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Trinity Biotech acquires metabolomics diagnostics to expand in maternal health market

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A deep-tech ML platform, developed PrePsia, an innovative test predicting preeclampsia risk in pregnant women



Trinity Biotech plc , a commercial-stage biotechnology company focused on human diagnostics and diabetes management solutions, including wearable biosensors, announced that it has acquired privately held Metabolomics Diagnostics, an Irish deep-tech company, specialized in the development of novel biomarker-based diagnostic solutions for complex diseases. The deal values Metabolomics Diagnostics with an enterprise value of approximately $1.3 million with the consideration consisting of just over 270,000 Trinity Biotech plc's ADS with the balance of consideration being in cash and the assumption of liabilities.

This acquisition provides Trinity Biotech with a strategically important deep-tech platform of mass spectrometry combined with machine learning powered bioinformatics. Trinity Biotech will initially leverage its New York State-based Immco reference laboratory to rapidly commercialise the PrePsia test in the U.S. market, while examining the launch of this test in international markets. This technology platform represents another long-term growth driver alongside Trinity Biotech's continuous glucose monitoring (CGM) technology.

The Company intends to manufacture the PrePsia test reagents in-house and commercialise the test in its New York State Department of Health-certified Immco diagnostic reference laboratory, with first revenues from preeclampsia testing expected in 2025. Given the late stage of development of PrePsia, and significant synergies with Trinity Biotech's existing capabilities and infrastructure, the additional investment for commercialisation in 2025 is expected to be limited.

"Human diagnostics is often regarded as one of the areas of healthcare that can most benefit from advances in artificial intelligence and machine learning. As such, it is strategically important for Trinity Biotech to have a proprietary, integrated human diagnostics platform which combines advanced biomarker analyses with machine learning to deliver better diagnostics for patients. More broadly, this acquisition aligns with our strategy of combining Trinity's established capabilities – in this case, our manufacturing expertise and New York State Department of Health-certified Immco reference laboratory – with cutting edge technologies such as Metabolomics Diagnostics' analytical, machine learning and bioinformatics expertise to address large scale, urgent and important clinical issues, in this case in maternal and fetal health," said John Gillard, President and Chief Executive Officer, Trinity Biotech. "Additionally, this low-cost transaction is structured to become quickly accretive to our overall franchise."

Dr Robin Tuytten will join the Trinity Biotech management team and continue to serve as Director of Metabolomic Diagnostics. Dr Tuytten stated: “Trinity Biotech has the ideal manufacturing and regulatory expertise to bring our innovative maternal risk screening diagnostics platform to the market. Through Trinity Biotech’s U.S.-based Immco reference laboratory, we look forward to accelerating the introduction of our potentially life-saving preeclampsia risk screening technology to the U.S. market and addressing the acute maternal health crisis while strengthening Trinity’s internal diagnostic innovation pipeline.”

According to the Centers for Disease Control and Prevention in the U.S. (CDC), there were 3.6 million births in the U.S. in 2023. Preeclampsia is a frequently occurring maternal health issue, impacting up to 5% of pregnancies, which can cause serious illness or death in affected mothers and babies. The condition is generally diagnosed by the presence of high blood pressure and measurements of kidney function and blood work at 20 weeks of pregnancy. Due to the lack of meaningful therapeutic interventions, a preeclampsia diagnosis can lead to a medically induced delivery of the baby. As a consequence, approximately 30% of preeclampsia diagnoses result in premature deliveries.

In peer-reviewed papers co-authored with leading Key Opinion Leaders, the Metabolomics Diagnostics proprietary PrePsia technology has been shown to deliver improved prediction of pre-term preeclampsia risk at week 12 of pregnancy, a timeframe which would allow for the prescription of effective medication which can significantly reduce the risk of often serious health issues for mothers and their babies. For details of publications, see https://metabolomicdiagnostics.com/our-research/.

The Metabolomics Diagnostics PrePsia test uses an analytical technique known as mass spectrometry to identify the presence of tens of metabolites in a blood sample. A powerful machine learning-driven algorithm then combines the result of this metabolomic testing with other patient-specific clinical information to deliver a personalised preeclampsia risk score that can be used to determine the need for additional medical intervention. Trinity plans to leverage this cutting-edge technology to develop other important diagnostic tests in the maternal health sector.