

GDL07

Adult Paracetamol Prescribing Guideline

1.0 Guideline Statement

This guideline provides safe and evidence-based recommendations for prescribing, preparing, and administering paracetamol via the oral and intravenous (IV) routes in adults. It aims to minimise the risk of hepatotoxicity and dosing errors, particularly in patients who have low body weight or have other high-risk factors however, clinical judgement is required.

2.0 Accountabilities

All staff involved in the prescribing and administration of medicines must adhere to this guideline.

Clinical directors and matrons are responsible for ensuring dissemination of the contents of this document to all staff.

3.0 Guideline Detail

3.1 Indications

- First-line management of mild to moderate pain
- Pyrexia
- The IV route must only be chosen when other routes of administration are not available or are contraindicated.

3.2 Key Safety Points

- There are significant patient safety risks attached to the use of IV paracetamol. Failure to prescribe the correct dose may result in paracetamol induced liver toxicity, which could lead to hepatic failure and death.
- Care must be taken when considering oral or IV doses of paracetamol, particularly for patients <50kg.
- Obtain an accurate body weight before prescribing, especially for adults that are visibly estimated to be <60kg. An accurate weight of the patient must be noted prior to dosing. If it is not possible to weigh the patient and they are visibly over 50 kg, this must be documented.
- Oral and IV doses are not equivalent. Care must be taken when switching from one route to another. If doses have already been administered by one route, these must be considered as part of the total recommended daily dose.
- A history of recent previous paracetamol use must be noted e.g. paracetamol bought over-the-counter and doses taken the same day.
- Check for other combined paracetamol-containing medicines (e.g. co-

codamol, co-dydramol, any over the counter cold/flu preparations e.g. Lemsip®.

3.3 High Risk Groups (requiring dose adjustments / careful monitoring)

The following patient characteristics are hepatotoxicity risk factors, which may require dose reductions:

- **Dry body weight <50kg**
Dry body weight should be used for patients on dialysis and is defined as the patient's weight immediate after dialysis where any accumulated fluid has been removed and is the lowest weight the patient can achieve without developing symptoms of hypotension or hypovolaemia.
- **Vulnerable patients**
 - Older adults, frail patients
 - Chronic malnutrition
 - Dehydration or chronic dehydration
 - Cachexia
- **Hepatic conditions**
 - Chronic alcohol consumption or regular consumption of alcohol in excess of recommended amounts
 - Decompensated liver disease
 - Long-term treatment with liver enzyme-inducing drugs e.g. carbamazepine, phenytoin, primidone, rifampicin, phenobarbital, St John's Wort etc
- **Renal insufficiency**
Patient with a creatinine clearance (CrCL) of <30mL/minute
- **Interactions**
 - Regular use of paracetamol can ↑ effect of warfarin, monitor INR
 - Prokinetics e.g. metoclopramide can ↑ paracetamol absorption, therefore reduce dose or frequency of paracetamol
 - Colestyramine may ↓ absorption of paracetamol, separate by 1-2hrs

3.4 Adult Paracetamol Dosing

3.4.1 Adult Oral Dosing

Patient weight	Dose per administration	Minimum dosage interval	Maximum daily dose
≥ 50kg	1 g	4 hours	4 g
≥ 50kg with risk factors for hepatotoxicity	500 mg - 1 g	4 hours	3 g NB: 1g QDS can be used for short periods (≤ 7 days). If needed long term, reduce dose. Clinical judgement required.
>40kg to <50kg	500 mg - 1 g	4 hours	3 g
≤ 40kg	500 mg	4 hours	2 g
• Use clinical judgement in cases of low body weight and hepatotoxicity. • Irrespective of weight where the patients CrCL is <30mL/min, the interval between dosing must be a minimum of 6 hours.			

