

**NON-SCIENTIFIC ABSTRACT**

Cancer of the prostate is the most common malignancy in men, and is the second most common cause of cancer deaths among American men. Currently it is predicted that there will be approximately 250,000 newly-diagnosed cases in the United States in 1997, with over 44,000 patients per year dying from this disease. There is no curative therapy for prostate cancer once it has spread outside the prostate.

Surgical therapy offers an excellent chance for cure if the disease is confined to the prostate itself. Approximately 40% of patients considered candidates for prostatectomy, have cancer detected at the outerportion or margins of the prostate at biopsy. This finding in these patients carries a much worse prognosis. Additional therapy such as radiotherapy and hormonal therapy offer varying rates of success. For these patients therefore, it is clear that new treatment approaches are needed.

The p53 gene is frequently altered in the tumors of patients with prostatic cancer. In scientific experiments using cells in the test tube and in animals, introducing a normal copy of the p53 gene into cancer cells that have abnormal p53 has been shown to be effective in treating cancer.

SCH 58500 is a new gene therapy that contains the p53 gene in a modified virus. The virus is used to deliver the copy of the gene into the malignant tumor cells. The modified virus has been constructed from an adenovirus most frequently associated with the common cold. The virus has been altered so that the parts of the virus necessary to reproduce itself have been removed. In turn, the removed portions of the virus are replaced by the p53 gene. It is not expected that the resultant virus will be able to multiply in the patient. The purpose of the study is to determine if the use of SCH 58500 in patients is safe. The study will also collect information to see if SCH 58500 can transfer the normal p53 gene into malignant prostatic tumors that are p53-altered and if introduction of the normal gene can have an anti-cancer effect. It has already been shown that administration of normal p53 can be effective in treating cancer. The present clinical study will evaluate, as a particular aspect of SCH 58500's anti-cancer effect, the extent to which introduction of normal p53 can cause the tumors to grow more slowly, stop growing, or die. SCH 58500 will be given to patients with prostatic cancer, as a series of 2 intratumoral injections. The trial will study the safety and effect of different dose levels of SCH 58500 using this new therapy. The maximum number of patients expected to be involved in this study is eighteen. Only those patients who have evidence of abnormal p53 in their tumor tissues can enroll in the study, thereby selecting those patients who may potentially benefit from this gene replacement therapy.

