

**General instructions for completing clozapine protocol forms**

- In order to comply with medical record standards, all components of the form must be completed in full. Incomplete entries are not valid.
- Please ensure that when completing the weekly/4 weekly review all boxes have information entered.
- All entries must be completed with a date, signature, name, designation and time.
- The review must be within 48 hours of a CBE, during a face to face assessment for signs and symptoms of infection.
- The full completion of this form is the minimum requirement for all participants prescribed clozapine under the TGA endorsed clozapine management protocols. Further monitoring may be required by individual health networks.
- All staff involved in monitoring clozapine, must be registered with the monitoring provider (refer to your local clozapine coordinator or SA Health Pharmacist for more information).
- On transfer to another Clozapine Centre, the original form is to go with the participant. A copy of the form is to be made for the Medical Record.

**Clozapine Review Guidelines**

Clinical Information	At each review document any important information (e.g. side effects, constipation, fever, chest pain, seizure activity, extra monitoring required etc.) in the clinical information box.
Recommencement review	Complete blood examination (CBE) Clozapine level C Reactive Protein (CRP) Troponin Electrolytes Liver function test (LFT) Fasting blood glucose level Fasting lipids Electrocardiograph (ECG) Echocardiogram (ECHO)
Shared Care	Consider community mental health clozapine clinic monitoring if available

**Cardiac Monitoring Guidelines**

At all times	Educate participants and carers to report flu-like symptoms, GI upsets, dizziness or chest pain.
Pre-Commencement, within 6 months, then annually	Echocardiogram.
First 28 Days	Measure body temperature at the same time each day.
Baseline, days 7, 14, 21, 28, week 12 then annually	Troponin T or I, CRP, ECG (except day 21), Pulse, Blood Pressure, Respiratory rate.
If at any time • Temperature > 38°C or flu-like symptoms	Immediate CRP, Troponin and CBE.
• Troponin > 2 ULN and CRP elevated	Urgent transfer to Emergency department. Urgent cardiology consultation – query myocarditis. Urgent echocardiography.
• Troponin > 2 ULN and normal CRP	Urgent transfer to Emergency department. Urgent cardiology consultation – query acute coronary syndrome.
• Troponin 1 to ≤ 2 ULN and elevated CRP	Urgent cardiology consultation. Daily assess: troponin, CRP and symptoms until features normalise. Clozapine treatment can continue if not contraindicated by ongoing assessment.

**CLOZAPINE PROTOCOL INFORMATION**

This form is for recommencement of clozapine, and is designed to meet the checks and observational needs of the participant. What is documented on this form should be documented on electronic equivalent where required.

Clozapine is a medication regulated by the TGA, under the *Highly Specialised Drugs Program*. It is a third line treatment for chronic schizophrenia refractory to treatment with other medications. Participants may only be prescribed clozapine when mandatory blood testing and other monitoring can be achieved in the community.

**Side effects**

- Weight gain
- Metabolic syndrome
- Diabetes
- Hyper-salivation (*more often at night*)
- Nausea
- Sedation
- Severe constipation
- Increased heart rate
- Myoclonic jerks
- Obsessional traits
- Nocturnal enuresis

**Life threatening events**

- Agranulocytosis/neutropenia
- Severe infections
- Seizures
- Hypertension/hypotension
- Myocarditis
- Cardiomyopathy
- Pulmonary embolus
- Acute renal failure

If any of the above adverse events are noted, please refer to the *Adverse Event Protocols*.

**Recommencing clozapine after a period of interruption:**

Clozapine must be re-titrated from 12.5mg if the participant has missed the medication for more than 48 hours to reduce the risk of serious side effects. There are also additional monitoring requirements depending on the period of interruption. See table below:

Period of Interruption (time since last dose was taken)	Dosage / Monitoring Requirements
≤ 48 hours	No change to dosage or monitoring
> 48 hours & ≤ 72 hours	Start on 12.5mg and titrate up No additional monitoring requirements
> 72 hours & ≤ 28 days	Start on 12.5mg and titrate up <b>For 4 Weekly participants:</b> Weekly monitoring for 6 weeks. If no abnormality, resume 4 weekly monitoring <b>For Weekly participants:</b> Weekly monitoring for 6 weeks or as long as needed to reach 18 weeks (whichever is the greatest).
> 28 days	New participant registration form New pre-treatment result and monitoring same as new participant (18 weeks); no 6 hour vital signs monitoring required Start on 12.5mg and titrate up.

