Us Too! Begins Distribution of “Resources for Making Prostate Cancer Decisions” to GREAT Reviews!

Despite the similarities of their disease, there are many differences between how Breast Cancer and Prostate Cancer patients decide how best to proceed with their treatment once diagnosed. One of the most startling differences is the quality of information available upon diagnosis. Sometimes it seems that when first diagnosed a Breast Cancer patient leaves the doctor’s office with a bag full of information to review and get “up to speed” on the disease and the decision process that they will soon face. That is an important empowerment tool and provides the patient with a wealth of information upon which to decide a course of treatment. Now compare that to the experience of many Prostate Cancer patients: a man gets diagnosed and walks out of the doctor’s office with an appointment card and/or a schedule for surgery, radiation or other treatment. Many prostate cancer patients may leave with little or no information about the disease or the options they may have in determining the course of their treatment.

But that has now changed. Over the last three months Us Too! International began distribution of its new “Resources For Making Prostate Cancer Decisions”. In the box, distributed free of charge through recognized Us Too! Chapters to their just diagnosed / new members, are reference materials chosen for their high quality content and reliability from among dozens of items reviewed for consideration.

One of the major components of the kit are the just released book by Dr. Stephen Strum and Donna Pogliano “A Primer on Prostate Cancer - The Empowered Patient’s Guide”. It is written in a straightforward and patient friendly style and, at nearly 400 pages, it is sure to be a reference for initial decision making as well as future reading.

Also included is a CD-ROM containing a number of useful tools, including complete archives of the Us Too! International and the Phoenix5 websites. The newsletters, full length videos and extensive information contained on this (continued on page 4)

Most Therapies Provide Similar Outcomes for Early Prostate Cancer

Source: Cancer 2002;95 2041-2043, 2126-2135.

Using a combination of pretreatment PSA, tumor stage and Gleason score, the 5-year outcome appears to be similar among men with low-risk and intermediate-risk prostate cancer, regardless of the type of treatment received, researchers report in the November 15th issue of Cancer.

“It is possible to give patients realistic comparisons of the differences in the 5-year rates of biochemical control of prostate cancer with various forms of treatment,” lead author Dr. Frank A. Vicini from the William Beaumont Hospital, Royal Oak, Michigan, told Reuters Health. “Since there are no randomized trials available, the best we can do is to compare retrospective results,” he added.

Dr. Vicini and colleagues collected data on 6877 men with prostate cancer. The men were treated between 1989 and 1998 at seven different hospitals and with six different therapies.

The researchers calculated the 5-year actuarial rates of PSA failure based on prognostic factors, including baseline PSA, tumor stage and Gleason score. They also calculated outcome using definitions of biochemical failure and length of follow-up.

Depending on the number of variables used to define treatment groups, there were substantial differences in the outcomes of patients in the same hospital receiving the same treatment, the researchers found. (continued on page 8)
Us Too! publishes a FREE e-mail based news service which provides updates on the latest prostate cancer related news. To subscribe or link to the archives simply visit the Us Too! Website: www.ustoo.org

News items contained in Us Too! publications are obtained from various news sources and edited for inclusion. Where available, a point-of-contact is provided.

All references to persons, companies, products or services are provided for information only, and are not endorsements. Readers should conduct their own research into any person, company, product or service, and consult with their loved ones and personal physician before deciding upon any course of action.

PSA “Bounce” No Reason For Concern May Indicate More Cells Dying

A passing rise in early levels of PSA after radiation therapy for localized prostate cancer doesn’t necessarily mean cancer is coming back, say researchers in the Journal of Urology (Vol. 168: 2001-2005). If PSA rises but then returns to the level it had just after treatment, that movement may be a “PSA bounce.” “Our study shows some patients can have an elevation in their PSA after external beam radiotherapy that is not a sign of cancer progression” said Louis Pisters, MD, at the MD Anderson Cancer Center in Houston. The researchers feel that the bounce is not a sign of cancer growth and may be caused by death of damaged cancer cells that then release their PSA. In fact, patients who have such a PSA bounce finding less than two years after treatment may be less likely to have cancer return later, said Pisters.

