# Long term BCR free interval at minimum 5 year follow up post RALP in the UK

#### Intro

RALP has entered its second decade as a well-established method of treatment for localised prostate cancer. The long term outcomes of patients post RALP is still being investigated. There has been 1 other publication with any long term follow up post RALP in the UK with a sample population of 175 patients. We looked at the oncological outcome in terms of the Bio-Chemical Recurrence (BCR) free for the first 500 consecutive patients operated upon by a single surgeon with a minimum follow up of 5 years. We compared the results with currently published data.

### Materials and Methods

Patient data was collected retrospectively on all patients who underwent a RALP between 1<sup>st</sup> Jan 2007 and 31<sup>th</sup> May 2010. Exclusion criteria used to narrow the patient population were complete lack of follow up PSA data or development of other significantly morbid pathology. For the remaining eligible patients, final T staging and follow up PSA data were tabulated. BCR was defined as a post op PSA of >0.2 ng/ml consistently on 2 or more occasions. Percentage recurrence in various populations were calculated and then compared to currently published data.

## **Results**

One Patient was found to have undiagnosed metastatic disease post-surgery. The remaining patient distribution by final Gleasons and T stage were:

Gleason Grade	Percentage of Patients
6	22
7	73.5
8	1.5
9	2.5

Pathological T	Percenta
stage	ge

pT2a	12
pT2b	2.5
pT2c	61.5
pT3a	16
pT3b	7.5

The overall PSM and BCR rates were around 24% and 12%. Distribution of BCR by Gleasons and final pathological T stage were:

Gleaso ns	BCR (in %)
6	4.5
≥7	14

T Sta ge	BCR (in %)
T2	9
Т3	21

## **Conclusions**

The reported long term data on BCR by Menon et al, Sukumar et al, Suardi et al and Billia et al suggest 5 year BCR free rates of 86.5%, 90.2%, 86% and 95.4% respectively. These correspond to our rate of 88%. This 5 year data includes data from the surgeons "learning curve", the change form a 3 to a 4 arm system. There have also been many minor modifications in the dissection and reconstruction techniques due better understanding of the relevant anatomy and physiology, the introduction of newer suture materials and haemostatic agent etc.

The outcomes published till date validate the need for proper risk stratification and appropriate management to maximize clinical benefit for patients. The correlation between post op staging and Gleason's grade with BCR also highlight the need for reassessment post RALP to consider adjuvant therapy especially in high risk populations.