

COMMERCIAL-SENSITIVE

Supply Issues Update for Primary and Secondary Care: December 2019

This report has been produced by the Department of Health and Social Care (DHSC) Medicine Supply Team. We aim to update this report monthly to provide an update on current primary and secondary care medicine supply issues that we are working on. This information is confidential to the NHS; please do not upload to websites in the public domain. Please do share with relevant colleagues and networks.

Where it has been stated 'a clinical memo from UKMI will be published on the SPS website', this will be found at the following URL: <https://www.sps.nhs.uk/category/shortages-discontinuations-and-expiries/>

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Information provided w/c 16 December 2019

New Issues

Injectables

Amikacin 100mg/2ml injection

- Vianex SA are out of stock until end January 2020 due to manufacturing delays.
- Amikacin 500mg/2ml injection remains available.
- Review local protocols, ensuring that all those affected are aware of this issue and that consideration is given to mitigating the risks associated with switching to a different strength of amikacin injection.
- A Medicine Supply Notification was issued to secondary care on 19 December (attached).

Benzylpenicillin 600mg and 1.2g injection

- Thornton and Ross were out of stock of benzylpenicillin 600mg and 1.2g powder for solution for injection but supplies of both 600mg and 1.2g injection became available during w/c 16 December 2019

Human C1-esterase inhibitor (Berinert) 500IU powder for reconstitution and injection

- CSL Behring, the sole manufacturer of the Berinert brand, will have limited supplies until 30 December 2019.
- There is sufficient stock available to maintain supply to all existing patients on continuous home treatment.
- Specialist centres are no longer required to actively switch patients who are on continuous home therapy to alternative treatments.

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- Patients who have already agreed to switch should continue to be supported to do so.
- There is insufficient stock available to replenish stock for inpatient and A&E use.
- An update to the Supply Disruption Alert (SDA) was issued 11 December:
<https://www.cas.mhra.gov.uk/ViewandAcknowledgment/ViewAlert.aspx?AlertID=102946>

Midazolam 50mg/10ml solution for injection ampoules

- Hameln and Accord are out of stock until 31 January 2020.
- Midazolam 10mg in 2ml ampoules remain available from Hameln and Accord.
- Review local protocols, ensure that all those affected are aware of this issue and that consideration is given to mitigating the risks associated with switching to a different volume of midazolam (5mg/ml) ampoule presentation.
- A Medicine Supply Notification was issued to secondary care on 2 December (attached).

Orals

Cefuroxime (Zinnat) 125mg/5ml oral suspension

- GSK, sole supplier is out of stock until w/c 16 December 2019.
- Alternative cephalosporin suspensions remain available.

Clonidine 25microgram tablets

- Accord are out of stock and unable to advise a resupply date.
- Limited supplies are available until January 2020.
- A clinical memo from UK Medicines Information (UKMi) will be published on the SPS website.
- A Medicine Supply Notification will be issued to primary and secondary care shortly.

Co-careldopa 25mg/100mg tablets

- Teva, a generic supplier is out of stock and is currently unable to provide a resupply date.
- MSD, the supplier of the brand *Sinemet Plus* can cover supply for the whole market during this time.

Diclofenac 75mg and misoprostol 200mcg (Arthrotec 75) modified release tablets

- Pfizer, sole supplier is out of stock until late December 2019.
- Arthrotec 50 tablets remain available.
- There are several alternative suppliers of diclofenac 75mg modified release tablets.

Haloperidol (Serenace) 500 microgram capsules

- Teva, sole supplier of the capsule formulation is out of stock and currently unable to provide a resupply date.
- Haloperidol 500 microgram tablets are currently available.
- A Medicine Supply Notification was issued to primary and secondary care on 18 December (attached).

Lansoprazole (Zoton FasTabs) 15mg and 30mg dispersible tablets

- Pfizer will be out of stock of the brand Zoton FasTabs from 30 December until 24 January 2020.
- Generic lansoprazole 15mg and 30mg orodispersible tablets remain available.
- For patients prescribed Zoton FasTabs by brand who do not have sufficient supplies for the out of stock period, clinicians should consider prescribing the generic product.

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Moclobemide 150mg and 300mg tablets

- Mylan is currently out of stock of moclobemide 150mg and 300mg tablets.
- Mylan are expecting moclobemide 150mg and 300mg tablets back in stock March 2020 and April 2020, respectively.
- Sandoz is in stock of moclobemide 150mg tablets, however, is out of stock of moclobemide 300mg until January 2020.
- Unlicensed moclobemide 300mg tablets are available from importers; lead times vary.

Others

Colestipol (Colestid) 5g granules

- Pfizer, sole supplier is out of stock of Colestid Orange sachets until 20 December 2019.
- Colestid plain sachets are currently available but will be out of stock from 23 December until 21 February 2020.

Fluorouracil (Efudix) 5% cream

- Mylan, sole supplier of Efudix 5% cream is out of stock until 23 December 2019.
- Unlicensed fluorouracil 5% is available to order from importers; lead times vary.

Tostran (testosterone) 2% gel

- Kyowa Kirin, sole supplier has been experiencing intermittent supply issues with this product over the last few months.
- Limited supplies are available but should resume to normal levels by end of December 2019.

Ongoing Issues

Injectables

Adrenaline Auto-Injectors (AAIs)

- Recent supply issues affecting some brands of AAIs has impacted on all manufacturers, however, there are currently sufficient supplies overall to meet normal UK demand.

Emerade (Bausch & Lomb UK Ltd)

- On 28 November, the MHRA issued a Class 2 pharmacy level recall for all strengths of Emerade devices following reports from the manufacturer, Bausch & Lomb UK Limited, of Emerade devices that have failed to activate. See link:
<https://www.gov.uk/drug-device-alerts/class-2-medicines-recall-emerade-150-300-and-500-microgram-solution-for-injection-in-pre-filled-syringe-mdr-57-08-19>
- On 29 November, DHSC issued a Supply Disruption Alert (SDA) with advice on how to manage patients affected. See link:
<https://www.cas.mhra.gov.uk/ViewandAcknowledgment/ViewAlert.aspx?AlertID=102938>
- The MHRA can confirm, following discussion with DHSC that Emerade stock held by pharmacies that has been designated for the flu vaccination/emergency use, should not be subject to the recall.
- This stock should have been in accordance with the recommended storage conditions and therefore should not be impacted by the temperature issues that have been highlighted in the alert.

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- When renewing the adrenaline in your anaphylaxis kits (once Emerade/AAI devices have expired/been used), all staff are alerted to please stock ampoules (see adrenaline 1:1000 ampoules below).

