

GG&C Alcohol and Drug Recovery Service Guideline for the use of Alcohol Protective Medication

Document Number	Final V1	
Lead Manager:	Professional Nurse Advisor, Chair of Alcohol Care and Treatment Group, GGC Alcohol and Drug Recovery Service	
Responsible Director:	Associate Medical Director, GGC Alcohol and Drug Recovery Service	
Approved by:	ADRS Care Governance Committee	
Date approved:	February 2020	
Date for Review:	February 2022	
Replaces previous version: [if applicable]	GG&C Addiction Services Guideline for Management of Adults with Moderate to Severe Alcohol-use Disorders, approved 6 th June 2013.	

Index

	Page
Interventions for Alcohol Use Disorder (AUD)	2-4
Disulfiram guidance	5-8
Acamprosate guidance	9-10
Neumprosate galdance	3 10
Naltrexone guidance	11-12
References	13
Appendices	
1 Patient Information Leaflets	14
2 Consent to Disulfiram Treatment	15
3 Supervised Disulfiram Pharmacy List Link	16
4 Disulfiram Prescription Examples	17-18
5 Disulfiram Patient Treatment Card	19
6 Clinical Opiate Withdrawal Scale	20-21
7 Naltrexone Patient Treatment Card	22

GG&C Alcohol and Drug Recovery Services Guideline for Alcohol Protective Medication

This guideline makes recommendations on the pharmacological therapies available to support abstinence in adults with an Alcohol Use Disorder (AUD).

Patients should have a comprehensive assessment carried out, including assessment for assisted alcohol withdrawal (in the community, as a day patient or an inpatient, all under specialist alcohol services), along with consideration of any alcohol protective medication. Please refer to the *Guidance to Support Delivery of Detoxification from Alcohol* for full assessment details.

Before considering protective medication:

- Conduct a comprehensive assessment and/or examination, highlight any mental health and social risk factors and manage as appropriate.
- Check baseline urea and electrolytes, liver function tests with GGT, full blood count, vitamin B₁₂ and folate, BBV screening plus any other indicated blood tests (a coagulation screen may be appropriate in those with liver disease). Improvement in bloods (i.e. repeated bloods) may be required prior to initiation of medication. (A baseline FibroScan® of the liver should be considered in services that have access to the device).
- Complete urine drug screening near patient test or lab sample
- Complete ECG unless not indicated by clinical assessment/medication risk.
- Prescribing would usually commence after investigation results are reviewed although it may be appropriate to initiate medications prior to investigations to avoid delays that could lead to relapse. Investigations should be prioritised and completed as soon as possible thereafter.
- Consider any cautions or contraindications, and discuss these with the patient. Discussions should be recorded in the patient notes.
- Alcohol education and motivational work is an important component of each encounter with the patient. The importance of psychosocial interventions for AUD must be discussed with the patient before detoxification and before protective medication initiation; plans for the patient to start these interventions should be made by the ADRS worker as soon as possible (preferably pre-detoxification). Examples of psychosocial interventions are: cognitive behavioural therapies, behavioural therapies or social network and environment-based therapies (services include Addaction/Recovery Cafes/Alcoholics Anonymous/Drink Wise Age Well). The patient should be informed that there are improved outcomes for maintaining abstinence when protective medications are used in combination with on-going psychosocial interventions.

Pre-detoxification

- 1. Vitamin/thiamine supplementation with intramuscular (I.M.) Pabrinex as prophylaxis for Wernickes Encephalopathy pre-detoxification in moderate to severe dependency and malnourished patients. Prior to administration of IM Pabrinex, appropriately experienced staff should review platelet count (and coagulation screen in significant liver disease). Pabrinex IM must be considered for at risk patients who are undertaking self-detoxifications as well.
- 2. Acamprosate has few side effects/interactions and should be initiated prior to starting an alcohol detoxification (at least one week); there is some evidence of neuroprotective benefits and a neuromodulatory effect promoting sleep. A low threshold for its use pre-detoxification is recommended.

3. All protective medication should be considered as part of the overall care plan PRIOR to detoxification. Patients should be provided with verbal and written information (appendix 1) on <u>all</u> protective medication as part of motivational enhancement work to promote change and to aid an informed decision. Previous response to protective medication, patient experience and preference should all be used to inform the treatment choice. Patient preconceptions regarding medications may need to be addressed.

