INITIATING FEMINISING HORMONE TREATMENT ON ORAL OR TRANSDERMAL ESTROGEN

Recommended starting doses;
1. Transdermal estradiol – patch 25–50mcg twice weekly or gel 0.5- 1.5mg daily

2. Oral estradiol – 1 or 2mg daily

Consider lower starting doses in older patients or those with CV risk factors
Oral estrogen may increase VTE risk.
Transdermal estradiol should be first line option for patients;
a) over 40
b) with risk factors for VTE (including BMI >30)
c) with risk factors for CVD
d) T2DM

Current smokers should not exceed maximum conventional HRT doses
The following should be measured 6 monthly for the first year and then annually thereafter:
1. Estradiol (E2) – • Target 350-750 pmol/l if aged < 40; 300-600 pmol/l if aged 40-50 – dose range oral E2 up to 8 mg od, E2 patch up to 400 micrograms twice weekly, E2 gel up to 6 mg daily.
• Target 200-400 pmol/l if aged > 50 or younger and significant CV risk factors particularly smoking – use transdermal route E2 administration for this group and do not exceed conventional HRT doses.

Discuss with specialist if target range not achieved within these parameters.
2. **Prolactin** – if persistent hyperprolactinaemia (>1000 mU/l or lower levels with symptoms/signs of hyperproactinaemia) refer to local endocrinologist for further evaluation.

3. **Blood pressure** – may increase – treat as appropriate and discuss with specialist regarding estrogen dose adjustment.

4. **LFTs** – refer back to specialist if three times greater than upper limit of normal reference range.

5. **Full lipid screen** including fasting triglycerides – oral estrogen can increase triglycerides. Treat raised triglycerides as per local guidance.

6. **HbA1c** if diabetes or pre-diabetes.

The following should be performed according to usual screening protocols:
7. Breast cancer screening

Testosterone –
- • No need to check testosterone post orchidectomy unless signs of virilization.
- • Pre-orchidectomy monitoring will be advised by the GIS and the target will be dependent on the anti-androgen treatment used – usually suppressed into the female reference range on a GnRH

agonist and should certainly be < 5 nmol/l; on oral anti-androgens levels may drop below male reference range but not a consistent outcome.

ANDROGEN BLOCKADE

Androgen blockade can be started at the same time as, or any time after initiation of estrogen treatment, and is particularly effective for suppressing facial and body hair growth.

The preferred option is:

- • GnRH agonist, such as Leuprorelin 11.25 mg 3 monthly

The alternative, usually if there are concerns about injections or suppression of sexual function, is:

- • **An oral anti-androgen such as spironolactone 100 mg twice daily**

Where scalp hair loss is an ongoing concern after other hormone treatment has been well-established consider adding **finasteride 5 mg alternate days**.

NB Suppression of testicular function, either by estrogen alone or in combination with androgen blockade, is not a guaranteed method of contraception