Jext (ALK-Abello Ltd)

- Jext 150 microgram devices are currently available.
- Unlicensed Jext 300 microgram devices are being supplied through Alliance Healthcare via the PIP code: 801-6941 (see company letter attached).
- Specific batches of UK licensed Jext 150 micrograms and 300 micrograms have received MHRA approval for extended use by four months beyond the labelled expiry date.
- Clinicians should check with patients requesting new Jext 150 micrograms and 300 micrograms to establish if they currently hold one of the batches that can be used beyond the listed expiry. If one of the listed batches is held, further supplies should be delayed until the extended expiry date, counselling the patient on the extended expiry.
- Please see the link for further information: <https://jext.co.uk/>

EpiPen/EpiPen Junior (Mylan)

- Supplies of both EpiPen and EpiPen Junior are currently available via a prescription validation process.
- Community Pharmacies can place orders for up to a maximum of two EpiPen's per prescription. Trusts place orders via Mylan's customer service team.
- Hospitals should request EpiPen's from the Mylan customer services team (mguk_customer.services@mylan.co.uk; +44 (0) 1707 853 100) with information including the number of the pens required, the reason for need and their Alliance Healthcare account number.
- Specific batches of EpiPen 300 micrograms have received MHRA approval for extended use by four months beyond the labelled expiry date.
- Clinicians should check with patients requesting new EpiPen 300 micrograms to establish if they currently hold one of the batches that can be used beyond the listed expiry. If one of the listed batches is held, further supplies should be delayed until the extended expiry date, counselling the patient on the extended expiry.
- Please see the link for further information: <http://www.epipen.co.uk/>

Adrenaline 1:1000 ampoules for anaphylaxis kits

- Adrenaline 1:1000 ampoules are currently available in sufficient quantities to meet normal demand.
- Some healthcare professionals may be holding an AAI in preference to adrenaline ampoules, to treat anaphylactic reactions; this should not be necessary.
- All healthcare professionals providing services where anaphylaxis treatment may be required, including but not exclusive to flu vaccination services, should have the competency to draw up and administer intramuscular adrenaline from ampoules with a normal syringe and needle.
- During the current shortage, please use ampoules and not auto-injectors to replenish anaphylaxis kits. Remember to include the relevant dosing charts, syringes and needles.
- The [Green Book](#) and [Resuscitation Council](#) guidance provides additional advice to healthcare professionals on the use of adrenaline in response to anaphylaxis. Pharmacists providing vaccination services may also wish to refer to [PSNC FAQs](#). There is an expectation that healthcare professionals should use adrenaline ampoules in preference to Emerade or other AAIs.

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Botulinum toxin type A (Azzalure) 125unit injection

- Galderma Ltd will have intermittent supplies until February 2020 due to supply challenges and increased demand.
- If Azzalure (which is only indicated for cosmetic use) is not available, *Botox* 50, 100 and 200unit and *Bocouture* 50 and 100unit can be used and are currently in stock but are not exact equivalents.
- Clinicians should refer to the SPCs for dosing.
- Galderma Ltd have supplied the following email for availability enquiries:
MedinfoUK@galderma.com

Crisantaspase (Erwinase) injection

- Porton Biopharma, the manufacturer of Erwinase, have had ongoing manufacturing issues affecting this product for the past 1-2 years with intermittent supply issues expected until mid-2020.
- Jazz Pharmaceuticals distributes Erwinase and supplies are currently available.
- Jazz Pharmaceuticals works closely with the clinical networks and supplies are prioritised on a patient need basis in conjunction with the treating clinicians.

Diamorphine 5mg and 10mg injection

- Accord are out of stock until March 2020 due to ongoing issues at their manufacturing plant in Europe.
- Wockhardt have insufficient stock to cover full forecasted demand in both primary and secondary care.
- There are insufficient volumes of other strength diamorphine injections to cover any shortfall.
- Primary care, private hospitals, hospices and substance misuse treatment centres can continue to order diamorphine, unrestricted, from usual wholesalers.
- **Secondary care should:**
 - reduce orders of diamorphine 5mg injection to 25% of historical demand;
 - order diamorphine 10mg injection up to 60% of historical demand;
 - discuss this supply issue with clinical colleagues and consider local prioritisation of available diamorphine 5mg and 10mg stock;
 - continue to order morphine 10mg injection from Martindale in line with historic demand. Martindale CANNOT support increased orders;
 - order additional morphine 10mg injection from Hameln, who can support this supply issue;
 - consider how you will manage having two morphine 10mg injection presentations in your departments;
 - let your regional procurement specialist know of any local issues or if you are considering using an alternative other than morphine and;
 - cascade onto any relevant networks, who may find this information useful.
- For any concerns around patient safety, please contact your local Medication Safety Officer who will escalate to Nicola Wake (Medication Safety Lead, Specialist Pharmacy Service).
- UKMi guidance to support the management of this supply issue can be found at:
<https://www.sps.nhs.uk/articles/shortage-of-diamorphine-5-and-10mg/>
- A medicine supply notification has been shared with the NHS (attached) which provides further information.

Digoxin (Lanoxin) 250mcg/ml injection

- Aspen, sole supplier are out of stock until February 2020.
- Unlicensed imports are available; lead times may vary.
- UKMi memo on management options below:
<https://www.sps.nhs.uk/articles/shortgae-of-lanoxin-digoxin-250-micrograms-ml-injection/>

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Medroxyprogesterone acetate (Sayana Press) 104mg injection

- Pfizer are out of stock of Sayana Press injection until further notice due to manufacturing delays.
- Depo-Provera (medroxyprogesterone acetate 150mg) is currently available and able to support the market during this time, should clinicians deem a switch appropriate.
- See the attached letter from Pfizer for further information.
- On 23 October, the MHRA issued a class 2 medicines recall for Sayana Press injection. See the link below for further details:

<https://www.gov.uk/drug-device-alerts/class-2-medicines-recall-sayana-press-104mg-0-65ml-mdr-055-06-19>

Mitomycin 2mg/10mg/20mg injection and mitomycin 40mg intravesical solution (Mitomycin-C)

- Kyowa Kirin are out of stock due to quality control release and manufacturing delays with no date for resupply.
- No alternative supplies of UK licensed mitomycin are currently available in sufficient quantities to support this gap in supply.
- Please see the below links to the recent Supply Disruption Alerts (SDA) and an MHRA Class 2 recall for all unexpired Kyowa Kirin LTD Mitomycin-C products for further information:
Latest update:
<https://www.cas.mhra.gov.uk/ViewandAcknowledgment/ViewAlert.aspx?AlertID=102921>
MHRA Class 2 recall:
<https://www.cas.mhra.gov.uk/ViewAndAcknowledgment/viewAlert.aspx?AlertID=102920>
- Extra supplies of Medac mitomycin 40mg intravesical kits have now been exhausted with more stock expected to be available in the coming months.
- Trusts who usually order Medac mitomycin 40mg intravesical kits can continue to do so. All others are requested not to contact Medac directly until instructed to do so by their regional procurement lead.

Oily Phenol 5% (almond oil) injection

- Martindale, sole suppliers are out of stock due to packaging delays until January 2020.
- There is no stock remaining in wholesalers.

