Greater Manchester Health and Care Commissioning

Generic Prescribing Guidelines

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Version 2.0

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DOCUMENT CONTROL

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Revision history

REVISION DATE	ACTIONED BY	SUMMARY OF CHANGES	VERSION
08.09.18	K Osowska/K Griffiths	Full review of the Generic Prescribing Guidance December 2013. Comments by GMHCC team	1.1
16.11.18	K Osowska	Comments incorporated following consultation	1.2
19.11.18	K Osowska	Formatting and adding table of contents	2.0
05.02.19	K Osowska	Amended as per FMESG comments	2.0

The changes made to version 1.0 during the production of version 2.0 are shown in table 1.

Table 1

Section	Section name	Changes within updated version 2.0 November 2018
	Format	Updated format to current GMHCC template.
	Document control	Added.
	Contents page	Added.
1.	Executive summary	Updated to include new statements on added sections. Changes made for clarity and consistency.
2.	Background	Updated 'branded generics' section.
4.	When should a specific manufacturer's product be prescribed	Updated biosimilar drugs section.
6.	References	Updated hyperlinks.
	Appendix 1	• Chapter 2 (added section about biosimilar 'low molecular heparins') • Chapter 6 (added section about 'Calcitonin and parathyroid hormone' biosimilar drugs) • Chapter 8 (removed azathioprine from the list) • Added 'miscellaneous section' about biosimilar monoclonal antibodies.

Approvals

This document must be approved by the following before distribution:

NAME	DATE OF ISSUE	VERSION
FMESG		2.0
GMMMG		2.0

Contents

1. Executive summary

1.1. A generic medicine contains the same quantity of active substance(s) as the proprietary medicine that originally received marketing authorisation (i.e. the reference medicine). However, the name of the medicine, its appearance (such as colour or shape) and its packaging can be different from those of the reference medicine.[1]

1.2. Generic medicines are, overall, much less expensive to the NHS. Their appropriate use instead of branded medicines delivers considerable cost savings.

1.3. Average NHS levels of generic prescribing for the period 1976 to 2013 have increased from 20% to 84%, respectively. This has resulted in saving the NHS around £7.1 billion and allowed 490 million more items to be prescribed without an increase in spending. Consequently, the NHS is now getting much more value for every pound it spends on prescribing.[2]

1.4. Assuming the trend for growth in prescribing continues, and that generic prescribing increases to 90 per cent, by 2023/4, if prescribing volume increased by 50% this would only result in an associated 5% increase in spend.Across Greater Manchester CCGs the annual potential generic savings in 2017/18 ranged from £72,000 to £232,000.

1.5. It is good practice to prescribe drugs generically using their approved, international non-proprietary name (INN) (i.e. as described in the BNF medicine entry heading) and not specify the manufacturer or supplier, except where a change to a different manufacturer's product may compromise efficacy or safety.[4]

1.6. Some generic medicines have been given a brand name by the manufacturer for marketing reasons; these products are referred to as '**branded generics**'.

1.7. The GMMMG Formulary lists products by generic drug name. For some drugs, branded generics may offer a more economical means of procurement in Primary Care. In this instance the brand with the lowest acquisition cost and greatest ease of acquisition should be prescribed according to local choice.

1.8. List prices for some 'branded generics' may be lower than the reimbursement price for equivalent generics. However, any cost savings achieved by their use may be unsustainable by the manufacturer and may not necessarily be cheaper, or in the best interests of the NHS in the longer term.

1.9. There are a few circumstances when it is appropriate to prescribe a specific manufacturer's product (branded or generic). These include:

- drugs with a narrow therapeutic index
- certain modified- or controlled-release drugs
- certain administration devices
- multiple ingredient products
- biological drugs including biosimilars
- drugs with different licensed indications
- ensuring adherence to long-term medications, where differences in appearance between manufacturer's products might cause confusion and anxiety [5, 6]

2. Background

2.1. If a generic medicine is granted a license, the regulatory authority has considered it to be equally safe and clinically equivalent to the reference branded medicine when used at the same dose to treat the same condition. There is little clinical evidence to suggest that interchanging branded and generic medicines causes any adverse clinical consequences.

