ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Trelegy Ellipta 92 micrograms/55 micrograms/22 micrograms inhalation powder, pre-dispensed

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each single inhalation provides a delivered dose (the dose leaving the mouthpiece) of 92 micrograms fluticasone furoate, 65 micrograms umeclidinium bromide equivalent to 55 micrograms umeclidinium and 22 micrograms vilanterol (as trifenatate). This corresponds to a pre-dispensed dose of 100 micrograms fluticasone furoate, 74.2 micrograms umeclidinium bromide equivalent to 62.5 micrograms umeclidinium and 25 micrograms vilanterol (as trifenatate).

Excipient with known effect

Each delivered dose contains approximately 25 mg of lactose monohydrate.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Inhalation powder, pre-dispensed (inhalation powder)

White powder in a light grey inhaler (Ellipta) with a beige mouthpiece cover and a dose counter.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Trelegy Ellipta is indicated as a maintenance treatment in adult patients with moderate to severe chronic obstructive pulmonary disease (COPD) who are not adequately treated by a combination of an inhaled corticosteroid and a long-acting β 2-agonist or a combination of a long-acting β 2-agonist and a long-acting muscarinic antagonist (for effects on symptom control and prevention of exacerbations see section 5.1).

4.2 Posology and method of administration

Posology

The recommended and maximum dose is one inhalation once daily, each day at the same time.

If a dose is missed the next dose should be inhaled at the usual time the next day.

Special populations

<u>Elderly</u>

No dose adjustment is required in patients 65 years of age or older (see section 5.2).

Renal impairment

No dose adjustment is required in patients with renal impairment (see section 5.2).

Hepatic impairment

No dose adjustment is required in patients with mild, moderate or severe hepatic impairment. Trelegy Ellipta should be used with caution in patients with moderate to severe hepatic impairment (see sections 4.4 and 5.2).

Paediatric population

There is no relevant use of Trelegy Ellipta in the paediatric population (under 18 years of age) for the indication of COPD.

Method of administration

For inhalation use only.

Instructions for use:

The following instructions for the 30 dose (30 day supply) inhaler also apply to the 14 dose (14 day supply) inhaler.

a) Prepare a dose

Open the cover when ready to inhale a dose. The inhaler should not be shaken.

Slide the cover down fully until a "click" is heard. The medicinal product is now ready to be inhaled.

The dose counter counts down by 1 to confirm. If the dose counter does not count down as the "click" is heard, the inhaler will not deliver a dose and should be taken back to a pharmacist for advice.

b) How to inhale the medicinal product

The inhaler should be held away from the mouth breathing out as far as is comfortable, but not breathing out into the inhaler.

The mouthpiece should be placed between the lips and the lips should then be closed firmly around it. The air vents should not be blocked with fingers during use.

- Inhale with one long, steady, deep breath in. This breath should be held in for as long as possible (at least 3-4 seconds).
- Remove the inhaler from the mouth.
- Breathe out slowly and gently.

The medicinal product may not be tasted or felt, even when using the inhaler correctly.

The mouthpiece of the inhaler may be cleaned using a dry tissue before closing the cover.

c) Close the inhaler and rinse your mouth

Slide the cover upwards as far as it will go, to cover the mouthpiece.

Rinse your mouth with water after you have used the inhaler, do not swallow.

This will make it less likely to develop a sore mouth or throat as side effects.

For further instructions on handling the device, see section 6.6.

4.3 Contraindications

Hypersensitivity to the active substances or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

Asthma

This medicinal product should not be used in patients with asthma since it has not been studied in this patient population.

Not for acute use

There are no clinical data to support the use of Trelegy Ellipta for the treatment of acute episodes of bronchospasm, or to treat an acute COPD exacerbation (i.e. as a rescue therapy).

Deterioration of disease

Increasing use of short-acting bronchodilators to relieve symptoms may indicate deterioration of disease control. In the event of deterioration of COPD during treatment with Trelegy Ellipta, a re-evaluation of the patient and of the COPD treatment regimen should be undertaken.

Patients should not stop therapy with Trelegy Ellipta without physician supervision since symptoms may recur after discontinuation.

Paradoxical bronchospasm

Administration of fluticasone furoate/umeclidinium/vilanterol may produce paradoxical bronchospasm with an immediate wheezing and shortness of breath after dosing and may be life-threatening. If paradoxical bronchospasm occurs, treatment should be discontinued immediately. The patient should be assessed and alternative therapy instituted if necessary.

Cardiovascular effects

Cardiovascular effects, such as cardiac arrhythmias, e.g. atrial fibrillation and tachycardia, may be seen after the administration of muscarinic receptor antagonists and sympathomimetics, including umeclidinium and vilanterol, respectively (see section 4.8). Therefore, Trelegy Ellipta should be used with caution in patients with unstable or life-threatening cardiovascular disease.

Patients with hepatic impairment

Patients with moderate to severe hepatic impairment receiving Trelegy Ellipta should be monitored for systemic corticosteroid-related adverse reactions (see section 5.2).

Systemic corticosteroid effects

Systemic effects may occur with any inhaled corticosteroid, particularly at high doses prescribed for long periods. These effects are much less likely to occur than with oral corticosteroids.

Visual disturbance

Visual disturbance may be reported with systemic and topical corticosteroid use. If a patient presents with symptoms such as blurred vision or other visual disturbances, the patient should be considered for referral to an ophthalmologist for evaluation of possible causes which may include cataract, glaucoma or rare diseases such as central serous chorioretinopathy (CSCR) which have been reported after use of systemic and topical corticosteroids.

Coexisting conditions

Trelegy Ellipta should be used with caution in patients with convulsive disorders or thyrotoxicosis, and in patients who are unusually responsive to beta₂-adrenergic agonists.

Trelegy Ellipta should be administered with caution in patients with pulmonary tuberculosis or in patients with chronic or untreated infections.

Anticholinergic activity

Trelegy Ellipta should be used with caution in patients with narrow-angle glaucoma or urinary retention. Patients should be informed about the signs and symptoms of acute narrow-angle glaucoma and should be informed to stop using Trelegy Ellipta and to contact their doctor immediately should any of these signs or symptoms develop.

Pneumonia in patients with COPD

An increase in the incidence of pneumonia, including pneumonia requiring hospitalisation, has been observed in patients with COPD receiving inhaled corticosteroids. There is some evidence of an increased risk of pneumonia with increasing steroid dose but this has not been demonstrated conclusively across all studies.

There is no conclusive clinical evidence for intra-class differences in the magnitude of the pneumonia risk among inhaled corticosteroid products.

Physicians should remain vigilant for the possible development of pneumonia in patients with COPD as the clinical features of such infections overlap with the symptoms of COPD exacerbations.

Risk factors for pneumonia in patients with COPD include current smoking, older age, low body mass index (BMI) and severe COPD.

Hypokalaemia

Beta₂-adrenergic agonists may produce significant hypokalaemia in some patients, which has the potential to produce adverse cardiovascular effects. The decrease in serum potassium is usually transient, not requiring supplementation.

No clinically relevant effects of hypokalaemia were observed in clinical studies with Trelegy Ellipta at the recommended therapeutic dose. Caution should be exercised when Trelegy Ellipta is used with other medicinal products that also have the potential to cause hypokalaemia (see section 4.5).

Hyperglycaemia

Beta₂-adrenergic agonists may produce transient hyperglycaemia in some patients. No clinically relevant effects on plasma glucose were observed in clinical studies with fluticasone furoate/umeclidinium/vilanterol at the recommended therapeutic dose. There have been reports of increases in blood glucose levels in diabetic patients treated with fluticasone furoate/umeclidinium/vilanterol and this should be considered when prescribing to patients with a history of diabetes mellitus. Upon initiation of treatment with Trelegy Ellipta, plasma glucose should be monitored more closely in diabetic patients.

Excipients

This medicinal product contains lactose. Patients with rare hereditary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption should not use this medicinal product.

4.5 Interaction with other medicinal products and other forms of interaction

Clinically significant drug interactions mediated by fluticasone furoate/umeclidinium/vilanterol at clinical doses are considered unlikely due to the low plasma concentrations achieved after inhaled dosing.

Interaction with beta-blockers

Beta₂-adrenergic blockers may weaken or antagonise the effect of beta₂-adrenergic agonists, such as vilanterol. If beta-blockers are required, cardioselective beta-blockers should be considered, however, caution should be exercised during concurrent use of both non-selective and selective beta-blockers.

