**Supply Issues Update for Primary and Secondary Care March 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 as it may be commercially sensitive. Please share with relevant colleagues and networks.

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**Information provided w/c 1st April 2019**

# New Issues

## Injectables

### Ativan injection

* Pfizer are experiencing a short-term delay to their next delivery and are now out of stock but have a delivery arriving this week that should be available for customers to order from their wholesaler by Wednesday 10th April 2019
* UKMI have previously prepared advice regarding alternatives, which can be found [here](https://www.sps.nhs.uk/articles/shortage-of-ativan-lorazepam-injection-4-mg-in-1-ml/)
* We have checked the supply of alternative products as per the memo and supplies remains available from the various suppliers, however Buccolam (midazolam buccal) is short term out of stock, with their next delivery being made available early next week (w/c 8th April 2019).
* As lorazepam injection will be out of stock for less than a week there are no unlicensed imports available.

### Fentanyl 50mcg/ml 2ml injection

* There have been recent issues affecting fentanyl injection:
  + Martindale have recently been out of stock but are now back in stock.
  + Advanz is out of stock until June 2019.
  + Hameln have been able to supply some stock in recent weeks but this has almost now been depleted.
* We are continuing to work closely with all suppliers to ensure that supplies remain available and will provide further updates as the situation changes.

### Furosemide injection

* Some community pharmacies are having difficulty obtaining furosemide injections.
* Supplies have confirmed they are all currently have stock available and information on how to order is also provided:
  + Intrapharm: Community pharmacies can place direct orders by contacting Sunil Shaunak; [shaunak@riemser.com](mailto:shaunak@riemser.com)
  + Accord: If community pharmacies contact customer services directly, they will remove the hospital only marker for that individual account and the pharmacy can then order this product.
  + Hameln: stock is managed through direct orders for hospitals only. Wholesalers are free to purchase stock for distribution through their network and Hameln would place no restrictions on who purchases stock from wholesaler.

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### Hydrocortisone sodium succinate 100mg injection

* There is supply issue affecting the two UK suppliers of hydrocortisone sodium succinate injection.
* Panpharma has experienced manufacturing delays due to API issues and are currently out of stock; they do not expect to have replacement stock until mid-April.
* Pfizer, the other supplier, are currently supporting the full market, however they have recently informed us that they are expecting a temporary out of stock period from **17 March** to **4 April 2019**
* There is a very limited supply of hydrocortisone sodium succinate single vials available from Pfizer, which is being reserved for primary care use.
* We have been working closely with the unlicensed specialist importer companies who are able to source stock for this short stock out period.
* Advanz, the sole supplier of hydrocortisone sodium phosphate injection currently has very limited stock available and cannot support the additional demand. The product is used for emergency administration, so it would be very problematic if this stock was depleted. **We are therefore not recommending this as an alternative, please do not order this product to cover the gap.**

### Idarubicin 10mg injection

* Pfizer will shortly be out of stock of Idarubicin 10mg injection across all depots in the UK due to a quality issue until August 2019.
* Pfizer are working with the manufacturers of the 5mg presentation to understand the volumes they can secure over the coming months but at this stage there is insufficient 5mg injection to cover forecasted demand of 10mg.
* Accord are the only alternative license holder and do not actively manufacturer this product. They have no further stock available to support this supply issue (limited stock remains at Mawdsley’s). We will continue to work with Accord to look at future manufacturing scheduling.
* We have been working with the importers on this issue and companies have confirmed that limited supplies are available from Europe and USA – hospitals requiring stock should place orders NOW for unlicensed imports as lead times will vary.
* **Due to the very limited availability of idarubicin injection, we are asking that NO NEW PATIENTS be started on any regimens that contain idarubicin from Monday 1st April 2019 until further notice.**
* Hospitals who have surplus stock have been asked to consider sharing supplies locally.
* Work is ongoing with clinical leads and suppliers of alternative medicines to ascertain stock levels of proposed alternatives; this information will help support the development of clinical guidance. This information is being collated and evaluated over the coming days and we hope to have further guidance following full consultation shortly.

### Mivacron (mivacurium chloride) injection

* Aspen Pharma will be out of stock of mivacurium chloride 2mg/ml 5ml ampoules from 1st May – 24th June 2019 and the 10ml ampoules from 30th April – 27th July 2019.
* There are alternative non-depolarising neuromuscular blocking drugs in the benzylisoquinolinium group available. Please consult local anaesthetists for advice on switching between agents.

### Neurobloc (Botulinum Toxin Type B)

* Neuroblos (Botulinum Toxin Type B) will not be available until July 2019 due to the product being divested from Eisai to Sloan Pharma.
* DHSC has worked with the specialist importers during this time and can confirm that unlicensed Botulinum Toxin Type B is available from abroad, but lead times may vary.

