

# Urologic Oncology Symposium



by Stanley Brosman MD and Mark Scholz MD

For the past five years, radiation oncologists, urologic oncologists, medical oncologists and scientists from all over the world have gathered in either San Francisco or Orlando to discuss current developments in prostate cancer. This year's program emphasized Screening and Prevention of Prostate Cancer, Integrated Care for High-risk Disease and Future Pathways: What is on the way?

### SCREENING AND PREVENTION

Dr Peter Carroll from the University of California presented data showing that early detection is associated with a decreased risk of prostate cancer death and PSA testing should be offered to well-informed, healthy men who are at risk for developing prostate cancer particularly those who are at high risk. Dr Otis Brawley, from the American Cancer Society, emphasized that the current guidelines regarding PSA testing are not intended to discourage men from having PSA testing but rather to engage in appropriate testing that should be decided by the patient and his physician. Large-scale population screening has little value in the United States since so many men are routinely checked by their physicians.

Dr Klein reviewed the recent follow-up data on the men who participated in the Prostate Cancer Prevention Trial in which 18,000 men who were at low risk (PSA <3) for developing prostate cancer were randomized to take finasteride or placebo. There was a 25% reduction in the diagnosis of prostate cancer in those who took finasteride. A similar study, REDUCE, using dutasteride as the test agent for men with intermediate risk (PSA 2.5-10) demonstrated a 23% reduction in risk. Both of these agents do not actually prevent prostate cancer but can delay its onset. There are already many men that are already taking one of these agents to manage their enlarged prostates. Men over the age of 50 who are considered to be at moderate to high risk for developing prostate cancer are being advised to begin one of these agents.



There are three studies that are ongoing for men who are at high risk for developing prostate cancer because their biopsies revealed the presence of HGPIN, a precursor of prostate cancer. One study is testing Selenium vs placebo, another is testing selenium, vitamin E and soy protein individually and in various combinations against a placebo. A third study is testing Toremifene, an estrogen blocking agent. The results of these studies will be reported later this year.

### HIGH RISK DISEASE

Dr Joel Nelson from the University of Pittsburgh reviewed data from several methods used to classify the risk of developing recurrent cancer or dying from prostate cancer following initial therapy. The D'Amico classification, which is the one most commonly used, defines high risk as a PSA >20, a biopsy Gleason score of 8 or higher and stage of T2c as determined by rectal exam. Men in this category have a 50% risk of developing a recurrence as measured by a rising PSA within 5 years. However, the 15 year prostate cancer specific mortality in this group of men is around 20%. Dr Nelson asks: "How high-risk is a disease when less than 20% have died of it within 15 years?" The answer is that we have come a long way in managing recurrent cancer and slowing its progression with the use of many medical, hormonal and chemotherapeutic therapies. Most of the agents that are being used today were not available 10 years ago.

Improvements in imaging in detecting early recurrences were discussed by Dr Mukesh Harisinghani from the Massachusetts

General Hospital. He showed examples of imaging techniques that target specific molecular entities. Prostate cancer cells have specific proteins on the surface of their cells that can distinguish them from normal cells. By creating an antibody against these proteins and attaching it to another protein that has an imaging isotope, a small number of cancer cells can be detected. There were several presentations evaluating the use of detecting circulating tumor cells (CTC). CellSearch® from Veridex is a newly developed commercial test for CTC's. In a sample of 7.5 cc of blood is all that is necessary. This research continues to improve the detection rate since some cancer cells undergo a change in the type of proteins on their surface and would not be detected using this test.

Dr Judd Moul from Duke University discussed the role of radical prostatectomy for men with high risk disease. He pointed out that an integrated approach using surgery to removal the majority of the cancer followed by radiation therapy in conjunction with Hormonal and/or Chemotherapy is advantageous for many men and can significantly increase the time to recurrence.

### FUTURE PATHWAYS

The androgen receptor contained within the prostate cancer cells is the focus of much research. Dr Charles Ryan from the University of California, San Francisco, reviewed two agents that will become available in the next few years. Abiraterone is an oral agent that is similar to ketoconazole but is 100 times more potent. The re-

sponse rate varies from 45% in those that have progressive cancer after being on multiple therapies to 75% of patients who have not had extensive hormonal or chemotherapy.

MDV3100 is a pill that acts directly on the androgen receptor has shown even better responses in early studies. The role that these novel agents will play in the overall management of prostate cancer will require more investigation but studies are being prepared to test these agents in patients with early, localized cancer and in combination with surgery and radiation therapy.

Data on the next generation of Taxotere® was presented. Cabazitaxel is a chemotherapeutic agent that was reported to significantly improve overall survival and progression free survival in patients with metastatic, hormone refractory prostate cancer even in those whose disease progressed following treatment with Taxotere. In addition, Cabazitaxel has fewer side-effects.

There were a number of studies presented on the effects of a variety of molecularly targeted agents such as Bevacizumab, Dasatinib, Gefitinib and another dozen or more agents. These agents act upon the various proteins that allow prostate cancers to grow and spread.

The future is filled with promise and the scientists and clinical investigators who are pursuing this research are enthusiastic in the outlook for the future.