

## Supply Issues Update for Primary and Secondary Care: January 2021

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 [here](#).

### Contents

New Issues.....	3	Bleomycin (Bleo-Kyowa) 15,000I.U. injection	6
Injectables .....	3	Crisantaspase (Erwinase) injection .....	6
Ceftolozone/tazobactam (Zerbaxa) 1g/0.5g powder for concentrate for solution for infusion .....	3	Diazepam (Diazemuls) 10mg/2ml emulsion for injection.....	6
Mitomycin 10mg injection.....	3	Epirubicin 100mg solution for injection.....	6
Phytomenadione (Konakion MM) 10mg/ml injection .....	3	Flucytosine (Ancotil) 2.5g/250ml solution for infusion .....	6
Sodium chloride 1.8 %, 2.7 % and 5 % Polyfusors .....	4	Lorazepam (Ativan) 4mg/ml solution for injection .....	7
Orals.....	4	Mitomycin 2mg powder for solution for injection/infusion.....	7
Diltiazem (Zemtard) 240mg XL capsules .....	4	Norethisterone enantate (Noristerat) 200mg solution for intramuscular injection .....	7
Docusate sodium 100mg capsules .....	4	Phytomenadione (Konakion MM) 2mg/0.2ml injection .....	7
Isosorbide mononitrate (Isotard) 50mg modified release tablets.....	4	Ranitidine 50mg/2ml injection .....	7
Promethazine 25mg tablets .....	4	Somatropin 0.2mg MiniQuick (Genotropin) device.....	7
Others .....	4	Tetracosactide 1mg depot injection .....	8
Buprenorphine (Butec) 15 microgram/hr patches (7 day) .....	4	Urokinase (Syner-KINASE) injection.....	8
Balneum Plus Bath Oil .....	5	Verteporfin (Visudyne) 15mg powder for solution for infusion.....	8
Granisetron (Sancuso) 3.1mg/24 hours transdermal patches.....	5	Orals.....	8
Ongoing Issues.....	5	Alprazolam (Xanax) 250mcg and 500mcg tablets .....	8
Injectables .....	5	Chloral betaine 707mg tablets.....	8
Adrenaline Auto-Injectors (AAIs).....	5	Co-amilofruse 5/40 tablets .....	8
Atracurium besilate solution for injection vials and ampoules (all strengths) .....	6	Co-careldopa 25mg/100mg tablets .....	8
		Colectipol (Colectid) orange 5g granules .....	8

COMMERCIAL-SENSITIVE

Colestyramine (Questran) Powder for Oral Suspension.....	9	Desmopressin (Desmospray) 10micrograms/actuation nasal spray .....	16
Contraceptive products (oral) .....	9	Desmopressin (Octim) 150mcg/actuation nasal spray .....	16
Ferrous Fumarate 322mg/Folic Acid 0.35mg (Pregaday) tablets.....	10	Fludrocortide 0.0125% cream .....	16
Fluoxetine 10mg tablets .....	10	Fluticasone propionate (Flixotide) 0.5mg/2ml and 2mg/2ml nebulas .....	16
Fluoxetine 30mg capsules .....	10	Metronidazole (Acea) 0.75% gel.....	16
Haloperidol 5mg/5ml oral solution sugar free .....	10	Prednisolone 5mg suppositories .....	16
Histamine (H2) antagonists .....	11	Sodium cromoglycate (Intal) 5mg inhaler ..	16
Hormone Replacement Therapy products (HRT) .....	11	Eye drops/treatments.....	17
Isosorbide Mononitrate (Imdur) 60mg modified release tablets.....	12	Chloramphenicol (Eykappo) 5mg/ml Preservative Free Eye Drops 10ml.....	17
Ketotifen (Zaditen) 1mg/5ml oral solution..	12	Sofradex ear/eye drops .....	17
Lithium carbonate (Priadel) 200mg and 400mg tablets.....	12	Vaccines .....	17
Mianserin 10mg and 30mg tablets.....	13	Hepatitis B Vaccines.....	17
Moclobemide 150mg and 300mg tablets....	13	Pneumovax 23 pre-filled syringes.....	17
Penicillamine 250mg tablets .....	13	Discontinuations .....	17
Pethidine 50mg tablets.....	13	Aripiprazole 30mg tablets (Niche Generics)	17
Phenelzine sulphate (Nardil) 15mg tablets .	13	Diamorphine 10mg tablets (Ethypharm) ....	17
Phenytoin sodium NRI 100mg capsules...	13	Itraconazole (Sporanox) IV 10 mg/ml concentrate and solvent for solution for infusion (Janssen).....	18
Prazosin (Hypovase) 1mg tablets .....	13	Losartan 50mg / Hydrochlorothiazide 12.5mg tablets (Teva) .....	18
Pristinamycin 500mg tablets .....	14	Metformin (Glucient SR) 500mg tablets (Consilient).....	18
Ranitidine oral preparations.....	14	Oxycodone (Onexila XL) 40mg & 80mg tablets (Rivopharma) .....	18
Sterculia 62% with frangula bark 8% granules (Normacol Plus) .....	14	Paracetamol (Perfalgan) 500mg/50ml and 1g/100ml solution for infusion (BMS) .....	18
Trifluoperazine 1mg/5ml syrup .....	14	Sildenafil 25mg (4 & 8 tablet packs) & 50mg (4 tablet pack) tablets (Upjohn/ Viatris) .....	18
Tuberculosis medications .....	14	Sulindac 100mg & 200mg tablets (Chemidex) .....	18
Valsartan capsules .....	14	Resolved.....	19
Zonisamide 25mg, 50mg and 100mg capsules .....	15	Diamorphine 5mg, 10mg and 30mg injection .....	19
Others .....	15		
Bisacodyl (Dulcolax) 5mg and 10mg suppositories .....	15		
Desmopressin (DDAVP) 0.01% w/v intranasal solution.....	16		

