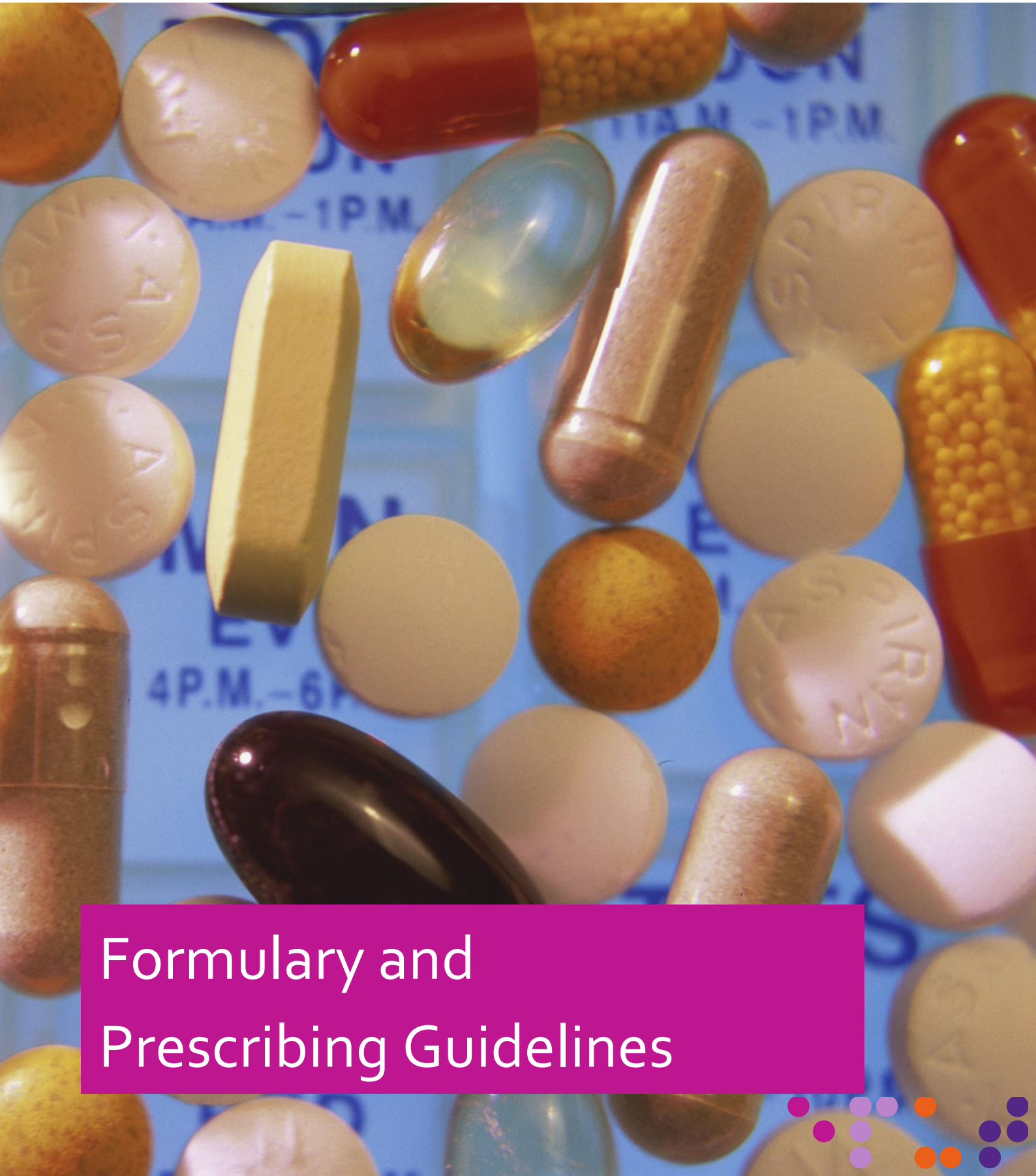
Essex Partnership University
NHS Foundation Trust

