# **Prescribing Guidelines**

Trans man medication
(This applies to a person assigned female, cis female, at birth undertaking gender transition to become a male)

These guidelines are to support GPs in the ongoing management of adult patients requiring life- long medication

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# 1. Transfer of Prescribing Responsibilities from Secondary to Primary Care

In April 2016 NHS England Specialist Services Circular SSC1620 was issued which described Primary Care responsibilities in relation to prescribing and monitoring of hormone therapy for patients undergoing or having undergone Gender Dysphoria treatments. NHSE commission gender dysphoria services, the service specification includes current prescribing arrangements for hormone treatment, that being the prescribing and monitoring is undertaken in primary care, on the recommendation of a registered medical practitioner in the MDT of the specialist gender identity clinic. The General Medical Council (GMC) have information to support the care and treatment of Transgender Patients. It includes;

- Information on how to make your practice more inclusive
- Confidentially and equality consideration
- Prescribing responsibilities
- Mental Health and bridging prescriptions

The specialist Gender Identity Clinic will assist primary care by providing specific, relevant information and support for prescribing and monitoring, including the interpretation of blood test results. During and after a patient has completed the care pathway and has been discharged by the Specialist service, GPs should offer them the usual range of primary healthcare services that are available to other patients.

This guideline applies to patients who are of an age of majority to be able to provide informed consent i.e. over the age of 18

#### Special circumstances.

There has been an increase in the number of patients seeking bridging prescriptions prior to any formal diagnosis or who are accessing treatment from private Gender Identity Clinics, with accompanying requests for their GP to prescribe. For information on dealing with such requests - see <a href="Appendix 2.">Appendix 2.</a>

The Gender Identity Clinic staff at Porterbrook can give general advice and guidance in these circumstances. Such advice and guidance might relate to factors to consider in assessment and potential strategies, but it will not be specific to a particular patient or constitute a recommendation.

## 2. Roles and responsibilities

#### Responsibilities of the primary care clinician

- To refer appropriate patients to Gender Identity Clinics for assessment (see appendix 3 if patients may benefit from support whilst waiting to be seen)
- To agree to prescribe for patients in line with the prescribing guidelines
- To continue to prescribe for the patient as advised by the consultant
- To undertake monitoring as per prescribing guidelines (see <u>table on page</u> 8)
- As requested by the patient/clinic, refer the patients that are not invited by the
  national programme for breast, cervical and/or AAA screening. (see <a href="section 9">section 9</a>).
   If a patient changes their registered sex at the practice, discuss how this has
  implications for them with regard to <a href="national screening programmes.">national screening programmes.</a>
- To adjust testosterone doses to maintain serum levels at the desired level (Appendix 1)
- To seek the advice of the consultant if there are any concerns with the patient's
  therapy please ensure all relevant blood monitoring has been performed and is
  included in the communication. Note, If seeking advice from the specialist
  specifically around blood monitoring results, communication should include;
  latest test results (testosterone should be a trough level see <a href="appendix1">appendix 1</a>) and a
  covering letter to capture the specific question / concern.

#### Responsibilities of consultant clinician

- To assess patients in line with the NHSE service specification.
- To liaise with referring GP if concerns with baseline monitoring
- To discuss benefits and side effects of treatment with the patient/carer and obtain written consent. This is particularly important for unlicensed products and when prescribing products outside of their licensed indications. A copy of the consent should be shared with the individual and the patients GP.
- To consider and discuss with the patient their individual requirements for national screening programmes (see <u>section 9</u>). The patients registered sex and the hormone treatment being taking can affect both the need for screening and whether the national screening programmes invite patients for screening. Risks and mitigating actions should be discussed and agreed with the patient and shared with primary care.
- To provide the details of the medication recommended and a copy\link to the prescribing guidelines.
- To contact patient's GP to request prescribing is commenced and continued and send a link to, or a copy of the prescribing guidelines.
- Timely discussion of any concerns with the GP regarding the patient's therapy

To provide the GP with clear instructions including duration of treatment, details
of monitoring and screening and re-referral criteria following the patients
discharge from the specialist service.

