Current and Newsworthy Prostate Cancer Information You Need to Know

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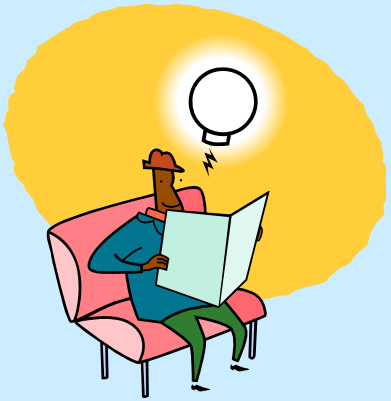
Us TOO *HotSheet*

- 8-page monthly newsletter
  - "Burning Issues" supplements
- 3-member Editorial Team
  - Tom Kirk, President & CEO, Us TOO International
  - Pam Barrett, Us TOO Development Director
  - Jonathan McDermed, PharmD
- Includes announcements, upcoming & recent support group events, fundraising activities, patient vignettes, medical articles & information from 3 physician columns

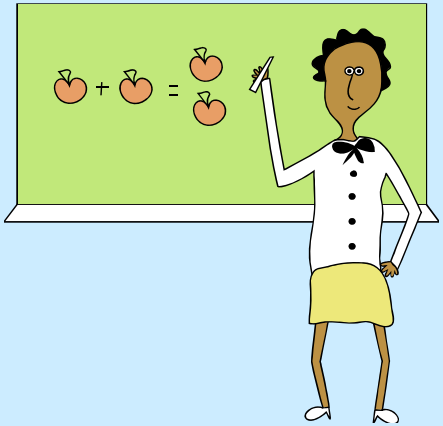
Us TOO *HotSheet*

- Items in Us TOO publications are obtained from various news sources and are edited for inclusion
- Where available, contact information is provided (website, e-mail, phone number)
- References to persons, companies, products or services are provided for information only and are not endorsements
- Information and opinions expressed by Us TOO are not recommendations for any medical treatment, product, service or course of action

Basic goals of the Us TOO *HotSheet*



Inform



Educate

Offer hope

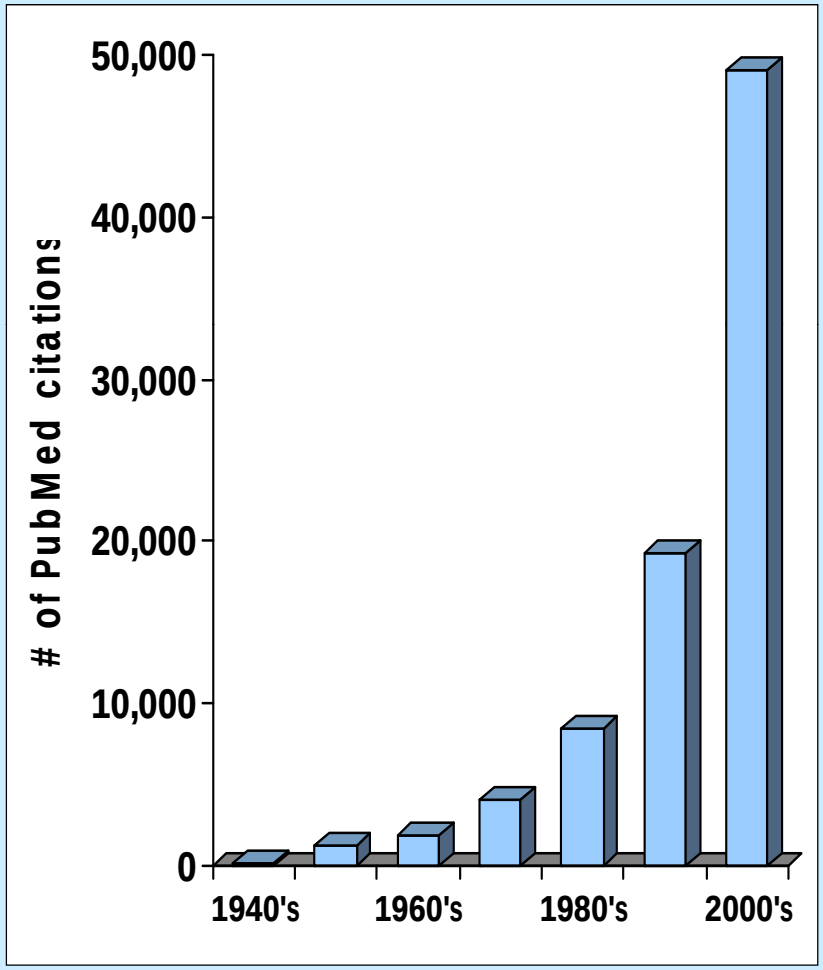
Sources of medical information

- News services
  - Reuters, Medscape, MedPage Today, Health Day, certain online newspapers, etc.
- Press releases
  - American Cancer Society (ACS), FDA, NCI, AUA, ASCO, ASTRO, universities, private companies
- Abstracts & journal articles
  - Some E-publications ahead of print
- Websites & blogs