SECTION 4: TREATMENT OF ANXIETY



Formulary and Prescribing Guidelines

4.1 Introduction

This guidance should considered as part of a stepped care approach in the management of generalised anxiety disorder (GAD), panic disorder (PD), post-traumatic stress disorder (PTSD), obsessive-compulsive disorder (OCD), body dysmorphic disorder (BDD) and social anxiety disorder (previously known as 'social phobia'). Pharmacological therapies are not recommended as first-line treatments for anxiety disorders due to psychological therapies being associated with a longer duration of effect. Many of the drugs recommended in this section are not licensed for the indications for which they are being used, due primarily to the fact that these drugs are no longer on patent and licenses have not been applied for. Annex 1 of section 1 provides information relating to licensing indications and annex 2 provides information relating to side effects.

Guidance on the use of agents in children & adolescents can be found in section 12. Further guidance on prescribing for older adults and for antenatal/postnatal women can be found in section 11 and section 20.

For all patients with depression or unexplained anxiety, consider testing for thyroid dysfunction. [13]

If used in pregnancy:

- refer to the MHRA warning [15] for SSRI and SNRIs, about the small increased risk of postpartum haemorrhage when used in the month before delivery.
- refer to the MHRA warning [16] for pregabalin. A new study has suggested pregabalin may slightly increase the risk of major congenital malformations if used in pregnancy. Patients should continue to use effective contraception during treatment and avoid use in pregnancy unless clearly necessary.

See formulary section 20 (Antenatal and postnatal prescribing) for further details of these risks.

4.2 Generalised Anxiety Disorder (GAD) in ADULTS

4.2.1 Approved Drugs for GAD in adults

Drug[1]	Formulation[1]	Comments[2-4]
Sertraline	Tabs 50mg, 100mg	Unlicensed. ***1st line*** SSRI
Fluoxetine	Caps 20mg, Disp Tabs 20mg Liquid 20mg/5ml	Unlicensed. ***2nd line*** SSRI
Paroxetine	Tabs 20mg, 30mg Liquid 10mg/5ml	Licensed. ***2nd line*** SSRI
Citalopram	Tabs 10mg, 20mg, 40mg Oral drops 40mg/ml (2mg/drop). NB. 8 drops (16mg) = 20mg Tablet	Unlicensed. ***2nd line*** SSRI
Venlafaxine	Tabs 37.5mg XL caps 75mg	Licensed. Selective norepinephrine reuptake inhibitor (SNRI). ***2nd line*** if SSRI(s) ineffective
Duloxetine	Capsules 30 mg, 60 mg	Licensed. SRNI

Drug[1]	Formulation[1]	Comments[2-4]
Pregabalin[a]	Caps 25mg, 50mg, 75mg, 100mg, 150mg, 200mg, 225mg, 300mg	Licensed. ***3rd Line*** if SSRIs/SRNIs ineffective/not tolerated
Buspirone[b]	Tabs 5mg, 10mg	Licensed
Clomipramine	Caps 10mg, 25mg, 50mg	Unlicensed. Tricyclic (TCA)
Diazepam[c]	Tabs 2mg, 5mg,10mg Liquid 2mg/5ml, 5mg/5ml	Licensed for the short-term relief (2-4 weeks only) of severe/distressing anxiety
Escitalopram	Tabs, 5 mg; 10 mg Oral drops, 10 mg/mL; 20 mg/mL	Licensed.
Hydroxyzine	Tabs 10mg, 25mg Liquid 10mg/5ml	Licensed. (antihistamine) BAP[1] endorses use of hydroxyzine in the management of GAD
Lorazepam[c]	Tabs 1mg Injection 4mg/ml	Licensed for the treatment of acute anxiety states, excitement or acute mania
Promethazine	Tabs 10mg, 25mg Liquid 5mg/5ml	Unlicensed. Antihistamine
Propranolol	Tabs 10mg, 40mg, 80mg Liquid 5mg/5ml, 10mg/5ml, 50mg/5ml	Licensed. Beta blocker

