June

# Better Pharmacist Knowledge

Jordan Drug Information and Toxicology Centre 2025

2025

## Anti-inflammatory reliever therapy in patients with mild asthma (May 2025)

As-needed inhaled glucocorticoids reduce asthma exacerbations in those with poor control despite multiple maintenance therapies, but whether this practice benefits patients with more mild disease has been unclear. In a trial that enrolled over 2500 patients with poor asthma control on albuterol alone (71 percent) or low-dose inhaled glucocorticoids, use of albuterol-budesonide as needed reduced the risk of exacerbations requiring systemic glucocorticoids compared with albuterol as-needed alone (5.3 versus 9.4 percent; hazard ratio 0.54). However, given their poor asthma control at baseline, all patients enrolled in this study would qualify for a step-up in asthma therapy, which was not initiated in the control group. These results support our **recommendation for anti-inflammatory reliever therapy as a preferred initial controller option for patients with asthma who have moderately frequent symptoms.** [1]

## Prothrombin Complex Concentrate versus Fresh Frozen Plasma for coagulopathic bleeding after Cardiopulmonary bypass (April 2025)

The optimal treatment for coagulopathic bleeding after cardiac surgery with cardiopulmonary bypass (**CPB**) is unclear. In a trial that randomly assigned 538 patients with post-CPB bleeding to receive unactivated prothrombin complex concentrate (PCC) or Fresh Frozen Plasma (FFP), those in the PCC group were less likely to require hemostatic intervention within 24 hours of therapy, received fewer transfusions, and had fewer serious adverse events. **If available, we use PCC rather than FFP to treat bleeding after CPB**.[ 2]

## Risk for Acne relapse after isotretinoin therapy (April 2025)

Studies assessing rates and risk factors for acne relapse after isotretinoin therapy have yielded varied results. In a retrospective study of data from over 19,000 patients treated with isotretinoin in the United States, 23 percent of patients relapsed after treatment; higher cumulative dose was associated with a reduced risk for relapse, while female sex was associated with an increased risk for relapse. The daily dose did not influence the risk for relapse among patients treated with at least a conventional cumulative dose (120 mg/kg). Major limitations of the study included the use of prescription data to identify relapse and the use of population-based weight data to estimate weight-based dosing of isotretinoin. **The findings support cumulative dose as a risk factor for relapse and suggest that individualizing the daily dose to support drug tolerability may be reasonable in patients who will receive at least a conventional cumulative dose of isotretinoin**.[3]

## Reduced-dose Apixaban for extended anticoagulation in patients with cancer-associated thrombosis (May 2025)

Many patients with cancer-associated venous thromboembolism (VTE) are at high risk for VTE recurrence and receive extended anticoagulation despite an increased risk of bleeding. Whether a reduced-dose anticoagulation regimen might be as effective while decreasing the bleeding risk is unknown. In a trial of over 1700 patients with cancer-associated VTE who had completed six months of anticoagulant therapy, reduced-dose apixaban (ie, 2.5 mg twice daily) resulted in similar 12-month VTE recurrence rates compared with full-dose (ie, 5 mg twice daily) apixaban (2.1 versus 2.8 percent). However, fewer patients taking reduced-dose apixaban experienced clinically relevant bleeding, compared with patients taking full-dose apixaban (12.1 versus 15.6 percent). For most patients with active cancer on apixaban for extended anticoagulation, **we suggest a reduced-dose regimen (2.5 mg twice daily).**[4]

**References**:

1. Initiating asthma therapy and monitoring in adolescents and adults, accessed online via uptodate , cited on 1st June 2025.
2. Achieving hemostasis after cardiac surgery with cardiopulmonary bypass, accessed online via uptodate , cited on 1st June 2025.
3. Oral isotretinoin therapy for acne vulgaris, accessed online via uptodate , cited on 1st June 2025.
4. Anticoagulation therapy for venous thromboembolism (lower extremity venous thrombosis and pulmonary embolism) in adult patients with malignancy, accessed online via uptodate , cited on 1st June 2025.

