

15 October 2025

Medsafe 133 Molesworth Street PO Box 5013 Wellington 6140

Sent via: https://consult.health.govt.nz/medsafe/clozapine-blood-monitoring-consultationhp/consultation/intro/

Dear Sir/Madam,

Re: Clozapine: Proposed changes to blood monitoring and prescribing requirements - consultation questions for healthcare professionals

The Pharmacy Guild of New Zealand (Inc.) (the Guild) is a national membership organisation, and the largest single representative of community pharmacy owners. We provide leadership on all issues affecting the sector and advocate for the business and professional interests of community pharmacy.

Our feedback on this consultation focuses on Guild members' concerns around general economic, funding and supply issues. Guild submissions should not be taken as any endorsement of, or any attempt to comment on, issues of safety, efficacy or individual patient utility.

Thank you for the opportunity to provide feedback on the proposed changes to the blood monitoring and prescribing requirements for clozapine. While we have submitted our responses through the consultation website, we have also included them below for the benefit of our members.

#### Section 1: Duration of blood monitoring

#### Q5. Do you agree that ongoing blood monitoring can be stopped after a period of time?

- Yes, we support stopping ongoing blood monitoring after a defined period of stable clozapine treatment, provided the patient meets clear safety criteria, as evidence shows the risk of serious or clozapine-induced neutropenia becomes negligible after approximately two years of continuous treatment and is comparable to that of other antipsychotics after three years. Continuing mandatory monitoring beyond this period adds little clinical value while creating unnecessary barriers to treatment access.
- However, in the interest of patient safety, we recommend that community pharmacies are enabled and funded to undertake annual safety checks and monitoring, which could be achieved either through the ability to order laboratory blood tests or providing on-site point-of-care testing (POCT), offering ongoing reassurance for patients, ensuring continuity of care, and allowing pharmacists to make timely referrals where clinically appropriate.

#### Q6. When should blood monitoring be stopped?

- The blood monitoring should be stopped after two years of continuous and stable clozapine treatment without neutropenia, provided strict clinical criteria are met.
- The evidence (Northwood et al 2024, Atkin et al 1996, Rubio et al 2024) shows risk of clozapine-induced neutropenia peaks within the first 18 weeks and becomes negligible

- after two years of exposure, and after three years, the risk is comparable to that seen with other antipsychotics.
- Stopping mandatory blood monitoring after two years balances patient safety, treatment access, and system efficiency, while still allowing for clinical review or testing if infection symptoms occur.

### Q7. Please select the criteria that will identify the patients who can stop ongoing blood monitoring (you can choose more than one option)

- Have been taking clozapine consistently for 2 years
- Have a history of absolute neutrophil count (ANC) ≥1.0x10<sup>9</sup>/L (≥0.5x10<sup>9</sup>/L in benign ethnic neutropenia (BEN)) while on clozapine
- Have had no previous confirmed clozapine-induced severe neutropenia/agranulocytosis
- Are adherent to treatment
- Are independent and self-manage their medical care
- Are able to identify signs and symptoms of infection, notify a healthcare professional accordingly and obtain a blood test

# Q8. Do you agree that after stopping ongoing blood monitoring, monitoring of clozapine-induced agranulocytosis should be via signs and symptoms of infection, and if these occur, the patient should have a blood test to check absolute neutrophil count?

- Yes, we agree, as this approach is consistent with international best practice and balances patient safety with reducing unnecessary monitoring.
- To support this model, patients should receive clear education on the symptoms of
  infection to watch for, and healthcare providers, including pharmacists, should have
  defined pathways to facilitate rapid access to blood testing and clinical review when
  required.

#### Q9. How long should blood tests be valid for?

• No need to change, keep it at 72 hours.

### Q10. Please provide the rationale for your answer to question 9 (i.e., how long blood tests should be valid for)

- Blood tests should remain valid for 72 hours, as a 72-hour validity period provides an
  appropriate balance between operational practicality and patient safety, and allows
  sufficient time for laboratories, pharmacies, and patients to coordinate dispensing, while
  also covering weekends or public holidays when services may be closed.
- Shortening the timeframe (e.g., to 48 hours) would create unnecessary pressure on both patients and providers, increasing the risk of treatment interruptions.
- Conversely, extending it (e.g., to 96 hours) could compromise patient safety by allowing results to become outdated, particularly if a patient's clinical condition changes.

