NEWS RELEASE

Real-World Evidence Confirms IDgenetix®-Guided Medication Management Significantly Improves Response and Remission Rates in Patients with Major Depressive Disorder

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IDgenetix is a clinically validated pharmacogenomic (PGx) test that incorporates drug-gene interactions, drug-drug interactions and lifestyle factors to guide medication management for patients' neuropsychiatric conditions, such as depression and anxiety

FRIENDSWOOD, Texas--(BUSINESS WIRE)-- Castle Biosciences, Inc. (Nasdaq: CSTL), a company improving health through innovative tests that guide patient care, today announced data from a single-site, open-label study demonstrating the consistent impact of IDgenetix® on medication response and remission rates in patients with major depressive disorder (MDD). The study found that real-world patient outcomes were strongly aligned to the results of a previously published randomized controlled trial (RCT) that demonstrated IDgenetix-guided medication management significantly improved response and remission rates for patients with MDD.[1,2] The data will be shared in a poster at the 2023 Neuroscience Education Institute (NEI) Congress, taking place Nov. 9-12, 2023, in Colorado Springs, Colorado.

"This study demonstrates the strong correlation between results from a real-world analysis of IDgenetix and a published RCT from Bradley and colleagues, which showed that patients whose medication management was guided by IDgenetix were 2.65 times more likely to achieve remission of depressive symptoms compared to patients whose medication management was not guided by the test," said Robert Cook, Ph.D., senior vice president of research and development at Castle Biosciences. "Results of the IDgenetix test allow doctors to tailor medication selection for each patient, rather than relying on trial and error, which may help patients achieve faster remission

from their depression symptoms."

Poster #23: IDgenetix-Guided Medication Management for Major Depressive Disorder: Confirmation of Randomized Controlled Trial Outcomes by Real-World Evidence

Presenting Author: Feng Cao, Ph.D., Castle Biosciences

Date & Time: Friday, Nov. 10, from 3-4:30 p.m. Mountain Time

Location: Bartolin Hall

The study compared clinical outcome results from a multi-center RCT (n=261) toreal-world evidence (RWE) from a single-center, non-randomized, open-label study (n=242).[1,3] Response and remission rates for patients with moderate to severe MDD were analyzed using IDgenetix-guided medication management (guided) and compared to patients receiving standard of care medication management (unguided).

Patient response and remission rates strongly aligned between both studies. Compared to patients in the unguided group, response rates for the IDgenetix-guided participants improved by 37% in the RCT vs. 32% in the RWE. Remission rates improved 49% in the RCT vs. 57% in the RWE.

The study also highlighted the impact of drug-drug interactions (DDI) and lifestyle factors on the test results, indicating that 43% of the RCT recommendations and 24% of the RWE recommendations were impacted by DDI and lifestyle factors, which are unique to IDgenetix.

Overall, comparing the clinical outcome results from the RCT with RWE demonstrated the consistent impact of IDgenetix on patient response and remission rates. This study provides evidence-based research that supports the clinical use of IDgenetix to guide medication management in patients with MDD.

The poster can be viewed on Castle's website **here** and will also be available in the **NEI Virtual Poster Library** following the presentation.

About IDgenetix®

IDgenetix® is an advanced pharmacogenomic (PGx) test designed to guide medication selection and management for patients with neuropsychiatric conditions, such as depression and anxiety. IDgenetix provides important genetic information to clinicians to help guide personalized treatment plans for their patients, with a goal of helping patients achieve faster therapeutic response and improving their chances of remission by identifying appropriate medications more efficiently than the standard-of-care, trial-and-error approach. IDgenetix integrates drug-gene, drug-drug and lifestyle factor interactions in a clinically actionable report and is supported by a published, peer-reviewed randomized controlled trial that demonstrated clinical utility over the standard of care when physicians

reviewed IDgenetix results prior to prescribing a medication. More information can be found at **www.IDgenetix.com**.

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 continued consistent impact of IDgenetix on response and remission rates in patients with MDD; and the potential of IDgenetix to help guide personalized treatment plans for their patients, with a goal of helping patients achieve faster therapeutic response and improving their chances of remission by identifying appropriate medications more efficiently than the standard-of-care, trial-and-error approach. The words "can," "may," "potential," "will" 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 IDgenetix 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 three months 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. Bradley P, Shiekh M, Mehra V, et al. Improved Efficacy with Targeted Pharmacogenetic-guided Treatment of Patients with Depression and Anxiety: A Randomized Clinical Trial Demonstrating Clinical Utility. J Psychiatr Res. 2018 Jan;96:100-107. doi: 10.1016/j.jpsychires.2017.09.024. Epub 2017 Sep 23. PMID: 28992526.

2. Cao F, Hanson A, Cook R, et al. **The Importance of Incorporating Drug-Drug Interactions and Lifestyle Factors in Pharmacogenomics-Guided Medication Management for Patients with Major Depressive Disorder in a Randomized Controlled Trial.** Poster at Psych Congress 2023: Sept 6-10, 2023; Nashville, Tennessee.

3. Cao F, Maciel A, Wosnik K, et al. **Improved Response and Remission Rates in Patients Receiving IDgenetix-guided Medication Management for Major Depressive Disorder.** Poster at 2023 American Psychiatric Association (APA) Annual Meeting: May 20-24, 2023; San Francisco, California.

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Source: Castle Biosciences, Inc.