### 3. Medication

Most of the medication in these guidelines are unlicensed for the indications for which they are being used.

### Hormone treatment

It is anticipated that trans men (like hypogonadal cis gender men) will remain on lifelong hormone replacement therapy with testosterone. The goal is to avoid hypogonadism while reducing the potential impact of any negative effects of testosterone, the most serious of which are related to polycythaemia and erythrocytosis and associated adverse thrombotic events.

### Injectable preparations

Drug	Route/ Formulation	Dose	Comments
Nebido® (testosterone undecanoate) 1g/4ml	IM injection	250mg-1000mg Every 10-20 weeks. (The gender identity clinic will advise on starting dose. This is usually Nebido 1g IM every 12 weeks)	This is not suitable for self-administration.  Trough levels should be used. See appendix 1 below Note - Following repeated i.m. injection of 1000 mg testosterone undecanoate to hypogonadal men using an interval of 10 weeks between injections, steady-state conditions were achieved between the 3rd and the 5th administration. Mean Cmax and Cmin values of testosterone at steady-state were about 42 and 17 nmol/l, respectively. Post-maximum testosterone levels in the serum decreased with a half-life of about 90 days, which corresponds to the release rate from the depot

Sustanon® 250® (testosterone propionate 30mg, testosterone phenylpropionate 60mg, testosterone isocaproate 60mg & testosterone decanoate 100mg)	IM injection	1ml every 2-6 weeks (The gender identity clinic will advise on starting dose/frequency. This is usually Sustanon 250 IM every 4 weeks).	The goal is for patients to self-administer. Practices may have to administer the initial injections and teach patients or a partner how to self-administer  Contains peanut oil
Testosterone Enantate 250mg	IM Injection	1ml every 2-6 weeks (The gender identity clinic will advise on starting dose. This is usually testosterone enanthate 250mg IM every 4 weeks).	The goal is for patients to self-administer. Practices may have to administer the initial injections and teach patients or a partner how to self-administer

### **Topical Preparations**

Drug	Route/ Formulation	Dose	Comments
Testogel®	50mg/5g 1% sachets	50-100mg daily (1-2 sachets)	Apply to clean dry skin
	16.2mg/g gel pump	40.5 – 81mg daily  One pump actuation delivers-20.25mg	
Tostran®	10mg/0.5ml 2% metered dose pump		Apply to clean dry skin
Testavan®	20mg/g gel – metered dose pump	46 – 92mg daily One pump actuation delivers 23mg of testosterone	Apply to clean dry skin

### **Supporting information**

The adult male red blood cell mass is around 30g/L greater than that of women and children, reflecting the erythropoeisis-stimulating action of testosterone. Thus, the most important parameters are haemoglobin and haematocrit. Although both anaemia and polycythaemia or erythrocytosis have multiple causes, in a patient on testosterone these findings could likely reflect under- and over- replacement, respectively.

Although it is important to monitor serum testosterone level, the finding of haemoglobin and/or haematocrit (Hct) above male reference range should prompt an overall reduction in dose, almost irrespective of the serum testosterone level and/or patient symptoms. This is because polycythaemia and erythrocytosis are associated with significantly increased risk of both venous and arterial thrombosis.

We should aim for a Hct <50% (<0.50). If a patient becomes significantly polycythaemic (Hct >0.50 or 50%), we would recommend that testosterone treatment be temporarily suspended and wait for it to go below 50% (check Hct after 6 weeks) and then reduce the dose. If thrombotic episode or Hct not improving or Hct >0.54 refer to hematology. If the patient is still attending clinic seek advice from the gender identity clinic.

#### **Ovarian Suppression**

Achieving maximum suppression of female secondary sexual characteristics sometimes requires treatment with GnRH analogues. This is especially the case where introduction of testosterone has not led to suppression of the ovarian axis and cessation of the menstrual cycle. The goal is to achieve equivalent male levels of estradiol. They are usually introduced after testosterone.

- Leuprorelin, 3.75mg-11.25mg every month, 2 months or 3 months.
- Triptorelin 3mg -11.25mg every month, 2 months or 3 months

(Occasionally these are given every 10 weeks)

These medications inhibit the secretion of pituitary gonadotrophins, leading to low circulating levels of estradiol and cessation of the menstrual cycle.