#### Section 2: Monitoring thresholds

### Q11. Do you agree that blood monitoring should measure absolute neutrophil count only (i.e., remove the requirement for white blood cells)?

• Yes, monitoring absolute neutrophil count (ANC) alone is sufficient for ongoing safety and aligns with both the FDA and European Clozapine Task Force recommendations, where the evidence indicates that monitoring white blood cells (WBC) adds little additional clinical

value, and reliance on just the ANC simplifies monitoring without compromising patient safety.

### Q12. For standard monitoring (i.e., patients who do not have benign ethnic neutropenia), do you agree with the 'green' absolute neutrophil count threshold change to $\geq 1.5 \times 10^9$ /L?

• Yes, agree with the proposed 'green' ANC threshold of ≥1.5×10<sup>9</sup>/L.

### Q13. For standard monitoring, do you agree with the 'amber' absolute neutrophil count threshold range change to 1.0-<1.5×10<sup>9</sup>/L?

Yes, agree with the proposed 'amber' absolute neutrophil count (ANC) threshold of 1.0 –
 <1.5×10<sup>9</sup>/L

### Q14. For standard monitoring, do you agree with the 'red' absolute neutrophil count threshold change to <1.0×10°/L?

• Yes, agree with proposed 'red' absolute neutrophil count (ANC) threshold of <1.0×109/L

### Q15. For people with benign ethnic neutropenia (BEN), do you agree with the introduction of absolute neutrophil count thresholds for 'green', 'amber' and 'red'?

- Yes, we support the introduction of specific absolute neutrophil count (ANC) thresholds for benign ethnic neutropenia (BEN) as this approach aligns with international best practice (FDA, EMA, and the European Clozapine Task Force).
- It recognises that individuals with benign ethnic neutropenia (BEN), including many Māori and Pacific patients, naturally have lower baseline neutrophil counts without increased clinical risk and reflects current evidence confirming that people with BEN are not at higher risk of clozapine-induced agranulocytosis and should not be disadvantaged by one-size-fits-all thresholds.
- By introducing the BEN-specific thresholds (Green ≥1.0 × 10<sup>9</sup>/L, Amber 0.5-<1.0 × 10<sup>9</sup>/L, Red <0.5 × 10<sup>9</sup>/L), it will promote equitable access to clozapine, prevent unnecessary treatment interruptions, and support safe, evidence-based monitoring tailored to individual patient profiles.

### Q16. Do you have any other comments or feedback about Medsafe's proposals for changes to blood counts and monitoring thresholds for clozapine?

- Clear national guidance and clinical algorithms must be developed to ensure consistency
  across regions and mental health services, defining eligibility criteria, benign ethnic
  neutropenia (BEN) certification process, re-entry or restart pathways, and clarifying
  responsibilities of each provider involved in clozapine management.
- Implementation must ensure that prescriber patient management systems, pharmacy patient dispensing systems and Clozapine Patient Monitoring Systems (CPMS) are updated regularly to facilitate two-way communication and access to shared medical records in a consistent and timely manner to prevent dispensing barriers in community pharmacy, as well as avoid delays in treatment continuity and to maintain patient safety.
- Two-way communication systems, such as the Conporto platform via reCare/reScript, should be funded and actively utilised to enable efficient, secure communication between healthcare professionals, supporting better coordination of care, reducing administration burdens, and allowing for the fast-tracking of patients requiring urgent assessment or review.
- Structured patient education is essential to ensure patients can recognise signs and symptoms of infection, understand when to seek urgent assessment or testing, and have access to clear, rapid testing pathways.

- Enhanced surveillance should be maintained for patients with cognitive impairment or limited insight, and routine monitoring should not be discontinued unless agreed upon by a multidisciplinary team.
- Expedited assessment and testing pathways should be established for patients who
  develop infection symptoms or have low results, with defined timelines for clinical review,
  treatment interruption, and rechallenge decisions.

#### Section 3: Management of low absolute neutrophil count (ANC) results ('red' results)

# Q17. Do you agree that the action taken with clozapine following a confirmed 'red' blood test result should first involve an investigation of the cause and a discussion with the individual rather than immediately stopping clozapine?