Interaction with CYP3A4 inhibitor

Fluticasone furoate and vilanterol are rapidly cleared by extensive first pass metabolism mediated by enzyme CYP3A4.

Caution is advised when co-administering with strong CYP3A4 inhibitors (e.g. ketoconazole, ritonavir, cobicistat-containing products) as there is potential for increased systemic exposure to both fluticasone furoate and vilanterol, which could lead to an increased potential for adverse reactions. Co-administration should be avoided unless the benefit outweighs the increased risk of systemic corticosteroid adverse reactions, in which case patients should be monitored for systemic corticosteroid adverse reactions. A repeat dose study was performed in healthy subjects with the fluticasone furoate/vilanterol combination (184/22 micrograms) and ketoconazole (400 milligrams, a strong CYP3A4 inhibitor). Co-administration increased mean fluticasone furoate AUC₍₀₋₂₄₎ and C_{max} by 36% and 33%, respectively. The increase in fluticasone furoate exposure was associated with a 27% reduction in 0-24 hours weighted mean serum cortisol. Co-administration increased mean vilanterol AUC_(0-t) and C_{max} by 65% and 22%, respectively. The increase in vilanterol exposure was not associated with an increase in beta₂-agonist related systemic effects on heart rate or blood potassium.

Interaction with CYP2D6 inhibitors/CYP2D6 polymorphism

Umeclidinium is a substrate of cytochrome P450 2D6 (CYP2D6). The steady-state pharmacokinetics of umeclidinium was assessed in healthy volunteers lacking CYP2D6 (poor metabolisers). No effect on umeclidinium AUC or C_{max} was observed at a dose 8-fold higher than the therapeutic dose. An approximately 1.3-fold increase in umeclidinium AUC was observed at 16-fold higher dose with no effect on umeclidinium C_{max} . Based on the magnitude of these changes, no clinically relevant drug interaction is expected when fluticasone furoate/umeclidinium/vilanterol is co-administered with CYP2D6 inhibitors or when administered to patients who are genetically deficient in CYP2D6 activity (poor metabolisers).

Interaction with P-glycoprotein inhibitors

Fluticasone furoate, umeclidinium and vilanterol are substrates of the P-glycoprotein transporter (P-gp). The effect of the moderate P-gp inhibitor verapamil (240 mg once daily) on the steady-state pharmacokinetics of umeclidinium and vilanterol was assessed in healthy volunteers. No effect of verapamil was observed on umeclidinium or vilanterol C_{max}. An approximately 1.4-fold increase in umeclidinium AUC was observed with no effect on vilanterol AUC. Based on the magnitude of these changes, no clinically relevant drug interaction is expected when fluticasone furoate/umeclidinium/vilanterol is co-administered with P-gp inhibitors. Clinical pharmacology studies with a specific P-gp inhibitor and fluticasone furoate have not been conducted.

Other long acting antimuscarinics and long acting beta2- adrenergic agonists

Co-administration of Trelegy Ellipta with other long-acting muscarinic antagonists or long-acting beta₂-adrenergic agonists has not been studied and is not recommended as it may potentiate the adverse reactions (see sections 4.8 and 4.9).

Hypokalaemia

Concomitant hypokalaemic treatment with methylxanthine derivatives, steroids, or non-potassium-sparing diuretics may potentiate the possible hypokalaemic effect of beta₂-adrenergic agonists, therefore caution should be exercised (see section 4.4).

4.6 Fertility, pregnancy and lactation

Pregnancy

There are limited data from the use of fluticasone furoate/umeclidinium/vilanterol in pregnant women. Studies in animals have shown reproductive toxicity at exposures which are not clinically relevant (see section 5.3).

Administration of Trelegy Ellipta to pregnant women should only be considered if the expected benefit to the mother justifies the potential risk to the foetus.

Breast-feeding

It is unknown whether fluticasone furoate, umeclidinium, vilanterol or their metabolites are excreted in human milk. However, other corticosteroids, muscarinic antagonists and beta₂-adrenergic agonists are detected in human milk. A risk to newborns/infants cannot be excluded. A decision must be made whether to discontinue breast-feeding or to discontinue Trelegy Ellipta therapy taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman.

Fertility

There are no data on the effects of fluticasone furoate/umeclidinium/vilanterol on human fertility. Animal studies indicate no effects of fluticasone furoate, umeclidinium or vilanterol on male or female fertility (see section 5.3).

4.7 Effects on ability to drive and use machines

Fluticasone furoate/umeclidinium/vilanterol has no or negligible influence on the ability to drive and use machines.

4.8 Undesirable effects

Summary of the safety profile

The most frequently reported adverse reactions are nasopharyngitis (7%), headache (5%) and upper respiratory tract infection (2%).

Tabulated list of adverse reactions

The safety profile of Trelegy Ellipta is based on three phase III clinical studies and spontaneous reporting.

Where adverse reaction frequencies differed between studies, the higher frequency is reported below.

Adverse reactions are listed by MedDRA system organ class.

The frequency of adverse reactions is defined using the following convention: very common ($\geq 1/10$); common ($\geq 1/100$ to < 1/10); uncommon ($\geq 1/1,000$ to < 1/100); rare ($\geq 1/10,000$ to < 1/1,000); very rare (< 1/10,000) and not known (cannot be estimated from available data).

System Organ Class	Adverse reactions	Frequency	
Infections and infestations	Pneumonia	Common	
infections and infestations	Upper respiratory tract infection	Common	
	Bronchitis		
	Pharyngitis		
	Rhinitis		
	Sinusitis		
	Influenza		
	Nasopharyngitis		
	Candidiasis of mouth and throat		
	Urinary tract infection		
	Viral respiratory tract infection	Uncommon	
Immune system disorders	Hypersensitivity reactions, including	Rare	
,	anaphylaxis, angioedema, urticaria, and		
	rash		
Nervous system disorders	Headache	Common	
	Dysgeusia	Uncommon	
Eye disorders	Vision blurred (see section 4.4)	Uncommon	
	Glaucoma		
	Eye pain		
	Intraocular pressure increased	Rare	
Cardiac disorders	Supraventricular tachyarrhythmia	Uncommon	
	Tachycardia		
	Atrial fibrillation		
Respiratory, thoracic &	Cough	Common	
mediastinal disorders	Oropharyngeal pain		
	Dysphonia	Uncommon	
Gastrointestinal disorders	Constipation	Common	
	Dry mouth	Uncommon	
Musculoskeletal and	Arthralgia	Common	
connective tissue disorders	Back pain		
	Fractures	Uncommon	

Description of selected adverse reactions

Pneumonia

In a total of 1810 patients with advanced COPD (mean post-bronchodilator screening FEV₁ 45% of predicted, standard deviation (SD) 13%), 65% of whom had experienced a moderate/severe COPD exacerbation in the year prior to study entry (study CTT116853), there was a higher incidence of pneumonia events reported up to 24 weeks in patients receiving Trelegy Ellipta (20 patients, 2%) than in patients receiving budesonide/formoterol (7 patients, <1%). Pneumonia which required hospitalisation occurred in 1% of patients receiving Trelegy Ellipta and <1% of patients receiving budesonide/formoterol up to 24 weeks. One fatal case of pneumonia was reported in a patient who received Trelegy Ellipta. In the subset of 430 patients treated for up to 52 weeks, the incidence of pneumonia events reported in both Trelegy Ellipta and budesonide/formoterol arms was equal at 2%. The incidence of pneumonia with Trelegy Ellipta is comparable with that observed in the fluticasone furoate/vilanterol (FF/VI) 100/25 arm of FF/VI clinical studies in COPD.

In a 52-week study, with a total of 10,355 patients with COPD and a history of moderate or severe exacerbations within the prior 12 months (mean post-bronchodilator screening FEV_1 46% of predicted, SD 15%) (study CTT116855), the incidence of pneumonia was 8% (317 patients) for Trelegy Ellipta (n = 4,151), 7% (292 subjects) for fluticasone furoate/vilanterol (n = 4,134), and 5% (97 subjects) for umeclidinium/vilanterol (n = 2,070). Fatal pneumonia occurred in 12 of 4,151 patients (3.5 per 1,000 patient-

years) receiving Trelegy Ellipta, 5 of 4,134 patients (1.7 per 1,000 patient-years) receiving fluticasone furoate/vilanterol, and 5 of 2,070 patients (2.9 per 1,000 patient-years) receiving umeclidinium/vilanterol.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in <u>Appendix V</u>.