### Urokinase injection

* Further to our previous communications on urokinase injection, Syner-med have now confirmed that all three urokinase strengths, 10,000unit, 25,000unit and 100,000 unit, are now **out of stock** and anticipated resupply dates are provided below:
  + 10,000IU – further stock due early June;
  + 25,000IU –further stock due mid-May;
  + 100,000IU – further stock due early June.
* We are aware that unlicensed imports are not readily available or in sufficient quantities to fully meet demand during this time and therefore Trusts are asked to review their current usage of urokinase and consider using an alternative product. Details of suggested alternative products can be found in a [memo produced by UKMi](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/).
* We have been in contact with all the suppliers of the suggested alternatives and can confirm that they have sufficient supplies available to support during this time.
* Additional information for the product Taurolock is also attached. If you would like to place orders for this product please contact [customerservice@kimal.co.uk](mailto:customerservice@kimal.co.uk) and copy [louise.kelly@kimalco.uk](mailto:louise.kelly@kimalco.uk)

## Orals

### Abacavir 300mg tablets

* Mylan are experiencing a delay in the manufacture of abacavir 300mg tablets
* A small volume of Mylan stock is still available via Alliance Healthcare with further stocks available for order via wholesalers on 12th April 2019
* Viiv Healthcare can support during this out of stock period with *Ziagen 300mg tablets*, which can be ordered via Alliance.
* Only order based on historical demand and review existing stock holding before placing orders.

### Creon 25,000

* Mylan have experienced a short term issue and will be fully back in stock during the w/c 8th April.

### Epanutin (phenytoin) 50mg Chewable Infatabs

* Pfizer have informed DHSC of a temporary supply issue with Epanutin Infatabs from 1st May until September 2019 due to a delay in manufacturing.
* To help mitigate the shortage Pfizer has obtained approval from the MHRA to import stock of Dilantin (phenytoin) Infatabs from Canada.
* Canadian packs of Dilantin are considered as an unlicensed product in the UK. A copy of the product information can be found attached to this update.
* Epanutin 30 mg/5 ml Oral Suspension remains available, however, supplies are only available to meet normal market demand as such patients should not be switched to Epanutin Oral Suspension as this may precipitate a shortage of this presentation.
* Further communications to follow from Pfzier shortly.

### Epilim preparations

* In January and February 2019, Sanofi experienced some short-term supply issues affecting Epilim preparations due to constraints in their manufacturing capacity.
* During these periods, there were some reduced stock available on the market for specific preparations and Sanofi issued the attached public statement.
* DHSC continue to engage with Sanofi and monitor the situation closely.
* Sanofi have confirmed supplies of all preparations are currently available however there are quotas in place. If a pharmacy is having difficulty obtaining any Epilim preparations please contact Sanofi Customer Care on: 01483 505 515

### Felotens XL (felodipine modified-release) tablets

* Genus Pharmaceuticals are currently out of stock of Felotens (Felodipine) XL 5mg & 10mg tablets; further supplies are expected in April 2019.
* DHSC has contacted manufacturers of alternative modified release felodipine and can confirm these products are currently available.

### Hormone Replacement Therapy products (HRT)

#### FemSeven Products

* Theramex, the supplier of FemSeven Conti and Sequi patches are experiencing long term supply issues affecting both products and expect to be out of stock until late 2019.
* This supply issue does not affect supplies of FemSeven Mono.
* Supplies of other HRT patches and products continue to remain available.

#### Elleste Range

* Mylan, the sole manufacturer of the Elleste HRT product line has reported that some of the Elleste range (Elleste Solo 1mg, 2mg; Elleste Duet Conti; Elleste Duet 1mg) are currently unavailable due to manufacturing issues.
* The resupply date for the Elleste range is expected to be the end of April 2019.
* As per UKMI advice, please see the table below for equivalent alternatives currently available on the market, if required.

Table 1. Equivalent HRT alternatives for the Elleste HRT range

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Brand | Ingredient(s) | Current  Availability | Equivalent | Ingredient(s) | Current Availability |
| Elleste Solo 1mg | estradiol hemihydrate | Out of stock | Progynova 1mg | estradiol hemihydrate | In Stock |
| Zumenon 1mg | In Stock |
| Elleste Solo 2mg | estradiol hemihydrate | Out of Stock | Progynova 2mg | estradiol hemihydrate | In Stock |
| Zumenon 2mg | In Stock |
| Elleste Duet Conti | estradiol 2mg/ norethisterone 1mg | Out of Stock | Kliofem | estradiol 2mg/ norethisterone 1mg | In Stock |
| Elleste Duet 1mg | estradiol 1mg/ norethisterone 1mg | Out of Stock | NovoFem | estradiol 1mg/ norethisterone 1mg | In Stock |

### Hydroxyzine 25mg tablets

* Creo Pharma are out of stock of hydroxyzine 25mg tablets until July 2019. They remain in stock of 10mg tablets.
* Alliance Pharmaceuticals can support the full market of the 25mg tablets during this time.

### Levitra (vardenafil) tablets

* Bayer are out of stock of Levitra 5mg and 10mg tablets, and 10mg orodispersible tablets until November 2019.
* Several other generic preparations of vardenafil tablets remain available.

### Olena (fluoxetine) 20mg dispersible tablets

* Advanz Pharma, the sole manufacturer of Olena (Fluoxetine) 20mg dispersible tablets, are currently out of stock; further supplies are expected in May 2019.
* An oral solution, fluoxetine 20mg/5ml, is available from alternative manufacturers.