Scientists Discover Gene ‘Signature’ for Tumor’s Tendency to Spread

Researchers at Dana-Farber Cancer Institute and the Whitehead Institute have discovered a pattern of genetic activity in several types of primary tumors. That appears to predict the likelihood that they will spread, or metastasize, to other parts of the body. “These results strongly support the idea that some primary tumors are pre-configured to metastasize, and that this propensity is detectable at the time of initial diagnosis,” says Sridhar Ramaswamy, MD, a researcher at Dana-Farber. If larger studies support these findings, an early indicator of life-threatening cancer spread might lead to a clinical test that would help determine appropriate treatment. The study was published by Nature Genetics.

High Doses Of Vitamins, Minerals Harmful

Men with prostate cancer who take large doses of vitamins and minerals could be doing more harm than good. A study in the December issue of the International Journal of Radiation Oncology, Biology and Physics from the American Society for Therapeutic Radiology and Oncology, says these patients could have complications and adverse effects with their traditional cancer treatments. Dr. Anthony D’Amico, of Brigham and Women’s Hospital and the Dana-Farber Cancer Institute, says a 55-year-old prostate cancer patient took extremely large doses of several vitamins and minerals daily, including 2,250 mg of niacin. The recommended daily allowance is 12 to 20 mg per day. The patient was scheduled for brachytherapy, a form of radiation therapy for prostate cancer, but it had to be canceled when it was discovered he was at risk for hemorrhage due to a drug interaction between the high dose of niacin and a routinely administered preoperative antibiotic.

Doubling Of PSA In The First Year After Receiving Radiation Therapy At Greatest Risk Of Dying From The Disease

In research at Brigham and Women’s Hospital and the Dana-Farber Cancer Institute, men with prostate cancer who undergo radiation therapy and subsequently relapse were found to be able to predict the pace of their disease accurately with a new interpretation of the changing levels of a certain protein in their blood. Prostate-specific antigen (or PSA) is a protein made by prostate cells. PSA levels rise in people with prostate cancer. Though it is understood that elevated PSA levels is an indication of a patient’s cancer worsening, determining what to do has been worrisome. The new study, published in the Dec. 1 issue of the Journal of Oncology, determined that men who experience a doubling of their PSA level in the first year after receiving radiation therapy are at greatest risk of dying from the disease and should probably consider more aggressive treatment options.

Using The Magnitude Of PSA Bounce After MRI-Guided Prostate Brachytherapy To Distinguish Recurrence, Benign Precipitating Factors, And Idiopathic Bounce

Das P, et al
Int J Radiat Oncol Biol Phys 2002 Nov 1;54(3):698-702

In patients treated with MRI-guided prostate brachytherapy, recent ejaculation, instrumentation, or ongoing radiation proctitis can cause a transient increase in PSA, the magnitude of which is significantly higher than that for idiopathic PSA bounce, but is similar to that in patients with recurrent disease.
The success of medical treatments for men with ED among long-term survivors of prostate carcinoma is limited. Men prefer noninvasive treatments, although invasive treatments are more effective. Sexual counseling for men and their partners is recommended, because it may increase the use of medical therapies for ED. Creating more realistic expectations in both partners also may enhance treatment adherence.

Brain metastasis from prostate small cell carcinoma: Not to be neglected
The Canadian Journal of Neurological Sciences - Number 4/ November 2002; Pages: 375 - 377
Conclusion: A literature review suggests that small cell carcinoma of the prostate is more likely to spread to the brain compared to adenocarcinoma and that brain metastases indicate a poor prognosis. The prostate gland should be remembered as a possible cause of brain metastases and that a normal serum prostate specific antigen does not exclude this diagnosis.