Procyclidine 10mg/2ml injection

- Accord, sole supplier, are out of stock until March 2020.
- Consider sharing remaining stock locally with the support of your regional procurement lead.
- Unlicensed imports of procyclidine are not available.
- An alternative injectable anticholinergic agent, benzotropine mesilate (unlicensed), is available from pharmaceutical importers.
- A medicine supply notification has been shared with secondary care (attached) which provides further information.

Sodium thiosulfate 12.5g/50ml solution for injection vials

- Hope Pharmaceuticals, sole supplier, are currently experiencing a long term out of stock.
- UK licensed *Nithiodote*, also by Hope Pharmaceuticals, contains 1 vial of sodium thiosulfate 12.5g/50ml and 1 vial of sodium nitrite 300mg/10ml and is available to order at no extra cost.

Somatropin (Genotropin) 5.3mg GoQuick

- Pfizer are out of stock until mid-January 2020.
- All other doses and presentations within the Genotropin range remain available.
- A copy of the DHCP letter can be found attached.

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Tetracosactide 1mg depot injection

- Mallinckrodt, sole suppliers will be out of stock until the second half of 2020.
- Unlicensed imports are available; lead times vary.

Tobramycin 240mg/6ml injection

- Pfizer are out of stock until early January 2020.
- There is sufficient 80mg/2ml available from both Pfizer and Flynn (via Alloga) to cover full usage and Trusts are advised to switch to this strength during the out of stock period.
- Reserve any 240mg/6ml injection for patients who are unable to switch to the 80mg/2ml, for example, those who use via a nebuliser.

Urokinase (Syner-KINASE) injection

- Syner-Med are currently in stock of all strengths of Syner-KINASE injection.
- Supply restrictions will likely remain in place until mid-2020.
- Details of suggested alternative products, if required, can be found in the UKMi memo below:
<https://www.sps.nhs.uk/articles/shortage-of-urokinase-injection-syner-kinase-10000-iu-25000-iu-and-100000-iu-powder-for-solution-for-injection-or-infusion/>
- Additional information for the product Taurolock is attached. To place orders for this product, contact customerservice@kimal.co.uk and copy louise.kelly@kimal.co.uk

Orals

Carbamazepine (Carbagen) various preparations

- Carbamazepine is considered a Category 1 anti-epileptic medication and patients should normally be maintained on the same brand, however Mylan (manufacturers of Carbagen) will be out of stock of the below products until Q1 2020:
 - Carbagen 200mg and 400mg immediate release tablets
 - Carbagen 200mg and 400mg modified release tablets
- Patients currently prescribed Carbagen tablets will need to be switched to an alternative brand of carbamazepine tablets during this time.
- Novartis, the manufacturer of Tegretol tablets, the alternative brand of carbamazepine, have confirmed that all presentations are currently available that they are able to support additional demand during this time for all affected strengths and formulations.
- DHSC have worked with NHSE/I and UKMi to develop a clinical memo, which has been produced to support clinicians in prioritising and switching patients:
<https://www.sps.nhs.uk/articles/shortage-of-carbagen-carbamazepine-tablets/>

Co-fluampicil 250mg/250mg capsules

- Crescent are out of stock until the end of December 2019.
- Clinicians are advised to prescribe flucloxacillin and ampicillin capsules as separate preparations, considering patients' ability to swallow an increased number of capsules.
- Ampicillin 250mg and 500mg capsules are available from Crescent and Chemidex.
- Ampicillin oral suspensions (125mg/5ml and 250mg/5ml) are also available from Chemidex.

Colestyramine (Questran) Powder for Oral Suspension

- Cheplapharm are out of stock of Questran Powder 4g sachets until 2021.
- Unlicensed imports are available from importers; lead times vary.
- Limited supplies of Questran Light are currently available through Alliance Healthcare.

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- Mylan have recently launched a generic colestyramine 4g light sachet that will be available in wholesalers 18 December 2019.

Diazepam 2mg/5ml oral solution

- Sandoz, sole supplier is out of stock until the end of February 2020.
- Diazepam 2mg/5ml (sugar-free) oral solution is available from alternative suppliers.

Disopyramide 150mg capsules

- Mylan, sole supplier is out of stock until January 2020.
- Unlicensed imports are available from importers; lead times vary.
- Disopyramide 100mg capsules (*Rythmodan*) are available from Sanofi.
- See link below for the Supply Disruption Alert issued 14 June 2019:
<https://www.cas.mhra.gov.uk/ViewandAcknowledgment/ViewAlert.aspx?AlertID=102869>
- A medicine supply notification has been shared with the NHS (attached) which provides further information.

Eletriptan (Relpax) 20mg tablets

- Pfizer, sole supplier is out of stock until end February 2020.
- Unlicensed imports are available; lead times vary.
- Where unlicensed supplies are deemed inappropriate UK Medicine Information have advised:
 - The licensed initial dose of eletriptan is 40 mg.
 - The 20mg strength of eletriptan may be used as the starting dose in patients with mild or moderate renal impairment.
 - Although 40mg eletriptan tablets are available, there are no data on halving or crushing them to deliver a 20mg dose.
 - However, there are several other 5HT₁-receptor agonists (triptans) available that patients can switch to. Please refer to BNF or local formulary.
 - Choice of triptan will also depend on which ones have already been tried. In patients with renal impairment, please refer to SPC to check if a dose reduction is required.

Ethinylestradiol 10microgram/50microgram tablets

- UCB, sole supplier is out of stock due to manufacturing issues and currently unable to advise a resupply date.
- Unlicensed imports are available; lead times vary.

Ethinylestradiol and norethisterone (Synphase) tablets

- Pfizer are out of stock until early January 2020.
- Alternative brands of phasic oral contraceptive tablets with a different dosing schedule and containing a different progestogen remain available.
- Unlicensed imports are available; lead times vary.
- A medicine supply notification has been shared with the NHS (attached) which provides further information.

Fluoxetine oral preparations

- See the table below for a summary of the supply position with fluoxetine oral preparations.

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Product	Current stock position	Anticipated resupply date
Fluoxetine 10mg capsules	In stock	n/a
Fluoxetine 10mg tablets	In stock	n/a
Fluoxetine 20mg capsules	In stock	n/a
Fluoxetine 30mg capsules	Out of stock	Early January 2020
Fluoxetine 40mg capsules	In stock	n/a
Fluoxetine 20mg dispersible tablets (Olena)	Out of stock	February 2020
Fluoxetine 20mg/5ml oral liquid	In stock	n/a

- Serious shortage protocols (SSPs) were first issued on 3 October. There are currently no active SSPs in place.