4.9 Overdose

An overdose will likely produce signs, symptoms or adverse reactions associated with the individual components' pharmacological actions (e.g. Cushing's syndrome, Cushingoid features, adrenal suppression, decrease in bone mineral density, dry mouth, visual accommodation disturbances, tachycardia, arrhythmias, tremor, headache, palpitations, nausea, hyperglycaemia and hypokalaemia).

There is no specific treatment for an overdose with Trelegy Ellipta. If overdose occurs, the patient should be treated supportively with appropriate monitoring as necessary.

Cardioselective beta-blockade should only be considered for profound vilanterol overdose effects that are clinically concerning and unresponsive to supportive measures. Cardioselective beta-blocking medicinal products should be used with caution in patients with a history of bronchospasm.

Further management should be clinically indicated or as recommended by the national poisons centre, where available.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Drugs for obstructive airway diseases, adrenergics in combination with anticholinergics including triple combinations with corticosteroids, ATC code: R03AL08.

Mechanism of action

Fluticasone furoate/umeclidinium/vilanterol is a combination of inhaled synthetic corticosteroid, long-acting muscarinic receptor antagonist and long-acting beta₂-adrenergic agonist (ICS/LAMA/LABA). Following oral inhalation, umeclidinium and vilanterol act locally on airways to produce bronchodilation by separate mechanisms and fluticasone furoate reduces inflammation.

Fluticasone furoate

Fluticasone furoate is a corticosteroid with potent anti-inflammatory activity. The precise mechanism through which fluticasone furoate affects COPD symptoms is not known. Corticosteroids have been shown to have a wide range of actions on multiple cell types (e.g. eosinophils, macrophages, lymphocytes) and mediators (e.g. cytokines and chemokines) involved in inflammation.

Umeclidinium

Umeclidinium is a long-acting muscarinic receptor antagonist (also referred to as an anticholinergic). Umeclidinium exerts its bronchodilatory activity by competitively inhibiting the binding of acetylcholine with muscarinic receptors on airway smooth muscle. It demonstrates slow reversibility at the human M3 muscarinic receptor subtype *in vitro* and a long duration of action *in vivo* when administered directly to the lungs in pre-clinical models.

Vilanterol

Vilanterol is a selective long-acting, beta₂-adrenergic receptor agonist (LABA). The pharmacologic effects of

beta₂-adrenergic agonists, including vilanterol, are at least in part attributable to stimulation of intracellular adenylate cyclase, the enzyme that catalyses the conversion of adenosine triphosphate (ATP) to cyclic-3',5'-adenosine monophosphate (cyclic AMP). Increased cyclic AMP levels cause relaxation of bronchial smooth muscle and inhibition of release of mediators of immediate hypersensitivity from cells, especially from mast cells.

Pharmacodynamic effects

Cardiac electrophysiology

The effect of fluticasone furoate/umeclidinium/vilanterol on the QT interval has not been evaluated in a thorough QT (TQT) study. TQT studies for FF/VI and umeclidinium/vilanterol (UMEC/VI) did not show clinically relevant effects on QT interval at clinical doses of FF, UMEC and VI.

No clinically relevant effects on the QTc interval were observed on review of centrally read ECGs from 911 subjects with COPD exposed to fluticasone furoate/umeclidinium/vilanterol for up to 24 weeks, or in the subset of 210 subjects exposed for up to 52 weeks.

Clinical efficacy and safety

The efficacy of Trelegy Ellipta (92/55/22 micrograms), administered as a once-daily treatment, has been evaluated in patients with a clinical diagnosis of COPD in two, active-controlled studies and in a single, non-inferiority study. All three studies were multicentre, randomised, double-blind studies that required patients to be symptomatic with a COPD Assessment Test (CAT) score ≥10 and on daily maintenance treatment for their COPD for at least three months prior to study entry.

FULFIL (CTT116853) was a 24-week study (N=1,810), with an extension up to 52 weeks in a subset of subjects (n=430), that compared Trelegy Ellipta (92/55/22 micrograms) with budesonide/formoterol 400/12 micrograms (BUD/FOR) administered twice-daily. At screening, the mean post-bronchodilator percent predicted FEV₁ was 45% and 65% of patients reported a history of one or more moderate/severe exacerbation in the past year.

IMPACT (CTT116855) was a 52-week study (N=10,355) that compared Trelegy Ellipta (92/55/22 micrograms) with fluticasone furoate/vilanterol 92/22 micrograms (FF/VI) and umeclidinium/vilanterol 55/22 micrograms (UMEC/VI). At screening, the mean post-bronchodilator percent predicted FEV $_1$ was 46% and over 99% of patients reported a history of one or more moderate/severe exacerbation in the past year.

At study entry, the most common COPD medications reported in the FULFIL and IMPACT studies were ICS +LABA+LAMA (28%, 34% respectively), ICS+LABA (29%, 26% respectively), LAMA+LABA (10%, 8% respectively) and LAMA (9%, 7% respectively). These patients may have also been taking other COPD medications (e.g. mucolytics or leukotriene receptor antagonists).

Study 200812 was a 24-week, non-inferiority study (N=1,055) that compared Trelegy Ellipta (92/55/22 micrograms) with FF/VI (92/22 micrograms) + UMEC (55 micrograms), co-administered once daily as a multi-inhaler therapy in patients with a history of moderate or severe exacerbations within the prior 12 months.

Lung function

In FULFIL, bronchodilatory effects with Trelegy Ellipta were evident on the first day of treatment and were maintained over the 24-week treatment period (mean changes from baseline in FEV_1 were 90-222 mL on day 1 and 160-339 mL at week 24). Trelegy Ellipta significantly improved (p<0.001) lung function (as defined by mean change from baseline in trough FEV_1 at week 24) (see Table 1) and the improvement was maintained in the subset of patients who continued treatment to week 52.

Table 1. Lung function endpoint in FULFIL

	Trelegy Ellipta	BUD/FOR	Treatment difference (95% CI)
	(N= 911)	(N=899)	Comparison with BUD/FOR
Trough FEV ₁ (L) at week 24, LS mean change	0.142	-0.029	0.171
from baseline (SE) ^a	(0.0083)	(0.0085)	0.148, 0.194

FEV₁=forced expiratory volume in 1 second; L=litres; LS=least squares; SE= standard error, N=number in the intent-to-treat population; CI= confidence interval, ^a Statistically significant treatment difference for FF/UMEC/VI vs. BUD/FOR also observed at the other assessment timepoints (weeks 2, 4 and 12).

In IMPACT, Trelegy Ellipta significantly improved (p<0.001) lung function when compared with FF/VI and UMEC/VI over a 52-week period (See Table 2).

Table 2 – Lung function endpoint in IMPACT

				Treatment di	fference 95%
	Trelegy Ellipta (N = 4,151)	FF/VI (N = 4,134)	UMEC/VI (N = 2,070)	Comparison Trelegy vs. FF/VI	Comparison Trelegy vs. UMEC/VI
Trough FEV ₁ (L) at week 52,					
LS mean change from baseline	0.094	-0.003	0.040	0.097	0.054
(SE) ^a	(0.004)	(0.004)	(0.006)	0.085, 0.109	0.039, 0.069

FEV₁= forced expiratory volume in 1 second; L= litres; LS=least squares; SE= standard error; N= number in the intent-to-treat population; CI= confidence interval; ^a Statistically significant treatment differences for FF/UMEC/VI vs. FF/VI and FF/UMEC/VI vs. UMEC/VI were also observed at the other assessment timepoints (weeks 4, 16, 28, and 40).

In Study 200812, Trelegy Ellipta was non-inferior compared with FF/VI+UMEC, co-administered in two inhalers, in the improvement from baseline in trough FEV_1 at week 24. The pre-specified non-inferiority margin was 50 mL.

Exacerbations

In IMPACT, over 52 weeks, Trelegy Ellipta significantly reduced (p<0.001) the annual rate of moderate/severe exacerbations by 15% (95% CI:10, 20) compared with FF/VI (rate; 0.91 vs 1.07 events per patient year) and by 25% (95% CI: 19, 30) compared with UMEC/VI (rate; 0.91 vs 1.21 events per patient year). In FULFIL, based upon data up to 24 weeks, Trelegy Ellipta significantly reduced (p=0.002) the annual rate of moderate/severe exacerbations by 35% (95% CI: 14, 51) compared with BUD/FOR.

