SignatureDx

Reshaping the way we predict and detect disease

About SignatureDx

In collaboration with the University of Pittsburgh and Magee-Womens Research Institute and Foundation, Signature is focused on the research and development of early-stage diagnostic and phenotyping tools for complex disease. In addition to its research facilities at Magee-Womens Research Institute, Signature operates SDxLabs, a CLIA certified high complexity molecular diagnostic laboratory and soon to be CAP and COLA Accredited.

Our Mission

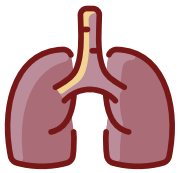
Signature is changing the paradigm of disease detection through new advanced technologies and novel diagnostic tools. Using a framework of noninvasive liquid biopsy to understand states of cellular function, Signature is focused on early detection of silently progressing complex disease. Signature is also dedicated to supporting women's reproductive health by utilizing genetic tests to determine risks of pregnancy-related complications before they occur.

Our Approach

Our approach utilizes novel DNA methylation analysis using a state-of-the-art liquid biopsy. This noninvasive screening method can serve as an early indication system by informing current disease state, and the likelihood of future disease development. This could reduce the expense, discomfort, and risks of traditional diagnostics. Using early detection as a means of proactive healthcare has the potential to drastically reduce the progression of organ disease and pregnancy-related complications.

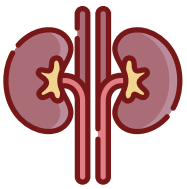
What drives us? The Global Burden of Disease and Health Risk

2.8 Million
pregnant women and newborns die every year around the world due to complications (UNICEF, 2019)



544.9 Million
people suffer worldwide from chronic respiratory diseases
(Chronic Respiratory Disease Collaborators, 2020)

3-10%
of women in the world experience preeclampsia during pregnancy (Jeyabalan, 2013)



10%
of the population worldwide is affected by chronic kidney disease (World Kidney Day, 2015)

“This is an exciting opportunity to translate our research efforts into commercial products that will improve patient health outcomes. Our novel solutions will help them make proactive healthcare decisions that will have a positive impact on their health.”

- David G. Peters, PhD, Co-founder and Chief Science Officer

Our Research at the Core

Women’s Reproductive Health

Through the innovation of noninvasive prenatal screening (NIPS), we can detect genetic abnormalities and birth risks using a maternal blood sample. This method of prenatal testing provides ease of mind through its ability to inform on fetal health without the discomfort of undergoing invasive testing and its potentially harmful effects. In a continuous effort to improve the prenatal healthcare experience, we are developing breakthrough NIPS testing that will predict health risks for both mother and baby during pregnancy.

Organ Health

Proactive healthcare includes checking for signs of future organ disease. Our genetic tests will determine if an individual has a genetic predisposition for organ disease or if there is an increased hereditary risk due to family history. We’re committed to improving health outcomes for patients who have received organ transplants as well. Our technology will offer providers noninvasive options to improve how they assess the likelihood of organ rejection.

Our vision is to change the paradigm of healthcare intervention by enabling the early noninvasive detection of silently progressing disease.