#### COMMERCIAL-SENSITIVE

Elleste Duet 1mg and 2mg tablets (17/12/20) .....	19	Remdesivir 100mg powder for concentrate for solution for infusion and concentrate solution for infusion (4/12/20) .....	19
Enalapril 20mg tablets (17/12/20) .....	19	Rifampicin (Rifadin) 100mg/5ml oral suspension (12/12/20).....	19
Entacapone 200mg tablets (11/12/20) .....	19	Ritonavir 100mg tablets (4/1/21) .....	19
FemSeven Conti patch (8/1/21)		Sulfasalazine (Salazopyrin-En) gastro- resistant 500mg tablets (23/12/20).....	19
Hyaluronidase (Hyalase) 1500I.U. Powder for Solution for injection/infusion (21/12/20) ..	19	Tapentadol (Palexia) 20mg/ml oral solution (15/12/20).....	19
Meloxicam 7.5mg tablets (23/12/2020).....	19	Appendix .....	20
Mupirocin (Bactroban) 2% cream (06/01/21) .....	19	Table 2: HRT availability and anticipated resolution dates .....	20
Pancreatin (Pancrex V and Pancrex V 125mg) capsules (23/12/20).....	19		
Phenindione 10mg and 25mg tablets (16/12/20) .....	19		

### **Information provided: w/c 4 January 2021**

#### New Issues

##### Injectables

##### Ceftolozone/tazobactam (Zerbaxa) 1g/0.5g powder for concentrate for solution for infusion

- MSD, sole supplier of ceftolozone/tazobactam 1g/0.5g powder for concentrate for solution for infusion have issued a global recall of this product due to potential sterility issues.
- The UK recall notice and further information can be found [here](#)
- Patients currently receiving treatment with this antibiotic should be discussed with local microbiology teams.

##### Mitomycin 10mg injection

- Mitomycin 10mg injection is out of stock with no date for replenishment.
- Other vial sizes of mitomycin for injection and/or infusion remain available including 20mg from Vygoris Ltd and 40mg from Accord-UK Ltd.
- Mitomycin for intravesical use remains available including 20mg from Vygoris Ltd and 40mg from Medac GmbH.
- Specialist importers can source unlicensed products. Lead times may vary.
- An updated MSN was issued 24 December 2020 (attached).

##### Phytomenadione (Konakion MM) 10mg/ml injection

- Limited supplies available until the end of February 2021.
- Supplies of Konakion MM Paediatric 2mg/0.2ml injection in tri-lingual packaging (including English; considered unlicensed in the UK) are available to support via Mawdsley's Specials and Alliance Specials.

#### COMMERCIAL-SENSITIVE

- From mid/late January, UK licensed phytomenadione 2mg/0.2ml injection will be resupplied and able to support the uplift in demand.
- Specialist importers can also source unlicensed phytomenadione 10mg/ml injection. Lead times may vary.
- An MSN will be issued shortly.

#### Sodium chloride 1.8 %, 2.7 % and 5 % Polyfusors

- Fresenius Kabi is out of stock until at least mid-January 2021.
- Stock remains available at Trust level in England. Please contact your Regional Pharmacy Procurement Specialist who may facilitate stock sharing between Trusts.

## Orals

#### Diltiazem (Zemtard) 240mg XL capsules

- Zemtard 240mg XL capsules are out of stock until w/c 1 February 2021.
- Adizem and Viazem (diltiazem) XL 240mg capsules remain available and are the only brands that can support the uplift in demand.
- Zemtard 120mg XL capsules are unable to support the uplift in demand.
- An MSN was issued 18 December 2020 (attached).

#### Docusate sodium 100mg capsules

- Limited supplies of docusate sodium 100mg capsules are available until April 2021.
- Docusate sodium 50mg/5ml oral solution remains available.
- An MSN was issued 18 December 2020 (attached).

#### Isosorbide mononitrate (Isotard) 50mg modified release tablets

- Kyowa Kirin sole supplier are out of stock until w/c 18 January 2021.
- Limited emergency stock is available for order through Kyowa Kirin Medical Information: [medinfo@kyowakirin.com](mailto:medinfo@kyowakirin.com).
- Isosorbide mononitrate 50mg modified release capsules remain available.
- If the formulation is switched patients should be reassured that they are receiving the same treatment and to seek advice in the unlikely event of experiencing an increase in side effects, such as headache, or an increase in use of glyceryl trinitrate.

#### Promethazine 25mg tablets

- Teva are out of stock until April 2021.
- Phenergan (promethazine) 25mg tablets remain available from Sanofi.

## Others

#### Buprenorphine (Butec) 15 microgram/hr patches (7 day)

- Butec 15microgram/hour patches (7 day) are out of stock until w/c 18 January 2021.
- Alternative brands of buprenorphine 15microgram/hour patches (7 day) remain available.

#### COMMERCIAL-SENSITIVE

- If alternative brands of buprenorphine 15microgram/hour transdermal patches (7 day) are not considered suitable, Butec 5 and 10microgram/hour patches (7 day) remain available.
- An MSN was issued 8 December 2020 (attached).

#### Balneum Plus Bath Oil

- Balneum Plus bath oil is out of stock until early February 2021.
- All other Balneum products remain available.

#### Granisetron (Sancuso) 3.1mg/24 hours transdermal patches

- Sancuso (granisetron) 3.1mg/24 hours transdermal patches are out of stock until mid-February 2021.
- Granisetron 1mg and 2mg tablets remain available and can support an increase in demand.
- Alternatively, clinicians are advised to switch patients to alternate ondansetron preparations (as per SPC).
- Granisetron 1mg/ml concentrate for solution for injection/infusion remain available and can support an increase in demand.
- Unlicensed imports of granisetron 3.1mg/24hours transdermal patches can be sourced. Lead times may vary.
- An MSN will be issued shortly.

