TUMOR MARKERS FOR POTENTIALLY PREDICTING OUTCOME OF ANTI-ANGIOGENESIS THERAPY

SUMMARY

Researchers at the National Cancer Institute have identified tumor cell apoptosis, p53, and HER2 as having potential predictive significance for treatment outcome in breast cancer patients who received anti-angiogenesis therapy in combination with chemotherapy. The National Cancer Institute is interested in licensing of p53, tumor apoptosis, and HER2 as markers for anti-angiogenesis therapy.

REFERENCE NUMBER

E-096-2011

PRODUCT TYPE

- Diagnostics

KEYWORDS

- prognostic
- p53
- HER2
- angiogenesis
- apoptosis

COLLABORATION OPPORTUNITY

This invention is available for licensing.

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DESCRIPTION OF TECHNOLOGY

The National Cancer Institute is interested in collaborative research to co-develop, evaluate, or commercialize p53, tumor apoptosis, and HER2 as markers for anti-angiogenesis therapy.

Researchers at the National Cancer Institute have identified tumor cell apoptosis, p53, and HER2 as having potential predictive significance for treatment outcome in breast cancer patients who received anti-angiogenesis therapy in combination with chemotherapy. The researchers have developed a quantitative antibody-based testing method for correlating expression of p53 and HER2 and tumor

apoptosis with clinical outcome. These markers can be potentially applied to predict which patients should receive anti-angiogenesis therapy plus chemotherapy.

POTENTIAL COMMERCIAL APPLICATIONS

- A diagnostic kit for predicting benefit of anti-angiogenesis therapy plus chemotherapy in breast cancer patients.
- A testing service for breast cancer patients.

COMPETITIVE ADVANTAGES

- The clinical predictive markers p53, HER2 and tumor apoptosis indicators are easily and readily evaluated using the new assay.
- New assay potentially useful to determine which patients should or should not receive anti-angiogenesis therapy plus chemotherapy for longer survival and progression-free survival in patients with breast cancer.
- A large, randomized follow-up study will be planned by the inventors and potential collaborators.

INVENTOR(S)

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DEVELOPMENT STAGE

- Pre-clinical (in vivo)

PATENT STATUS

- **U.S. Filed:** Patent Application No. 14/002,455, filed November 18, 2013
- **Foreign Filed:** PCT Application No. PCT/US2012/027283 filed 01 March 2012

THERAPEUTIC AREA

- Cancer/Neoplasm