After a successful detoxification

- All patients who complete or are about to complete a detoxification should be offered Disulfiram, Acamprosate, Naltrexone or a combination of medication (Disulfiram + Acamprosate / Acamprosate + Naltrexone).
- All medication should be in combination with psychosocial intervention focused specifically on problem alcohol use. Examples of psychosocial interventions are: cognitive behavioural therapies, behavioural therapies or social network and environment-based therapies (services include Addaction, Recovery Cafes, Alcoholics Anonymous, Drink Wise Age Well).

Treatment Duration

A 6 week trial of medication(s) should be offered initially. If benefit is seen, treatment should be reviewed 6-12monthly or as clinically indicated. The decision to stop treatment should be made in consultation with the patient, after balancing the risks and benefits of continuation or stopping medications. AUD is a chronic relapsing condition and should be managed as such. Longer term treatment is usually required to support sustained abstinence. Patients should be considered on a case by case basis in a non-judgemental manner. Risks and benefits of longer term prescribing should be considered and documented.

Role of Care Manager / Keyworker

The ADRS worker should ensure that alcohol education and motivational work is undertaken with the patient at each encounter. The ADRS worker should provide the patient with verbal and written information on <u>all</u> protective medications prior to detoxification/reduction/cessation of drinking.

Suitability for all protective medication should be discussed with the prescriber and potentially the alcohol MDT/Complex Case Meeting. Further medical review may be required prior to initiation.

Once assessment and initiation of protective medications is complete, workers should continue to engage with patients. As a minimum, patients should be seen 4 weekly, although more regular appointments may be required, for example when Disulfiram is prescribed; patients should be seen at least fortnightly for the first 2 months (see Disulfiram section). Core skills work should be completed and psychosocial involvement discussed and clearly documented throughout treatment. Workers should also link with third sector staff to monitor engagement if applicable. Workers should be flexible with regard to offering additional appointments, with home visits if necessary, based on the patient circumstances at that time.

Relapse

AUD is a chronic relapsing condition. Protective medication and engagement in psychosocial relapse prevention intervention should be offered to ameliorate risk of relapse. Relapse should be considered in context of the patient case and history. The decision regarding timing of detoxification and choice of protective medication should be reached by discussion with medical staff, taking into account: motivation for abstinence, engagement with psychosocial interventions and previous response to treatment. A patient who is unable/unwilling to engage with psychosocial

interventions should not be precluded from the consideration of protective medications, although the patient should be informed that improved outcomes are seen when protective medications are used in combination with on-going psychosocial interventions.

Disulfiram

Formulary Status: Restricted to specialist use only.

Formulary Prescribing Notes: Consult with your local Alcohol and Drug Recovery Service (ADRS) for details of local arrangements relating to ongoing supply of disulfiram. ADRS will retain responsibility for ongoing clinical review.

Supervised Disulfiram works mainly as a psychological deterrent to alcohol and is effective as an aid to maintaining abstinence/preventing relapse in motivated, carefully selected and co-operative patients with AUD, who have achieved abstinence from alcohol, and who have been well informed on the mechanism of action, benefits and risks of the medication. Recent studies indicate Disulfiram to be superior to Acamprosate and Naltrexone in prolonging time to relapse and maintaining abstinence from alcohol. Its use should be accompanied by appropriate supportive/psychosocial intervention.

Disulfiram is cautioned (although risk / benefit should be considered on an individual basis):

- hepatic impairment
- renal impairment
- epilepsy
- · respiratory disease
- · diabetes mellitus
- acute porphyria
- memory impairment

Disulfiram is contraindicated (although risk / benefit should be considered on an individual basis):

- in cardiac failure
- in coronary artery disease
- in a history of stroke
- in hypertension
- in severe personality disorder
- in suicidal risk, psychosis
- during the consumption of alcohol
- in hypersensitivity to disulfiram or any of the excipients
- in the first trimester of pregnancy and in breastfeeding

Balancing the Benefits and Risks of Disulfiram

Each patient should be considered individually. In many cases, the benefits of abstinence from alcohol will outweigh risks from any comorbidity. The patient should be made aware of the risks to their physical health that can arise from the Disulfiram Alcohol Reaction (DAR) and that abstinence from alcohol will negate these risks. Discussion with the Alcohol MDT / Complex Case Meeting on risk/benefit should be considered in higher risk/more complex patients.

Consideration and liaison with specialist services should be considered in motivated but higher risk / complex cases to reach a decision about suitability, for example in severe liver disease, a discussion with Gastroenterology may be helpful; cardiac conditions can be discussed with Cardiology.