## Ongoing Issues

### Injectables

#### Adrenaline Auto-Injectors (AAIs)

- There are currently sufficient supplies of EpiPen and Jext to meet normal UK demand.
- Specific batches of [EpiPen](#) 300mcg have received MHRA approval for extended use by four months beyond the labelled expiry date.
- Clinicians should check with patients requesting these devices 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.
- The advice remains to conserve supplies of AAIs for patients who truly need them. All healthcare professionals providing services where anaphylaxis treatment may be required should have the competency to draw up and administer adrenaline from ampoules with a normal syringe and needle.
- We ask that when you renew the adrenaline in your anaphylaxis kits, you alert all your staff to please stock ampoules (ensuring you also include dosing charts, needles and syringes) and not AAIs.
- The [Green Book](#) and [Resus Council guidance](#) provides additional advice to healthcare professionals on the use of adrenaline in response to anaphylaxis.

#### *Emerade (Bausch & Lomb UK Ltd)*

- On [4 March](#), [7 April](#) and [18 May](#) 2020, the MHRA issued a patient level recall for Emerade 150mcg, 300mcg and 500mcg devices, respectively.
- Patients and/or carers should return Emerade 150, 300 and 500mcg auto-injectors to their local pharmacy once they have obtained a prescription for, and been supplied with, an alternative brand.

## COMMERCIAL-SENSITIVE

### Atracurium besilate solution for injection vials and ampoules (all strengths)

- Atracurium 250mg/25ml solution for injection is currently out of stock and there are limited supplies of all other strengths of atracurium injection remaining in the UK supply chain due to the recent increase in demand to support the UK's COVID-19 response.
- Supplies of non-UK licensed atracurium 50mg/5ml stock have been sourced.
- Hospitals now have the option of using a non-UK licensed atracurium presentation to support mitigation of this supply issue.
- Rocuronium is also available in sufficient quantities to support the increase in demand.
- Other neuromuscular blocking agents (NMBAs) including cisatracurium and vecuronium also continue to be available. Trusts and hospitals who use these agents should continue to do so.
- An updated [SDA](#) was issued 15 December 2020.

### Bleomycin (Bleo-Kyowa) 15,000I.U. injection

- Bleomycin 15,000I.U. injection is out of stock until at least Q3 2021.
- Specialist importers can source unlicensed products. Lead times may vary.
- An updated MSN was issued 15 May 2020 (shared previously).

### 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 for the foreseeable future.
- Jazz Pharmaceuticals currently distributes Erwinase and supplies of UK licensed stock remain available.

### Diazepam (Diazemuls) 10mg/2ml emulsion for injection

- Accord is out of stock until late March 2021.
- NOTE: There are insufficient supplies of lorazepam 4mg/ml (Ativan) injection to support, please do not use in place of Diazemuls.
- An MSN was issued 27 March 2020 (shared previously).
- UKMi have prepared a [clinical memo](#) to support management of this issue.

### Epirubicin 100mg solution for injection

- Limited supplies are currently available from Teva and Accord with full resupply expected February 2021.
- An MSN was issued 14 January 2020 (shared previously).

### Flucytosine (Ancotil) 2.5g/250ml solution for infusion

- Mylan have [recalled](#) remaining stock of certain batches as a precautionary measure after an issue at the manufacturing site. The resupply date is to be confirmed.
- Unlicensed imports are not recommended as the GMP issue has affected the global supply chain.
- Specialist importers can source unlicensed supplies of flucytosine 500mg tablets. Lead times may vary.
- Patients should be reviewed on a case-by-case basis to decide on alternative treatments.

## COMMERCIAL-SENSITIVE

### Lorazepam (Ativan) 4mg/ml solution for injection

- Lorazepam (Ativan) 4mg/ml solution for injection continues to be out of stock, with no confirmed date of resupply. Whilst stock remains, supplies will be reserved for primary care only.
- Pfizer have sourced an alternative lorazepam product from Canada in 4mg/ml multi-dose glass vials (see DHCP letter attached).
- From w/c 11 January 2021, Canadian lorazepam injection will be subject to a monthly allocation limit per organisation to ensure equity of supply.
- The US lorazepam injection 2mg/ml, supplied in Carpuject single dose cartridges which have been covering the Ativan shortage since October 2020, are no longer available to order.
- Importer companies have indicated they can source limited supplies of non-UK licensed lorazepam; strength and lead times vary.
- An updated MSN was issued 2 December 2020 (shared previously).

### Mitomycin 2mg powder for solution for injection/infusion

- Mitomycin 2mg vials are out of stock with no date for replenishment.
- Other vial sizes of mitomycin for injection and/or infusion remain available including 20mg from Vygoris Ltd and 40mg from Accord-UK Ltd.
- Mitomycin for intravesical use remains available including 20mg from Vygoris Ltd and 40mg from Medac GmbH.
- See above for information on mitomycin 10mg vials.
- Specialist importers can source unlicensed products. Lead times may vary.
- An MSN was issued 1 July 2020 (shared previously).

### Norethisterone enantate (Noristerat) 200mg solution for intramuscular injection

- Bayer are out of stock until the end of January 2021.
- Depo-Provera injection remains available.

### Phytomenadione (Konakion MM) 2mg/0.2ml injection

- Cheplapharm are out of stock of UK licensed Konakion MM Paediatric until late January 2021.
- Resupply will be of the generic product, phytomenadione 2mg/0.2ml injection.
- Supplies of Konakion MM Paediatric in tri-lingual packaging (including English; considered unlicensed in the UK) are available to support during this time via Mawdsley's Specials and Alliance Specials.
- Neokay 1mg capsules (phytomenadione) also remain available.
- An MSN was issued 21 October 2020 (shared previously).

### Ranitidine 50mg/2ml injection

- Ranitidine 50mg/2ml injection is out of stock.
- An updated MSN with clinical revisions was issued 16 June 2020 (shared previously).