WCC and NC	Range	Action
WCC >3.5 x 10 <sup>9</sup> /L and NC >2.0 x 10 <sup>9</sup> /L	GREEN	Clozapine therapy can continue or be titrated upwards as required
WCC 3.0-3.5 x 10 <sup>9</sup> /L and/or NC 1.5-2.0 x 10 <sup>9</sup> /L	AMBER	Requires increasing frequency of monitoring, to twice weekly
WCC <3.0 x 10 <sup>9</sup> /L and/or NC <1.5 x 10 <sup>9</sup> /L	RED	STOP clozapine immediately and repeat blood test within 24 hours. Contact Consultant Psychiatrist and arrange urgent medical review

**Recommended re-titration regimens**

Rapid titration is for participants with good tolerance to previous clozapine treatment. From day 14 dose can be increased in 50mg intervals every 2 to 3 days depending on efficacy and side effects. Maximum dose is 900mg. Clozapine levels should be assessed as per commencement protocol, or if: side effects are apparent, there is evidence of infection, there are changes in medications that interact with clozapine, or changes in the use of tobacco and caffeine (*see SAH Clozapine Management Clinical Guideline*).

Titration Type	Day 1		Day 2		Day 3		Day 4		Day 5		Day 6		Day 7	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Normal dose (mg)	12.5	-	25	-	25	-	25	25	25	25	25	50	25	75
Rapid dose (mg)	12.5	-	25	-	25	25	25	50	25	75	25	75	25	100

Titration Type	Day 8		Day 9		Day 10		Day 11		Day 12		Day 13		Day 14	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Normal dose (mg)	25	100	50	100	50	100	50	125	50	125	50	125	50	150
Rapid dose (mg)	50	100	50	125	50	150	50	175	75	175	100	175	100	200

CLOZAPINE RECOMMENCEMENT/INTERRUPTION MR-78D



Government of South Australia  
SA Health

**CLOZAPINE PARTICIPANT PROTOCOL  
RECOMMENCEMENT / INTERRUPTION  
(MR78D)**

Facility: .....

Affix participant identification label in this box

UR No: .....  
Surname: .....  
Given Name: .....  
Second Given Name: .....  
D.O.B: ..... Sex: .....

Community / Private Psychiatrist: ..... Participant CPN: ..... NB Remeasure arm circumference if weight  $\pm$  5kg

Blood Group:	O+ <input type="checkbox"/>	O- <input type="checkbox"/>	A+ <input type="checkbox"/>	A- <input type="checkbox"/>	B+ <input type="checkbox"/>	B- <input type="checkbox"/>	AB+ <input type="checkbox"/>	AB- <input type="checkbox"/>	Diagnosed Diabetes	Yes / No	Family Hx Diabetes	Yes / No
Dispensing pharmacy:	Monitoring clinic/GP:			Height (m):	Diagnosed Hypertension	Yes / No	Family Hx Heart Disease	Yes / No				

CLOZAPINE PARTICIPANT PROTOCOL - Weekly monitoring				WCC > 3.5 x 10 <sup>9</sup> /L and NC > 2.0 x 10 <sup>9</sup> /L			
CLINICAL REVIEW	Baseline	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Review date (DD/MM/YYYY)	___/___/20___	___/___/20___	___/___/20___	___/___/20___	___/___/20___	___/___/20___	___/___/20___
Review time (HH:MM)	___:___ am / pm	___:___ am / pm	___:___ am / pm	___:___ am / pm	___:___ am / pm	___:___ am / pm	___:___ am / pm
Total Daily Dosage (mg)							
Arm Circumference (cm)							
Weight (kg)							
BMI (weight/height <sup>2</sup> )							
Waist measurement (cm)							
Blood pressure 1st							
Blood pressure 2nd							
Temperature (°C)							
Manual pulse							
Respiratory Rate							
Blood glucose level (BGL)							
No of Tobacco cigarettes/day							
Clinical Information (constipation, fever, chest pain, seizure activity etc.)							
CLINICAL REMINDERS							
Serum clozapine level					Due		
Pathology	Recommendation pathology review						
Cardiac	Recommendation cardiac review						
Details of person filling in this column							
Signature							
Name (please print)							
Designation							

Reflex Blue

Black

MR78D Clozapine



Medication

SA Health  
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