In motivated but higher risk patients, Disulfiram could be commenced, and the risks managed with more frequent monitoring of the patient initially (weekly or twice weekly review). This should include monitoring for side effects/new symptoms, follow-up investigations such as bloods / ECG as appropriate. The additional monitoring requirements should be clearly documented in the patient notes. The additional risk / monitoring could also be communicated to the supervising pharmacist, who should notify ADRS of positive breathalyser readings (asap) or missed doses (within 24 hours).

Risk decisions should be clearly documented and explained to patients. The Consent to Disulfiram Treatment Form should be completed (appendix 2), see Informed Consent section below.

Before Initiating Treatment

Complete baseline ECG and bloods as previously detailed (page 2).

Prescribing would usually commence after investigation results are reviewed although it may be appropriate to initiate disulfiram prior to investigations to avoid delays that could lead to relapse. Investigations should be prioritised and completed as soon as possible thereafter.

Informed Consent

- -Complete the active process of informed consent with the patient (appendix 2), explaining any medical terminology in full. The patient should have the opportunity to consider their options and ask questions prior to initiation of treatment, which may require additional time.
- -Once complete the consent document should be scanned into EMIS web under the appropriate code allocated to the document.

Initiating Treatment

Start treatment at least 24 hours after the last alcoholic drink consumed and confirm with a negative breath alcohol test (0mcg/100ml).

Dose & Freq	Support/Supervision
	Discuss supervision with the patient
	 Evidence shows that Disulfiram is effective when supervised.
	Depending on where it was initiated, Disulfiram can be
200mg daily */**	supervised by an ADRS day unit for a period, whereby patients are breathalysed before dose supervision.
	 Practitioners should be aware of the current <i>Guideline for the Supervision of Disulfiram in Community Pharmacy.</i> GG&C has a Service Level Agreement (SLA) with a number of community pharmacies whereby a pharmacy will supervise Disulfiram; the patient will be breathalysed before every dose. See appendix 3 for the link to a list of the pharmacies enrolled to provide the service. If pharmacy supervision is impractical, supervision by a
	responsible family member or carer may be considered. They should be aware of the reasons for using disulfiram, the signs of a reaction and should agree to contact the ADRS in the event of a reaction or the patient stopping treatment. There
	have been reports of patients switching the Disulfiram tablets,

- it may be prudent for the person supervising to note the disulfiram tablet markings.
- In select patients, after careful consideration of risk/benefit, unsupervised Disulfiram can be considered. This may involve further discussion with the Alcohol MDT / Complex Case Meeting in higher risk/more complex patients.

*For patients who continue to drink, if a dose of 200mg (taken regularly for at least a week) does not cause a sufficiently unpleasant reaction to deter drinking, reassess suitability for disulfiram and carefully consider increasing the dose in consultation with the patient. The maximum UK licensed daily dose of disulfiram is 500mg, although as the tablet is a 200mg strength, it is practical to give a maximum daily dose of 400mg (2 tabs). Examples of higher dose regimens would be 400mg Monday to Saturday or 600mg Monday, Wednesday and Friday**. Note that side effects and toxicity reactions may be more likely at higher doses and the patient should be informed and monitored regularly for this.

**The dosage-regimen can be modified in order to improve compliance to a two/three-times-a-week dosing schedule.

Prescription Wording

Prescriptions for Community Pharmacy supervision should contain a dose and an instalment. Both of these will be the same if every dose is to be supervised. "Breathalysed and supervised on day of collection" should also be stated on all prescriptions for pharmacy supervision. It is recommended best practice that this is undertaken on each occasion the patient attends the pharmacy to collect medication. The prescription should also advise pharmacy staff to contact the ADRS to inform of any single missed dose or positive breathalyser reading. Please see appendix 4 for examples of 28 day prescriptions.

