NEWS RELEASE

New Study Highlights Significant Potential Medicare Savings Through Use of Castle Biosciences' DecisionDx®-SCC Test to Guide Adjuvant Radiation Therapy Decisions in Patients with Cutaneous Squamous Cell Carcinoma

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Study finds that using DecisionDx-SCC to guide patient selection for adjuvant radiation therapy (ART), identifying patients with cutaneous squamous cell carcinoma (SCC) who can safely forgo the treatment, could result in significant savings to the healthcare system

FRIENDSWOOD, Texas--(BUSINESS WIRE)-- Castle Biosciences, Inc. (Nasdaq: CSTL), a company improving health through innovative tests that guide patient care, today announced the publication of a new **study**[1] in The Journal of Clinical and Aesthetic Dermatology (JCAD) which found that using its DecisionDx-SCC test to guide ART decisions for patients with SCC could result in substantial Medicare healthcare savings of up to approximately $972 million annually.

"The implications of this study are significant, as evidenced by the opportunity to save our overburdened healthcare system hundreds of millions of dollars through use of the DecisionDx-SCC test to guide more risk-appropriate utilization of ART in patients with SCC," said Ally-Khan Somani, M.D., Ph.D., lead author, director of Mohs micrographic, reconstructive surgery & cutaneous oncology at SkinMD LLC, and adjunct clinical assistant professor, Department of Dermatology & Otolaryngology-Head and Neck Surgery at Indiana University School of Medicine. "Above and beyond the considerable cost savings is the potential to truly improve SCC patient care by using the test's results to provide added confidence in decisions to forgo radiation therapy when a patient's risk of metastasis

is low."

ART has been shown to improve outcomes for patients with SCC who have a high risk of disease progression. As such, high-risk patients are eligible for ART under relevant society guidelines, such as those provided by the American Academy of Dermatology (AAD), the American Society for Radiation Oncology (ASTRO) and the National Comprehensive Cancer Network (NCCN; 2024, v1). NCCN lists three levels of clinicopathologic risk factors (low, high and very high) and recommends consideration of ART for tumors that are classified as high or very high risk. While ART can benefit some patients, selecting patients based upon clinicopathologic factors alone can lead to overtreatment of certain patients who may not experience disease progression. Multiple published studies have shown that DecisionDx-SCC is a significant risk stratification factor for regional and distant metastasis and improves the identification of high-risk patients when used in combination with clinicopathologic factors or staging systems.[2,3]

Published studies have also demonstrated that clinicians use DecisionDx-SCC test results to guide personalized patient management decisions, such as frequency of follow-up care, surveillance imaging, sentinel lymph node biopsy (SLNB) and the use of ART.[4-7] Two recent studies support the test's utility in guiding more informed decisions regarding the use of ART. The first demonstrated DecisionDx-SCC's ability to risk-stratify a cohort of ART-eligible patients.[8] The second demonstrated that DecisionDx-SCC was able to identify patients who benefitted most from ART, along with those who are less likely to show a significant benefit of ART in controlling metastatic disease progression.[9]

The cost savings article published in JCAD reports the significant, direct healthcare savings that could be realized in the management of SCC patients who use DecisionDx-SCC to guide decisions about ART. In the study, normalized medical claims data identified 22,917 Medicare-eligible SCC patients in the United States who received ART in the 12 months ending June 2022. The weighted average direct cost for ART across four of the most common radiation treatment modalities was found to be $60,693 per patient, or $1.4 billion for all such Medicare-eligible SCC patients annually. Results from the study indicate that using the DecisionDx-SCC test to guide decisions about ART could result in net Medicare healthcare savings of up to approximately $972 million annually. This outcome is based on the distribution of DecisionDx-SCC test results reported in previous studies, with cost reductions attributed to avoiding ART in patients with a DecisionDx-SCC low-risk, Class 1 test result and low rates of disease progression.

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 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, uveal melanoma, Barrett's esophagus and mental health conditions. 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 potential of for the use of DecisionDx-SCC to guide ART decisions for patients with SCC to result in Medicare healthcare savings of up to approximately $972 million annually; and the ability of DecisionDx-SCC to (i) guide personalized patient management decisions, such as frequency of follow-up care, surveillance imaging, SLNB and the use of ART, (ii) act as a significant risk stratification factor for regional and distant metastasis and improve the identification of high-risk patients when used in combination with clinicopathologic factors or staging systems and (iii) identify patients who benefitted most from ART, along with those who are less likely to show a significant benefit of ART in controlling metastatic disease progression. The words "can," "may" 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 shown in this study, including with respect to the discussion of DecisionDx-SCC 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, 2022, our Quarterly Report on Form 10-Q for the quarter ended September 30, 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.

1. Somani SK, Ibrahim SF, Tassavor M, et al. Use of the 40-gene expression profile (40-gep) test in medicare-eligible patients diagnosed with cutaneous squamous cell carcinoma (cscc) to guide adjuvant radiation therapy (art) decisions leads to a significant reduction in healthcare costs. J Clin Aesthet Dermatol. 2024;17(1):41–44.
2. Ibrahim SF, Kasprzak JM, Hall MA, et al. Enhanced metastatic risk assessment in 218 cutaneous squamous cell carcinoma with the 40-gene expression profile test. Future Oncology. 2022;18(7):833-847. doi:10.2217/fon-2021-1277
3. Wysong A, Newman JG, Covington KR, et al. Validation of a 40-gene expression profile test to predict metastatic risk in localized high-risk cutaneous squamous cell carcinoma. J Am Acad Dermatol. 2021;84(2):361-369. doi:10.1016/j.jaad.2020.04.088
4. Farberg AS, Hall MA, Douglas L, et al. Integrating gene expression profiling into NCCN high-risk cutaneous squamous cell carcinoma management recommendations: impact on patient management. Curr Med Res Opin. 2020;36(8):1301-1307. doi:10.1080/03007995.2020.1763284
5. Singh G, Tolkachjov SN, Farberg AS. incorporation of the 40-gene expression profile (40-gep) test to improve treatment decisions in high-risk cutaneous squamous cell carcinoma (cSCC) patients: case series and algorithm. Clin Cosmet Investig Dermatol. 2023;16:925-935. doi:10.2147/CCID.S403330
6. Saleeby E, Bielinski K, Fitzgerald A, et al. A prospective, multi-center clinical utility study demonstrates that the 40-gene expression profile (40-gep) test impacts clinical management for Medicare-eligible patients with high-risk cutaneous squamous cell carcinoma (cSCC). SKIN The Journal of Cutaneous Medicine. 2022;6(6):482-496. doi:10.25251/skin.6.6.5 236
7. Hooper PB, Farberg AS, Fitzgerald A, et al. Real-World evidence shows clinicians appropriately use the prognostic 40-gene expression profile (40-gep) test for high-risk cutaneous squamous cell carcinoma (cSCC) patients. Cancer Invest. 2022;40(10):911-922. doi:10.1080/07357907.2022.2116454
8. Koyfman SA, Wysong A, Arron S, et al. Improved risk stratification in an adjuvant radiation therapy (ART) eligible cutaneous squamous cell carcinoma (cSCC) patient population by integration of the 40-gene expression profile prognostic test (40-GEP). JCO. 2021;39(15_suppl):e21589-e21589. doi:10.1200/JCO.2021.39.15_suppl.e21589
9. Arron ST, Canueto J, Siegel JJ, et al. Association of a 40-gene expression profile with risk of metastatic disease progression of cutaneous squamous cell carcinoma (cSCC) and benefit of adjuvant radiation therapy. Fall Clinical Dermatology Conference, 2023.

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