### Questran Light (colestyramine) 4g sachets

* Bristol-Myers Squibb (BMS) have informed DHSC of a supply issue with Questran Light sachets due to a shortage of the active pharmaceutical ingredient.
* BMS anticipate limited resupply by week ending 19th April 2019.
* Emergency supply processes have been implemented via Alliance Healthcare and will remain in place until May 2019 to avoid a total out of stock situation.

### Ranitidine effervescent 150mg tablets

* Waymade are currently out of stock of ranitidine 150mg effervescent tablets until September 2019.
* Other generic preparations of ranitidine effervescent tablets remain available.

### Vibramycin-D (doxycycline) dispersible tablets

* Pfizer have reported a supply issue with Vibramycin-D dispersible tablets and expect to be out of stock for at least 5 weeks from 25th March to the end of April 2019.
* Advice from our clinical colleagues at UKMI recommends where doxycycline is indicated in a patient who cannot swallow solid dosage forms, prescribers should refer to local guidance for alternatives or consult microbiologists in more complex cases.

Others

### Canestan (clotrimazole) 500mg pessaries

* Pfizer have informed DHSC they are out of stock of Canestan 500mg pessaries (‘P med’ until June 2019; ‘POM’ until early May 2019).
* There are alternative suppliers of this product available.

## Eye drops/treatments

### Betnesol (betamethasone 0.1%) eye/ear/nose drops

* RPH Pharmaceuticals are currently out of stock of betamethasone 0.1% eye/ear/nose drops with a resupply date of late 2019. Martindale Pharma can support the full market during this time.

# Ongoing Issues

Injectables

### Bleomycin injection

* Kyowa Kirin, the sole supplier of bleomycin injection is out of stock with resupply expected 8 April.
* Unlicensed specials importers can access supplies in line with usual demand. Lead times may vary. Further information has been circulated to your regional procurement specialists.

### Dimercaprol 50mg/mL injection

* Advanz Pharma, sole supplier of this product, have advised that dimercaprol injection will be unavailable from the end of February until July 2019.
* Advice by RCEM/NPIS on antidote availability in Emergency Departments is available [here](https://www.sps.nhs.uk/articles/regional-medicines-optimisation-committee-antidotes-and-rums-position-statement/).
* NHS Trusts should contact the NPIS for clinical advice if required.

### Doxorubicin powder for injection

* Medac have now discontinued supply of doxorubicin powder for injection and they have exhausted all stock – letter for further information is attached.
* Doxorubicin solution for injection remains available from several suppliers.
* We are aware that there are specialist indications which are prepared via PMUs that require the powder presentation specifically as a very concentrated solution is required (e.g TACE drug-eluting beads). Discussions are ongoing with clinical / technical colleagues to determine if there is an alternative technical method using the solution for injection which can be put in place.
* Merit can provide information about HepaSphere microspheres for TACE.
* Unlicensed imports continue to be available; lead times may vary and quantities are limited.

### Epanutin (phenytoin sodium) Ready Mixed Parenteral 250mg/5ml

* Pfizer are out of stock of this product until May 2019, but continue to have supplies of Phenytoin Hospira Injection BP, and some other generic presentations of Phenytoin IV also remain available.
* Clinical teams should refer to local IV monographs when switching to other Phenytoin IV products.

### EpiPen and EpiPen Junior

* The supply situation for EpiPen and EpiPen Juniors continues to improve, and further stock is due in the coming months.
* All preparations of EpiPen, Emerade and Jext adult and junior are currently available via wholesalers.
* Stock of EpiPen Junior remains available via a prescription validation process for the foreseeable future. Pharmacies are allocated stock on a prescription-only basis and can place orders for up to a maximum of two EpiPen Junior 0.15mg auto-injectors per prescription. Information about this process is available on the [EpiPen website](http://www.epipen.co.uk/) under the ‘Instruction to Pharmacists’ section

Erwinase

* Porton Biopharma, the manufacturer of Erwinase, have had ongoing manufacturing issues affecting this product for the past 1-2 years.
* Jazz Pharmaceuticals distributes Erwinase and currently have limited supplies available. However, it is likely ongoing intermittent supply issues will continue during 2019.
* Jazz works closely with the clinical networks and supplies are prioritised on a patient need basis and in conjunction with the treating clinicians.

### Fludarabine 50mg/2ml injection

* Teva have reported a supply issue with fludarabine solution for injection and expect to be out of stock from 7/4/19 until the next delivery in July 2019 due to API issues.
* Current updates from Accord:
  + The 25mg/1ml solution for injection is currently available
  + Accord are out of stock of the powder presentation and expect a delivery in mid-April 2019
* Sanofi have limited stock of the 50mg powder presentation (Fludara) and are not able to support any increase in demand.