Inform the patient (and family members/carers if involved):

- The interaction between Disulfiram and alcohol (which may also be found in food, perfume, aerosol sprays etc.), the symptoms of which may include flushing, nausea, palpitations, and more seriously, arrhythmias, hypotension and collapse[#]. Alcohol must <u>not</u> be consumed during treatment and for up to 14 days after discontinuation. Inform the patient to attend accident and emergency if they consume alcohol on Disulfiram treatment and to inform ADRS worker as soon as possible.
- To carry a 'Disulfiram Patient Treatment Card' (appendix 5, provided by ADRS) with them at all times whilst on treatment with disulfiram.
- Possible side effects[#]: drowsiness, fatigue, nausea, halitosis, and reduced libido. Note that side effects / toxicities can be dose dependent and related to length of treatment (a build-up of toxic metabolites). If side effects / toxicities encountered are mild, careful consideration of the risk/benefit of stopping Disulfiram should occur in consultation with the patient, and an initial reduction in dose could be considered e.g. 200mg on Monday, Wednesday and Friday.
- More severe side effects[#]: Psychotic reactions occur rarely, allergic dermatitis, peripheral neuritis has been reported.
- The rapid and unpredictable onset of the rare complication of hepatotoxicity; advise the patient that if they feel unwell or develop a fever or jaundice that they should stop taking Disulfiram and seek urgent medical attention.
- See appendix 1 for a link to a printable Patient Information Leaflet.

[#] Full details of the potential DAR and side effects are contained in the Consent to disulfiram treatment form (appendix 2).

Continuing Treatment and Duration of Treatment

Patients should be seen at least every 2 weeks (includes clinic and Care Manager appointments) for the first 2 months, then monthly.

Prescriber review should occur 6-12 monthly or as clinically indicated. This should include monitoring of prescribing benefit, and potential toxicities.

Standard bloods should be considered at 1 month, 6 months and annually while treatment continues (or more frequently if clinically indicated). Particular attention should be paid to an increase in transaminases despite abstinence from alcohol as a drug induced hepatitis may be asymptomatic.

Consider an annual ECG.

Duration of treatment should be reviewed on a case by case basis, in consultation with the patient regarding the risks and benefits of the continuation or stopping of Disulfiram. This could involve further discussion with the Alcohol MDT / Complex Case Meeting. If the patient continues to find Disulfiram beneficial in maintaining abstinence from alcohol, the prescription should be continued (see *Balancing the Benefits and Risks of Disulfiram* section). If a patient is to trial a period without medication, further worker support should be offered during this time.

Contact the manufacturer for the latest SPC if required (medinfo@tevauk.com).

Please note the information in this guideline does not replace the SPC or BNF and should be read in conjunction with both.

Acamprosate

Formulary Status: Restricted to specialist initiation only.

Formulary Prescribing Notes:

- Continue for up to one year, although can be continued when relapse prevention benefit is demonstrated
- Discontinue if lack of efficacy or full relapse occurs
- Recommended: Review of alcohol consumption and psychosocial wellbeing every 6 months

Acamprosate is an anti-craving and neuroprotective / neuromodulatory medication for AUD.

Due to its neuroprotective benefits, Acamprosate should be initiated at least 1 week <u>prior</u> to detoxification or as soon as possible for patients undertaking a gradual self-reduction of alcohol.

It is a low risk medication with few side effects / interactions, therefore a low threshold for its use pre-detoxification is recommended. If not commenced pre-detoxification, it should be commenced during detoxification or as soon as possible after detoxification. It should be combined with psychosocial intervention.

Acamprosate should be avoided:

- in patients with a known hypersensitivity to Acamprosate or to any of the excipients
- during pregnancy (unless potential benefit outweighs risk) and breastfeeding
- in cases of renal impairment (serum creatinine >120 micromol/L)
- in severe hepatic impairment

Before Initiating Treatment

Bloods as previously detailed (page 2).

Prescribing would usually commence after investigation results are reviewed although it may be appropriate to initiate acamprosate prior to investigations to avoid delays that could lead to relapse. Investigations should be prioritised and completed as soon as possible thereafter.

Initiating Treatment

Dosing is weight based following the table below:

Weight of Dose and Frequency Patient	
60kg and over	666mg three times a day with or after food
Less than 60kg	666mg at breakfast, 333mg at lunch and dinner

Duration

Consider stopping 4-6 weeks after initiation if abstinence is not achieved or no significant improvement in drinking levels is noted. Consider on a case by case basis.

Prescribe for up to 1 year, or longer for those benefitting from the drug who want to continue with it, prescriber review at least 6-12 monthly or if clinically indicated.

Continuing Treatment and Prescribing/Supply

Patients should be reviewed at least monthly and remain within the specialist service for a minimum of 3 months while other psychosocial input is undertaken. Stable patients can be handed over to the GP for further prescribing, with advice to consider reviewing the patient 6-12 monthly. GPs should be informed that prescriptions can continue for up to 1 year or longer for those benefitting from the medication. Prescribing for more complex patients for example those with liver disease should remain within ADRS if possible. Handing over the prescribing to the GP is a joint decision between the Care Manager and the Prescriber.