### Somatropin 0.2mg MiniQuick (Genotropin) device

- Genotropin 0.2mg MiniQuick devices are out of stock until May 2021.
- All other Genotropin lines remain available.

## COMMERCIAL-SENSITIVE

### Tetracosactide 1mg depot injection

- Atnahs Pharma, sole suppliers will be out of stock until May 2021.
- Specialist importers can source unlicensed products. Lead times may vary.

### Urokinase (Syner-KINASE) injection

- Syner-Med are currently in stock of all strengths of Syner-KINASE injection.
- Supply restrictions for the 10,000IU and 25,000IU will remain in place until Q2 2021.
- Details of suggested alternative products, if required, can be found in the [UKMi memo](#).
- Additional information for the product Taurolock has been shared previously. To place orders for this product, contact [customerservice@kimal.co.uk](mailto:customerservice@kimal.co.uk) and copy [louise.kelly@kimal.co.uk](mailto:louise.kelly@kimal.co.uk)

### Verteporfin (Visudyne) 15mg powder for solution for infusion

- Cheplapharm, sole supplier is out of stock of UK licensed Visudyne until mid-2021.
- US Visudyne (considered unlicensed in the UK) is being supplied by their distributor, Neon Healthcare, in restricted quantities.
- Please contact Neon Healthcare with any queries: 01920 444 345 or [office@neonhealthcare.com](mailto:office@neonhealthcare.com)
- Specialist importers can also source unlicensed products. Lead times may vary.

## Orals

### Alprazolam (Xanax) 250mcg and 500mcg tablets

- Pfizer, sole supplier is out of stock of Xanax 250mcg and 500mcg tablets with resupply due w/c 11 January 2021.

### Chloral betaine 707mg tablets

- Atnah's, sole supplier, are out of stock until Q2 2021.
- Unlicensed specials are available through Alliance Healthcare using PIP code: 802-0745.

### Co-amilofruse 5/40 tablets

- Milpharm are out of stock with a resupply date to be confirmed.
- Sanofi (Frumil) are out of stock until w/c 11 January 2021.
- Supplies remain available from Wockhardt.

### Co-careldopa 25mg/100mg tablets

- Zentiva, a generic supplier of co-careldopa 25mg/100mg are currently out of stock until mid-January 2021.
- There are sufficient supplies of the brand *Sinemet Plus* and generic co-careldopa 25mg/100mg to cover demand.

### Colestipol (Colestid) orange 5g granules

- Colestid orange sachets are out of stock until the end of May 2021.
- Colestid plain sachets are currently available.
- UKMi have prepared a [clinical memo](#) containing further information on alternative bile-acid sequestrants.



COMMERCIAL-SENSITIVE

Colestyramine (Questran) Powder for Oral Suspension

- Cheplapharm are out of stock of Questran Powder 4g sachets until Q3 2021.
- Specialist importers can source unlicensed products. Lead times may vary.
- Colestyramine light 4g sugar free sachets remain available.
- UKMi have prepared a [clinical memo](#) containing further information on alternative bile-acid sequestrants.

Contraceptive products (oral)

- See the table below for a summary of the supply position of oral contraceptive products.
- An updated MSN was issued on 30 November 2020 (shared previously).

Product affected	Ingredients	Resupply Date	Management Advice
Brevinor	Ethinylestradiol/norethisterone 35microgram/500 microgram tablets	w/c 1 Feb 21	There are no exact equivalent preparations available in the UK market. Other ethinylestradiol and norethisterone OCP products remain available.  Clinicians are advised to refer to <a href="#">CKS guidance</a> and BNF for advice.  Unlicensed imports have been sourced; lead times vary.
Femodette	Ethinylestradiol/Gestodene 20microgram/ 75micogram tablets	w/c 18 Jan 21	Equivalent alternatives with the same composition remain available from suppliers of the following brands (please note, these brands have shared they are able to support an increase in demand): Akizza, Millinette
Microgynon 30 ED	Levonorgestrel/ Ethinylestradiol 150microgram/ 30 microgram tablets (+ 7 placebo tablets)	w/c 1 Feb 21	There are no exact equivalent preparations available in the UK market.  Other levonorgestrel/ ethinylestradiol OCP products remain available (without placebo tablets).  Clinicians are advised to refer to <a href="#">CKS guidance</a> and <a href="#">BNF</a> for advice.  Unlicensed imports of have been sourced; lead times vary.
Norimin	Ethinylestradiol/norethisterone 35microgram/1mg tablets	w/c 1 Feb 21	There are no exact equivalent preparations available in the UK market. Other

COMMERCIAL-SENSITIVE

			<p>ethinylestradiol and norethisterone OCP products remain available.</p> <p>Clinicians are advised to refer to <a href="#">CKS guidance</a> and <a href="#">BNF</a> for further advice.</p> <p>Unlicensed imports have been sourced; lead times vary.</p>
Norinyl-1	Norethisterone/ Mestranol 1mg/50micrograms tablets	w/c 15 Feb 21	<p>There are no exact equivalent preparations available in the UK market.</p> <p>Clinicians are advised to refer to <a href="#">CKS guidance</a> and <a href="#">BNF</a> for advice.</p> <p>Unlicensed imports of Norinyl-1 tablets have been sourced; lead times vary.</p>
Synphase	Ethinylestradiol/norethisterone 35microgram/500microgram and 35microgram/1mg tablets	w/c 1 Feb 21	<p>Other brands of phasic oral contraceptive tablets of differing composition remain available.</p> <p>Unlicensed imports have been sourced; lead times vary.</p>
Yiznell	Ethinylestradiol/drospirenone 30microgram/3mg tablets	Late January 21	<p>Equivalent alternatives with same composition remain available from suppliers of following brands: Dretine, Yacella, Yasmin, Ellaite and Lucette.</p>

Ferrous Fumarate 322mg/Folic Acid 0.35mg (Pregaday) tablets

- Recipharm are out of stock until late January 2021.
- An MSN was issued on 8 July (shared previously).

