## **IPAR**



#### IRISH MEDICINES BOARD

# PUBLIC ASSESSMENT REPORT FOR A MEDICINAL PRODUCT FOR HUMAN USE

Scientific discussion

Rennie Ice 680mg/80mg Chewable Tablets Calcium Carbonate Magnesium Carbonate, Heavy PA1410/53/4

The Public Assessment Report reflects the scientific conclusion reached by the Irish Medicines Board (IMB) at the end of the evaluation process and provides a summary of the grounds for approval of a marketing authorisation for a specific medicinal product for human use. It is made available by the IMB for information to the public, after deletion of commercially sensitive information. The legal basis for its creation and availability is contained in Article 21 of Directive 2001/83/EC, as amended. It is a concise document which highlights the main parts of the documentation submitted by the applicant and the scientific evaluation carried out by the IMB leading to the approval of the medicinal product for marketing in Ireland.

#### **I INTRODUCTION**

Based on the review of the data on quality, safety and efficacy, the IMB has granted a marketing authorisation for Rennie Ice 680 mg/80 mg Chewable Tablets, from Bayer Limited on 28th January, 2011 for the relief of stomach upsets due to hyperacidity and heartburn.

This application for a marketing authorisation was submitted as a change to an existing marketing authorisation-Rennie Spearmint (PA 1410/53/2), leading to an extension as referred to in Annex II of Regulations (EC) No 1084/2003 or 1085/2003. Rennie Ice has different excipients to Rennie Spearmint.

Rennie ICE will be available through General Sale.

The Summary of Product Characteristics for (SPC) for this medicinal product is available on the IMB's website at www.imb.ie.

Name of the product	Rennie Ice
Name(s) of the active substance(s) (INN)	Calcium Carbonate
Pharmacotherapeutic classification (ATC code)	Magnesium Carbonate, Heavy A02AX
Pharmaceutical form and strength(s)	680 mg/80mg
Marketing Authorisation Number(s) in Ireland (PA)	PA1410/53/4
Marketing Authorisation Holder	Bayer Limited

## **II QUALITY ASPECTS**

#### **II.1.** Introduction

This application is for Rennie Ice 680 mg/80 mg Chewable Tablets.

## II.2 Drug substance

The active substances are calcium carbonate and magnesium carbonate (heavy) which are both established active substances described in the European Pharmacopoeia, and are both manufactured in accordance with the principles of Good Manufacturing Practice (GMP)

The active substance specifications are considered adequate to control the quality and meets current pharmacopoeial requirements (Ph. Eur.). Batch analytical data demonstrating compliance with the specifications have been provided for both active substances.

#### II.3 Medicinal product

# P.1 Composition

Each chewable tablet contains 680 mg calcium carbonate and 80 mg heavy magnesium carbonate which are the active substances. The tablets also contain the following excipients: sucrose, pregelatinised maize starch, potato starch, talc, magnesium stearate, light liquid paraffin, Xylitab 100, cooling flavour and mint flavour.

## P.2 Pharmaceutical Development

The product is an established pharmaceutical form (chewable tablets) and its development is adequately described in accordance with the relevant European guidelines.

#### P.3 Manufacture of the Product

The product is manufactured in accordance with the principles of good manufacturing practice (GMP) at suitably qualified manufacturing sites.

The manufacturing process has been validated according to relevant European and ICH guidelines and the process is considered to be sufficiently validated.

#### P.4 Control of Other Substances (Excipients)

All ingredients comply with Ph. Eur. or are adequately controlled by the manufacturer's specifications.

## P.5 Control of Finished Product

The Finished Product Specification is based on the pharmacopoeial monograph for chewable tablets and also take into account relevant quality guidelines (e.g. ICH etc.), and the tests and control limits are considered appropriate for this type of product.

The analytical methods used are described in sufficient detail and are supported by validation data.

Batch analytical data for a number of batches from the proposed production site have been provided, and demonstrate the ability of the manufacturer to produce batches of finished product of consistent quality.

#### P.6 Packaging material

The product is presented as PVC/aluminium blisters which are placed in cardboard cartons to contain 12, 24 or 48 chewable tablets.

Evidence has been provided that the blister material complies with Ph. Eur. requirements and with the relevant EU legislation.

#### P.7 Stability of the Finished Product

Stability data on the finished product in the proposed packaging have been provided in accordance with EU guidelines demonstrating the stability of the product for 2 years when stored below 25°C and protected from moisture.

#### II.4 Discussion on Chemical, Pharmaceutical and Biological Aspects

The important quality characteristics of the product are well-defined and controlled. Satisfactory chemical and pharmaceutical documentation has been provided, assuring consistent quality of Rennie Ice 680 mg/ 80 mg Chewable Tablets.

#### III NON-CLINICAL ASPECTS

#### III.1 Introduction

This active substance is the same as that present in Rennie Spearmint. No new preclinical data have been submitted. As such, no pre-clinical assessment has been made on the application. This is acceptable for this type of application.

#### IV CLINICAL ASPECTS

#### IV.1 Introduction

Rennie ICE is a line extension of Rennie Spearmint. Both are indicated for the relief of stomach upsets due to hyperacidity and heartburn.

The active ingredients are calcium carbonate and magnesium carbonate; these are well known active substances with established efficacy and tolerability.

#### **IV.2 Pharmacokinetics**

A small amount of calcium and magnesium may be absorbed, but in healthy subjects it is usually rapidly excreted by the kidney.

The soluble chlorides produced by the reaction of calcium and magnesium with gastric acid react, in turn, with intestinal, biliary and pancreatic secretions to form insoluble salts, which are excreted in the faeces.

#### IV.3 Pharmacodynamics

Calcium and magnesium carbonates function as antacids reacting with excess hydrochloric acid in the gastric medium to produce soluble chlorides.

$$CaCO_3 + 2HCl \Rightarrow CaCl_2 + H_2O + CO_2$$
  
 $MgCO_3 + 2HCl \Rightarrow MgCl_2 + H_2O + CO_2$ 

Each Rennie ICE tablet neutralises 15.5 mEq H<sup>+</sup>.

#### **IV.4** Clinical Efficacy

Rennie ICE is a line extension of Rennie Spearmint containing the same active ingredients in the same quantity.

Compared to the Rennie Spearmint tablet, Rennie ICE contains three additional excipients. These additional excipients are:

Xylitab.

Cooling flavour (diethyl malonate, maltodextrin, menthol, menthyl lactate, modified starch, iso-pulegol). Mint flavour (maltodextrin, menthol, modified starch).

It is not expected that the additional excipients in Rennie ICE would influence the efficacy of the active ingredients.

## IV.5 Clinical Safety

It is not expected that the additional excipients in Rennie ICE would influence the safety of the product.

The Marketing Authorisation Holder submitted a set of documents describing the Pharmacovigilance System, including information on the availability of an EU Qualified Person for Pharmacovigilance (EU-QPPV) and the means for notification of adverse reaction reports in the EU or from a Third Country.

#### IV.6 Discussion on the clinical aspects

This application for a marketing authorisation was submitted as a change to an existing marketing authorisation, Rennie Spearmint, leading to an extension as referred to in Annex II of Regulations (EC) No 1084/2003 or 1085/2003. Rennie Ice has different excipients to Rennie Spearmint.

No additional studies were submitted and this is acceptable for this type of application. The applicant provides justification for waiving the need for bioequivalence studies.

#### V OVERALL CONCLUSIONS

#### Benefit/Risk Assessment and Recommendation

From a quality perspective the overall assessment outcome for Rennie Ice 680 mg/80 mg Chewable Tablets is positive.

Rennie ICE chewable tablet is a line extension of Rennie Spearmint. Rennie Spearmint is a well-known medicinal product with an established favourable efficacy and safety profile. The change in excipients that resulted in this line extension are not expected to have any impact on the safety or efficacy of the product.

The MAH has provided written confirmation that systems and services are in place to ensure compliance with their pharmacovigilance obligations.

The IMB, on the basis of the data submitted, considered that Rennie ICE demonstrated adequate evidence of efficacy for the approved indication as well as a satisfactory risk/benefit profile and therefore granted a marketing authorisation.