2.2. The Department of Health and Social Care (DHSC) continues to support the increased use of generic medicines in a way that is less prescriptive and acceptable to patients, recognising that there are still more cost savings to be made in this area.

2.3. Presently, if a specific brand-name drug is prescribed in primary care, a pharmacist is obliged to supply this, even if an equivalent generic version is available. Reimbursement is made using the manufacturer's list price for the branded product.

2.4. Some generic medicines have been given a brand name by the manufacturer for marketing reasons. These products are referred to as branded generics.

2.5. List prices for branded generics may be lower than the list price for equivalent generics (Drug Tariff Part VIII), and some Primary Care Organisations have adopted policies promoting selected branded generics to achieve cost savings. However, these savings may be unsustainable by the manufacturer and overall may not necessarily be cheaper, or in the best interests of the NHS in the longer term.[7]

2.6. When a generic name is written, a branded or generic version can be supplied, but the pharmacist is reimbursed at the generic rate. The reimbursement price of generic medicines is normally greater than the price they pay. This encourages competition between manufacturers as dispensers seek to purchase best value generics available.

2.7. The total discount obtained by dispensers on the price of generic medicines is set at an agreed margin by the DHSC in negotiation with the Pharmacy Services Negotiating Committee (PSNC). This agreed margin forms part of the funding for the community pharmacy contract.

2.8. The use of branded products, in particular branded generics, can result in community pharmacy not achieving the annually agreed funding level. If the funding underspend is significant then the DHSC can take a range of actions, which may include increasing the price paid to dispensers for generic medicines to ensure the funding level is met.

3. Scope

3.1 This guidance applies to all services contracted by or delivered by the NHS across Greater Manchester, including: GPs, other prescribers, acute hospitals, NHS community providers, and out-patient clinics who provide NHS prescriptions which are dispensed in a pharmacy.

3.2 This covers the provision of prescriptions to a patient registered on the list of a general medical practitioner, or temporary resident.

3.3 It does not cover the provision of private services or prescriptions to members of the public who are not registered with the practice.

4. Benefits of generic prescribing

4.1 Many medicines are available in both generic and branded forms. However, generic medicines are, overall, much less expensive to the NHS.

4.2 Generic prescribing can reduce the risk of prescribing or dispensing errors as each drug has only one approved name, rather than a variety of brand names.

4.3 Generic prescribing allows patients to recognise the medicine's International Non-proprietary Name (INN) on their prescription.[8] This reduces the expectation that a particular brand should be used when a different product needs to be supplied, for example following patent expiry, a particular brand becoming unavailable or obtaining supply from a different dispensary than the patient's usual one.

4.4 Generic prescribing allows any suitable generic (or equivalent branded product) to be dispensed, reduces the number of items to be stocked in the pharmacy and can potentially reduce delays in supplying medicines to the patient (e.g. when a particular brand is not stocked.)

4.5 Where non-proprietary ('generic') titles are given, they should be used in prescribing, except in the circumstances detailed in section 4. This will enable any suitable product to be dispensed, thereby preventing delay to the patient and sometimes expense to the health service. The only exception is where there is a demonstrable difference in clinical effect between each manufacturer's version of the formulation, making it important that the patient should always receive the same brand. In such cases, the brand name or the manufacturer should be stated. Non-proprietary titles should **not** be invented for the purposes of prescribing generically since this can lead to confusion, particularly in the case of compound and modified-release preparations.[4]

5. When should a specific manufacturers product be prescribed?

5.1 A specific manufacturer's product could be either branded or generic.

5.2 **Drugs with a narrow therapeutic index.** There is no good quality evidence for any clinically significant difference between bioequivalent medicines containing drugs with a narrow therapeutic index. However, in view of the concerns and potentially serious consequences of losing therapeutic control, patients should be maintained on the same manufacturer's product for drugs with a narrow therapeutic index.

