

Background — Despite the tremendous progress that has been made in understanding the role genetics plays in disease, at least one piece of the puzzle is still missing. While over 50 hereditary cancer syndromes have been identified, inherited mutations only account for 5-10% of all cancers. Most genetic research on focuses on single base mutations in the genome and falls short of explaining known genetic components of cancer. Orbit Genomics focuses on short tandem repeats also known as microsatellites. While microsatellites are not new and are the standard for DNA forensics and paternity testing, Orbit Genomics has developed proprietary algorithms which optimize microsatellite sequencing. Through the analysis of thousands of human genome sequences, we have identified markers specific to different diseases.

Brain Cancer — Orbit Genomics will improve brain cancer diagnosis by eliminating unnecessary brain biopsies through the use of a non-invasive, blood based biopsy based on the microsatellite fingerprint.

Current brain cancer clinical diagnostic methods require a tumor biopsy, a highly invasive procedure wrought with neurological complications and mortality risk for patients. Unnecessary biopsies are often performed and eliminating them will reduce the clinical complications for the patient and the economic burdens to the healthcare system as well as aid in treatment plans. Our microsatellite based assay will be the first blood based diagnostic tool for brain cancer and one allowing clinicians to distinguish between less aggressive (low grade) gliomas and highly aggressive glioblastoma and will allow clinicians to determine whether a further biopsy is medically necessary.

Companion Diagnostics, CDx — By comparing the genomes of responders and non-responders in a clinical trial, we can identify microsatellite markers that can be used to select those patients that will benefit most from a given therapy via a non-invasive blood test.

Today the overwhelming majority of FDA approved companion diagnostics are for oncology. The companion diagnostic development process is done concomitantly with the clinical development process, and is one largely based on genomic methods. Missing from today's companion diagnostics development toolbox is the exploration of the hidden genome or microsatellites. By combining the information gathered from traditional OMICS based sources, microsatellites will add another informative layer that not only holds promise for pan-cancer diagnostics but also for other non-oncology disease areas.

Business Model — The Company is refining its multiplexed microsatellite panel. The beta version has been manufactured and tested on hundreds of cancer patient samples. To create our commercial version we will analyze thousands of additional brain cancer patients' and cancer-free patients' genomes to optimize the sensitivity and specificity of our multiplexed assay. Each next generation genome sequence will be reassembled via our proprietary algorithms to correctly call the DNA genotypes at each of 2 million microsatellite loci. We then compare at each locus the distribution of genotypes for the each cancer patient tumor subtype and cancer-free patients to identify those few loci that differentiate the different groups to form our commercial assay. Finalizing the commercial product is expected to take less than one year. Clinical trials will be completed during the second year of operation with commercial operations commencing thereafter.

Diagnostic testing for brain cancer and companion diagnostics will be done at our CLIA lab in Boulder, Colorado.

Team — Orbit Genomics is led by a founding team of seasoned entrepreneurs. CSO, Harold "Skip" Garner is the inventor of the technology and has founded several others companies. Ventac Partners has provided key team members, including CEO, Dede Willis, GC, Robert Buchanan, CBO, Scott Woodward, and Chairman Rolf Ehrnström following its well established success model for building and running portfolio companies. The Scientific Advisory Board includes renowned scientists George Church, Harvard University, John Minna, UT Southwestern Medical Center and Kevin Schulman, Duke University.

IP — The Company holds a world-wide exclusive license from Virginia Tech Intellectual Properties, Inc. to an IP portfolio broadly covering the beta method for detecting disease risk by interrogating microsatellite sequences. See US 20160040254 and US 20150337388.

Investment Opportunity — Orbit Genomics is seeking \$6.5 million to fund the development of the commercial platform which will serve as a basis for not only brain cancer and companion diagnostics, but also other products in the pipeline. The investment will take the Company through product development, clinical trials and regulatory approval, with commercial launch in two years.