ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

EDURANT 25 mg film-coated tablets

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each film-coated tablet contains rilpivirine hydrochloride equivalent to 25 mg rilpivirine.

Excipient with known effect

Each film-coated tablet contains 56 mg lactose monohydrate.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Film-coated tablet

White to off-white, round, biconvex, film-coated tablet with a diameter of 6.4 mm, debossed with "TMC" on one side and "25" on the other side.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

EDURANT, in combination with other antiretroviral medicinal products, is indicated for the treatment of human immunodeficiency virus type 1 (HIV-1) infection in antiretroviral treatment-naïve patients 12 years of age and older with a viral load \leq 100,000 HIV-1 RNA copies/ml.

Genotypic resistance testing should guide the use of EDURANT (see sections 4.4 and 5.1).

4.2 Posology and method of administration

Therapy should be initiated by a physician experienced in the management of HIV infection.

Posology

The recommended dose of EDURANT is one 25 mg tablet taken once daily. EDURANT **must be taken with a meal** (see section 5.2).

Dose adjustment

For patients concomitantly receiving rifabutin, the EDURANT dose should be increased to 50 mg (two tablets of 25 mg each) taken once daily. When rifabutin co-administration is stopped, the EDURANT dose should be decreased to 25 mg once daily (see section 4.5).

Missed dose

If the patient misses a dose of EDURANT within 12 hours of the time it is usually taken, the patient must take the medicine with a meal as soon as possible and resume the normal dosing schedule. If a patient misses a dose of EDURANT by more than 12 hours, the patient should not take the missed dose, but resume the usual dosing schedule.

If a patient vomits within 4 hours of taking the medicine, another EDURANT tablet should be taken with a meal. If a patient vomits more than 4 hours after taking the medicine, the patient does not need to take another dose of EDURANT until the next regularly scheduled dose.

Special populations

Elderly

There is limited information regarding the use of EDURANT in patients > 65 years of age. No dose adjustment of EDURANT is required in older patients (see section 5.2). EDURANT should be used with caution in this population.

Renal impairment

EDURANT has mainly been studied in patients with normal renal function. No dose adjustment of rilpivirine is required in patients with mild or moderate renal impairment. In patients with severe renal impairment or end-stage renal disease, rilpivirine should be used with caution. In patients with severe renal impairment or end-stage renal disease, the combination of rilpivirine with a strong CYP3A inhibitor (e.g., ritonavir-boosted HIV protease inhibitor) should only be used if the benefit outweighs the risk (see section 5.2).

Treatment with rilpivirine resulted in an early small increase of mean serum creatinine levels which remained stable over time and is not considered clinically relevant (see section 4.8).

Hepatic impairment

There is limited information regarding the use of EDURANT in patients with mild or moderate hepatic impairment (Child-Pugh score A or B). No dose adjustment of EDURANT is required in patients with mild or moderate hepatic impairment. EDURANT should be used with caution in patients with moderate hepatic impairment. EDURANT has not been studied in patients with severe hepatic impairment (Child-Pugh score C). Therefore, EDURANT is not recommended in patients with severe hepatic impairment (see section 5.2).

Paediatric population

The safety and efficacy of EDURANT in children aged < 12 years have not yet been established. No data are available.

Pregnancy

Lower exposures of rilpivirine were observed during pregnancy, therefore viral load should be monitored closely. Alternatively, switching to another ART regimen could be considered (see sections 4.4, 4.6, 5.1 and 5.2).

Method of administration

EDURANT must be taken orally, once daily **with a meal** (see section 5.2). It is recommended that the film-coated tablet be swallowed whole with water and not be chewed or crushed.

