Veracyte Announces First Publications Using Afirma GRID Research Tool To Help Usher in Next Generation of Thyroid Nodule Testing

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Landmark studies leverage Afirma GRID whole transcriptome-derived data to identify molecular classifiers and signatures differentiating thyroid cancer risk groups

SOUTH SAN FRANCISCO, Calif.--(BUSINESS WIRE)--Nov. 3, 2025-- Veracyte, Inc. (Nasdaq: VCYT), a leading genomic diagnostics company, today announced the publication of two studies demonstrating the Afirma GRID (Genomic Resource for Intelligent Discovery) research tool's ability to help define the future of thyroid nodule evaluation. Using the company's innovative whole-transcriptome-derived research-use-only platform, researchers analyzed molecular data from thyroid nodules to develop signatures with potential to provide enhanced prognostic information prior to surgery. The findings appear in Frontiers in Endocrinology and Surgery respectively.

The first study describes the development and validation of mRNA-based classifiers to preoperatively predict low-risk thyroid tumor features in collaboration with researchers at Memorial Healthcare System in South Florida and Brigham and Women's Hospital in Boston. The second study, published independently by researchers at Cleveland Clinic, explores whether mRNA-based expression signatures can be used to differentiate higher-risk tumors prior to surgery.

"We introduced Afirma GSC in 2017 to primarily help patients with indeterminate thyroid nodules—those that were not clearly benign or malignant —avoid unnecessary diagnostic surgery. Now, Veracyte is working to help clinical researchers better answer the next critical question for thyroid nodule care: 'For those patients whose nodules are likely cancerous, how much surgery is needed?' These studies, which evaluate biomarkers to determine a likely cancer's aggressiveness, may one day enable us to answer this question," said Joshua Klopper, M.D., Veracyte's medical director for Endocrinology.

In the Cleveland Clinic study, 445 thyroid samples had undergone Afirma GSC testing. Researchers then evaluated these samples using 30 molecular signatures available for research use only through the Afirma GRID to determine whether any could differentiate nodules, based on risk groups developed by the American Thyroid Association to categorize a thyroid nodule's likelihood of being low or intermediate/high risk thyroid cancer. Two of the signatures stood out: an "invasion signature" for which a higher score predicted a 30% greater likelihood of intermediate- or high-risk cancer and a "*NIS* expression" signature for which higher expression levels predicted low-risk cancers.

Dr. Gustavo Romero-Velez, an endocrine surgeon at the Cleveland Clinic and senior author on the study, said, "The next phase in thyroid nodule care is to find a preoperative prognostic marker with clinical utility. Veracyte with Afirma GRID is giving us a path to do that work to get to a clinically useful prognostic marker."

While the study does not yet provide the necessary data or validation for clinical use of these signatures, it highlights several with potential clinical utility. The study authors concluded that with further validation studies, gene expression profile signatures may serve as a preoperative predictive tool for high-risk features, potentially enhancing recurrence risk stratification and helping guide extent-of-surgery discussion with patients.

These publications demonstrate the power of Afirma GRID—enabling clinicians and scientists to explore molecular markers and signatures that may one day help guide patient treatment. Veracyte's commitment to making Afirma GRID available for research is rapidly fueling the expansion of thyroid cancer insights.

About Afirma GRID

The Afirma GRID database is derived from the sequencing of over 21,000 expressed genes for over 200,000 patients with thyroid nodules (benign and malignant) and is used by Veracyte and its partners to contribute to continued research that helps advance understanding of thyroid tumors. Afirma GRID information is available on a Research-Use-Only basis. More information about Afirma GRID can be found here.

About the Afirma GSC

Veracyte's flagship Afirma Genomic Sequencing Classifier (GSC) was developed with RNA whole-transcriptome-derived sequencing and machine learning technology and helps physicians identify patients with benign thyroid nodules among those whose fine needle aspiration (FNA) biopsy results are indeterminate by cytopathology so that they can potentially avoid unnecessary thyroid surgery. The Afirma GSC also includes Xpression Atlas, the largest thyroid gene variant and fusion panel available, to help inform treatment decisions for patients whose genomic test or cytopathology results are suspicious for cancer. Veracyte also enables physicians to order DNA testing of the *TERT* promoter gene, which is performed on the same FNA sample, to help further guide treatment decision-making. More information about the Afirma GSC can be found here.

About Veracyte

Veracyte (Nasdaq: VCYT) is a global diagnostics company whose vision is to transform cancer care for patients all over the world. We empower clinicians with the high-value insights they need to guide and assure patients at pivotal moments in the race to diagnose and treat cancer. Our Veracyte Diagnostics Platform delivers high-performing cancer tests that are fueled by broad genomic and clinical data, deep bioinformatic and AI capabilities, and a powerful evidence-generation engine, which ultimately drives durable reimbursement and guideline inclusion for our tests, along with new insights to support continued innovation and pipeline development. For more information, please visit www.veracyte.com or follow us on LinkedIn or X (Twitter).

Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements, including, but not limited to our statements regarding how Veracyte's commitment to making Afirma GRID available for research is rapidly fueling the expansion of thyroid cancer insights; Veracyte's efforts to help clinical researchers answer the next critical question for thyroid nodule care (determining "how much surgery is needed" for patients); the potential for gene expression profile signatures to serve as a preoperative predictive tool for high-risk features; the possibility that such signatures may enhance recurrence risk stratification and help guide extent-of-surgery discussions with patients; the belief that Afirma GRID is giving researchers a path toward identifying a

clinically useful prognostic marker; and the expectation that molecular markers and signatures identified through Afirma GRID may one day help guide patient treatment. Forward-looking statements can be identified by words such as: “appears,” “anticipate,” “intend,” “plan,” “expect,” “believe,” “should,” “may,” “will,” “enable,” “positioned,” “offers,” “designed,” "ultimately," and similar references to future periods. Actual results may differ materially from those projected or suggested in any forward-looking statements. These statements involve risks and uncertainties, which could cause actual results to differ materially from our predictions, and include, but are not limited to the potential impact the Veracyte Diagnostics Platform can have on scientific advancements in cancer and, in turn, patient care. Additional factors that may impact these forward-looking statements can be found under the caption “Risk Factors” in our Annual Report on Form 10-K filed on February 28, 2025. Copies of these documents, when available, may be found in the Investors section of our website at https://investor.veracyte.com. These forward-looking statements speak only as of the date hereof and, except as required by law, we specifically disclaim any obligation to update these forward-looking statements or reasons why actual results might differ, whether as a result of new information, future events or otherwise.

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