

**Prescribing of Cyanocobalamin (Vitamin B12) tablets now RAG rated BLACK with LSCMMG**

**Prescribing tip for information**



**Hydroxocobalamin 1mg/ml solution for injection is recommended by NICE and the BNF and is a more cost-effective treatment for vitamin B12 deficiency.**

Lancashire and South Cumbria Medicines Management Group (LSCMMG) have made a decision in January 2020 that the prescribing of **cyanocobalamin tablets should be RAG rated BLACK** for the treatment of: nutritional vitamin B12 deficiency; vitamin B12 deficiency following partial gastrectomy; tropical sprue, alone or with folic acid; pernicious anaemia. (*Patients who require treatment of more complex conditions may be considered an exception to the policy on recommendation of a specialist.*)<sup>1</sup>

**BLACK medicine - NOT recommended for use by the NHS in Lancashire and includes medicines for which there is insufficient evidence of their effectiveness.**

The BNF states that cyanocobalamin is less suitable for prescribing than hydroxocobalamin<sup>2</sup> and that hydroxocobalamin has completely replaced cyanocobalamin as the form of vitamin B12 of choice for therapy <sup>3</sup>

**NICE CKS Anaemia - B12 and folate deficiency (February 2019): <sup>4</sup>**

For people with neurological involvement

- Seek urgent specialist advice from a haematologist.
- Initially administer hydroxocobalamin 1 mg intramuscularly on alternate days until there is no further improvement, then administer hydroxocobalamin 1 mg intramuscularly every 2 months.

For people with no neurological involvement

- Initially administer hydroxocobalamin 1 mg intramuscularly three times a week for 2 weeks.
- The maintenance dose depends on whether the deficiency is diet related or not.

For people with B12 deficiency that is:

- Not thought to be diet related: administer hydroxocobalamin 1 mg intramuscularly every 2–3 months for life.
- Thought to be diet related: advise people either to take oral cyanocobalamin tablets 50–150 micrograms daily between meals or have a twice-yearly hydroxocobalamin 1 mg injection.
- In vegans, treatment may need to be life-long, whereas in other people with dietary deficiency replacement treatment can be stopped once the vitamin B12 levels have been corrected and the diet has improved.

Give dietary advice about foods that are a good source of vitamin B12.

**Drug Tariff Prices correct for February 2020**<sup>5</sup>

Cyanocobalamin 50microgram tablets	Annual cost	Hydroxocobalamin 1mg/ml solution for injection	Annual cost
At a daily dose of 50mcg, annual cost / patient	<b>£57.09</b>	At a dose of 1mg / 3 months, annual cost /patient	<b>£6.96</b>
At a daily dose of 150mcg, annual cost / patient	<b>£171.26</b>	At a dose of 1mg / 2 months, annual cost/ patient	<b>£10.44</b>

If a patient still wishes to take cyanocobalamin tablets, then they should be directed to self-care and purchase 'over the counter' as per NHS England guidelines.<sup>6</sup>

<sup>1</sup> <https://www.lancsammg.nhs.uk/media/1384/cyanocobalamin-tablets-updated-with-exception.pdf>

<sup>2</sup> <https://bnf.nice.org.uk/drug/cyanocobalamin.html#indicationsAndDoses>

<sup>3</sup> <https://www.medicinescomplete.com/#/content/bnf/286183421?hsp=hydroxocobalamin>

<sup>4</sup> <https://cks.nice.org.uk/anaemia-b12-and-folate-deficiency/#scenario>

<sup>5</sup> <https://www.nhs.uk/sites/default/files/2020-01/Drug%20Tariff%20February%202020.pdf>

<sup>6</sup> <https://www.england.nhs.uk/wp-content/uploads/2018/03/otcguidance-for-ccgs.pdf>

To contact the Medicines Optimisation Team please phone 01772 214302