3.4.2 Adult IV Dosing

Patient weight	Dose per administration	Minimum dosage interval	Maximum Daily Dose	Volume per administration	MAXIMUM volume of solution for infusion per administration (based on upper weight limits)
≥ 51kg	1 g	4 hours	4 g	100 mL	100 mL
≥ 51kg with risk factors for hepatotoxicity	1 g	4 hours	3 g	100 mL	100 mL
< 51kg	15 mg/kg	4 hours	60 mg/kg not exceeding 3 g	1.5 mL/kg	75 mL
Irrespective of weight where CrCL is <30 mL/min, the interval between dosing must be a minimum of 6 hours.					

3.6 Administration

- **Oral Route:** Preferred when possible. Swallow tablets with water; dispersible or liquid formulations available for patients with a swallowing difficulty.
- **IV Route:** See MEDUSA Injectable Medicines Guide. Use only when oral/enteral routes are unsuitable. Administer using a volumetric infusion pump over at least 15 minutes. Record total daily dose across all routes.

3.7 Monitoring and review

- Check cumulative 24-hour totals when switching routes.
- Monitor LFTs in hepatic risk patients during prolonged therapy.
- Reassess need for IV therapy beyond 48 hours.

3.8 Overdose and Escalation

Take care during prescribing and administration as confusion between milligram (mg) and millilitre (mL) may occur, which could cause accidental overdose resulting in patient harm. Paracetamol 10mg/mL solution for infusion is 10mg paracetamol per 1mL solution.

Points to consider:

- Ensure correct dose is prescribed.
- Ensure dose is appropriate to weight and age of patient.
- Check other medicines administered do not contain paracetamol (this includes undertaking an accurate drug history) to avoid risk of overdose.

- Consider other risk factors e.g. chronic alcoholism, chronic malnutrition.
- When writing prescriptions, include the MAXIMUM dosage frequency appropriate for the patient.

Toxicity from paracetamol is dependent on the amount ingested, type of exposure, and time since exposure. Following significant overdose, a large proportion of paracetamol is converted to a toxic metabolite which causes hepatocellular injury, which can lead to liver failure and death.

If overdose suspected or cumulative dose exceeded:

- All cases of deliberate self-harm must be referred for medical assessment irrespective of reported dose.
- Refer to relevant Trust paracetamol overdose guideline
- Visit TOXBASE® website toxbase.org or call the UK National Poisons Information Service (NPIS) on 0344 892 0111
- Management of paracetamol overdose depends on the type of overdose involved. The NPIS has defined protocols for different types of paracetamol overdose
- In all patients it is important to measure the paracetamol concentration, ALT and INR. However, the significance of each of these measurements, and how to interpret them, will depend on the timepoint in question.
- Contact Pharmacy Team or On-call Pharmacist (if out of hours) if you require further support.

4.0 Equipment Required

Paracetamol IV must be administered using a volumetric pump suitable for the area of use.

5.0 Training

No training required.

6.0 Financial Risk Assessment

1	Does the implementation of this document require any additional Capital resources	No
2	Does the implementation of this document require additional revenue resources	No
3	Does the implementation of this document require additional manpower	No
4	Does the implementation of this document release any manpower costs through a change in practice	No
5	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programs or allocated training times for staff.	No
	Other comments	N/A

7.0 Equality Impact Assessment

Not applicable.

8.0 Maintenance

The guidance will be reviewed by the Trust Medication Safety Officer in line with the Trust approved frequency, or sooner if clinical need suggests otherwise.

9.0 Communication and Training

The document will be made available on the Trust Intranet Site: Adult Medical Guidelines.

10.0 Audit Process

Criterion	Lead	Monitoring method	Frequency	Evaluation
Datix Incidents	Medication Safety Officer	Datix search for incidents involving *paracetamol*	6 monthly	Medication Safety Group

11.0 References

The following resources were accessed for information regarding indication for use, dosing guidance, caution and high-risk patient groups.