Screening with low PSA Cutoff Values Results in Low Rates of Positive Surgical Margins in Radical Prostatectomy Specimens.
Berger AP, et al
Prostate 2002 Nov 1;53(3):241-5
As tumor stage and surgical margin status after radical prostatectomy are important predictors of the likelihood of PSA recurrence, which necessitates additional therapy, these findings support the concept of PSA screening by using low PSA cutoff levels.

Neoadjuvant Therapy Before Radical Prostatectomy for Clinical T3/T4 Carcinoma of the Prostate: 5-Year Followup, Phase II Southwest Oncology Group Study 9109
Powell JJ, et al
Neoadjuvant hormonal therapy followed by radical prostatectomy is reasonable and appropriate for clinical stage T3 prostate cancer. A progression-free and overall 5-year survival of 70% and 90%, respectively, compares favorably to Radiation Therapy Oncology Group neoadjuvant trial outcomes for this stage of prostate cancer.

Potential Benefits of Combining Cytosine Deaminase/5-Fluorocytosine Gene Therapy and Irradiation for Prostate Cancer: Experimental Study.
Kato H, et al
Findings indicate that CD/5-FC gene therapy for prostate cancer may function with enhanced antitumor effect when combined with external beam radiation. However, combining CD/5-FC gene therapy and RIT using an anti-PSA mAb may not be effective because of insufficient accumulation of the mAb at the target tumors.

Can Volume Measurement of the Prostate Enhance the Performance of Complexed Prostate-Specific Antigen?
Naya Y, et al
Urology 2002 Oct;60(4 Suppl 1):36-41
We assessed whether volume-based complexed prostate-specific antigen (cPSA) indices could enhance prostate cancer detection in men with serum total PSA (tPSA) between 2.5 and 10.0 ng/mL. In conclusion, volume-based cPSA can modestly enhance the performance of cPSA.

Determinants of Prostate Cancer-Specific Survival After Radiation Therapy for Patients With Clinically Localized Prostate Cancer.
D’Amico AV, et al
J Clin Oncol 2002 Dec 1;20(23):4567-73
Prostate cancer was a major cause of death during the first decade after RT for patients with clinically localized but high-risk disease, and the cause of death for patients with a short PSA DT after RT was nearly always prostate cancer. These data provide evidence to propose the hypothesis that a short posttreatment PSA DT may serve as a possible surrogate for PCSD. Prospective validation is needed.

Effects of Combined Androgen Blockade on Bone Metabolism and Density in Men With Locally Advanced Prostate Cancer
M. Ozgür Tan
No convincing evidence was found about the detrimental effect of CAB on bone mineral density and metabolism in a highly selected group of patients with advanced prostate cancer without bone metastases.

Receiving Androgen Deprivation Therapy for Prostate Cancer: A Pilot Study
William F. Pirl, et al
This data suggests a significant rate of major depression in men with prostate cancer receiving ADT and that men with past histories of depression may be at particular risk for recurrence of their depression while undergoing this treatment.

Biochemical and Pathological Predictors of the Recurrence of Prostatic Adenocarcinoma With Seminal Vesicle Invasion
Mario Sofer; et al
PSA greater than 10 ng/mL, tumor volume greater than 20% and age are significant predictors of recurrence after radical retropubic prostatectomy in patients with prostate cancer and seminal vesicle invasion. Hopefully future randomized trials may show a survival benefit of adjuvant therapy in patients at high risk.

Factors Affecting Recurrence Rates After Prostatectomy or Radiotherapy in Localized Prostate Carcinoma Patients With Biopsy Gleason Score 8 or Above
Patrick A. Kupelian, M.D.; et al
Patients with localized prostate carcinoma with a biopsy Gleason score 8 or less have low recurrence rates if iPSA levels are 10 or less. Biochemical control rates were encouraging for patients with biopsy Gleason score 8 or above, clinical Stage T1-T2, and iPSA levels less (continued on page 5)
CD-ROM is sure to provide in-depth information and assistance in helping the patient and his family, together with his health care team, make the most appropriate and informed decision possible for them.