Examples: Ciclosporin, lithium, CFC-free beclomethasone metered dose inhalers and some antiepileptic medicines[5]

5.3 **Anti-epileptics (where used in epilepsy only).** The Medicines and Healthcare products Regulatory Agency (MHRA) has written to healthcare professionals to provide information about switching between different manufacturers' products of antiepileptic drugs (AEDs).[9] This includes switching between branded products and generic products, and between different generic products of a particular drug.

Following a review of the available evidence and consideration of the bioavailability and pharmacokinetic characteristics of the different drugs it has been suggested that they could be classified into three categories:

Category 1: carbamazepine, phenobarbital, phenytoin, primidone

- For these drugs, doctors are advised to ensure that their patient is maintained on a specific manufacturer's product.

Category 2: valproate, lamotrigine, perampanel, retigabine, rufinamide, clobazam, clonazepam, oxcarbazepine, eslicarbazepine, zonisamide, topiramate

- For these drugs the need for continued supply of a particular manufacturer's product should be based on clinical judgement and consultation with patient and/or carer, taking into account factors such as seizure frequency and treatment history.

Category 3: brivaracetam, levetiracetam, lacosamide, tiagabine, gabapentin, pregabalin, ethosuximide, vigabatrin

- For these drugs it is usually unnecessary to ensure that patients are maintained on a specific manufacturer's product unless there are specific concerns such as patient anxiety, and risk of confusion or dosing errors.

A patient information leaflet has been prepared and provides a summary of what these changes mean.[10]

Therefore, for those medications listed in both category 1 and category 2, it is reasonable to err on the side of caution and specify the preparation by brand name (or as a generic from a particular manufacturer) to maintain continuity of supply, particularly for seizure free and stabilised patients.

Where newer AEDs are prescribed that are only currently available as the branded product care should be taken to ensure that prior to generic alternatives becoming available all prescriptions for control of epilepsy are changed to brand to avoid inadvertent generic switch once generics are available.

Patients should always be considered on individual cases and if a patient has poor control then switching to a different product (either branded or generic) may not inadvertently affect seizure control.
If AEDs are used for control of conditions other than epilepsy (e.g. neuropathic pain, migraine prophylaxis etc.) products should be prescribed generically where available.

5.4 **Certain modified or extended release products.** Drug release and bioavailability profiles may differ considerably between modified-release or extended-release formulations of drugs, primarily because of different formulation approaches taken by manufacturers.

Examples: modified-release diltiazem **>**60mg, nifedipine and mesalazine; transdermal strong opioids

The MHRA recommends that all modified-release preparations should be prescribed by their brand name, but the BNF warns against changing brands only where there is the possibility of significant clinical impact (e.g. loss of clinical control or increased risk of adverse effects). In many instances, variation that results from non-bioequivalence is likely to have a smaller effect than other factors that determine absorption and

distribution of the drug (e.g. not taking the medicine exactly on time and varying the time of taking the medicine with respect to food). For these reasons the BNF does not highlight the need to keep to the same brand for every modified-release drug.[11]

5.5 **Certain drug administration devices.** Technique may be an important component of drug delivery, and brand name prescribing is appropriate where administration devices have different instructions for use and patient familiarity with the same product is important.

Examples: dry powder inhalers and adrenaline auto-injectors

5.6 **Multiple ingredient products.** Generic titles may not always exist for many multiple ingredient products, and prescribing a specific brand or manufacture's product is necessary for identification and ensuring that the correct product is dispensed.

Examples: oral contraceptives, pancreatin supplements, emollient creams.

Non-proprietary titles should not be invented for the purpose of prescribing generically.

5.7 **Biological products including biosimilars.** A biological medicine is a medicine that contains one or more active substance made by or derived from a biological source rather than by chemical synthesis. A biosimilar medicine is a biological medicine that is developed to be similar to an existing biological medicine (the 'reference medicine', or originator).[12] Biosimilars are not the same as generics, which have simpler chemical structures and are considered to be identical to their reference medicines.

