Medicines & Healthcare products Regulatory Agency

MHRA Regulating Medicines and Medical Devices

Public Assessment Report

UKPAR

Vitamin B Compound Tablets BPC

(Nicotinamide, thiamine hydrochloride and riboflavin)

UK Licence No: PL 40739/0171

Ennogen Healthcare Limited

LAY SUMMARY
Vitamin B Compound Tablets BPC

(Nicotinamide, thiamine hydrochloride, riboflavin)

This is a summary of the Public Assessment Report (PAR) for Vitamin B Compound Tablets BPC (PL 40739/0171). It explains how Vitamin B Compound Tablets BPC were assessed and their authorisation recommended, as well as their conditions of use. It is not intended to provide practical advice on how to use Vitamin B Compound Tablets BPC.

For practical information about using Vitamin B Compound Tablets BPC, patients should read the package leaflet or contact their doctor or pharmacist.

For ease of reading, Vitamin B Compound Tablets BPC will be referred to as Vitamin B Tablets throughout the remainder of this PAR.

What are Vitamin B Tablets and what are they used for?
This medicine is the same as Vitamin B Compound Tablets BPC (PL 17496/0002; Dalkeith Laboratories Limited), which is already authorised. The company (Dalkeith Laboratories Limited) that makes Vitamin B Compound Tablets BPC (PL 17496/0002) has agreed that its scientific data can be used as a basis for the grant of an identical licence for Vitamin B Tablets (PL 40739/0171).

Vitamin B Tablets are used to prevent vitamin B deficiencies, as a nutritional supplement in the elderly and to help the patient's recovery after illness or surgery.

How do Vitamin B Tablets work?
Vitamin B Tablets contain three vitamins known as, nicotinamide, thiamine hydrochloride and riboflavin which are more commonly knowns as vitamins B3, B1 and B2 respectively. Vitamins are essential nutrients for the body and are required for the normal functioning of specific enzymes present in the body. These enzymes are responsible for many functions in the body such as their function in carbohydrate metabolism and converting sugar into usable energy.

How are Vitamin B Tablets used?
The pharmaceutical form of this medicine is a tablet and the route of administration is oral (by mouth).

The patient should always take this medicine exactly as their doctor or pharmacist has told them. The patient should check with their doctor or pharmacist if they are not sure.

Vitamin B Tablets are not recommended for children under 12 years of age.

The tablets should be swallowed with a drink of water. If the doctor prescribes this medication, they will decide what dose the patient should take. The usual dose for adults, the elderly, and children over 12 years of age is one to three tablets daily.

Please read section 3 of the package leaflet for detailed information on dosing recommendations, the route of administration, and the duration of treatment.

This medicine can be obtained without a prescription.

For further information on how Vitamin B Tablets are used, refer to the package leaflet and Summary of Product Characteristics (SmPC) available on the Medicines and Healthcare products Regulatory Agency (MHRA) website.

What benefits of Vitamin B Tablets have been shown in studies?
Vitamin B Tablets are considered identical to previously authorised Vitamin B Compound Tablets BPC (PL 17496/0002; Dalkeith Laboratories Limited), with the same benefits and risks. So, no new studies have been provided for Vitamin B Tablets, but reference is made to the studies for Vitamin B Compound Tablets BPC (PL 17496/0002; Dalkeith Laboratories Limited).

What are the possible side effects from Vitamin B Tablets?
Vitamin B Tablets are suitable for most people and side effects do not usually occur with these tablets. The patient must be especially careful if they have an intolerance to some sugars as these tablets contain small amounts of lactose.

For a full list of all the side effects reported with Vitamin B Tablets see section 4 of the package leaflet, available on the Medicines and Healthcare products Regulatory Agency (MHRA) website.

For the full list of restrictions, see the package leaflet.

Why are Vitamin B Tablets approved?
The MHRA decided that the benefits of Vitamin B Tablets are greater than the risks and recommended that they are approved for use.

What measures are being taken to ensure the safe and effective use of Vitamin B Tablets?
A Risk Management Plan has been developed to ensure that Vitamin B Tablets are used as safely as possible. Based on this plan, safety information has been included in the Summary of Product Characteristics and the package leaflet for Vitamin B Tablets including the appropriate precautions to be followed by healthcare professionals and patients.

Known side effects are continuously monitored. Furthermore, new safety signals reported by patients/healthcare professionals will be monitored/reviewed continuously.

Other information about Vitamin B Tablets
A Marketing Authorisation was granted in the UK on 06 September 2018.

The full PAR for Vitamin B Tablets follows this summary.

For more information about treatment with Vitamin B Tablets read the package leaflet or contact your doctor or pharmacist.

This summary was last updated in October 2018.

