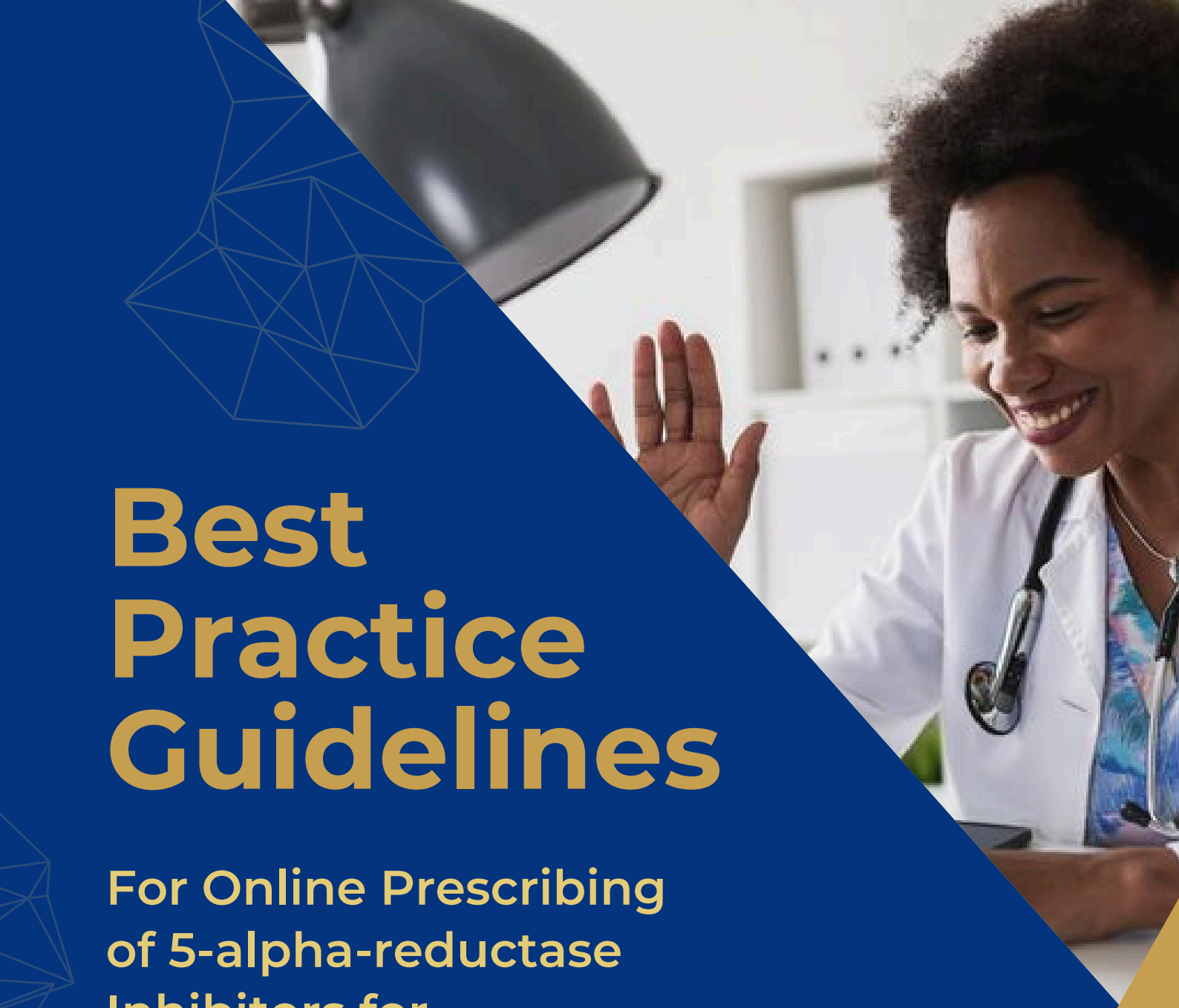

Best Practice Guidelines

For Online Prescribing of 5-alpha-reductase Inhibitors for Androgenic Alopecia

DiCE

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About this document

These Best Practice Guidelines (BPGs) are based on the collective experience of established online healthcare providers who participate in the Digital Clinical Excellence (DiCE) Forum. Working group virtual meetings were held between January and April 2024. The purpose of these meetings was to gather and review existing evidence and contemporary practices, and to form a consensus on a best practice approach to enhance the quality and safety of online / remote prescribing within the independent pharmacy sector.

