# Guidelines for the use of High Dose Antipsychotics (HDAT)

**Version 4**

**Summary:**
Guidelines for the use of High Dose Antipsychotics (HDAT).

**Keywords (minimum of 5):**
(To assist policy search engine)
High Dose, Antipsychotics, (HDAT), medication, medicine, medicines, above BNF dose.

**Target Audience:**
Medical Staff, Pharmacists, Nurses, MHPs.

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January 2019

**Approved & Ratified by:**
Medicines Management Committee
**Date of meeting:**
18 January 2017

**Date issued:**
September 2017

**Author:**
Rebecca Henry, Principal Pharmacist Winchester.

**Sponsor:**
Dr Sarah Constantine, Medical Director
## Change Record

<table>
<thead>
<tr>
<th>Date</th>
<th>Author</th>
<th>Version</th>
<th>Page</th>
<th>Reason for Change</th>
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<tr>
<td>28/11/2013</td>
<td>Rebecca Henry, Clinical Pharmacist</td>
<td>2</td>
<td>6-7</td>
<td>Updated version of Antipsychotic Dosage Ready Reckoner.</td>
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<td>22/1/2015</td>
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<td>Removal of Antipsychotic Dosage Ready Reckoner.</td>
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<tr>
<td></td>
<td>Update</td>
<td>3</td>
<td></td>
<td>Add GP letter</td>
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<td>Change orientation monitoring form</td>
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<td>18/01/17</td>
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<td>Update includes changes to the HDAT monitoring sheet,</td>
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<td>GP and service user care plan letters and an entry for risk</td>
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<td>assessment on Rio.</td>
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<tr>
<td>1/9/17</td>
<td>Alex Weston</td>
<td>4</td>
<td>1, 5</td>
<td>Added Solent NHS Trust logo for collaborative working.</td>
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<td>Amendment to point 11 to include the words “from inpatient</td>
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<td>wards” so it is clear it is not discharge from service.</td>
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<tr>
<td>15/09/17</td>
<td>Cheryl Field</td>
<td>4</td>
<td>5</td>
<td>Reworded section 12 to: Where patients are discharged</td>
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<td>from inpatients wards on HDAT the GP will be informed using</td>
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<td></td>
<td>the template letter (appendix 3). Chair approval. Numbering adjusted.</td>
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## Reviewers/contributors

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<td>RiO entry</td>
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Antipsychotic Dosage Ready Reckoner is available on the staff intranet
Guidelines for the use of High Dose Antipsychotics

Introduction

A high dose of antipsychotic is defined as a total daily dose (whether of a single antipsychotic or more than one prescribed combination) greater than 100% of the maximum recommended daily dose (Royal College of Psychiatrists, 2006).

Use of “Discretionary” (PRN or “as required”) antipsychotic medication should also be taken into account if given on a regular/semi-regular basis. Please refer to Rapid tranquillisation guidelines (SH CP 48) if a stat dose is given which causes the total dose for that day to exceed BNF maximum.

To calculate total antipsychotic percentage dose for an individual use the antipsychotic dose reckoner to determine the percentage of the BNF maximum for each antipsychotic that is prescribed and then sum the percentages.

Guideline

The use of high dose antipsychotics should be an exceptional clinical practice.

1. Records need to be made in the patient’s clinical notes at each and every stage.

2. Indicate in the clinical/medical notes the patients target symptoms, response and side-effects.

3. Before using a high dose ensure sufficient time has been allowed for response, at least two different antipsychotics have been tried, the patient is compliant and alternative approaches including adjuvant therapy and psychological approaches, new or atypical antipsychotics and clozapine have been considered.

4. The responsibility to exceed the licensed dose of a single antipsychotic or a combination of more than one lies with the patient’s consultant psychiatrist. The decision should be discussed with the multidisciplinary team, the patient and carer, where possible. Valid consent should be obtained. For detained patients, ensure compliance with the Mental Health Act 1984. That the patient had been informed of the HDAT, or the reason why they have not been informed, should be documented in the medical/clinical notes.