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I INTRODUCTION

The Medicines and Healthcare products Regulatory Agency (MHRA) granted Ennogen Healthcare Limited a Marketing Authorisation for the medicinal product Vitamin B Compound Tablets (PL 40739/0171) on 06 September 2018. This product is available throughout pharmacies (P) without a prescription for the prophylaxis of vitamin B deficiencies; as a nutritional supplement in the elderly; and as an aid to convalescence after illness or surgery.

This application was submitted as a simple abridged (informed consent) application according to Article 10c of Directive 2001/83/EC, as amended.

This application cross-refers to the reference product Vitamin B Compound Tablets BPC (PL 17496/0002), which were originally granted in the UK on 23 March 2000 to the marketing authorisation holder (MAH) Dalkeith Laboratories Limited. Vitamin B Tablets contains three active substances, nicotinamide, thiamine hydrochloride and riboflavin. Thiamine is phosphorylated in the body and acts as a co-enzyme in carbohydrate metabolism. Riboflavin is also phosphorylated to give co-enzymes in the respiratory chain and oxidative phosphorylation. Nicotinamide is also active in the respiratory chain. Symptomatic nutritional vitamin B deficiency commonly involves these three vitamins. The three vitamins are all well absorbed from the gastro-intestinal tract and are widely distributed in the body tissues. Thiamine and riboflavin are not stored in the body and are excreted mainly in the urine. Nicotinamide is also widely distributed and has a short half-life. It is excreted mainly as metabolites

No new data were submitted nor were necessary to be submitted for this application, as the data are identical to the data for the previously granted reference product.

II QUALITY ASPECTS

II.1 Introduction

This is an abridged application for Vitamin B Tablets (PL 40739/0171) submitted under Article 10c of Directive 2001/83/EC, as amended.

The application cross-refers to the reference product Vitamin B Compound Tablets BPC (PL 17496/0002), which was originally granted in the UK on 23 March 2000 to the MAH Dalkeith Laboratories Limited.

II.2. Drug Substance

Drug substance specifications

The proposed drug substance specification is consistent with the details registered for the cross-reference product.

II.3. Medicinal Product

Name

The proposed product name for this application is Vitamin B Compound Tablets BPC. The product has been named in line with current requirements.

Strength, pharmaceutical form, route of administration, container and pack sizes

Vitamin B Tablets are available in polypropylene (PP) and high density polyethylene (HDPE) tablet containers in pack sizes of 28, 100 and 1000 tablets.

The proposed shelf life of the unopened product is 3 years with the storage conditions 'Do not store above 25°C. Store in the original container. Keep the container tightly closed.'

The proposed packaging, shelf life and storage conditions are consistent with the details registered for the reference product.

Legal status

Pharmacy (P).

Marketing Authorisation Holder/Contact Persons/Company

Ennogen Healthcare Limited, Unit G4, Riverside Industrial Estate, Riverside Way, Dartford DA1 5BS UK

Manufacturers

The proposed manufacturing sites are consistent with those registered for the reference product and evidence of Good Manufacturing Practice (GMP) compliance has been provided.

Qualitative and quantitative compositions

The proposed product composition is consistent with the details registered for the reference product.

Manufacturing process

The proposed manufacturing processes are consistent with the details registered for the reference product and the maximum batch size is stated.

Finished product/shelf-life specifications

The proposed finished product specification is in line with the details registered for the reference product.

TSE Compliance
With the exception of lactose, none of the excipients used contain material of animal or human origin. The supplier of lactose monohydrate has confirmed that it is sourced from healthy animals under the same conditions as milk for human consumption.

This product does not contain or consist of genetically modified organisms (GMO).

Bioequivalence
No bioequivalence data are required to support this simple abridged application because the proposed product is manufactured to the same formula utilising the same processes as the reference product, Vitamin B Compound Tablets BPC (PL 17496/0002).

Expert Report
The applicant cross-refers to the data for Vitamin B Compound Tablets BPC (PL 17496/0002), to which this application is claimed to be identical. This is acceptable.

Product Name and Appearance
See Section II.3 'Medicinal Product; Name' for details of the proposed product name. The appearance of the product is identical to that of the reference product.

II.4 Discussion on chemical, pharmaceutical and biological aspects
The data submitted with the application are acceptable. The grant of a Marketing Authorisation is recommended.

III NON-CLINICAL ASPECTS
Introduction
As this application is submitted under Article 10c of Directive 2001/83/EC, as amended, (as an informed consent application) no new non-clinical data have been supplied and none are required.

Ecotoxicity/environmental risk assessment (ERA)
Suitable justification has been provided for non-submission of an Environmental Risk Assessment. As the application is an identical version of an already authorised product, it is not expected that environmental exposure will increase following approval of the Marketing Authorisation for the proposed product.