### Flupentixol injection

* Mylan are out of stock of flupentixol injection with anticipated resupply dates as below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Description | Brand | Pack | Out of stock date | Anticipated Resupply Date |
| FLUPENTIXOL SOLUTION FOR INJECTION AMP 20MG/1ML | Psytixol | 10 x 1ml | w/c 18 March | 08/04/2019 |
| FLUPENTIXOL SOLUTION FOR INJECTION AMP 40MG/2ML | Psytixol | 10 x 2ml | w/c 25 Feb | 16/04/2019 |
| FLUPENTIXOL SOLUTION FOR INJECTION AMP 50MG/0.5ML | Psytixol | 10 x 0.5ml | w/c 25 Feb | 08/04/2019 |
| FLUPENTIXOL SOLUTION FOR INJECTION AMP 100MG/1ML | Psytixol | 10 x 1ml | w/c 5 March | 04/04/2019 |
| FLUPENTIXOL SOLUTION FOR INJECTION AMP 200MG/1ML | Psytixol | 5 x 1ml | w/c 25 Feb | 15/03/2019 |

* Lundbeck are currently in stock of their Depixol product range as per product description below.
* All products are available to order through Alliance

|  |  |  |
| --- | --- | --- |
| **Description** | **Brand** | **Pack** |
| FLUPENTIXOL SOLUTION FOR INJECTION AMP 20MG/1ML | Depixol | 10 x 1ml |
| FLUPENTIXOL SOLUTION FOR INJECTION AMP 100MG/1ML | Depixol | 10 x 1ml |
| FLUPENTIXOL SOLUTION FOR INJECTION AMP 200MG/1ML | Depixol | 5 x 1ml |

* Unfortunately, there is no Depixol 40mg or 50mg injection as part of the product range. In order to administer these doses, there would have to be some manipulation of the above products, this will need highlighting to clinical staff and appropriate information and support provided.

### Gadovist preparations

* Bayer are experiencing ongoing manufacturing issue at their site in Berlin is affecting supplies of their Gadovist presentations. This issue is likely to go on for a number of months.
* We have engaged with Bracco and Guerbet regarding their supply position on other gadolinium containing products. Both companies have good supplies available and have sufficient stock to support this supply issue
* Please see full summary/stock potion in table below.

|  |  |  |
| --- | --- | --- |
| **Manufacturer** | **Presentation** | **Stock Availability** |
| Bayer Plc | Gadovist 1mmol/ml solution for injection 10ml pre-filled syringes | Currently **in stock**. The scheduled delivery arrived in the middle of March as planned, covering back-orders and providing a limited re-stock until April; however, another OOS period is then expected to start in May and extend into June. Overall, it is anticipated that restricted supply will be likely to continue through Q2/Q3 2019, due to production problems. |
| Bayer Plc | Gadovist 1mmol/ml solution for injection 15ml vials | Currently **OOS**. The delivery planned in early March only provided partial cover for back-orders as anticipated, so it will remain practically OOS until the next delivery which was scheduled for end of March. This should provide a re-stock until the subsequent delivery arrives at the end of April. Overall, it is anticipated that restricted supply will be likely to continue through Q2/Q3 2019, due to production problems. |
| Bayer Plc | Gadovist 1mmol/ml solution for injection 5ml pre-filled syringes | Currently **in stock.** The scheduled delivery arrived at the end of February and is expected to last until early May. It is anticipated that we will then be OOS until the next planned delivery arrives in July. Overall, it is anticipated that restricted supply will be likely to continue through Q2/Q3 2019, due to production problems. |
| Bayer Plc | Gadovist 1mmol/ml solution for injection 7.5ml pre-filled syringes | Currently **OOS**. The next delivery is scheduled for  early April. The April delivery is expected to provide stock cover until early May, but it is anticipated that we will then go OOS for approx. 6 - 7 weeks until the following delivery arrives in the w/c 24 June. Overall, it is anticipated that restricted supply will be likely to continue through Q2/Q3 2019, due to production problems. |
| Bayer Plc | Magnevist 2mmol/l solution for injection 1 x 20 ml pre-filled syringe | Currently **out of stock.** The next scheduled deliveries have been delayed by approx. 1-2 months*.* Next delivery is now due in July. However, anticipated stock quantities lead to the expectation that each delivery will be consumed by back-orders. Therefore, supply will continue to be significantly interrupted/reduced until at least Q3 2019. |
| Guerbet UK | Dotarem 10ml vial  Dotarem 10ml PFS  Dotarem 15ml vial  Dotarem 15ml PFS  Dotarem 20ml vial  Dotarem 20ml PFS  Dotarem 5ml vial | All presentations in stock and Guerbet have sufficient stock to support the shortage |
| Bracco UK Ltd | ProHance 0.5mmol/ml 10ml pre-filled syringes  ProHance 0.5mmol/ml 10ml vials  ProHance 0.5mmol/ml 15ml vials  ProHance 0.5mmol/ml 17ml pre-filled syringes  ProHance 0.5mmol/ml 20ml vials | All presentations in stock and Bracco have sufficient stock to support the shortage |

### Imigran (sumatriptan) injection

* Due to a manufacturing issue, some supplies of GSK’s branded sumatriptan injection are currently unavailable.
* GSK have confirmed the treatment pack is available, however supplies of the refill packs are not expected until July 2019.
* Generic supplies of sumatriptan injection in both initiation and refill packs are available from Sun Pharma/Ranbaxy – (this product is ‘sumatriptan 6 mg/0.5 ml solution for injection’)
* Sun Pharma/Ranbaxy have confirmed that they are able to support the additional demand during this time.

