NEWS RELEASE

Castle Biosciences to Present New Data Highlighting the Clinical Value of its Dermatologic Tests for Patients with Skin Cancer at the 2024 American Academy of Dermatology (AAD) Annual Meeting

3/8/2024

Castle's presentations at AAD include the latest findings from the Company's ongoing collaboration with the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program Registries, providing new data from a study of more than 5,000 patients confirming that testing with DecisionDx®-Melanoma is associated with improved survival in patients with cutaneous melanoma (CM)

FRIENDSWOOD, Texas--(BUSINESS WIRE)-- Castle Biosciences, Inc. (Nasdaq: CSTL), a company improving health through innovative tests that guide patient care, today announced that it will share data across its dermatologic portfolio of gene expression profile (GEP) tests via oral and electronic poster presentations at the 2024 AAD Annual Meeting, taking place March 8-12 in San Diego.

"Our presentations at the 2024 AAD Annual Meeting add to the growing body of evidence supporting the use of our tests in guiding improved, personalized care for patients with skin cancers," said Robert Cook, Ph.D., senior vice president of research and development at Castle Biosciences. "In collaboration with leading dermatologists dedicated to advancing patient care, we are excited to share our latest findings which highlight how our tests are empowering both clinicians and patients with meaningful, clinically actionable information that can refine risk and inform important treatment decisions."

Castle will present the following abstracts at AAD. Abstract content will be available throughout the meeting in the online viewing portal and at the on-site viewing stations, and will also be published online in the Fall 2024 Journal of

the American Academy of Dermatology (JAAD) supplement.

DecisionDx®-Melanoma

- Oral Poster Presentation Title: 31-GEP testing is associated with improved melanoma-specific survival relative to untested patients: an analysis of patients <65 years old
- Presenter and Lead Author: Michael Tassavor, M.D., Skin Cancer Center, Cincinnati
- Abstract Number: 51667
- Date: March 9, 2024
- Time: 4:50-4:55 p.m. Pacific Time
- Location: San Diego Convention Center (Upper Level, Sails Pavilion, Poster Center 1)

Summary: For patients with CM, the median age at diagnosis is 66 years old, suggesting that almost half of newly diagnosed patients are younger than 65. In this large study of unselected, clinically tested patients with CM who were under 65 (n=5,183), the DecisionDx-Melanoma (31-GEP) test identified patients at higher risk of melanoma-specific death who may benefit from more aggressive management, including imaging surveillance. In the study, use of the DecisionDx-Melanoma test was associated with improved melanoma-specific survival relative to untested patients. This is clinically significant, as identifying high-risk patients allows for earlier detection of recurrence, while the tumor burden is lower, which has been shown to lead to better response to therapy.

DecisionDx®-SCC

- Oral Poster Presentation Title: Consistent utilization of the 40-gene expression profile (40-GEP) test in high-risk cutaneous squamous cell carcinoma (cSCC) by clinicians according to intended use indications
- Presenter and Lead Author: Jane Yoo, M.D., Icahn School of Medicine at Mount Sinai, New York
- Abstract Number: 54153
- Date: March 9, 2024
- Time: 10:30-10:35 a.m. Pacific Time
- Location: San Diego Convention Center (Upper Level, Sails Pavilion, Poster Center 2)

Summary: This study provides summary metrics regarding DecisionDx-SCC (40-GEP) test results and patient risk factors for tumor samples clinically tested in the first three years of the test's availability between September 2020 and August 2023 (n=16,930). The study data demonstrate that clinicians are utilizing the DecisionDx-SCC test appropriately for patients with high-risk cutaneous squamous cell carcinoma (SCC). These patients are at a higher risk of poor outcomes compared to the general SCC patient population, yet over 70% of patients received a Decision-SCC Class 1 test result, indicating they are at a lower biological risk for metastasis. Each DecisionDx-SCC Class result was present in the various subgroupings of risk factors in the study (patients with 1-2, 3-4 and more

than 5 risk factors), demonstrating that the test provides independent risk assessment from clinicopathological presentation. These data support incorporating the test's results into clinical practice to improve the accuracy of risk predictions to guide more personalized treatment plans for patients.