4.3 Contraindications

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

EDURANT should not be co-administered with the following medicinal products, as significant decreases in rilpivirine plasma concentrations may occur (due to CYP3A enzyme induction or gastric pH increase), which may result in loss of therapeutic effect of EDURANT (see section 4.5):

- the anticonvulsants carbamazepine, oxcarbazepine, phenobarbital, phenytoin
- the antimycobacterials rifampicin, rifapentine
- proton pump inhibitors, such as omeprazole, esomeprazole, lansoprazole, pantoprazole, rabeprazole
- the systemic glucocorticoid dexamethasone, except as a single dose treatment
- St John's wort (*Hypericum perforatum*).

4.4 Special warnings and precautions for use

While effective viral suppression with antiretroviral therapy has been proven to substantially reduce the risk of sexual transmission, a residual risk cannot be excluded. Precautions to prevent transmission should be taken in accordance with national guidelines.

Virologic failure and development of resistance

EDURANT has not been evaluated in patients with previous virologic failure to any other antiretroviral therapy. The list of rilpivirine resistance-associated mutations presented in section 5.1 should only guide the use of EDURANT in the treatment-naïve population.

In the pooled efficacy analysis from the Phase III trials in adults through 96 weeks, patients treated with rilpivirine with a baseline viral load > 100,000 HIV-1 RNA copies/ml had a greater risk of virologic failure (18.2% with rilpivirine versus 7.9% with efavirenz) compared to patients with a baseline viral load \leq 100,000 HIV-1 RNA copies/ml (5.7% with rilpivirine versus 3.6% with efavirenz). The greater risk of virologic failure for patients in the rilpivirine arm was observed in the first 48 weeks of these trials (see section 5.1). Patients with a baseline viral load \geq 100,000 HIV-1 RNA copies/ml who experienced virologic failure exhibited a higher rate of treatment-emergent resistance to the non-nucleoside reverse transcriptase inhibitor (NNRTI) class. More patients who failed virologically on rilpivirine than who failed virologically on efavirenz developed lamivudine/emtricitabine associated resistance (see section 5.1).

Findings in adolescents (12 to less than 18 years of age) in trial TMC278-C213 were generally in line with these data (for details see section 5.1).

Only adolescents deemed likely to have good adherence to antiretroviral therapy should be treated with rilpivirine, as suboptimal adherence can lead to development of resistance and the loss of future treatment options.

As with other antiretroviral medicinal products, resistance testing should guide the use of rilpivirine (see section 5.1).

Cardiovascular

At supra-therapeutic doses (75 and 300 mg once daily), rilpivirine has been associated with prolongation of the QTc interval of the electrocardiogram (ECG) (see sections 4.5, 4.8 and 5.2). EDURANT at the recommended dose of 25 mg once daily is not associated with a clinically relevant effect on QTc. EDURANT should be used with caution when co-administered with medicinal products with a known risk of Torsade de Pointes.

Immune reactivation syndrome

In HIV infected patients with severe immune deficiency at the time of initiation of CART, an inflammatory reaction to asymptomatic or residual opportunistic pathogens may arise and cause serious clinical conditions or aggravation of symptoms. Typically, such reactions have been observed within the first weeks or months of initiation of CART. Relevant examples are cytomegalovirus retinitis, generalised and/or focal mycobacterial infections and *Pneumocystis jiroveci* pneumonia. Any inflammatory symptoms should be evaluated and treatment instituted when necessary.

Autoimmune disorders (such as Graves' disease and autoimmune hepatitis) have also been reported to occur in the setting of immune reactivation; however, the reported time to onset is more variable and these events can occur many months after initiation of treatment (see section 4.8).

Pregnancy

Edurant should be used during pregnancy only if the potential benefit justifies the potential risk. Lower exposures of rilpivirine were observed when rilpivirine 25 mg once daily was taken during pregnancy. In the Phase III studies, lower rilpivirine exposure, similar to that seen during pregnancy, has been associated with an increased risk of virological failure, therefore viral load should be monitored closely (see sections 4.6, 5.1 and 5.2). Alternatively, switching to another ART regimen could be considered.

