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PRESS RELEASE

Avesthagen completes the first Whole Genome Sequence of a Parsi breast cancer patient

February 14, 2011, Bangalore - Avesthagen Limited has yet again established its position as a leader in the successful application of next gen technologies as it announces the completion of the first Parsi breast cancer whole genome sequence of a 74-year-old Parsi woman with a heritable form of breast cancer. The incidence of breast cancer in most populations is strongly linked to a genetic basis but little is known about the variants at the present time. By employing whole-genome sequencing of affected individuals all genetic variants linked to the disease can be identified. This will lead to a broader understanding of breast cancer disease mechanisms, the development of new diagnostic tests, and the discovery of new drug targets and design of drugs.

This study is part of The AVESTAGENOME Project™, a systems biology based study on the Parsi population to determine the genetic basis of longevity and age-related disorders. The whole genome sequencing is being carried out in partnership with The Genome Analysis Centre (TGAC), UK. The TGAC team is employing the SOLiD™ 4 next-generation sequencing platform (Applied Biosystems) to generate a draft sequence. Avesthagen's bioinformatics experts will analyze and interpret the DNA sequence data and work with international partners to integrate the data set with other studies, so that it has the greatest possible impact.

Existing breast cancer diagnostic tests and drugs, focusing on genetic variations in genes such as BRCA1 and HER2, address only a fraction of breast cancer cases. A comprehensive understanding of all forms of breast cancer and the risks posed to each individual can only be determined by identifying all heritable genetic variations that occur in affected individuals. This first sequencing of the genome of a Parsi breast cancer patient is an important milestone in this effort. Whole genome sequencing for additional breast cancer cases and other disease conditions is being carried out.

The Parsis are a distinct minority population living in India and around the world with unique traits that include longevity, but also predispositions to certain diseases, including breast cancer. By comparing the genomes of Parsi individuals affected by breast cancer to healthy individuals, both within the community and in the general population, scientists will be able to identify those variations that are most likely to be responsible for breast cancer. The samples collected to date enable Avesthagen to assemble cohorts for a variety of diseases. The information so developed in combination with well characterized genetic information provides for accelerated new biomarker and drug discovery. Avesthagen is currently focusing on Breast Cancer, Diabetes and Neurological disorders.

Commenting on these developments, Dr. Villoo Morawala-Patell, Founder and CMD of Avesthagen said: "With The AVESTAGENOME Project as driver, Avesthagen intends to become the world leader in the development of new cancer diagnostics and drugs and, and ultimately, the development of personalized healthcare."

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