

<p>562FM.1 DISULFIRAM FOR USE IN TREATMENT OF ALCOHOL DEPENDENCY IN ADULTS 18 YEARS AND OVER Amber Initiation Guideline</p>

This guideline provides prescribing and monitoring guidance for disulfiram therapy. It should be read in conjunction with the Summary of Product Characteristics (SPC) available on www.medicines.org.uk/emc and the British National Formulary (BNF).

BACKGROUND FOR USE

Disulfiram is used as an adjunct in the treatment of alcohol dependence (under specialist supervision).

Disulfiram is a drug used to support the treatment of chronic alcoholism by producing an acute sensitivity to ethanol. Disulfiram plus alcohol in even small amounts produce flushing, throbbing in the head and neck, a throbbing headache, respiratory difficulty, nausea, vomiting, sweating, thirst, chest pain, palpitation, dyspnoea, hyperventilation, fast heart rate, low blood pressure, marked uneasiness, weakness, vertigo, blurred vision and confusion.

SUPPORTING INFORMATION

Disulfiram is an established drug with a known side effect profile. It is third line choice of therapy for treatment of alcohol abstinence. Disulfiram should only be used in patients in whom acamprosate and naltrexone are not suitable due to contraindications, inefficiency or intolerance.

CONTRAINDICATIONS

- Cardiac failure
- Coronary artery disease
- History of cerebrovascular accident
- Hypertension
- Psychosis
- Severe personality disorder
- Suicide risk

PRECAUTIONS

- Avoid in acute porphyrias
- Avoid in diabetes mellitus
- Avoid in epilepsy
- Avoid in respiratory disease
- Avoid in first trimester of pregnancy. High concentrations of acetaldehyde which occur in the presence of alcohol may be teratogenic.
- Avoid in breastfeeding. No information available.
- Hepatic impairment - use with caution.
- Renal impairment - use with caution.

DOSAGE

- Adult dose 200 mg daily (increased if necessary up to 500 mg daily).

TIME TO RESPONSE

- Immediate

PRE-TREATMENT ASSESSMENT BY ONE RECOVERY BUCKS (ORB)

- Urea + electrolytes (U+E) and liver function test (LFT) needed within 6 weeks before prescribing the medication by in-house phlebotomist and results are sent through to general practitioner (GP) surgery (ORB do not have access to OrderComms (ICE)).

- Prior to request for disulfiram prescribing to be shared with the patient's GP, the patient will be abstinent of alcohol and have a care plan and details of post treatment psychosocial interventions at ORB in place.
- ORB to ensure that alcohol is not consumed for at least 24 hours before treatment is initiated by use of breathalyser.
- This treatment package will be communicated electronically to the patient's GP via secure **nhs.net** email.