Blood tests are not required routinely but can be used to monitor for liver function recovery and as a motivational aid for patients to show improvement, for example on prescriber review.

Inform the patient:

- Possible side effects: diarrhoea, abdominal pain, nausea, vomiting, flatulence, pruritus, maculo-papular rash, frigidity or impotence, decreased libido.
- See appendix 1 for a link to a printable Patient Information Leaflet.

See SPC via link below:

http://www.medicines.org.uk/EMC/medicine/1042/SPC/Campral+EC/

Naltrexone

Formulary Status: Restricted to specialist use (Addiction Services) according to local treatment guidelines

In AUD, Naltrexone reduces the rewarding effects and cravings for alcohol.

Naltrexone is an opioid antagonist indicated for use as an additional therapy within a comprehensive treatment program including psychosocial intervention for alcohol dependence to support abstinence.

Naltrexone should be avoided:

- in hypersensitivity to Naltrexone hydrochloride or to any of the excipients.
- in severe renal impairment
- in acute hepatitis and severe hepatic impairment / failure
- •in opioid addicted patients with current use of opioids, patients on substitute prescribing or patients prescribed opioids for analgesia
- if a patient has a positive screening result for opioids
- in pregnancy (use only if benefit outweighs risk) and breastfeeding

Before Initiating Treatment

- Bloods as previously detailed (page 2). Prescribing would usually commence
 after investigation results are reviewed although it may be appropriate to
 initiate naltrexone prior to investigations to avoid delays that could lead to
 relapse. Investigations should be prioritised and completed as soon as
 possible thereafter.
- 2. The patient should have been abstinent from all opiate drugs for 7-10 days (including over the counter medicines e.g. 8/500 co-codamol).
- 3. Within clinic, verify that the patient has not taken any opiate drugs. Consider a urine drug screen and use of the Clinical Opiate Withdrawal Scale (COWS, appendix 6).

Initiating Treatment

25mg (half a tablet) on day 1, then increased if tolerated to 50mg daily.

If the patient feels unwell advise them to stop the oral Naltrexone immediately.

Duration

Consider stopping 4-6 weeks after initiation if abstinence is not achieved or no significant improvement in drinking levels is noted. Consider on a case by case basis.

Prescribe for up to 1 year, or longer for those benefitting from the drug who want to continue with the medication, with prescriber review at least 6-12 monthly or if clinically indicated.

Continuing Treatment

Patients should be seen at least monthly while in treatment.

Standard bloods should be considered at 1 month, 6 months and annually while treatment continues (or more frequently if clinically indicated). **Special attention** should be paid to patients with hepatic enzyme levels exceeding three times the normal value and patients with renal impairment.

Note for concomitant treatment:

Data from a safety and tolerability study of co-administration of Naltrexone with Acamprosate in non-treatment seeking, alcohol dependent individuals showed that Naltrexone administration significantly increased Acamprosate plasma level. If patients report side effects the Acamprosate dose can be reduced.

Inform the patient:

- Against the concomitant use of opioids (e.g. opioids in cough medication, opioids in symptomatic medication for the treatment of common colds, or opioids contained in anti diarrhoeal agents, etc.) during Naltrexone treatment.
- Patients should be warned that large doses of opioids to overcome the blockade may, after the cessation of Naltrexone, result in an acute opioid overdose, with possible fatal outcome.
- Patients might be more sensitive to opioid containing medicines after stopping treatment with naltrexone.
- To carry a 'Naltrexone patient treatment card' (provided by ADRS, appendix
 7) with them at all times whilst on treatment with naltrexone.
- Very common side effects: headache, sleep disorders, restlessness, nervousness, abdominal pain, abdominal cramps, nausea, vomiting, joint and muscle pain.
- Common side effects: thirst, dizziness, drowsiness, shivering, increased sweating, increased lacrimation, pain in the chest, diarrhoea, constipation, urine retention, rash, pruritis, lack of appetite, delayed ejaculation, decreased potency, increased energy, irritability.
- See appendix 1 for a link to a printable Patient Information Leaflet.

See SPC via link below:

 $\frac{http://www.medicines.org.uk/EMC/medicine/25878/SPC/Naltrexone+Hydrochloride+5}{0+mg+Film-coated+Tablets/}$

References

Actavis UK Ltd, Devon 2011. Summary of Product Characteristics: Antabuse Tablets 200mg. [cited 9th July 2019, requested from Teva].

