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COMPANION DIAGNOSTICS AND CANCER BIOMARKERS

Molecular Predictors of Sensitivity to the Insulin-like Growth Factor 1 Receptor Inhibitor Figitumumab (CP-751,871)

Adam Pavlicek, Maruja E. Lira, Nathan V. Lee, Keith A. Ching, Jingjing Ye, Joan Cao, Scott J. Garza, Kenneth E. Hook, Mark Ozeck, Stephanie T. Shi, Jing Yuan, Xiaoxian Zheng, Paul A. Rejto, Julie L.C. Kan, and James G. Christensen

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ABOUT THE COVER

Ovarian cancer is the deadliest gynecologic malignancy in developed countries, but progress in developing new therapies has been elusive. A novel targeted delivery system was developed by conjugating a urokinase plasminogen activator antibody with liposomal nanobins (as shown in the figure) to specifically deliver a therapeutic cargo (arsenic trioxide) into ovarian cancer cells. The targeted nanobins were efficiently internalized by cancer cells and reduced tumor burden in a xenograft model of ovarian cancer through the efficient induction of apoptosis. Urokinase system–targeted delivery of nanobins could serve as a new platform for the treatment of malignancies overexpressing urokinase, including ovarian and breast cancers. For details, see article by Zhang and colleagues, on page 2628.