They are effective, well tolerated and generally are not associated with significant side effects.

- Many side effects, such as hot flushes, depression and loss of libido do not occur as testosterone is co-administered and thus the effects of hypogonadism avoided. However, vaginal dryness can be a problem.
- The use of gonadorelin analogues in pregnancy is contra-indicated.

**Pregnancy should be excluded** before treatment; the first injection should be given during menstruation (if this continues) or shortly afterwards or use barrier contraception for 1 month beforehand.

Drug	Route/ Formulation	Dose	Comments
Leuprorelin	Subcutaneous or IM injection (Depending on formulation)	3.75mg-11.25mg every month, 2 months or 3 months (The gender identity clinic will stipulate the frequency. This is usually 3.75mg injection monthly for 2 months and if well tolerated change to 11.25mg subcutaneous injection every 3 months thereafter).	The goal is for patients to self-administer. Practices may have to administer the initial injections and teach patients or partner how to self-administer; side effects include diabetes and liver problems

Triptorelin	Subcutaneous or IM injection (Depending on formulation)	3mg -11.25mg every month, 2 months or 3 months (The gender identity clinic will stipulate the frequency. This is usually 3mg injection monthly for 2 months and if well tolerated change to 11.25mg subcutaneous injection every 3 months thereafter).	Self-administer may not be possible due to the volume of the injection.
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### **Transition to Non-binary gender identity**

Some people do not identify as either male or female and the terms non binary gender identity is often used.

A birth assigned female who experiences gender dysphoria but does not wish to fully transition to a male gender role/body may also have testosterone treatment recommended as part of their care plans.

These guidelines remain applicable in most respects but the target serum testosterone range may diverge from these recommendations. In this situation more bespoke recommendations will be made and additional interaction and support from the GIC will be available.

# 4. Monitoring Requirements

- Every 3 months in the first year and every 6 months for the following 2 years after starting therapy
- Yearly thereafter

Test/Measurement	Recommended action if results outside of the normal range	
Body Mass Index	Offer to refer to local weight loss services if BMI increases to over 30.	Only necessary if the patient is considering surgery. Surgery may be declined if BMI over 30.
	BMI under 40 is desired (but not essential) prior to commencing hormone therapy.	Risk / benefits of treatment to be considered by specialist
Blood Pressure	Treat in accordance with local hypertension guidelines if BP greater than 140/90mmHg	All patients
Haematocrit 0.40-0.52 (52%)	Aim Hct <0.50. If a patient becomes significantly polycythaemic (Hct >0.50 or 50%), stop testosterone temporarily and when Hct<50% (check after 6 weeks) reduce the dose. If no improvement in Hct or experiences a thrombotic event, or Hct >0.54 testosterone treatment should temporarily suspended and a haematology referral made. If the patient is still attending clinic seek advice from Porterbrook or the patients original gender identity clinic.  Also see supporting information above	All patients
Urea and electrolytes	Long term use of gondotrophins can cause U&Es to fall outside of usual ranges seek advice from Porterbrook or the patients original gender identity clinic.	All patients
TSH 0.27 – 4.2miu\l	Refer to endocrinology if outside the normal range or treat in accordance with local guidelines	
Liver function tests	Refer to gastroenterology if elevated (see section 6)	All patients Risk of elevated LFTs
HbA1c	Treat in accordance with local diabetes guidelines	All patients Increased diabetes risk with hormonal treatment
Lipid profile	Treat in accordance with local lipid management guidelines	Increased CVS risk with hormonal therapy

Serum testosterone  < 8 – 12 nmol\L trough level for injectables 25 – 30nmol/L peak level for injectables (one week post injection)  14 – 20nmol/L for gel preparation measured 4 – 6 hours after application	Serum testosterone should be at the lower end of the normal range.	Testosterone levels should be a trough measurement for injectables. The blood sample should be taken before the next dose is due.  For gel preparations blood tests are to be taken 4 – 6 hours after application.		
Serum estradiol < 70pmol/L	If estradiol above desired cut-off check LH/FSH and seek advice			
	from Porterbrook or the patients original gender identity clinic			
Serum prolactin < 1000mU/L	If above 1000mU/L on follow up refer to local endocrinologist			
Baseline result	if prolactin > 500mU/L at baseline.			
<500mU/L	Porterbrook will consider of need			
	for cannulated prolactin and			
	ascertain cause.			
Also see section 9 on page 14 for National screening advice				