There are many topics of interest

- Risk factors
  - Hereditary, other factors
- Prevention
  - Diet & lifestyle changes
  - Proscar, Avodart, etc.
- Early detection (PSA)
  - Screening controversy
- Diagnosis
  - Biopsies, imaging
  - First biopsy negative??
- Staging
  - Role of imaging
- Treatment options
  - Early stage disease
  - Biochemical recurrence
  - Distant spread ("mets")
    - Hormone responsive
    - Hormone refractory
- Investigational agents
  - Chemotherapy
  - Therapeutic vaccines
  - Biologic agents
    - Angiogenesis inhibitors
    - Monoclonal antibodies
- Supportive care

Medical information grows continually



- Each decade, the number of new papers related to prostate cancer doubles (x2)
- Focus before 1990 was epidemiology, testing, treatment options
- Focus now includes
  - PSA screening
  - Prevention
  - Genes (risk factors, etc.)
  - New tests, drugs, biologics

Doc Moyad's "No Bogus Science"

- Co-director of the men's health program at the University of Michigan Medical Center
- Editor-in-chief of the journal *"Seminars in Preventive & Alternative Medicine"*
- Author of several books
- Areas of primary interest include
  - Prostate cancer
  - Cardiovascular diseases
  - Osteoporosis
  - Diet, exercise & nutritional supplements

Ask Dr. Snuffy Myers

- Medical oncologist specializing in prostate cancer providing comprehensive patient care
- Prostate cancer survivor
- Former cancer researcher at NIH
- Prostate Forum – educational arm of his practice
  - Monthly newsletter and hosts an interactive website
- Column addresses questions from survivors or significant others that are e-mailed to his website
- All topics are relevant to prostate cancer & address difficult or controversial topics

Dr. Chodak's Bottom Line

- Provides comments regarding the medical articles appearing in each issue of the *HotSheet* & gives his "bottom line" conclusions & recommendations
- Medical feedback is valuable to "balance" the information conveyed in some of the news releases
- Emphasizes the need for studies to provide Level One evidence of safety & efficacy of any new treatment approach

What medical articles do we print?

- All articles must be medically relevant
  - Studies of new drugs or medical procedures
  - Recently published medical articles
  - Policy statements (e.g., ACS, AUA, ASCO)
  - Clinical trials for certain prostate cancer groups
- Articles we like to avoid
  - Non-human studies (e.g., cells, animal studies)
  - Most phase I studies & many Phase II studies
  - Articles reporting data from the same study
  - Studies with results that are potentially biased

Information important to survivors

- Prostate cancer advocacy activities
  - Support group meetings
  - Special educational events
  - Fundraising activities
  - Reports from Board of Directors meetings
- New diagnostic tests and treatments
  - Prostate cancer risk assessment
  - Managing incontinence
  - Managing erectile dysfunction

Education

- Brochures
- Books
- CDs & tapes
- Us TOO University

New treatments that may offer Hope

- Abiraterone acetate
- Provenge

Abiraterone – for failure with primary ADT

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JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Phase I Clinical Trial of the CYP17 Inhibitor Abiraterone Acetate Demonstrating Clinical Activity in Patients With Castration-Resistant Prostate Cancer Who Received Prior Ketoconazole Therapy

Charles J. Ryan, Matthew R. Smith, Lawrence Fong, Jonathan E. Rosenberg, Philip Kantoff, Florence Raynaud, Vanessa Martins, Gloria Lee, Thian Kheoh, Jennifer Kim, Arturo Molina, and Eric J. Small

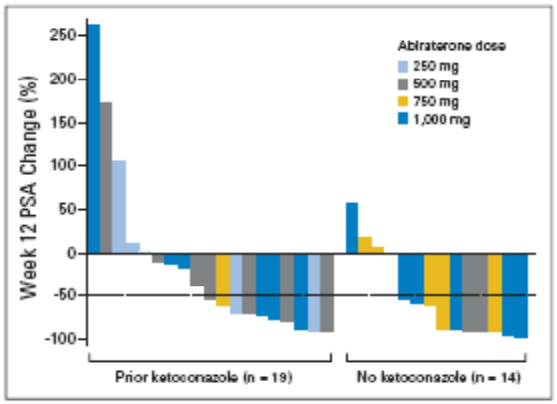

Fig 3. Relative change in prostate-specific antigen (PSA) levels at week 12 of therapy in men with castration-resistant prostate cancer treated with abiraterone acetate. Patients who had received prior ketoconazole therapy appear on the left; those who had not received prior ketoconazole appear on the right.

