Non-Technical Abstract

Clinical Protocol for Wild Type p53 Gene Induction in Premalignancies of Squamous Epithelium of the Oral Cavity via an Adenoviral Vector

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Surgery is the only meaningful treatment currently available for persons with pre-cancerous lesions of the oral cavity. Unfortunately, conventional surgery does not necessarily prevent the condition from returning or developing into cancer. Earlier studies have suggested that patients with a mutated p53 gene are at greatest risk with up to 50% progressing to cancer despite prevention approaches. The goal of this clinical research study is to see if a normal copy of the p53 gene can be placed inside a patient's pre-cancerous cells using a virus similar to those which cause the common cold. It is hoped that this will cause the cells that may be capable of changing into cancer cells to die or return to a more "normal" state.

Patient eligibility includes males and females 18 years of age and older with a confirmed diagnosis of mild - severe dysplasia or carcinoma in-situ of the oral cavity. Patients may have received conventional treatment for a prior head & neck malignancy, but must have a life expectancy of at least 12 months and a Zubrod performance status of <2. Female patients of childbearing potential must have a negative serum pregnancy test. Male and female patients must agree to use barrier contraception while on study, and to avoid pregnancy for 1 year after treatment. Patients must test negative for the Human Immunodeficiency Virus. Adequate bone marrow function (peripheral absolute granulocyte count of 2,000/mm^3 and platelet count of 100,000/mm^3), adequate liver function (bilirubin < 1.5 mg/dl), and adequate renal function (creatinine 1.5 mg/dl) are required for participation. All patients must sign an informed consent indicating that they are aware of the investigational nature of this study in keeping with the policies of the institution.

Twelve patients will be entered into the phase I dose-finding trial with 33 patients anticipated to be entered into the phase II trial. Patients will be asked to receive tests and biopsies before beginning treatment. Patients will receive p53 in one of three possible dosages by injection and oral rinse on day 1 followed by twice-daily oral rinses on days 2-5 in addition to lab work, research blood draws, and photo documentation for the completion of one cycle. The study cycle will be repeated on a monthly basis for a period of six months. Small tissue samples (biopsies) are taken during this time to monitor changes in the pre-cancerous cells, and to look for changes in the surrounding tissue. Urine and blood samples will also be studied in an effort to evaluate the treatment's effect.