Galantamine 8mg/12mg tablets

- Teva will be out of stock of their immediate release galantamine preparations (8mg and 12mg) until end March 2020.
- Galantamine modified release capsules (8mg, 16mg, 24mg) and galantamine 4mg/ml oral solution are available.
- UKMi guidance for switching preparations below:
 - It is recommended that the same total daily dose of galantamine is administered to patients. Patients switching to the once-daily regimen should take their last dose of galantamine tablets or oral solution in the evening and start prolonged- release capsules once daily the following morning.

Hormone Replacement Therapy products (HRT)

There are still some ongoing supply issues, please see **Table 2** in the Appendix for a full update on all HRT products.

Elleste oral HRT Range

- Mylan, sole supplier, has been experiencing ongoing manufacturing issues at their contract manufacturing site since the beginning of 2019.
- Mylan have now advised whilst new manufacturing arrangements are being confirmed, the Elleste range will be unavailable from the middle of December 2019 until mid-2020.
- Current forecasted out of stock dates for specific Elleste products are listed in **Table 1 and 2**.
- See **Table 1** below for equivalent alternatives to the Elleste range.

Table 1. Equivalent HRT alternatives for the Elleste HRT range

Brand	Ingredient(s)	Current Availability	Equivalent	Ingredient(s)
Elleste Solo 1mg	estradiol hemihydrate	In stock until mid-late December	Progynova 1mg	estradiol hemihydrate
			Zumenon 1mg	
Elleste Solo 2mg	estradiol hemihydrate	In stock until beginning of January	Progynova 2mg	estradiol hemihydrate
			Zumenon 2mg	
Elleste Duet Conti	estradiol 2mg/ norethisterone 1mg	Out of stock	Kliefem	estradiol 2mg/ norethisterone 1mg

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Elleste Duet 1mg	estradiol 1mg/ norethisterone 1mg	In stock until mid- December	NovoFem	estradiol 1mg/ norethisterone 1mg
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Evorel transdermal patch range

- On 24 October 2019, Janssen-Cilag divested the Evorel range (Evorel, Evorel Conti and Evorel Sequi) to Theramex UK Ltd.
- Theramex have advised a resupply date of February 2020.
- All preparations are now out of stock others are expected to last until early 2020.
- UKMi have published guidance to advise on suitable alternatives. This provides a range of alternative options and highlights the need for prescribers to seek specialist advice for more complex patients and consider prioritising the use of transdermal HRT therapy for women at increased risk of venous thrombosis:
<https://www.sps.nhs.uk/articles/shortage-of-evorel-hormone-replacement-therapy-hrt-patch-range/>
- The British Menopausal Society (BMS) with the support of the Royal College of Obstetrics and Gynaecologists have published a document advising on HRT preparations and equivalent alternatives to aid prescribing during this period: <https://thebms.org.uk/2019/11/british-menopause-society-further-update-on-hrt-supply-shortages-26-november-2019/>
- Unlicensed imports are available; lead times vary.

FemSeven transdermal patch range

(FemSeven Mono (estradiol only); FemSeven Sequi and Conti (estradiol/ levonorgestrel)).

- Teva divested the FemSeven product range to Theramex UK Ltd mid-2018.
- Theramex have confirmed that whilst new manufacturing arrangements are being established, the FemSeven range will be out of stock until Q2 2020.
- Unlicensed imports for FemSeven Mono are available; lead times vary.

Estraderm 100 microgram transdermal patch

- Norgine are currently out of stock of Estraderm 100 microgram patches. Resupply is expected early January.
- Please refer to the 'HRT preparations and equivalent alternatives' document developed by the BMS to aid HRT prescribing via: <https://thebms.org.uk/2019/11/british-menopause-society-further-update-on-hrt-supply-shortages-26-november-2019/>

Indivina (estradiol/medroxyprogesterone) 1mg/2.5mg, 1mg/5mg and 2mg/5mg tablets

- Orion, sole manufacturer is out of stock of both strengths until January 2020 due to manufacturing issues.
- Unlicensed imports are available; lead times vary.

Sandrena (estradiol hemihydrate) 0.5mg gel

- Orion are out of stock of 0.5mg Sandrena gel. They anticipate resupply by the mid-January 2020.
- Please refer to the 'HRT preparations and equivalent alternatives' document developed by the BMS to aid HRT prescribing via: <https://thebms.org.uk/2019/11/british-menopause-society-further-update-on-hrt-supply-shortages-26-november-2019/>

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Levofloxacin 250mg tablets

- Accord, sole suppliers are out of stock until February 2020
- UKMi have confirmed that levofloxacin 500mg tablets can be divided into equal doses to provide a 250mg dose.
- Supplies of levofloxacin 500mg tablets are currently available from Accord and Teva.

Medroxyprogesterone (Provera) tablets

- Pfizer are out of stock of Provera 100mg tablets until early January 2020 due to manufacturing delays.
- Provera 200mg tablets are also out of stock until 20 December 2019.
- Provera 400mg tablets currently remain available.
- Unlicensed imports of medroxyprogesterone 100mg tablets are available; lead times vary.
- For patients in whom unlicensed supplies are not considered appropriate a referral to secondary care cancer specialists will be required for consideration of alternative options, as per the UKMI memo below:
<https://www.sps.nhs.uk/articles/shortage-of-provera-medroxyprogesterone-acetate-100mg-tablets/>
- A medicine supply notification has been shared with the NHS (attached) which provides further information.

Methadone (Physeptone) 1mg/1ml sugar free oral solution

- The resupply date of Martindale's Physeptone 1mg in 1mL oral solution sugar free in 100mL sized bottles is end of January 2020.
- Please see an overview of the current supply situation below:

Product	Pack Sizes	Manufacturers	Stock status	Further Detail
Physeptone 1mg/ml Oral Solution sugar free	100ml	Martindale Pharmaceuticals	Out of stock	Resupply 24 Jan 2020
	500ml		In stock	Available from wholesalers
	2.5 Litre			
Physeptone 1mg/ml Oral Solution sugared	100ml	Martindale Pharmaceuticals	In stock	Available from wholesalers
	500ml			
	2.5 Litre			
Methadone 1mg/ml Oral Solution: Sugar Free and Sugared Formulations	100ml	Rosemont Pharmaceuticals	In stock	Special; Order direct
	500ml			Available from wholesalers
	500ml	Thornton and Ross		

Metoprolol 50mg and 100mg tablets

- There are ongoing supply issues affecting metoprolol 50mg and 100mg tablets.
- The issue has been caused by some manufacturers discontinuing the products and others having supply difficulties.
- Aurobindo-Milpharm are currently the sole supplier of both presentations in the UK.
- Supplies of both presentations are currently available but may be limited; supply is likely to be intermittent for several months.

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- See the link below for a UKMi memo with input from clinical experts at NHSE/I, which advises on management options:
<https://www.sps.nhs.uk/articles/shortage-of-metoprolol-50mg-and-100mg-tablets/>
- The manufacturer of carvedilol has indicated it would be unable to meet demand if patients were switched to this product. Manufacturers of bisoprolol, atenolol and propranolol have indicated they have capacity to support any additional demand on their products.