DiCE BPG aims to align with existing professional and regulatory standards, but also to broaden and strengthen them from an industry perspective. This is in recognition of the fact that rapidly progressing and expanding areas of care are often developing at a faster pace than professional or regulatory standards are published. BPGs are not intended to replace or contest any current professional or regulatory standards. Prescribers must always adhere to the standards set by regulatory bodies relevant to their profession, and any other relevant national guidance.

DiCE BPG applies only to prescribers and is not intended for use by healthcare practitioners operating under a Patient Group Direction. In addition, while DiCE BPG may be useful for prescribers operating outside of the United Kingdom, it is not written with this purpose in mind and some recommendations may not apply.

This guidance has been developed specifically for digital asynchronous prescribing of 5-alpha-reductase (5AR) inhibitors for the treatment of male pattern hair loss (androgenic alopecia). Other types of prescribing of 5AR inhibitors falls outside the scope of this document. Recommendations are regularly reviewed and updated where necessary.

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DiCE Best Practice Guidelines are not intended to replace current prescribing information. Prescribers should always refer to the BNF and Summary of Product Characteristics, and any relevant national guidelines

About Digital Clinical Excellence 'DiCE'

DiCE was established in March 2019 to provide a collective voice and support to the growing community of UK digital healthcare providers. The network aims to drive excellence in digital care standards to support clinical care improvement and safety in digital healthcare. DiCE members are senior clinical leaders from online clinical service providers who ensure collective governance for DiCE. There is no commercial focus or activity within the network.

DiCE aims to work collaboratively within the industry and with relevant professional bodies and healthcare regulators to produce its Best Practice Guidance. However, these are industry produced and should not be regarded as being endorsed by any professional body or regulator, who have their own standards. Healthcare professionals are reminded that the only statutory standards that must be adhered to are those produced by the UK healthcare regulators. Established national guidance such as those produced by NICE, SIGN or other statutory bodies must also be followed.

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About digital asynchronous prescribing

The term 'digital asynchronous prescribing' describes the process of online / remote prescribing of medicines using a form-based assessment, without a real-time conversation between prescriber and patient.

Digital asynchronous prescribing is subject to the same legal requirements and regulations as in-office primary care, including the Royal Pharmaceutical Society (RPS) competency framework for consultations and prescribing governance that applies to all prescribers in England and Wales [1].

In addition, registered online pharmacies and other prescribing platforms are required to follow guidance and professional standards set by relevant regulatory bodies, for example the General Medical Council (GMC) and the General Pharmaceutical Council (GPhC) [2-4]. In England, registered prescribing platforms employing doctors as part of the prescribing team also fall under the remit of the Care Quality Commission (CQC) [5].

When conducted in a well-regulated setting with good risk management systems, routine reviews to drive continuous learning improvement, and careful consideration of how information is provided to patients, asynchronous prescribing can be effective in replacing some in-office primary care visits, providing timely care and increased convenience for patients [6–11].

For more general information on professional standards and guidance relevant to digital asynchronous prescribing, refer to the following documents developed by UK regulatory and professional bodies:

- Guidance for registered pharmacies providing pharmacy services at a distance, including on the internet (GPhC, 2022) [12]
- Good practice in prescribing and managing medicines and devices (GMC, 2021) [4]
- Policy for providing medicines online (RPS, 2019) [13]
- Is a remote consultation appropriate? (GMC, 2019) [14]
- Remote prescribing high-level principles (Joint statement by UK-wide healthcare regulators, royal colleges and faculties, 2019) [15]
- The state of care in independent online primary health services (CQC, 2018) [5]

1. What is androgenic alopecia?

Androgenic alopecia, also known as male pattern hair loss, is the most common type of alopecia worldwide [16]. It is estimated to affect up to 60% of men by the age of 50 years [17].

Androgenic alopecia can have a profound psychological and social impact, particularly in younger men and men with rapidly progressing hair loss [18].

An increasing number of men are seeking treatment for androgenic alopecia, including hair transplantation and drug therapies to slow down or reverse hair loss. Studies show that younger men are more likely to turn to an online prescriber than to access treatment through traditional care [19,20].