5. HDAT may be prescribed in an emergency for acute symptoms, after referral to the relevant Rapid Tranquillisation policy (SH CP 48). This should be discussed with the consultant before it is prescribed. If this is not possible the reason should be documented and reviewed at the next opportunity by the consultant or deputy.

6. Consider any contra-indications or risk factors such as cardiac history (particularly MI, arrhythmias and abnormal ECG), hepatic/renal impairment, electrolyte disturbances e.g. hypokalaemia, epilepsy, diabetes, fragility, substance misuse, harmful use of alcohol, smoking, adults over 65 years, dehydration, being overweight and diarrhoea and vomiting.

7. Consider and minimise potential drug interactions with concomitant treatment with: other drugs. Consider recent use of acute IM medications (see Rapid Tranquillisation guidelines SH CP 48).

8. Allow adequate time for response between each dose increase.

9. Where possible increase the dose slowly ideally over intervals of at least one week.
10. Review progress, target symptoms and side effects, ideally using validated rating scales, after steady state has been reached and at least once every 6 months. Continued use of HDAT where there is no clinical response should be justified in the case notes; consultants should consider seeking a second opinion from a colleague. The review should be documented in the patients’ notes. Recommended rating scales include the BPRS and GASS.

11. If there are any abnormalities in the test results review treatment and refer, where necessary, and document actions taken.

12. Where patients are discharged from inpatients wards on HDAT the GP will be informed using the template letter (appendix 3).

13. Patients should be educated on the common symptoms of cardiac arrhythmias such as dizziness, palpitations and syncope, advised when to seek medical attention and document advice given in the patient’s PMR.

14. Add nursing HDAT care plan to PMR, see RIO care plan library.

References

Maudsley Guidelines 12th Edition
Consensus Statement on high-dose antipsychotic medication, CP190, Nov 2014
QT interval and drug therapy, DTB 2016 54: 33-36
Rapid Tranquillisation Guidelines SH CP 48
# Appendix 1

## HDAT Monitoring: Responsibilities

### Ward Pharmacist Responsibilities

**Carry out or ensure the following has been completed:**
- Check BNF % from drug chart doses to see if HDAT Monitoring Form - complete the patient details, drugs, percentages and interacting medicines
- Inform nursing and medical staff of high-dose status
- Highlight on patient record & medicine chart that a patient is on HDAT

### Nursing/MHP Responsibilities

Document HDAT status in a nursing care plan. (see care plan library)
- Check for clinical signs of dehydration, Temperature, Blood Pressure (supine & standing) and Pulse.
- Record on Track & Trigger
- Checks to be done; at a minimum of one week after dose changes, once steady state has been reached and then every 6 months
- Check that monitoring sheet is being completed and bring to medical staff attention if checks have not been done.
- Ensure that high-dose status is recorded & discussed/recorded at MDT review.

### Doctor Responsibilities

**Decision to initiate high-dose antipsychotic therapy is the responsibility of the consultant.**

Document reason for HDAT and target symptoms in patient records and review/record at MDT.
- Check HDAT is mentioned on MHA Form T2 / Form T3, if applicable.
- On Monitoring Form complete Risk Factors and order tests as per form
- Discuss with the GP and other relevant community mental health personnel the HDAT status, required checks and who will be performing them
- Refer to share care HDAT discharge letter. If the guideline cannot be followed document, the reasons in notes.
### Appendix 2
#### HIGH DOSE ANTIPSYCHOTIC THERAPY MONITORING SHEET

**Addressograph**
- Patient name:
- NHS Number: D.O.B. M/F

**Consultant:**
- Ward/Team:

| Rationale for HDAT, please circle and document in clinical notes; ineffective treatment, treatment resistance, swapping medication, refused/intolerant to clozapine or other Consent, please circle; obtained and documented or appropriate section T2/T3 |

**Please consider additional risk factors, please circle**

**Co-morbid condition:**
- Cardiovascular, hepatic/ renal impairment, epilepsy, diabetes
- Substance/alcohol misuse, high dose methadone,
- Overweight, smoker.