Mianserin 10mg/30mg tablets

- Mylan, sole supplier is out of stock of both strengths until Q2 2020.
- For patients who do not have sufficient supplies of mianserin tablets for the duration of the expected out of stock period, **clinicians should consider prescribing an unlicensed preparation** of mianserin tablets as soon as possible in order to avoid abrupt withdrawal.
- Unlicensed imports can be sourced from abroad; lead times may vary.
- In order for pharmacies to dispense an unlicensed drug, FP10 prescriptions must indicate that a special is required/prescribed by the GP. This could include the GP annotating the prescription with the following wording: “special order”.
- For patients in whom unlicensed imports are not appropriate, DHSC have commissioned clinical advice which recommends:

Patients who have been prescribed mianserin for < 6 months

1. GP to start mirtazapine at a low dose depending on clinical judgement and the Summary of Product Characteristics (SPC)
2. Consider psychological therapies

Patients who have been prescribed mianserin for > 6 months

1. GP to start mirtazapine at a low dose depending on clinical judgement and the SPC
2. Seek specialist secondary care advice on management options

Nifedipine (Adalat) tablets

- There are ongoing supply issues with the Adalat Retard and LA range from Bayer. Alternative nifedipine presentations continue to remain available from generic suppliers.
- Supplies of nifedipine 5mg and 10mg immediate release soft gel capsules are now available from Relonchem.
- Please see the attached letter from Bayer and the shortages memo from UKMI:
<https://www.sps.nhs.uk/articles/shortage-of-adalat-nifedipine/>

Opicapone (Ongentys) 50mg capsules

- Bial Pharma, sole supplier is out of stock until mid-January 2020.
- Very limited supplies of unlicensed opicapone capsules are available from importers.
- Refer to the SDA issued 25 October 2019 for further information:
<https://www.cas.mhra.gov.uk/ViewandAcknowledgment/ViewAlert.aspx?AlertID=102911>

Oral Contraceptive Pill products (OCP)

Noriday (norethisterone) 350 micrograms tablet

- Pfizer are out of stock until early January 2020.
- UKMi have advised that there are no exact equivalent preparations in the UK market and clinicians should refer to CKS guidance for advice on alternative POPs:

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<https://cks.nice.org.uk/contraception-progestogen-only-methods#!scenario>

Norimin (ethinylestradiol/norethisterone) 0.035mg/1mg tablets

- Pfizer are out of stock until the end of April 2020.
- UKMi have advised that there are no exact equivalent preparations to Norimin available in the UK market.
- Other ethinylestradiol and norethisterone OCP products should be available.
- Clinicians are advised to refer to CKS guidance for advice COCs:
<https://cks.nice.org.uk/contraception-combined-hormonal-methods>

Paroxetine (Seroxat) 10mg/5ml oral solution

- GSK are out of stock until end January 2020.
- Generic paroxetine tablets remain available and UKMI have advised that tablets can be crushed and mixed with water for administration (off-label use). The crushed tablets are bitter and have a slight local anaesthetic effect. *See information below on Seroxat 10mg tablets.*
- Unlicensed imports of paroxetine 10mg/5ml oral solution are available; lead times vary.
- A medicine supply notification (attached) has been shared with the NHS, which provides further information.

Pethidine 50mg tablets

- Martindale are out of stock until mid-February 2020.
- Teva can support the full market until Martindale's resupply.

Phenelzine sulfate (Nardil) 15mg tablets

- Kyowa Kirin, sole supplier is out of stock until at least March 2020 due to manufacturing delays.
- Unlicensed imports are available from the following specialist importer companies: Clinigen, Target, Alium, Mawdsleys, Durbin, WEP Clinical and Waymade. Lead times may vary.
- Unlicensed imports can be obtained through normal wholesaler routes. If unable to obtain through wholesalers, pharmacists are advised to contact the relevant specialist importers directly.
- UKMi have also published guidance on management including the need for specialist referral to mental health teams if unlicensed supplies of phenelzine sulfate 15mg tablets are deemed unsuitable:
<https://www.sps.nhs.uk/articles/shortage-of-phenelzine-15mg-tablets-nardil/>

Phenytoin (Epanutin) 50mg Chewable Infatabs

- Pfizer are out of stock until mid-2020 due to a manufacturing delay.
- Pfizer has obtained approval from the MHRA to import stock of Dilantin (phenytoin) Infatabs from Canada.
- Canadian packs of Dilantin are considered unlicensed in the UK.
- A copy of the DHCP letter can be found attached.

Prazosin (Hypovase) 1mg tablets

- Pfizer, sole supplier is out of stock until 10 January 2020.
- Hypovase 0.5mg tablets remain available.

Quinapril (Accupro) 40mg tablets

- Pfizer, sole supplier is out of stock until 27 December 2019.
- Accupro 5mg, 10mg and 20mg tablets remain available.

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Quinapril 10mg/hydrochlorothiazide 12.5mg (Accuretic) tablets

- Pfizer are currently out of stock until 24 January 2020.
- There are several alternative combination preparations of ACE-Inhibitors with diuretics and UKMi have advised that patients can be safely switched, with clinical supervision.
- Unlicensed quinapril 10mg/hydrochlorothiazide 12.5mg tablets are available from importers; lead times vary.

Ranitidine 50mg/2ml injection

- This is now resolved, and ranitidine injection supplies are now available to be ordered from wholesalers and are not expected to be out of stock.
- An updated Medicine Supply Notification (MSN/2019/019U) was issued to secondary care on 9 December (attached) with further information.
- Guidance on the management of an expected shortage to ranitidine injection issued in the SDA update ([SDA/2019/005-U](#)) on 27 November has been superseded by MSN/2019/019U.
- There is no change to the supply situation for oral ranitidine and the guidance issued in [SDA/2019/005-U](#) should continue to be followed.
- See also ranitidine oral preparations below.

Ranitidine oral preparations

- Ranitidine tablets, effervescent tablets and oral solution are expected to be out of stock until further notice due to global regulatory investigations.
- Information on clinical and supply management for oral products has been communicated via an SDA ([SDA/2019/005-U](#)). A further updated SDA will be issued shortly.
- See also ranitidine injection above.

Trifluoperazine tablets

- There have been ongoing manufacturing issues affecting trifluoperazine 1mg and 5mg tablets causing long term issues with supplies not expected before mid-2020.
- Concordia and Rosemont have trifluoperazine liquid and supplies are available.
- Unlicensed imports of trifluoperazine tablets are available from importers; lead times vary.

Tuberculosis medications

- See the table below for a summary of the supply position with tuberculosis medications.
- A medicine supply notification has been shared with the NHS (attached) which provides further information.