Accord Healthcare Limited, Middlesex 2013. Summary of Product Characteristics: Naltrexone Hydrochloride 50 mg Film-coated Tablets [cited 9th July 2019] Available at:

http://www.medicines.org.uk/EMC/medicine/25878/SPC/Naltrexone+Hydrochloride+50+mg+Film-coated+Tablets/

Joint Formulary Committee (2019) *BNF 78: September 2019.* London: Pharmaceutical Press.

Lingford-Hughes AR, Welch S, Peters L, Nutt DJ. BAP updated guidelines: evidence-based guidelines for the pharmacological management of substance abuse, harmful use, addiction and comorbidity: recommendations from BAP. J Psychopharmacol. 2012;26(7):899–952. Available at: https://www.bap.org.uk/pdfs/BAP_Guidelines-Addiction.pdf

National Institute for Health and Care Excellence. Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence. NICE clinical guideline 115 (2011). Available at: www.nice.org.uk/guidance/CG115

NHS Greater Glasgow and Clyde, *GGC Formulary*. [cited 3rd January 2020] Available at: http://www.ggcprescribing.org.uk

Merck Serono, Middlesex 2015. Summary of Product Characteristics: Campral EC. [cited 9th July 2019] Available at: http://www.medicines.org.uk/EMC/medicine/1042/SPC/Campral+EC/

Appendix 1 Patient Information Leaflets

Printable patient information leaflets are available via the Choice and Medication Website:

https://www.choiceandmedication.org/nhs24/printable-leaflets/

https://www.choiceandmedication.org/nhs24/generate/pillacamprosate.pdf https://www.choiceandmedication.org/nhs24/generate/pilldisulfiram.pdf https://www.choiceandmedication.org/nhs24/generate/pillnaltrexone.pdf

Appendix 2 Consent to Disulfiram Treatment

	ent Name:	EMISweb Scanning code: EMISNO
СНІ	number: Consent to Disulfiram Treatment	EMISWED SCATTLING CODE. EMISING
1	Aim of Treatment	
	support the prevention of relapse in alcohol dependence in conjun	ction with appropriate
	chosocial interventions.	тип арргорияс
2.	Requirements of Treatment	
•	Remain abstinent from alcohol	
•	Adhere to medication supervision arrangements as agreed with a	ddiction recovery service
•	Comply with arrangements for healthcare practitioner and prescri	ber review, including checks to
	confirm abstinence (bloods, breathalyser etc.)	
•	Engage with appropriate psychosocial activities to support abstine	ence from alcohol
•	Safe custody, storage and disposal.	
3 /	Risks Associated with Disulfiram	
	Relapse; disulfiram - alcohol reaction (DAR)	
	Expected reaction (severe flushing, breathlessness, headache, hea	art palpitations, nausea and
	vomiting)	
	Severe reaction; tachycardia, hypotension, respiratory depression	, chest pain, QT prolongation.
	ST depression, arrhythmias, coma, convulsions	
	Rare complications; hypertension, bronchospasm, methaemoglob	inaemia (complication with
	the supply of oxygen to body tissues)	
-	In rare cases death has occurred	
-	All products (toiletries etc) used are required to be alcohol (ethan	ol, ethyl alcohol) free
b.	Possible side effects, listed in order of severity and frequency:	
	quencies quoted as per choice and medication leaflet and practiti	oner experience)
	Liver cell damage (rare)	
-	Psychiatric disorders (rare); depression, mania, paranoia, schizoph	renia. Reduction in libido.
-	Peripheral neuritis / Optic neuritis (rare)	
-	Encephalopathy (rare)	
-	Allergic dermatitis (uncommon)	
	Nausea / Vomiting (common)	
	Drowsiness / Fatigue during initial treatment (common)	
-	Halitosis (common)	
	☐ Choice and Medication Patient Information Leaflet	
	https://www.choiceandmedication.org/nhs24/generate/pilld	sulfiram.pdf
c.	Potential risks and benefits in pregnancy	
	Pregnancy test may be necessary / Report if planning or are p	
	 Pregnancy Patient Information Leaflet provided (ple 	ase tick)
	https://www.choiceandmedication.org/nhs24/generate/hand	lyfactsheetperinataldisulfiram.pdf
d.	Need to make all treating doctors and pharmacy aware (carry pat	ient treatment card) e.e. if
	admitted to hospital for an operation	
	ve fully discussed disulfiram withonon	
	e particular risks emphasised or concerns raised	
	nfirm that he/she understands the purpose, benefits and risks of o	
	nes to proceed.	
	edPrint NameDa	
I co	nfirm that the purpose, benefits and risks of disulfiram treatment	have been explained to me by
	above and I wish to proceed with treatment.	