### Ribavirin injection (unlicensed)

* Mylan have informed us that they are out of stock of Virazole injection (unlicensed) due to a manufacturing issue.
* Mylan are currently unable to advise on a resupply date.
* Unlicensed imports continue to remain available; lead times may vary.

### Tetracosactide 1mg depot injection

* Mallinckrodt have informed DHSC that tetracosactide 1mg injection will be unavailable until mid-2019.
* We have been working with the specialist importers and can confirm that unlicensed products have been sourced.
* NHS Trusts should place orders now with the specialist importer companies as lead times may vary. Further information has been circulated to your regional procurement specialists

Orals

### Adalat (nifedipine)

* Letter from Bayer attached below
* There continues to be a temporary interruption to the supply of some Adalat presentations, with Bayer UK intending to re-supply the market at a later date than previously advised.
* There will be some out of stock periods for some preparations and long-term discontinuations of the following products:
  + Adalat 5mg capsules – discontinued from February 2019. Bayer were the sole licensed UK supplier of this product. We have been working with potential alternative manufacturers and are working to get another licensed supply to the UK market. We have had a positive response and it is currently estimated that supplies could be available April – May 2019. We have also been in contact with the specialist importers and can confirm that unlicensed supplies have been sourced.
  + Adalat 10mg capsules – discontinued by March 2019
  + Adalat Retard 10mg modified release tablets – discontinued November 2018
  + Adalat Retard 20mg modified release tablets – discontinued August 2018
  + Adalat LA 20mg, 30mg and 60mg prolonged release – out of stock until 2021.
* The below letter also lists the other preparations of Adalat (nifedipine) that remain available to order as well as contact details for healthcare professionals to obtain further advice and support.
* Supplies of other nifedipine capsules and tablets remain available currently, including;
  + Adipine (Chiesi)
  + Coracten (UCB)
  + Nifedipress (Dexcel)
  + Tensipine (Genus)
* We are in contact with the suppliers of all of the above alternatives and they are working to ensure that supplies remain available and to expedite future deliveries where possible.
* UKMI have issued a shortages memo, which provides advice on alternatives, this is available on the SPS website via the following link: <https://www.sps.nhs.uk/articles/shortage-of-adalat-nifedipine/>

### Bumetanide tablets

* Mylan, the sole supplier of bumetanide 5mg tablets, have informed DHSC they are not currently manufacturing stock of this strength and are not able to provide a date for when this product will be made available.
* Supplies of the 1mg remain available with further deliveries expected w/c 8th April.
* There is a bumetanide 1mg/5ml liquid available from Chemidex however there is insufficient stock to cover an uplift in demand.

### Carbagen (carbamazepine) various preparations

* As carbamazepine is considered a Category 1\* anti-epileptic medication, patients should normally be maintained on the same brand, however Mylan (the manufacturers of Carbagen) have informed DHSC that the following preparations of Carbagen (carbamazepine) tablet will be unavailable until mid-late 2019.
* The affected products are listed below:
  + Carbagen 200mg Immediate Release Tablets – unavailable until mid-2019
  + Carbagen 400mg Immediate Release Tablets – unavailable until late 2019
  + Carbagen 200mg and 400mg Modified Release Tablets – unavailable until late 2019
* Patients currently prescribed Carbagen tablets by brand will therefore need to be switched to an alternative brand of carbamazepine tablets during this time.
* Novartis, the manufacturer of Tegretol which is the alternative brand of carbamazepine, tablets 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, NHSI and UK Medicines Information to develop a [clinical memo](https://www.sps.nhs.uk/articles/shortage-of-carbagen-carbamazepine-tablets/), which has been produced to support clinicians in prioritising and switching patients during this period.
* Clinicians and pharmacists should identify potentially affected patients as soon as possible and ensure they are managed appropriately.

*\*There are clear indications that clinically relevant differences between different manufacturers’ products might occur, even when the pharmaceutical forms are the same and bioequivalence has been shown.*

Clomipramine capsules

* We are aware of a current supply issue affecting the 10mg and 25mg presentations. Teva and Mylan are experiencing manufacturing issues and as a result, have recently been out of stock.
* Teva have confirmed that the anticipated re-supply date for the 10mg strength is mid to late April.
* Mylan are expecting supplies of clomipramine 10mg capsules in mid-June.
* Clomipramine 25mg and 50mg capsules, from Teva, remain available.

### Hydroxycarbamide 100mg and 1000mg tablets

* Nordic Pharma are no longer distributing this product on behalf of the manufacturer.
* Nordic Pharma have contacted all hospitals who have purchased this product in the last year to inform them of this.
* Currently, there are no alternative arrangements for distribution of this product
* Medac have hydroxycarbamide 500mg capsules supplies available and are on contract for the NHS.

