

Study identifies 114 genetic variants which cause oral cancer in humans

06 February 2022 | News

Path-breaking genomics-based joint research by IBAB and HCG

In what is claimed to be path-breaking research, Bengaluru-based Institute of Bioinformatics and Applied Biotechnology (IBAB) in collaboration with HCG, has identified 114 genetic variants which cause oral cancer in humans. The study has also revealed key genetic signatures that can predict survival in oral cancer patients with over 90% accuracy.

In the press conference held on The World Cancer Day (4 Feb) at Vidhana Soudha, Dr. C.N.Ashwatha Narayana, Minister for IT/BT and S&T said that the study made extensive use of Advanced Machine Learning and Bioinformatics.

The analysis of mutations gave out a list of unique genes associated with 114 novel variants, of which 35 were oncogenes, 11 were tumor suppressors, and 2 DNA damage repair genes, he added, the research would guide towards cell-targeted personalized treatment.

"Currently, even after the best treatment, oral cancer is found to recur in up 50% of cases. But the present research would make it possible to provide treatment in an effective way such that the disease does not recur and enables precise treatment with improved quality of life", Prof. Vibha Choudhary, IBAB, pointed out.