Essex Partnership University
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## SECTION 12: TREATMENT OF CHILDREN AND ADOLESCENTS

# Formulary and Prescribing Guidelines

## 12.1 Introduction

Treatment of mental health disorders in this population is associated with the following challenges:

### 12.1.1 Co-morbidity

There is a high rate of co-morbidity between ADHD and conduct disorder, oppositional defiant disorder, anxiety (including OCD), depression and tourette's syndrome[1]. Medicines that are often used for one condition must also be evaluated for suitability in others. For example methylphenidate may be effective for ADHD, but it must be monitored to ensure there is no worsening of baseline tic frequency in a patient who also has tourette's.

Some presentations may also be fore-runners of other diagnoses. One third of children presenting with depression may later present with features of Bipolar Affective Disorder. Therefore monitoring for switches into a manic phase is an important consideration when prescribing an antidepressant in this population.

### 12.1.2 Increased sensitivity to psychotropics (relative to the adult population).

Children and adolescents can exhibit heightened sensitivity to Tricyclic Antidepressants (TCAs) with increased rates of dry mouth, dizziness, tachycardia, hypotension and cardiotoxicity. As a consequence, it is important members of this population have regular ECG monitoring (as recommended with the use of clomipramine in childhood OCD[3]).

Children have been reported to show increased aggression when prescribed buspirone, whilst adolescents have displayed this response to a lesser extent.[4] Therefore whilst buspirone augmentation is a strategy cited by NICE guidance for body dysmorphic disorder (BDD) management in adults, such augmentation therapy is not endorsed for BDD in children and adolescents[3].

Children (along with the elderly) are more likely to display disinhibition when prescribed benzodiazepines, and therefore; long-term administration of benzodiazepines in children and adolescents is not recommended[5].

First generation Antipsychotics (FGAs) are associated with increased rates of extrapyramidal symptoms in children and adolescents (including laryngeal spasm). Should administration of an intramuscular antipsychotic be required, parenteral procyclidine must be readily available. Haloperidol in particular, should probably be avoided[6].

Second generation antipsychotics (SGAs), have been associated with increased weight gain, lipid and prolactin changes[7]. The SPC (for olanzapine) cites 'a greater magnitude of weight gain, lipid and prolactin alterations have been reported in short-term studies of adolescent patients than in studies of adult patients[7].

Regular clinical monitoring of endocrine function should be considered when children are taking an antipsychotic drug known to increase prolactin levels; this includes measuring weight and height, assessing sexual maturation, and monitoring menstrual function (BNFC entry for olanzapine[21]).

The use of antidepressants (citalopram, escitalopram, paroxetine, sertraline, mirtazapine, and venlafaxine) in individuals under 18 years is associated with unfavourable risk benefit balance[6]. NICE recommends fluoxetine as the only antidepressant where benefits of its use outweigh risk.

### 12.1.3 Off-label use of medicines or unlicensed medicines.

Medicines which are licensed for one indication are frequently used for another in this population. For example, the use of Circadin® (melatonin 2 mg SR) in children is unlicensed as this brand is only indicated for insomnia in the over 55's. Olanzapine is recommended by NICE for the acute management of mania in children and adolescents. This SGA however, is not licensed within the UK for individuals below 18 years of age[5].

### 12.1.4 Treatment of symptoms, not the cause of the disorder.

An example includes the use of risperidone in children from the age of five with sub-average intellectual functioning, to help alleviate persistent aggression in conduct disorder.

12.1.5 Attachment difficulties should not be treated using pharmacological interventions.

## Ask about use of alcohol and drugs

In 2016 NICE published guideline NG58: Coexisting severe mental illness and substance misuse: community health and social care services.[24] This contains recommendations on managing drug and alcohol misuse.

Healthcare professionals in all settings, including primary care, secondary care mental health services, CAMHS and accident and emergency departments, and those in prisons and criminal justice mental health liaison schemes, should routinely ask adults and young people, including those with known or suspected psychosis, about their use of alcohol and/or prescribed and non-prescribed (including illicit) drugs (examples include illegal drugs such as cannabis, cocaine, crack cocaine and heroin, prescribed drugs that have not been prescribed to the person using them or are not taken in the way that was intended such as diazepam, pregabalin and 'over-the-counter' medicines that can be bought from a pharmacy such as codeine.)

Also ask about their use of new psychoactive substances. The level of detail obtained depends on the setting and how much information the person wishes to provide at that time.

If the person has used substances ask them about all of the following:

- particular substance(s) used
- quantity, frequency and pattern of use
- route of administration
- duration of current level of use.

Healthcare professionals should also conduct an assessment of dependency and also seek corroborative evidence from families, carers or significant others, where this is possible and permission is given.

### Coexisting mental illness and substance misuse

Identify and provide support to people with coexisting severe mental illness and substance misuse.

### Other considerations

For all patients with depression or unexplained anxiety, consider testing for thyroid dysfunction. [25]

Consider tests for thyroid dysfunction for children and young people with abnormal growth, or unexplained change in behaviour or school performance. [25]

### Shared decision making

NICE has also published specific recommendations[26] for decision making in patients under the age of eighteen. A visual aid[26] to support decision making in young people is shown below.


## 12.2 The treatment of depression in Children (8-11 years) and Adolescents (12-18)

Antidepressant medication should not be used for the initial treatment of children and young people with mild depression[2]. In children and young people psychological therapies are the first-line endorsed treatments.

| Drug[6] | Formulation[6] | Comments[2] |
|---|---|---|
| Fluoxetine | Caps 20mg, 60mg, Disp Tabs 20mg<br>Liquid 20mg/5ml | ***1st Line SSRI*** – licensed ≥ 8 years age |
| Sertraline | Tabs 50mg, 100mg | 2nd line SSRI – unlicensed<br>(see caveats below) |
| Citalopram | Tabs 10mg, 20mg, 40mg<br>Drops 40 mg/ml<br>Nb.10mg tab = 8mg oral drops | 2nd line SSRI – unlicensed<br>(see caveats below) |

NICE **specifically excludes** Paroxetine*, Venlafaxine, Tricyclic* Antidepressants, and *St. John's Wort* for the treatment of depression (in this age group).

**Medication for depression in Children and Adolescents should only be:**

1. Offered in combination with a concurrent psychological therapy.
2. Offered when the depression is diagnosed as moderate to severe.
3. After assessment and diagnosis by a Child and Adolescent Psychiatrist.

Specific arrangements must be made for careful monitoring of adverse drug reactions, as well as for reviewing mental state and general progress; for example, weekly contact with the child or young person and their parent(s) or carer(s) for the first 4 weeks of treatment. The precise frequency will need to be decided on an individual basis and recorded in the notes. In the event that psychological therapies are declined, medication may still be given, but as the young person will not be reviewed at psychological therapy sessions, the prescribing doctor should closely monitor the child or young person's progress on a regular basis and focus particularly on emergent adverse drug reactions. The specific adverse drug reactions referred to in the NICE guidelines include suicidal behaviour, self-harm, and hostility.

NICE NG134: Depression in children & young people[2] reports **fluoxetine** as 'the only antidepressant for which trials show that the benefits outweigh the risks'.

