Reduced androgen levels may have psychological, somatic and sexual effects influencing patient’s general well being. Intramuscular long acting testosterone injections are widely used, convenient form of androgen replacement in patients with hypogonadism.

AIMS:
To evaluate the long term effects of parenteral long acting testosterone replacement on patients commenced on treatment in years 2006-2014 and adherence to monitoring undertaken by primary care after discharge from specialist service.

METHOD
During the follow up period out of 64 patients:
- 53 patients continued with the treatment,
- 7 patients discontinued the treatment
- 4 patients died during the follow up period.

We reviewed the adherence to the advised monitoring intervals of the following parameters by primary care after discharge from specialist service.

Parameters followed up :
- alanine transaminase (ALT),
- aspartate transaminase (AST),
- total cholesterol (TC),
- haemoglobin (Hb),
- prostate-specific antigen (PSA)
- testosterone

RESULTS
Adherence to 6-monthly monitoring of selected parameters [%]

DISCUSSION
During the follow up period (on average 4.3 years), on long acting parenteral testosterone replacement we have not observed significant changes in the levels of alanine transaminase (ALT), aspartate transaminase (AST). This is consistent with the reports in the literature, as the unfavorable hepatic effects do not appear to be associated with intramuscular injections.

We observed only slight increase in the levels of both haematoctit (HCT) and haemoglobin (Hb), 7% and 4.6% respectively. Out of total of 371 checks of HCT, only 51.2% were in the polycythaemic range (HCT above 51%), which is lower than observed elsewhere.

Reduction of total cholesterol levels by 6.4% during the follow up period was noticed. This is concordant with the results reported in the literature, where either no significant changes or slight reduction in total cholesterol were found regardless of mode of testosterone replacement.

We observed a rise in PSA levels, although the mean value remained in the normal range. Out of the total of 269 checks of PSA, only 5.2% were above the level of 4 µg/L warranting referral for urological review or prostate biopsy.

3 of our patients were eventually referred for further urological assessment. We have observed the reduction of the International Prostate Symptom Scale (IPSS) by 187% in the first 6 months of the follow up.

Adherence to the monitoring intervals advised by our specialist service was: ALT 74%, HCT and Hb 75%, PSA 48% and testosterone 63%.
Adherence to these advised monitoring intervals, especially for PSA and testosterone levels needs further attention.