ASH Draft Recommendations for Diagnosis of Iron Deficiency

INTRODUCTION

American Society of Hematology (ASH) guidelines are based on a systematic review of available evidence. Through a structured process, a guideline panel makes judgements about the evidence and forms recommendations.

The public comment period occurs after recommendations are formed but before a manuscript report of the guidelines has been finalized and before ASH organizational approval of the guidelines. Comments collected during the open comment period are provided to the guideline panel for review prior to finalizing the guidelines.

These draft recommendations are not final and therefore are not intended for use or citation.

To submit comments on the draft recommendations, **please email guidelines@hematology.org**. Only comments submitted via email will be reviewed by the guideline panel.

The public comment period for these draft recommendations is **September 29 – October 29, 2025.**

RECOMMENDATIONS

YOUNG CHILDREN (9 MONTHS TO 4 YEARS)

- Question 1: Should serum ferritin cutoff of ≤12 ng/mL or ≤20 ng/mL be used to diagnose iron deficiency, with or without anemia, in children aged 9 months to 4 years of age?
  - **Recommendation 1**: In children age 9 months to 4 years, the ASH Guideline Panel ***suggests*** using a serum ferritin threshold of ≤ 20 ng/ml instead of a threshold of ≤ 12 ng/ml for the diagnosis of iron deficiency. (conditional recommendation based on low certainty in the evidence about effects ⊕⊕◯◯).
    - **Remarks:** This cutoff is for *children* **without** known or suspected inflammation, and a higher ferritin threshold may be required for patients with inflammation.
  - Evidence Profile and Evidence to Decision Framework

ADULTS (EXCLUDING PREGNANT AND MENSTRUATING)

- Question 2: Should serum ferritin cutoff of 15 ng/mL, 30 ng/mL, or 50 ng/mL be used to diagnose iron deficiency, with or without anemia, in the general adult population (excluding menstruating and pregnant individuals)?
  - **Recommendation 2:** In the general adult population (excluding menstruating or pregnant individuals), the ASH Guideline Panel ***suggests*** using a serum ferritin threshold of ≤30 ng/mL instead of ≤15 ng/mL for the diagnosis of iron deficiency. (conditional recommendation based on low certainty in the evidence about effects ⊕⊕◯◯).
    - **Remarks:**
      - For people with signs or symptoms associated with ID, or ongoing ID risk factors (see Table), it may be appropriate to use a serum ferritin threshold of ≤50 ng/ml to diagnose iron deficiency and guide management decisions.
      - A separate recommendation was made for adults with inflammation.
  - Evidence Profile and Evidence to Decision Framework

MENSTRUATING INDIVIDUALS

- Question 3: Should serum ferritin cutoff of 15 ng/mL, 30 ng/mL, or 50 ng/mL be used to diagnose iron deficiency with or without anemia in menstruating individuals?
  - **Recommendation 3:** In menstruating individuals, the ASH Guideline Panel ***suggests*** using a serum ferritin threshold of ≤30 ng/ml and ***suggests against*** using a serum ferritin threshold of ≤15 ng/ml for the diagnosis of iron deficiency. (conditional recommendation based on low certainty in the evidence about effects ⊕⊕◯◯).
    - **Remarks**: For people with heavy menstrual bleeding, symptoms associated with ID, additional risk factors for ID, upcoming surgery, or planning pregnancy, serum ferritin ≤50 ng/mL is appropriate to diagnose iron deficiency and guide management decisions.
    - **Good Practice Statement:** A detailed menstrual history is necessary to facilitate the diagnosis of HMB. It would be essential to address the HMB if identified.
  - Evidence Profile and Evidence to Decision Framework

PREGNANT INDIVIDUALS

- Question 4: Should serum ferritin cutoff of 15 ng/mL, 30 ng/mL, or 50 ng/mL be used to diagnose iron deficiency with or without anemia in pregnant individuals?
  - **Recommendation 4:** In pregnant individuals, the ASH Guideline Panel ***suggests*** using a serum ferritin threshold of ≤30 ng/ml (conditional recommendation based on low certainty in the evidence about effects ⊕⊕◯◯) and ***recommends against*** using a serum ferritin threshold of <15 ng/ml for the diagnosis of iron deficiency. (strong recommendation based on low certainty in the evidence about effects ⊕⊕◯◯)
    - **Remarks:** For pregnant individuals with anemia and/or other ID risk factors and/or symptoms associated with ID (Table), a serum ferritin <50 ng/mL is appropriate to diagnose iron deficiency and guide management decisions.
  - Evidence Profile and Evidence to Decision Framework

ADULTS WITH ANEMIA OF INFLAMMATION

- Question 5: Should serum ferritin alone (threshold of 100 µg/L) vs serum ferritin (threshold of 100 µg/L) with TSAT (threshold of 20%) be used to diagnose iron deficiency, with or without anemia, in the general population (including pediatrics and adults of all age groups) with inflammation?
    - **Recommendation 5:** For adults with anemia of inflammation, the ASH Guideline Panel ***suggests*** performing both serum ferritin and TSAT rather than serum ferritin alone to evaluate for iron deficiency. (conditional recommendation based on very low certainty in the evidence about effects ⊕◯◯◯)
    - **Remarks:**
      - In adults with anemia of inflammation iron deficiency is diagnosed with either (A) TSAT ≤20%, or (B) ferritin ≤100 mcg/L (see figure).
      - TSAT should be drawn in a fasting state (including fasting from multivitamin/iron supplements), as the test is susceptible to recent dietary intake.
      - Anemia of inflammation is a diagnosis of exclusion and requires additional investigations as directed by clinical history. It may occur in individuals with infectious diseases, cancer, chronic kidney disease, heart failure, rheumatologic disorders and other chronic inflammatory disorders, and various disease states may have different serum ferritin ceiling thresholds in keeping with ID.

- Evidence Profile and Evidence to Decision Framework

OVERARCHING GOOD PRACTICE STATEMENT

Clinicians should perform serum ferritin to evaluate iron status. A complete blood count alone is not adequate for identification of iron deficiency irrespective of the presence or absence of anemia.