But the kit goes beyond that by providing road maps to help focus a newly diagnosed patient on the information they may need to understand immediately, before making any treatment option decisions.

Those of you who have participated in Us Too! support groups understand that there are numerous values to being part of an Us Too! support group. Over time there are opportunities to meet other survivors at support group meetings and to listen to experts and learn from the experiences of others who have already been dealt with this disease. Research has confirmed that such experiences can increase your odds for successful treatment outcome and provide a more positive future.

But the most immediate benefit of the kit is the gathering of well-documented materials to help the newly diagnosed man become better informed about prostate cancer treatment possibilities.

There is a large amount of information included in this resource kit, but the idea is not to try to digest all of it at once. The objective is to determine and use what is most appropriate for the patient’s particular situation. And this kit is intended to help them do that.

Us Too! recognizes that a wide range of options exist for dealing with prostate cancer — in addition to the wide range of information sources about the choices to be made. Therefore we believe the best approach is to provide a large amount of well-documented information along with a system to help pick and choose what is most appropriate at this time — and have other information available for future reference. The resource kit contains basic information, advanced information, and much that is a mixture of the two.

To avoid information overload or “underload,” we constructed alternative review “road maps” to match where a patient may be in their personal understanding of prostate cancer, how the disease is diagnosed, what treatment choices exist, and the possibilities after treatment.

For each of the materials we provide comments made from the point of view of ordinary people who have dealt with prostate cancer. These comments should help to choose the materials in the sequence that seems best for that patient. The resource collection is a mix that will help patients make decisions that are best for them right now and in the future.

Already the kit has been extremely well received. The reviews and responses we have received are resoundingly positive. One of the best aspects of the resource kit is that the information comes from numerous, well-trusted sources. Among the information sources included are the following:

**LIVING WITH PROSTATE CANCER**

If you have recently been told you have prostate cancer, it’s normal to wonder about your future. But did you know that many men have overcome this disease? Start learning by reading this basic pamphlet. It is extremely well illustrated and provides a simple overview of anatomy, prostate cancer, and treatment options. It is a starting point.

**KNOW YOUR OPTIONS**

This booklet provides a basic description of many aspects of prostate cancer. Us Too! and the National Cancer Institute (NCI) have distributed it for several years to newly diagnosed patients. The information is general, unbiased, and easy to understand. It discusses treatment choices and options for different types of disease (localized or disease that has spread). There is a section on considering the chances of survival. This is a basic introduction for the newly diagnosed patient.

**A PRIMER ON PROSTATE CANCER**

This is the newest and most comprehensive text available to help understand the technology and emotional issues of prostate cancer. It will serve as an invaluable resource at all levels of the prostate cancer journey. It is thoughtfully written for the patient, and illustrated in full color.

Use the table of contents, index and glossary to find the sections of interest for your particular stage of learning. This is a text/reference book. Do not expect to read it at one sitting. It is intended to help fill the need for comprehensive direction and understanding. Even if newly diagnosed, many sections are fully understandable and useful, especially the Glossary, the Overview Chapter, the Partin Tables, and description of staging and interpreting your results.

For the more experienced patient, Appendix B, “If You Want To Learn More”, includes advanced information related to each chapter. All levels of patients can use Appendix A, “Resources”, a list and summary of Internet websites, printed materials, support groups, and questions you can ask your doctor.

The section: “How to Use This Book” describes the format of the book and how it can fit individual needs. The “An Overview” section and Chapter 1 (“How to Proceed”), are good starting points to get the overall scope of the variety of information available in this book. Understanding the doctrines of prostate cancer technology is a major step toward “Patient Empowerment” and can result in a better outcome. Patients are encouraged to keep this book handy for easy access - along with the rest of the materials in this resource kit - for future reference.