The active substance of a biosimilar and its reference medicine is essentially the same biological substance, though there may be minor differences due to their complex nature and production methods.[13] Biosimilars are approved according to the same standards of pharmaceutical quality, safety and efficacy that apply to all biological medicines. Subtle differences exist between biosimilar medicines from different manufacturers and these may not be fully apparent until greater experience in their use has been established. Therefore, in order to support pharmacovigilance monitoring, the specific biological medicinal product given to the patient should be clearly identified, and prescribing should refer to a specific manufacturer's product.
The Medicines and Healthcare products Regulatory Agency recommend that it is good practice to prescribe biological products by brand name to ensure that automatic substitution of a biosimilar product at the point of dispensing does not occur.[14] A recent EU directive requires the brand name to be included in the medical prescription of all biological products.[15]

Examples of medicines where biosimilar products are available are: epoetins, enoxaparin, filgrastim, insulin glargine, insulin lispro, teripatide, somatropin, and several monoclonal antibodies. The latter group include infliximab, rituximab, etanercept, transtuzumab and adalimumab. The number of biosimilars is growing as the originator products' manufacturers lose exclusivity.

For guidance on prescribing of high cost biosimilars refer to GMMMG's guidance (LINK TO http://gmmmg.nhs.uk/docs/guidance/Prescribing-of-high-cost-biosimilar-biological-medicines-GMMMG-final-v2-0.pdf)

5.8 **Different licensed indications.** Generic preparations are licensed on the basis of bioequivalence with the branded product and it can be argued that brand-name prescribing is not necessary. It can also be argued that a medicine should not be used 'off-label' for an unlicensed indication when a licensed alternative exists.

5.9 **Different excipients.** Inactive formulation ingredients (excipients) may differ between products (branded and generic). Where an individual patient is intolerant to an excipient, it may be reasonable to prescribe a specific brand or generic product that does not contain the troublesome component.

5.10 **Differences in appearance.** For conditions requiring long-term medication, differences in appearance between manufacturer's products might cause confusion and anxiety, and this may affect adherence. This may be of most concern among the elderly, those with learning disabilities, mental health patients, non-English speaking patients and those with low-levels of 'health literacy'. Where it is not possible to allay patients' concerns effectively, it may be appropriate for a specific brand or manufacturer's generic to be prescribed. Recommendations about how healthcare professionals can support patients to adhere to their prescribed medicine can be found in NICE clinical guideline 76.[16]

5.11 A table of "Items Unsuitable for Generic Prescribing" is available in Appendix 1 based on an original version by UKMi written in July 2013.

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Appendix 1 (Version 2.0)

Items unsuitable for generic prescribing

The following list provides examples of drugs/preparations which the GMMMG would NOT recommend for generic prescribing. This list is guidance only. For further information refer to the BNF. Refer to GM Formulary for preferred brands where applicable.

BNF	Drug or drug class	Reason for considering brand-name prescribing	Specific references
Chapter 1			
1.1.1	Antacids-preparations containing simeticone	To aid identification. Products contain multiple ingredients.	BNF
1.1.2	Compound alginates and proprietary indigestion preparations	To aid identification. Products contain multiple ingredients.	BNF
1.5.1	Mesalazine oral preparations	The BNF states there is no evidence that any one oral preparation of mesalazine is more effective than another; however, delivery characteristics of mesalazine preparations may vary. If switching to a different brand of mesalazine, advise the patient to report any changes in symptoms .	BNF UKMi[17]
1.6.1	Bulk forming laxatives	To aid identification. Products contain multiple ingredients.	BNF
1.6.4	Macrogols (polyethylene glycols	To aid identification. Products contain multiple ingredients.	BNF
1.7.2	Compound haemorrhoid preparations	To aid identification. Products contain multiple ingredients.	BNF
1.9.4	Pancreatin supplements	To aid identification. Products contain multiple ingredients	BNF
Chapter 2			
2.6.2	Diltiazem modified release (MR) preparations > 60mg	Different versions of diltiazem MR preparations containing more than 60mg may not have the same clinical effect.	BNF
2.6.2	Nifedipine modified release preparations	Different versions of nifedipine MR preparations may not have the same clinical effect.	BNF
2.8.1	Low molecular heparin	It is recommended to prescribe biosimilar drugs by brand name.	MHRA
Chapter 3			
3.1-3.2	All inhalers	Patient familiarity with one brand is important; instructions for use vary between preparations and patient training is required [8]. Generic prescribing of inhalers should be avoided as this can lead to people with asthma being given an unfamiliar inhaler device with resultant problems of usage and compliance.	UKMi[5], CKS Asthma[18]