# 5. Risk and adverse effects of masculinising hormones

Risk Level	Condition
Likely increased risk	Polycythaemia *(see below for further details) Weight gain I increased visceral fat
	Acne
	Androgenic alopecia (balding)
	Sleep apnoea
Possible increased risk	Altered lipid profiles **
	Liver dysfunction
Possible increased risk with	Type 2 diabetes**
presence of additional risk	Hypertension**
factors	Mania and psychosis in patients with pre-existing
	disorders (this is associated with
	supraphysiologic blood levels of testosterone)
	Cardiovascular disease

No increased risk or	Breast Cancer
inconclusive	Osteoporosis
	Cervical cancer
	Ovarian cancer
	Uterine cancer

<sup>\*</sup>Risk is greater with supraphysiologic (beyond normal male range) serum levels of testosterone, which are more likely to be found with extended intramuscular dosing, than transdermal administration.

# 6. Hormone therapies and associated adverse effects

Adverse effects	Comments
Polycythaemia	Testosterone replacement can be associated with polycythaemia and this increase in blood viscosity can lead to an increased incidence of stroke. This can occur even in young subjects, both stroke and myocardial infarction have been reported in athletes that abuse testosterone.  This is seen more when injectable testosterone is used and appears to be proportional to the amount of supraphysiological testosterone that is administered. For this reason haematocrit takes precedence over serum trough levels of testosterone during injectable treatments.
	<ul> <li>Polycythaemia usually responds to an increase in dose interval or reduction in dose.</li> <li>Referral to specialist gender identity clinic is advised.</li> </ul>
Liver Dysfunction	In one study transient increases in liver function enzymes was seen in 4.4% of trans-men and this was prolonged (>6months) in 6.8%.  These are usually minor and do not require cessation of treatment.
	Routine monitoring of the liver function in patients on testosterone replacement is recommended.  Minor derangement of Liver function, with increases in liver enzyme levels to less than twice the upper limit of normal do not require withdrawal of testosterone therapy. Screening for other causes of hepatic dysfunction should be performed and ultrasound scanning of the liver to exclude any hepatic lesion or the presence of gall stones.  There have been no reports of liver tumours with testosterone esters
Lipid Profile	The administration of testosterone in trans-men is associated with an increase in triglyceride and a decrease in plasma HDL levels both of which are

<sup>\*\*</sup> Patients with Polycystic Ovarian Syndrome may be at greater risk

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	proatherogenic. However total cholesterol and LDL cholesterol remain unchanged.
	These changes in lipid profile do not appear to translate into an alteration in cardiovascular risk as there is no increase in cardiovascular mortality in treated trans men. The myocardial infarction rate is approximately half that expected in the general male population.
Gynaecological Malignancy	<ul> <li>The risk of developing ovarian carcinoma if the ovaries remain in situ once testosterone therapy commences is unlikely to be different to that of a cis women whose lifetime risk is slightly greater than that of women who have been pregnant.</li> <li>Testosterone therapy does not increase the risk of cervical cancer, although it may increase the risk of minimally abnormal Pap smears due to atrophic changes.</li> <li>Testosterone can be aromatised to estradiol. The reported risk of endometrial hyperplasia is 15% in trans men but they are more likely to develop endometrial atrophy. Therefore hysterectomy is not recommended for prevention of endometrial cancer though endometrial ultrasound should be carried out every 2 years from 5 years after commencing testosterone.</li> <li>The reason for this is that endometrial cancer may be of higher risk in trans men who have a uterus while their body is aromatising 'unopposed oestrogen' derived from testosterone. In this respect it is assumed that they will have the same negative response as cis woman with a uterus who have the same 'unopposed' oestrogen exposure.</li> <li>If irregular bleeding occurs the patient should undergo immediate ultrasound scanning and endometrial biopsy to rule out any neoplastic alteration in the endometrial epithelium.</li> </ul>
Breast Malignancy	Trans man Registered with a GP as a female A trans man aged 50 to 70 who is registered with a GP as female, will be routinely invited for screening. Patients on long-term hormone therapy may be at increased risk of developing breast cancer and should consider going for breast screening.
	Patients should strongly consider breast screening if they have not had chest reconstruction surgery or still have breast tissue  Registered with a GP as male A trans man aged 50 to 70 who is registered with a GP as male, won't be invited for breast screening.