Fluoxetine 10mg tablets

- Endo Ventures are out of stock of fluoxetine 10mg tablets until March 2021.
- Fluoxetine 10mg capsules and fluoxetine 20mg/5ml oral solution remain available.
- An MSN was issued 12 March 2020 (shared previously).
- A [serious shortage protocol](#) (SSP) was issued on 12 March 2020.

Fluoxetine 30mg capsules

- Advanz, sole supplier is out of stock with resupply expected mid-March 2021.
- Fluoxetine 10mg and 20mg capsules remain available.
- An MSN was issued 21 October 2020 (shared previously).
- A [serious shortage protocol](#) (SSP) was issued on 20 October 2020.

Haloperidol 5mg/5ml oral solution sugar free

- Haloperidol 5mg/5ml oral solution sugar free is out of stock until March 2021.

#### COMMERCIAL-SENSITIVE

- Haloperidol (Haldol) 2 mg/ml oral solution is the only licensed oral solution that can support an uplift in demand.
- Haloperidol 500microgram, 1.5mg, 5mg and 10mg tablets remain available.
- Specials manufacturers have confirmed they can manufacture haloperidol 5mg/5ml oral solution sugar free.
- An MSN was issued 28 October 2020 (shared previously)

#### Histamine (H2) antagonists

- See the table below for a summary of the supply position with oral H2 antagonists.
- An updated MSN was issued 28 October 2020 (shared previously), a further update will be issued shortly.

Product	Supplier	Current Stock Position	Anticipated resupply date	Suggested management plan
Famotidine 20mg tablets	Tillomed	In stock	n/a	Unlicensed supplies have been sourced
	Teva	Out of stock	To be confirmed	
Famotidine 40mg tablets	Tillomed	In stock	n/a	
	Teva	Limited supplies	To be confirmed	
Cimetidine 200mg tablets	Ennogen	Out of stock	June 2021	
	Medreich	Out of stock	To be confirmed	
Cimetidine 400mg tablets	Ennogen	Out of stock	June 2021	
	Medreich	Out of stock	To be confirmed	
Cimetidine 800mg tablets	Ennogen	Out of stock	June 2021	
	Medreich	Out of stock	To be confirmed	
Cimetidine 200mg/5ml oral solution (sugar free)	Rosemont	Out of stock	June 2021	
Cimetidine (Tagamet) 200mg/5ml syrup	Essential Pharma	In stock	n/a	
Nizatidine 150mg capsules	Mylan	Out of stock	End January 2021	Unlicensed supplies have been sourced
	Medreich	Out of stock	To be confirmed	
	Relonchem	Out of stock	Early February 2021	
Nizatidine 300mg capsules	Mylan	Out of stock	End January 2021	Refer to MSN/2019/020-U2
	Medreich	Out of stock	To be confirmed	
	Relonchem	Out of stock	Early February 2021	

#### Hormone Replacement Therapy products (HRT)

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

#### Elleste oral HRT Range

- Mylan, sole supplier of the Elleste range, have limited supplies of Elleste Duet Conti available with further supplies expected by early February 2021.
- See **Table 1** for equivalent alternatives

**Table 1. Equivalent HRT alternatives for the affected products in the Elleste HRT range**

Brand	Ingredient(s)	Current Availability	Equivalent	Ingredient(s)	Current Availability
Elleste Duet Conti	estradiol 2mg/ norethisterone 1mg	Limited availability	Kliefem	estradiol 2mg/ norethisterone 1mg	In stock

#### *Ethinylestradiol 10microgram/50microgram tablets*

- UCB, sole supplier is out of stock due to manufacturing issues and currently unable to advise a resupply date.
- Specialist importers can source unlicensed products. Lead times may vary.

#### *FemSeven Transdermal patch range*

- 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 2021 except for FemSeven Conti which is now back in stock.
- Specialist importers can source unlicensed products. Lead times may vary.

#### *Isosorbide Mononitrate (Imdur) 60mg modified release tablets*

- Topridge, sole supplier, are out of stock until April 2021.
- Parallel imports remain available as well as other brands of isosorbide mononitrate 60mg modified release tablets.
- If the brand is switched, reassure patients that they are receiving the same treatment and to seek advice in the unlikely event of experiencing an increase in side effects, such as headache, or an increase in use of glyceryl trinitrate.

#### *Ketotifen (Zaditen) 1mg/5ml oral solution*

- Limited supplies of Zaditen oral solution are currently available with further resupply in late January 2021.
- Zaditen 1mg tablets are currently available.
- Specialist importers can source unlicensed ketotifen oral solution. Lead times may vary.
- An MSN was issued on 17 July 2020 (shared previously).

#### *Lithium carbonate (Priadel) 200mg and 400mg tablets*

- Essential Pharma have issued a legally binding commitment with the Competition and Markets Authority (CMA) to continue to supply Priadel tablets for a minimum of five years to the UK, thereby securing the long-term availability of this crucial medicine. Further information can be found [here](#).
- DHSC have agreed a revised price for Priadel 200mg and 400mg tablets with Essential Pharma. The following NHS list prices have been agreed:
  - Priadel MR 200mg x 100 tablets £7.50
  - Priadel MR 400mg x 100 tablets £8.50

#### COMMERCIAL-SENSITIVE

- All patients who are prescribed lithium treatment should now continue to be managed in line with usual clinical practice underpinned by the relevant NICE guidance.
- An updated [SDA](#) was issued 4 January 2021.

#### Mianserin 10mg and 30mg tablets

- Mylan, sole supplier is out of stock of both strengths until Q2 2021.
- Specialist importers can source unlicensed products. Lead times may vary.
- For patients where imports are not appropriate, see previous updates for clinical advice.