In IMPACT, Trelegy Ellipta prolonged the time to first moderate/severe exacerbation and significantly decreased (p<0.001) the risk of a moderate/severe exacerbation, as measured by time to first exacerbation, compared with both FF/VI (14.8%; 95% CI: 9.3, 19.9) and UMEC/VI (16.0%; 95% CI: 9.4, 22.1). In FULFIL, Trelegy Ellipta significantly decreased the risk of a moderate/severe exacerbation compared with BUD/FOR over 24 weeks (33%; 95% CI: 12, 48; p=0.004).

In IMPACT, treatment with Trelegy Ellipta reduced the annual rate of severe exacerbations (i.e., requiring hospitalisation or resulting in death) by 13% compared with FF/VI (95% CI: -1, 24; p=0.064). Treatment with Trelegy Ellipta significantly reduced the annual rate of severe exacerbations by 34% compared with UMEC/VI (95% CI: 22, 44; p<0.001).

Health-related quality of life

Trelegy Ellipta significantly improved (p<0.001) Health Related Quality of Life (as measured by the St George's Respiratory Questionnaire [SGRQ] total score) in both FULFIL (week 24) when compared with BUD/FOR (-2.2 units; 95% CI: -3.5, -1.0) and IMPACT (week 52) when compared with FF/VI (-1.8 units; 95% CI: -2.4, -1.1) and UMEC/VI (-1.8 units; 95% CI: -2.6, -1.0).

A higher percentage of patients receiving Trelegy Ellipta responded with a clinically meaningful improvement in SGRQ total score in FULFIL at week 24 compared with BUD/FOR (50% and 41%).

respectively), odds ratios of response vs. non-response (OR) (1.41; 95% CI: 1.16, 1.70) and in IMPACT at week 52 compared with FF/VI and UMEC/VI (42%, 34% and 34% respectively), OR vs. FF/VI (1.41; 95% CI:1.29, 1.55) and OR vs. UMEC/VI (1.41; 95% CI: 1.26, 1.57); all treatment comparisons were statistically significant (p<0.001).

In FULFIL, the proportion of patients who were CAT responders (defined as 2 units below baseline or lower) at week 24, was significantly higher (p<0.001) for patients treated with Trelegy Ellipta compared with BUD/FOR (53% vs. 45%; OR 1.44; 95% CI: 1.19, 1.75). In IMPACT, the proportion of patients who were CAT responders at week 52 was significantly higher (p<0.001) for patients treated with Trelegy Ellipta (42%) compared with FF/VI (37%; OR 1.24; 95% CI: 1.14, 1.36) and UMEC/VI (36%; OR 1.28; 95% CI: 1.15, 1.43).

Symptom relief

Breathlessness was measured using the Transition Dyspnoea Index (TDI) focal score at week 24 in FULFIL and week 52 in IMPACT (a subset of patients, n=5,058). In FULFIL the proportion of responders according to TDI (defined as at least 1 unit) was significantly higher (p<0.001) for Trelegy Ellipta compared with BUD/FOR (61% vs 51%; OR 1.61; 95% CI: 1.33, 1.95). In IMPACT, the proportion of responders was also significantly higher (p<0.001) for Trelegy Ellipta (36%) compared with FF/VI (29%; OR 1.36; 95% CI: 1.19, 1.55) and UMEC/VI (30%; OR 1.33; 95% CI: 1.13, 1.57).

In FULFIL, Trelegy Ellipta improved daily symptoms of COPD as assessed by E-RS: COPD total score, compared with BUD/FOR (≥2 unit decrease from baseline). The proportion of responders during weeks 21-24 was significantly higher (p<0.001) for patients treated with Trelegy Ellipta compared with BUD/FOR (47% and 37% respectively; OR 1.59; 95% CI: 1.30, 1.94).

Use of rescue medication

In FULFIL, Trelegy Ellipta significantly reduced (p<0.001) the use of rescue medication between weeks 1-24 compared with BUD/FOR (treatment difference: -0.2 occasions per day; 95% CI: -0.3, -0.1).

In IMPACT, Trelegy Ellipta significantly reduced (p<0.001) the use of rescue medication (occasions per day) at each 4-week time period compared with FF/VI and UMEC/VI. At weeks 49-52, the treatment difference was -0.28 (95% CI: -0.37, -0.19) when compared with FF/VI and -0.30 (95% CI: -0.41, -0.19) with UMEC/VI.

Nighttime awakenings

In IMPACT, Trelegy Ellipta statistically significantly reduced the mean number of nighttime awakenings due to COPD compared with FF/VI (-0.05; 95% CI: -0.08, -0.01; p=0.005) and with UMEC/VI (-0.10; 95% CI: -0.14, -0.05; p<0.001) at weeks 49 to 52. Significant reductions were observed over all other timepoints for UMEC/VI (p<0.001) and for the all but two of the of timepoints for FF/VI (p \leq 0.021).

Paediatric population

The European Medicines Agency has waived the obligation to submit the results of studies with Trelegy Ellipta in all subsets of the paediatric population in COPD (see section 4.2 for information on paediatric use).

5.2 Pharmacokinetic properties

When fluticasone furoate, umeclidinium and vilanterol were administered in combination by the inhaled route from a single inhaler in healthy subjects, the pharmacokinetics of each component were similar to those observed when each active substance was administered either as fluticasone furoate/vilanterol combination or as an umeclidinium/vilanterol combination or umeclidinium monotherapy.

Population PK analyses for FF/UMEC/VI were conducted using a combined PK dataset from three phase III studies in 821 COPD subjects. Systemic drug levels (steady state C_{max} and AUC) of FF, UMEC and VI following FF/UMEC/VI in one inhaler (triple combination) were within the range of those observed following FF/VI + UMEC as two inhalers, dual combinations (FF/VI and UMEC/VI), as well as individual

single inhalers (FF, UMEC and VI). Covariate analysis showed higher FF apparent clearance (42%) when comparing FF/VI to FF/UMEC/VI; however, this is not considered clinically relevant.

Absorption

Fluticasone furoate

Following inhaled administration of fluticasone furoate/umeclidinium/vilanterol in healthy subjects, fluticasone furoate C_{max} occurred at 15 minutes. The absolute bioavailability of fluticasone furoate when administrated as fluticasone furoate/vilanterol by inhalation was 15.2%, primarily due to absorption of the inhaled portion of the dose delivered to the lung, with negligible contribution from oral absorption. Following repeat dosing of inhaled fluticasone furoate /vilanterol, steady state was achieved within 6 days with up to 1.6-fold accumulation

Umeclidinium

Following inhaled administration of fluticasone furoate/umeclidinium/vilanterol in healthy subjects, umeclidinium C_{max} occurred at 5 minutes. The absolute bioavailability of inhaled umeclidinium was on average 13%, with negligible contribution from oral absorption. Following repeat dosing of inhaled umeclidinium, steady state was achieved within 7 to 10 days with 1.5 to 2-fold accumulation.

Vilanterol

Following inhaled administration of fluticasone furoate/umeclidinium/vilanterol in healthy subjects, vilanterol C_{max} occurred at 7 minutes. The absolute bioavailability of inhaled vilanterol was 27%, with negligible contribution from oral absorption. Following repeat dosing of inhaled umeclidinium/vilanterol, steady state was achieved within 6 days with up to 1.5-fold accumulation.

Distribution

Fluticasone furoate

Following intravenous dosing of fluticasone furoate to healthy volunteers, the mean volume of distribution at steady state of 661 litres. Fluticasone furoate has a low association with red blood cells. *In vitro* plasma protein binding in human plasma of fluticasone furoate was high, on average >99.6%.

Umeclidinium

Following intravenous administration of umeclidinium to healthy volunteers, the mean volume of distribution was 86 litres. *In vitro* plasma protein binding in human plasma was on average 89%.

Vilanterol

Following intravenous administration of vilanterol to healthy volunteers, the mean volume of distribution at steady state was 165 litres. Vilanterol has a low association with red blood cells. *In vitro* plasma protein binding in human plasma was on average 94%.

Biotransformation

Fluticasone furoate

In vitro studies showed that fluticasone furoate is primarily metabolised by cytochrome P450 3A4 (CYP3A4) and is a substrate for the P-gp transporter. The primary metabolic route for fluticasone furoate is hydrolysis of the S-fluoromethyl carbothioate group to metabolites with significantly reduced corticosteroid activity. Systemic exposure to the metabolites is low.