Product	Supplier	Current stock position	Anticipated re-supply date	Suggested management plan
Rifampicin 150mg capsules	Sanofi	In stock	n/a	n/a
	Mylan	In stock	n/a	
Rifampicin 300mg capsules	Sanofi	Out of stock	w/c 13 Jan 2020	Order direct from DrugsRUs or from major wholesalers for Sandoz and Mylan stock. If 300mg product cannot be obtained dispense rifampicin 150mg capsules and counsel patient.
	Sandoz	In stock		
	Mylan	In stock		
	DrugsRUs	In stock		

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Rifampicin 100mg/5ml syrup	Sanofi	In stock		Some localised out of stocks at wholesaler level, Sanofi expect all depots to be fully replenished by w/c 30/12/19.
Ethambutol 100mg tablets	Morningside	Out of stock	Mid-late Jan 2020	Place orders for Kent and T&R product if available at your local depot(s). Importer companies have indicated that unlicensed imports can be sourced; lead times vary.
	Thornton & Ross	Out of stock	w/c 23 Dec	
	Kent	In stock		
Ethambutol 400mg tablets	Kent	Out of stock	Feb 2020	Place orders for Morningside product via AAH or Phoenix if you cannot obtain contracted product.
	Thornton & Ross	Out of stock	Jan 2020	
	Intrapharm	Out of stock	Jan 2020	
	Morningside	In stock		
Pyrazinamide 500mg tablets	Thornton & Ross	In stock		Place orders for T&R product.
	Morningside	Out of stock	Early-mid Jan 2020	
Isoniazid 50mg tablets	RPH Pharmaceuticals	Out of stock	Feb 2020	Isoniazid 100mg tablets are available from Morningside: https://www.sps.nhs.uk/articles/shortage-of-isoniazid-tablets-50mg/ SPS memo on halving 100mg tablets. Unlicensed specially manufactured liquid is available from Ennogen and Rosemont.
Isoniazid 100mg tablets	Morningside	In stock	n/a	n/a
Rifinah 150 tablets (rifampicin 150mg/isoniazid 100mg)	Sanofi	Out of stock	w/c 6 Jan 2020	Prescribe/dispense as individual ingredients.
Rifinah 300 tablets (rifampicin 300mg/isoniazid 150mg)	Sanofi	In stock		n/a
	DrugsRUs	In stock		
Rifater tablets (rifampicin 120mg/pyrazinamide 300mg/isoniazid 50mg)	Sanofi	Out of stock	w/c 6 Jan 2020	Very limited stock available direct from DrugsRUs. Unlicensed importer companies have indicated they can source unlicensed imports; place orders for imports.
	DrugsRUs (Parallel Import)	Limited stock	TBC	
Voractiv tablets	Thornton & Ross	In stock		Sole supplier, no capacity for uplift. Trusts should only order in line with historic demand.

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Others

Alprostadil (Muse) urethral sticks

- Mylan is out of stock of Muse 250 microgram as a result of manufacturing difficulties.
- The current anticipated resupply date has not been confirmed.
- Muse 500 microgram and 1000 microgram strengths are currently available.
- There are alternative preparations of alprostadil available; they are not exact equivalents. Please refer to the SPCs for dosing.

Anusol Ointment

- Church & Dwight UK Limited are out of stock until January 2020.
- Anusol cream and Anusol suppositories remain available.

Capsaicin (Zacin) 0.025%/(Axsain) 0.075% cream

- Teva, sole supplier is out of stock until early January 2020.
- Unlicensed imports are available from importers; lead times vary.
- For patients in whom unlicensed imports are not appropriate, UKMI have produced a clinical memo on alternative treatments:
<https://www.sps.nhs.uk/articles/shortage-of-capsaicin-cream-zacin-and-axsain/>

Fentanyl (Instanyl) 50mcg nasal spray

- Takeda are out of stock of Instanyl 50mcg nasal spray and are unable to provide a resupply date:
 - 50mcg - no current resupply date
 - 100mcg – in stock
 - 200mcg – in stock
- Immediate release fentanyl products are not interchangeable and when considering switching patients from one product to another, patients should not be converted on a microgram per microgram basis from one to another; it is necessary to titrate the new formulation with advice from a specialist.
- UKMI memo on management options below:
<https://www.sps.nhs.uk/articles/shortage-of-actiq-lozenges-and-instanyl-nasal-spray-immediate-release-fentanyl-citrate/>

Flixotide 2mg/2ml nebules

- GSK the sole supplier is currently out of stock until early January 2020.
- Parallel imports are currently available
- Flixotide 0.5mg/2ml nebules remain available, if prescribers wish to switch patients on lower dose preparations
- Unlicensed imports of flixotide 2mg/2ml nebules are available from Clinigen, with a 2-week lead time.

Fludrocortide 0.0125% cream and ointment

- Typharm Limited cannot release further stock of fludrocortide cream and ointment due to updates to their licences and changes to regulatory standards.
- Resupply is expected by March 2020.
- Fludrocortide 4micrograms/cm² tape remains available.

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Mesalazine (Salofalk) 1g suppositories

- Dr Falk Pharma are out of stock of Salofalk 1g suppositories and are currently unable to provide a resupply date.
- Salofalk 500mg suppositories are now available.
- Pentasa 1g suppositories remain available.
- UKMi memo on management options below:
<https://www.sps.nhs.uk/articles/shortage-of-salofalk-mesalazine-suppositories-500mg-and-1g/>
- A medicine supply notification has been shared with the NHS (attached) which provides further information.

Eye drops/treatments

Cyclopentolate 0.5% and 1% Minims (Bausch and Lomb)

- Out of stock until early January 2020.
- Further information will be available on the Royal College of Ophthalmologists website shortly.
- A Medicine Supply Notification will be issued to primary and secondary care shortly.

Loteprednol etabonate (Lotemax) 0.5% eye drops (Bausch and Lomb)

- Out of stock until end January 2020.
- Alternative topical corticosteroids should be used, as recommended by the Royal College of Ophthalmologists.
- Further information will be available on the Royal College of Ophthalmologists website shortly.

Mydrane (lidocaine 10mg/1ml+tropicamide 0.2 mg/1ml+phenylephrine 3.1 mg/1ml) solution for injection (Thea Pharma)

- Out of stock until January 2020.
- *Mydriasset* remains available and is a suitable alternative, as recommended by the Royal College of Ophthalmologists.
- Further information will be available on the Royal College of Ophthalmologists website shortly.

Phenylephrine 2.5%/10% Minims eye drops solution (Bausch and Lomb)

- Out of stock until early January 2020.
- Limited unlicensed imports can be sourced; lead times vary.
- The Royal College of Ophthalmologists (RCOphth) has provided clinical guidance to support local prioritisation of remaining supplies and advice on alternative options where appropriate.
- See link below for the Supply Disruption Alert issued 14 November 2019:
<https://www.cas.mhra.gov.uk/ViewandAcknowledgment/ViewAlert.aspx?AlertID=102923>

Trifluorothymidine (trifluridine F3T) 1% eye drops (unlicensed special)

- Stockport Pharmaceuticals are out of stock until early January 2020.
- Unlicensed imports are available; lead times may vary.