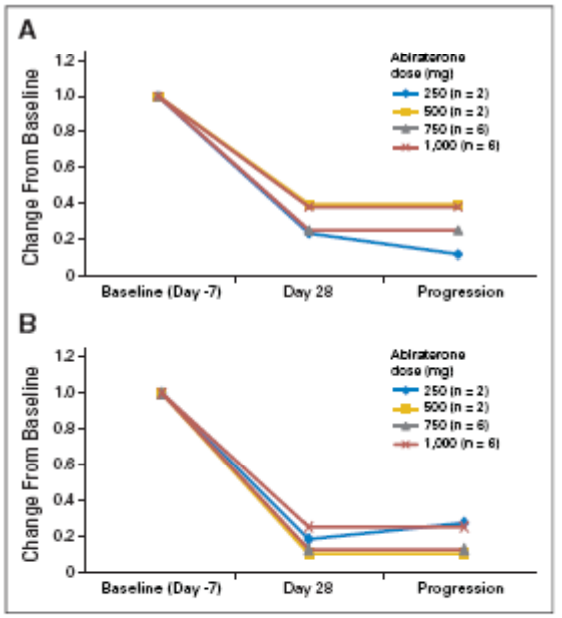

Fig 2. Relative levels of (A) dehydroepiandrosterone sulfate and (B) testosterone (commercial assay) at baseline, at day 28, and at the time of disease progression in patients treated with abiraterone acetate, by dose.

AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

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Abiraterone – for docetaxel resistance

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JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Significant and Sustained Antitumor Activity in Post-Docetaxel, Castration-Resistant Prostate Cancer With the CYP17 Inhibitor Abiraterone Acetate

Alison H.M. Reid, Gerhardt Attard, Daniel C. Danila, Nikhil Babu Oommen, David Olmos, Peter C. Fong, L. Rhoda Molife, Joanne Hunt, Christina Messiou, Christopher Parker, David Dearnaley, Joost F. Swennenhuis, Leon W.M.M. Terstappen, Gloria Lee, Thian Kheoh, Arturo Molina, Charles J. Ryan, Eric Small, Howard I. Scher, and Johann S. de Bono

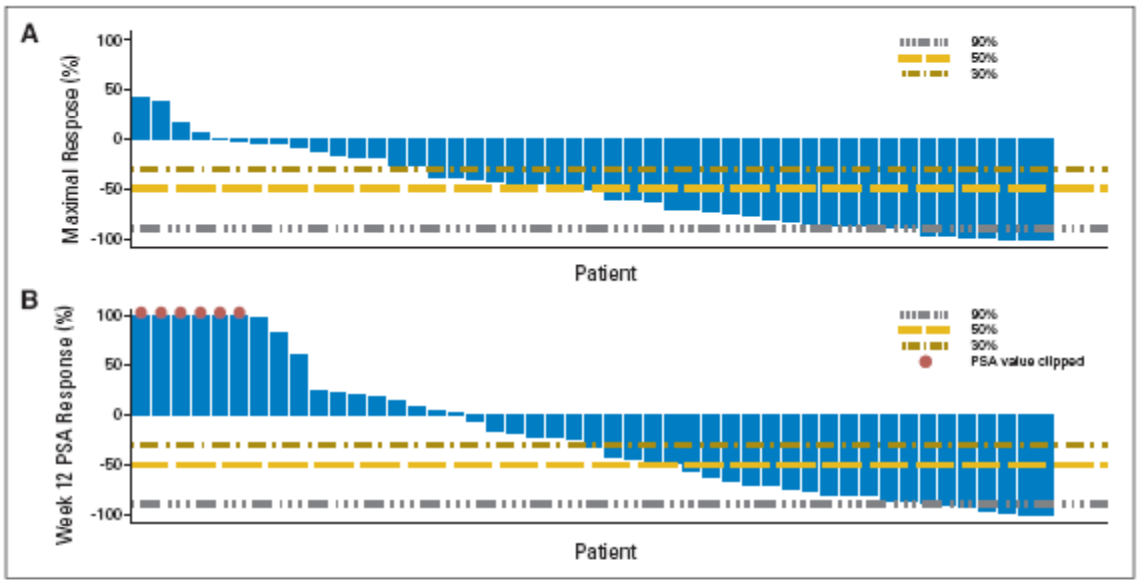

Fig 1. Waterfall plots of prostate-specific antigen (PSA) changes. (A) Waterfall plot of greatest percentage change in PSA of individual patients on abiraterone acetate. (B) Waterfall plot of PSA change from baseline at 12 weeks for individual patients on abiraterone acetate. Brown, gold and grey lines indicate a decline in PSA of 30%, 50% and 90%, respectively. Some patients had a PSA decline on study but this was short-lived; PSA then increased again, which explains why the week-12 and maximal PSA declines are different.