Notes

a) Pregabalin is licensed for the management of GAD and the total daily dose can be administered in two or three doses. The MMG encourages twice daily schedules to maximise cost savings. Pohl et al. (2005) suggest no significant difference in efficacy or tolerability between BD and TDS dosing[8]. Prescribers of pregabalin should be aware that there is a risk of dependence and that it may be misused or diverted. [9]

b) Buspirone has a delayed onset of anxiolytic effect (initial effects are observed by the second week, and full effect in approximately one month) and is not appropriate for 'as needed' use. It produces no significant sedation, and is associated with minimal potential for abuse. The therapeutic dose range has been quoted as 20 – 30 mg per day; with the maximum dosage being 45 mg daily. Abrupt termination of treatment does not result in pronounced rebound anxiety or any withdrawal reaction.

c) Benzodiazepines should not usually be prescribed for more than 2 – 4 weeks. For longer-term care of generalised anxiety disorder, an antidepressant should normally be used. The most suitable benzodiazepine is diazepam because it is rapidly absorbed and has a long half-life. Benzodiazepines with longer half-lives are less likely to cause dependence problems than those with shorter half-lives e.g. lorazepam. Patients who have received benzodiazepines regularly for several days should have them withdrawn gradually. The FDA has warned of a serious risk of death when benzodiazepines are used in combination with Opioid analgesic or cough preparations.[11]

4.2.2 NICE Clinical Guidelines

NICE CG113, January 2011. Generalised anxiety disorder and panic disorder (with or without agoraphobia) in adults[4]

- If a patient with GAD chooses drug treatment, consider offering **sertraline (SSRI) first line**. As sertraline is not licensed for this indication - informed consent should be obtained and documented.

- If sertraline is ineffective, consider another SSRI or SNRI (such as venlafaxine).

- If the patient cannot tolerate **SSRIs or SNRIs** – consider pregabalin.

- Benzodiazepines should not be offered for the treatment of GAD in either primary or secondary care except as a short-term measure during crises. Antipsychotics should not be offered for the treatment of GAD in primary care.

- When discussing treatment with a patient, ascertain the patient's prior experience with respect to drug therapy (e.g. adherence, efficacy, side-effects, experience of a withdrawal reaction, and personal preference). Explain the benefits of antidepressant therapy and the gradual development of anxiolytic effect over one week or more. Inform the patient of the need to take medication as directed (to avoid withdrawal effects associated with some antidepressants, e.g. paroxetine and venlafaxine) and the need to continue medication after remission to avoid relapse.

- Specific risks associated with antidepressant therapy include the following; increased risk of bleeding associated with SSRIs - especially in the elderly and in patients on NSAIDs or warfarin/aspirin (consider prescribing a gastro-protective agent); increased risk of suicidal thoughts and self-harm in a minority of patients aged 30 (and under) and thus all such patients should be **seen** within one week of initiation of therapy with weekly monitoring for such behaviour for the first month of drug treatment; risk of activation seen with SSRIs and SNRIs – manifested as increased anxiety, agitation and problems sleeping. For patients who develop side effects – consider one of the following strategies; monitoring symptoms (if mild and acceptable to the patient) or reducing/stopping the drug and (according to the patient's preference) selecting either an alternative drug or high-intensity psychological intervention.

- Drug therapy should be reviewed every 2-4 weeks with respect to efficacy and tolerability during the first three months of treatment and every 3 months thereafter.

- If the drug is effective, advise the patient to continue taking it for at least a year as the likelihood of relapse is high.

- When GAD has not responded to drug treatment, offer a high-intensity psychological intervention or an alternative drug treatment (see above). When GAD has partially responded to drug treatment, consider the use of high-intensity psychological intervention in addition to drug treatment.

- Consider referral to secondary care if the individual has severe anxiety with any of the following:

    1. Risk of self-harm or suicide

    2. Significant co-morbidity (such as substance misuse, personality disorder, or complex physical problems)

    3. Self-neglect

4. Demonstrates a lack of response to the above therapeutic interventions.

- Combinations of antidepressants or augmentation of antidepressants may be considered at step 4, but it is the opinion of NICE that 'evidence for the effectiveness of combination treatments is lacking and side effects and interactions are more likely when combining and augmenting antidepressants'.