Discussion on the non-clinical aspects
The grant of a Marketing Authorisation is recommended.

IV CLINICAL ASPECTS
Introduction
As this application is submitted under Article 10c of Directive 2001/83/EC, as amended, (as an informed consent application) no new clinical data have been supplied and none are required.

Risk Management Plan (RMP)
The MAH has submitted a risk management plan, in accordance with the requirements of Directive 2001/83/EC as amended.

There are no differences from other products containing this active substance in terms of proposed uses, maximum pack size / strength or pharmaceutical form / formulation that would have any implications for safety.

In line with other products containing this active, the applicant proposes only routine pharmacovigilance and routine risk minimisation measures for all safety concerns (labelling in the SmPC and the patient information leaflet (PIL)). This is agreed.

The MAH shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the Marketing Authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:
- At the request of the Competent Authority;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

If the dates for submission of a Periodic Safety Update Report and the update of an RMP coincide, they can be submitted at the same time, but via different procedures.

Discussion on the clinical aspects
The grant of Marketing Authorisation is recommended.

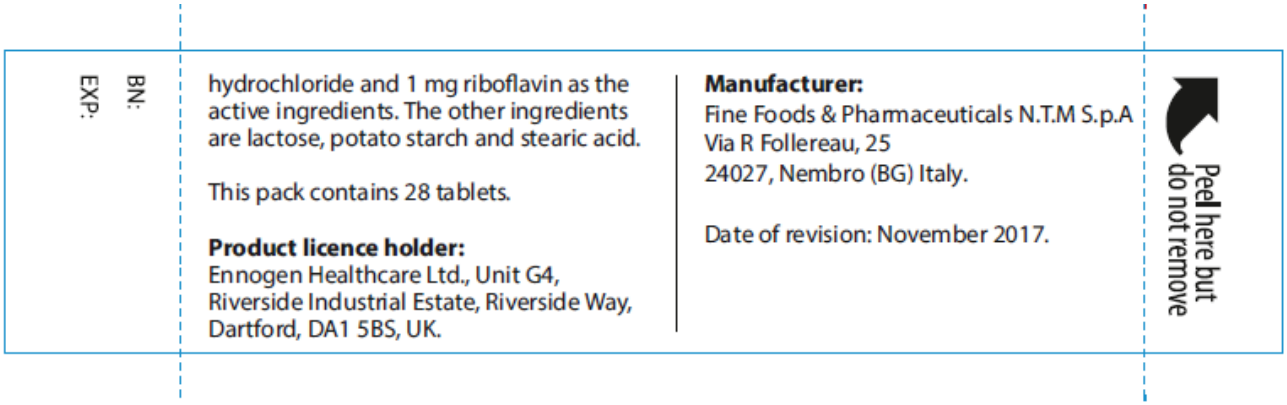
V User consultation
A user consultation with target patient groups on the PIL has been performed on the basis of a bridging report making reference to Vitamin B Compound Tablets BPC (PL 17496/0002; Dalkeith Laboratories Limited). The bridging report submitted by the MAH is acceptable

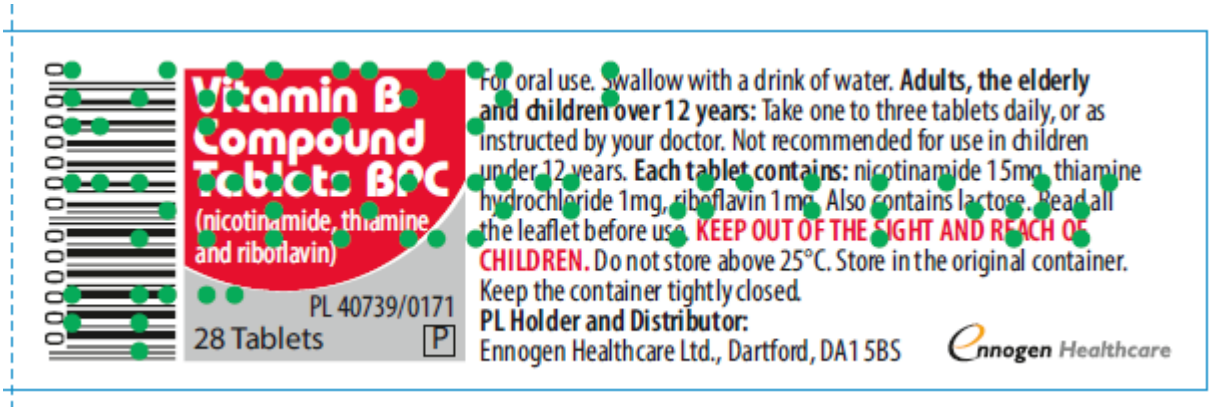
VI Overall conclusion, benefit/risk assessment and recommendation
The quality of the product is acceptable, and no new non-clinical or clinical safety concerns have been identified. The MAH's product is identical to the reference product. Extensive clinical experience with nicotinamide, thiamine hydrochloride and riboflavin is considered to have demonstrated the therapeutic value of the compounds. The benefit/risk balance is, therefore, considered to be similar to the referenced product and positive.

