

ABSTRACT

CERVICAL CANCER – BENCH TO BEDSIDE

Dr. R.V. Rajam Oration

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Cervical cancer is the second most common cancer in Indian women and 4th most common cancer in women world-wide. Over nearly two decades, we have carried out epidemiological and molecular studies in cervical cancer, with an intent to identify potential early diagnostic biomarkers, predictive and prognostic markers, develop newer therapies against cervical cancer and identify potential new targets for therapy.

Our studies had identified 14 high risk and 10 low risk human papilloma virus (HPV) in our cervical cancer patients for the first time; had identified life style related co-factors in the development of cervical cancer [paan chewing, parity, early age at first sexual intercourse and first childbirth, husband with two or more sexual partners]; we have developed a p16 ELISA kit for cervical cancer screening for use at point of care like PHC's; identified a 7 gene signature which help identify patients who can be treated with radiotherapy alone; identified potential prognostic markers for use in the clinic; developed the country's first Dendritic cell vaccine therapy for cervical cancer and completed the phase 1 study; have identified newer potential therapeutic targets for treatment of cervical cancer.

Keywords: Cervical cancer; Human papilloma virus; p16 ELISA; Predictive and Prognostic markers; UBE2C; Dendritic Cell Vaccine for treatment.