#### Moclobemide 150mg and 300mg tablets

- Mylan (Manerix) are currently in stock of both strengths.
- Sandoz currently expect resupply for the 150mg tablet in July 2021 and the 300mg tablet in March 2021.

#### Penicillamine 250mg tablets

- Kent Pharmaceuticals are out of stock until the end of January 2021.
- Mylan have supplies of penicillamine 125mg and 250mg tablets available.

#### Pethidine 50mg tablets

- Martindale and Teva are out of stock. Teva do not have a date of resupply however Martindale anticipate having stock available in February 2021.
- Specialist importers can source unlicensed products. Lead times may vary or be extended as this product is a controlled drug.
- An MSN was issued on 7 August 2020 (shared previously).

#### Phenelzine sulphate (Nardil) 15mg tablets

- Kyowa Kirin, the previous sole supplier, has been out of stock due to manufacturing delays since August 2019 and was unable to provide a resupply date.
- In September 2020, Kyowa Kirin advised Nardil has been divested to Neon Healthcare. Resupply date is to be confirmed.
- Specialist importers are sourcing unlicensed imports of the tablets.
- Supplies of phenelzine 15mg capsule specials are also available. Further information can be found in the SDA.
- An [SDA](#) was issued on 25 June 2020 and a subsequent update was issued on the 3 July 2020.

#### Phenytoin sodium NRI 100mg capsules

- Accord remains out of stock of phenytoin sodium NRI 100mg capsules with resupply to be confirmed.
- Flynn Pharma can support the full market during this time.
- As phenytoin is classed as a Category 1 anti-epileptic drug by the MHRA, switching to an alternative formulation requires monitoring and may also require specialist support, advice or referral.
- An [SDA](#) was issued on 10 January 2020.

#### Prazosin (Hypovase) 1mg tablets

- Hypovase 1mg tablets are out of stock with resupply date to be confirmed.

#### COMMERCIAL-SENSITIVE

- Hypovase 500mcg tablets are currently available and able to support the full market demand for both strengths.

#### Pristinamycin 500mg tablets

- Pristinamycin is only available in the UK as an unlicensed medicine via specialist importers.
- Specialist importer companies currently only have access to a very limited supply.
- Please contact your Trust Microbiology clinical leads for further guidance on alternatives if required.

#### 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.
- An updated MSN with clinical revisions was issued 12 June 2020 (shared previously).

#### Sterculia 62% with frangula bark 8% granules (Normacol Plus)

- Normacol Plus granules are currently out of stock with resupplies expected early February 2021.
- Specialist importers can source unlicensed products. Lead times may vary.
- An MSN was issued 27 August 2020 (shared previously).

#### Trifluoperazine 1mg/5ml syrup

- Trifluoperazine 1mg/5ml syrup is out of stock until April 2021.
- Trifluoperazine 1mg and 5mg tablets remain available and can support an increase in demand.
- Specials manufacturers have confirmed they can manufacture trifluoperazine 1mg/5ml oral suspension.
- Trifluoperazine 5mg/5ml oral solution remains available and can support an increase in demand.
- An MSN was issued 10 November 2020 (shared previously).

#### Tuberculosis medications

- The final MSN for TB oral agents was issued 28 September 2020 (shared previously).
- See table in the MSN for a summary of the supply position with tuberculosis medications.

#### Valsartan capsules

- There are ongoing intermittent supplies of valsartan. See the table below for an overview of current availability:

Product	Supplier	Current Stock Position	Anticipated resupply date
Valsartan 40mg capsules	Mylan	In stock	n/a
	Teva	In stock	n/a
	Milpharm	Out of stock	To be confirmed
	Crescent	In stock	n/a
Valsartan 80mg capsules	Mylan	In stock	n/a
	Teva	In stock	n/a

COMMERCIAL-SENSITIVE

	Milpharm	Out of stock	To be confirmed
	Crescent	Out of stock	Late Jan 2021
Valsartan 160mg capsules	Mylan	In stock	n/a
	Teva	In stock	n/a
	Milpharm	Out of stock	To be confirmed
	Crescent	Out of stock	Late Jan 2021
Valsartan 320mg capsules	Mylan	In stock	n/a

Zonisamide 25mg, 50mg and 100mg capsules

- There are ongoing intermittent supplies of zonisamide. See the table below for an overview of current availability.
- An updated MSN was issued 28 October 2020 (shared previously).

Product	Supplier	Current Stock Position	Anticipated resupply date
Zonisamide 25mg capsules	Eisai	In stock	n/a
	Teva	Out of stock	w/c 1 Mar 2021
	Glenmark	In stock	n/a
Zonisamide 50mg capsules	Eisai	In stock	n/a
	Teva	Out of stock	w/c 1 Mar 2021
	Glenmark	In stock	n/a
Zonisamide 100mg capsules	Eisai	In stock	n/a
	Teva	Out of stock	w/c 18 Jan 2021
	Glenmark	In stock	n/a

Others

Bisacodyl (Dulcolax) 5mg and 10mg suppositories

- Sanofi, sole supplier is currently out of stock of Dulcolax 5mg suppositories until w/c 1 March 2021.
- Dulcolax 10mg suppositories are currently out of stock until w/c 1 February 2021 followed by limited supplies until March 2021.
- Other laxatives remain available.
- An updated MSN was issued 10 November 2020 (shared previously).

## COMMERCIAL-SENSITIVE

### Desmopressin (DDAVP) 0.01% w/v intranasal solution

- DDAVP (desmopressin) 0.01% w/v (100micrograms/ml) intranasal solution is out of stock until mid-2021.
- Supplies of desmopressin 100micrograms/ml nasal spray (10 micrograms per actuation) remain available from Aspire Pharma Ltd and can fully support demand during this time for patients on doses  $\geq 10$  microgram.
- Unlicensed imports of desmopressin 100micrograms/ml intranasal solution can be sourced.
- An MSN was issued 15 October 2020 (shared previously).