**Sertraline & Citalopram** are recommended as second line treatments ONLY when:

1. The depression is sufficiently severe (e.g. weight loss/suicidal behaviour) to justify trial of a second antidepressant.
2. There is evidence (documented) of a fair trial with fluoxetine (in combination with a psychological therapy).
3. There has been a reassessment of the likely causes of the depression and treatment resistance.
4. The action has been sanctioned (that is, advice has been given) by a Consultant in Child and Adolescent Psychiatry.

5. The patient (if over 16, and deemed competent) and/or someone with parental responsibility **has signed an appropriate and valid consent form.**
6. Patient and carer have been fully involved in discussions about benefits and risks.

If a patient is taking St John's Wort, NICE specifically recommends its discontinuance. This is due to:

- Lack of clinical trials in children/young people
- Unknown side effect profile (in this population)
- Known drug interactions (including contraceptives)

If St John's Wort is discontinued, patient should be monitored for recurrence of depression.

When prescribing any of the above antidepressants (fluoxetine, citalopram or sertraline), patients and their carers should be informed of the rationale for drug treatment, the delay in onset of action, the time course of treatment, possible side-effects, and the need to take medication as prescribed. Additionally, patients and carers should be given information in writing, that is, the relevant Patient Information Leaflet endorsed by the relevant regulatory authority.

**The licensed starting dose for fluoxetine** is 10mg daily for one week, then 20mg daily thereafter[6] (≥ 8 years age) with higher doses considered in children of higher body weight (albeit, there is little evidence regarding the effectiveness of doses of fluoxetine greater than 20mg daily). For antidepressants such as **sertraline and citalopram** – the starting dose should be half the daily starting dose for adults[6]. This can be gradually increased to the daily dose for adults over the next 2 to 4 weeks if clinically necessary, although lower doses should be considered in children with lower body weight. There is little evidence regarding the effectiveness of the upper daily doses for adults in children and young people, but these may be considered in older children of higher body weight and/or when, in severe illness, an early clinical response is considered a priority.

**A child or young person prescribed an antidepressant should be closely monitored by the prescribing doctor and the healthcare professional delivering the psychological therapy for the appearance of suicidal behaviour, self-harm or hostility, particularly at the beginning of treatment or when dose is changed.** Unless it is felt that medication needs to be started immediately, symptoms that might be subsequently interpreted as side effects should be monitored for seven days before prescribing. Once medication is started the patient and their parent(s) or carer(s) should be informed that if there is any sign of new symptoms, urgent contact should be made with the prescribing doctor. Once remission occurs (defined as no symptoms and full functioning for at least 8 weeks), medication should be continued for at least 6 months further. If the antidepressant is to be discontinued, this should occur (with respect to citalopram and sertraline) ideally over 6-12 weeks titrating against withdrawal symptoms.

**The CSM has advised that hyponatraemia (possibly due to inappropriate secretion of ADH) should be considered in all children who develop drowsiness, confusion or convulsions whilst taking an antidepressant drug[6]**

For children and young people with psychotic depression, augmenting the current treatment plan with an atypical antipsychotic medication should be considered, although the optimum dose and duration of treatment are unknown[2].

## 12.3 Anxiety in Children and Adolescents

### 12.3.1 Generalized Anxiety Disorder (GAD), Panic Disorder (PD), Post Traumatic Stress Disorder (PTSD) and Social Anxiety disorder

NICE has not made any specific recommendation for children and adolescents who present with GAD or PD. NICE categorically specifies that drug treatment should **NOT** be offered for Children and Adolescents in the prevention or treatment of PTSD [23]. NICE recommends that pharmacological interventions should **NOT** be routinely offered to treat social anxiety disorders in children and young people[12].

If the anxiety is severe and disabling and CBT is inappropriate or has failed, the use of medication is likely to be considered. The evidence base is poor and the treatment strategy generally follows that as in adults with the following considerations[4]:

1. Young people are more likely to develop disinhibition with benzodiazepines
2. Young people treated with SSRIs are more likely to develop suicidal thoughts and acts.
3. TCAs are more cardiotoxic in children
4. Buspirone can cause disinhibitory reactions and worsen aggression
5. Fluoxetine has been shown to be effective and is probably the drug of choice

### 12.3.2 Obsessive Compulsive Disorder (OCD) and Body Dysmorphic Disorder (BDD) in Children and Adolescents[3]

| Drug | Formulation | Comments |
|---|---|---|
| Fluoxetine | Caps 20mg, 60mg, Disp Tabs 20mg<br><br>Liquid 20mg/5mL | ***1st line BDD*** (?1st line if OCD with depression) |
| Sertraline | Tabs 50mg, 100mg | ***1st line OCD,*** Licensed from 6 years |
| Fluvoxamine | Tabs 50mg, 100mg | ***1st line OCD,*** Licensed from 8 years |
| Clomipramine | Caps 10mg, 25mg, 50mg | |

Patients (and their carers) should be informed of the rationale for treatment; delay in onset of response; time course for treatment; side-effects (anxiety, agitation, akathisia) and the need to take medication as prescribed. They must also be informed (especially if CBT is not available) of increased risk of suicidal behaviour, self-harm and hostility, and if these should occur – to inform their medical practitioner as soon as possible.

All information should be given in writing, as well as verbally. Increase the dose gradually – bearing in mind delayed onset of therapeutic response (up to 12 weeks) in OCD. Be aware however, that depressive symptoms may improve more quickly. When remission is achieved – continue for at least six months. Thereafter, attempts may be made to withdraw treatment slowly (to avoid discontinuation effects) over several weeks – if the patient agrees.

When prescribing **clomipramine** an ECG must be carried out before using to exclude cardiac conduction abnormalities. BP should be monitored at baseline and regularly thereafter. The patient and family must be warned about side effects and toxicity in overdose. If there has been a poor response to treatment (but no significant side effects), consider a gradual dose increase. If effective, continue treatment for at least 6 months because there may be further improvement in symptoms. Thereafter, attempts may be made to withdraw treatment slowly (to avoid discontinuation effects) over several weeks – if the patient agrees.

### 12.3.3 NICE Clinical Guidelines

NICE CG 31, November 2005. Core interventions in the treatment of obsessive-compulsive disorder and body dysmorphic disorder

**Treatment of OCD in Children and Adolescents**

- OCD with moderate to severe functional impairment, NICE recommends consideration of an SSRI (if patient cannot engage with or refuses CBT).

- Where a patient can/will engage in CBT, consider augmentation with an SSRI if response to said CBT is inadequate after 12 weeks.

- **SSRI could be sertraline or fluvoxamine** (both of which are licensed for use in children for OCD). For OCD with **co-morbid depression, use fluoxetine** and monitor for suicidal thoughts or behaviours (especially if the patient has not accepted CBT).

- If there is a poor response to a SSRI (or if there is prolonged/marked akathisia or restlessness), consider switching to another SSRI or clomipramine. Check adherence to the initial medication/interference with alcohol/substance misuse first.

- For depression, SSRIs should only be prescribed after the patient has been assessed and diagnosed by a Consultant in Child and Adolescent Psychiatry.