- BNF Online – NICE, 2025 editions: Paracetamol monographs (oral, IV) for Adults
- British Hepatology Pharmacy Group: Prescribing weight-adjusted oral paracetamol in adults, March 2022. [Link: https://www.basl.org.uk/uploads/BHPG/Paracetamol%20Position%20Statement_Mar%202022.pdf]
- Summary of Product Characteristics – Paracetamol 10 mg/mL Solution for Infusion, (B. Braun Medical) May 2025. [Link: [Paracetamol 10 mg/ml solution for infusion - Summary of Product Characteristics \(SmPC\) - \(emc\) | 15148](#)]
- TOXBASE® – Paracetamol poisoning management monograph

Part A - Document Control

Procedure/ Guidelines number and version	Title of Guideline: Paracetamol IV Prescribing Guideline	Status: Final		Author: Trust Medication Safety Officer For Trust-wide Procedures and Guidelines Chief Officer Sponsor: Director of Pharmacy
Version / Amendment History	Version	Date	Author	Reason
	1.0	October 2020	See above	New Guideline
	1.1	Nov. 2025	See above	Extension
	2.0	May 2026	See above	Full Review
Intended Recipients: All prescribers employed by RWT.				
Consultation Group / Role Titles and Date: Medication Safety Group (MSG) Medicines Management Group (MMG)				
Name and date of group where reviewed		- Medicines Management Group - Approved September 2026 - Executive Sponsor Endorsement – September 2026		
Name and date of final approval committee		Executive Sponsor Endorsement – September 2026		
Date of Procedure/Guidelines issue		October 2026		
Review Date and Frequency (standard review frequency is 3 yearly unless otherwise indicated – see section 3.8.1 of Attachment 1)		October 2029		

Training and Dissemination: The document will be available on the Trust Intranet site and disseminated via the Clinical Directors and Matrons at first use.	
Publishing Requirements: Can this document be published on the Trust's public page: Yes	
To be read in conjunction with: Not Applicable	
Initial Equality Impact Assessment: Completed: No Full Equality Impact assessment (as required): Not Applicable If you require this document in an alternative format e.g., larger print please contact Policy Administrator 85887 for Trust- wide documents or your line manager or Divisional Management office for Local documents.	
Contact for Review	Trust Medication Safety Officer
Monitoring arrangements	Medication Safety Group Datix Incidents
Document summary/key issues covered. This document provides guidance for the safe prescribing of paracetamol in adults, including patients at high risk of paracetamol toxicity.	
Key words for intranet searching purposes	Paracetamol IV Paracetamol oral

IMPLEMENTATION PLAN

To be completed when submitted to the appropriate committee for consideration/approval

Procedure/Guidelines number and version	Title of Procedure/Guidelines Paracetamol IV Prescribing Guideline	
Reviewing Group	Medicines Management Group Policy Group	Date reviewed: September 2021 January 2022
Implementation lead: Print name and contact details		
Implementation Issue to be considered (add additional issues where necessary)	Action Summary	Action lead / s (Timescale for completion)
Strategy; Consider (if appropriate) 1. Development of a pocket guide of strategy aims for staff 2. Include responsibilities of staff in relation to strategy in pocket guide.	Not applicable	
Training; Consider 1. Mandatory training approval process 2. Completion of mandatory training form	Not applicable	
Development of Forms, leaflets etc.; Consider 1. Any forms developed for use and retention within the clinical record MUST be approved by Health Records Group prior to roll out. 2. Type, quantity required, where they will be kept / accessed/stored when completed	Not applicable	
Procedure/Guidelines communication; Consider 1. Key communication messages from the policy / procedure, who to and how?	Guideline to be shared via Trust Brief, Clinical Directors, Matrons, Pharmacy Team Brief	Paula Haydon January 2022
Financial cost implementation Consider Business case development	Not applicable	
Other specific issues / actions as required e.g. Risks of failure to implement, gaps or barriers to implementation	Link to guidance added to ePMA template when guideline approved	Paula Haydon & Trust ePMA team January 2022