### Lofexidine tablets

* Britannia are no longer supplying Britlofex (lofexidine) tablets due to manufacturing problems.
* Britannia is the sole supplier of this product to the UK.
* Britannia does not yet know the resupply date for the next delivery of Britlofex tablets, but the out of stock period is likely to last several months. This is due to the transfer of the product to a new manufacturer. We have been in discussion with the specialist importer companies about this and they have been unable to source supplies from abroad, as this product is not used in many other countries.
* UKMI have prepared a shortages memo, which has now been published on the [SPS website](https://www.sps.nhs.uk/articles/shortage-of-lofexidine-hydrochloride-tablets-200-microgram-britoflex/)

Menadiol tablets

* Alliance Pharma, the sole supplier, have informed DHSC they will be able to resupply licensed menadiol tablets from mid-April 2019.
* They are currently supplying an unlicensed special which is the same formulation as the licensed product. This product is available to order from Alcura.
* Other specialist importers are also able to source unlicensed supplies until the licensed stock becomes available.
* UKMI have drafted a shortages memo, which will provide advice on alternatives, this is available on the SPS website: <https://www.sps.nhs.uk/articles/shortage-of-menadiol-diphosphate-tablets-10mg/>

### Metopirone 250mg capsules

* DHSC have been informed of a supply issue affecting Metopirone 250mg capsules
* HRA Pharma, the sole supplier in the UK, are experiencing manufacturing issues and as a result are out of stock until July 2019
* This has been communicated to the Endocrinology group at NHS England and should now have been disseminated through their networks

### Metoprolol 50mg and 100mg tablets

* DHSC has been made aware of an ongoing supply issue with the following two products:
  + Metoprolol 50mg tablets
  + Metoprolol 100mg tablets.
* The issue has been caused by some manufacturers discontinuing the products and others having supply difficulties.
* Milpharm/Aurobindo, are currently the sole supplier of both presentations to the UK market.
* Supplies of both presentations are currently available but may be limited, further stock is arriving over the coming weeks however supply is likely to be intermittent for a number of months.
* If patients are having difficulty obtaining metoprolol, they may need to be switched to an appropriate alternative treatment.
* Please see a memo with had been developed by UK Medicine Information with input from national experts at NHSE and NHSI, which advises on management options for patients affected by this supply issue, including the use of alternative beta blockers, dosing information for these alternative beta blockers and monitoring requirements. This is available on the [SPS website](https://www.sps.nhs.uk/articles/shortage-of-metoprolol-50mg-and-100mg-tablets/).
* Suppliers of alternative beta blockers have been contacted to determine if they can meet any additional demand and currently, 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.

### Sandimmun (ciclosporin) capsules

* Novartis have notified us of a supply issues affecting Sandimmun (ciclosporin) capsules due to a manufacturing site transfer.
* Sandimmun 25mg, 50mg and 100mg are currently out of stock, resupply is expected early May 2019.
* Novartis have sourced supply of all strengths from their Italian market to meet the gap during this period.
* The unlicensed Italian stock is available from their distributor, Clinigen.
* Pharmacies can order stock through Clinigen who can be contacted at: Churchfield road, Weybridge, KT13 8DB, Tel: 01932 824 100, Fax: 01932 824 300

E-mail - [ukcustomerservice@clinigengroup.com](mailto:ukcustomerservice@clinigengroup.com)

* Novartis have issued a letter (attached) to customers

### Sevelamer carbonate 800mg tablets

* DHSC are aware of a supply issue affecting sevelamer carbonate 800mg tablets.
* This is due to two suppliers discontinuing their product from the UK market resulting in an increase in demand on other supplier’s products.
* Deliveries from Sanofi (Renvela brand) and Creo (generic) occurred throughout March with further deliveries expected in May and June 2019.
* Supplies of sevelamer carbonate 800mg tablets currently remain available but may be limited. We are working closely with all suppliers to expedite future deliveries.
* Sevelamer hydrochloride 800mg tablets (Renegal brand) remain available however there is insufficient stock to cover an uplift in demand.

### Sinemet (co-careldopa) tablets

* Ongoing issues with the supply of Sinemet from MSD- please see attached company letter.
* The latest update we have on the current supply position is:
  + **Sinemet 10/100mg -** currently out of stock and further stock is expected in early May.
  + **Sinemet 25mg/250mg -** currently out of stock and further stock is expected in early June
* DHSC has been working with generic suppliers on this issue and can confirm generic co-careldopa supplies in the above strengths will be available to support.
* DHSC are continuing to work with MSD and generic manufacturers to manage the overall supply position over the coming months and will provide updates as information becomes available.

### 

### Stemetil (prochlorperazine) 5mg in 5ml oral syrup

* Sanofi are out of stock of Stemetil oral syrup until November 2019.
* Other presentations of prochloperazine which will continue to remain available are;
  + Buccal (maleate) 3mg
  + Injection (mesylate) 12.5mg
  + Tablets (maleate) 5mg
* UKMI have prepared the following shortages memo, which provides potential advice on management options, this has now been published on the [SPS website](https://www.sps.nhs.uk/articles/shortage-of-stemetil-prochlorperazine-5mg-5ml-syrup/)

### Tizanidine

* There is a short-term supply issue affecting tizanidine 2mg and 4mg tablets.
* Niche have informed DHSC they are currently out of stock of both strengths.
* Teva received deliveries of the 4mg tablets in March 2019 with a further delivery planned at the end of April 2019. Supplies available through Alliance.
* Tizanidine 2mg tablets remain out of stock until end of April 2019.

