Vitamin B₁₂ Deficiency Evaluation

**ACASM / Pernicious Anemia Cascade**
Testing begins with Vitamin B₁₂ Assay, Serum

- **>400 ng/L**
  - No further testing is performed. Result does not suggest vitamin B₁₂ deficiency.
  - **≤0.4 nmol/mL** Methylmalonic acid
  - **>0.4 nmol/mL**

- **<150 ng/L**
  - **150-400 ng/L**
    - Intrinsic factor blocking antibody
      - **POSITIVE** Result consistent with pernicious anemia.
      - **NEGATIVE** Result does not suggest pernicious anemia as the cause of vitamin B₁₂ deficiency.
      - **≤200 pg/mL** Gastrin
    - **INDETERMINATE** Result consistent with pernicious anemia.
      - **>200 pg/mL**

This value implies that there is no deficiency of vitamin B₁₂ at the cellular level.