**WHAT YOU SHOULD KNOW ABOUT PROSTATE CANCER**

Developed by the Prostate Cancer Research Institute (PCRI), it gives basic facts on prostate cancer. There
is also a detailed discussion of prostate cancer including a discussion of nutritional supplements to consider and an in-depth discussion of the Prostate Specific Antigen (PSA) blood test, the Digital Rectal Exam (DRE), and additional tools to help clarify diagnosis and decisions to be made. It also has references for additional reading.

PROSTATE CANCER - RESOURCE GUIDE
Published by the American Foundation for Urologic Disease, this is another potential starting point for learning about this disease. It lists resources such as suggested readings, Internet sites of interest, listing of cancer centers and other cancer-focused organizations along with their contact information. You’ll also find several “Tips for Survivors of Prostate Cancer” and a list of local support groups in the U.S. and abroad.

PROSTATE CANCER - Treatment Guidelines For Patients
This report describes, in lay terms, the way prostate cancer is treated at leading cancer centers. Published by National Comprehensive Cancer Network (NCCN) and the American Cancer Society, it is a very helpful tool for future planning. The booklet’s "decision trees" illustrate and explain the different stages used by doctors in their testing, work up and treatment of prostate cancer.

Newly diagnosed patients coming to a recognized Us Too! chapter meeting, for the first time may inquire about receiving a Resource Kit at no cost. With your registration at the meeting you’ll also be eligible to receive notification of the periodic updates we make to the kit for a year.

If you don’t have a local support group, or want to receive a resource kit for yourself or a friend, you can order kits online at the Us Too! website (www.ustoo.org) or from Us Too! headquarters (630-795-1002) for $40 each prepaid, including shipping and handling in the US. This offer expires on March 31, 2003 or while supplies last - so order your Resource Kit today. The Primer is available alone at $25 each and the CD-ROM is available at $10 each (both prepaid include shipping and handling in the USA).

US TOO! PCa HOT SHEET JANUARY 2003
A new survey of prostate cancer patients diagnosed within the past two years shows that many men are unaware of the likelihood of recurrence of their cancer following initial treatment and believe they are cured. Of the men surveyed, 66 percent believed that, as a result of their initial treatment, their prostate cancer has been cured.

"Many men are sent home from their doctor believing they have been cured of prostate cancer," said John Page, President and CEO of Us Too! International. "Unfortunately, in many cases this is simply not true. Research shows that of all men treated for prostate cancer -- including those treated by surgery or radiation -- one-third or more will see their cancer return within ten years."

The survey, conducted by Us Too! International, the world’s largest independent network of prostate cancer education and support groups, highlights a distinct misperception men have about the possibility of their cancer recurring. The 10-year clinical recurrence rates following radical prostatectomy (surgical removal of the prostate) and radiation therapy can exceed 30 percent.

Of the men surveyed, about half either said they were not told (35 percent) or did not know (14 percent) what the chances of recurrence were. Of the other half who had at least some idea about the possibility of their cancer returning, most (37 percent) believed it is less than 25 percent. The survey also showed that 40% of patients were told by their doctor that they were cured.

"The results of this survey are very disheartening. It is important for men to discuss with their doctor, even if they have been successfully treated, steps they might take to monitor their health and hopefully prevent their prostate cancer from coming back. At the very least, they should continue to get checked regularly," said Page.

Four out of five men surveyed (83 percent) said they have not discussed with their doctor any additional treatment to reduce the possibility of recurrence, and two-thirds (65 percent) said they are doing nothing to prevent a recurrence of the disease. Among the one-third of patients who are doing something, their activities include watching their diet, healthy eating and exercise, regular checkups, and a small percentage mentioned taking specific medications. Studies also show that a positive mental outlook and participation in outreach and support groups contribute to better outcomes.

