

## Prostate Screening Workgroup: Review of Literature

### Diagnosis

#### A. Introduction

Review of International Recommendations on Screening	Citations	Evidence/ Recommendation
Screening should not be recommended because of over-treatment UICC	Miller AB, Chamberlain J, Day NE, Hakama M, Prorok PC. Report on a workshop of the UICC project on evaluation of screening for cancer. Int J Cancer 1990; 46:761-9.	IV/C
Insufficient evidence that a decrease in mortality from prostate cancer occurs with screening by DRE, TRUS and PSA. US NCI	CancerNet from the National Cancer Institute. Screening for prostate cancer	
Yet there are Guidelines advocating annual DRE and PSA testing for men above 50 years of age AUA, ACS	AUA Guidelines  ACS	

#### B. Ethics & Methodology for Screening Trials - Should Screening Trials be conducted?

Ethics & Methodology of a Prostate Screening Trial	Citations	Evidence/ Recommendation
1. <b>"Concern for the interest of the subject must always prevail over the interest of science and society"</b>	Declaration of Helsinki 1964	
1. <b>Need for Clinical Trials</b>  <ul style="list-style-type: none"> <li>• too much inherent biases in most trials</li> <li>• lead time bias and length time bias</li> </ul>	Madsen PO, Graversen PH, Gasser TC, Corle DK. Treatment of localised prostatic cancer. Radical prostatectomy versus placebo. A 15 year follow up. Scandinavian J of Neph Supp 1988; 110: 95-100.	
1. <b>Prostate Cancer Screening Trials must be:</b> 2. randomised 3. big (show diff of 20% cancer mortality with power of 90%) 4. show mortality benefits	Begg 1994, Methodological issues in studies of the treatment , diagnosis and etiology of prostate cancer.  Wilson JMG, Jungner G. Principles and Practice of Screening for Disease. Geneva: WHO, Public Health Paper No. 4, 1969.,  Canadian Task Force on the Periodic Health Examination. The Periodic Health Examination. Canad Med Ass J, 121: 1193, 1979.  Guide to Clinical Preventive Services: An assessment of the Effectiveness of 169 Interventions. Report of the US	

	Preventive Services Task Force. Baltimore:Williams & Wilkins, 1989.	
1. <b>Two trials underway</b> a. PLCO Screening Trial	Gohagan, Prorok, et al. 1994 ,Prostate Cancer Screening in the Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial of the National Cancer Institute.	
b. European Randomised Study of Screening for Prostate Cancer	Schroder FH, Denis LJ, Kirkels W, de Koning HJ, Standaert B. European Randomised Study of Screening for Prostate Cancer. Progress Report of Antwerp and Rotterdam Pilot Studies. Cancer Jul 1995, 76(1): 129-134.	
1. <b>Observational Studies</b>  • detection rates are from 0.2% to 5.6% with a mean of 3%	Schroder FH, Denis LJ, Kirkels W, de Koning HJ, Standaert B. European Randomised Study of Screening for Prostate Cancer. Progress Report of Antwerp and Rotterdam Pilot Studies. Cancer Jul 1995, 76(1): 129-134.  Catalona, Smith, et al. 1993  Detection of organ-confined prostate cancer is increased through prostate specific antigen-based screening.	

### C. Evidence-Based Recommendations for Prostate Cancer Screening

Recommendations	Citations	Evidence/ Recommendation
1. <b>All males above the age of 40 years of age with the following risk factors should be screened</b>		GPP
1 <sup>st</sup> degree relative with prostate cancer at young age.	Spitz, Currier, et al. 1991  Familial patterns of prostate cancer: a case control analysis  Bova GS, Beaty TH, Steinberg GD, Childs B, Isaacs WB. Hereditary prostate cancer: epidemiological and clinical features. J Urol 1993; 150: 797-802.  Li FP. Molecular epidemiology studies in cancer in families. Eur J Cancer 1993; 68:217-9.	III/B
Screening for prostate cancer in Asians is probably not indicated.  Urgent need for good data to direct early detection.		GPP  A