Summaries of Product Characteristics (SmPC), Patient Information Leaflets (PIL) and Labels
The SmPC and PIL are consistent with the details registered for the reference product.

In accordance with Directive 2010/84/EU the Summaries of Product Characteristics (SmPCs) and Patient Information Leaflets (PILs) for products granted Marketing Authorisations at a national level are available on the MHRA website.

The approved combined labelling and leaflet for this medicine is presented below:





Patient Information Leaflet

Vitamin B Compound Tablets BPC

(nicotinamide, thiamine hydrochloride and riboflavin)

Read the leaflet carefully and keep it in case you want to read it again.

Do not share medicines with other people.

If any of the side effects get serious, or if you have any other questions, speak to your doctor or pharmacist.

1. What these tablets are and what they are used for

These tablets contain three vitamins as the active ingredients. These are nicotinamide, thiamine hydrochloride and riboflavin (Vitamins B3, B1 and B2). Vitamins are essential nutrients for the body.

These tablets are used to prevent Vitamin B deficiencies, as a nutritional supplement in the elderly and to help your recovery after illness or surgery.

2. Before you take these tablets

Do not take these tablets if:

- You know you are allergic to the active ingredients or to any of the other ingredients (these are listed in section 6)

You must be **especially careful** if:
You have an intolerance to some sugars. These tablets contain small amounts of lactose.

Discuss your treatment with your doctor before taking this medicine if any of the above applies to you.

Taking other medicines

Always tell your doctor or pharmacist about all the medicines you are taking including other vitamin supplements. This means medicines you have bought yourself as well as those you have on prescription from your doctor.

Pregnancy and breastfeeding
No problems have been reported, however, as with all medicines you should check with your doctor before taking this medicine.

Driving and using machinery
Vitamin tablets should not affect your ability to drive or operate machinery.

3. How to take these tablets

The tablets should be swallowed with a drink of water. If this medicine has been given to you by your doctor, he/she will decide what dose you need to take. Always take the tablets exactly as the doctor has told you. The dose will be on the pharmacist's label. If you are not sure, ask your doctor or pharmacist. Carry on taking them for as long as you have been told unless you have any problems. In that case, check with your doctor.

The usual doses are as follows:
Adults, the elderly and children over 12 years:
Take one to three tablets daily.

The tablets are not recommended for children under 12 years.

If you take more tablets than you should
If you have taken more tablets than you should, speak to your doctor or pharmacist straightaway. Take your tablets or the pack with you.

If you forget to take your tablets
If you miss a dose don't worry. Miss this dose and carry on with the normal routine.

4. Possible side effects

Vitamin B Tablets are suitable for most people and side effects do not usually occur with these tablets.

Reporting of side effects

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard.
By reporting side effects you can help provide more information on the safety of this medicine.

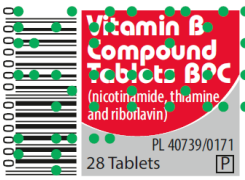
5. How to store these tablets

Keep out of the sight and reach of children. Do not store above 25°C. Store in the original container. Keep container tightly closed. Do not use the tablets after the expiry date shown on the label.

Take any left over back to your pharmacist to be destroyed.

6. Further Information

Ingredients
Each round, yellow tablet contains 15 mg nicotinamide, 1 mg thiamine



For oral use. Swallow with a drink of water. **Adults, the elderly and children over 12 years:** Take one to three tablets daily, or as instructed by your doctor. Not recommended for use in children under 12 years. **Each tablet contains:** nicotinamide 15mg, thiamine hydrochloride 1mg, riboflavin 1mg. Also contains lactose. Read all the leaflet before use. KEEP OUT OF THE SIGHT AND REACH OF CHILDREN. Do not store above 25°C. Store in the original container. Keep the container tightly closed.
PL Holder and Distributor:
Ennogen Healthcare Ltd., Dartford, DA1 5BS

Ennogen Healthcare

Table of content of the PAR update

Steps taken after the initial procedure with an influence on the Public Assessment Report (Type II variations, PSURs, commitments)

Scope	Procedure number	Product information affected	Date of start of the procedure	Date of end of procedure	Approval/ non approval	Assessment report attached Y/N (version)