperactive glycolytic metabolism, which render them vulnerable to glycolysis blockade therapy. For details, see article by Xu and colleagues on page 717.