Umeclidinium

In vitro studies showed that umeclidinium is primarily metabolised by cytochrome P450 2D6 (CYP2D6) and is a substrate for the P-gp transporter. The primary metabolic routes for umeclidinium are oxidative (hydroxylation, O-dealkylation) followed by conjugation (glucuronidation, etc), resulting in a range of metabolites with either reduced pharmacological activity or for which the pharmacological activity has not been established. Systemic exposure to the metabolites is low.

Vilanterol

In vitro studies showed that vilanterol is primarily metabolised by cytochrome P450 3A4 (CYP3A4) and is a substrate for the P-gp transporter. The primary metabolic routes for vilanterol are O-dealkylation to a range of metabolites with significantly reduced beta₁- and beta₂-adrenergic agonist activity. Plasma metabolic profiles following oral administration of vilanterol in a human radiolabel study were consistent with high first-pass metabolism. Systemic exposure to the metabolites is low.

Elimination

Fluticasone furoate

The apparent plasma elimination half-life of fluticasone furoate following inhaled administration of fluticasone furoate/vilanterol was, on average, 24 hours. Following intravenous administration, the elimination phase half-life averaged 15.1 hours. Plasma clearance following intravenous administration was 65.4 litres/hour. Urinary excretion accounted for approximately 2 % of the intravenously administered dose. Following oral administration, fluticasone furoate was eliminated in humans mainly by metabolism with metabolites being excreted almost exclusively in faeces, with <1% of the recovered radioactive dose eliminated in the urine.

Umeclidinium

Umeclidinium plasma elimination half-life following inhaled dosing for 10 days averaged 19 hours, with 3% to 4% active substance excreted unchanged in urine at steady-state. Plasma clearance following intravenous administration was 151 litres/hour. Following intravenous administration, approximately 58% of the administered radiolabelled dose was excreted in faeces and approximately 22% of the administered radiolabelled dose was excreted in urine. The excretion of the drug-related material in the faeces following intravenous dosing indicated secretion into the bile. Following oral administration, 92% of the administered radiolabelled dose was excreted primarily in faeces. Less than 1% of the orally administered dose (1% of recovered radioactivity) was excreted in urine, suggesting negligible absorption following oral administration.

Vilanterol

Vilanterol plasma elimination half-life following inhaled dosing for 10 days averaged 11 hours. Plasma clearance of vilanterol following intravenous administration was 108 litres/hour. Following oral administration of radiolabelled vilanterol, 70% of the radiolabel was excreted in urine and 30% in faeces. Primary elimination of vilanterol was by metabolism followed by excretion of metabolites in urine and faeces.

Special populations

Elderly

The effects of age on the pharmacokinetics of fluticasone furoate, umeclidinium and vilanterol were evaluated in the population pharmacokinetic analysis. No clinically relevant effects requiring dose adjustment were observed.

Renal impairment

The effect of fluticasone furoate/umeclidinium/vilanterol has not been evaluated in subjects with renal impairment. However, studies have been conducted with fluticasone furoate/vilanterol and umeclidinium/vilanterol that showed no evidence of an increase in systemic exposure to fluticasone furoate, umeclidinium or vilanterol. *In vitro* protein binding studies between subjects with severe renal impairment and healthy volunteers were conducted, and no clinically significant evidence of altered protein binding was seen.

The effects of haemodialysis have not been studied.

Hepatic impairment

The effect of fluticasone furoate/umeclidinium/vilanterol has not been evaluated in subjects with hepatic impairment. However, studies have been conducted with fluticasone furoate/vilanterol and umeclidinium/vilanterol.

The fluticasone furoate/vilanterol component of Trelegy Ellipta was assessed in patients with all severities of hepatic impairment (Child-Pugh A, B or C). For fluticasone furoate, patients with moderate hepatic impairment showed up to three times higher systemic exposure (FF 184 micrograms); therefore, patients with severe hepatic impairment received half the dose (FF 92 micrograms). At this dose, no effects on systemic exposure were observed. Therefore, caution is advised in moderate to severe hepatic impairment, but no specific dose adjustment based on hepatic function is recommended. There was no significant increase in systemic exposure to vilanterol.

Patients with moderate hepatic impairment showed no evidence of an increase in systemic exposure to either umeclidinium or vilanterol (C_{max} and AUC). Umeclidinium has not been evaluated in patients with severe hepatic impairment.

Other special populations

The effects of race, gender and weight on the pharmacokinetics of fluticasone furoate, umeclidinium and vilanterol were also evaluated in the population pharmacokinetic analysis.

In 113 East Asian subjects with COPD (Japanese and East Asian Heritage), who received FF/UMEC/VI from a single inhaler (27% subjects), fluticasone furoate AUC_(ss) estimates were on average 30% higher compared with Caucasian subjects. However, these higher systemic exposures remain below the threshold for FF-induced reduction of serum and urine cortisol and are not considered clinically relevant. There was no effect of race on pharmacokinetic parameters of umeclidinium or vilanterol in subjects with COPD.

No clinically relevant differences requiring dose adjustment based on race, gender or weight were observed in fluticasone furoate, umeclidinium or vilanterol systemic exposure.

In terms of other patient characteristics, a study in CYP2D6 poor metabolisers showed no evidence of a clinically significant effect of CYP2D6 genetic polymorphism on systemic exposure to umeclidinium.

5.3 Preclinical safety data

Pharmacological and toxicological effects seen with fluticasone furoate, umeclidinium or vilanterol in nonclinical studies were those typically associated with glucocorticoids, muscarinic receptor antagonists, or beta₂-adrenergic receptor agonists. Administration of combined fluticasone furoate, umeclidinium and vilanterol to dogs did not result in any significant new toxicity or any major exacerbation of expected findings associated with fluticasone furoate, umeclidinium or vilanterol alone.

Genotoxicity and carcinogenicity

Fluticasone furoate

Fluticasone furoate was not genotoxic in a standard battery of studies and was not carcinogenic in lifetime inhalation studies in rats or mice at exposures of 1.4- or 2.9-fold, respectively, those seen in humans at a daily dose of 92 micrograms fluticasone furoate, based on AUC.

Umeclidinium

Umeclidinium was not genotoxic in a standard battery of studies and was not carcinogenic in lifetime inhalation studies in mice or rats at exposures ≥ 20 - or ≥ 17 - fold the human clinical exposure at a daily dose of 55 micrograms umeclidinium, based on AUC respectively.

Vilanterol

Vilanterol (as alpha-phenylcinnamate) and triphenylacetic acid were not genotoxic indicating that vilanterol (as trifenatate) does not represent a genotoxic hazard to humans. Consistent with findings for other beta₂ agonists, in lifetime inhalation studies vilanterol trifenatate caused proliferative effects in the female rat and mouse reproductive tract and rat pituitary gland. There was no increase in tumour incidence in rats or mice at exposures 0.9- or 22-fold, respectively, the human clinical exposure of vilanterol at a daily dose of 22 micrograms based on AUC.

Toxicity to reproduction

Fluticasone furoate, umeclidinium and vilanterol did not have any adverse effects on male or female fertility in rats.

Fluticasone furoate

Fluticasone furoate was not teratogenic in rats or rabbits, but delayed development in rats and caused abortion in rabbits at maternally toxic doses. There were no effects on development in rats at exposures 6.6-fold the human clinical exposure at a daily dose of 92 micrograms, based on AUC. Fluticasone furoate had no adverse effect on pre- or post-natal development in rats.

Umeclidinium

Umeclidinium was not teratogenic in rats or rabbits. In a pre- and post-natal study, subcutaneous administration of umeclidinium to rats resulted in lower maternal body weight gain and food consumption and slightly decreased pre-weaning pup body weights in dams given 180 micrograms/kg/day dose (approximately 61-fold the human clinical exposure of umeclidinium at a daily dose of 55 micrograms, based on AUC).

Vilanterol

Vilanterol was not teratogenic in rats. In inhalation studies in rabbits, vilanterol caused effects similar to those seen with other beta₂-adrenergic agonists (cleft palate, open eyelids, sternebral fusion and limb flexure/malrotation). When given subcutaneously there were no effects at exposures 62-fold the human clinical exposure at a daily dose of 22 micrograms, based on AUC. Vilanterol had no adverse effect on pre-or post-natal development in rats.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Lactose monohydrate Magnesium stearate

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

2 years

Shelf-life after opening the tray: 6 weeks

6.4 Special precautions for storage

Do not store above 30 °C.

