



NEWS RELEASE

New Data at American Foregut Society's 2025 Annual Meeting Demonstrates TissueCypher® Can Detect High-Risk Barrett's Esophagus Patients Not Identified by Pathology to Support Improved Care Decisions

2025-09-09

In the study, TissueCypher identified that 15% of patients with non-dysplastic Barrett's esophagus (NDBE) had a probability of progression that was similar to, or exceeded, progression rates associated with low-grade dysplasia (LGD); current guidelines recommend prompt intervention for LGD to prevent disease progression (FRIENDSWOOD, Texas, Sept. 09, 2025 (GLOBE NEWSWIRE) -- Castle Biosciences, Inc. (Nasdaq: CSTL), a company improving health through innovative tests that guide patient care, today announced that new data demonstrating the personalized risk stratification provided by its TissueCypher Barrett's Esophagus test will be shared via a podium presentation at the American Foregut Society's (AFS) 2025 Annual Meeting, taking place Sept. 11-13, 2025, in Dallas.

"The findings being presented at AFS underscore the importance of moving beyond standard pathology when assessing progression risk in patients with Barrett's esophagus," said lead study author Caitlin C. Houghton, M.D., board-certified foregut surgeon at Keck Medicine of USC in Los Angeles. "TissueCypher provides an added level of precision that is designed to reveal high-risk patients who might otherwise be overlooked, potentially enabling personalized surveillance and treatment strategies aimed at reducing their chances of developing esophageal cancer."

Details regarding the podium presentation are included below:

Title: Patients With Non-Dysplastic Barrett's Esophagus Received Individualized Risk Stratification With the Tissue

Systems Pathology Test

- Presenter and Lead Author: Caitlin C. Houghton, M.D.
- Session: AFS Podium Presentations
- Date & Time: Saturday, September 13, 10-10:10 a.m. Central time
- Location: Tate B

For patients with Barrett's esophagus (BE), regular endoscopic surveillance is intended to catch signs of disease progression early, when endoscopic eradication therapy (EET) can be most effective in preventing advancement to high-grade dysplasia (HGD) or esophageal adenocarcinoma (EAC). Many doctors rely on a patient's clinical history and pathology results to estimate cancer risk and set intervals for follow-up endoscopic surveillance. These population-based risk estimates have done little to slow the rising incidence of esophageal cancer. This underscores the need for more precise tools, like TissueCypher, that can help identify a patient's individual risk of progressing to cancer and guide care that is better aligned to that risk.

This study evaluated TissueCypher's ability to stratify risk in 85 patients diagnosed with NDBE who received test results from four surgical practices. Patients with NDBE are generally considered to have the lowest risk of cancer progression, and current guidelines recommend surveillance every three to five years. However, while 85% of patients in the study received low-risk TissueCypher results, 15% were classified as intermediate- or high-risk by the TissueCypher test, indicating a significantly higher likelihood of progressing to HGD or EAC than their pathology results suggested. Patients with intermediate-risk scores had a median five-year progression probability of 9%, and those with high-risk scores had a 16% probability. Both groups exceeded the 8.5% five-year risk of progression associated with expert-confirmed LGD based on population estimates, which is the threshold at which guidelines recommend escalating to EET or more frequent surveillance every six to twelve months.

These findings show that TissueCypher can deliver clinically meaningful risk insights that can help physicians better tailor care for patients with BE. Notably, patients in the study with intermediate- and high-risk scores had similar or greater predicted progression risk than patients diagnosed with LGD, despite having a NDBE diagnosis. By identifying low-risk patients whose care can follow guideline-based surveillance intervals and intermediate- and high-risk patients who may benefit from earlier intervention, TissueCypher can potentially support more precise, risk-aligned management aimed at preventing disease progression.

For more information on the TissueCypher test, please visit Castle at exhibit #22.

About TissueCypher Barrett's Esophagus Test

The TissueCypher Barrett's Esophagus test is Castle's precision medicine test designed to predict future development of high-grade dysplasia (HGD) and/or esophageal cancer in patients with Barrett's esophagus (BE). The

TissueCypher Barrett's Esophagus test is indicated for use in patients with endoscopic biopsy confirmed BE that is graded non-dysplastic (NDBE), indefinite for dysplasia (IND) or low-grade dysplasia (LGD); its clinical performance has been supported by 16 peer-reviewed publications of BE progressor patients with leading clinical centers around the world. The test received Advanced Diagnostic Laboratory Test (ADLT) status from the Centers for Medicare & Medicaid Services (CMS) in March 2022.

About Castle Biosciences

Castle Biosciences (Nasdaq: CSTL) is a leading diagnostics company improving health through innovative tests that guide patient care. The Company aims to transform disease management by keeping people first: patients, clinicians, employees and investors.

Castle's current portfolio consists of tests for skin cancers, Barrett's esophagus and uveal melanoma. Additionally, the Company has active research and development programs for tests in these and other diseases with high clinical need, including its test in development to help guide systemic therapy selection for patients with moderate-to-severe atopic dermatitis seeking biologic treatment. To learn more, please visit www.CastleBiosciences.com and connect with us on **LinkedIn, Facebook, X and Instagram**.

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Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are subject to the "safe harbor" created by those sections. These forward-looking statements include, but are not limited to, statements concerning: TissueCypher's ability to play an important role in identifying BE patients at higher risk for progression to esophageal cancer, and enable more personalized surveillance and treatment strategies for BE patients that help prevent cancer. The words "believe," "can" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements that we make. These forward-looking statements involve risks and uncertainties that could cause our actual results to differ materially from those in the forward-looking statements, including, without limitation: subsequent study or trial results and findings may contradict earlier study or trial results and findings or may not support the results obtained in these studies, including with respect to the discussion of our tests in this press release; actual application of our tests may not provide the aforementioned benefits to patients; and the risks set forth under the heading "Risk Factors" in our

Annual Report on Form 10-K for the year ended December 31, 2024, and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2025, each as filed with the SEC, and in our other filings with the SEC. The forward-looking statements are applicable only as of the date on which they are made, and we do not assume any obligation to update any forward-looking statements, except as may be required by law.

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Source: Castle Biosciences, Inc.

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