Abiraterone – for docetaxel resistance

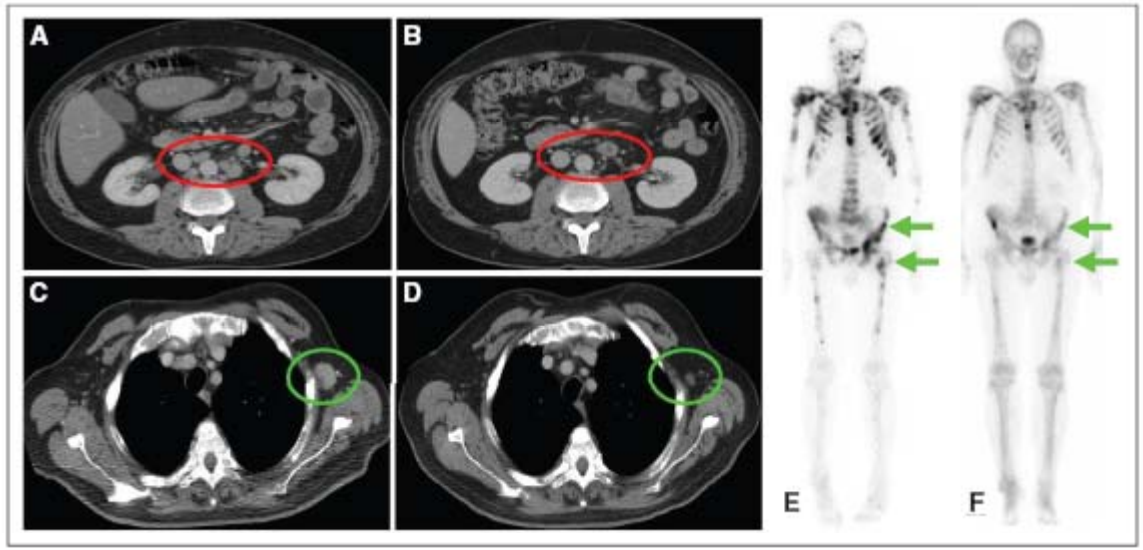

Fig 2. Radiologic responses. (A) Patient 010 had previously experienced progression on an luteinizing hormone-releasing hormone (LHRH) agonist, flutamide, bicalutamide, docetaxel, the monoclonal antibody to IGF-1R, CP-751, 871, and the survivin inhibitor YM155. Before starting treatment with abiraterone acetate, the prostate-specific antigen (PSA) was 799, and there was evidence of nodal and bony metastatic disease. Circulating tumor cells (CTCs) were not detected. Red oval, retroperitoneal nodal disease on a baseline computed tomography (CT) scan (A). After 3 months on abiraterone acetate, PSA decreased to a nadir of 1.4 (ie, > 90% decline), and (B) the red oval shows that the nodal disease has largely disappeared. Patient 010 continues to take study drug, now in the third year of treatment. (C) Patient 025 had previously experienced progression on an LHRH agonist, antiandrogen, stilboestrol, and docetaxel. Baseline PSA was 10,325, and it decreased to a PSA nadir of 46 (ie, > 90% decline) after 4 months on abiraterone acetate. Baseline CTC count was 20, which decreased to a CTC count nadir of 0 after 4 weeks. Green oval, CT scan at baseline demonstrated an axillary nodal metastasis (C). Reduction in size is seen in a follow-up scan performed at 6 months (green oval; D). (E) Whole-body, 99mTc-MDP bone scintigraphy at baseline (again for patient 025). A response in the bony disease can be seen in (F) after 6 months on abiraterone acetate. This patient remained on study in excess of a year (ie, 482 days).

- PSA response (>50% decline) in 24/47 (51%) of patients
  - Average time to PSA progression 24 weeks
  - 12/47 (25.5%) still responding after 48 weeks
- Partial response (≤50% ↓ in tumor mass) in 8/30 (27%) patients
- Circulating tumor cell counts ↓ also

Provenge – for advanced disease

- 512 randomized to Provenge or placebo
- Relative risk of death ↓22% vs. the placebo
- Median survival ↑4.1-months (25.8 months with Provenge vs. 21.7 months with placebo)
- 3-year survival probability was 31.7% with Provenge vs. 23.0% with placebo
- PSA response had no relationship to survival
- The time to objective disease progression was similar in the two study groups

Try to avoid "false hope" at all costs

- Potential new drugs that weren't effective in head-to-head comparison studies (Phase III)
  - Atrasentan (Xinlay®, Abbott)
  - Lycopene, selenium & vitamin E
  - Calcitriol (Asentar®, Novacea)
  - Satraplatin (Orplanta®, GPC Biotech)
  - GVAX (Cell Genesis)
- The jury is still out
  - MDV3100
  - OGX-0111

Summary & conclusions