The survey also highlights another major concern of prostate cancer patients, namely the possible side effects associated with existing options to treat prostate cancer. Four out of five patients were informed about the possible side effects of the treatments they discussed with their doctor, and 60 percent were concerned about these side effects, particularly those associated with surgery, radiation therapy and chemotherapy.

"This survey underscores the critical need for better targeting and newer treatment options designed to ensure a longer, disease-free life. Men deserve the greatest choice of options possible so that they can better manage their disease, as well as balance the potential side effects of treatment to suit their lifestyle," said Page.

In the survey, more than two-thirds (69 percent) said they would be interested in a treatment that could reduce the chances of recurrence of their prostate cancer, including almost half (48 percent) saying they would be very interested.

Physicians have been embroiled in a similar debate over other types of cancer screenings. Several recent studies have raised questions about the effectiveness of breast self-examinations and mammography, noting that death rates among women who had the screenings and those who didn’t appear to be similar. Other studies have reached the opposite conclusion.

About 57 percent of men over 50 had a blood test for prostate cancer last year, according to the Centers for Disease Control and Prevention. About 36 percent had a rectal examination for the disease, the CDC said.

The blood test looks for levels of a substance called prostate specific antigen, PSA. Men who test positive for cancer during a PSA test or a rectal exam usually undergo a biopsy to confirm the diagnosis.

A PSA test costs less than $100. But a biopsy and follow-up examinations can run thousands of dollars more.

Dr. Leonard Gomella, chairman of urology at Jefferson Medical College in Philadelphia, said he believes the benefits of aggressive detection outweigh its costs.

“We know we are over-treating many men with prostate cancer,” he said. “But something is going on over the last 10 years where we are seeing the death rate from prostate cancer go down consistently, and the easiest thing to ascribe this to is the screenings.”

About 189,000 men are diagnosed with prostate cancer each year, and about 30,200 die of the disease, making it the second leading cancer killer for men, according to the American Cancer Society. More than 75 percent of cases are diagnosed in men older than 65.

The most common treatment for prostate cancer that has not yet spread is surgery. Other treatments include radiation, hormone therapy and “watchful waiting” - doctors wait to see whether the tumor grows before deciding what to do.

The task force said black men, men between the ages of 50 and 70, and men with a history of prostate cancer in the family are the most likely to benefit from screening.

**Nutrients Are Key to Preventing Cancer**

*By Lauran Neergaard - AP Medical Writer*

Can a diet rich in a particular nutrient really prevent cancer? The government is recruiting 32,000 middle-aged men to see if selenium or vitamin E can prevent prostate cancer, the biggest clinical trial yet to address such dietary questions.

It’s just a first step toward what could become a major change in nutrition: Preliminary but intriguing genetic research suggests certain nutrients may prove more cancer-protective for one person than the next - suggesting that one day doctors might write prescriptions for diets to prevent tumors in certain people.

“The future is tailored recommendations,” John Milner of the National Cancer Institute says about this fledgling new science, “nutrigenomics.” “That’s the excitement.”

Cancer doesn’t just arise overnight. A few tiny cells gone wrong slowly grow over decades. Whether the result is a life-threatening tumor depends on genes and environment - including food. Up to 35 percent of cancers are related to dietary habits, says Milner, chief of NCI’s research into nutrition and cancer prevention. That doesn’t mean an occasional cheeseburger or doughnut is doomed. But study after study links lifelong diets high in plant foods to lower cancer rates.

Also, people who eat lots of fruits and vegetables generally are skinnier. Obesity increases risks of cancers of the uterus, gallbladder and possibly colon and prostate, while a large weight gain after reaching adulthood is linked to breast cancer.

Armed with such provocative evidence, scientists now are trying to tease out which of the myriad nutrients and chemicals in different foods are most protective - and why, at a genetic level, they do the job. It’s exceedingly complex research. Not everybody gets equal benefit from nutrient-rich diets, a discrepancy that probably points to genetic variability. For example, scientists studying lung cancer rates in part of China found people with the lowest cancer risks also were genetically deficient in an enzyme that metabolizes certain nutrients in cruciferous vegetables.

