

**Amber with Guidance**= To be initiated and titrated to a stable dose in secondary care with follow up prescribing and monitoring by primary care where deemed appropriate.

## Disulfiram

<p><b>Background Information</b></p>	<p><b>Disulfiram</b> is used as an adjunct in the treatment of alcohol dependence. It gives rise to an extremely unpleasant systemic reaction after the ingestion of even a small amount of alcohol because it causes accumulation of acetaldehyde in the body; it is only effective if taken daily. Symptoms can occur within 10 minutes of ingesting alcohol and include flushing of the face, throbbing headache, palpitation, tachycardia, nausea, vomiting, and, with large doses of alcohol, arrhythmias, hypotension, and collapse; these reactions can last several hours. Small amounts of alcohol such as those included in many oral medicines may be sufficient to precipitate a reaction— even toiletries and mouthwashes that contain alcohol should be avoided. If this reaction occurs the patient should seek medical advice and a reaction should be treated in hospital.</p> <p>Alcohol should be avoided for at least 1 week after stopping treatment.</p> <p>Before initiating disulfiram, prescribers should evaluate the patient’s suitability for treatment, because some patient factors, for example memory impairment or social circumstances, make compliance to treatment or abstinence from alcohol difficult.</p>
<p><b>BNF therapeutic class</b></p>	<p>4.10. Drugs used in substance dependence <a href="https://doi.org/10.18578/BNF.400566415">https://doi.org/10.18578/BNF.400566415</a></p>
<p><b>Indication</b></p>	<p>Adjunct in the treatment of alcohol dependence (under expert supervision)</p>
<p><b>Dosage and administration</b></p>	<p>The standard dose is 200mg daily. Dose can be increased up to 500mg if necessary</p> <p>There is no need for a loading dose to start treatment. The treatment is usually continued for approximately 6 – 12 months but some patients wish to continue for longer. There is no reason why disulfiram cannot be continued if well tolerated.</p>
<p><b>Cautions and Contraindications</b></p>	<p>The following are cautions to disulfiram and require discussion with the team, the prescriber and the patient in balancing the risk and benefits of treatment.</p> <ul style="list-style-type: none"> <li>• Liver disease</li> <li>• Moderately elevated liver function tests (&gt;x 2 ALT)</li> <li>• Epilepsy</li> <li>• Diabetes</li> <li>• Acute porphyrias</li> <li>• Respiratory disease</li> </ul> <p><b>Contraindications:</b></p> <ul style="list-style-type: none"> <li>• Cardiac failure</li> <li>• Coronary artery disease</li> <li>• History of stroke</li> <li>• Hypertension (uncontrolled)</li> <li>• Psychosis</li> <li>• High suicidal risk</li> <li>• Renal failure</li> <li>• Pregnancy or breast feeding</li> <li>• Severe Personality Disorder</li> </ul> <p>Contra-indications are not absolute. There will be cases where the known risks of continuing to drink alcohol will outweigh the potential risk of prescribing. If prescribing goes ahead after assessing the risks/benefits, reasons should be clearly documented.</p>

**Amber with Guidance**= To be initiated and titrated to a stable dose in secondary care with follow up prescribing and monitoring by primary care where deemed appropriate.

<b>Adverse Drug Reactions</b>	<b>Side-effects:</b> These are usually mild and transient. The most common are gastro-intestinal symptoms.														
	<table border="1"> <thead> <tr> <th>Side Effect</th> <th>Suggested Action</th> </tr> </thead> <tbody> <tr> <td>Drowsiness/fatigue</td> <td>Take at night, usually lessens</td> </tr> <tr> <td>Nausea/vomiting</td> <td>Take after food</td> </tr> <tr> <td>Halitosis</td> <td>Ensure dental hygiene</td> </tr> <tr> <td>Sexual dysfunction/lack of libido</td> <td>Discuss with doctor, may be another cause</td> </tr> <tr> <td>Mood changes</td> <td>Discuss</td> </tr> <tr> <td>Impaired liver function</td> <td>Need to monitor LFT, may need to discontinue</td> </tr> </tbody> </table>	Side Effect	Suggested Action	Drowsiness/fatigue	Take at night, usually lessens	Nausea/vomiting	Take after food	Halitosis	Ensure dental hygiene	Sexual dysfunction/lack of libido	Discuss with doctor, may be another cause	Mood changes	Discuss	Impaired liver function	Need to monitor LFT, may need to discontinue
	Side Effect	Suggested Action													
	Drowsiness/fatigue	Take at night, usually lessens													
	Nausea/vomiting	Take after food													
	Halitosis	Ensure dental hygiene													
	Sexual dysfunction/lack of libido	Discuss with doctor, may be another cause													
	Mood changes	Discuss													
Impaired liver function	Need to monitor LFT, may need to discontinue														
<b>Monitoring</b>	<p>Initiation and initial monitoring should be by a specialist service (Substance Misuse Team or Shared care GP practices). Patients should be seen every 2 weeks for the first 2 months, then monthly for the following 4 months. It is desirable for a carer or family member who is aware of the use of disulfiram to oversee its administration.</p> <p>It is recommended that the liver function count is checked 1-2 months after starting treatment (<b>specialist responsibility</b>) and <b>then every 6 months if within normal parameters. Disulfiram should be discontinued if there is any evidence of symptomatic liver disease.</b></p>														
<b>Interactions</b>	<p>Important to check reactions in BNF with:</p> <ul style="list-style-type: none"> <li>• Warfarin</li> <li>• Phenytoin</li> <li>• Benzodiazepines – metabolism is inhibited, increasing sedative effect</li> <li>• Amitriptyline and other tricyclic antidepressants</li> <li>• Metronidazole</li> </ul>														

### Contact names and details

Contact Details	Telephone number	Email
Dr Fleur Ashby Consultant Clinical Director, Barnsley Recovery Steps	01226 779066	<a href="mailto:Amanda.Ashby@humankindcharity.org.uk">Amanda.Ashby@humankindcharity.org.uk</a>
Chris Lawson, Head of Medicines Management, NHS Barnsley CCG	01226 433798	<a href="mailto:chris.lawson@nhs.net">chris.lawson@nhs.net</a>

### References

- British National Formulary. Available at: <https://www.medicinescomplete.com/mc/bnf/current/index.htm> Accessed 12.08.20
- Disulfiram Summary of Product Characteristics March 2020. Available at: <https://www.medicines.org.uk/emc/product/11168> Accessed 12.08.20
- Alcohol - Use Disorders. Diagnosis, assessment and management of harmful drinking and alcohol dependence. NICE Clinical Guideline 115. February 2011. Available at: <http://guidance.nice.org.uk/CG115> Accessed 12.08.20
- Choice and Medication website (information about mental health conditions, treatments and medications). Available at: <https://www.choiceandmedication.org/humankind/>

*This guideline was approved at the APC on 14<sup>th</sup> October 2020.*