- **Commence SSRIs at a low dose** – normally a quarter to half the normal starting dose

- If effective, continue treatment for at least 6 months after remission (defined as: symptoms are not clinically significant and the patient is fully functional for at least 12 weeks) to prevent relapse and allow for further improvement.

- After 6 months (after remission) review need for on-going therapy

- Avoid TCAs (except Clomipramine) and SNRIs (that is, duloxetine or venlafaxine), MAOIs, or the use of an antipsychotic alone for the treatment of OCD.

- Augmentation (of the antidepressant) with an antipsychotic should not be routinely initiated in primary care.

**Treatment of BDD in Children and Adolescents**

- Irrespective of the level of impairment, NICE recommends consideration of an SSRI (**specifically fluoxetine**) if a patient cannot engage with or has refused CBT.

- When a patient can engage in CBT, consider augmentation with fluoxetine if given CBT is inadequate after 12 weeks.

- For depression, an SSRI should be sanctioned by a Child/Adolescent Consultant Psychiatrist.

- Commence SSRI at a low dose (quarter to half the normal starting dose in week 1).

- If there is a poor response to one SSRI, consider switching to another SSRI or clomipramine.

- Avoid TCAs (except clomipramine), and SNRIs (such as venlafaxine) or MAOIs.

- Augmentation with an antipsychotic should not routinely be initiated in primary care.

## 12.4 Bipolar Affective Disorder in Children and Adolescents

Diagnosis of bipolar disorder in children or young people should be made only after a period of intensive, prospective longitudinal monitoring by a healthcare professional or multidisciplinary team trained and experienced in the assessment, diagnosis and management of bipolar disorder in children and young people, and in collaboration with the child or young person's parents or carers.

When offering treatment to young people with bipolar disorder, take in to account their cognitive ability, emotional maturity, development level, their capacity to consent to treatment, the severity of their bipolar disorder and the risk of suicide or self-harm. This guidance only provides information relating to pharmacological therapies and readers should consult literature to appreciate the psychosocial strategies which should be used prior to and during management with medication. The monitoring requirements for the various medications are listed in annex 1. The team should maintain responsibility for baseline checks and for monitoring the efficacy, tolerability and side effects during titration, dose changes and as specified at intervals. Clinical judgement should also be used to assess whether any additional monitoring may be required. Do not routinely continue antipsychotic therapy for more than 12 weeks. A full MDT review of mental and physical health should be carried out.

- Valproate medicines must not be used in women or girls of childbearing potential unless a Pregnancy Prevention Programme is in place[16] and the conditions met, and

only if other treatments are ineffective or not tolerated, as judged by an experienced specialist. Ensure all women and girls (and their parent, caregiver, or responsible person, if necessary) are fully informed of the risks and the need to avoid exposure to valproate medicines in pregnancy. Specialists must book in review appointments at least annually with women and girls under the Pregnancy Prevention Programme, check they are on highly effective contraception (taken without interruption), and re-evaluate treatment as necessary; explain clearly the conditions as outlined in the supporting materials (the "toolkit")[22] ;provide a "Patient Guide"[22] to girls (of any age) and women of childbearing potential (or their parent/caregiver/responsible person) who are started on or are continuing to use valproate medicines; and complete and sign the Annual Risk Acknowledgement Form (Annex 4)—a copy of the form must be filed in the patient's record, a copy given to the patient or patient/caregiver/responsible person, and a copy sent to their GP.

- As with all teratogenic medicines, pregnancy should be excluded before initiation on valproate medicines, with a negative plasma pregnancy test, confirmed by a healthcare professional. Women and girls of childbearing potential must use highly effective contraception if they are able to become pregnant (see guidance from Faculty of Sexual and Reproductive Health [FSRH] https://www.fsrh.org/news/fsrh-ceu-statement-on-contraception-for-women-using-known/). Methods of contraception considered 'highly effective' in this context include the long-acting reversible contraceptives (LARC): copper intrauterine device (Cu-IUD), levonorgestrel intrauterine system (LNG-IUS), and progestogen-only implant (IMP), and male and female sterilisation, all of which have a failure rate of less than 1% with typical use (see guidance from FSRH for more about user-independent methods and failure rates). If a user-independent form is not used, two complementary forms of contraception including a barrier method should be used and regular pregnancy testing considered. Individual circumstances should be, in each case, evaluated when choosing the contraception method, involving the patient in the discussion to guarantee her engagement and compliance with the chosen measures.[16]
- If the patient becomes pregnant on valproate, consideration should be given to tapering the valproate down carefully, while introducing suitable alternative drug treatment.

## Approved drugs for the treatment Bipolar Affective Disorder

| Drug[6] | Formulation[6] | Comment |
|---|---|---|
| Carbamazepine | Tablets 100mg, 200mg, 400mg<br>Chewtabs 100mg, 200mg<br>M/R tablets 200mg,400mg<br>Liquid 100mg/5ml | For mood disorder use sustained release preparation |
| Lamotrigine | Tabs 25mg, 50mg, 100mg, 200mg<br>Dispersible tabs 5mg, 25mg, 100mg | |
| Lithium **Carbonate** (tablets)<br>*Bioequivalence varies widely between brands and salts* | **Priadel: M/R tablets 200mg, 400mg (scored) – preferred** | |
| | Camcolit:, 400mg (scored), Essential Pharma 250mg Generic Tablets | |

| Drug[6] | Formulation[6] | | Comment |
|---|---|---|---|
| Lithium **Citrate** (liquids) *Bioequivalence varies widely between brands and salts* | Li-liquid | yellow liq. 509mg/5ml (=200mg of Lithium tab) orange liq. 1.018g/5ml (=400mg of Lithium tab) | |
| | **Priadel: Liquid 520mg/5ml (=204mg of Lithium tab) NB. Exact conversion not required for Priadel.** | | |
| Olanzapine | Tabs 2.5mg, 5mg, 10mg, 15mg, 20mg Orodispersible tabs 5mg, 10mg, 15mg, 20mg | | |
| Quetiapine | Tabs 25mg, 100mg, 150mg, 200mg, 300mg M/R tabs 50mg, 150mg, 200mg, 300mg, 400mg | | Do not prescribe liquid. Tablets can be crushed. |
| Risperidone | Tabs 0.5mg, 1mg, 2mg, 3mg, 4mg, 6mg Orodispersible tabs 0.5mg,1mg, 2mg,3mg, 4mg Liquid 1mg/ml | | |
| Aripiprazole | Tabs 5mg, 10mg, 15mg, 30mg Orodispersible tabs 10mg, 15mg, 30mg Liquid 1mg/ml | | Generic aripiprazole is only licensed in schizophrenia. |
| Sodium Valproate | Tablets 100mg, 200mg, 500mg M/R tablets 200mg,300mg,500mg M/R capsules 150mg, 300mg Liquid 200mg/5ml Other formulations e.g. Episenta granules, Epilim Chronosphere | | Contraindicated in females of childbearing potential unless they meet the conditions of a Pregnancy Prevention Programme, |

### 12.4.1 Treatment of Mania or hypomania (NICE CG 185)[7] (NICE TA292)[14]

Acute mania in Children and Adolescents should be treated (pharmacologically) as for adults. Aripiprazole (TA292) is also recommended as a possible treatment for up to 12 weeks for moderate to severe manic episodes in adolescents>13 years with Bipolar disorder. Treatments should commence at lower doses (see cBNF) and clinicians should be aware of the increased potential for a range of side effects. Do not offer lamotrigine to manage mania.