Appendix 3 Pharmacies Providing Disulfiram Supervision

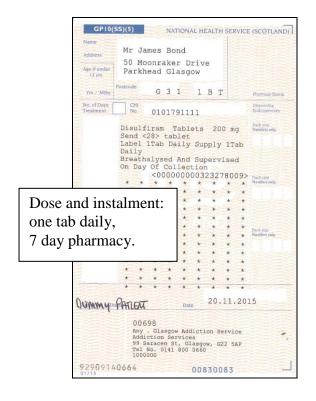
An up to date list of pharmacies (in postcode order) providing the supervised disulfiram service is available at:

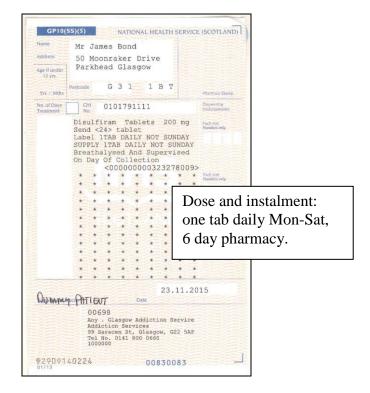
https://www.glasgow.gov.uk/CHttpHandler.ashx?id=29531&p=0

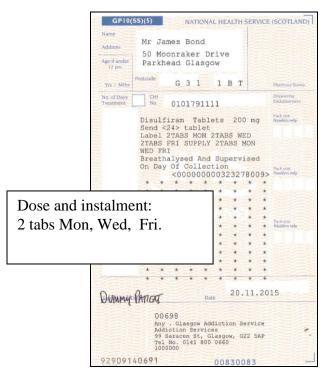
Any queries contact Jennifer Torrens, Alcohol Pharmacist.

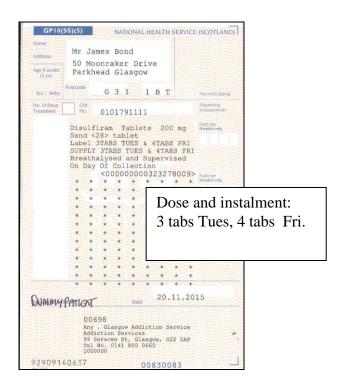
Email: <u>Jennifer.Torrens@ggc.scot.nhs.uk</u>

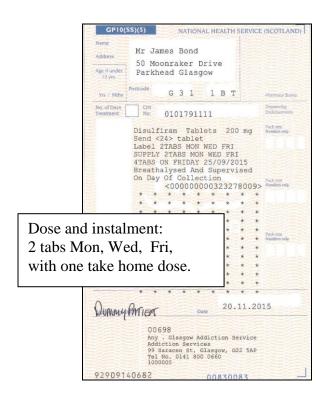
Appendix 4 Disulfiram Prescription Examples

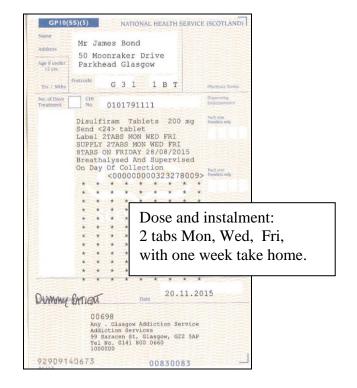




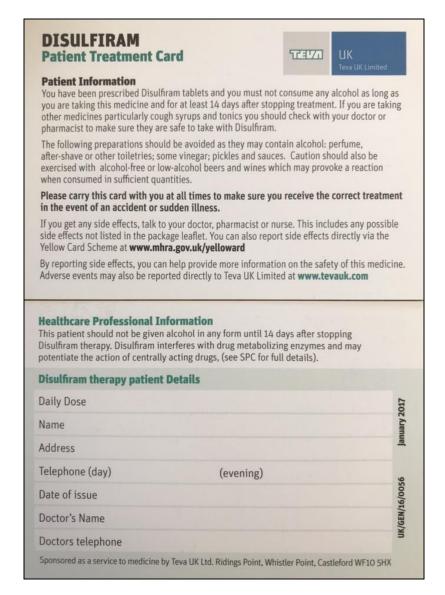








Appendix 5 Disulfiram Patient Treatment Card



Request these from Teva® (email: medinfo@tevauk.com) or contact the Alcohol Pharmacist (email: Jennifer.Torrens@ggc.scot.nhs.uk).