	Patients on long-term hormone therapy may be at increased risk of developing breast cancer and should consider asking for breast screening.  Patients that have had chest reconstruction will still have breast tissue; discuss with the patient whether they wish referring to a breast screening service.  Depending on residual breast tissue volume mammography or Ultrasound or MRI is necessary
Osteoporosis	Testosterone therapy maintains or increases bone mineral density among trans men prior to oophorectomy, at least in the first three years of treatment.  There may be an increased risk of bone density loss after oophorectomy, but this is unlikely to be significant unless testosterone therapy is interrupted or insufficient
Cardiovascular disease	Masculinising hormone therapy at normal physiologic doses does not appear to increase the risk of cardiovascular events among healthy patients.  Masculinising hormone therapy may increase the risk of cardiovascular disease in patients with underlying risks factors.
Obstructive Sleep Apnoea	Testosterone therapy exacerbates the symptoms of obstructive sleep apnoea. In a trans man who has symptoms of obstructive sleep apnoea, symptom, scores should be assessed, and referral made to a specialist in sleep disorders for treatment if the patient displays deterioration in their condition

# 7. Treatment Outcomes

The effects of masculinising hormones and the time to realise the desired outcomes are shown below.

### Effects and expected time course of masculinising hormones

Effect	Expected onset	Expected maximum effect
Skin oiliness/acne	1-6 months	1-2 years
Facial/body hair growth	3-6 months	3-5 years
Scalp hair loss	>12 months	Variable
Increased muscle mass/strength	6-12 months	2-5 years

Body fat redistribution	3-6 months	2-5 years
Cessation of menses	2-6 months	n/a
Clitoral enlargement	3-6 months	1-2 years
Vaginal atrophy	3-6 months	1-2 years
Deepened voice	3-12 months	1-2 years

This is a general guide and the timing of introduction of GnRH analogues may influence timescales. Other factors including age, genetics and amount of exercise are also of significance.

### 8. Follow up and Discharge Arrangements

When service users are discharged from the service, detailed information is sent to the GP and service user. Guidance includes:

- Breast screening
- Ongoing treatment testosterone is usually life long, in the absence of serious complications,
- Long term goals and monitoring of hormone treatment, including target ranges for hormone levels
- Monitoring tests are needed for life. 3 monthly in first year and 6 monthly basis for 2 years, then yearly thereafter if the patient remains well
- Action to take in response to common disorders and serious complications, including cessation of treatment
- · When and where to seek specialist advice
- How to refer back or contact the Sheffield Gender Identity Clinic.

### 9. Screening

See <u>link</u> for patient information leaflet, or <u>NHS screening webpage</u> more details on screening programme for trans and non-binary people

Transman	What screening can be had?	Considerations (See <u>link</u> (PIL) / <u>link</u> (web version) for patient information on screening programmes for trans and non-binary people)
Breast Screening or patient is made breast aware	V	All patients <b>registered</b> as a female will still be invited in for screening as per national screening programme.  Patients <b>registered</b> as <b>male</b> will not be called up for screening. If there is still breast tissue present discuss with patient. If, after

