1 step back ... 2 steps forward

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Women with hormone-receptor positive, metastatic breast cancer may take medications for years to help keep their cancer at bay, but when the tumor becomes resistant to anti-hormonal drugs, treatment with chemotherapy becomes the only option. But a study presented today at the 2008 ASCO Breast Cancer Symposium may change this approach. Early data suggests a new treatment approach can "re-sensitize" the tumor, allowing anti-hormonal drugs to do their job once again.

The strategy being investigated involves breast cancers that are fueled by estrogen—these are called estrogen-receptor or progesterone-receptor positive cancers (ER or PR positive). Women who have ER or PR positive metastatic breast cancer often take anti-hormonal medicines, such as aromatase inhibitors, to keep the cancer from progressing. Aromatase inhibitors lower the amount of estrogen in the body. Over time, however, the cancer becomes resistant to this approach and begins to grow.

"At first, the tumor's growth is halted because the aromatase inhibitor is depriving the cancer of the estrogen it needs to grow," says Claudine Isaacs, M.D., clinical director of breast cancer program at Georgetown University Medical Center's Lombardi Comprehensive Cancer Center. "Eventually, though, the cancer will figure out another way to thrive in the absence of the estrogen."

Isaacs and her colleagues, including lead author Deepa Subramaniam, M.D. of Lombardi, are conducting a clinical trial to see if a new approach can destroy the machinery the tumor creates in order to grow

without the estrogen. The drug being studied is called sorafenib.

The results of the phase II study involving 27 patients were presented today at the ASCO 2008 Breast Cancer Symposium. It included post-menopausal women with metastatic breast cancer whose cancer had recurred or progressed while taking the aromatase inhibitor anastrozole. The preliminary analysis shows a clinical benefit response in 26 percent of the patients taking both sorafenib and anastrozole.

"Given what we know about the ineffectiveness of sorafenib alone in metastatic breast cancer, we believe the benefit that we're seeing may be attributable to the restoration of sensitivity to aromatase inhibitors," Isaacs concludes. "To manage breast cancer long term, it's apparent that we may need to continually switch drugs to keep up with how a cancer evolves and evades each approach. In a sense, for each step back, we hope to take two steps forward."

Source: Georgetown University