If any antidepressants are being taken, consider stopping depending on clinical need/risk of discontinuation reactions (see risk of antidepressant discontinuation syndrome, section 1 of formulary prescribing guidelines) and consider offering an antipsychotic

If an individual develops mania or hypomania and is not taking an antipsychotic or mood stabiliser offer an antipsychotic

If the first antipsychotic is poorly tolerated at any dose or is ineffective offer an alternative, taking into account preference and clinical context (including physical comorbidity, previous response to treatment and side effects).

If a young person develops mania or hypomania and is taking an antidepressant in combination with a mood stabiliser, consider stopping the antidepressant.

If a young person is already taking lithium, check plasma levels to optimise treatment. If the person is taking another mood stabiliser as prophylactic treatment consider increasing the dose. If there is no improvement consider adding an antipsychotic depending on the person's preference and previous response to treatment. If lithium is prescribed serum creatinine should be measured to monitor for acute kidney injury.[20]

Use of benzodiazepines may be helpful in the initial stages of treatment for behavioural disturbance or agitation; they should not be for long term usage.

### 12.4.2 Treatment of Depressive episodes (NICE CG 185)[7]

Offer structured psychological intervention to young people with bipolar depression for at least 3 months. If after 4-6 weeks there is no or limited response; carry out MDT review and consider alternative individual or family psychological therapy. If there is a risk of self-harm or suicide, carry out an urgent review and develop a risk management plan.

When drug treatment is needed (depression is moderate to severe) or if the original psychological therapy (in combination with prophylactic medication) has proven ineffective NICE suggest considering **fluoxetine.**

The choice of anti-manic depends on likely side-effects, suitability for future prophylaxis, and whether the patient is female and of child-bearing potential.

For all patients on SSRIs (such as fluoxetine, citalopram or sertraline) - monitor for agitation and anxiety (as well as switches into mania). Additionally, all patients and parents/carers should be given information regarding: reasons for commencing therapy; possible side effects; duration of therapy; reassurance that addiction will not occur; need to take medication as directed and discontinuation reactions. As for all medications, PILs should be issued.

**Additionally, the use of antidepressants in children and adolescents mandates extra monitoring for suicidal thoughts.**

### 12.4.3 Long-term treatment of Bipolar disorder in Children and Adolescents

Atypical antipsychotics (preferably one which does not cause weight gain or raises prolactin levels) are the treatment choice for long-term management/prophylaxis of bipolar disorder.

Lithium may be considered a prophylactic agent for female patients and valproate or lithium prophylactic agents for male patients if the child has frequent relapses or continual functional impairment.

Carbamazepine may be used under specialist supervision in children unresponsive to other combinations (or rapid cycling disorder). Children should be offered a modified-release preparation to reduce the risk of side-effects; altering the timing of medication may also be beneficial (BNF entry for carbamazepine[6].)

When discontinuing antipsychotics the dose should be gradually reduced over at least 4 weeks if the child is continuing on other antimanic drugs; if the child is not continuing on other antimanic drugs, or has a history of relapse, a withdrawal

period of up to 3 months may be required. When discontinuing carbamazepine, valproate or lithium, reduce dose gradually over a period of at least 4 weeks.

Long acting intra-muscular injections of atypical antipsychotics should not be routinely used in BPAD and there is limited evidence in this population. These should be reserved for specialist centres.

### 12.4.4 Physical health monitoring for Mood stabilisers/Antipsychotics

*See Annex 1 for monitoring requirements*

## 12.5 Treatment of insomnia in Children and Adolescents

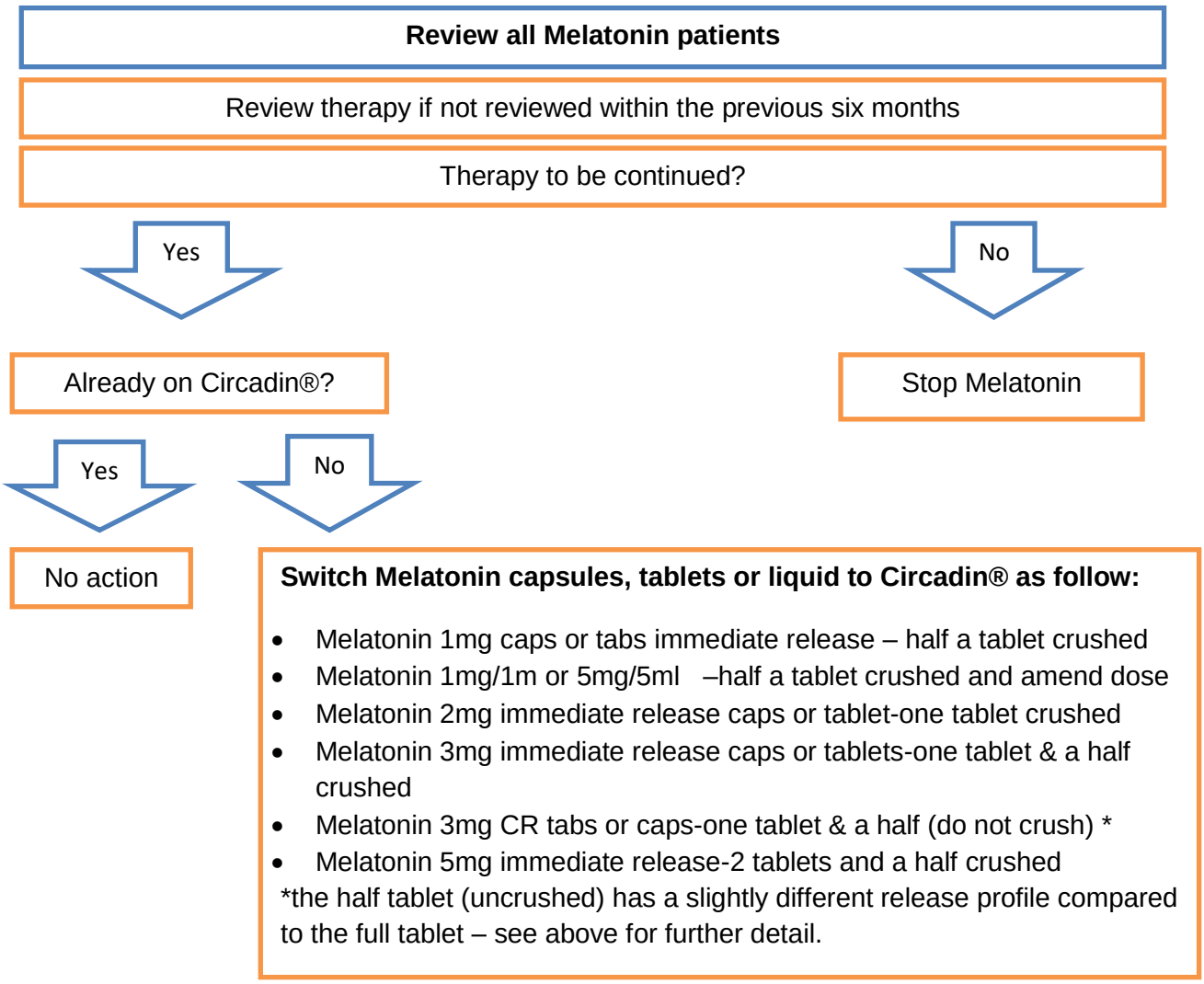
NICE guidelines give no recommendations regarding use of hypnotics in Children and Adolescents apart from in Autism (see 12.11.2 below). The BNF-C reports that the prescribing of hypnotics for children is not justified (except for occasional use as sedation prior to procedures such as dental treatment) and that problems such as 'settling children at night should be managed with behavioural therapy'.