- Yes, we agree. This should first involve an investigation of the cause and a discussion with the individual rather than immediately stopping clozapine.
- Evidence shows that not all cases of severe neutropenia in patients taking clozapine are caused by clozapine itself, and that many patients can be safely rechallenged without recurrence of neutropenia.
- Immediate discontinuation can cause significant harm, including acute relapse of psychosis, rapid deterioration in mental state, and cholinergic rebound symptoms, and a structured clinical review process, including daily blood monitoring during investigation, will allow clinicians to determine the true cause of neutropenia before stopping treatment.

### Q18. Please select the relevant factors to consider when deciding whether to continue clozapine treatment (select all those that apply).

- Severity of neutropenia (ANC results and recovery)
- Clinical signs/symptoms of neutropenia including infection
- Neutrophil patterns (ANC trends)
- Time of onset (since clozapine initiation)
- Other causes of neutropenia (e.g., medicines or other conditions)
- Previous blood test results and clozapine-induced agranulocytosis (CIA) rechallenge history
- Control of treatment-resistant schizophrenia and efficacy of clozapine (including risk of relapse)
- Alternative treatment options to clozapine
- Haematologist advice
- Patient and/or caregiver input

#### Q19. Do you agree that if clozapine caused the severe neutropenia, then clozapine should be discontinued?

- Yes, we agree. This is appropriate to protect patient safety.
- However, it is important that this decision is supported by a prompt, multidisciplinary clinical review to confirm causality, as not all cases of severe neutropenia are directly caused by clozapine.
- A clear pathway for rapid clinical reassessment and psychiatric support should also be in place to minimise the risk of psychiatric destabilisation following treatment cessation.

### Q20. If clozapine-induced severe neutropenia is suspected, should there be an option to reduce the dose of clozapine as opposed to immediate discontinuation?

- Yes, in selected cases if clozapine-induced severe neutropenia is suspected a temporary
  dose reduction may be reasonable. Where the cause of neutropenia is uncertain and the
  patient remains clinically stable, this approach allows continued monitoring and
  assessment while minimising the risk of psychiatric destabilisation that can occur with
  abrupt discontinuation.
- However, this option should only be used under close clinical supervision, with daily blood
  monitoring and a clear plan for escalation or discontinuation if neutrophil counts continue
  to decline or infection symptoms develop, and decisions should be made collaboratively
  within a multidisciplinary team, ideally involving psychiatry, haematology, and pharmacy
  input.

### Q21. Do you agree that clozapine rechallenge following suspected clozapine-induced agranulocytosis can be considered, if the benefits outweigh the risks for the individual?

- Yes, we agree, particularly in patients with severe, treatment-resistant schizophrenia for whom clozapine remains the most effective therapy.
- Evidence from international databases (e.g., the UK Central Non-Rechallenge Database and Australasian Clozapine Patient Monitoring System) shows that many patients successfully resume clozapine after a previous episode of suspected clozapine-induced agranulocytosis, especially when close haematological and clinical monitoring are maintained.
- In this event, any rechallenge should involve a multidisciplinary review including
  psychiatry and haematology, full re-entry into the standard monitoring schedule (weekly
  for 18 weeks, then four-weekly) and clear documentation of the clinical rationale and
  patient consent.

# Q22. Do you agree that if clozapine is rechallenged following suspected clozapine-induced severe neutropenia/agranulocytosis, the monitoring frequency and duration should start as for a 'new' patient (i.e., weekly blood tests for the first 18 weeks, then every four weeks)? (select all those that apply).

- Yes, we agree. Full re-entry into the standard monitoring schedule is appropriate for all rechallenge cases no matter how long the patient has been taking clozapine to ensure early detection of any recurrent haematological abnormalities and aligns with international best practice (FDA, EMA, and European Clozapine Task Force recommendations).
- Restarting the monitoring as for a 'new' patient with weekly monitoring for the first 18 weeks, followed by every four weeks provides an adequate safety buffer while maintaining treatment continuity, supporting clinical confidence and allowing timely intervention if blood counts decline again.

# Q23. Do you agree that if a patient experiences severe neutropenia that is not caused by clozapine and restarts treatment, the frequency of monitoring can return to the patient's usual monitoring frequency (which could be no monitoring)?

- Yes, we agree that if a patient experiences severe neutropenia unrelated to clozapine and subsequently restarts treatment, monitoring can generally resume at the patient's usual frequency, which may include no routine monitoring if this was previously the case and no other indications exist.
- However, it is essential that the neutropenia is confidently determined not to be clozapineinduced, and that other patient-specific factors affecting neutropenia risk are considered first.