Clinical Opiate Withdrawal Scale (COWS)

Flow sheet for measuring symptoms over a period of time during induction of medication.

For each item, write in the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

add to the score.		
Patient's Name:	CHI:	Date:
Enter scores at time zero, 30min after first dose, 2 h after fi	irst dose.	

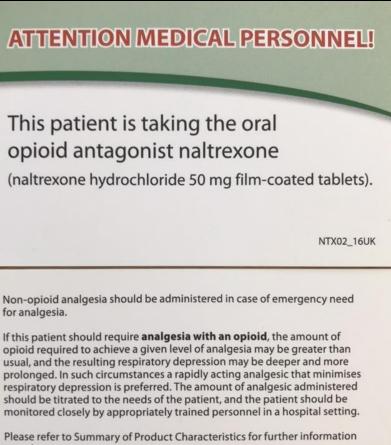
	Pre dose	At 30 minutes	At 2 hours
Resting Pulse Rate: (record beats per minute)		minutes	
Measured after patient is sitting or lying for one minute			
0 pulse rate 80 or below			
1 pulse rate 81100			
2 pulse rate 101120			
4 pulse rate greater than 120			
Sweating: over past ½ hour not accounted for by room			
temperature or patient activity.			
0 no report of chills or flushing			
1 subjective report of chills or flushing			
2 flushed or observable moistness on face			
3 beads of sweat on brow or face			
4 sweat streaming off face			
Restlessness Observation during assessment			
0 able to sit still			
1 reports difficulty sitting still, but is able to do so			
3 frequent shifting or extraneous movements of legs/arms			
5 Unable to sit still for more than a few seconds			
Pupil size			
0 pupils pinned or normal size for room light			
1 pupils possibly larger than normal for room light			
2 pupils moderately dilated			
5 pupils so dilated that only the rim of the iris is visible			
Bone or Joint aches If patient was having pain			
previously, only the additional component attributed			
to opiates withdrawal is scored			
0 not present			
1 mild diffuse discomfort			
2 patient reports severe diffuse aching of joints/ muscles			
4 patient is rubbing joints or muscles and is unable to sit			
still because of discomfort			
Runny nose or tearing Not accounted for by cold			
symptoms or allergies			
0 not present			
1 nasal stuffiness or unusually moist eyes			
2 nose running or tearing			
4 nose constantly running or tears streaming down			
cheeks			

Clinical Opiate Withdrawal Scale (COWS) continued

	Pre dose	At 30	At 2 hours
		minutes	
GI Upset: over last ½ hour			
0 no GI symptoms			
1 stomach cramps			
2 nausea or loose stool			
3 vomiting or diarrhoea			
5 Multiple episodes of diarrhoea or vomiting			
GI Upset: over last 1/2 hour			
0 no GI symptoms			
1 stomach cramps			
2 nausea or loose stool			
3 vomiting or diarrhoea			
5 Multiple episodes of diarrhoea or vomiting			
Tremor observation of outstretched hands			
0 No tremor			
1 tremor can be felt, but not observed			
2 slight tremor observable			
4 gross tremor or muscle twitching			
Yawning Observation during assessment			
0 no yawning			
1 yawning once or twice during assessment			
2 yawning three or more times during assessment			
4 yawning several times/minute			
Anxiety or Irritability			
0 none			
1 patient reports increasing irritability or anxiousness			
2 patient obviously irritable anxious			
4 patient so irritable or anxious that participation in the			
assessment is difficult			
Gooseflesh skin			
0 skin is smooth			
3 piloerrection of skin can be felt or hairs standing up on			
arms			
5 prominent piloerrection			
Total scores			

Score: 5 - 12 = mild; 13 - 24 = moderate; 25 - 36 = moderately severe; more than 36 = severe withdrawal

Appendix 7 Naltrexone Patient Treatment Card



on naltrexone.

For further information medical personnel should call: AOP Orphan Pharmaceuticals AG (UK) on **0121 262 4119**



Request supplies from Jennifer Torrens, Alcohol Pharmacist.

Email: Jennifer.Torrens@ggc.scot.nhs.uk