The pharmacological treatment of insomnia with melatonin in children with ASD or ADHD is endorsed by BAP as part of a comprehensive treatment programme when psychosocial interventions fail. The need for this therapy, in children, should be reviewed at least every 3 months.

**Using Melatonin 2mg CR (Circadin®) as first line for all melatonin prescriptions**

Circadin is the only licensed melatonin product on formulary/ approved for the use of insomnia in children and adolescents. The MHRA have produced guidance indicating that where melatonin is needed, a licensed product should be used where possible – including off-label use where deemed suitable by the clinician.

In-vitro dissolution studies show that intact/whole Circadin® tablet releases melatonin in a controlled and prolonged manner over at least 8 hours, although approximately 40% of total dose is released within the first hour and may be regarded as effectively "immediate release". The tablet broken into quarter fragments provides for melatonin release over approximately 4 hours and an immediate release component of the order 60%. The in-vitro release from a crushed or powdered tablet is expected to provide an immediate release profile similar to that from an unlicensed immediate release tablet or (unlicensed) oral liquid.




## 12.6 Psychosis in Children and Adolescents

The prevalence of psychotic disorders in children aged between 5-18 has been estimated to be 0.4% (the figure across all ages and populations is 0.7%)[10]. There is a worse prognosis for psychosis and schizophrenia when the onset is in childhood or adolescence.

### 12.6.1 Management of Psychosis in Children and Adolescents

NICE (CG155) acknowledges that although the mainstay of treatment for psychosis and schizophrenia has been antipsychotic medication, there is limited evidence of its efficacy in children and young people[10]. Whilst open studies and case series support a lower risk of treatment emergent EPSEs with atypical (SGA) antipsychotics, this has to be balanced against the risk of significant metabolic effects. First choice should usually be either olanzapine, risperidone or aripiprazole; with second choice being an alternative atypical from the aforementioned. Third choice should usually be clozapine[10]. Clozapine seems to be effective in treatment-resistant psychosis in adolescents, although this population may be more prone to neutropenia and seizures than adults[4]

Do not offer antipsychotic medication for psychotic symptoms or mental state changes that are not sufficient for a diagnosis psychosis or schizophrenia or with the aim of decreasing the risk of psychosis[10].

If the child or young person and their parents or carers wish to try psychological interventions (family intervention with individual CBT) alone without antipsychotic medication for first episode psychosis, advise that psychological interventions are more effective when delivered in conjunction with antipsychotic medication.[10]

NICE (TA213) permits the use of aripiprazole in young people (aged between 15-17 years) with schizophrenia, where risperidone is not efficacious, is not tolerated or is contra-indicated. For those 15-17 year olds currently receiving aripiprazole who do not meet these criteria –the option to continue treatment until it is considered appropriate to stop should be available. This decision should be made between the patient and the relevant clinician with, if appropriate, parents/carers.

### 12.7 Monitoring of Antipsychotics in Children and Adolescents

Monitoring requirements in children and adolescents taking antipsychotics can be found below (ANNEX 2). More frequent monitoring should be carried out if there are clinical symptoms or elevated levels detected for any of the parameters listed or specified within the given SPCs. The monitoring requirements highlighted by NICE[10] differ to those stated by the F&PG. NICE CG155 advocates the monitoring of weight (plotted on a growth chart) at baseline and weekly for the first six weeks. The MMG has taken the view that weights supplied by the parent/guardian using an appropriate weighing apparatus and recorded on the antipsychotic monitoring parent/guardian chart (found at CAMHS clinics) are suitable to help identify any changes in weight which may be apparent when undertaking formal monitoring during clinical assessment.

### 12.8 Management of acute disturbed behaviour in Children and Adolescents

See section 8 or CG52

### 12.9 Tics and Tourette's syndrome in Children and Adolescents[4]

- Co-morbid depression, anxiety, OCD and behavioural problems are more prevalent than would be expected by chance alone. These conditions should usually be treat first before assessing the disability caused by the tics. Studies of pharmacological interventions are difficult to interpret for several reasons.

- Tourette's syndrome (TS) is believed to be mediated by dopamine, and thus antipsychotics would be expected to be effective. **Haloperidol** and **pimozide** have been shown to be statically superior to placebo but can generate EPSE in children and adolescents (especially with haloperidol[6]). Irrespective of age group, both drugs necessitate regular ECG monitoring. In a review of the efficacy and safety of pimozide in the amelioration of tics, Pringsheim et al., concluded that the latter is more effective than placebo in this objective and slightly less effective than haloperidol (but with respect to haloperidol, shows fewer side-effects).

- **Risperidone** has been shown to be more effective than placebo in a small RCT[4]

- **Sulpiride** has been shown to be effective and relatively well tolerated[4]

- **Clonidine** is effective against tics (and ADHD) of Tourette's - Regular blood pressure monitoring is required, and the drug must not be stopped abruptly because of the potential for rebound hypertension[1].

## 12.10 Antisocial behaviour and conduct disorder[11]

Conduct disorders are characterised by repetitive and persistent patterns of antisocial, aggressive or defiant behaviour that amounts to significant and persistent violations of age-appropriate social expectations[11].

The prevalence of conduct disorders increases throughout childhood and they are more common in boys than girls. For example, 7% of boys and 3% of girls aged 5 to 10 years have conduct disorders; in children aged 11 to 16 years the proportion rises to 8% of boys and 5% of girls[11].

Conduct disorders commonly coexist with other mental health problems: 46% of boys and 36% of girls have at least 1 coexisting mental health problem. The coexistence of conduct disorders with attention deficit hyperactivity disorder (ADHD) is particularly prevalent and in some groups more than 40% of children and young people with a diagnosis of conduct disorder also have a diagnosis of ADHD. Conduct disorders in childhood are also associated with a significantly increased rate of mental health problems in adult life, including antisocial personality disorder – up to 50% of children and young people with a conduct disorder go on to develop antisocial personality disorder. The prevalence of conduct disorders in the UK varies across ethnic groups; for example, their prevalence is lower than average in children and young people of south Asian family origin and higher than average in children and young people of African-Caribbean family origin[11].

### 12.10.1 Management of antisocial and conduct disorder (NICE CG158)[11]

Do not offer pharmacological interventions for the routine management of behavioral problems in children and young people with oppositional defiant disorder or conduct disorder.

Offer methylphenidate or atomoxetine, within their licensed indications, for the management of ADHD in children and young people with oppositional defiant disorder or conduct disorder in line with section 6, treatment of ADHD (based on NICE CG72).

