



SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Hydroxocobalamin Injection 1 mg/ml

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

<u>Active Substance</u>	<u>Quantity</u>	<u>Reference Standard</u>
Hydroxocobalamin Acetate equivalent to	1.04 mg	Ph Eur
Hydroxocobalamin	1.00 mg	

An average of 7.5% has been incorporated

3. PHARMACEUTICAL FORM

Solution for Injection

4. CLINICAL PARTICULARS

4.1. Therapeutic Indications

Addisonian pernicious anaemia. Prophylaxis and treatment of other macrocytic anaemias associated with vitamin B₁₂ deficiency. Tobacco amblyopia and Leber's optic atrophy

4.2. Posology and Method of Administration

Route of Administration

Intramuscular injection

Dosage and Administration

The following dosage schemes are suitable for adults and children.

Addisonian pernicious anaemias and other macrocytic anaemias without neurological involvement

Initially 250 to 1000 micrograms intramuscularly on alternate days for one or two weeks, then 250 micrograms weekly until the blood count is normal

Maintenance. 1000 micrograms every two to three months

Addisonian pernicious anaemia and other macrocytic anaemias with neurological involvement

Initially: 1000 micrograms on alternate days as long as improvement is occurring.

Maintenance: 1000 micrograms every two or three months.

Prophylaxis of macrocytic anaemia associated with vitamin B₁₂ deficiency resulting from gastrectomy, some malabsorption syndromes and strict vegetarianism

1000 micrograms every two or three months.

Tobacco amblyopia and Leber's optic atrophy

Initially: 1000 micrograms or more daily by intramuscular injection for two weeks then twice weekly as long as improvement is occurring.

Maintenance: 1000 micrograms monthly.

4.3. Contra-Indications

Hypersensitivity to any ingredient in the preparation.

4.4. Special Warnings and Special Precautions for Use

The dosage schemes given above are normally satisfactory, but regular examination of the blood is advisable.

If megaloblastic anaemia fails to respond, folate metabolism should be investigated. Doses in excess of 10 micrograms daily may produce a haematological response in patients with folate deficiency. Indiscriminate administration may mask the true diagnosis.

Cardiac arrhythmias secondary to hypokalaemia during initial therapy have been reported. Plasma potassium should therefore be monitored during this period.

4.5. Interaction with other Medicinal Products and other Forms of Interaction

Chloramphenicol-treated patients may respond poorly to Hydroxocobalamin injection.

Serum concentrations of hydroxocobalamin may be lowered by oral contraceptives.

The above interactions are unlikely to have clinical significance.

Antimetabolites and most antibiotics invalidate Vitamin B₁₂ assays by microbiological techniques.

4.6. Pregnancy and Lactation

Hydroxocobalamin injection should not be used for the treatment of megaloblastic anaemia of pregnancy.

4.7. Effects on Ability to Drive and Use Machines

None Known.

4.8. Undesirable Effects

Itching, exanthema, chills, fever, hot flushes, nausea, and dizziness and exceptionally anaphylaxis.

Acniform and bulbous eruptions have been reported rarely.

4.9. Overdose

Treatment is unlikely to be required in the case of overdosage.

5. PHARMACOLOGICAL PROPERTIES**5.1. Pharmacodynamic Properties**

Hydroxocobalamin is extensively bound to specific plasma proteins. It is absorbed from the gastro-intestinal tract, but may be irregularly absorbed when given in large therapeutic doses and absorption is impaired in patients with an absence of intrinsic factor, with a malabsorption syndrome or with disease or abnormality of the gut, or after gastrectomy.

Hydroxocobalamin is stored in the liver, excreted in the bile, and undergoes some enterohepatic recycling, part of the dose is excreted in the urine, most of it in the first 8 hours. Hydroxocobalamin diffuses across the placenta.

5.2. Pharmacokinetic Properties

An intramuscular injection of hydroxocobalamin produced higher serum levels than the same dose of cyanocobalamin and these levels are well maintained.

5.3. Pre-clinical Safety Data

Not applicable.

6. PHARMACEUTICAL PARTICULARS**6.1. List of Excipients**

Glacial acetic acid Ph Eur
Sodium chloride Ph Eur
Water for injection Ph Eur

6.2. Incompatibilities

None known

6.3. Shelf-life

The proposed shelf life is 24 months.

6.4. Special Precautions for Storage

Store at or below 25°C. Protect from light.

6.5. Nature and Contents of Container

Type I glass ampoules in cardboard box.
5 ampoules per pack.

6.6. Instructions for Use, Handling and Disposal

None.

7. MARKETING AUTHORISATION HOLDER

Goldshield Pharmaceuticals Ltd.
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CR9 6BP

8. MARKETING AUTHORISATION NUMBER(S)

PL 12762/0008

9. DATE OF FIRST AUTHORISATION / RENEWAL OF AUTHORISATION

18 August 1997

10. DATE OF (PARTIAL) REVISION OF THE TEXT

May 1999