### Trifluoperazine tablets

* There have been ongoing manufacturing issues with the active ingredient affecting trifluoperazine 1mg and 5mg tablets. As a result, there are long term issues affecting the tablets. There are currently no dates for resupply.
* Concordia and Rosemont have trifluoperazine as a liquid formulations and good supplies are available.
* We are also aware that unlicensed supplies of the 1mg and 5mg tablet are available from both Ennogen and several other specialist importer companies.
* Pharmacies can obtain unlicensed supplies via these specialist companies or Ennogen.

### Zaditen (ketotifen) 300ml (1.38mg in 5 ml oral solution)

* CD Pharma are currently out of stock of Zaditen oral solution 300ml (no date available for resupply).
* In the interim, they can provide alternative 100 ml packs for Zaditen Syrup (Origin Polish market), which is now available at Alloga.
* The MHRA has approved a variation for CD Pharma to supply this product, so it is considered licensed.
* The UK stock will be available once all Polish stock has been exhausted, expected to be mid-2019
* Please find attached the information letter for further info.
* Zaditen 1mg tablets are not affected by this issue and remain readily available.

Others

Gastrografin

* DHSC have been informed by Bayer of a supply issue affecting Gastrografin Gastroenteral Solution due to manufacturing constraints.
* Deliveries until June are expected to be limited and intermittent.
* It is anticipated that stock levels will begin to normalize from the beginning of Q3 2019 after which further deliveries should start to re-stock the market back to normal levels.
* We have informed the unlicensed specials importers, who have been able to source products.

## Eye drops/treatments

**Bausch & Lomb**

* Viscotears - There is a short-term back order of Viscotears but this is expected to be cleared shortly.

**Allergan**

* Lacri-Lube **-** out of stock due to an ongoing manufacturing issue.
* The [Royal College of Ophthalmology](https://www.rcophth.ac.uk/standards-publications-research/quality-and-safety/medicines-safety/drugs-shortages/) is aware of the Lacri-Lube shortage and is recommending Xailin Night Ointment.

**RPH Pharmaceuticals AB**

* Betnesol Eye Ointment 0.1% **w/w x 3g -** RPH Pharmaceuticals AB (marketing authorisation holder) who distribute the product through Focus Pharmaceuticals have advised about the discontinuation of Betnesol Eye Ointment 0.1% w/w x 3g towards the end of March
* RPH Pharmaceuticals will be launching a generic Betamethasone Eye Ointment 0.1% w/w x 3g and are currently expecting stock in 2019.

Vaccines

**For updates on other vaccine supply position, please refer to** [**PHE’s Vaccine Update Bulletin**](https://www.gov.uk/government/collections/vaccine-update)

### Hepatitis B Vaccines

Renal dose

* Hepatitis B renal vaccines (MSD’s HBVAXPRO 40mcg and GSK’s Fendrix) are temporarily out of stock.
* GSK are expecting resupply of Fendrix in March 2019
* MSD are out of stock of HBVAXPRO 40mcg until further notice. Please see statement [here](https://www.msd-uk.com/products/vaccines.xhtml)
* PHE have advised that standard adult dose vaccine can be used if vaccination cannot be safely deferred. Renal dialysis patients should be routinely tested for hepatitis B immunity post vaccination as per national guidelines.
* Please refer to PHE’s [Vaccine Update](https://www.gov.uk/government/collections/vaccine-update) bulletin for further information

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.

Menveo **(meningitis A,C,W,Y):**

* GSK are out of stock of Menveo until late March 2019
* Pfizer have confirmed they are in stock of Nimenrix and currently able to support increased demand.

Pneumococcal Polysaccharide Vaccine **(PPV23):**

* MSD are the sole UK supplier of this vaccine and although still under restriction, supplies have improved.
* MSD has introduced a limited quantity of a prefilled syringe presentation (PFS) of PPV23 under the brand name PNEUMOVAX® 23 to supplement the current supply of vials. A combination of growing global demand for pneumococcal polysaccharide vaccines, alongside manufacturing constraints, have led to regular interruptions in supply of PPV to the UK since 2017. The introduction of a PFS presentation of PPV is intended to support the continuity of supply and to help address public health need.
* Pneumovax® 23 in the PFS presentation can be ordered in the same way as the PPV in vials; through MSD’s distribution partner AAH online at <http://www.aah.co.uk/> or by phone on 0344 561 8899. Customers need an AAH account to place an order.
* For more information about the vaccine, please refer to the Summary of Product Characteristics.
* PHE’s guidance to GPs and recommendations published in February edition of PHE’s [Vaccine Update](https://www.gov.uk/government/publications/vaccine-update-issue-291-february-2019) Bulletin (Page 7) on how to manage patients if unable to obtain PPV vaccine continue to apply.

### Rabipur (Rabies vaccine)

* GSK is currently experiencing a supply delay with their Rabies vaccine, Rabipur, due to manufacturing constraints.
* Limited supplies are currently available and likely to continue through the first half of 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 at the following [link](https://travelhealthpro.org.uk/news/389/rabies-vaccine-availability)

# Discontinuations

Actonel 30mg tablets (risedronate sodium) **(Warner Chillcot (Actavis))**

* Being discontinued once stocks within the supply chain are exhausted. It is noted that Actonel 5mg and Actonel Once-a-week presentations remain available. Risedronate sodium 30mg tablets remain available from a number of other generic manufacturers.