4.3 Panic Disorder (PD) in ADULTS

4.3.1 Approved drugs in PD for Adults

Drug[1]	Form[1]	Comments[1,2]
Sertraline[a]	Tabs 50mg, 100mg	Licensed. ***1st line SSRI*** (based on acquisition cost)
Citalopram[a]	Tabs 10mg, 20mg, 40mg Oral drops 40mg/ml (2mg/drop)	Licensed.
Clomipramine	Caps 10mg, 25mg, 50mg	Unlicensed.
Escitalopram[a]	Tabs, 5 mg; 10 mg Oral drops, 10 mg/mL; 20 mg/mL	Licensed.
Fluoxetine[a]	Caps 20mg, Disp Tabs 20mg Liquid 20mg/5ml.	Unlicensed.
Imipramine	Tabs 10mg, 25mg	Unlicensed.
Paroxetine[a]	Tabs 20mg, 30mg Liquid 10mg/5ml.	Licensed.

Notes

a) The initial dose of an SSRI should be very small (usually half of the smallest dosage form) to minimise drug-induced anxiety and panic frequency. The dose should be increased weekly until the desired effect is seen or side-effects emerge.

4.3.2 NICE Clinical Guidelines

NICE CG113, January 2011. GAD and PD (with or without agoraphobia)[4]

- **First line treatment** should be with an SSRI licensed for panic disorder.

- As per previous NICE guidance, all patients commencing on antidepressants should be informed about delay in onset of effect, potential side-effects, need to take medication as directed, time course of treatment, and possible discontinuation side-effects. Such information should also be supplied in writing.

- Side-effects on initiation can be lessened by starting at a low dose and slowly increasing the dose until a satisfactory therapeutic response is achieved.

- Review efficacy and side effects within 2 weeks of starting treatment and again at 4, 6 and 12 weeks.

- Long-term treatment & doses at the upper end of the dose range may be necessary.

- If an SSRI is not suitable or if there is no improvement after a 12-week course, and if further medication is appropriate, consider imipramine or clomipramine. Although neither is licensed for panic disorder, efficacy has been demonstrated (informed consent must be obtained and documented). The risk(s) of deliberate self-harm or accidental overdose must be considered before prescribing a Tricyclic antidepressant (TCA) such as imipramine or clomipramine – they are considerably more dangerous in overdose relative to SSRIs. Additionally, TCAs should not be routinely offered to patients at significant risk of cardiovascular disease without baseline ECG and BP measurements.

- If there has been an improvement after 12 weeks of treatment, continue treatment for 6 months after optimal dose has been reached (with review at 8-12 weekly intervals): the dose can then be tapered.

- If there has not been an improvement after 12 weeks of treatment, and this has been the first intervention – reassess the panic disorder and consider trying another intervention. If this was the second intervention –review and offer referral to specialist mental health services.

- Benzodiazepines, sedating antihistamines and antipsychotics should not be prescribed for treatment of panic disorder.

- People with borderline or antisocial personality disorders should only be prescribed sedative medication for short-term crisis management or treatment of comorbid conditions.

4.4 Post-Traumatic Stress Disorder (PTSD)

4.4.1 Approved Drugs for PTSD in ADULTS

Randomised placebo-controlled treatment studies in PTSD indicate evidence for the efficacy of a range of antidepressants including some SSRIs (fluoxetine, paroxetine, sertraline), amitriptyline, imipramine, mirtazapine, nefazodone, phenelzine and venlafaxine. There is also evidence for the efficacy of risperidone, olanzapine and topiramate. However a meta-analysis found that only paroxetine, sertraline and venlafaxine have superiority over placebo[12]. There is evidence for the efficacy of longer-term treatment for PTSD, for fluoxetine and sertraline. The findings of small randomised placebo-controlled augmentation studies provide evidence for the efficacy of prazosin in reducing nightmares and other PSTD symptoms.

