Locally advanced prostate cancer

Locally advanced or high risk prostate cancer exists when there is no evidence of metastatic disease (distant spread) but:

- The PSA is relatively high (eg >15)
- The Gleason Score is 8 or higher
- There is extensive or high volume disease on biopsy
- The cancer appears outside the prostate capsule clinically
- MRI suggests disease outside the capsule

Usual treatments for lower risk localised prostate cancer have a poor cure rate and a high chance of local and distant failure. The alternatives to be considered are:

- A radical prostatectomy followed by external beam radiotherapy if there is a positive margin (disease up to the margin of excision) or there is extra-capsular disease on histopathology
- Image guided external beam radiotherapy with a high dose rate (HDR) brachytherapy boost
- Neo-adjuvant androgen deprivation therapy then image guided external beam radiotherapy
- Neo-adjuvant androgen deprivation therapy then image guided external beam radiotherapy with a high dose rate (HDR) brachytherapy boost

Clearly the treatment is more extensive, often involves a multi-disciplinary approach, is of longer duration and has greater side-effects but is necessary to increase the chance of local control and biochemical disease free survival.