Consider risperidone first line for the short-term management of severely aggressive behaviour in young people with a conduct disorder who have problems with explosive anger and severe emotional dysregulation and who have not responded to psychosocial interventions. There is less evidence to support the use of other atypical antipsychotics (Olanzapine, Quetiapine and Aripiprazole)[4].

Provide young people and their parents or carers with age-appropriate information and discuss the likely benefits and possible side effects of each drug including:

- metabolic (including weight gain and diabetes)
- extrapyramidal (including akathisia, dyskinesia and dystonia)
- cardiovascular (including prolonging the QT interval)
- hormonal (including increasing plasma prolactin)
- other (including unpleasant subjective experiences).

If Olanzapine is prescribed it should be explained that weight gain is likely to be seen soon after starting treatment, but can occur at any time.

Antipsychotics should be started by an appropriately qualified healthcare professional with expertise in conduct disorders and should be based on a comprehensive assessment and diagnosis. The healthcare professional should undertake and record investigations as highlighted in annex 2.

Treatment with antipsychotics should be carefully evaluated, and include the following:

- Record the indications and expected benefits and risks, and the expected time for a change in symptoms and appearance of side effects.
- At the start of treatment give a dose at the lower end of the licensed range and slowly titrate upwards within the dose range given in the British national formulary for children (BNFC) or the summary of product characteristics (SPC).
- Justify and record reasons for dosages above the range given in the BNFC or SPC.
- Monitor and record systematically throughout treatment, but especially during titration:

    - efficacy, including changes in symptoms and behaviour
    - the emergence of movement disorders
    - weight and height
    - fasting blood glucose, $HbA_{1c}$, blood lipid and prolactin levels
    - adherence to medication
    - physical health, including warning parents or carers and the young person about symptoms and signs of neuroleptic malignant syndrome.

- Record the rationale for continuing or stopping treatment and the effects of these decisions
- Review the effects of antipsychotics after 3–4 weeks and discontinue it if there is no indication of a clinically important response at 6 weeks

## 12.11 Autism[13]

The following guidance is based on CG170 and relates to pharmacological therapies only when indicated. Clinicians wishing to gain a full overview of all strategies available should in the first instance review CG170.

Antipsychotics, antidepressants, anticonvulsants and exclusion diets (such as gluten/casein free diets **should not be used** in the management of core features of autism in children and young people. Furthermore, Secretin and chelation should not be used for any indication in autism.

### 12.11.1 Pharmacological interventions for behavior that challenges

Consider antipsychotic medication when psychosocial or other interventions are insufficient or could not be delivered because of severity. Antipsychotic medication should initially be prescribed and monitored by a pediatrician or psychiatrist who should:

- Identify the target behavior
- Decide on an appropriate measure to monitor effectiveness, including frequency and severity of the behavior and a measure of global impact.
- Review the effectiveness and any side effects of the medication after 3-4 weeks

- Stop treatment if there is no indication of a clinically important response at 6 weeks.

If antipsychotic medication is prescribed – start with a low dose, use the minimum effective dose needed and regularly review the benefits and any adverse events. Take into account side effects, acquisition cost, patient/carer preference and response to previous treatment with an antipsychotic.

If prescribing is transferred to primary/community care the specialist should give clear guidance to the practitioner who will be responsible for continued prescribing about:

- Selection of target behaviors
- Monitoring of beneficial and side effects
- The potential for minimally effective dosing
- The proposed duration of treatment
- Plans for stopping treatment

If local specialist skills are not available or there is no response to local team interventions consideration should be given for referral to regional or national specialist centre.

### 12.11.2 Pharmacological interventions for Sleep Problems

Do not use pharmacological intervention to aid sleep unless sleep problems persist following a sleep plan/psychosocial interventions and are having a negative impact on the child/young person and their family or carers.

If pharmacological intervention is used it should only be done so in conjunction with non-pharmacological interventions and reviewed regularly to evaluate on going need and benefit. This should be managed by the relevant specialist (pediatrician or psychiatrist) and a referral to the paediatric sleep specialist is indicated within the NICE guidance. Omega 3 fatty acids should not be used for sleep. See section 12.5 for further information regarding agents for sleep problems.

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**Annex 1**

## Physical health monitoring required for mood stabilisers in children and adolescents

## Monitoring of Lithium Therapy in Children and Adolescents

| Parameter | Baseline | 1 month | Every 6 months | Annually | If clinical symptoms arise |
|---|---|---|---|---|---|
| **Pregnancy** (in female adolescent patients only) | ✓ | | | | ✓ |
| **FBC** (especially WCC) | ✓ | ✓ | | ✓ | ✓ |
| **Renal function** (Na, K, Cr, U+E) | Please do at baseline and with every Lithium level. Increases in Li concentrations may reflect reduced renal function[20] | | | | ✓ More often if symptoms arise- and if patient is on ACE-inhibitor, NSAID and/or diuretics. |
| **ECG** (only required for patients with pre-existing cardiac disease. Li can cause $QT_c$ elongation.) | ✓ | | | ✓ | ✓ |
| **TFTs** (Measure TSH and $fT_4$) | ✓ | ✓ | ✓ | | ✓ If evidence of clinical deterioration (that is, hypothyroidism occurs e.g. patient complaining of coldness, weight gain, and tiredness) |
| **Specific gravity of urine** (ability of renal system to concentrate urine) | ✓ | | | ✓ | ✓ If evidence of clinical deterioration |
| **Lithium level** | Take level one week after initiation, and one week after every dose change, until levels stable, **then every 3 months. It is advisable to also take U & Es – as increases in K and creatinine levels may be due to reduced renal function.** | | | | ✓ |
| **Weight, Height and BMI** (waist size, and BP) | ✓ | For children and adolescents, monitor monthly for 6 months and then every 6 months. Where there is significant gain in weight – BP should also be recorded, due to the relationship between weight increase and elevations in systolic BP. This is not a requirement for Lithium monitoring –but one for children and adolescents who are now receiving therapy for bipolar affective disorder. | | | ✓ Whenever needed, i.e. when patient weight gains rapidly. |

## Monitoring of Carbamazepine Therapy in Children and Adolescents

| Parameter | Baseline | 1 month | Every 6 Months | Annually | If clinical symptoms arise |
|---|---|---|---|---|---|
| **LFTs** | ✓ | ✓ | ✓<br>NICE advise monitoring of LFTs **at 6 months.** NB. Carbamazepine hepatotoxicity is very rare & ALK PHOS & GGT levels are usually elevated due to carbamazepine induction. | | ✓<br>jaundice, dark urine, abdominal cramping, pale stools.<br>Note: carers should be educated regarding these symptoms & advised to seek medical help if they arise. |
| **Urea & electrolytes** | ✓ | ✓ | ✓<br>Carbamazepine can cause hyponatraemia- NICE recommends **6 monthly** monitoring of urea & electrolytes. | | ✓<br>Inform carers to report nausea, malaise, headache & irritability. If severe enough, can give rise to seizures. |
| **FBC** | ✓ | ✓ | ✓<br>**(AT SIX MONTHS)**<br>NICE recommends monitoring **at 6 months** and at baseline. carbamazepine can cause neutropenia & mild leucopoenia). | | ✓<br>Warn carers to report excessive bruising, bleeding, or onset of sore throat with fever to a health professional. |
| **Weight & Height (BMI)** | ✓ | For children & adolescents, monitor monthly for 6 months & then every 6 months from start of any therapy for bipolar. | | | ✓ |
| **Serum drug level** | | | ✓ | | ✓<br>Toxicity includes ataxia, diplopia, blurred vision, nausea, vomiting, and sedation. |