Drug[1]	Form[1]	Comments[4, 12]
Paroxetine	Tabs 20mg, 30mg Liquid 10mg/5ml	Licensed. Supported by NICE guidance and endorsed by BAP. ***1st line***
Sertraline	Tabs 50mg, 100mg	Licensed. Supported by NICE guideline and endorsed by BAP. The latter cites sertraline as having acute and chronic efficacy in PTSD. ***1st line***

Venlafaxine	Tabs/ Caps (IR and MR) 37.5mg, 75mg, 150mg	Unlicensed, but endorsed by NICE and BAP. ***1st line***
Mirtazapine	Tabs 15mg, 30mg, 45mg Dispersible Tabs, 15mg, 30mg, 45mg Oral solution 15mg/mL	Unlicensed, but evidence cited by BAP.
Amitriptyline	Tabs 10mg, 25mg, 50mg Liquid 25mg/5ml, 50mg/5ml	Unlicensed, but evidence cited by BAP.
Imipramine	Tabs 10mg, 25mg Liquid 25mg/5ml	Unlicensed, but evidence cited by BAP.
Fluoxetine	Caps 20mg Liquid 20mg/5ml	Unlicensed, but evidence cited by BAP (having acute and chronic efficacy in PTSD).
Olanzapine (augmentation of SSRI antidepressant)	Tabs 2.5mg, 5mg, 7.5mg, 10mg, 15mg, 20 mg Dispersible Tabs 5mg, 10mg, 15mg, 20mg	Unlicensed, but endorsed by BAP.
Risperidone	Tabs 0.5mg, 1mg, 2mg, 3mg, 4mg, 6mg Orodispersible tabs 0.5mg, 1mg, 2mg, 3mg, 4mg Oral solution 1mg/ml	Unlicensed, but endorsed by NICE and BAP.
Phenelzine	Tabs 15mg	Unlicensed**,** but evidence cited by BAP. Consultant initiation only.

(NOTE[12]: Drugs which have **not** been found efficacious in placebo-controlled trials include citalopram, alprazolam, tiagabine and semisodium valproate).

4.4.2 NICE Clinical Guidelines

NICE NG116 (December 2018). Post-traumatic stress disorder[4].

Drug treatments for adults

- Do not offer drug treatments, including benzodiazepines, to prevent PTSD in adults.

- Consider venlafaxine or a selective serotonin reuptake inhibitor (SSRI), such as sertraline for adults with a diagnosis of PTSD if the person has a preference for drug treatment. Review this treatment regularly.

NOTE: At the time of publication of NG116 (December 2018):

- only sertraline and paroxetine have a UK marketing authorisation for this indication.
- venlafaxine did not have a UK marketing authorisation for this indication.

The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and

documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

Consider antipsychotics such as risperidone, in addition to psychological therapies to manage symptoms for adults with a diagnosis of PTSD if:

- they have disabling symptoms and behaviours, for example severe hyperarousal or psychotic symptoms **and**
- their symptoms have not responded to other drug or psychological treatments.

NOTE: At the time of publication of NG116 (December 2018) risperidone did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

Antipsychotic treatment should be started and reviewed regularly by a specialist.

