

**Astarte Medical and Tiny Health Join Forces to
Optimize Gut Health for Vulnerable Preterm Infants**

*The new partnership will seek to develop an end-to-end NICU solution
to stratify and treat at-risk babies*

YARDLEY, PA and AUSTIN, TX (September 20, 2023) - [Astarte Medical](#), a leading pediatric clinical intelligence company, is forming a joint venture with [Tiny Health](#), makers of gut microbiome tests for babies and expecting parents. The partners have agreed to develop a clinical-facing technology solution to support gut health for preterm and critically ill infants receiving care in the neonatal ICU.

By combining Astarte Medical's proprietary NICUbiome™ dataset and NICUtrition EMR-integration platform with Tiny Health's deep shotgun metagenomics sequencing and functional profiling expertise and capabilities, providers will be able to identify and stratify risks, as well as monitor the gut health of preterm babies.

"Nutrition for preterm infants is guided by two main factors: a baby's age and weight. Today, technology allows us to measure and compare thousands of gut profiles, which can directly inform how we treat babies during the extremely formative first 1,000 days," said Astarte Medical Chief Executive Officer Tracy Warren. "This partnership forms the basis of evidence-based precision nutrition care models for clinicians leveraging NICUtrition^(R), with the goal to deliver more effective feeding to preterm babies to improve their growth, neurodevelopment and long-term immune health."

In the U.S., [40% of school-aged children have at least one chronic health condition](#) such as asthma, obesity, or eczema. Tiny Health is pioneering microbiome science for early-stage development, identifying and mitigating health risks before and after birth. The company's gut test is the first and only test tailored by age that screens for 120,000 bacteria, viruses, fungi and parasites – microbes that can help or harm a premature baby's development.

"Expecting mothers are searching for greater assurances and a deeper level of clinical guidance for their developing babies. We have created precision technology to determine a baby's risk for chronic conditions that can influence pediatric nutritional interventions on a case-by-case basis," said Tiny Health Founder and Chief Executive Officer Cheryl Sew Hoy. "By partnering with Astarte Medical, we're extending our solution to support infants and families at their most vulnerable time. Our aim is empowering clinicians to incorporate evidence-based gut health protocols to improve outcomes in real-time."

In a previous multi-center microbiome study, Astarte Medical identified six gut community types among nearly 300 preterm infants born under 34 weeks gestational age. These gut community types, or 'NutriTypes', can serve to identify vulnerable infants for adverse events, such as

growth faltering or necrotizing enterocolitis, as well as advise on the use of clinical interventions, such as probiotics, micro and macronutrients.

“As survival for preterm infants has improved, meeting a baby’s nutritional needs has become more important and increasingly complex,” said Dr. Nicholas Embleton, Astarte Medical advisor and professor of neonatal medicine at Newcastle University (U.K.). “The interplay of nutrients, microbes and a baby’s immune system is dynamic, yet there is no good method to assess gut health in practice.”

As part of the joint venture, the two companies will share population health data and set up an overlapping workstream between technology teams in order to conduct a proof of concept prospective trial. In addition to re-validating its NICUbiome gut community types using Tiny Health’s pipeline and bioinformatics tools, Astarte Medical will develop a prototype clinical dashboard to deliver AI/ML-based approaches to stratify at-risk infants and deliver targeted interventions. Tiny Health will offer NICU parents the option to test their infants post-discharge to extend the understanding of the maturity patterns of infants born preterm.

About Astarte Medical

Astarte Medical is a clinical intelligence company providing digital solutions to support nutrition and feeding practices and protocol-driven care across pediatric populations. Its first product, NICUtrition® improves growth and clinical outcomes for preterm infants and impacts critical performance metrics for hospitals. Visit astartemedical.com and nicutrution.com for more information.

About Tiny Health

Tiny Health® is the leading microbiome health platform for families, improving health outcomes of future generations through evidence-based insights. Tiny Health’s Gut Health Test is the first-ever at-home gut microbiome test to use next generation sequencing tailored specifically for babies, children, and now adults. For more information, visit tinyhealth.com.