Vaccines

For updates on other vaccine supply positions, please refer to PHE's Vaccine Update Bulletin found at the following address:

<https://www.gov.uk/government/collections/vaccine-update#2019>

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Hepatitis B Vaccines

Renal dose

- MSD's renal vaccine HBVAXPRO 40micrograms are still out of stock of until further notice. Please see statement: <http://www.msd-uk.com/products/vaccines.xhtml>
- GSK's Hepatitis B renal vaccine, Fendrix, is currently available.

Adult dose

- MSD are out of stock HBVAXPRO 10mcg vaccine until further notice
- GSK are confident they can support the increased demand during this time.

Measles, Mumps and Rubella (MMR) vaccine

- Limited supplies of Priorix (GSK) and MMRVAXPRO (MSD) are available for the private market (locally procured stock) until January and March 2020 respectively due to global increase in demand.
- This supply issue does not impact the nationally procured MMR vaccine used for the Public Health England's (PHE) national programme.
- Most of the MMR vaccinations provided in the UK are nationally procured by PHE and delivered as part of a national immunisation programme.

Pneumococcal Polysaccharide Vaccine 23-valent vaccine (PPV23) vials and Pneumovax 23 pre-filled syringes

- MSD, sole supplier of PPV23 vaccine, have limited supplies of both the PPV23 vials and Pneumovax pre-filled syringes until February 2020.
- Public Health England (PHE) have issued guidance on how available supplies should be managed at this time. This guidance advises the need for the prioritisation of patients considered to be in the high priority clinical risk group. Find full guidance on PHE's Vaccine Update Issue 300 (page 12): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/844742/PHE_11388_vaccine_update_300_bug_special_october2019ppv.pdf

Rabies vaccine (Rabipur)

- Limited supply of GSK's Rabipur is currently available. Supply issues resulting from manufacturing constraints have now resolved, however, GSK do not expect the situation to fully normalise until late December 2019.
- Sanofi Pasteur have confirmed they are able to support the full market during this time with their unlicensed Rabies vaccine, Verorab
- NATHNAC have issued further information available at the following link: <https://travelhealthpro.org.uk/news/389/rabies-vaccine-availability>

Discontinuations

Collagenase clostridium hitsolyticum (Xiapex) 0.9mg injection (Swedish Orphan Biovitrum Ltd)

- Sobi are discontinuing Xiapex injection at the end of 2019 (see letter attached).
- Unlicensed imports are available; lead times vary.
- Sobi have informed all customers of the plan to discontinue this product.

Diltiazem (Slozem) 120mg/180mg/240mg/300mg capsules (Merck Serono)

- Merck are discontinuing their Slozem range with immediate effect and expect stocks to be exhausted by the end of February 2020.
- UKMi have advised prescribers to switch patients to equivalent strength diltiazem preparations.

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Fluoxetine (Prozac) 20mg capsules and 20mg/5ml oral suspension (Eli Lilly)

- Lilly are discontinuing Prozac 20mg capsules and 20mg/5ml oral suspension from the market in December 2019.
- Generic fluoxetine capsules and oral suspension remains available from a number of suppliers.

Fluphenazine decanoate (Modecate) injection (Sanofi)

- Manufacture of Modecate (fluphenazine decanoate) injection has ceased
- Existing stock of Modecate Injection (25 mg/ml) expired in August 2019.
- Existing stock of Modecate Concentrate Injection (100 mg/ml) will expire in August 2020 – stock will not be released after 29th February 2020.
- Prescribers should complete arrangements to transfer patients on Modecate to therapeutic alternatives under medical supervision.
- Unlicensed imports are available; lead times vary.

Hepatitis A vaccine (Havrix Monodose Adult and Junior) vials (GSK)

- GSK are discontinuing Havrix Monodose Adult and Junior vials.
- Please note that Havrix Monodose Adult and Junior pre-filled syringe presentations remain available.

Insulin Human (Insuman Basal, Comb15 and Comb25) (Sanofi)

- Insuman Basal vials are being discontinued and supplies are expected to be exhausted by May 2020. Insuman Basal cartridges and pre-filled Solostar pen presentations remain available.
- Insuman Comb15 cartridges are being discontinued and supplies are expected to be exhausted by June 2020. There are no direct mixed 15%/85% insulin alternatives, but clinical advice indicates that this should not be particularly impactful from a clinical perspective.
- Insuman Comb25 vials are being discontinued and supplies are expected to be exhausted by June 2020. Insuman Basal cartridges and pre-filled Solostar pen presentations remain available.
- A copy of the DHCP letter can be found attached.

Ivabradine 5mg & 7.5mg tablets (Teva)

- Teva are discontinuing ivabradine 5mg and 7.5mg tablets from the UK market
- Other generic manufacturers have been made aware and have good supplies available.

Rolapitant (Varuby) 90mg tablets (Tesarro)

- Tesarro are discontinuing Tesarro tablets for the UK market with immediate effect and expect stocks to be exhausted by mid-December 2019
- There are three other licensed neurokinin 1-receptor antagonists available - aprepitant, fosaprepitant, and netupitant (combo product with palonosetron, brand name Akynzeo).

Stavudine (Zerit) 20mg, 30mg & 40mg hard capsules (BMS)

- BMS are discontinuing Zerit (stavudine) hard capsules and supplies are expected to be exhausted by the **31 Dec 2019**.
- This is an early date than BMS have previously communicated to healthcare professionals.

Theophylline (Slo-Phyllin) 60mg/125mg/250mg capsules (Merck)

- Merck have discontinued Slo-Phyllin capsules with immediate effect.
- Very limited supplies are available directly from Merck. Contact Merck Customer Services for more information: 0800 032 6339 or CSC.uk@merckgroup.com

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- See link below for the Supply Disruption Alert issued 28 November 2019:
<https://www.cas.mhra.gov.uk/ViewandAcknowledgment/ViewAlert.aspx?AlertID=102936>

Resolved (date resolved)

Acetylcholine Chloride 20mg powder and solvent for irrigation (18/12/2019)

Alprostadil (Muse) 500 micrograms and 1000 micrograms urethral sticks (06/12/19)

Amikacin 500mg/2ml injection (13/12/19)

Atovaquone (Wellvone) 750mg/5ml oral suspension (12/19)

Botulinum toxin type B (Neurobloc) (09/12/19)

Colestipol (Colestid) plain 5g granules (18/11/19)

Fentanyl (Instanyl) 100mcg and 200mcg nasal sprays (19/12/19)

Fluoxetine 40mg capsules (22/11/19)

Methylprednisolone acetate with lidocaine (40mg/ml + 100mg/ml) (Depo-Medrone) suspension for injections 1ml/2ml (11/19)

