Sema4|GeneDx Announces Results from Phase 1 of SeqFirst Study, Demonstrating Broad Utility of Rapid Whole Genome Sequencing for Critically Ill Newborns

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-- Abnormal findings reported in 63% of infants in study, change in health management recommended in 88% of cases --
-- Sema4|GeneDx contributes to latest data in the SeqFirst study being presented at the American Society of Human Genetics Annual Meeting --

STAMFORD, Conn., Oct. 27, 2022 (GLOBE NEWSWIRE) -- Sema4 (Nasdaq: SMFR), a health insights company, today announced updated research showing the clear benefits of rapid whole genome sequencing (rWGS) to diagnose critically ill newborns in the neonatal intensive care unit (NICU). The findings come from the recently completed first phase of the SeqFirst study, for which Sema4|GeneDx performed the sequencing, and was conducted in partnership with Seattle Children's Hospital and the University of Washington. Tara Wenger, an attending physician at Seattle Children's Hospital, will give a platform presentation at the American Society of Human Genetics (ASHG) Annual Meeting on October 28, 2022, to share research highlights.

Abnormal rWGS results were found in 63% of the infants that were sequenced, and explanatory rWGS results resulted in a change in health management in 88% of cases overall. Among the infants who received abnormal results, one-quarter were not suspected of having a genetic syndrome, emphasizing the value of broad-based testing.

"Rapid genome sequencing in the NICU has the power to transform clinical approaches and therefore improve overall health outcomes for critically ill newborns, as evidenced by our ongoing analyses of the data," said Dr. Paul Kruszka, Chief Medical Officer of GeneDx at Sema4. "By increasing utilization of rapid genomic testing as early as possible we can put patients and families on the right treatment path and decrease inequities in genetic diagnoses."

Researchers for the SeqFirst study analyzed the electronic medical records for every newborn under 6 months of age admitted to the NICU at Seattle Children's Hospital since January 2021. One hundred and twenty-five newborns were included in the study – infants whose admissions to the NICU were not fully explained by prematurity, trauma, or infection – with rWGS performed in parallel with standard clinical care to enable a comparison of diagnostic rates, referrals, and outcomes.

Results of the SeqFirst study will provide guidance about the best ways to use whole genome sequencing in helping families of children with health conditions find a precise genetic diagnosis, better anticipate their child's needs, and take advantage of new treatments. Sema4|GeneDx has played a key role in pediatric disease diagnosis for hundreds of thousands of patients. With a database of approximately 400,000 clinical exomes and corresponding clinical information, the company is a key driver in understanding gene-disease relationships.

About Sema4|GeneDx
Sema4|GeneDx is a patient-centered health intelligence company dedicated to advancing healthcare through data-driven insights. Sema4 is transforming healthcare by applying AI and machine learning to multidimensional, longitudinal clinical and genomic data to build dynamic models of human health and defining optimal, individualized health trajectories. Centrellis™, our innovative health intelligence platform, is enabling us to generate a more complete understanding of disease and wellness and to provide science-driven solutions to the most pressing medical needs. Sema4 believes that patients should be treated as partners, and that data should be shared for the benefit of all. For more information, please visit sema4.com and connect with us on LinkedIn, Twitter, Facebook, and Instagram.

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