RESPONSIBILITIES

ORB

- A comprehensive assessment by the recovery worker and specialist prescriber to be done initially to establish diagnosis and develop a care plan. Ensure the plan contains contact details for care coordinator/key worker and specialist prescriber.
- Organise blood tests prior to treatment, LFTs, U&Es. The results to be recorded in GP patient notes and ORB are responsible for reviewing the results. (ORB do not have access to ICE hence the results are sent to GP.)
- Initiate treatment and prescribe until the dose is stable and the initial two months of monitoring has been completed.
- Ensure the patient understands the nature and complications of drug therapy and their role in reporting adverse effects promptly and complies with attending regular appointments.
- Provide copy of patient information leaflet and drug monitoring card where appropriate.
- Send secure email to the GP requesting continued prescribing of disulfiram.
- ORB will email GP monthly for first 6 months to confirm compliance with attending appointments, and to confirm that the GP can continue to prescribe the next monthly script of disulfiram.
- At 6 months ORB will inform GP of the care plan. This may be:
 - The patient's treatment is stopped as no further benefit identified.
 - The patient is assessed by ORB as compliant and is safe to be discharged from ORB, treatment is recommended to be continued to be prescribed by the GP for a maximum of a further 6 months (12 months in total). No ongoing monitoring by the GP is required. The GP will add the recommended stop date to the prescription. If the patient or GP has any concerns ORB to be contacted for further advice. If the patient or GP believes there may be benefit in continuing treatment after 12 months they can contact ORB for advice on further prescribing.
 - The patient will continue to be seen less frequently by ORB, treatment is recommended to be continued to be prescribed by the GP for a maximum of a further 6 months (12 months in total). If there are any changes to the patient's alcohol use, or missed clinic appointments ORB will inform the GP and recommend any changes in treatment. If the patient or GP believes there may be benefit in continuing treatment after 12 months they can contact ORB for advice on further prescribing.
- Be available to give advice to GP and patient throughout treatment.
- Ensure patient is fully informed about their treatment including discuss with them any plans of pregnancy.
- The GP will be informed if it is known that the service user is pregnant prior to prescribing of disulfiram being agreed.
- Forward a copy of the care plan to GP.
- Discuss appropriate lifestyle issues with the patient if appropriate.
- Monitor for response and adverse drug reactions; to report adverse drug reactions to Medicines and Healthcare Products Regulatory Agency (MHRA) and GP.
- Inform GP of concurrent therapy as this may interact with any other medicine patient is prescribed from GP.

GP

- Email ORB via secure nhs.net email to acknowledge the continued prescribing of disulfiram within 14 days of receipt of request.
- Notify ORB to any changes in patient's medical condition, any adverse drug reactions or failure to attend appointments.
- At each monthly review for the first six months, GP to review ORB key workers email and check that the patient continues to be compliant with the information from ORB.
- GP to continue to prescribe for at least 6 months but up to 12 months if it benefits the patient and patient wants to continue taking medication. The GP will receive a monthly email confirmation from ORB that the patient is compliant with the programme for the first six months.
- Prescribe thiamine 100 mg tablets (vitamin B1), one tablet three times a day.
- Stop prescribing if ORB notify GP practice that patient is non compliant or not attending ORB monthly review.
- Ensure all monitoring is completed in accordance with NICE guidelines. This is every 2 weeks for the first 2 months (done by ORB), then each month for the following 4 months and at least every 6 months thereafter (by GP). This is due to the fact that disulfiram is hepatotoxic.
Blood tests for 6 month disulfiram review:
LFTs – total protein, albumin, gamma GT, bilirubin, alanine aminotransferase (ALT), aspartate aminotransferase (AST)
U+E – sodium, potassium, urea, creatinine

Patient

- Agree to treatment and monitoring after making an informed decision.
- Agree to being under the shared care of the GP and ORB.
- Attend for blood tests and monitoring when required.
- Ensure the patient's personal monitoring card is kept up to date and is brought to all appointments.
- Report any side effects to the GP or a member of the specialist team.
- Attend education session if offered.
- Attend the monthly follow up by ORB and any other support recommended by ORB.
- Maintain abstinence from alcohol.
- Immediately inform ORB or GP if becomes pregnant.

This guideline provides prescribing and monitoring guidance for disulfiram therapy in adults.

Monitoring by ORB

- For the first 2 months of treatment ORB will review the patient every 2 weeks and then after the 2 months the GP will be asked to take over the prescribing. The GP to review the patient each month thereafter and do blood test at 6 months.
- ORB will continue to work with those prescribed disulfiram. As part of this engagement ORB will randomly request the patient to be breathalysed. The results of these are to be shared with the patient's GP.
- If the patient returns to drinking at any time after the commencement of treatment the medication should be **stopped**.

Supporting Information

- ORB will supply the first 56 days of disulfiram to the patient.
- ORB will email attendance at psychosocial interventions monthly to the patient's GP so continuation of prescriptions for the patient in aftercare can be ensured. If patient stops attending psychosocial interventions GP will be advised to stop prescribing the medication.