• Even when routine monitoring is not required, clinicians should remain vigilant for signs of infection or haematological complications, particularly in the period immediately following the reinitiation of clozapine.

# Q24. Do you agree that patients who have stopped ongoing monitoring and who have interrupted treatment for any duration for reasons not related to neutropenia can continue with no haematological monitoring when clozapine is restarted?

- Yes, we agree that these patients can generally restart clozapine without resuming routine blood monitoring.
- However, the interruption must not have been caused by neutropenia or any other blood dyscrasia, and the patient's prior haematological stability should be well established and documented.
- Even in the absence of routine monitoring, clinicians should remain vigilant for signs of infection or haematological problems, particularly during the initial weeks after restarting clozapine, as some guidelines may still recommend baseline blood tests at re-initiation as a precautionary measure, even if ongoing monitoring is not required.

### Q25. Do you have any other considerations or comments relating to Medsafe's proposals for changes to management of 'red' blood test results?

- Clear national guidance and clinical algorithms must be developed to ensure consistency
  across regions and mental health services, defining eligibility criteria, benign ethnic
  neutropenia (BEN) certification process, re-entry or restart pathways, and clarifying
  responsibilities of each provider involved in clozapine management, whilst supporting
  equitable access.
- Pharmacists must have real-time access to haematology results to safely supply clozapine.
   While the technology to enable this exists through national shared medical records platforms, additional funding and wider implementation are required to fully support pharmacists and streamline communication between healthcare providers.

#### Section 4: Who can prescribe clozapine?

#### Q26. Do you agree with the proposal for who can initiate clozapine treatment?

- Yes, we agree that the initiation of clozapine treatment should be limited to psychiatrists and medical practitioners working under the supervision of, or in consultation with, a psychiatrist.
- Psychiatrists are specifically trained to manage treatment-resistant schizophrenia and the
  complex side effect profile of clozapine, and allowing medical practitioners to initiate
  treatment under psychiatric supervision helps balance patient access and safety,
  particularly in areas with limited psychiatrist availability, and supports shared-care
  models, provided that communication pathways and responsibilities are clearly defined.

#### Q27. Do you agree with the proposal for who can continue clozapine treatment?

- Yes, we agree with the broadening of the range of clinicians who can continue clozapine treatment to include:
  - Medical practitioners working in a community mental health team
  - Nurse practitioners under the supervision of, or in consultation with, a psychiatrist
  - Nurse practitioners working in a community mental health team
  - Nurse prescribers under the supervision of a psychiatrist
  - Pharmacist prescribers under the supervision of a psychiatrist

• This model aligns with shared-care principles, enabling patients to receive ongoing treatment closer to home while maintaining safety oversight from psychiatrists, helping to optimise healthcare resources and reduces the burden on psychiatrists for routine continuation prescribing, without compromising safety.

### Q28. Do you have any comments or feedback relating Medsafe's proposed prescribing restrictions for clozapine?

- We agree that initiation should be limited to psychiatrists and medical practitioners under psychiatric supervision or consultation as this ensures that patients starting clozapine are carefully assessed, monitored, and managed by clinicians with expertise in treatment-resistant schizophrenia and the drug's complex side effect profile.
- While psychiatrists are specifically trained to manage treatment-resistant schizophrenia and the complex side effect profile of clozapine, allowing medical practitioners to initiate treatment under psychiatric supervision helps balance patient access and safety, particularly in areas with limited psychiatrist availability, and supports shared-care models, provided communication pathways and responsibilities are clearly defined.
- We support broader continuation prescribing, including community medical practitioners, nurse practitioners, nurse prescribers, and pharmacist prescribers, under appropriate supervision, as this allows patients to maintain treatment continuity, improves access, and reduces unnecessary burden on psychiatrists while maintaining safety oversight.
- This model aligns with shared-care principles, enabling patients to receive ongoing treatment closer to home while maintaining safety oversight from psychiatrists, supporting to optimise healthcare resources, and reducing psychiatrist workload for routine continuation prescribing without compromising safety.
- Clear guidelines, training and communication pathways are essential to support these extended prescribing roles and ensure non-psychiatrist prescribers can safely monitor for haematological and other adverse effects, providing consistent, safe management of patients on clozapine.
- Pharmacist prescribers should be enabled to prescribe clozapine, but only where strong, formal links exist with psychiatry and Clozapine Patient Monitoring System (CPMS) oversight, ensuring a collaborative, team-based approach. The same framework should apply to nurse practitioners and nurse prescribers to maintain patient safety and continuity of care.
- We believe pharmacists are well positioned and suitably trained to assess whether a patient meets the criteria to discontinue ongoing blood monitoring, provided they have access to a clear, evidence-based clinical algorithm and the patient's medical records via a national shared medical records platform. This would enable pharmacists to safely determine eligibility, ensure all criteria are met, and maintain thorough documentation and communication with the wider healthcare team.
- Given clozapine has a high-risk haematological profile, the framework should continue to emphasise the importance of robust monitoring, clear escalation pathways, and rapid communication with supervising psychiatrists if issues arise, with baseline and ongoing monitoring protocols explicitly defined, particularly for prescribers who are not psychiatrists.