3.1.3	Theophylline MR preparations	Theophylline has a narrow therapeutic index and bioavailability differs between brands of oral MR theophylline. Patients should be maintained on the same brand. If a prescription for an oral theophylline MR preparation does not specify a brand name, the pharmacist should contact the prescriber and agree the brand to be dispensed.	BNF, CKS Asthma[18]
3.1.3	Aminophylline MR preparations	Aminophylline has a narrow therapeutic index and bioavailability differs between brands. Patients should be maintained on the same brand. If a prescription for an oral aminophylline MR preparation does notspecify a brand name, the pharmacist should contact the prescriber and agree the brand to be dispensed.	BNF
3.2	Beclometasone dipropionate containing CFC-free pressurised metered dose inhalers	Beclometasone dipropionate CFC-free pressurised metered-dose inhalers are not interchangeable and should be prescribed by brand name; Qvar has extra-fine particles, is more potent than traditional beclometasone dipropionate CFC-containing inhalers, and is approximately twice as potent as Clenil Modulite.	BNF MHRA[19]
3.4.3	Adrenaline (epinephrine) pre-filled syringes	Patient familiarity with one brand is important; instructions for use vary between preparations and patient training is required. To ensure patients receive the auto-injector device that they have been trained to use, prescribers should specify the brand to be dispensed.	BNF, UKMi[5]
Chapter 4			
4.2.3	Lithium preparations	Lithium has a narrow therapeutic index and preparations vary widely in bioavailability. Changing the preparation requires the same precautions as initiation of treatment.	BNF
4.4	Methylphenidate MR preparations	Methylphenidate MR preparations contain both immediate-release (IR) and MR methylphenidate. The proportion of IR and MR methylphenidate differs between brands; different preparations may not have the same clinical effect.	BNF
4.7.2	Buprenorphine patches	Buprenorphine patches are available as 72-hourly, 96-hourly and 7-day formulations. Brand name prescribing is recommended to reduce the risk of confusion and error in dispensing and administration.	BNF, Palliative Care Formulary (PCF), CQC[20]

4.7.2	Fentanyl patches	Fentanyl patches are available as matrix and reservoir formulations. Reservoir patches must not be cut because damage to the rate-limiting membrane can lead to a rapid release of fentanyl resulting in overdose. If the prescriber intends the patch to be cut (NB: unlicensed and not recommended by the MHRA) then the prescription must specify a brand of matrix formulation patch. Brand name prescribing is recommended to reduce the risk of confusion and error in dispensing and administration.	PCF, CQC
4.7.2	Morphine oral MR preparations	Oral morphine MR preparations are available in 12-hourly and 24-hourly formulations. Dosage requirements should be reviewed if the brand of morphine MR is altered. The pharmacokinetic profiles of MR products differ; to minimise the risk of mistakes, it is best to keep individual patients on the same MR brand. Including the brand name on the prescription and dispensing label will aid in identification of the correct formulation to be dispensed or administered.	BNF, PCF, Department of Health[21]
4.7.2	Oxycodone oral MR preparations	Oral oxycodone MR preparations are available in 12-hourly and 24-hourly formulations. Brand-name prescribing is recommended to reduce the risk of confusion and error in dispensing and administration.	BNF, PCF, PrescQIPP[22]
4.7.2	Tramadol oral MR preparations	Oral tramadol MR preparations are available as 12-hourly or 24-hourly formulations. Brand-name prescribing is recommended to reduce the risk of confusion and error in dispensing and administration.	BNF, PCF
4.8.1	Antiepileptic drugs (when used for epilepsy)	The MHRA has classified antiepileptic drugs (AEDs) into three categories of risk, based primarily on their therapeutic index and physiochemical characteristics (in particular solubility and permeability across membranes) to help healthcare professionals decide whether it is necessary to maintain continuity of a specific manufacturer's product: • **Category 1** (carbamazepine, phenobarbital, phenytoin, primidone). For these drugs, doctors are advised to ensure that their patient is maintained on a specific manufacturer's product. • **Category 2** (valproate, lamotrigine, perampanel, retigabine, rufinamide, clobazam, clonazepam, oxcarbazepine,	MHRA[9] NICE[23]