Drug therapies for male pattern hair loss include:

- Topical or oral minoxidil, which works by increasing blood flow to hair follicles [21,22], and
- Oral 5-alpha-reductase (5AR) inhibitors, which work by blocking the 5AR enzyme from metabolising testosterone to dihydrotestosterone (DHT), a more potent androgen known to contribute to progressive hair loss [23].

Whilst topical minoxidil is an over-the-counter product, oral minoxidil and 5AR inhibitors are not available on the NHS for use in male pattern hair loss and require a private prescription. Registered online prescribers in the UK currently offer two oral 5AR inhibitors: finasteride and dutasteride. Finasteride is more commonly prescribed for men with hair loss, since the use of dutasteride is 'off-label' for these patients [24,25].

Dutasteride is a more potent inhibitor of 5AR and is, in theory, a more effective treatment for hair loss than finasteride [24,25]. The two drugs appear to have comparable side effect profiles [26].

2. Why is a best practice approach needed?

2.1 Providing a safe and trustworthy service

Hair loss is a highly sensitive topic, as demonstrated by the high-profile media attention afforded to 5AR inhibitors. Establishing a best practice approach is essential to reassure patients that their medication is coming from trustworthy pharmacies and clinicians who are aware of any risks and clear on their responsibility to protect patients.

Online prescribers have a duty to provide a safe service for all patients seeking treatment with a 5AR inhibitor, and to follow the professional standards set by the regulatory body relevant to their profession [2–4]. For example, the GMC professional standards state that medicines should only be dispensed if the prescriber feels that they have adequate knowledge of the patient's health, and are satisfied that the medicines serve the patient's needs [4]. These principles are closely aligned with those of the GPhC [3].

It is expected that all prescribers using asynchronous form-based assessments have undertaken a comprehensive risk assessment of the service being provided, in line with current statutory guidance and standards [2,4,12].

If the prescriber feels that a patient's asynchronous form-based assessment does not provide sufficient information to make a safe prescribing decision, and further information is required from the patient, it may be that a telephone or video consultation (or other two-way communication method) is needed. If the prescriber feels that additional sources of information are needed to make a safe prescribing decision, they may ask the patient (or another healthcare professional involved in their care – see section 2.2) to provide this information. Examples of potentially useful documents include recent hospital discharge letters, test results and clinic letters.

Best practice in digital asynchronous prescribing requires that appropriate screening, prescribing and monitoring is undertaken by professionals meeting the requirements of the RPS competency framework [1]. To ensure high-quality provision of care, online prescribers should proactively audit and review the quality and safety of their service. This includes analysing prescribing trends to be able to identify any inappropriate prescribing and supply of 5AR inhibitors.

In addition, consideration should be given to providing pharmacy teams with training on 5AR inhibitors for androgenic alopecia, as well as pharmacists having access to a prescriber of appropriate seniority who can provide further advice and support.

2.2 Information sharing and patient consent

Current professional and regulatory standards recommend that online prescribers request patient consent to share their treatment details with their other healthcare professionals involved in their care (for example, their GP) before prescribing prescription-only medicines [2,4].

Patients requesting GLP-1RA treatment should be asked to consent to GP notification. If a patient refuses consent, the prescriber should record their reasons for refusing (for example, concerns about privacy). They should also inform the patient the importance of sharing information between healthcare providers to ensure continuity of care, and the potential risks of not sharing this information. Prescribers should keep a clear written record of treatment decisions made based on the information provided by the patient, particularly if a GLP-1RA is prescribed without obtaining consent for GP notification. This is in line with current professional and regulatory standards [2,4].

In cases where failing to share information could pose a risk to patient safety, the prescriber should explain to the patient that they cannot prescribe and signpost the patient to appropriate alternative services.

2.3 Safety of 5AR inhibitors

In May 2017, the MHRA issued a Drug Safety Update based on reports of depression and, in rare cases, suicidal thoughts in men taking finasteride for androgenic alopecia with and without a history of depression [27]. An increased risk for self-harm and depression has also been reported in men taking 5AR inhibitors for prostate enlargement [28].

