

Unraveling HPV-Associated Cancer Complexity: From Molecular Insights to Innovative Therapies

Gauri Misra¹, Ashwini Kumar Dubey¹, and Tara Chand¹

¹National Institute of Biologicals

October 9, 2023

Abstract

Human cervical, vaginal, vulval, penile, anal, and oropharyngeal cancers are all caused by the human papillomavirus (HPV). This review article focuses on HPV biology, virus-host interactions, cell transformation, cancer progression, and its co-infection with HIV, HSV, EBV, and other bacteria in cancer development. It explores HPV vaccination's role in preventing high-risk HPV infections and cancers, emphasizes early detection and screening methods, discusses emerging strategies like specialized therapies and immuno-based interventions, and considers personalized medical care for HPV-linked cancers. Comprehensive coverage includes HPV-associated cancer epidemiology, regional variations, and India's unique challenges. The cumulative efforts of scientists facilitate groundbreaking approaches toward reducing the adverse consequences of HPV-related malignancies among people and communities.

Hosted file

HPV Review Oct 06.docx available at <https://authorea.com/users/672529/articles/671565-unraveling-hpv-associated-cancer-complexity-from-molecular-insights-to-innovative-therapies>