		eslicarbazepine, zonisamide, topiramate). For these drugs the need for continued supply of a particular manufacturer's product should be based on clinical judgement and consultation with patient and/or carer. It is necessary to consider clinical factors such as seizure frequency, treatment history and the potential implications for the individual of having a breakthrough seizure • **Category 3** (brivaracetam, levetiracetam, lacosamide, tiagabine, gabapentin, pregabalin, ethosuximide, vigabatrin). For these drugs it is usually unnecessary to ensure that patients are maintained on a specific manufacturer's product unless there are specific concerns such as patient anxiety, and risk of confusion or dosing errors.	
	Antiepileptic drugs (when used for epilepsy-continuation	The MHRA acknowledges factors other than therapeutic equivalence are important. Differences between products (e.g. product name, packaging, appearance and taste) may be perceived negatively by patients or carers and may lead to dissatisfaction, anxiety, confusion, dosing errors and reduced adherence. Difficulties for patients with autism, learning disability or mental health problems should be considered. Continuity of the same brand or the same generic preparation of **category 1 and 2** antiepileptic medication has been agreed across by GMMMG for patients with seizure disorders, unless the prescriber (in consultation with the patient and their family or carers) considers this not to be a concern. (For individual antiepileptic agents, see below.)	
4.8.1	Carbamazepine (MHRA category 1)	Different preparations may vary in bioavailability. Carbamazepine has a narrow therapeutic index. Ensure that the patient is maintained on a specific manufacturer's product. (See also 'Antiepileptic medicines' above.)	MHRA
4.8.1	Eslicarbazepine (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines' above.)	MHRA

4.8.1	Oxcarbazepine (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines' above.)	MHRA
4.8.1	Lamotrigine (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines'above.)	MHRA
4.8.1	Perampanel (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines' above.)	MHRA
4.8.1	Phenobarbital (MHRA category 1)	Ensure that the patient is maintained on a specific manufacturer's product. (See also 'Antiepileptic medicines' above.)	MHRA
4.8.1	Primidone (MHRA category 1)	Ensure that the patient is maintained on a specific manufacturer's product. (See also 'Antiepileptic medicines' above.)	MHRA
4.8.1	Phenytoin (MHRA category 1)	Phenytoin has a narrow therapeutic index. Ensure that the patient is maintained on a specific manufacturer's product. (See also 'Antiepileptic medicines' above.)	MHRA, BNF
4.8.1	Retigabine (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines' above.)	MHRA
4.8.1	Rufinamide (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines' above.)	MHRA
4.8.1	Topiramate (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines' above.)	MHRA
4.8.1	Sodium Valproate (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines' above.)	MHRA