## Monitoring of Valproate Therapy in Children and Adolescents

| Parameter | Baseline | Monthly | Every 6 months | Annually | Clinical Need |
|---|---|---|---|---|---|
| **LFTs** | ✓ | ✓ | ✓ | | ✓ |
| **Weight & Height (BMI)** | ✓ | For children and adolescents, monitor monthly for 6 months and then every 6 months from commencement of therapy for Bipolar disorder. | | | ✓<br>Weight gain with valproate can be significant. |
| **Pregnancy** (usually avoided) | ✓ | | | | ✓ |
| **FBC** | ✓ | ✓ | ✓ | | |
| **Serum drug level** | | | | | ✓<br>NICE recommends only if there is evidence of lack of efficacy, poor adherence or toxicity. |
| Some authors also recommend monitoring lipid profiles at baseline & yearly, plus record of menstrual history | | | | | |

**PHYSICAL HEALTH MONITORING OF CHILDREN AND ADOLESCENTS TAKING ANTIPSYCHOTICS (except clozapine)** ✓ **= DONE** **R = REFUSED**

| **Name:** | | **DOB:** | | **NHS Number** | | **CFCS** | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | **Baseline** | **1 month** | **3month** | **6month** | **12month** | **6 monthly** | **6 monthly** | **6 monthly** | **6 monthly** | **6 monthly** | **6 monthly** | **6 monthly** |
| Date | | | | | | | | | | | | |
| Weight/Height (BMI) | | | | | | | | | | | | |
| BP/Pulse | | | | | | | | | | | | |
| Waist and hip circumference | | | | | | | | | | | | |
| EPSE Examination | | | | | | | | | | | | |
| LFTs | | | | | | | | | | | | |
| Fasting Glucose & HbA1c | | | | | | | | | | | | |
| U&Es | | | | | | | | | | | | |
| Blood lipid profile | | | | | | | | | | | | |
| FBC | | | | | | | | | | | | |
| TFTs | | | | | | | | | | | | |
| Prolactin | | | | | | | | | | | | |
| ECG if indicated | | Baseline ECG is indicated for all inpatient service users with schizophrenia and related disorders, or for any patient where there are cardiovascular risk factors, a personal or family history of cardiovascular disease, during treatment with doses of antipsychotic above the BNF recommended limit, or where specified in the SPC. Repeat ECGS are not part of this schedule but should be carried out if clinically indicated. | | | | | | | | | | |
| Other | | Nutritional status, diet and level of physical activity should be assessed at baseline and regularly throughout treatment. In addition efficacy, side effects and adherence should be monitored regularly throughout treatment and especially during titration. | | | | | | | | | | |

NICE CG155 advocates the monitoring of weight (plotted on a growth chart) at baseline and weekly for the first six weeks. The MMG has taken the view that weights supplied by the parent/guardian using an appropriate weighing apparatus and recorded on the antipsychotic monitoring parent/guardian chart (found at CAMHS clinics) are suitable to help identify any changes in weight which may be apparent when undertaking formal monitoring during clinical assessment.

The monitoring requirements for **children and adolescents** occur **every 6 months**. Physical health monitoring of those taking antipsychotic drugs should be based on the schedule above **in addition** to any specific SPC/NICE requirements. More frequent monitoring should be conducted if there are clinical symptoms or changes detected.

Before starting antipsychotic medication, **perform a full physical examination, record BP and pulse,** and carry out baseline ECG if indicated (above).

**References**: 1. South London and Maudsley NHS Foundation Trust Prescribing Guidelines 12th edition, Wiley Blackwell, 2015

# Weight Monitoring Chart
# for children and adolescents starting antipsychotic medication

| Name | Date of birth | NHS Number |
|---|---|---|
| | | |

| Week | Date | Weight (kilograms preferred) |
|---|---|---|
| 0 Baseline | | |
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |

- Weight and height should be measured in clinic before an antipsychotic is started ("baseline"), and at

| Week | Date | Height at baseline (metres preferred) |
|---|---|---|
| 0 Baseline | | |

  all follow-up appointments while an antipsychotic is being taken.

- For children and adolescents considered at high risk of weight gain, weight should be checked every week for the first six weeks. This includes young people with autistic spectrum disorders and learning disabilities, patients who have never been prescribed an antipsychotic before, and younger children.
- These weekly weight measurements can be carried out either at clinic or at home if scales are available, as advised by your clinician.
- Weekly weights should be recorded on this form which should be brought to the follow-up appointment.
- Height should also be measured in clinic at baseline and at follow-up appointments.

# Annual Risk Acknowledgement Form
# VALPROATE HAS RISKS IN PREGNANCY

**Name of valproate user:** _____ **Date of Birth:** _____

**Identification (NHS or hospital) number:** _____

**Name and role of specialist:** _____

**Signature of specialist and date:** _____

**Name of valproate user's GP:** _____

**Children exposed to valproate in utero have a very high risk for congenital malformations and neurodevelopmental disorders. Valproate is therefore contraindicated in women of childbearing potential unless the conditions of 'prevent', the pregnancy prevention programme are fulfilled.**

The specialist must provide this form to girls and women of childbearing potential treated with valproate (Epilim, Depakote, Convulex, Episenta, Epival, Kentlim, Orlept, Syonell, Valpal) - or to their "responsible person": a parent/legal guardian or person capable of giving consent on behalf of patients who are minors or without the capacity to make an informed decision or person acknowledging that the treatment is in the best interests of the patient.

## There are three steps needed to complete this form:

**Step 1 – Decide if the patient needs to be on 'prevent' – the valproate pregnancy prevention programme**

**Step 2 – 'prevent' applies to this patient- she is of childbearing potential and at risk of pregnancy**

**Step 3 – Your patient needs to complete this section to confirm they understand the risks of valproate in pregnancy**

**WARNING:** Prescribing valproate to a woman of childbearing potential without the pregnancy prevention programme conditions being fulfilled is contraindicated and represents an unlicensed use of the drug. Use of valproate during pregnancy for bipolar disorder, and during pregnancy for epilepsy (unless there is no suitable alternative treatment), are both unlicensed. This is the case even when treatment is based on an informed choice made by the patient.

Prescribers are expected to follow the General Medical Council's guidance in *"Good practice in prescribing and managing medicines and devices"*. You must document in the patient's clinical record your reason for unlicensed use, that you have informed the patient of the unlicensed use and its associated risk.