If stored in a refrigerator allow the inhaler to return to room temperature for at least an hour before use.

Keep the inhaler inside the sealed tray in order to protect from moisture and only remove immediately before first use.

6.5 Nature and contents of container

The Ellipta inhaler consists of a light grey body, beige mouthpiece cover and a dose counter, packed into a foil laminate tray containing a silica gel desiccant sachet. The tray is sealed with a peelable foil lid.

The inhaler is a multi-component device composed of polypropylene, high density polyethylene, polyoxymethylene, polybutylene terephthalate, acrylonitrile butadiene styrene, polycarbonate and stainless steel.

The inhaler contains two aluminium foil laminate blister strips that deliver a total of 14 or 30 doses (14 or 30 day supply). Each blister in one strip contains fluticasone furoate, each blister in the other strip contains umeclidinium (as bromide) and vilanterol (as trifenatate).

Pack sizes of 1 inhaler with 14 or 30 doses. Multipacks containing 90 (3 inhalers of 30) doses.

Not all pack sizes may be marketed.

6.6 Special precautions for disposal

After inhalation, patients should rinse their mouth with water without swallowing.

The inhaler is packaged in a tray containing a desiccant sachet, to reduce moisture. The desiccant sachet should be thrown away and it should not be opened, eaten or inhaled. The patient should be advised to not open the tray until they are ready to inhale a dose.

The inhaler will be in the 'closed' position when it is first taken out of its sealed tray. The "Discard by" date should be written on the inhaler label and carton in the space provided. The date should be added as soon as the inhaler has been removed from the tray. The "Discard by" date is 6 weeks from the date of opening the tray. After this date the inhaler should no longer be used. The tray can be discarded after first opening.

If the inhaler cover is opened and closed without inhaling the medicinal product, the dose will be lost. The lost dose will be securely held inside the inhaler, but it will no longer be available to be inhaled.

It is not possible to accidentally take an extra dose or a double dose in one inhalation.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

GlaxoSmithKline Trading Services Limited 12 Riverwalk Citywest Business Campus Dublin 24 Ireland

8. MARKETING AUTHORISATION NUMBER(S)

EU/1/17/1236/001 EU/1/17/1236/002 EU/1/17/1236/003

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 15 November 2017

Date of latest renewal:

10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency http://www.ema.europa.eu.

ANNEX II

- A. MANUFACTURER RESPONSIBLE FOR BATCH RELEASE
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE
- C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION
- D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

A. MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer responsible for batch release

Glaxo Wellcome Production Zone Industrielle No.2 23 Rue Lavoisier 27000 Evreux France

The printed package leaflet of the medicinal product must state the name and address of the manufacturer responsible for the release of the concerned batch.

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal product subject to medical prescription.

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

Periodic safety update reports (PSURs)

The requirements for submission of PSURs for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines web-portal.

D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

• Risk management plan (RMP)

The marketing authorisation holder (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 European Medicines Agency;
- 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.

ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

OUTER CARTON (SINGLE PACKS)

1. NAME OF THE MEDICINAL PRODUCT

Trelegy Ellipta 92 micrograms/55 micrograms/22 micrograms inhalation powder, pre-dispensed fluticasone furoate/umeclidinium/vilanterol

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each delivered dose contains 92 micrograms of fluticasone furoate, 55 micrograms of umeclidinium (equivalent to 65 micrograms of umeclidinium bromide) and 22 micrograms of vilanterol (as trifenatate).

3. LIST OF EXCIPIENTS

Excipients: lactose monohydrate and magnesium stearate.

See package leaflet for further information.

4. PHARMACEUTICAL FORM AND CONTENTS

Inhalation powder, pre-dispensed.

1 inhaler of 14 doses

1 inhaler of 30 doses

5. METHOD AND ROUTE(S) OF ADMINISTRATION

ONCE DAILY

Read the package leaflet before use.

Inhalation use

Do not shake.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

Do not swallow the desiccant.

8. EXPIRY DATE

EXP

In use shelf-life: 6 weeks.

Discard by:

Do not store above 30°C. Store in the original package in order to protect from moisture.
10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
GlaxoSmithKline Trading Services Limited 12 Riverwalk Citywest Business Campus
Dublin 24 Ireland
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/17/1236/001 EU/1/17/1236/002
13. BATCH NUMBER
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
trelegy ellipta
17. UNIQUE IDENTIFIER – 2D BARCODE
2D barcode carrying the unique identifier included.

9.

SPECIAL STORAGE CONDITIONS

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC

SN

NN

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

OUTER CARTON FOR MULTIPACK (WITH BLUE BOX)

1. NAME OF THE MEDICINAL PRODUCT

Trelegy Ellipta 92 micrograms/55 micrograms/22 micrograms inhalation powder, pre-dispensed fluticasone furoate/umeclidinium/vilanterol

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each delivered dose contains 92 micrograms of fluticasone furoate, 55 micrograms of umeclidinium (equivalent to 65 micrograms of umeclidinium bromide) and 22 micrograms of vilanterol (as trifenatate).

3. LIST OF EXCIPIENTS

Excipients: lactose monohydrate and magnesium stearate.

See package leaflet for further information.

4. PHARMACEUTICAL FORM AND CONTENTS

Inhalation powder, pre-dispensed. Multipack: 90 (3 inhalers of 30) doses

5. METHOD AND ROUTE(S) OF ADMINISTRATION

ONCE DAILY

Read the package leaflet before use.

Inhalation use

Do not shake.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

Do not swallow the desiccant.

8. EXPIRY DATE

EXP

In use shelf-life: 6 weeks.

	ot store above 30°C. in the original package in order to protect from moisture.
10.	SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
11.	NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
	oSmithKline Trading Services Limited verwalk
Cityw Dubli Irelan	
12.	MARKETING AUTHORISATION NUMBER(S)
	/17/1236/003
13.	BATCH NUMBER
Lot	
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE
treleg	gy ellipta
17.	UNIQUE IDENTIFIER – 2D BARCODE
2D ba	arcode carrying the unique identifier included.
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC SN NN	

9.

SPECIAL STORAGE CONDITIONS

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

INTERMEDIATE CARTON OF MULTIPACK (WITHOUT BLUE BOX)

1. NAME OF THE MEDICINAL PRODUCT

Trelegy Ellipta 92 micrograms/55 micrograms/22 micrograms inhalation powder, pre-dispensed fluticasone furoate/umeclidinium/vilanterol

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each delivered dose contains 92 micrograms of fluticasone furoate, 55 micrograms of umeclidinium (equivalent to 65 micrograms umeclidinium bromide) and 22 micrograms of vilanterol (as trifenatate).

3. LIST OF EXCIPIENTS

Excipients: lactose monohydrate and magnesium stearate. See package leaflet for further information.

4. PHARMACEUTICAL FORM AND CONTENTS

Inhalation powder, pre-dispensed

1 inhaler of 30 doses.

Component of a multipack, can't be sold separately.

5. METHOD AND ROUTE(S) OF ADMINISTRATION

ONCE DAILY

Read the package leaflet before use.

Inhalation use

Do not shake.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

Do not swallow the desiccant.

8. EXPIRY DATE
EVD
EXP In use shelf-life: 6 weeks.
Discard by:
Discard by.
9. SPECIAL STORAGE CONDITIONS
Description of the 200C
Do not store above 30°C Store in the original package in order to protect from moisture.
Store in the original package in order to protect from moisture.
10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR
WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
GlaxoSmithKline Trading Services Limited
12 Riverwalk
Citywest Business Campus
Dublin 24
Ireland
12. MARKETING AUTHORISATION NUMBER(S)
13. BATCH NUMBER
Direction and the second secon
Lot
44 CENTED AT CLASSIFICATION FOR CURRY
14. GENERAL CLASSIFICATION FOR SUPPLY
15. INSTRUCTIONS ON USE
1/ INFORMATION IN DRAIL I E
16. INFORMATION IN BRAILLE
trelegy ellipta
17 UNIQUE IDENTIFIED AD DADCODE
17. UNIQUE IDENTIFIER – 2D BARCODE
18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

MINIMUM PARTICULARS TO APPEAR ON BLISTERS OR STRIPS
TRAY LABEL
1. NAME OF THE MEDICINAL PRODUCT
Trelegy Ellipta 92/55/22 mcg inhalation powder fluticasone furoate/umeclidinium/vilanterol
2. NAME OF THE MARKETING AUTHORISATION HOLDER
GlaxoSmithKline Trading Services Limited GSK Logo
3. EXPIRY DATE
EXP
4. BATCH NUMBER
Lot
5. OTHER
Do not open until ready to inhale. In use shelf-life: 6 weeks.
14 doses 30 doses

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS
INHALER LABEL
1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION
Trelegy Ellipta 92 /55 /22 mcg inhalation powder fluticasone furoate/umeclidinium/vilanterol Inhalation use
2. METHOD OF ADMINISTRATION
3. EXPIRY DATE
EXP
In use shelf-life: 6 weeks. Discard by:
4. BATCH NUMBER
Lot
5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT
14 doses 30 doses
6. OTHER

B. PACKAGE LEAFLET

Package leaflet: Information for the patient

Trelegy Ellipta 92 micrograms/55 micrograms/22 micrograms inhalation powder, pre-dispensed fluticasone furoate/umeclidinium/vilanterol

Read all of this leaflet carefully before you start using this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

- 1. What Trelegy Ellipta is and what it is used for
- 2. What you need to know before you use Trelegy Ellipta
- 3. How to use Trelegy Ellipta
- 4. Possible side effects
- 5. How to store Trelegy Ellipta
- 6. Contents of the pack and other information

Step-by-step instructions

1. What Trelegy Ellipta is and what it is used for

What Trelegy Ellipta is

Trelegy Ellipta contains three active substances called fluticasone furoate, umeclidinium bromide and vilanterol. Fluticasone furoate belongs to a group of medicines called corticosteroids, often simply called steroids. Umeclidinium bromide and vilanterol belong to a group of medicines called bronchodilators.

What Trelegy Ellipta is used for

Trelegy Ellipta is used to treat chronic obstructive pulmonary disease (**COPD**) in adults. COPD is a long-term condition characterised by breathing difficulties that slowly get worse.

In COPD the muscles around the airways tighten, making breathing difficult. This medicine widens these muscles in the lungs, reducing the swelling and irritation in the small air passages and making it easier for air to get in and out of the lungs. When used regularly, it can help to control your breathing difficulties and reduce the effects of COPD on your everyday life.

Trelegy Ellipta should be used every day and not only when you have breathing problems or other symptoms of COPD. It should not be used to relieve a sudden attack of breathlessness or wheezing. If you get this sort of attack you must use a quick-acting inhaler (such as salbutamol). If you do not have a quick-acting inhaler contact your doctor.

2. What you need to know before you use Trelegy Ellipta

Do not use Trelegy Ellipta:

- if you are allergic to fluticasone furoate, umeclidinium, vilanterol or any of the other ingredients of this medicine (listed in section 6).

Warnings and precautions

Talk to your doctor before using Trelegy Ellipta

- if you have **asthma** (Do not use Trelegy Ellipta to treat asthma)
- if you have heart problems or high blood pressure
- if you have **liver problems**
- if you have tuberculosis (TB) of the lung, or any long standing or untreated infections
- if you have an eye problem called narrow-angle glaucoma
- if you have an enlarged prostate, difficulty passing urine or a blocking in your bladder
- if you suffer from epilepsy
- if you have thyroid gland problems
- if you have **low potassium** in your blood
- if you have a history of diabetes
- if you experience blurred vision or other visual disturbances

Check with your doctor if you think any of these may apply to you.

Immediate breathing difficulties

If you get tightness of the chest, coughing, wheezing or breathlessness immediately after using your Trelegy Ellipta inhaler:

stop using this medicine and seek medical help immediately, as you may have a serious conditioncalled paradoxical bronchospasm.

Eye problems during treatment with Trelegy Ellipta

If you get eye pain or discomfort, temporary blurring of vision, visual halos or coloured images as well as red eyes during treatment with Trelegy Ellipta:

stop using this medicine and seek medical help immediately. These may be signs of an acute attack of narrow-angle glaucoma.

Infection of the lung

Because you are using this medicine for COPD, you may be at an increased risk of developing an infection of the lungs known as pneumonia. See section 4 'Possible side effects' for information on symptoms to look out for while you are using this medicine.

Tell your doctor as soon as possible if you develop any of these symptoms.

Children and adolescents

Do not give this medicine to children or adolescents below the age of 18 years.

Other medicines and Trelegy Ellipta

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines. If you are not sure what your medicine contains talk to your doctor or pharmacist.

Some medicines may affect how this medicine works, or make it more likely to have side effects. These include:

- medicines called beta blockers (such as propranolol), to treat high blood pressure or other heart problems
- ketoconazole or itraconazole, to treat fungal infections
- clarithromycin or telithromycin, to treat bacterial infections
- ritonavir or cobicistat, to treat HIV infection

- medicines that lower the amount of potassium in your blood, such as some diuretics (water tablets) or some medicines used to treat COPD and asthma (such as methylxanthine or steroids)
- other long-acting medicines similar to this medicine that are used to treat breathing problems, e.g. tiotropium, indacaterol. Do not use Trelegy Ellipta if you already use these medicines.

Tell your doctor or pharmacist if you are taking any of these. Your doctor may wish to monitor you carefully if you are taking any of these medicines as they may increase the side effects of Trelegy Ellipta.

Pregnancy and breast-feeding

If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor for advice before taking this medicine. Do not use this medicine if you are pregnant unless your doctor tells you that you can.

It is not known whether the ingredients of this medicine can pass into breast milk. If you are breast-feeding, you must check with your doctor before you use Trelegy Ellipta. Do not use this medicine if you are breast-feeding unless your doctor tells you that you can.

Driving and using machines

It is unlikely that this medicine will affect your ability to drive or use machines.

Trelegy Ellipta contains lactose

If you have been told by your doctor that you have an intolerance to some sugars, contact your doctor before using this medicine.

3. How to use Trelegy Ellipta

Always use this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

The **recommended dose** is one inhalation every day at the same time of day. You only need to inhale once a day because the effect of this medicine lasts for 24 hours.

Do not use more than your doctor tells you to use.

Use Trelegy Ellipta regularly

It is very important that you use Trelegy Ellipta every day, as instructed by your doctor. This will help to keep you free of symptoms throughout the day and night.

Trelegy Ellipta should **not** be used to relieve a **sudden attack of breathlessness or wheezing**. If you get this sort of attack you must use a quick-acting reliever inhaler (such as salbutamol).

How to use the inhaler

See 'Step-by-step instructions' at the end of this leaflet for full information.

Trelegy Ellipta is for inhalation use.

Once the tray is opened Trelegy Ellipta is ready to use.

If your symptoms do not improve

If your COPD symptoms (breathlessness, wheezing, cough) do not improve or get worse, or if you are using your quick-acting inhaler more often:

contact your doctor as soon as possible.

If you use more Trelegy Ellipta than you should

If you use too much of this medicine, **contact your doctor or pharmacist for advice immediately** as you may need medical attention. If possible, show them the inhaler, the package or this leaflet. You may notice

that your heart is beating faster than usual, you feel shaky, you have visual disturbances, have a dry mouth, or have a headache.

If you forget to use Trelegy Ellipta

Do not inhale a double dose to make up for a forgotten dose. Just inhale your next dose at the usual time. If you become wheezy or breathless, use your quick-acting inhaler (such as salbutamol), then seek medical advice.

If you stop using Trelegy Ellipta

Use this medicine for as long as your doctor recommends. Do not stop unless your doctor advises you to, even if you feel better, as your symptoms may get worse.

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.

4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them.

Allergic reactions

Allergic reactions to Trelegy Ellipta are rare (they may affect up to 1 in 1,000 people).

If you have any of the following symptoms after taking Trelegy Ellipta, **stop using it** and **tell your doctor** immediately:

- skin rash or redness, hives (*urticaria*)
- swelling, sometimes of the face or mouth (angioedema)
- wheezing, coughing or having difficulty in breathing
- suddenly feeling weak or light headed (may lead to collapse or loss of consciousness)

Immediate breathing difficulties

If your breathing or wheezing gets worse straight after using this medicine, **stop using it** and **get medical help** immediately.