**What additional actions need to be taken?**

**High Dose Antipsychotic Monitoring.**
- **Pre-Rx:** Specify %
- **Dose change:** Specify drug(s) and dose(s)

<table>
<thead>
<tr>
<th>Date</th>
<th>High-dose details</th>
<th>Steady state</th>
<th>6 Monthly or if clinically indicated.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Interacting medications? Y/ N:**
- Specify:
- ECG check (QTc interval)
- FBC (if OK)
- U&Es (if OK)
- LFTs (if OK)
- Temperature (°C)
- Blood Pressure (mmHg)
- Pulse (beats/min)
- Blood glucose (fasting)
- Total cholesterol (fasting)
- CPK
- GASS/GASS for clozapine score

**Inform Dr of any Abnormal Results and record actions taken**

Guidelines for the use of High Dose Antipsychotics (HDAT)
Version: 4
September 2017
Appendix 3

Our Ref:

Dear

Re:  
DOB:  
NHS No:  
Address:

Your above named Service User is prescribed High Dose Antipsychotic Therapy (HDAT). The following information may be useful and should be kept on file for future information.

High dose antipsychotic therapy is the use of a single agent or combination of two or more antipsychotics which result in doses above the BNF limit. It is used by psychiatrists for treatment resistant psychosis when other options are not suitable for ongoing management. HDAT increases the risk of adverse effects, the majority of which are dose dependent.

Risk factors for increasing likelihood of adverse effects include: old age, weight changes, renal or hepatic impairment, smoking, concomitant drugs, substance misuse including alcohol, comorbidities (e.g. cardiac, diabetes, and epilepsy), reduced exercise tolerance, previous history of antipsychotic intolerance and women considering pregnancy.

Expectations and responsibilities

- The decision to initiate HDAT is the responsibility of the consultant psychiatrist
- Mental Health Nurses/Professionals will ensure initiation pathway is followed
- The CMHT will arrange physical health checks on a 6 monthly basis and will communicate with GP regarding findings. If any abnormalities are found, CMHT will liaise with GP to arrange appropriate management.
- Due to the nature of HDAT medication and potential serious side effects it is important to ensure regular blood tests and ECGs are carried out. These will be arranged by CMHT.
- GP to inform CMHT regarding risk factors as above, or changes in medications in particular regarding CYP inhibitors that could lead to hazardous interactions. It is recommended to avoid concomitant treatment with: terfenadine/astemizole, diuretics, anti-arrhythmics, some anti-hypertensives, TCAs, erythromycin and citalopram.
- The individual on HDAT will be reviewed at least every 6 months to ensure it is appropriate to continue.

Please find relevant monitoring parameters below. It is information and advice only.

<table>
<thead>
<tr>
<th>Parameter/Test</th>
<th>Suggested Frequency</th>
<th>Action to be taken outside reference range</th>
</tr>
</thead>
<tbody>
<tr>
<td>U+Es</td>
<td>Baseline and 6 monthly</td>
<td>Investigate all abnormalities</td>
</tr>
<tr>
<td>FBC</td>
<td>Baseline and 6 monthly</td>
<td>Investigate all abnormalities</td>
</tr>
<tr>
<td>Lipids (fasting if possible)</td>
<td>Baseline and 6 monthly</td>
<td>Lifestyle advice, consider statins</td>
</tr>
<tr>
<td>Plasma Glucose</td>
<td>Baseline, and 6 monthly</td>
<td>Lifestyle advice. Obtain fasting sample and HbA1C. Consider oral hypoglycaemics as per community guidance.</td>
</tr>
<tr>
<td>ECG (QTc)</td>
<td>Baseline and 6 monthly</td>
<td>Refer to cardiologist if abnormality</td>
</tr>
<tr>
<td><strong>interval)</strong></td>
<td><strong>detected.</strong></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>BP/pulse/temp</strong></td>
<td>Baseline, frequently during dose titration and 6 monthly</td>
<td>Slow titration if hypo/hypertension observed.</td>
</tr>
<tr>
<td><strong>LFTs</strong></td>
<td>Baseline and 6 monthly</td>
<td>Stop suspected medication if indicative of hepatitis or functional damage.</td>
</tr>
<tr>
<td><strong>CPK</strong></td>
<td>Baseline, then if NMS suspected</td>
<td>If elevated, transfer to A+E</td>
</tr>
</tbody>
</table>

