

## **OTC** decision tree (age)

With so many different options to choose from, this chart can help you recommend the most effective OTC pain relief.



OTC analgesics for various pain types	Children (0-18 years)	Adult (19-64 years)	Elderly (65+ years)
Dental Pain	Oral PCM, IBU, NAP and their combination <sup>1</sup>	Oral PCM, IBU, NAP; and their combination <sup>1</sup>	Oral PCM, IBU, NAP and their combination <sup>1</sup>
Osteoarthritis (OA)	NA	• Topical NSAIDs • Oral NSAIDs, PCM <sup>2</sup>	Topical NSAIDs     Oral NSAIDs and PCM <sup>2</sup>
Musculoskeletal (MSK) Pain	NA	<ul> <li>Topical NSAIDs</li> <li>Oral NSAIDs, PCM and their combination<sup>3</sup></li> </ul>	<ul> <li>Topical NSAIDs</li> <li>Oral NSAIDs &amp; PCM and their combination<sup>3</sup></li> </ul>
Tension type Headache (TTH)	Oral PCM and oral NSAIDs (IBU, NAP etc.) <sup>4</sup>	Oral PCM and NSAIDs (IBU, NAP etc.) <sup>4</sup>	Oral IBU and PCM⁵
Low back pain (LBP)	NA	<ul> <li>Topical NSAIDs<sup>7</sup></li> <li>Oral NSAIDs, PCM and their combination<sup>6,8</sup></li> </ul>	• Topical NSAIDs <sup>7</sup> • Oral NSAIDs and PCM <sup>6</sup>
Migraine	Oral PCM and IBU <sup>9</sup>	Oral PCM, aspirin, diclofenac and IBU <sup>10</sup>	Oral PCM, combination of PCM with caffine <sup>9</sup>
General Pain	Oral PCM and IBU <sup>11</sup>	<ul> <li>Topical NSAIDs</li> <li>Oral NSAIDs, PCM and their combination<sup>7</sup></li> </ul>	<ul> <li>Topical NSAIDs</li> <li>Oral PCM<sup>12</sup>, NSAIDS (if suitable)<sup>13</sup></li> </ul>
Period Pain	NA	Oral NSAIDs ( IBU, NAP, aspirin etc.) <sup>16,17</sup>	NA
Sore throat Pain	Oral PCM or IBU (If suitable) <sup>18</sup>	Oral PCM or IBU (If suitable) <sup>18</sup>	Oral PCM or IBU (If suitable) <sup>18</sup>
Fever	Oral PCM and IBU <sup>11</sup>	Oral PCM <sup>14</sup> or IBU <sup>15</sup>	Oral PCM <sup>14</sup>

 $\textbf{Abbreviations:} \ \textbf{PCM:} \ \textbf{Paracetamol;} \ \textbf{IBU:} \ \textbf{Ibuprofen;} \ \textbf{NAP:} \ \textbf{Naproxen;} \ \textbf{NSAIDS:} \ \textbf{Nonsteroidal anti-inflammatory} \ \textbf{drugs}$ 

**Disclaimer:** Treatment guidelines and recommendations need to be applied according to your local environment, always check the latest version of your local guidelines and follow the instructions in the label of the product you select to recommend.







# Key Considerations for Choosing OTC Analgesics across patient's different age groups

### Children (0-18 years)

#### **Suitability:**

Paracetamol (usually first-line) or ibuprofen are the most appropriate medicines for children with mild pain and fever

#### **Check points:**

when prescribing analgesia to a child:

- Calculate dose based on an up-to-date measurement of weight
- Check that the prescribed strength of liquid is as intended
- Check that the total volume of medicine does not exceed what is required
- Ensure the child is not being given any over-the-counter medicines that also contain the prescribed medicine<sup>19</sup>

#### Use OTC with cautions:

- 1. Aspirin: Age under 16 years.
- 2. NSAIDs :risk of acute kidney injury<sup>20</sup>

#### Adult (19-64 years)

#### Suitability:

Paracetamol and NSAIDs are most suitable analgesic options for initial, self-treatment across all pain conditions in adults, particularly for mild-to-moderate pain<sup>24</sup>.

#### **Check points:**

when prescribing analgesia to an adult:

- Suggest the most appropriate analgesic for the individual patient, considering their age, gender, comorbidities and concomitant medications
- Use oral NSAIDs at the lowest effective dose for the shortest duration of time
- Consider using topical NSAIDs before oral NSAIDs to minimize the risk of systemic side effects
- Consider using combination of analgesics if pain is severe<sup>24</sup>.

#### Use OTC with cautions:

- 1. Paracetamol should be avoided in patients with liver disease
- 2. Oral NSAIDs may be risky in those with renal, cardiovascular or peptic ulcer disease<sup>24</sup>.