In other words, those lucky people’s genes seemed to make broccoli better for them. Similar links to cancer are being explored with genes that metabolize alcohol, folate from grains and other food chemicals. “In five years, we’ll have a lot of information on how your gene profiles influence your response” to different foods, Milner predicts. But first, scientists need hard proof of which of the many nutrients commonly considered protective truly are, and at what levels. Small studies promoting 12 cups a day of tea or three whole garlic cloves daily aren’t too practical for many people.

Until now, most food and cancer research has focused on animals or merely monitoring people’s diets and their later health, which gives only clues, not proof. Plus, too much of some nutrients can be dangerous.

Top of the federal research list: selenium, a trace element found in grains and meat. Previous studies suggest that eating 200 micrograms of selenium a day, about twice the national average, might lower the risk of prostate, lung and colorectal cancer, perhaps by slowing abnormal cell growth or activating tumor suppressor genes.

To prove the prostate benefit, NCI is recruiting 32,400 healthy men in their 50s to take for the next seven years either selenium; 400 milligrams of vitamin E, another nutrient linked to lower prostate risk; both; or a dummy pill. Too much is toxic, so don’t pop lots of selenium supplements, cautions NCI researcher Cindy Davis.

Lycopene, the chemical that makes tomatoes and watermelon red, is another top prospect. Cooking tomatoes with a little oil - think spaghetti sauce - significantly increases lycopene absorption. In one study, it decreased prostate cancer by 35 percent. The NCI has begun small clinical trials to find lycopene’s maximum safe dose and see if giving it to prostate cancer patients before surgery helps stem their disease.

Despite lots of hype, research is much more mixed on other foods. Soy, for instance, is widely touted as protective against breast cancer, but women seem to get the benefit only if they eat soy before puberty, says NCI researcher Harold Seifried.

It will take years to sort out what are truly anticancer diets. For now, the American Cancer Society’s best advice: Eat a wide variety of foods, including at least five servings of fruits and vegetables a day, and slim down.
**SIMILAR OUTCOMES**

(continued from page 1)

However, the estimates of 5-year PSA outcomes for low- and intermediate-risk patients were “remarkably similar,” regardless of the type of treatment patients received, they add.

“With cooperation between specialties and institutions, we can actually gather enough patients with similar prognostic factors to make good comparisons between treatments,” Dr. Vicini said.

Among high-risk patients, the 5-year PSA outcomes were poor, no matter which treatment modality was used, Dr. Vicini’s team found.

“We should push for randomized trials but until then, if we cooperate and gather data meticulously, we can give patients very reasonable estimates as to how to best treat their cancer,” Dr. Vicini said. “The data...clearly show that 5-year results in very early stage patients are extremely good regardless of whether surgery or radiotherapy is used.”

“I would like to congratulate Dr. Vicini and colleagues on compiling and analyzing a large and valuable database,” Dr. Anthony V. D’Amico from Harvard Medical School, Boston, comments in a journal editorial.

“I expect that, in time, they will contribute to the growing pool of investigators who are working on the problem of defining the patients with prostate carcinoma for whom PSA failure after currently available therapies will translate into disease specific death,” he adds.

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**MR SPECTROSCOPY CAN DIFFERENTIATE AGGRESSIVE PROSTATE CANCERS**

*Medscape Medical News 2002 Peggy Peck*

Using new magnetic resonance technology — MR spectroscopic imaging (MRSI) — it is possible to “identify a metabolic signature for prostate cancer” that can effectively predict Gleason score without need for biopsy, according to researchers at Memorial Sloan-Kettering Cancer Center (MSK) in New York.

Hedvig Hricak, MD, PhD, chair of the department of radiology, discussed the new technology during a press conference at the 88th Scientific Assembly and Annual Meeting of the Radiological Society of North America. The study will be formally presented on Friday, Dec. 6.