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### Two-bag Acetylcysteine dosing protocol for Acetaminophen poisoning (April 2025)

There are many Acetylcysteine (N-acetylcysteine) dosing protocols for acetaminophen poisoning, including the **21-hour three-bag intravenous** (IV) protocol and a **simplified 20-hour two-bag** IV protocol. A meta-analysis with more than 7600 patients found that a two-bag protocol, as compared with the three-bag protocol, was associated with fewer nonallergic anaphylactic reactions and other adverse events (3 versus 11 percent) without an increased risk of hepatoxicity. Given these findings, we suggest use of the two-bag protocol instead of other protocols. For a patient with an acute acetaminophen ingestion, regardless of which protocol is chosen, **it should deliver at least 300 mg/kg Acetylcysteine orally or IV during the first 20 to 24 hours of treatment**. The Acetylcysteine IV solution product label has been updated to include the two-bag protocol.[1]

### Inhaled Sevoflurane not beneficial in Acute Respiratory Distress Syndrome (April 2025)

Preliminary data suggested that the gaseous anesthetic sevoflurane may be efficacious as a sedative in mechanically ventilated patients. However, in a trial of 687 patients with early moderate to severe acute respiratory distress syndrome (ARDS), compare d with patients treated with propofol, patients randomized to sevoflurane had fewer ventilator-free days (between-group difference -2.1, 95% CI -3.6 to -0.7) and lower 7- and 90-day survival (90.6 versus 86.5 percent; 47.1 versus 55.7 percent, respectively). In addition, patients receiving sevoflurane had higher lactate levels, acute kidney injury rates, and sevoflurane-specific adverse effects (eg, arginine vasopressin resistance and malignant hyperthermia). These findings **do not support inhaled sevoflurane use as a sedative in patients with ARDS**.[2]

### تعميم صادر عن المؤسسة العامة للغذاء والدّواء:

اشارة الى معلومات المأمونية الدوائية المستجدة الخاصة بالمستحضرات التي تندرج ضمن المجموعة العلاجية **GLP-1 or dual GIP/GLP-1 receptor agonists** والتي تضمن المستحضرات التي تحتوي على أحد المواد الفعالة التالية:

**(Liraglutide, Liraglutide (fixed dose combination with insulin degludec), Semaglutide, Tirzepatide, Dulaglutide, Exenatide and Lixisenatide (fixed dose combination with insulin glargine)**

والصادره من وكالة الأدوية الأوروبية (EMA- PRAC) بتاريخ 12/8/2024 والسلطات الدوائية البريطانية بتاريخ 28/1/2025 حيث تشمل المعلومات ما يلي:

• Healthcare professionals should be aware of the potential risk of **pulmonary aspiration** in patients using GLP-1 or dual GIP/GLP-1 receptor agonists who undergo surgery or procedures with general anaesthesia or deep sedation.

• Anaesthetists should consider the potential risk of aspiration within their risk assessment of patients being treated with GLP-1 or dual GIP/GLP-I receptor agonists for all indications and manage the aspiration risk, in line with usual anaesthetic practice.

• **Anaesthetists should provide an individualised assessment of the aspiration risk.** Within the risk assessment, consider the following points:

• That patients taking GLP-1 or dual GIP/GLP-I receptor agonists who have underlying diabetic gastroparesis, as well as other comorbidities such as obesity or gastroesophageal reflux disease, and symptoms of delayed gastric emptying (such as nausea, vomiting, and abdominal pain) may be at **higher risk of aspiration**.

•Patients should be asked about whether they are taking GLP-I or dual GIP/GLP-1receptor agonists. Consider the possibility that patients may have purchased GLP-1 or dual GIP/GLP-] receptor agonists for aesthetic weight loss and may not readily disclose this information unless directly asked. Be aware that private prescriptions may not always be included in the patient's medical notes or drug history.

• Healthcare professionals should **identify the increased risk of aspiration as early as possible before surgery and specifically at pre-assessment clinic before surgery**.[3]

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**References:**

1. Acetaminophen (paracetamol) poisoning: Management in adults and children, accessed online via uptodate , cited on 1st June 2025.
2. Sedative-analgesia in ventilated adults: Medication properties, dose regimens, and adverse effects, accessed online via uptodate , cited on 1st June 2025.
3. JFDA, 27 March 2025.



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