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TITLE: Identification of Cellular and Molecular Markers of Prostate  
Cancer Progression in Racial-Ethnic Minorities

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| <b>13. ABSTRACT (Maximum 200 Words)</b><br><br>This is a study looking at the differences in tumor behavior (molecular and cellular behavior) observed in prostate cancer arising in men of different racial groups. Characterization of those pathways involved in tumor invasion, metastasis, and loss of growth control, including their regulation and interconnections, should provide insight into the behavior of prostate cancer. We have defined a cohort of men with prostate cancer, 400 African-Americans and 300 Latino men. These men had already signed a tissue release form, which we believed would suffice for this study to allow us to secure tissue release from hospitals. However, due to the nature of this particular study and new language requirements in the consents as required by our Institutional Review Board, new consents had to be developed, substantially delaying start up for this study. 210 men have signed the forms and returned them to us by mail. We have given 163 tissue release request forms to the Tissue Procurement Core Resource. We are in the process of calling subjects and tracking cases through our cancer registry follow-up department. The first tissues are now being received and we have begun the immunohistochemical assays on these samples. |   |  |  |                               |
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FOREWORD

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N/A In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and use of Laboratory Animals of the Institute of Laboratory Resources, national Research Council (NIH Publication No. 86-23, Revised 1985).

X For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 45 CFR 46.

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N/A In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to the NIH Guidelines for Research Involving Recombinant DNA Molecules.

N/A In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.


  
PI - Signature 11/25/99  
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## INTRODUCTION

This is a study looking at the differences in tumor behavior (molecular and cellular behavior) observed in prostate cancer arising in men of different racial groups. Further, characterization of those pathways involved in tumor invasion, metastasis, and loss of growth control, including their regulation and interconnections, should provide insight into the behavior of prostate cancer, and lead to greater predictability of outcome for individual patients. We have defined a cohort of men with prostate cancer, 400 African-Americans and 300 Latino men and we are retrieving prostate tissue from the hospitals. Once we receive the prostate tissue we will compare the tumors from these two cohorts for molecular/cellular changes which characterize the pathways of tumor progression, particularly invasion and metastases. We will focus of the following pathways: (a) cellular proliferation; (b) tumor angiogenesis and regulation of the tumor neovascular response; (c) cell-cell interactions; (d) cell cycle regulation; and (e) alterations in tumor suppressor genes.

## BODY

We have identified all of the African-American and Latino-American prostate cancer cases in the multi-ethnic cohort. 700 men have been identified and contacted by mail, and in some cases, by phone and asked to sign the tissue release forms. These men had already signed a release form, which we believed would suffice for this study to allow us to secure tissue release from hospitals. However, due to the nature of this particular study and new language requirements in the consents as required by our IRB, new consents had to be developed, substantially delaying start up for this study. These consents were approved by the University of Southern California IRB office and sent to the men identified as having prostate cancer through follow-up linkages with our SEER cancer registry. 210 men have signed the forms and returned them to us by mail. We are in the process of calling the other respondents to encourage them to sign and return the consent forms. We are also tracking cases through our cancer registry follow-up department, whose letter has been returned to us as undeliverable. Ten subjects have died and we are trying to secure tissue release forms signed by next-of-kin.

We have given 163 tissue release request forms to date to the Tissue Procurement Core Resource at USC/Norris Comprehensive Cancer Center. Forty-seven additional signed consent forms are ready for submission to the Tissue Procurement Core Resource. The first tissues are now being received from hospitals and we have begun the immunohistochemical assays on these samples. Once we receive sufficient tissue, we will begin comparing tumors from the two groups of men for molecular and cellular changes.

## KEY RESEARCH ACCOMPLISHMENTS

We have the lab functioning, and have begun the appropriate assays. We will be looking at the specific markers outlined in the Statement of Work in the upcoming year.

REPORTABLE OUTCOMES

None to date.

## CONCLUSIONS

None to date.

REFERENCES

Not applicable at this time.

APPENDICES

None at this time.

FINAL REPORTS

Not applicable at this time.