**This form expires on** _____ **(12 months after completion).**

**Complete a new form at each annual review.**

**More information can also be found online at www.medicines.org.uk by entering "valproate" in the search box and then clicking on "Risk Materials" next to any of the medicines that appear.**

SAGB.VPA.15.12.1440c(2) March 2019

# Annual Risk Acknowledgement Form
# VALPROATE HAS RISKS IN PREGNANCY

## Step 1 – Decide if the patient needs to be on 'prevent' – the valproate pregnancy prevention programme

- Women of childbearing potential (from menarche to menopause) who are taking any medicine containing valproate, regardless of the indication, should fulfil all the requirements of **'prevent'**.
- The only exception is when you (the specialist) consider that there are compelling reasons to indicate that there is no risk of pregnancy.
- The absence of risk of pregnancy may be permanent (e.g., post-menopausal patients or those after hysterectomy) and in this case the risk does not need to be discussed in the next annual review and the requirements of **'prevent'** do not apply.
- If the absence of risk is subject to change (e.g., the patient is pre-menarchal), the date for the next annual discussion of the risks must be documented and the patient or the patient's family/carers asked to contact you rapidly if the situation changes before the next annual review in order to bring this review forward.
- Girls who have not yet reached menarche **DO NOT** need to be on **'prevent'**, but they and their responsible person need to be aware of the risks for the future. You should provide a copy of the Patient Guide, and remind the responsible person to contact the specialist or GP to arrange for review of treatment as soon as menarche occurs.

If you consider there is a compelling reason that indicates there is no risk of pregnancy, record this here. **If appropriate, you and your patient should still complete the rest of the form** so that your patient and/or their responsible person is aware of the risks if their situation were to change in the future.

| **To be completed by the specialist when they consider a Pregnancy Prevention Programme (PPP) is not needed** |
|---|
| The requirements of **'prevent'**, the valproate pregnancy prevention programme, are not necessary because there are compelling reasons to indicate that there is no risk of pregnancy, because (*tick* which applies): |
| ☐ the patient has not yet reached menarche. I have informed the patient and family to inform me if this changes before the next annual review which is due on *(insert date)*: |
| ☐ the absence of pregnancy risk is permanent for the following reason *(insert reason)*: |
| ☐ I consider that sexual activity that could lead to pregnancy will not occur before the next annual review because *(insert reason)*: |
| ☐ I have given the patient or responsible person a copy of the Patient Guide |
| Signature of patient or responsible person to confirm: |

**More information can also be found online at www.medicines.org.uk by entering "valproate" in the search box and then clicking on "Risk Materials" next to any of the medicines that appear.**

SAGB.VPA.15.12.1440c(2) March 2019

# Annual Risk Acknowledgement Form
# VALPROATE HAS RISKS IN PREGNANCY

## Step 2 – 'prevent' applies to this patient- she is of childbearing potential and at risk of pregnancy

This form confirms that you have discussed the risks with girls, women of childbearing potential and their responsible person (if applicable), and you are acting in compliance with the pregnancy prevention programme.

You need to:

- Explain the risks of valproate in pregnancy and ensure these are understood.
- Give your patient (or their responsible person) a copy of the Patient Guide.
- Complete all parts of this form, keep the original in the patient record and provide a copy to the patient, her responsible person (if appropriate), and to her GP.
- Arrange a follow-up appointment at least every year to review the need for continued treatment with valproate and compliance with **'prevent'**.

| To be completed and initialled by the specialist | Initials |
|---|---|
| **I confirm that the patient needs valproate because:**<br>• her condition does not respond adequately to other treatments, or<br>• she does not tolerate other treatments, or<br>• she is undergoing a treatment change from valproate | |
| **I confirm I have discussed the following with the patient:** | |
| Valproate must not be used during pregnancy (except in rare situations in epilepsy for patients who are resistant or intolerant to other treatments) | |
| The overall risks in children exposed to valproate during pregnancy are:<br>• an approximately 10% chance of birth defects<br>• a 30% to 40% chance of a wide range of early developmental problems that can lead to learning disabilities. | |
| The conditions of the pregnancy prevention programme must be fulfilled | |
| The need for regular (at least annual) review of the need to continue valproate treatment by a specialist | |
| The need for effective contraception, without interruption, throughout treatment with valproate | |
| The need to arrange an appointment with her specialist as soon as she is planning pregnancy to ensure timely discussion, and a timely switch to an alternative treatment before stopping contraception and conception occurring. | |
| The need to contact her GP immediately for an urgent review of her treatment in case of suspected or inadvertent pregnancy. | |
| The need for a negative (ideally serum) pregnancy test result at start and if needed thereafter | |
| I confirm I have given the patient or responsible person a copy of the Patient Guide | |
| **In case of pregnancy, I confirm that:** | |
| • We have discussed options for switching treatment | |
| • She is fully aware of the risks of pregnancy, and has had the opportunity for counselling about the risks | |
| • I have given the patient or responsible person a copy of the Patient Guide | |

**More information can also be found online at www.medicines.org.uk by entering "valproate" in the search box and then clicking on "Risk Materials" next to any of the medicines that appear.**

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March 2019

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# Annual Risk Acknowledgement Form
# VALPROATE HAS RISKS IN PREGNANCY

## Step 3 – Your patient needs to complete this section to confirm they understand the risks of valproate in pregnancy

If you use valproate while you are pregnant, your future child has significant risk of serious harm.

Completing this form confirms that you (or your responsible person) understand the risks of using valproate during pregnancy, and what method of contraception you will use to prevent becoming pregnant during treatment.

| To be completed and signed by the patient or their responsible person | Initials |
|---|---|
| **I have discussed the following with my specialist and I understand:** | |
| √ Why I need valproate rather than another medicine | |
| √ That I should visit a specialist regularly (at least once a year) to review whether valproate remains the best option for me | |
| √ The risks in children whose mothers took valproate during pregnancy are:<br>• 1 out of 10 children will have physical birth defects<br>• 3 to 4 out of 10 children will have early developmental problems that can lead to significant learning disabilities | |
| √ That I have had a pregnancy test (if advised by my doctor/specialist) | |
| √ Why I must use effective contraception, without stopping or interruption, at all times while taking valproate | |
| √ The options for effective long-term contraception (or a consultation has been planned with a professional who can give me advice) | |
| √ The need to consult my specialist or GP as soon as I start thinking about becoming pregnant. This is to make sure I have time to switch to another treatment before I come off contraception | |
| √ That I should request an urgent GP appointment if I think I am pregnant | |
| √ I have been given a copy of the Valproate Patient Guide and know where to find more information | |
| **In case of pregnancy, I confirm that:**<br>√ Options for switching treatment have been considered<br>√ I am fully aware of the risks and have had the opportunity to have counselling about the risks | |

**Name of patient:** _____

**Name of responsible person (if applicable):** _____

**Signature of patient (or responsible person) and date:** _____

**Effective contraception is essential while taking valproate.**

At least one highly effective method of contraception (preferably a user independent form such as an intrauterine device or implant) or two complementary forms of contraception including a barrier method should be used. Individual circumstances should be evaluated in each case. When choosing the contraception method involve the patient in the discussion to guarantee her engagement and compliance with the chosen measures. Even if she has amenorrhoea she must follow all the advice on highly effective contraception.

**More information can also be found online at www.medicines.org.uk by entering "valproate" in the search box and then clicking on "Risk Materials" next to any of the medicines that appear.**

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March 2019

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