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		discussion, screening is agreed, the GPs will need to refer to a local breast screening unit for a mammogram.
		Note the NHS Breast Screening Programme team are currently discussing ways to make the screening pathway more robust for all clients and in particular, the trans population.
Cervical Screening	<b>V</b>	All patients registered as a female will get invited in for cervical screening, this is recommended unless the patient has had a total hysterectomy and no longer has a cervix. In such cases GPs can contact the national screening programme to request removal from the cervical screening invitation list
		All patients registered as a male will not get invited to the national screening programme. Patients who have not had a hysterectomy should be offered screening, this should be discussed with the patient. GPs can then contact the national screening programme to request addition to the cervical screening invitation list.
Abdominal aortic aneurysm (AAA) screening	V	Patients registered as female will not get invited in for AAA screening. The risk of AAA in transmen is lower than males assigned at birth, however if, after discussion the patient wishes to be screened Patients can contact clinics directly or be referred in to arrange an appointment. See <a href="Link">Link</a> to find local clinic details.  Patients registered as male will get invited in for AAA screening. Note The risk of AAA in transmen is lower than males assigned at birth, if.
Bowel screening	<b>√</b>	
Monitoring of the endometrial thickness by ultrasound scanning every two years is recommended in patients who retain their uterus after 5 years of treatment	V	If irregular bleeding occurs book immediate ultrasound scan and endometrial biopsy to rule out any neoplastic alteration

### 10. For advice on on-going management contact

Porterbrook Clinic, Michael Carlisle Centre, 75 Osborne Road, Sheffield, S11 9BF, 01142716671

GP hormone advice line – 07811041506 (This line is exclusively for medical professionals who require urgent advice on hormone treatment and monitoring for transgender patients, call backs should be received within 48 hours. For non-urgent queries please write).

If the patient has been discharged and advice is needed around endocrine issues, then advice can be sought/patient referred to STH/local endocrine service

Also see website for information to support GPs - <a href="https://www.shsc.nhs.uk/services/gender-identity-clinic">https://www.shsc.nhs.uk/services/gender-identity-clinic</a> (scroll down page and click on 'information for GPs')

#### Training/education

Porterbrook run regular training and consultation workshops for general practitioners and primary care staff. If you are interested in attending a training session please contact the clinic by emailing porterbrook@shsc.nhs.uk or calling 0114 2716671.

For external training around transhealth see;

- Royal College of GPs Gender Variance training
- Centre of Pharmacy Postgraduate Education <u>Transgender Health, consulting with dignity and respect.</u>
- Gender Identity Research and Education Society (GIRES) offer a number of courses to support care for transgender patients See link

### 11. Bibliography

The role of the GP in caring for gender-questioning and transgender patients <a href="https://www.rcgp.org.uk/-/media/Files/Policy/A-Z-policy/2019/RCGP-position-statement-providing-care-for-gender-transgender-patients-june-2019.ashx?la=en">https://www.rcgp.org.uk/-/media/Files/Policy/A-Z-policy/2019/RCGP-position-statement-providing-care-for-gender-transgender-patients-june-2019.ashx?la=en</a>

NHS England Specialised Services Circular 1826. Primary Care Responsibilities In Regard To Requests by Private On-Line Medical Service Providers to Prescribe Hormone Treatments for Transgender People. Available at:

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<u>line%20Medical%20Service%20Providers%20to%20Prescribe%20Hormone%20Treatments</u>.pdf

Information for trans people: NHS Screening Programmes

https://www.gov.uk/government/publications/nhs-population-screening-information-for-transgender-people/nhs-population-screening-information-for-trans-people

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Uterine and ovarian changes during testosterone administration in young female-to-male transsexuals Taiwanese Journal of Obstetrics & Gynecology 55 (2016) 686e691

Identification of an optimal prolactin threshold to determine prolactinoma size using receiver operating characteristic analysis - <a href="https://www.nature.com/articles/s41598-021-89256-7.pdf">https://www.nature.com/articles/s41598-021-89256-7.pdf</a>

Pituitary Incidentaloma: An Endocrine Society Clinical Practice Guideline J Clin Endocrinol Metab. April 1, 2011; 96(4): 894–904. doi: 10.1210/jc.2010-1048

### Appendix 1

Gender Identity Clinic usually recommends starting at lowest dose i.e. Testogel 50mg/5g 1 sachet per day/Testogel 16mg/g 2 measures per day; **or** Tostran 3 measures per day; **or** Testavan® 20mg/g 2 measures per day and a testosterone serum check 8 to 12 weeks after commencement. Once satisfactory serum levels are reached (3 monthly checks in the first year) then 6 monthly checks, for the following 2 years and annually thereafter.