#### Section 5: Point-of-care testing (POCT)

### Q29. Do you agree that point-of-care tests of appropriate quality and accuracy should be an alternative to laboratory blood tests after 18 weeks of treatment with clozapine?

- Yes, we agree. This approach improves accessibility and convenience for patients, particularly those living in rural or remote areas, or for whom regular laboratory testing presents logistical or financial barriers.
- Allowing POC testing could also enhance adherence to monitoring requirements and
  reduce treatment interruptions, ensuring continuity of care. Pharmacists, in particular, are
  well placed to perform POC testing before dispensing clozapine, provided they are trained,
  have access to the required equipment, and results are recorded and shared securely
  through the Clozapine Patient Monitoring System (CPMS) and other platforms, such as
  Conporto a national shared medical records repository to maintain oversight and
  traceability and support clinical decision-making.
- However, it is essential that any approved POC devices meet robust quality and accuracy standards equivalent to laboratory testing, are subject to ongoing calibration and quality assurance processes, and that clear national guidance is developed for their implementation, funding, and integration into existing clinical workflows.

#### Q30. Do you have any other comments or feedback relating to point-of-care testing for clozapine?

- Funding and operational support will be essential, as without this, implementation risks widening inequities rather than improving them. The cost of point-of-care (POC) devices, consumables, and staff training should be covered at a system level rather than borne by individual providers.
- The role of community pharmacists in conducting and recording POC tests should be formally recognised, as community pharmacies are often the most accessible and consistent point of care for patients on clozapine. With appropriate training and access to patient clinical records, pharmacists could play a key role in improving continuity, safety, and timely clinical decision-making.
- In the interest of patient safety, we recommend that community pharmacies are enabled and funded to undertake annual safety checks and monitoring, which could be achieved either through the ability to order laboratory blood tests or providing on-site point-of-care testing (POCT), offering ongoing reassurance for patients, supporting continuity of care, and enabling pharmacists to make timely referrals where clinically appropriate.

#### Section 6: Educational needs

### Q31. What are your educational needs for clozapine prescribing and safety monitoring (both now and following any changes)?

- Access to clear, evidence-based national guidance detailing updated monitoring requirements, prescribing restrictions, and the roles of different health professionals under the proposed changes, coordinated nationally by Health New Zealand in partnership with professional bodies.
- Education and training programs for all prescribers and pharmacists involved in clozapine care, covering initiation, continuation, interruption, reinitiation protocols, and the management of abnormal blood results.
- Practical training in interpreting haematological results, managing 'amber' and 'red' alerts, and understanding escalation pathways and communication within Clozapine Patient Monitoring Systems (CPMS) and psychiatry teams.

- Comprehensive instruction for pharmacists and other prescribers on the use, quality assurance, and documentation of point-of-care testing (POCT), including integration within Clozapine Patient Monitoring Systems (CPMS) and shared-care models.
- Clear competency frameworks and clinical decision support tools, such as algorithms and flowcharts, to promote consistent, safe, and confident decision-making across all healthcare settings.
- Shared-care education resources that encourage collaboration between psychiatrists, general practitioners, nurse and pharmacist prescribers, and community pharmacists, ensuring seamless care transitions and consistent patient guidance.

If you have any questions about our response, please contact our Senior Advisory Pharmacists, Martin Lowis (martin@pgnz.org.nz, 04 802 8218) or Cathy Martin (cathy@pgnz.org.nz, 04 802 8214).

Yours sincerely,

Nicole Rickman

General Manager – Membership and Professional Services