Melphalan 2mg tablets

Meningitis A, C, W, Y (Menveo) Vaccine (29/11/19)

Mesalazine (Salofalk) 1g suppositories (13/12/19)

Methadone (Physeptone) 1mg/1ml oral solution - with sugar (25/11/19)

Paroxetine (Seroxat) 10mg tablets (3/12/19)

Prochlorperazine (Stemetil) 5mg in 5ml oral syrup (13/12/19)

Quinapril (Accupro) 10mg tablets (25/11/19)

Reboxetine (Edronax) 4mg tablets (12/12/19)

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Table. 2 HRT Availability

Oestrogen Only					
Ingredient (s)	Manufacturer	Brand	Strength	Current Availability	Anticipated resupply date
Estradiol hemihydrate	Mylan	Elleste Solo	1mg	In stock until late December	Mid- 2020.
			2mg	In stock until late January	
	Mylan	Zumenon	1mg	In stock	
			2mg	In stock	
Estradiol valerate	Bayer	Progynova	1mg	In stock	
			2mg	In stock	
Estradiol	Resource Medical UK	Bedol	2mg	Long term OOS	
Conjugated oestrogen	Pfizer	Premarin	300mcg	In stock	
			625mcg	In stock	
			1.25mg	In stock	
Ethinylestradiol	UCB pharma Ltd.	Ethinylestradiol	10mcg	OOS	Resupply date unavailable. Unlicensed imports available; lead times vary
			50mcg	OOS	
			1mg	In stock	
Transdermal patches					
Estradiol	New owner: <u>Theramex</u>	Evorel	25 mcg	OOS	February 2020. Unlicensed imports available; lead times vary
			50mcg	OOS	
			75mcg	OOS	
			100mcg	OOS	
Estradiol hemihydrate	Novartis	Estradot	25 mcg	In stock	
			37.5mcg	In stock	
			50mcg	In stock	
			75mcg	In stock	
			100mcg	In stock	
	Merus Labs/Norgine	Estraderm	25 mcg	In stock	
			50mcg	In stock	
			75mcg	In stock	
			100mcg	OOS	Early January 2020
	Theramex	FemSeven Mono	50mcg	OOS	Mid 2020 Unlicensed imports available; lead times vary
			75mcg	OOS	
			100mcg	OOS	
	Bayer	Progynova TS	50mcg	In stock	
100mcg			In stock		
Mylan	Elleste Solo MX	40mcg	In stock		

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			80mcg	In stock	
Topical (Transdermal gels/creams/other delivery systems)					
Estradiol	Besins Healthcare (UK) Ltd	Oestrogel	0.06%	In stock	
Estradiol hemihydrate	Orion	Sandrena	0.5mg	OOS	Mid-January 2020
			1mg (28)	In stock	
			1mg (91)	In stock	
	Pfizer	E-string vaginal delivery system	7.5mcg/24hours	In stock	
	Novo Nordisk	Vagifem vaginal tablets	10mcg	In stock	
Estriol	Flynn Pharma	Blissel	50mcg/g	In stock	
	Marlborough Pharma	Estriol cream (generic)	0.01%	In stock	
	Aspen	Ovestin cream	1mg	In stock	
Progestogen only					
Medroxyprogesterone	Resource Medical UK	Climanor	5mg	long term OOS	
Levonorgestrel	Bayer	Mirena Intrauterine device	20mcg/24hrs	In stock	
Progesterone	Besins Healthcare (UK) Ltd	Utrogestan	100mg	In stock	
		Utrogestan	200mg	In stock	
Combined HRTs (Progestogen and oestrogen)					
Continuous combined therapy					
Oral preparations					
Estradiol hemihydrate / norethisterone acetate	Mylan	Elleste Duet Conti	2mg / 1mg	OOS	Mid 2020
	Novo Nordisk	Kliofem	2mg/ 1mg	In stock	
Kliovance		1mg/ 500mcg	In stock		
Estradiol hemihydrate / dydrogesterone	Mylan	Femoston Conti	500mcg/ 2.5mg	In stock	
			1mg/ 5mg	In stock	
Estradiol valerate/medroxyprogesterone	Orion	Indivina	1mg /2.5mg	OOS	January 2020. Unlicensed imports available; lead times vary.
			2mg/ 5mg	OOS	
			1mg/5mg	OOS	January 2020. Unlicensed imports available; lead times vary.

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low dose conjugated oestrogen/medroxyprogesterone	Pfizer	Premique	300mcg/1.5 mg	In stock	
Transdermal patch					
Estradiol hemihydrate/norethisterone acetate	New Owner: <u>Theramex</u>	Evorel Conti	3.2mg/11.2 mg	OOS	February 2020 Unlicensed imports available; lead times vary
Estradiol hemihydrate/levonorgestrel	Theramex	FemSeven Conti	1.5mg/0.525mg	Long term OOS	Mid 2020
Sequential combined therapy					
Oral preparations					
Estradiol [X,X] / norethisterone acetate	Resource Medical UK	Clinorette	[2mg, 2mg]/1mg	Long term OOS	
Estradiol/norgestrel	Mylan	Cyclo-progynova	2mg/500mcg	Long term OOS	
Estradiol hemihydrate / norethisterone acetate		Elleste Duet	1mg/ 1mg	In stock until end of December	Mid- 2020.
			2mg/ 1mg	In stock until end of December	
Estradiol hemihydrate/dydrogesterone		Femoston	1mg/ 10mg	In stock	
	2mg/10mg		In stock		
Estradiol hemihydrate / norethisterone acetate	Novo Nordisk	Novofem	1mg/ 1mg	In stock	
Estradiol hemihydrate [X,X,X]/ norethisterone acetate		Trisequens	[2mg, 2mg, 1mg]/ 1mg	In stock	
Estradiol valerate/ medroxyprogesterone acetate	Orion	Tridestra	2mg/20mg	In stock	
Transdermal patch					
a) Estradiol hemihydrate and b) estradiol hemihydrate/norethisterone acetate	New Owner: <u>Theramex</u>	Evorel Sequi	a)3.2mg b) 3.2 mg /11.2 mg	OOS	February 2020. Unlicensed imports available; lead times vary
a) 1.5mg of estradiol hemihydrate b) Estradiol hemihydrate /levonorgestrel	Theramex	FemSeven Sequi	a) 1.5mg b) 1.5mg /1.5mg	Long term OOS	Mid -2020
Gonadomimetic (s)					
Tibolone 2.5mg	Advanz Pharma	Livial tablets	Tibolone 2.5mg	In stock	
Selective oestrogen receptor modulator					
Ospemifene 60mg tablets	Shionogi	Senshio tablets	Ospemifene 60mg tablets	In stock	

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Tissue-selective oestrogen complex					
Conjugated oestrogen 300mcg/ bazedoxifene 20mg	Pfizer	Duavive	conjugated oestrogen 300mcg/ bazedoxifen e 20mg	In stock	