### **Titration of Testosterone - Gels**

Serum testosterone levels should be in the middle of adult range 14 – 20nmol/L

Dose range	Testogel® sachets 50-100 mg/day	Testogel® pump 40-80 mg/day	Tostran® 30-80mg daily	Testavan® gel 40 – 90mg/day
If testosterone	Decrease daily dose to 1/2	Decrease dose by one	Decrease dose by one	Decrease dose by one
above -	sachet (or consider change	actuation per day	measure per day.	actuation per day
Above 20nmol/l	to Tostran)			
		Increase dose by one		Increase dose by one
		actuation per day	Increase by one measure per	actuation per day
If testosterone	Increase to 2 sachets per		day and re-test in 8 to 12	
below 15nmol/L	day.		weeks.	
		One pump actuation delivers		
	One sachet contains 50mg	20.25mg testosterone		One pump actuation delivers
	testosterone		One press of the canister	23mg testosterone
		*need to recheck in 8 to 12	delivers 10mg of testosterone	
	*need to recheck in 8 to 12 weeks	weeks	*need to recheck in 8 to 12 weeks	*need to recheck in 8 to 12 weeks

# Titration of Testosterone – Injectables (Sustanon/Enanthate)

Serum testosterone levels should be <8 - 12nmol/L trough serum level. I.e. blood tests should be taken day of next injection – before the injection is given

If above 12nmol/l , decrease frequency of injections i.e. if on a 3 weekly injection change this to a 4 weekly injection and then retake bloods in 3 months time.

If below 8nmol/L, increase frequency of injections.

Titration of Testosterone – Injectables (Nebido/Undecanoate)

<sup>\*</sup> Note: peak levels can also be checked. Peak levels should be within 25 – 30nmol/L and blood tests taken one week after injection has been given.

Serum testosterone levels should be 8 - 12nmol/L trough serum level. I.e. pragmatically blood tests can be taken up to two weeks before the next injection is given

If above 12nmol/I, decrease frequency of injections i.e. if on a 12 weekly injection change this to a 14 weekly injection and then retake bloods in 12 to 14 weeks time.

If below 8nmol/L, increase frequency of injections to 1g every 10 weeks.

# Appendix 2

For supporting information on ethical decisions regarding requests to prescribe hormone treatment to patients not under one of the NHSE commissioned services see the following supporting documents;

- NHS specialised circular <u>SSC1826</u>: Primary Care Responsibilities In Regard To Requests by Private On-Line Medical Service Providers to Prescribe Hormone Treatments for Transgender People
- GMC ethical hub Mental Health and Bridging Prescriptions (note see 4<sup>th</sup> tab for information on 'mental health and bridging prescriptions'

### **Appendix 3 - Patient information**

Gendered Intelligence is a free trans-led, confidential help and support service for patients waiting for their first appointment with a Gender Identify Clinic. The Gendered Intelligence can offer independent support and a listening ear at what we know can be a really difficult time for patients waiting.

The trans affirmative support they offer is provided by workers who are all trans and non-binary people themselves and have lived experience of gender identity services.

They can support patients to:

- · access confidential support
- source helpful information
- chat about resilience and self-care
- talk about how you might handle difficult times
- take care of your wellbeing

Patients can contact them on Mondays, Tuesdays and Thursdays from 2pm to 7pm and Wednesdays and Fridays from 10am to 3pm.

Any contact outside of these hours will be picked up and responded to as soon as possible.

Patients can get in touch in whatever way they feel most comfortable:

• Telephone: 0330 3559 678

Text message or WhatsApp: 07592 650 496Email: supportline@genderedintelligence.co.uk

To find out more about the support on offer visit genderedintelligence.co.uk

Patients can also contact one of our **Peer Support Workers** who have lived experience of using gender identity services and they can support, offer guidance, or answer any questions the patient may have about what to expect from the service. They can be contacted by emailing <a href="mailto:porterbrooksupport@shsc.nhs.uk">porterbrooksupport@shsc.nhs.uk</a>.