For any further information please do not hesitate to contact our CMHT.

Thank you for your ongoing care in the community.

Yours sincerely,

Consultant Psychiatrist
Appendix 4

Care Plan Letter

Dear Service user

I am writing to confirm your current high-dose antipsychotic care plan. Your consultant psychiatrist has prescribed you antipsychotic medications at doses that are higher than those usually used, which would have been discussed and agreed with you. This is because your symptoms have not responded to doses at a lower level. Your care coordinator and consultant will continue to monitor how your symptoms are responding to your medications.

You should never stop your medication suddenly without direct medical supervision or advice. If you want to stop or reduce your medication then please discuss this with your consultant psychiatrist before doing so. If you start or stop smoking please inform your care coordinator or psychiatrist, as this may have an effect on the level of medications you need. We would strongly advise you to avoid using other recreational drugs (including herbal highs) in addition to your high-dose antipsychotics, as this can be dangerous.

In order to make sure that you remain physically well on your medications, we will be inviting you to come to appointments in our physical health clinic. These will happen every 6 months once you are established on your medications, and will involve having a couple of simple routine tests done. These involve having a blood test and an ECG (also known as an electrocardiogram) done. An ECG is a tracing of your heart that is done by putting some sticky pads on your chest which pick up the movements of your heart. The blood tests and ECG may be done at the Acute Hospital. We will write to your GP to let them know the results. They will be able to discuss the results of your tests with you and address any concerns you have.

If you do have any concerns about your physical or mental health at any time, please feel free to contact your care-co-ordinator or the out-of-hours service. They will listen to your concerns and point you in the right direction to get help, for example if it concerns your physical health then we may advise you to see your GP.

If you would like further information on your medications and possible side effects then please access our website www.southernhealth.nhs.uk and click the link ‘choice and medication’ or ask a member of staff who will be able to print this off for you.

The Out of Hours Number is
Community Team Number is

Yours sincerely

Mental Health Team
cc GP, file
CC Carer
Appendix 5

Entry for risk assessment on RiO:

...... (service user) is on [current medication and dosage], which is above the licensed dose or BNF limits for antipsychotics. This has been deemed to be clinically necessary to manage their symptoms by their responsible consultant psychiatrist in discussion with the service user and MDT. As per no CP134 Guidelines for the use of high-dose antipsychotics, they will therefore be monitored every 6 months (once established on their meds) and the GP has been informed of this. This will involve appropriate blood tests, and ECG and completion of GASS/GASS clozapine to detect side-effects. The medications will be reviewed by the care coordinator/RC to see how they are affecting the target symptoms, and doses altered accordingly.

Add-on if using drugs/excessive alcohol
...... also uses recreational drugs, and has been informed that this significantly raises their risk of physical health problems and can be very dangerous. The GP has been informed of this, and potentially the carer if applicable. This has been discussed in clinical MDT.

ECG date: QTc interval
FBC date:
U&Es date:
LFTs date:
Temperature date:
Blood Pressure date:
Pulse date:
Blood glucose date:
CPK date:
GASS/GASS for clozapine date:
Total cholesterol date: