## **Medicines Management Programme**

# **Preferred Product:**

# Glatiramer acetate on the High Tech Arrangement



MEDICINES MANAGEMENT PROGRAMME

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#### List of Abbreviations

DMTs	Disease-modifying therapies
HSE	Health Service Executive
ММР	Medicines Management Programme
MPR	Medication possession ratio
MS	Multiple sclerosis
NHS	National Health Service
PCERS	Primary Care Eligibility & Reimbursement Service
PIL	Patient information leaflet
PFS	Pre-filled syringe
SmPC	Summary of Product Characteristics
UK	United Kingdom

## **1. Executive Summary**

The Health Service Executive (HSE)-Medicines Management Programme (MMP) aims to promote safe, effective and cost-effective prescribing of medicines. Medicinal products containing glatiramer acetate accounted for expenditure of approximately €7.5 million on the High Tech Arrangement in 2019.<sup>1</sup> There are now a number of medicinal products containing glatiramer acetate available on the High Tech Arrangement. This provides the opportunity to identify a preferred product for glatiramer acetate in order to achieve efficiencies in this therapeutic area.

The aim of this initiative is to ensure cost-effective prescribing of glatiramer acetate on the High Tech Arrangement. It identifies a preferred product for glatiramer acetate. It also aims to support the prescribing of this preferred product. The MMP recommends Brabio<sup>®</sup> as the preferred product for glatiramer acetate on the High Tech Arrangement.

Clinicians should give due consideration to prescribing Brabio<sup>®</sup> when issuing a prescription for glatiramer acetate on the High Tech Arrangement.

Implementation of this recommendation will lead to significant savings for the health service, in the order of millions of euros.

Initiation When initiating a patient on glatiramer acetate, the clinician should prescribe Brabio<sup>®</sup>. Switching Patients currently on Copaxone® should be considered for switching to Brabio® when their next repeat High Tech prescription is being issued.

## 2. Background

#### 2.1 Glatiramer acetate

Glatiramer acetate is a non-biological complex drug licensed for the treatment of relapsing forms of multiple sclerosis (MS). Expenditure<sup>i</sup> on medicinal products containing glatiramer acetate under the High Tech Arrangement accounted for approximately  $\xi$ 7.5 million in 2019.<sup>1</sup> It is one of a number of disease-modifying therapies (DMTs) that are available for the treatment of MS.

There are currently two medicinal products containing glatiramer acetate available on the High Tech arrangement, Brabio<sup>®</sup> and Copaxone<sup>®</sup>; both are available in two different strengths.<sup>2</sup> Copaxone<sup>®</sup> 20 mg/ml solution for injection pre-filled syringe (PFS) was granted a marketing authorisation in February 2004, with the 40 mg/ml solution for injection PFS authorised in January 2015.<sup>3,4</sup> Brabio<sup>®</sup> 20 mg/ml solution for injection PFS was granted a marketing authorisation in November 2016 following a decentralised procedure which involved a hybrid application claiming similarity with the innovator product Copaxone<sup>®</sup> 20 mg/ml solution for injection in November 2017 following a decentralised procedure which involved a hybrid application claiming a decentralised procedure which involved a hybrid application claiming similarity with the innovator product Copaxone<sup>®</sup> 20 mg/ml solution for injection PFS.<sup>5,6</sup> Brabio<sup>®</sup> 40 mg/ml solution for injection PFS was granted a marketing authorisation in November 2017 following a decentralised procedure which involved a hybrid application claiming similarity with the innovator product Copaxone<sup>®</sup> 40 mg/ml solution for injection PFS.<sup>7,8</sup> Brabio<sup>®</sup> 20 mg/ml solution for injection PFS was added to the High Tech Arrangement in February 2018, and the 40 mg/ml solution for injection PFS was added in March 2018.<sup>9</sup>

Glatiramer acetate was ranked 17<sup>th</sup> in terms of prescribing frequency on the High Tech Arrangement in 2017, with a prescribing frequency of 9,559.<sup>10</sup> There are approximately 640 patients in receipt of glatiramer acetate on the High Tech Arrangement on a monthly basis; the vast majority of these patients are currently on Copaxone<sup>®</sup>, with only negligible utilisation of Brabio<sup>®</sup>.<sup>11</sup>

<sup>&</sup>lt;sup>i</sup> Expenditure reflects the ingredient cost of the medicinal product, exclusive of value added tax and fees.

#### 2.2 Hybrid Medicinal Products

Glatiramer acetate is the acetate salt of a heterogenous mixture of synthetic polypeptides, containing four naturally occurring amino acids: L-glutamic acid, L-alanine, L-tyrosine and L-lysine in specific molar ratios but random order. Due to its compositional complexity, no specific polypeptide can be fully characterised, including in terms of amino acid sequence, although the final glatiramer acetate composition is not entirely random.<sup>3-8</sup>

The complexity of the drug substance presented particular challenges for demonstration of equivalence of other medicinal products containing glatiramer acetate with the reference medicine, Copaxone<sup>®</sup>. Since it is unknown which specific components (or parts thereof) are responsible for the therapeutic effect, simple pharmacokinetic studies, as would be the case for generic medicines, would not be appropriate for demonstrating equivalence between Copaxone<sup>®</sup> and other medicinal products containing glatiramer acetate i.e. Brabio<sup>®</sup>.<sup>6,8</sup>

Article 10(3) of Directive 2001/83/EC was considered by the reference member state to be the appropriate legal basis for consideration of licensing applications for Brabio<sup>®</sup> i.e. as an application as a hybrid medicinal product of the reference medicine Copaxone<sup>®</sup>. Following evaluation, Brabio<sup>®</sup> was considered a legitimate hybrid form of the reference product, Copaxone<sup>®</sup>, and was granted a marketing authorisation.<sup>6,8</sup>

Hybrid medicinal products are medicines whose authorisation depends partly on the results of tests on the reference medicine and partly on new data from clinical trials involving the hybrid medicinal product. Hybrid medicines arise when a manufacturer develops a generic medicine that is based on a reference medicine, but has a different strength, a different route of administration or a slightly different indication from the reference medicine.<sup>12</sup>

#### 3. Scope

This document considers the medicinal products containing glatiramer acetate that are available on the High Tech Arrangement, Brabio<sup>®</sup> and Copaxone<sup>®</sup>. It aims to achieve efficiencies by the identification of a preferred product for glatiramer acetate under the High Tech Arrangement.

#### 4. Definitions

For the purposes of this document, the reimbursement price refers to the reimbursed price of the medicinal product as listed in the High Tech Scheme Drug File maintained by the Corporate Pharmaceutical Unit. It may not represent the final acquisition cost to the HSE of the medicinal

product, which may also include any rebates and commercial in confidence arrangements that are in place. Both the reimbursement price and the acquisition cost are exclusive of value added tax.

Only licensed medicinal products containing glatiramer that were available on the High Tech Arrangement as of 1 May 2020 are included in this review. All prices and costs are correct as of 1 July 2020.

## 5. Preferred Product – Glatiramer Acetate

The MMP has identified a preferred product for glatiramer acetate under the High Tech Arrangement. The identification of the preferred product was carried out in accordance with an evaluation process that included internal review by the MMP and consideration of submissions received from the marketing authorisation holders of Brabio<sup>®</sup> and Copaxone<sup>®</sup>.

The MMP considered the following criteria when identifying a preferred product for glatiramer acetate:

- 1. Acquisition cost
- 2. Therapeutic indications
- 3. Formulation considerations
- 4. Product range including pack sizes and strengths available
- 5. Product stability including storage requirements
- 6. Administration devices
- 7. Patient factors
- 8. Expenditure in the therapeutic area and potential for cost savings
- 9. Clinical guidelines
- 10. Robustness of supply to the Irish Market
- 11. Utilisation and clinical experience with the medicinal product
- 12. Any other relevant factors.

The MMP recommends Brabio<sup>®</sup> as the preferred product for glatiramer acetate on the High Tech Arrangement.

Clinicians should give due consideration to prescribing Brabio<sup>®</sup> when issuing a prescription for glatiramer acetate on the High Tech Arrangement. Implementation of this recommendation will lead to significant savings for the health service, in the order of millions of euros.

## 5.1 Consultation process

As part of the evaluation process, the MMP undertook a period of consultation during which submissions were invited from the marketing authorisation holders of Brabio<sup>®</sup> (Mylan) and Copaxone<sup>®</sup> (Teva Pharmaceuticals). The MMP wrote to Mylan and Teva Pharmaceuticals on 1 May 2020, informing them of the MMP's intention to identify a preferred product for glatiramer acetate under the High Tech Arrangement, and inviting submissions from both parties. The closing date for receipt of submissions was 5pm on Friday 5 June 2020. Following a request by one of the parties, the closing date for receipt of submissions was extended until 5pm on Friday 19 June 2020. Both parties were informed of the extension to the closing date.

Two submissions were received during the consultation process. Submissions were received from the following:

- Mylan Ireland
- Teva Pharmaceuticals Ireland

## 6. Evaluation

As of 1 May 2020, there are two medicinal products containing glatiramer acetate available on the High Tech Arrangement:<sup>2</sup>

- Brabio<sup>®</sup>
- Copaxone<sup>®</sup>

Copaxone<sup>®</sup> is the reference medicinal product, and Brabio<sup>®</sup> is licensed as a hybrid form of Copaxone<sup>®</sup>. Both of these medicinal products were included in the evaluation to determine the MMP preferred product for glatiramer acetate under the High Tech Arrangement.

## 6.1 Acquisition cost

The acquisition cost and reimbursement price of the medicinal products containing glatiramer acetate that are available on the High Tech Arrangement as of 1 July 2020 are outlined in table 1.

**Table 1:** Acquisition cost and reimbursement price of medicinal products containing glatiramer acetate available on the High Tech Arrangement as of 1 July 2020<sup>2</sup>

Medicinal Product	Pack size	Reimbursement	Rebate	Acquisition
		Price		Cost
Brabio <sup>®</sup> 20 mg/ml 1ml PFS	28	€641.50	-	€641.50
Brabio <sup>®</sup> 40 mg/ml 1ml PFS	12	€641.50	-	€641.50
Copaxone <sup>®</sup> 20 mg/ml 1ml PFS	28	€916.33	€46.66	€869.67
Copaxone <sup>®</sup> 40 mg/ml 1ml PFS	12	€916.33	€46.66	€869.67

PFS: Pre-filled syringe

Prices correct as of 1 July 2020

Submissions received during the consultation process included revised commercial terms for some of the medicinal products listed above, resulting in significant reductions in the acquisition costs to the HSE.

#### Recommendation

For the 20 mg and 40 mg dosage of glatiramer acetate, Brabio<sup>®</sup> has the lowest acquisition cost to the HSE across all of the proposed revised commercial terms that were contained within submissions received as part of the consultation process.

## 6.2 Therapeutic indications

Brabio<sup>®</sup> and Copaxone<sup>®</sup> are both licensed for the treatment of relapsing forms of MS.<sup>3-5,7</sup> The Summary of Product Characteristics (SmPC) of both medicinal products contain a clear statement that they are not indicated in primary or secondary progressive MS.<sup>3-5,7</sup>

#### Recommendation

In relation to the criterion of therapeutic indications, the MMP is of the opinion that the two medicinal products containing glatiramer acetate that are available on the High Tech Arrangement are equivalent.

#### **6.3 Formulation considerations**

Brabio<sup>®</sup> is formulated as a clear, colourless to slightly yellow/brownish solution for injection in a PFS. The solution for injection is free from visible particles. The solution for injection has a pH of 5.5-7.0 and an osmolarity of about 265 mOsmol/L for the 20 mg/ml solution for injection, and 300 mOsmol/L for the 40 mg/ml solution for injection. One PFS of 20 mg/ml solution for injection contains 20 mg of glatiramer acetate equivalent to 18 mg of glatiramer, and one PFS of 40 mg/ml solution for injection contains 40 mg of glatiramer acetate equivalent to 36 mg of glatiramer.<sup>5,7</sup>

Copaxone<sup>®</sup> is formulated as a clear solution, which is free of visible particles. The solution for injection has a pH of 5.5-7.0 and an osmolarity of about 265 mOsmol/L for the 20 mg/ml solution for injection, and 300 mOsmol/L for the 40 mg/ml solution for injection. One PFS of 20 mg/ml solution for injection contains 20 mg of glatiramer acetate equivalent to 18 mg of glatiramer, and one PFS of 40 mg/ml solution for injection for injection contains 40 mg of glatiramer acetate equivalent to 36 mg of glatiramer.<sup>3,4</sup>

Both Brabio® and Copaxone® contain the following excipients:<sup>3-5,7</sup>

- mannitol
- water for injections

#### Recommendation

In relation to the criterion of formulation considerations, the MMP is of the opinion that the formulations of the two medicinal products containing glatiramer acetate that are available on the High Tech Arrangement are equivalent.

#### 6.4 Product range including pack sizes and strengths available

Table 2 outlines the various presentations of the medicinal products containing glatiramer acetate that are available on the High Tech Arrangement.

**Table 2:** Product range of medicinal products containing glatiramer acetate available on the High

 Tech Arrangement<sup>2</sup>

Medicinal Product	Product range including pack sizes and strengths available on the High Tech Arrangement		
	20 mg/ml 1 ml PFS x 28	40 mg/ml 1 ml PFS x 12	
Brabio®	$\checkmark$	$\checkmark$	
Copaxone®	$\checkmark$	$\checkmark$	

PFS: Pre-filled syringe

Both Brabio<sup>®</sup> and Copaxone<sup>®</sup> are available on the High Tech Arrangement in the 20 mg/ml and 40 mg/ml solution for injection in PFS presentations.

#### Recommendation

In relation to the criterion of product range, the MMP is of the opinion that both medicinal products containing glatiramer acetate that are available on the High Tech Arrangement provide the same offering.

#### 6.5 Product stability including storage requirements

Both presentations of Brabio<sup>®</sup> i.e. 20 mg/ml PFS and 40 mg/ml PFS have a shelf life of three years.<sup>5,7</sup> Copaxone<sup>®</sup> 20 mg/ml PFS has a shelf life of three years while Copaxone<sup>®</sup> 40 mg/ml PFS has a shelf life of two years.<sup>3,4</sup> Both Brabio<sup>®</sup> and Copaxone<sup>®</sup> must be stored in a refrigerator between 2°C and 8°C, and should not be frozen.<sup>3-5,7</sup>

The SmPCs of Brabio<sup>®</sup> and Copaxone<sup>®</sup> both state that if the PFS cannot be stored in a refrigerator, then they can be stored between 15°C and 25°C, once for up to one month. After this one-month period, if Brabio<sup>®</sup> or Copaxone<sup>®</sup> PFS have not been used and are still in their original packaging, they must be returned to storage in a refrigerator (2°C to 8°C). The SmPCs for both medicinal products also state that the PFS must be stored in their original packaging in order to protect from light.<sup>3-5,7</sup>

#### Recommendation

In relation to the criterion of product stability, the MMP is of the opinion that Brabio<sup>®</sup> is the preferred product due to the additional year of shelf life for the 40 mg/ml solution for injection in PFS presentation.

#### 6.6 Administration devices

Both medicinal products containing glatiramer acetate that are available on the High Tech Arrangement are available in a PFS. Table 3 provides a summary of various properties for the administration devices of the medicinal products containing glatiramer acetate that are available on the High Tech Arrangement.

	Brabio <sup>®</sup> PFS	Copaxone <sup>®</sup> PFS
Needle gauge <sup>†</sup>	29	29
Latex-containing	No	No
Safety features	No	No
Availability of autoinjector	Yes (MjJECT device)	Yes (CSYNC device)

**Table 3:** Characteristics of administration devices for medicinal products containing glatiramer

 acetate available on the High Tech Arrangement

PFS: Pre-filled syringe

<sup>†</sup>A higher needle gauge is indicative of a smaller bore size for the needle i.e. a thinner needle.

From examination of the patient information leaflets (PIL), SmPCs and submissions received for each of the medicinal products containing glatiramer acetate, there appears to be little difference between the various administration devices. Both medicinal products are presented in the form of PFS. Both also have a 29-gauge needle. There is no latex present in either of the medicinal products, therefore they can both be used in patients with a latex allergy. Neither of the products include a safety feature upon administration of the injection. The marketing authorisation holders of both medicinal products provide access to reusable autoinjectors for use with their medicinal products. Both autoinjectors permit patients to adjust the needle length and therefore, the needle depth for administration. Both autoinjectors also include audible indicators and an indicator window, which help the patient to know how long to keep the needle under the skin, in order to ensure complete administration of the dose of glatiramer acetate.

The instructions within each of the PILs for the administration of a dose from the PFS presentations of medicinal products containing glatiramer acetate are clear and easy to follow. In all cases, the instructions are presented in the form of text with accompanying pictograms.

#### Recommendation

In relation to the criterion of administration devices, the MMP is of the opinion that both medicinal products containing glatiramer acetate that are available on the High Tech Arrangement provide the same offering.

#### 6.7 Patient factors

Mylan Ireland and Teva Pharmaceuticals Ireland outlined the support services that are available to patients when they are prescribed the medicinal product containing glatiramer that they market.<sup>13,14</sup>

One study was identified that assessed the role of patient support services on adherence rates in patients using glatiramer acetate for relapsing-remitting MS. It investigated predictors of achievement of 80% medication possession ratio (MPR; a measure to quantify adherence) in patients enrolled in a manufacturer-provided patient support programme. A total of 5,825 patients met the study inclusion criteria. Approximately 70% of the study cohort received manufacturer-provided injection training, and 75% were eligible for, and utilised, co-payment assistance. 74.3% of patients who utilised one or more aspect of the patient support service attained the optimal adherence rate, defined as a MPR  $\geq$  80%. Statistically significant differences were demonstrated in the rates at which patients attained the optimal adherence rate if they used the manufacturer-provided injection training (p < 0.001) and when they had greater number of contacts with the nursing support service (p = 0.017). Patients who utilised

manufacturer-provided injection training were 40% more likely to attain the optimal adherence rate (p < 0.001). This study had a number of limitations; it was cross-sectional in nature, looking only at a single cohort of patients. The study did not assess which of the many interventions that the nurses may have provided to the patients, and whether benefit accrued to some interventions compared to others. The study was funded by Teva Pharmaceuticals, and all investigators were employees were of Teva Pharmaceuticals. No investigators external to Teva Pharmaceuticals were involved in any aspect of the study.<sup>15</sup>

The MMP did not identify any published evidence that compared the patient support programmes/services that are offered by the marketing authorisation holders of Brabio<sup>®</sup> and Copaxone<sup>®</sup>.

A number of studies were identified which investigated the impact of patient support programmes on patients who have been prescribed medicines for the treatment of MS, aside from glatiramer acetate. A survey of patients in Germany in receipt of the manufacturer-provided patient support programme for Betaferon<sup>®</sup> concluded that patients with MS place inherent value on these programmes, and that they improve self-reported measures of health status across early-to-middle stages of MS.<sup>16</sup>

A retrospective audit of patients in the Republic of Ireland in receipt of the manufacturer-provided patient support programme for Betaferon<sup>®</sup> showed that a greater proportion of patients in receipt of the patient support programme were on treatment at 12 and 24 months when compared to a control group of patients in the United Kingdom (UK) who were only in receipt of support from the National Health Service (NHS), and were not enrolled in the programme. The odds of being on treatment were significantly greater, at all times, for patients in the Republic of Ireland who were in receipt of the patient support programme, when compared with patients in the UK who were in receipt of NHS support only. The audit was supported by the manufacturers of Betaferon<sup>®</sup> (Merck Serono Ltd), and one of the authors was an employee of Merck Serono Ltd at the time of manuscript preparation.<sup>17</sup>

RediQoL was a phase IV multicentre randomised study to assess the impact of a telemedicine patientsupport programme on health-related quality of life in patients with relapsing-remitting MS who were being administered Rebif<sup>®</sup> with the RebiSmart<sup>®</sup> device. Patients (n = 93) were randomised to the telemedicine patient support programme (n = 46) or to technical support only (n = 47). No statistically significant difference was observed in the primary endpoint, which was to assess the impact on healthrelated quality of life at 12 months of the telemedicine patient support programme compared to those

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patients only receiving technical support for the RebiSmart<sup>®</sup> device. There was a trend towards better adherence in the cohort of patients in receipt of the telemedicine patient support programme, but this was not statistically significant. This study was funded by the manufacturers of Rebif<sup>®</sup> (Merck AB), and one of the authors was an employee of Merck AB.<sup>18</sup>

A non-interventional, prospective, cross-sectional multi-centre study evaluated whether patient support programmes had a positive impact on adherence to DMTs among patients with mild-to-moderate relapsing-remitting MS in Germany. One hundred and eighty-four patients were analysed as part of the study; adherence across DMTs (defined as not missing a single dose during a 24-week observation period) was significantly higher for patient support programme participants (92.9%) compared with non-participants (61.8%) (p = 0.0197). The observed rate of participation in patient support programmes (7.6%) was significantly lower than reported in previous studies (p < 0.0001). This study was only available in abstract form.<sup>19</sup>

READER was a single-arm, observational, retrospective audit that assessed adherence to Rebif<sup>®</sup> injections in patient with MS using data from RebiSmart<sup>®</sup>. As part of the baseline characteristics, the audit recorded if the patients were in receipt of any elements of the Rebif<sup>®</sup> patient support programme, MySupport. Subgroup analyses showed that there were no significant differences in mean adherence at 12 or 24 months for patients registered with MySupport services (96.2% and 95.6%) compared with those not registered for MySupport (95.6% and 94.0%). It is probable that patients who are more likely to persist with treatment are also more likely to adhere to treatment. The audit only included patients who were classified as persistent for two years, so may be representative of a more motivated subgroup of patients compared with those who discontinued before this time point. This may have reduced the ability of the audit to detect differences in adherence between patients who were receiving enhanced support compared with those who were not.<sup>20</sup>

Overall, the evidence supporting the benefits of manufacturer-provided patient support programmes for patients who are prescribed medicines for the treatment of MS is limited and of low-quality.

The offerings that are available to patients who are prescribed Brabio<sup>®</sup> or Copaxone<sup>®</sup> are all similar in nature, based on the information provided to the MMP as part of the consultation process. No robust clinical evidence was identified by the MMP that compared patient support services with each other.

#### Recommendation

In relation to the criterion of patient factors, the MMP is of the opinion that the patient support services offered by Mylan Ireland and Teva Pharmaceuticals Ireland are similar in nature.

#### 6.8 Expenditure in the therapeutic area and potential for cost savings

Expenditure<sup>ii</sup> on medicinal products containing glatiramer acetate accounted for approximately €7.5 million in 2019.<sup>1</sup> Glatiramer acetate was ranked 17<sup>th</sup> in terms of prescribing frequency on the High Tech Arrangement in 2017, with a prescribing frequency of 9,559.<sup>10</sup> There are approximately 640 patients in receipt of glatiramer acetate on the High Tech Arrangement on a monthly basis.<sup>11</sup>

The Framework Agreement on the Supply and Pricing of Medicines (2016) contains a number of clauses in relation to the pricing of patent-expired medicines and biological medicines on loss of exclusive supply. Clause 7 applies to patent-expired medicines (other than biological medicines) in respect of which a generic medicine is available for supply. In relation to price reductions, clause 7.1.2 states that the price of a medicine which becomes a patent-expired non-exclusive medicine after 1<sup>st</sup> August 2016 shall reduce to 50% of the original ex-factory price of that medicine. Clause 8 applies to patent-expired biological medicines for which a biosimilar medicine is available for supply. Clause 8.1.2 states that the price of a biological medicine which becomes a patent-expired non-exclusive biological medicine after 1<sup>st</sup> August 2016 shall reduce to 50% of the original ex-factory price of that medicine. Clause 8 applies to patent-expired biological medicines for which a biosimilar medicine is available for supply. Clause 8.1.2 states that the price of a biological medicine which becomes a patent-expired non-exclusive biological medicine after 1<sup>st</sup> August 2016 shall reduce to 80% of the ex-factory price of that biological medicine as of the 31<sup>st</sup> July 2016. In addition to this price reduction, clause 8.1.3 states that a rebate of 12.5% to the HSE is applied to the patent-expired, non-exclusive biological medicine.<sup>21</sup>

There has been no reduction in the price of Copaxone<sup>®</sup> following the addition of Brabio<sup>®</sup> to the High Tech Arrangement.

The current acquisition costs of medicinal products containing glatiramer acetate as of 1 July 2020 are outlined in Table 1. The acquisition costs of Brabio<sup>®</sup> 20 mg/ml PFS and 40 mg/PFS are less than that of Copaxone<sup>®</sup> 20 mg/ml PFS and 40 mg/ml PFS respectively, therefore efficiencies can be achieved through the prescribing and utilisation of Brabio<sup>®</sup> on the High Tech Arrangement. Data from the HSE-Primary Care Eligibility & Reimbursement Service (PCERS) indicates that there is negligible usage of Brabio<sup>®</sup> in 2019 and 2020 (to date).<sup>11</sup> Any additional savings that could have been achieved through the use of Brabio<sup>®</sup>, which has a lower acquisition cost than Copaxone<sup>®</sup>, have not been realised.

<sup>&</sup>lt;sup>ii</sup> Expenditure reflects the ingredient cost of the medicinal product, exclusive of value added tax and fees.

Submissions received during the consultation process included revised commercial terms for some of the medicinal products listed above, resulting in significant reductions in the acquisition costs to the HSE.

#### Recommendation

In relation to the criterion of expenditure in the therapeutic area and potential for cost savings, the MMP is of the opinion that Brabio<sup>®</sup> is the preferred product due to the potential for significant cost savings based on the revised commercial terms proposed in the submissions received as part of the consultation process.

#### 6.9 Clinical guidelines

There is currently no national clinical guideline available in Ireland for the treatment of MS.

#### Recommendation

In relation to the criterion of clinical guidelines, no relevant information was identified by the MMP.

#### 6.10 Robustness of supply to Irish Market

Mylan Ireland and Teva Pharmaceuticals Ireland both outlined the processes that they have in place for supply of their medicinal product containing glatiramer acetate to the Irish market.

Mylan Ireland outlined the distribution model that they have in place nationally for Brabio<sup>®</sup>. They also outlined the arrangements that they have in place to ensure sufficient supply of Brabio<sup>®</sup> to the Irish market, including internal processes. Mylan Ireland also outlined the systems that they have in place for supply of other medicines that they market in Ireland, and the actions that they have taken to deal with Brexit.<sup>13</sup>

Teva Pharmaceuticals Ireland outlined the arrangements that they have in place for the supply chain management of Copaxone<sup>®</sup> to the Irish market, including the distribution model that they employ. They also outlined the proactive measures that they have undertaken in relation to Brexit.<sup>14</sup>

#### Recommendation

In relation to the criterion of robustness of supply to the Irish market, the MMP is of the opinion that Mylan Ireland and Teva Pharmaceuticals Ireland have both provided evidence of their capacity to meet the ongoing needs of Irish patients with respect to the supply of medicinal products containing glatiramer acetate, including the measures they are taking to mitigate the impact of Brexit.

#### 6.11 Utilisation and clinical experience with the medicinal product

There is significant clinical experience with the use of Copaxone<sup>®</sup> in the Irish setting, with approximately 640 patients in receipt of Copaxone<sup>®</sup> on the High Tech Arrangement on a monthly basis.<sup>11</sup> Brabio<sup>®</sup> 20 mg/ml solution for injection PFS was added to the High Tech Arrangement in February 2018, and the 40 mg/ml solution for injection PFS was added in March 2018.<sup>9</sup>

The uptake of Brabio<sup>®</sup> in Ireland to date is negligible, with only a handful of patients receiving this medicinal product on the High Tech Arrangement in 2019 and 2020 (to date).<sup>11</sup>

Other healthcare systems have seen significant uptake in the utilisation of hybrid versions of glatiramer acetate, including The Netherlands and Norway.

Brabio<sup>®</sup> is licensed as a hybrid medicinal product i.e. following evaluation, Brabio<sup>®</sup> was considered a legitimate hybrid form of the reference product, Copaxone<sup>®</sup>, and was granted a marketing authorisation.<sup>6,8</sup> This evaluation included demonstration of equivalence of Brabio<sup>®</sup> with the reference product in a clinical study, the GATE trial. This multicentre, phase III trial consisted of a nine-month, double-blind, randomised, active and placebo-controlled initial phase comparing the efficacy, safety and tolerability of glatiramer acetate (Mylan)<sup>iii</sup> 20 mg/ml solution for injection, Copaxone<sup>®</sup> 20 mg/ml solution for injection and placebo in subjects with relapsing-remitting MS, followed by a 15-month open-label glatiramer acetate (Mylan) treatment phase.<sup>22,23</sup> The initial nine-month study demonstrated equivalent efficacy, safety and tolerability for glatiramer acetate (Mylan) and Copaxone<sup>®</sup> in patients with relapsing-remitting MS who were glatiramer treatment-naïve.<sup>22</sup> All patients completing the double-blind phase of the GATE trial on assigned treatment were eligible to continue into the 15-month open-label extension on glatiramer acetate (Mylan) treatment. This part of the study demonstrated the efficacy, safety, and tolerability of prolonged glatiramer acetate (Mylan) treatment, and that switching from Copaxone<sup>®</sup> to glatiramer acetate (Mylan) could be performed without impacting safety and efficacy.<sup>23</sup>

Results of the GATE trial formed part of the basis of the applications for both Brabio<sup>®</sup> products as legitimate hybrid forms of Copaxone<sup>®</sup>.<sup>6,8</sup> The MMP are, therefore, of the opinion that the clinical experience obtained with Copaxone<sup>®</sup> is transferable to Brabio<sup>®</sup>.

<sup>&</sup>lt;sup>iii</sup> Glatiramer acetate (Mylan) was subsequently issued a marketing authorisation under the trade name Brabio<sup>®</sup>.

#### Recommendation

The MMP acknowledge the significant clinical experience that has been obtained in Ireland with Copaxone<sup>®</sup>. Brabio<sup>®</sup>, which was licensed as a legitimate hybrid form of the reference product Copaxone<sup>®</sup>, was added to the High-Tech Arrangement in 2018 and uptake to date in Ireland is negligible. There has been significant uptake of the licensed hybrid medicine of glatiramer acetate in other European countries. This demonstrates that significant clinical experience is being obtained for this medicinal product.

Overall, in relation to the criterion of utilisation and clinical experience with the medicinal product, the MMP is of the opinion that both medicinal products containing glatiramer acetate that are available on the High Tech Arrangement provide a similar offering.

#### 6.12 Any other relevant factors

Information in relation to real-world utilisation of medicinal products containing glatiramer acetate was submitted under this criterion.

#### Recommendation

In relation to the criterion of any other relevant factors, the MMP is of the opinion that no new relevant material was submitted under this criterion that had not been considered under one of the other criteria.

## **Overall Recommendation**

The MMP recommends Brabio<sup>®</sup> as the preferred product for glatiramer acetate on the High Tech Arrangement.

## 7. MMP Recommendations

The MMP recommends Brabio<sup>®</sup> as the preferred product for glatiramer acetate on the High Tech Arrangement.

Clinicians should give due consideration to prescribing Brabio<sup>®</sup> when issuing a prescription for glatiramer acetate on the High Tech Arrangement.

Implementation of this recommendation will lead to significant savings for the health service, in the order of millions of euros.



Switching Patients currently on Copaxone® should be considered for switching to Brabio® when their next repeat High Tech prescription is being issued.

The MMP recommends that all new patients being initiated on a medicinal product containing glatiramer acetate should be prescribed the MMP preferred product Brabio<sup>®</sup>. Patients currently on Copaxone<sup>®</sup> should be considered for switching to Brabio<sup>®</sup> when their next repeat High Tech prescription is being issued.

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