Angeliq tablets (drospirenone & estradiol) **(Bayer)**

* Being discontinued with immediate effect. Alternate HRT remain available from other suppliers.

Augmentin Duosuspension **(amoxicillin/ clavulanate acid) (GSK) - Flavour change**

* Following a global factory realignment, both the 35ml and 70ml presentations of Augmentin DUO 400mg/57 mg/5ml powder for oral suspension Strawberry flavour are to be replaced by a Mixed Fruit flavour of the same strength.

Cilest tablets **(norgestimate and ethinylestradiol) (Janssen- Cilag) -**

* Being discontinued from the UK market in July 2019 due to commercial reasons.  Alternate branded norgestimate and ethinylestradiol products – Cilique and Lizinna - remain available from other suppliers.  The company is advising HCP’s not to start any new patients on Cilest and to transfer patients over to alternate oral contraceptives. Company letter attached below.

Creon 40,000 (pancreatin) **(Mylan)**

* Being discontinued in June 2019 due to declining use. Other strengths of Creon capsules will remain available and these can be taken to achieve the higher dose. The company has issued comms to HCPs.

### Flecainide injection

* Teva are the sole licensed UK supplier and have informed DHSC they have discontinued flecainide injection due to problems with the manufacturing process.
* Unlicensed imports continue to remain available; lead times may vary.

Glidipion 15mg tablets (pioglitazone) **(Accord)**

* Being discontinued once stocks within the supply chain are exhausted. Pioglitazone 15mg tablets remain available from a number of generic manufacturers.

Glucobay 50mg & 100mg tablets (acarbose) **(Bayer)**

* Being discontinued with immediate effect due to low volume sales. Acarbose 50mg & 100mg tablets remain available from a number of generic manufacturers.

Hypurin Bovine insulin UPDATE **(Wockhardt)**

* The next products to be discontinued are Bovine Lente Vials and Bovine Neutral Cartridges which have an expiry date of May 2019; supply of these products to the market will cease from the 30/04/19. All the latest information about the discontinuation of bovine insulin can be found on the [Wockhardt website](http://www.wockhardt.co.uk/our-products/bovine-insulin-patient-information.aspx)

Lecaent 75mg capsules (pregabalin) **(Accord)**

* Being discontinued once stocks within the supply chain are exhausted. Pregabalin 75mg capsules remain available from a number of generic and branded manufacturers.

Menopur 75IU x 1-vial pack **(Ferring)**

* Ferring are discontinuing the single vial pack but the 10-vial pack remains available.

### Modecate (fluphenazine decanoate) injection

* Manufacture of Modecate (fluphenazine decanoate) injection has ceased
* Existing stock of Modecate Injection (25 mg/ml) will expire in August 2019 – supplies should be ordered now to treat any patients who have yet to be switched to an alternative treatment.
* Existing stock of Modecate Concentrate Injection (100 mg/ml) will expire in August 2020 – stock will not be released after 29 February 2020.
* Prescribers should complete arrangements to transfer patients on Modecate to therapeutic alternatives under medical supervision.
* Some unlicensed importer companies have confirmed that they can source supplies of unlicensed fluphenazine decanoate injection from abroad going forward.

Quinapril 5mg, 10mg, 20mg & 40mg tablets (**Accord & Lupin)**

* Being discontinued with immediate effect. Teva continues to market quinapril 40mg tablets and Bayer markets the brand Accupro in 5mg, 10mg, 20mg & 40mg tablets.

### Reopro (abciximab) injection

* Following a long-term shortage with Reopro (abciximab) Janssen-Cilag have been unable to overcome production issues to bring the product back to market and have taken the decision to discontinue it.  We have contacted suppliers of the alternatives.
* UKMi have produced [a memo](https://www.sps.nhs.uk/articles/shortage-of-abciximab-reopro-2mgml-solution-for-injection-or-infusion/) during the shortage period which provides advice on possible alternative treatments.

Zovirax (aciclovir) eye ointment **(GSK)**

* Being discontinued globally due to repeated challenges in guaranteeing a sustainable product supply.  There are no other acyclovir eye ointments on the market but an alternative licensed product Virgan (ganciclovir) is available. Further information [here](https://gskpro.com/en-gb/products/zovirax/).
* UKMi have produced [a memo](https://www.sps.nhs.uk/articles/shortage-of-aciclovir/) giving advice on possible alternative treatments.
* Supplies of Zovirax eye ointment are now exhausted but Thea have confirmed that they have good supplies of Virgan (ganciclovir) eye gel available to meet the increase in demand.

# Resolved (date resolved)

### Clexane 40mg injection (3/2019)

### Lofepramine 70mg tablets (25/3/19)

### Lucentis 10mg/ml prefilled syringes (14/3/19)

### Madopar various preparations (co-beneldopa) (22/03/2019)

### Ondansetron 4mg and 8mg injections (01/03/2019)

* Prednisolone 20mg/100ml rectal solution