2) “State of the Art” for Cervical Cancer Treatment

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Though cervical cancer incidence and prevalence have decreased in the United States, the disease remains a very important cause of morbidity and mortality worldwide. Current therapy for early stage disease is surgical with adjuvant therapy being administered according to histopathologic findings. Pelvic radiation with concomitant platinum based chemotherapy is used to treat locally advanced disease while metastatic and recurrent lesions continue to be difficult to effectively treat and cure. Clinical trials in this latter scenario have suggested that clinical benefit may be associated with biologic therapies, so this is an exciting new area of investigation for this disease. This presentation will focus on standard treatment algorithms and investigational protocols including the use of targeted therapies in cervical cancer, specifically evaluating anti-angiogenesis treatments.

Figure 1.

![Diagram of DNA Damage and Molecular Processes](image_url)
HPV E6 is a viral oncogenic protein that interferes with p53, a tumor suppressor protein, via two mechanisms. The first is the blockage of p53 induction following DNA damage, which would usually allow for either cell cycle arrest and DNA repair or apoptosis. The second is mediated by binding of HPV E6 to p53, which leads to ubiquitination of p53 and its subsequent degradation. With either blockage of p53 induction or increased P53 degradation a series of pro-angiogenic pathways are triggered. This includes the up-regulation of VEGF and subsequently angiogenesis making this an important target in cervical cancer therapy.

REFERENCES