The use of 5AR inhibitors has also been linked with an increased risk of male breast cancer and sexual dysfunction, including decreased libido, erectile dysfunction, and ejaculation disorders [24–26]. In some cases, the sexual side effects of finasteride may persist after treatment is stopped [29].

In April 2024, the MRHA announced that a patient alert card is being introduced to help raise awareness among men of the risk of psychiatric and sexual side effects of finasteride. This patient alert card will be included in the packaging of the medication. The MHRA advises that prescribers should actively monitor patients taking finasteride for psychiatric and sexual side effects (see section 4.3) [29]. Patients should be advised to stop taking finasteride immediately if they develop depression and to inform a healthcare professional [27].

While it is hoped that all online providers already have protocols in place for regular monitoring of men prescribed 5AR inhibitors for hair loss, it is the opinion of participants in the DiCE Working Group that developing best practice guidance to establish a base-level of care across the industry would be beneficial. This includes recommendations for screening patients for mental health issues and other relevant medical conditions, as well as recommendations for monitoring and review of prescriptions.

3. Considering the patient journey

Men seeking a prescription for finasteride or dutasteride from an online provider are likely to have researched hair loss treatment options on the internet, where poor-quality research from unqualified sources is prolific.

It is important for online prescribers to distinguish themselves from the noise and provide trustworthy and scientifically rigorous information. A recent study from Germany of 2,904 men seeking finasteride treatment from an online provider found that 30.5% cited trust in the pharmacy as a motivating factor; by comparison, medication cost was cited by 27.7% [20].

The same study found that most men accessed the digital health platforms directly by typing in the URL rather than through search engines, referrals, social media or paid ads [20].

4. Recommendations from the DiCE Working Group

4.1 Who should follow these recommendations?

The following recommendations are intended as a best practice guide to developing form-based assessments to allow online providers to safely prescribe 5AR inhibitors for male pattern hair loss.

They are not intended to be comprehensive of all possible considerations, or to impose a universal screening process across all providers. For example, some providers may include further considerations (e.g. hair loss classification systems such as the Norwood scale [30]) in the screening process.

These recommendations are intended to complement current prescribing information for finasteride and dutasteride. Online providers should always refer to the BNF and Summary of Product Characteristics before prescribing a 5AR inhibitor for male pattern hair loss. Relevant NICE, SIGN and other national guidelines produced by statutory bodies should also be followed.

4.2 Recommendations for initial consultation and prescribing

Although the clinical evidence is mostly for finasteride 1 mg (the licensed dose for hair loss [24]), it is the opinion of participants in the DiCE Working Group that the same best practice approach applies in patients prescribed dutasteride 0.5 mg off-label.

Note that off-label prescription of any medication requires an adequate risk assessment, ensuring indemnity cover, and notifying the patient that the medication is being used off-label. Refer to the General Pharmaceutical Council guidance for more information [31].

These recommendations are intended to complement current prescribing information for 5AR inhibitors licensed for androgenic alopecia in adult males. Online providers should always refer to the BNF and Summary of Product Characteristics before prescribing a 5AR inhibitor in patients seeking treatment.

Recommendations

A patient may be eligible for 5AR inhibitor treatment for male pattern hair loss:

– If they were assigned male at birth

- 5AR inhibitors are not licensed for use in people assigned female at birth [24,25]

– If they are aged 18 years or older

- 5AR inhibitors are not licensed for use in children and adolescents [24,25]. The approval of finasteride 1 mg for androgenic alopecia was based on clinical studies in men aged 18–41 years with mild-to-moderate hair loss; however, an upper age limit for treatment has not been defined [24].
- If a prescriber implements an upper age limit for prescribing 5AR inhibitors in their practice, they should document their reasons.

Use caution when prescribing a 5AR inhibitor for male pattern hair loss:

– If the patient reports a history of depression or suicidal thoughts during screening

- Counsel the patient on the possible mental health side effects of 5AR inhibitors (see Section 2) [24,27,28].
- Signpost available NHS services and other sources of advice for depression.
- Follow the recommendations in Section 4.3 for monitoring and review of the customer's mental health and other side effects.

