

## Vitamin B12 and Folate Comments

|                       |         |        |
|-----------------------|---------|--------|
| Vitamin B12           | 130 650 | pmol/L |
| Vitamin B12 Grey zone | <250    | pmol/L |
| Folate                | > 8     | nmol/L |
| Red Cell Folate       | > 315   | nmol/L |

Measured RBC Folate = after the haematocrit is factored into the equation

Corrected RBC Folate = Measured RBC Folate – serum Folate

ND= not done

| Code    | Vitamin B12 | Serum Folate | Corrected RBC Folate | Suggested Comment   |
|---------|-------------|--------------|----------------------|---|
| V1      | ND or N     | ND           | <315                 | Low RBC Folate noted, ? dietary ?malabsorption ?coeliac. Suggest anti gliadin antibodies and endomysial antibodies if celiac disease is expected.   |
| V2      | <250        | ND           | <315                 | Borderline/low B12 and RBC Folate, suggestive of combined deficiency, if advice required re treatment, contact Haematology Registrar  |
| V4      | <250        | ND or N      | ND or N              | B12 deficiency is not excluded in patients with B12 values <250 pmol/L – especially the elderly. Treatment is recommended for any patient with clinical symptoms of B12 deficiency. Assessment of MMA and homocysteine levels may be informative in some younger patients.  |
| V4 & V6 | <250        | <8           | ND                   | B12 deficiency is not excluded in patients with B12 values <250 pmol/L – especially the elderly. Treatment is recommended for any patient with clinical symptoms of B12 deficiency. Assessment of MMA and homocysteine levels may be informative in some younger patients. Folate low. Specimens for repeat Folate and RBC Folate stores recommended. |
| V5      | >650        | ND           | ND                   | Causes of high B12 include liver and renal disease and myeloproliferative diseases  |
| V6      | ND          | <8.0         | ND                   | Folate low. Specimens for repeat Folate and RBC Folate stores recommended.  |

Updated July 2013