SIDE EFFECTS AND ACTIONS TO BE TAKEN

Side effects	Action
Common	
• Drowsiness	Often transient. If possible continue after reassuring patient.
• Fatigue	Often transient. If possible continue after reassuring patient.
• Halitosis	Usually not severe. If possible continue after reassuring patient.
• Reduced libido	If possible continue after reassuring patient
• Nausea and Vomiting	If possible continue with anti-emetic. Stop if significant and discuss with ORB.
Rare	
• Allergic dermatitis	Stop and inform ORB
• Depression	Stop and inform ORB
• Hepatic cell damage	Stop and inform ORB
• Mania	Stop and inform ORB
• Paranoia	Stop and inform ORB
• Peripheral neuritis	Stop and inform ORB
• Psychotic reactions	Stop and inform ORB
• Schizophrenia	Stop and inform ORB

DRUG INTERACTIONS (REFER TO [BNF](#) AND [SPC](#))

- **Alcohol – disulfiram** - reaction when disulfiram given with alcohol
- **Aminophylline** - inhibits metabolism of aminophylline (increased toxicity)
- **Metronidazole** - psychotic reaction reported when disulfiram given with metronidazole
- **Isoniazid** – central nervous system effects of disulfiram possibly increased by isoniazid
- **Warfarin** - disulfiram enhance anticoagulant effect of coumarins
- **Tricyclic antidepressants** - disulfiram inhibits metabolism of tricyclics (increased plasma concentration).
- **Phenytoin and fosphenytoin** - disulfiram inhibits metabolism of antiepileptics (increased risk of toxicity)
- **Anxiolytics and hypnotics** - disulfiram increases risk of temazepam toxicity.
- **Benzodiazepines** - disulfiram inhibits metabolism of benzodiazepines (increased sedative effect)
- **Paraldehyde** - risk of toxicity when disulfiram given with paraldehyde
- **Theophylline** - disulfiram inhibits metabolism of theophylline (increased risk of toxicity)

BACK-UP INFORMATION/ADVICE

CONTACT DETAILS	High Wycombe	Aylesbury
ORB	High Wycombe – 0300 772 9672 option 2 Secure email – OneRecovery.Bucks@nhs.net	Aylesbury – 0300 772 9672 option 1 Secure email – OneRecovery.Bucks@nhs.net

REFERENCES

- 1) BNF Substance Misuse Section 8.1
- 2) NICE guidance alcohol misuse prescribing
<https://www.nice.org.uk/guidance/cg115/chapter/1-Guidance>
- 3) BNF disulfiram: <https://bnf.nice.org.uk/drug/disulfiram.html>
- 4) NICE guidance drug misuse and psychosocial interventions
<https://www.nice.org.uk/guidance/cg51>

See also:

[Guideline 560FM Acamprosate for use in Treatment of Alcohol Dependency in Adults 18 Years and Over](#)

[Guideline 561FM Naltrexone for use in Treatment of Alcohol Dependency in Adults 18 Years and Over](#)

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CONFIDENTIAL

Shared Care Agreement Letter for Amber Initiation drugs

Dear Doctor,

Re: *Patient name, DOB*
Address

Your patient has been established on the below treatment and is stable.

The patient has received a full explanation and written information about the benefits and potential side effects of the treatment, an explanation of blood tests, monitoring requirements and the relevant Telephone Helpline details.

The patient understands the need for attending appointments for monitoring and contacting healthcare professionals in case of side effects.

GP action required:	Please confirm the acceptance of shared care prescribing and monitoring by email to: onerecovery.bucks@nhs.net If you are unable to undertake shared care, we would appreciate understanding why. Please specify the reason below and return the form to the email address above.
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Shared care specialist at ORB:

Shared care drug: [Click to choose a drug.](#)

(Full SCP available on DXS, dose will be confirmed by the latest clinic letter)

Formulary site: www.bucksformulary.nhs.uk/docs/sc/

Indication (please state):

Date treatment commenced: [Click to enter date.](#)

Estimated date of the prescribing to be continued by GP: [Click to enter date.](#)