Pneumonia (infection of the lung) in COPD patients (common side effect)

Tell your doctor if you have any of the following while using Trelegy Ellipta – these could be symptoms of a lung infection:

- fever or chills
- increased mucus production, change in mucus colour
- increased cough or increased breathing difficulties

Other side effects

Common (may affect up to 1 in 10 people)

- sore, raised patches in the mouth or throat caused by a fungal infection (candidiasis). Rinsing your mouth out with water immediately after using Trelegy Ellipta may help prevent this side effect.
- infection of the nose, sinuses or throat
- infection of the upper airways
- itchy, runny or blocked nose
- pain in the back of the mouth and throat
- inflammation of the sinuses
- inflammation of the lungs (*bronchitis*)
- flu (*influenza*)
- common cold
- headache
- cough
- painful and frequent urination (may be signs of a urinary tract infection)
- joint pain

- back pain
- constipation.

Uncommon (may affect up to 1 in 100 people)

- irregular heart beat
- faster heart beat
- hoarseness
- weakening of the bones, leading to fractures
- dry mouth
- taste disturbance
- blurred vision
- increased eye pressure
- eye pain.

Rare (may affect up to 1 in 1,000 people)

• allergic reactions (see earlier in Section 4)

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 national reporting system listed in Appendix V. By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store Trelegy Ellipta

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the carton, tray and inhaler after 'EXP'. The expiry date refers to the last day of that month.

Do not store above 30°C.

Keep the inhaler inside the sealed tray in order to protect from moisture and only remove immediately before first use. Once the tray is opened, the inhaler can be used for up to 6 weeks, starting from the date of opening the tray. Write the date the inhaler should be thrown away on the label in the space provided. The date should be added as soon as the inhaler has been removed from the tray.

If stored in a refrigerator, allow the inhaler to return to room temperature for at least one hour before use.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

6. Contents of the pack and other information

What Trelegy Ellipta contains

The active substances are fluticasone furoate, umeclidinium and vilanterol.

Each single inhalation provides a delivered dose (the dose leaving the mouthpiece) of 92 micrograms of fluticasone furoate, 65 micrograms umeclidinium bromide equivalent to 55 micrograms umeclidinium and 22 micrograms of vilanterol (as trifenatate).

The other ingredients are lactose monohydrate (see section 2 under 'Trelegy Ellipta contains lactose') and magnesium stearate.

What Trelegy Ellipta looks like and contents of the pack

Trelegy Ellipta is an inhalation powder, pre-dispensed.

The Ellipta inhaler consists of a light grey plastic body, a beige coloured mouthpiece cover and a dose counter. It is packaged in a foil laminate tray with a peelable foil lid. The tray contains a desiccant sachet, to reduce moisture in the packaging.

The active substances are present as a white powder in separate blister strips inside the inhaler. Trelegy Ellipta is available in packs of 1 inhaler containing either 14 or 30 doses (14 or 30 day supply) and in multipacks containing 90 (3 inhalers of 30) doses (90 day supply). Not all pack sizes may be marketed.

Marketing Authorisation Holder

GlaxoSmithKline Trading Services Limited 12 Riverwalk Citywest Business Campus Dublin 24 Ireland

Manufacturer

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For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

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Other sources of information

Detailed information on this medicine is available on the European Medicines Agency web site: http://www.ema.europa.eu.

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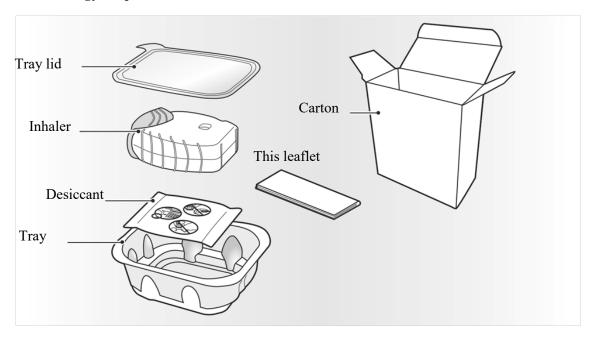
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Step-by-step instructions

What is the inhaler?

The first time you use Trelegy Ellipta you do not need to check that the inhaler is working properly; it contains previously measured doses and is ready to use straight away.

Your Trelegy Ellipta inhaler carton contains



The inhaler is packaged in a tray. **Do not open the tray until you are ready to inhale a dose of your medicine.** When you are ready to use your inhaler, peel back the lid to open the tray. The tray contains a desiccant sachet, to reduce moisture. Throw this desiccant sachet away — **do not** open, eat or inhale it.



When you take the inhaler out of the sealed tray, it will be in the 'closed' position. **Do not open the inhaler until you are ready to inhale a dose of medicine**. Write the "Discard by" date on the inhaler label and the carton in the space provided. The "Discard by" date is 6 weeks from the date you open the tray. **After this date the inhaler should no longer be used.** The tray can be discarded after first opening.

If stored in a refrigerator, allow the inhaler to return to room temperature for at least one hour before use.

The step-by-step instructions for use of the inhaler provided below can be used for either the 30-dose (30-day supply) or the 14-dose (14-day supply) Ellipta inhaler.

1) Read this before you start

If you open and close the cover without inhaling the medicine, you will lose the dose.

The lost dose will be securely held inside the inhaler, but it will no longer be available. It is not possible to accidentally take extra medicine or a double dose in one inhalation.

Dose counter

This shows how many doses of medicine are left in the inhaler.

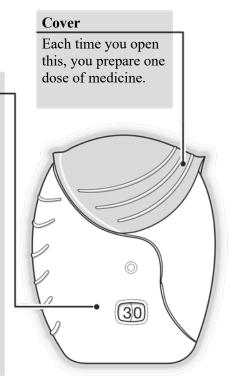
Before the inhaler has been used, it shows exactly 30 doses.

It counts down by 1 each time you open the cover.

When fewer than 10 doses are left, half of the dose counter shows red.

After you have used the last dose, half of the dose counter shows red and the number 0 is displayed. Your inhaler is now empty.

If you open the cover after this, the dose counter will change from half red to completely red.

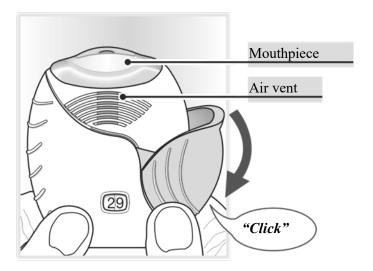


For the 14-dose inhaler, the dose counter will also show half red when there are fewer than 10 doses left, and then will show half red with the number 0 after the last dose is used. The dose counter will appear completely red if the cover is opened again.

2) Prepare a dose

Wait to open the cover until you are ready to take your dose. Do not shake the inhaler.

• Slide the cover down until you hear a "click".



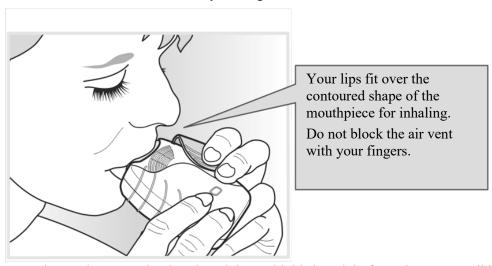
Your medicine is now ready to be inhaled.

The dose counter counts down by 1 to confirm.

- If the dose counter does not count down as you hear the "click", the inhaler will not deliver medicine. Take it back to your pharmacist for advice.
- Do not shake the inhaler at any time.

3) Inhale your medicine

- While holding the inhaler away from your mouth, breathe out as far as is comfortable.
 Do not breathe out into the inhaler.
- Put the mouthpiece between your lips, and close your lips firmly around it. Do not block the air vent with your fingers.



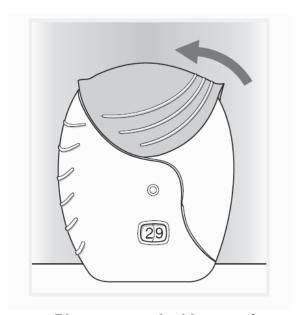
- Take one long, steady, deep breath in. Hold this breath in for as long as possible (at least 3-4 seconds).
- Remove the inhaler from your mouth.
- Breathe out slowly and gently.

You may not be able to taste or feel the medicine, even when you are using the inhaler correctly.

If you want to clean the mouthpiece, use a dry tissue, before you close the cover.

4) Close the inhaler and rinse your mouth

• Slide the cover upwards as far as it will go, to cover the mouthpiece.



• Rinse your mouth with water after you have used the inhaler, do not swallow. This will make it less likely that you will develop a sore mouth or throat as side effects.