– If the patient reports a history of liver disease during screening

- Because 5AR inhibitors are extensively metabolised in the liver, increases in liver enzymes can occur during treatment [24,25].
- Advise the patient to consult their GP or private doctor for further investigation before prescribing.
- If further investigation indicates severe liver disease, 5AR inhibitors should not be prescribed. The effect of severe liver disease on the pharmacokinetics of 5AR inhibitors has not been studied [24,25].

– If the patient is undergoing PSA monitoring

- Advise the patient that use of a 5AR inhibitors can affect the results of tests to determine the levels of prostate-specific antigen (PSA) in the blood, and that they should inform their doctor before taking a PSA test [24,25].

– If the patient has difficulty urinating (obstructive uropathy)

- Advise the patient to consult their GP or private doctor for examination and further advice.

– If the patient has a partner who is pregnant

- Advise the patient that their partner should avoid touching broken finasteride tablets or leaking dutasteride capsules in case of contact with the active drug, as this may affect the baby's sex organs [24,25].

– If the patient has a partner who is planning to become pregnant

- Advise the patient that 5AR inhibitors can impact their fertility, but this is not common and usually resolves after stopping treatment [24,25,32].
- While on treatment, small amounts of active drug may be present in their semen, but it is not known whether exposure at time of conception can affect the development of a male foetus [24,25,32].

Consider not prescribing a 5AR inhibitor for male pattern hair loss:

– If the patient has previously developed sexual dysfunction while taking a 5AR inhibitor

- Sexual dysfunction is a known side effect of 5AR inhibitors [24,25], and could potentially compound the risk of mental health issues while taking these medications.

– If the patient has a history of prostate cancer or is undergoing investigation for prostate cancer

- Although the evidence is inconsistent, it has been suggested that 5AR inhibitors can increase the malignant potential of prostate cancer [24,25].

– If the patient has a history of male breast enlargement (gynecomastia)

- Male breast enlargement is a known side effect of 5AR inhibitors [24,25].
- The signs of gynecomastia are like those of male breast cancer, which has been reported in men taking 5AR inhibitors [24,25].

Do not prescribe a 5AR inhibitor for male pattern hair loss:

– If the patient is under 18 or assigned female at birth

- 5AR inhibitors are not licensed for use in these patients [24,25].

– If the patient is already taking another 5AR inhibitor

- For example, for prostate cancer.

– If the patient has a known hypersensitivity

- 5AR inhibitors should not be prescribed to patients with hypersensitivity to the active drug or to any of the other substances listed in the SmPC [24,25].

4.3. Recommendations for monitoring and review

Once the screening consultation is complete, eligible patients may be prescribed up to 6 months of once-daily finasteride 1 mg (168 tablets) or dutasteride 0.5 mg (180 capsules).

Based on the experience of participants in the DiCE Working Group, most reports of side effects of 5AR inhibitors occur within the first 2 weeks of treatment and are self-reported by patients. However, it can take up to 6 months for patients to see any progress in terms of hair growth and prevention of further hair loss [24,25].

In terms of a best practice approach, there is a need to balance the risk of overlooking men who develop mental health issues while taking 5AR inhibitors and maximising the clinical value of contact points with patients.

The consensus among participants in the DiCE Working Group is that screening should take place at the time of prescription refill (repeat supply), 3–6 months after starting treatment.

Recommendations

In addition to the product's patient information leaflet, online prescribers should provide men with:

- ·Advice about stopping treatment if they develop depression or any other potentially serious side effect of 5AR inhibitors, and how they can seek help.
- ·Advice about the importance of checking for and reporting any changes in their breast tissue, such as lumps, pain or nipple discharge.
- ·Advice on how to self-report side effects of treatment to the MHRA using the Yellow Card online reporting tool for patients.

Monitor patients at time of prescription refill (3–6 months after starting treatment)

- Ask the patient whether they have perceived any improvement in their hair loss and reinforce that it can take up to 6 months to see an effect of treatment.
- Ask the patient if they have experienced any sexual side effects since starting treatment (e.g. low libido, erectile dysfunction or ejaculation disorders).
- Ask the patient if they have experienced any psychological side effects since starting treatment.
- Prescribers may wish to use a short, validated screening tool for depression (e.g., the 2-item Patient Health Questionnaire or a numerical rating scale).
- Consider repeating the initial screening process to ensure that continuing 5AR inhibitor therapy is right for them.

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