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Genefitletics launches early detection test for Oral Squamous Cell Carcinoma

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Early detection test statistically combines & quantifies 27 biochemical pathways



Delhi-based startup Genefitletics has entered into the preventive oncology space with the launch of an early detect test of Oral Squamous Cell Carcinoma- ORAONCO. The test, working at the confluence of next generation sequencing & machine learning, measures the functions of oral microbial cells in each patient's saliva & examines interaction between oral microbial activities & mitochondria in order to discover pre/early molecular features associated with the onset of oral cancer.

The test is built on a vector matrix algorithm which is completely data driven & has been constructed using 5 billion molecular data (nucleotides), phenotype metadata & longitudinal data points specific to Indian adult population with high risk of type 2 diabetes, hypertension & gum diseases & regular consumption of alcohol, tobacco & tobacco products.

The early detect test statistically combines & quantifies 27 biochemical pathways encompassing seven molecular mechanisms that measure the oral biochemical functions leading to systemic inflammation, oxidative stress & mitochondrial dysfunction to detect the onset of oral cancer at the earliest stage.

Sushant Kumar, Founder & CEO-Genefitletics mentions that their proprietary technology could go deeper down to cellular level to look at expression level of specific inflammatory & oxidative stress pathways that could lead to damaged respiration & mitochondria dysfunction- the hallmark of oral cancer.

Kumar clarified that ORAONCO is the first solution that not only detects oral cancer at an earliest stage but also provides mechanisms of action that can enable oncologists to prevent the disease, stop its progression or treat it with precision. "The test brings unprecedented accuracy, could reduce mortality & improve survival rate to 84% from current < 50%", he added.