

## S32. Prostate cancer prevention by short-term antiandrogens: A novel strategy

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12 years ago one of us (TO) first proposed the hypothesis that prostate cancer might be a product of a life-time of “sub-clinical” prostatitis. The article also speculated on the basis of the first results from use of intermittent hormone therapy that short-term (1–3 months) androgen blockade given at age 45 (to the one third of the population known from post mortem studies to have latent prostate cancer at that stage), by maximising opportunities for immune rejection and healing, could be a very effective form of chemo-prevention. Today, with five reviews in major journals, the concept of chronic inflammation of the prostate as a major cause of prostate cancer has become mainstream though without association with a single major pathogen. This presentation will review supporting data prior to focusing on the major paradox of medical therapy of prostate cancer, ie that PSA testing leads to over diagnosis and thus active monitoring to select those in need of radical treatment is acceptable. However, a recent meta-analysis of immediate vs deferred androgen blockade randomised trials has shown survival advantage though an unacceptable burden of side effects

for immediate treatment. The past year has seen the publication of the first results from The International Study of IAB for Carcinoma of the Prostate (ISICaP) Group that has undertaken an individual patient data meta-analysis of IAB studies. This has provided the first solid evidence that short course (3 months) IAB offers a potentially safe alternative to continuous anti-androgen therapy. More importantly from the point of view of the chemo-preventative potential of short course treatment, this analysis has also demonstrated that a higher proportion of earlier cases remain progression free for 3 or more years off treatment suggesting a possible role for immune resistance. In addition good progress has been reported in development of urine and semen based tests for diagnosing prostate cancer without the need for biopsy. With the increasing recognition of the high cancer risk of PSA positive biopsy negative individuals possible chemo-prevention protocols for such patients combining short term anti-androgens, anti-Cox 2s and high dose Vitamin D are under consideration. The rationale behind these proposals and their design will be reviewed.