4.5 Obsessive-Compulsive Disorder (OCD) in ADULTS

4.5.1 Approved Drugs for OCD in ADULTS

Drug[1]	Form[1]	Comments[1,3]
Fluoxetine	Caps 20mg, Disp Tabs 20mg Liquid 20mg/5ml	Licensed indication. ***1st line SSRI*** (based on acquisition cost)
Citalopram	Tabs 10mg, 20mg, 40mg Oral drops 40mg/ml (2mg/drop)	Unlicensed, but use in OCD is endorsed by BAP
Clomipramine	Caps 10mg, 25mg, 50mg	Licensed indication
Haloperidol	Caps 500 micrograms Tabs 1.5mg, 5mg, 10mg, Liquid 2mg/ml	Unlicensed, but use in OCD (augmentation) is specifically endorsed by BAP
Sertraline	Tabs 50mg,100mg	Licensed indication
Olanzapine	Tabs 2.5mg, 5mg, 7.5mg, 10mg, 15mg, 20mg Orodispersible Tabs 5mg, 10mg, 15mg, 20mg	Unlicensed, but use in OCD (augmentation) is specifically endorsed by BAP
Paroxetine	Tabs 20mg, 30mg Liquid 10mg/5ml	Licensed indication
Quetiapine	Tabs 25mg, 100mg, 150mg, 200mg, 300mg	Unlicensed, but use in OCD (augmentation) is endorsed by BAP
Risperidone	Tabs 0.5mg, 1mg, 2mg, 3mg, 4mg, 6mg Liquid 1mg/ml Orodispersible tabs 0.5mg, 1mg, 2mg	Unlicensed, but use in OCD (augmentation) is endorsed by BAP

4.5.2 NICE Clinical Guidelines

NICE CG31, November 2005. Obsessive-Compulsive Disorder. Core interventions in the treatment of obsessive-compulsive disorder and body dysmorphic disorder[3]

- **An SSRI antidepressant should be offered as first-line pharmacotherapy** for patients who cannot engage in CBT/ have found CBT ineffective.

- If this should prove ineffective at 12 weeks, with or without psychological therapy, **then a different SSRI or clomipramine should be offered**. (Clomipramine should not be routinely offered to patients at significant risk of cardiovascular disease without baseline ECG and BP measurements. Additionally, in patients at significant risk of suicide, small amounts of clomipramine should be prescribed or dispensed because of its toxicity in overdose.)

- Should a full trial of a second SSRI alone or clomipramine alone be ineffective at 12 weeks, addition of an antipsychotic (to either said SSRI or clomipramine) should be considered. If patient is already on citalopram, then augmentation with clomipramine could be contemplated. Augmentation of an SSRI or clomipramine with an antipsychotic should not be routinely carried out in primary care. Use of combined antidepressants should not routinely be carried out in primary care.

- Tricyclic antidepressants (excluding clomipramine), Tricyclic related antidepressants, SNRIs (including venlafaxine), and MAOIs should NOT be used for OCD (unless there is co-morbidity).

- Anxiolytics (except cautiously for short periods to counter early activation of SSRIs) should NOT be used in OCD (unless there is co-morbidity).

- Antipsychotic monotherapy should NOT be used for OCD.

- Maintenance with an SSRI antidepressant: if effective (defined as patient fully functional for 12 weeks with clinically insignificant symptoms), continue treatment for at least 12 months to prevent relapse, and allow for further improvement. Review ongoing need for drug therapy beyond 12 months, and document reason(s) for continuation or discontinuation of said drug therapy in the notes. If discontinuation is mutually agreed upon, then taper the dose gradually over several weeks.

- Maintenance with Clomipramine: Continue treatment for at least 12 months if it appears to be effective and because there may be further improvement. At review, document the reason(s) for continuation or discontinuation of therapy. Should the latter be mutually agreed upon, reduce the dose gradually to minimise potential discontinuation/withdrawal symptoms.

4.6 Body Dysmorphic Disorder (BDD) in ADULTS

4.6.1 Approved Drugs for BDD in ADULTS

Drug[1]	Form[1]	Comment[1,3]
Fluoxetine	Caps 20mg, Disp Tabs 20mg	Unlicensed. ***1st line***

Drug[1]	Form[1]	Comment[1,3]
	Liquid 20mg/5ml	
Buspirone	Tabs 5mg, 10mg	Unlicensed. There is a general reference to the use of buspirone as an augmenting agent (to SSRIs) in BDD at doses of 40-90 mg daily (the maximum UK recommended dose for buspirone is 45 mg daily)
Citalopram	Tabs 10mg, 20mg, 40mg Oral drops 40mg/ml (2mg/drop)	Unlicensed.
Clomipramine	Caps 10mg, 25mg, 50mg	Unlicensed.
Paroxetine	Tabs 20mg, 30mg Liquid 10mg/5ml	Unlicensed.
Sertraline	Tabs 50mg,100mg	Unlicensed.