MyPath® Melanoma

- ePoster Title: Enabling access to prognostic gene expression profile (GEP) testing for invasive melanoma by leveraging RNA-based testing in the diagnostic workflow
- Abstract Number: 52819

Summary: Reaching a definitive diagnosis of melanoma can be challenging. Ancillary testing can provide clarity and a definitive diagnosis for problematic lesions. The MyPath Melanoma (23-GEP) diagnostic test returns accurate results quickly, with approximately 80% of cases tested receiving an actionable result in a median of four business days. Between March 1 and July 31, 2023, approximately 60% of ambiguous lesions tested with MyPath received a benign test result, potentially reducing overdiagnosis and overtreatment for diagnostically challenging lesions. Lesions that receive a malignant test result (approximately 20% of lesions tested with MyPath in the five-month study timeframe) can be tested with the DecisionDx-Melanoma risk stratification test, using the same extracted tumor material when available, to inform risk-aligned decisions about sentinel lymph node biopsy, surveillance imaging and patient follow-up schedules. Approximately 80% of clinically tested lesions with a malignant MyPath result have sufficient biopsy tumor content for DecisionDx-Melanoma testing.

About DecisionDx-Melanoma

DecisionDx-Melanoma is a gene expression profile risk stratification test. It is designed to inform two clinical questions in the management of cutaneous melanoma: a patient's individual risk of sentinel lymph node (SLN) positivity and a patient's personal risk of melanoma recurrence and/or metastasis. By integrating tumor biology with clinical and pathologic factors using a validated proprietary algorithm, DecisionDx-Melanoma is designed to provide a comprehensive and clinically actionable result to guide risk-aligned patient care. DecisionDx-Melanoma has been shown to be associated with improved patient survival and has been studied in more than 10,000 patient samples. DecisionDx-Melanoma's clinical value is supported by 50 peer-reviewed and published studies, providing confidence in disease management plans that incorporate the test's results. Through Dec. 31, 2023, DecisionDx-Melanoma has been ordered more than 150,000 times for patients diagnosed with cutaneous melanoma.

About DecisionDx-SCC

DecisionDx-SCC is a 40-gene expression profile test that uses an individual patient's tumor biology to predict individual risk of cutaneous squamous cell carcinoma metastasis for patients with one or more risk factors. The test

result, in which patients are stratified into a Class 1 (low), Class 2A (higher) or Class 2B (highest) risk category, predicts individual metastatic risk to inform risk-appropriate management. Peer-reviewed publications have demonstrated that DecisionDx-SCC is an independent predictor of metastatic risk and that integrating DecisionDx-SCC with current prognostic methods can add positive predictive value to clinician decisions regarding staging and management.

About MyPath Melanoma

MyPath Melanoma is Castle's gene expression profile test designed to provide an accurate, objective result to aid dermatopathologists and dermatologists in characterizing difficult-to-diagnose melanocytic lesions. Of the approximately two million suspicious pigmented lesions biopsied annually in the U.S., Castle estimates that approximately 300,000 of those cannot be confidently classified as either benign or malignant through traditional histopathology methods. For these cases, the treatment plan can also be uncertain. Obtaining accurate, objective ancillary testing can mean the difference between a path of overtreatment or the risk of undertreatment. Interpreted in the context of other clinical, laboratory and histopathologic information, MyPath Melanoma is designed to reduce uncertainty and provide confidence for dermatopathologists and help dermatologists deliver more informed patient management plans.

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, mental health conditions and uveal melanoma. Additionally, the Company has active research and development programs for tests in 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, psoriasis and related conditions. To learn more, please visit **www.CastleBiosciences.com** and connect with us on **LinkedIn**, **Facebook**, **X** and **Instagram**.

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: the ability of our tests to (i) guide improved, personalized care for patients with skin cancers and (ii) provide meaningful, clinically actionable information that can refine risk and inform important treatment decisions. 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, 2023, 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.