### Desmopressin (Desmospray) 10micrograms/actuation nasal spray

- Ferring Pharmaceuticals have [recalled](#) Desmospray with resupplies expected in mid-2021.
- Desmopressin 10micrograms/actuation nasal spray remains available from Aspire Pharma Ltd.

### Desmopressin (Octim) 150microgram/actuation nasal spray

- Desmopressin (Octim) 150 micrograms/actuation nasal spray is out of stock until mid-2021.
- Ferring Pharmaceuticals have [recalled](#) Octim nasal sprays as a precautionary measure due to a lower volume of solution being observed and out of specification results of desmopressin acetate and benzalkonium chloride.
- Desmopressin (Octim) 15 micrograms per ml injection remains available and can be prescribed as an alternative.
- An MSN was issued 2 October 2020 (shared previously).

### Fludrocortide 0.0125% cream

- Typharm Limited cannot release further stock of fludrocortide cream due to updates to their licences and changes to regulatory standards.
- There is no confirmed resupply date.
- Fludrocortide 4micrograms/cm<sup>2</sup> tape remains available.

### Fluticasone propionate (Flixotide) 0.5mg/2ml and 2mg/2ml nebulas

- Both strengths of Flixotide nebulas are out of stock until mid-February 2021.
- An MSN was issued on 26 June (shared previously).

### Metronidazole (Acea) 0.75% gel

- Ferndale Pharmaceuticals are out of stock of Acea 0.75% gel until March 2021.
- Metrogel 0.75% and Rozex gel 0.75% gel remain available.
- An MSN was issued on 17 July 2020 (shared previously).

### Prednisolone 5mg suppositories

- RPH Pharmaceuticals are out of stock until the end of January 2021.
- Specialist importers can source unlicensed products. Lead times may vary.
- An MSN was issued on 10 June (shared previously).

### Sodium cromoglycate (Intal) 5mg inhaler

- Sanofi are out of stock until March 2021.



#### COMMERCIAL-SENSITIVE

- Parallel imports are available through Alliance or directly from DrugsRUs.

## Eye drops/treatments

### Chloramphenicol (Eykapo) 5mg/ml Preservative Free Eye Drops 10ml

- Aspire Pharma, sole supplier of a multidose preservative free chloramphenicol eye drop, are out of stock until w/c 11 January 2021.
- Minims chloramphenicol 0.5% single-use eye drops remain available for patients who require a preservative free formulation.

### Sofradex ear/eye drops

- Out of stock with resupply expected end of January 2021.
- Alternative preparations for use in the ear/eye remain available.

## Vaccines

**For updates on other vaccine supply positions, please refer to PHE's [Vaccine Update Bulletin](#).**

### Hepatitis B Vaccines

#### Renal dose

- MSD's renal vaccine HBVAXPRO 40micrograms are unavailable until end of 2020
- GSK's Hepatitis B renal vaccine, Fendrix, is currently available.

#### Adult dose

- MSD are out of stock HBVAXPRO 10mcg vaccine unavailable until end of 2020
- GSK are confident they can support the increased demand during this time.

### Pneumovax 23 pre-filled syringes

- Supplies of Pneumovax 23 pre-filled syringes (PFS) are out of stock until late January 2021 due to increased demand.
- An updated Vaccine Supply Notification (VSN) was issued 11 December 2020 (attached).
- The VSN includes the clinical prioritisation guidance issued by PHE. This is also available in PHE's [November edition of Vaccine Update bulletin](#) (pages 3-6).

## Discontinuations

### Aripiprazole 30mg tablets (Niche Generics)

- Niche Generics have discontinued aripiprazole 30mg tablets from the UK market with immediate effect.
- Aripiprazole 30mg tablets remain available from alternate generic suppliers.

### Diamorphine 10mg tablets (Ethypharm)

- Ethypharm plan to discontinue diamorphine 10mg tablets from the UK market in January 2021.
- There are no other suppliers of diamorphine 10mg tablets.

#### COMMERCIAL-SENSITIVE

- However, suitable therapeutic alternatives including oral morphine preps remains available.

#### Itraconazole (Sporanox) IV 10 mg/ml concentrate and solvent for solution for infusion (Janssen)

- Janssen have discontinued Sporanox IV and stocks are now exhausted.
- Itraconazole IV 10mg/ml concentrate and solvent for solution for infusion remains available from alternate generic suppliers.

#### Losartan 50mg / Hydrochlorothiazide 12.5mg tablets (Teva)

- Teva have discontinued Losartan 50mg / Hydrochlorothiazide 12.5mg tablets from the UK market with immediate effect.
- Losartan 50mg / Hydrochlorothiazide 12.5mg tablets remain available from alternate generic suppliers.

#### Metformin (Glucient SR) 500mg tablets (Consilient)

- Consilient have discontinued Glucient SR 500mg tablets from the UK market with immediate effect.
- Metformin 500mg tablets remain available from alternate suppliers.

#### Oxycodone (Onexila XL) 40mg & 80mg tablets (Rivopharma)

- Rivopharma have discontinued Onexila XL 40mg & 80mg tablets from the UK market with immediate effect.
- Oxycodone 40mg & 80mg tablets remain available from alternate suppliers.

#### Paracetamol (Perfalgan) 500mg/50ml and 1g/100ml solution for infusion (BMS)

- BMS plan to discontinue Perfalgan 500mg and 1g solution for infusion from the UK market with immediate effect.
- Paracetamol solution for infusion remains available from alternate generic suppliers.

#### Sildenafil 25mg (4 & 8 tablet packs) & 50mg (4 tablet pack) tablets (Upjohn/ Viatris)

- Upjohn/Viatris have discontinued sildenafil 25mg & 50mg tablets from the UK market.
- Sildenafil 25mg & 50mg tablets remain available from generic suppliers.