4.6.2 NICE Clinical Guidelines

NICE CG31, November 2005. Obsessive-Compulsive Disorder. Core interventions in the treatment of obsessive-compulsive disorder and body dysmorphic disorder[3]

- **Fluoxetine should be offered as first-line pharmacotherapy**.
- If this should prove ineffective at 12 weeks, with or without psychological therapy, **then a different SSRI or clomipramine** should be offered. (Clomipramine should not be routinely offered to patients at significant risk of cardiovascular disease without baseline ECG and BP measurements. Additionally, in patients at significant risk of suicide, small amounts of clomipramine should be prescribed OR dispensed because of its toxicity in overdose).
- Should a full trial of a second SSRI alone be ineffective at 12 weeks, addition of buspirone (to said SSRI) should be considered.
- Tricyclic antidepressants (excluding clomipramine), tricyclic related antidepressants, SNRIs (including venlafaxine), and MAOIs should NOT be used for BDD (unless there is co-morbidity).
- Anxiolytics (except cautiously for short periods to counter early activation of SSRIs) should NOT be used in BDD (unless there is co-morbidity).
- Antipsychotic monotherapy should NOT be used for BDD.
- Maintenance with an SSRI antidepressant: if effective (defined as patient fully functional for 12 weeks with clinically insignificant symptoms), continue treatment for at least 12 months to prevent relapse, and allow for further improvement. Review ongoing need for drug therapy beyond 12 months, and document reason(s) for continuation or discontinuation of said drug therapy in the notes. If discontinuation is mutually agreed upon, then taper the dose gradually over several weeks.

- Maintenance with Clomipramine: Continue treatment for at least 12 months if it appears to be effective and because there may be further improvement. At review, document the reason(s) for continuation or discontinuation of therapy. Should the latter be mutually agreed upon, reduce the dose gradually to minimise potential discontinuation/withdrawal symptoms.

4.7 Social Anxiety Disorder

4.7.1 Approved drugs for Social Anxiety Disorder – adult only

Drug[1]	Form[1]	Comments[1,7]
Sertraline	Tabs 50mg,100mg	Licensed. 1st line
Escitalopram	Tabs, 5 mg; 10 mg Oral drops, 10 mg/mL; 20 mg/mL	Licensed. Alternative 1st Line
Paroxetine	Tabs 20mg, 30mg Liquid 10mg/5ml	Licensed. 2nd Line
Venlafaxine	XL caps 75mg	Licensed. Selective norepinephrine reuptake inhibitor (SNRI). Alternative *2nd line* if SSRIs ineffective
Fluvoxamine	Tabs, 50mg; 100mg	Unlicensed, Alternative *2nd line*
Moclobemide	Tabs 150mg, 300mg	Licensed, 3rd line **Consultant initiation only**
Phenelzine	Tabs 15mg	Unlicensed, alternative 3rd line. **Consultant initiation only**

4.7.2 NICE clinical guidelines – Adult only

NICE CG159, May 2013. Social Anxiety Disorder: Recognition, assessment and treatment.

- For adults who decline cognitive behavioural interventions and express a preference for a pharmacological intervention, discuss their reasons for declining cognitive behavioral interventions and address any concerns
- For adults whose symptoms have only partially responded to an SSRI (escitalopram or sertraline) after 10 to 12 weeks of treatment, offer individual CBT in addition to the SSRI
- For adults whose symptoms have not responded to an SSRI (escitalopram or sertraline) or who cannot tolerate the side effects, offer an alternative SSRI (fluvoxamine or paroxetine) or a SNRI (venlafaxine), taking into account; a), the tendency of paroxetine and venlafaxine to produce a discontinuation syndrome (which may be reduced by extended-release preparations); and b), the risk of suicide and likelihood of toxicity in overdose.
- For adults whose symptoms have not responded to an alternative SSRI or an SNRI, offer a monoamine oxidase inhibitor (phenelzine or moclobemide).
- Discuss the option of individual CBT with adults whose symptoms have not responded to pharmacological interventions.
- Do not routinely offer anticonvulsants, tricyclic antidepressants, benzodiazepines or antipsychotic medication to treat social anxiety disorder in adults.