“Prostate cancer really requires ‘boutique’ treatment — tailored to each patient,” said Hricak. “This noninvasive diagnostic technology allows us to do that.” The MRSI “gives a clear road map for treatment.”

The MRSI tracks choline + creatine and citrate, Hricak said. “When the Gleason score is 6, choline is slightly elevated and citrate is low, but present. When the Gleason score is 8, choline is dramatically elevated and citrate is no longer present.” Thus, by tracing the choline/citrate ratios, “imaging can identify 72% of very aggressive prostate tumors — those with Gleason scores of 7.5 or higher.” she said. “With that level of accuracy we can effectively plan treatment.”

Moreover, imaging can identify “cancer that has spread beyond the prostate, so it is a noninvasive way to help us determine therapy,” Dr. Hricak illustrated the point with an MRSI slide in which an aggressive cancer had spread to the pelvic region. “Obviously we could not use brachytherapy in this man because the seeds would not get [to] the cancer, but conformal external radiation could be used.”

Dr. Hricak said that MRSI will not “replace biopsy but it can be used in addition to biopsy.” For example, she said that often men who have elevated prostate-specific antigen (PSA) levels will be referred for biopsy but the biopsy will be negative. “Often that means that the biopsy simply missed the cancer,” she says. If PSA remains elevated but the patient has two negative biopsies, MSK is now using MRSI to either confirm the negative finding or locate the cancer so that it can be staged.

Currently only two centers have MRSI capability — MSK and the University of California, San Francisco (UCSF). “But there is now a commercially available software called PROSE made by GE Medical Systems, so there should be 10 centers who have MRSI capability within a year,” says Fergus Coakley, MD, associate professor and chief of abdominal imaging at UCSF. Dr. Coakley was not involved in the MSK study but says the work there confirms earlier MRI studies at UCSF. “Here, the typical scenario is that the patient has an elevated PSA and positive biopsy but the treating physicians are unsure about treatment. We use MRI to stage the cancer and direct treatment.”

In the MSK study, Dr. Hricak and colleagues attempted to correlate MRI images to Gleason scores from 127 biopsy-proven prostate cancer patients.

All patients underwent endorectal MRI/MRSI prior to radical prostatectomy with whole-mount, step-section pathology from November 1999 through December 2001. The MRI data were obtained on a 1.5 Tesla Signa scanner (GE, Milwaukee, Wisconsin) using software provided by UCSF. MR imaging was followed by MRSI with PRESS excitation and BASHING water and lipid suppression resulting in a three-dimensional spectral grid with 6.2 mm resolution. Prostatectomy specimens were whole-mounted and serially sectioned at 3- to 4-mm intervals. After paraffin embedding, micro sections were placed on slides and stained with hematoxylin and eosin. Cancer foci were outlined with color corresponding to Gleason 3 or 4 cancers; Gleason 5 cancer was not differentiated from Gleason 4. Each prostate half was assigned a Gleason score (3+3, 3+4, 4+3, 4+4).

After elimination of patients who did not complete the exam or had poor SNR or artifact (n=16), patients with unavailable pathology slides (n=4), and patients with tumor only in the transition zone (n=4) or prostatitis (n=13), a population of 90 patients was used for analysis.

Of 180 prostate halves analyzed, 170 contained cancer. Overall MRSI detected cancer in 115 (68%) of 170 halves. Of the 55 halves in which MRSI did not detect cancer, 48 (87%) were Gleason 3+3, 5 (9%) were Gleason 3+4 and 2 (4%) were Gleason 4+3. MRSI detected all 11 Gleason 4+4 cancers. An increase in MRSI grade correlated positively with Gleason score (P < .001, chi-square test). In addition, the presence of at least one suspicious voxel in which choline was the only detectable metabolite predicted a higher Gleason score (P < .0001, Fisher’s exact test). RSNA 88th Scientific Assembly: Abstract 1525. Presented Dec. 6, 2002.