4.8.1	Zonisamide (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. See also 'Antiepileptic medicines'.	MHRA
4.8.1	Clobazam (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines' above.)	MHRA
4.8.1	Clonazepam (MHRA category 2)	Choice of product should be a clinical decision taken by the prescriber in consultation with the patient however GMMMG recommends that the same brand or generic product should be maintained. (See also 'Antiepileptic medicines' above.)	MHRa
4.9.1	Apomorphine pre-filled syringe	Patient familiarity with one brand is important; instructions for use vary between preparations	Dm+d
4.9.3	Botulinum toxin type A	Preparations are not interchangeable due to differences in potency.	BNF, Dm+d
Chapter 6			
6.1.1	Insulins	Patient familiarity with one brand is important; instructions for use vary between preparations and patient training is required.	UKMi[5] Dm+d
6.4.1	Hormone replacement therapy oral preparations	Different brands of the same formulation are available. Patient familiarity with one brand is important.	Dm+d
6.4.1	Estradiol transdermal patches	Different brands of the same formulation are available. Patient familiarity with one brand is important.	Dm+d
6.5.1	Somatropin injection cartridges	Patient familiarity with the same brand is important and training is required in the use of specific devices for self-injection. Some somatropin preparations are licensed as 'biosimilar' medicines.	BNF
6.6.1	Calcitonin and parathyroid hormone	It is recommended to prescribe biosimilar drugs by brand name.	MHRA
Chapter 7			
7.3.1	Combined oral contraceptives	The most cost-effective brand should be prescribed.	Dm+d
7.3.2	Progestogen only oral contraceptives	The most cost-effective brand should be prescribed.	Dm+d
7.4.5	Alprostadil injection	Patient familiarity with one brand is important; instructions for use vary between preparations.	Dm+d
Chapter 8			
8.2.1	Mycophenolate (when used to prevent transplant rejection)	Switching between a brand and generic formulation, or between generic formulations, should be initiated only by a transplant specialist [24]	European Society for Organ Transplantation Advisory Committee[24]
8.2.2	Ciclosporin (when used to prevent	Ciclosporin must be prescribed and dispensed by brand name. Patients should be stabilised	European Society for

	transplant rejection)	on a particular brand of oral ciclosporin because switching between formulations without close monitoring may lead to clinically important changes in blood ciclosporin concentration. Switching between a brand and generic formulation, or between generic formulations, should be initiated only by a transplant specialist.	Organ Transplantation Advisory Committee[24], MHRA[25]
8.2.2	Tacrolimus (when used to prevent transplant rejection)	Inadvertent switching between oral tacrolimus products has been associated with reports of toxicity and graft rejection. To ensure maintenance of therapeutic response when a patient is stabilised on a particular brand, oral tacrolimus products should be prescribed and dispensed by brand name only [26]. Switching between a brand and generic formulation, or between generic formulations, should be initiated only by a transplant specialist.	European Society for Organ Transplantation Advisory Committee[24], MHRA[26]
8.2.4	Interferon pre-filled disposable injection devices; Peginterferon pre-filled disposable injection devices	Patient familiarity with one brand is important; instructions for use vary between preparations.	Dm+d
Chapter 9			
9.1.3	Erythropoietins	Patient familiarity with the same brand is important and training is required in the use of specific devices for self-injection. Some epoetin preparations are licensed as 'biosimilar' medicines.	BNF Dm+d
9.1.6	Granulocyte-colony stimulating factors	Patient familiarity with the same brand is important and training is required in the use of specific devices for self-injection. Filgrastim preparations have been approved as 'biosimilar'.	BNF Dm+d
9.2.1	Oral rehydration salts	To aid identification. Products contain multiple ingredients.	BNF Dm+d
9.5.1	Calcium salts	To aid identification. Products contain multiple ingredients.	BNF Dm+d
Chapter 12			
12.3.5	Saliva replacement products	To aid identification. Products contain multiple ingredients.	BNF Dm+d
Chapter 13			
13.1-13.10	Preparations for skin and scalp conditions containing multiple ingredients	To aid identification. Products contain multiple ingredients. Also, potency of topical corticosteroid preparations is a result of the formulation as well as the corticosteroid.	BNF Dm+d
Chapter 14			
14.4	Human papillomavirus	Cervarix (bivalent vaccine) and Gardasil	BNF

	vaccine	(quadravalent vaccine) are not considered interchangeable.	
Miscellaneous			
Monoclonal antibodies		It is recommended to prescribe biosimilar medications by brand name.	MHRA

*Adapted from UK Medicines Information (UKMi) pharmacists for NHS healthcare professionals. Appendix 1, v 2.0, was updated with information provided in the document: UKMi, November 2017, Which medicines should be considered for brand-name prescribing in primary care? retrieved on the 18/10/2018 from https://www.sps.nhs.uk/wp-content/uploads/2017/12/UKMi_QA_Brand-name_prescribing_Update_Nov2017.pdf