- Do not offer St John's wort or other over-the-counter medications and preparations for anxiety to treat social anxiety disorder. Explain the potential interactions with other prescribed and over-the-counter medications and the lack of evidence to support their safe use.

4.8 Pregabalin Prescribing

Pregabalin is licensed for the treatment of GAD. The BNF dose is initially 150mg daily in preferably two divided doses (ie 75mg BD), increased as necessary at 7 day intervals in steps of 150mg daily up to a maximum of 600mg daily in preferably two divided doses. It should not be stopped abruptly as it may precipitate rebound anxiety and seizures.

Public Health England have published advice for prescribers surrounding the risk of dependence and misuse with pregabalin. Pregabalin should not be prescribed to patients with a known or suspected propensity to misuse, divert or become dependent on drugs unless alternative approaches have failed. Individuals misusing pregabalin have described improved sociability, euphoria, relaxation and a sense of calm. However, the depression of the CNS may result in drowsiness, sedation, respiratory depression or, in extreme cases, death.

The MHRA [14] has highlighted reports of severe respiratory depression with pregabalin.
Advice for healthcare professionals:

- pregabalin has been associated with reports of respiratory depression, in some cases without concomitant opioid treatment
- consider whether adjustments in dose or dosing regimen are necessary for patients at higher risk of respiratory depression, this includes people:
    - with compromised respiratory function, respiratory or neurological disease, or renal impairment
    - taking other CNS depressants (including opioid-containing medicines)
    - aged older than 65 years
- report suspected adverse drug reactions associated with use of pregabalin on a Yellow Card

Advice to give to patients and carers:

- some patients have experienced breathing difficulties when taking pregabalin – certain people may need a lower dose to reduce the risks of these issues
- contact your doctor if you notice new or increased trouble breathing or you experience shallow breathing after taking pregabalin; a noticeable change in breathing might be associated with sleepiness
- read the leaflet that comes with your medicine and talk to your doctor or pharmacist if you are worried about the other prescribed medicines you are taking with pregabalin
- avoid drinking alcohol during pregabalin treatment

When prescribing, the prescriber should have available a complete list of medication to ensure that potentially harmful drug interactions are minimised. The rationale for prescribing and decisions should be discussed and documented, including the risk of dependence. Prescribers should evaluate the risks of continued prescribing and make appropriate decisions regarding quantity of drugs to supply and review intervals.

In summary:

- Pregabalin should be prescribed ideally as two divided doses with the minimum number of capsules used
- There is a risk of abuse and dependence with pregabalin which should be discussed with the patient
- If there is a known or suspected risk of abuse or dependence, careful consideration should be given to prescribing to those individuals and alternatives tried first
- It is advisable to limit the quantity of pregabalin prescribed
- Use pregabalin for the shortest possible duration

As of April 2019, because of a risk of abuse and dependence, pregabalin and gabapentin are scheduled under the Misuse of Drugs Regulations 2001 as schedule 3. They are therefore now subject to the prescription-writing requirements for schedule 3 controlled drugs, i.e. prescriptions must include the prescriber's address, patient's full name and address, NHS number, name of the drug, form of the preparation (e.g. tablets, capsules, even if only one form exists), strength of the preparation, dose to be taken, total quantity of the preparation to be supplied, in both words and figures, e.g. 'ten (10) capsules, signature of the prescriber (and to aid identification, the prescriber should also print their name in block capitals, followed by their professional registration number), and the date on which the prescription has been written.

Pregabalin in pregnancy

A new study [16] has suggested pregabalin may slightly increase the risk of major congenital malformations if used in pregnancy. Patients should continue to use effective contraception during treatment and avoid use in pregnancy unless clearly necessary. See formulary section 20 (Prescribing in Pregnancy - Antenatal and postnatal) for further details.

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