#### Elderly (65+ years)

Aging increases the risk of various health issues, medication interactions and sensitivities, as well as the presence of other chronic conditions.<sup>21</sup> Therefore pain management is often more complex (i.e., polypharmacy, changes in pharmacodynamics etc.) in older adults<sup>22</sup>.

#### **Suitability:**

Paracetamol is generally well tolerated with minimal side effects.

#### **Check points:**

when prescribing analgesia to an older adult:

- Careful selection of pain medication
- Check if dose adjustments needed
- Close monitoring of the effects of analgesics23
- Prefer topical NSAIDs over oral NSAIDs to minimize any systemic side effects<sup>24</sup>

#### Use OTC with cautions:

- 1. NSAIDS (ibuprofen, naproxen): may increased risk of gastrointestinal (GI) bleeding and Kidney issue
- Paracetamol and combinations (with aspirin, paracetamol and caffeine): may increase liver enzymes<sup>21</sup>
- 3. Other concurrent medications, including natural remedies
- 4. Pre-existing medical conditions
- 5. Patient >65

## Haleon Pain portfolio covers all age groups



#### Children

- Advil kids
   Panadol kids
- 3. Panadol Advance
- 4. Advil liqui-gel



#### Adult

- 1. Panadol extend
- 2. Panadol Extra
- 3. Advil liqui-gel
- 4. Voltaren 1% & 2% gel



#### **Elderly**

- 1. Panadol extend
- 2. Panadol Extra
- 3. Advil liqui-gel
- 4. Voltaren 1% & 2% gel







#### **References:**

- American dental associations (ADA), Pain guideline 2024. 1.
- The American Academy of Orthopaedic Surgeons (AAOS). Management of Osteoarthritis of the Knee (Non-Arthroplasty) 2. Evidence-Based Clinical Practice Guideline. August 31, 2021.
- 3. AAFP. Management of Acute Musculoskeletal Pain - Clinical Practice Guideline, August 2020.
- 4. Diagnosis and treatment of headache disorders and facial pain. Danish Headache Society, 3rd edition, 2020. (adult and elderly); (Children)
- 5. AAFP. Outpatient Primary Care Management of Headaches: Guidelines from the VA/DoD. Am Fam Physician. 2021;104(3):316-320.
- 6. AECOM. Low back disorders. April 2019.
- OCTAVIA AMAECHI et. al. Pharmacologic Therapy for Acute Pain. Am Fam Physician. 2021;104(1):63-72. 7.
- Gervasoni, Fabrizio. (2022). Pain management with paracetamol and ibuprofen in combination. Medical Academy. 1: 26-33. 8.
- Puledda F, Sacco S, Diener H-C, et al. International Headache Society global practice recommendations for the acute pharmacological treatment of migraine. Cephalalgia. 2024;44(8).
- 10. Eigenbrodt AK, et. Al. Diagnosis and management of migraine in ten steps. Nat Rev Neurol. 2021 Aug;17(8):501-514.
- Doria M et. Al. Paracetamol and Ibuprofen in the Treatment of Fever and Acute Mild-Moderate Pain in Children: Italian Experts' Consensus Statements. Children (Basel). 2021 Sep 30;8(10):873.
- 12. RACGP aged care clinical guide (Silver Book), 5th edition, Part A. Pain.
- 13. Marttinen, M.K., Kautiainen, H., Haanpää, M. et al. Analgesic purchases among older adults a population-based study. BMC Public Health 21, 256 (2021).
- 14. New South Wales, Clinical excellence commisioon, High Risk Medicine Standard last updated 26 Feb 2024.
- 15. Fever:First Aid. Myoclinic.
- 16. Itani R, Soubra L, Karout S, Rahme D, Karout L, Khojah HMJ. Primary Dysmenorrhea: Pathophysiology, Diagnosis, and Treatment Updates. Korean J Fam Med. 2022 Mar;43(2):101-108.
- 17. Primary Dysmenorrhea Consensus Guideline.
- 18. NICE guideline. Sore throat (acute): antimicrobial prescribing. Published: 26 January 2018.
- 19. Best Practice Journal ,2014, BPJ: 59, Managing pain in children aged under 12 years. 2014.
- 20. Misurac JM, et al. Nonsteroidal anti-Inflammatory drugs are an important cause of acute kidney injury in children. J Pediatr 2013;162:1153-9.
- 21. Lisa smith. Migraine in Older Adults. Migraine Disorders. 2024.
- 22. MEDICAL BOARD OF CALIFORNIA. GUIDELINES FOR PRESCRIBING CONTROLLED SUBSTANCES FOR PAIN. JULY 2023.
- 23. Hosseini F, Mullins S, Gibson W, Thake M. Acute pain management for older adults. Clin Med (Lond). 2022 Jul;22(4):302-306.
- 24. Hagen, M. and Alchin, J., 2019. Nonprescription drugs recommended in guidelines for common pain conditions. Pain Manag.2020;10(2):117-29.