#### Sulindac 100mg & 200mg tablets (Chemidex)

- Chemidex plan to discontinue Sulindac 100mg & 200mg tablets from the UK market in January 2021.
- Mylan, the sole supplier, of Sulindac 100mg & 200mg tablets have confirmed that they can cover the whole market.

## Resolved

Diamorphine 5mg, 10mg and 30mg injection  
Elleste Duet 1mg and 2mg tablets (17/12/20)  
Enalapril 20mg tablets (17/12/20)  
Entacapone 200mg tablets (11/12/20)  
FemSeven Conti patch (8/1/21)  
Hyaluronidase (Hyalase) 1500I.U. Powder for Solution for injection/infusion (21/12/20)  
Meloxicam 7.5mg tablets (23/12/2020)  
Mupirocin (Bactroban) 2% cream (06/01/21)  
Pancreatin (Pancrex V and Pancrex V 125mg) capsules (23/12/20)  
Phenindione 10mg and 25mg tablets (16/12/20)  
Remdesivir 100mg powder for concentrate for solution for infusion and concentrate solution for infusion (4/12/20)  
Rifampicin (Rifadin) 100mg/5ml oral suspension (12/12/20)  
Ritonavir 100mg tablets (4/1/21)  
Sulfasalazine (Salazopyrin-En) gastro-resistant 500mg tablets (23/12/20)  
Tapentadol (Palexia) 20mg/ml oral solution (15/12/20)

COMMERCIAL-SENSITIVE

## Appendix

Table 2: HRT availability and anticipated resolution dates

<b>Oestrogen Only</b>						
Ingredient (s)	Manufacturer	Brand	Strength	Current Availability	Anticipated resupply date	
						Oral preparations
Estradiol hemihydrate	Mylan	Elleste Solo	1mg	In stock		
			2mg	In stock		
	Mylan	Zumenon	1mg	In stock		
			2mg	In stock		
Estradiol valerate	Bayer	Progynova	1mg	In stock		
			2mg	In stock		
Conjugated oestrogen	Pfizer	Premarin	300mcg	In stock		
			625mcg	In stock		
			1.25mg	In stock		
Ethinylestradiol	UCB pharma Ltd.	Ethinylestradiol	10mcg	Long term OOS	Unlicensed imports available; lead times vary	
			50mcg	Long term OOS		
			1mg	Long term OOS		
<b>Transdermal patches</b>						
Estradiol	Theramex	Evorel	25 mcg	In Stock		
			50mcg	In Stock		
			75mcg	In Stock		
			100mcg	In Stock		
Estradiol hemihydrate	Novartis	Estradot	25 mcg	In stock		
			37.5mcg	In stock		
			50mcg	In stock		
			75mcg	In stock		
			100mcg	In stock		
			Estraderm	25 mcg		In stock
				50mcg		In stock

COMMERCIAL-SENSITIVE

	Merus Labs/Norgine		75mcg	In stock	Q2 2021
			100mcg	In stock	
	Theramex	FemSeven Mono	50mcg	Long term OOS	
			75mcg	Long term OOS	
			100mcg	Long term OOS	
	Bayer	Progynova TS	50mcg	In stock	
			100mcg	In stock	
	Mylan	Elleste Solo MX	40mcg	In stock	
80mcg			In stock		
<b>Topical (Transdermal gels/creams/other delivery systems)</b>					
Estradiol	Besins Healthcare (UK) Ltd	Oestrogel	0.06%	In stock	
Estradiol hemihydrate	Orion	Sandrena	0.5mg	In stock	
			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	
<b>Progestogen only</b>					
Levonorgestrel	Bayer	Mirena Intrauterine device	20mcg/24 hr	In stock	
Progesterone	Besins Healthcare (UK) Ltd	Utrogestan	100mg	In stock	
		Utrogestan	200mg	In stock	
<b>Combined HRTs (Progestogen and oestrogen)</b>					

COMMERCIAL-SENSITIVE

Continuous combined therapy					
Oral preparations					
Estradiol hemihydrate / norethisterone acetate	Mylan	Elleste Duet Conti	2mg / 1mg	In stock (limited)	
	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	In stock	
			2mg/ 5mg	In stock	
			1mg/5mg	In stock	
low dose conjugated oestrogen/medroxyprogesterone	Pfizer	Premique	300mcg/1.5mg	In stock	
Transdermal patch					
Estradiol hemihydrate/ norethisterone acetate	Theramex	Evorel Conti	3.2mg/11.2mg	In stock	
Estradiol hemihydrate/ levonorgestrel		FemSeven Conti	1.5mg/ 0.525mg	In stock	
Sequential combined therapy					
Oral preparations					
Estradiol hemihydrate / norethisterone acetate	Mylan	Elleste Duet	1mg/ 1mg	In stock	
			2mg/ 1mg	In stock	
Femoston		1mg/ 10mg	In stock		
		2mg/10mg	In stock		

COMMERCIAL-SENSITIVE

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	
<b>Transdermal patch</b>					
a) Estradiol hemihydrate and b) estradiol hemihydrate/ norethisterone acetate	Theramex	Evorel Sequi	a)3.2mg b) 3.2 mg /11.2 mg	In stock	
a) 1.5mg of estradiol hemihydrate b) Estradiol hemihydrate /levonorgestrel		FemSeven Sequi	a) 1.5mg b) 1.5mg /1.5mg	Long term OOS	Q2 2021
<b>Gonadomimetic (s)</b>					
Tibolone 2.5mg	MSD/Advanz pharma	Livial tablets	Tibolone 2.5mg	In stock	
<b>Selective oestrogen receptor modulator</b>					
Ospemifene 60mg tablets	Shionogi	Senshio tablets	Ospemifene 60mg tablets	In stock	