Important information about some of the ingredients of EDURANT

EDURANT contains lactose. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicinal product.

4.5 Interaction with other medicinal products and other forms of interaction

Medicinal products that affect rilpivirine exposure

Rilpivirine is primarily metabolised by cytochrome P450 (CYP)3A. Medicinal products that induce or inhibit CYP3A may thus affect the clearance of rilpivirine (see section 5.2). Co-administration of rilpivirine and medicinal products that induce CYP3A has been observed to decrease the plasma concentrations of rilpivirine, which could reduce the therapeutic effect of rilpivirine. Co-administration of rilpivirine and medicinal products that inhibit CYP3A has been observed to increase the plasma concentrations of rilpivirine.

Co-administration of rilpivirine with medicinal products that increase gastric pH may result in decreased plasma concentrations of rilpivirine which could potentially reduce the therapeutic effect of EDURANT.

Medicinal products that are affected by the use of rilpivirine

Rilpivirine at a dose of 25 mg once daily is not likely to have a clinically relevant effect on the exposure of medicinal products metabolised by CYP enzymes.

Rilpivirine inhibits P-glycoprotein *in vitro* (IC₅₀ is 9.2 μ M). In a clinical study, rilpivirine did not significantly affect the pharmacokinetics of digoxin. However, it may not be completely excluded that rilpivirine can increase the exposure to other medicines transported by P-glycoprotein that are more sensitive to intestinal P-gp inhibition, e.g. dabigatran etexilate.

Rilpivirine is an *in vitro* inhibitor of the transporter MATE-2K with an IC_{50} of < 2.7 nM. The clinical implications of this finding are currently unknown.

Established and theoretical interactions with selected antiretrovirals and non-antiretroviral medicinal products are listed in table 1.

Interaction table

Interaction studies have only been performed in adults.

Interactions between rilpivirine and co-administered medicinal products are listed in table 1 (increase is indicated as " \uparrow ", decrease as " \downarrow ", no change as " \leftrightarrow ", not applicable as "NA", confidence interval as "CI").

Table 1: INTERACTIONS AND DOSE RECOMMENDATIONS WITH OTHER MEDICINAL PRODUCTS				
Medicinal products by therapeutic areas	Interaction Geometric mean change (%)	Recommendations concerning co-administration		
ANTI-INFECTIVES				
Antiretrovirals				
HIV NRTIs/N[t]RTIs				
Didanosine*#	didanosine AUC ↑ 12%	No dose adjustment is required.		
400 mg once daily	didanosine C _{min} NA	Didanosine should be administered at		
	didanosine $C_{max} \leftrightarrow$	least two hours before or at least four		
	rilpivirine AUC \leftrightarrow	hours after rilpivirine.		
	rilpivirine $C_{min} \leftrightarrow$	-		
	rilpivirine $C_{max} \leftrightarrow$			

Tenofovir disoproxil * [#] 245 mg once daily	tenofovir AUC $\uparrow 23\%$ tenofovir $C_{min} \uparrow 24\%$ tenofovir $C_{max} \uparrow 19\%$ rilpivirine AUC \leftrightarrow rilpivirine $C_{min} \leftrightarrow$ rilpivirine $C_{max} \leftrightarrow$	No dose adjustment is required.
Other NRTIs (abacavir, emtricitabine, lamivudine, stavudine and zidovudine)	Not studied. No clinically relevant drug-drug interactions are expected.	No dose adjustment is required.
HIV NNRTIs		
NNRTIs (delavirdine, efavirenz, etravirine, nevirapine)	Not studied.	It is not recommended to co-administer rilpivirine with other NNRTIs.
HIV PIs – with co-administrati	on of low dose ritonavir	
Darunavir/ritonavir* [#] 800/100 mg once daily	darunavir AUC \leftrightarrow darunavir $C_{min} \downarrow 11\%$ darunavir $C_{max} \leftrightarrow$ rilpivirine AUC $\uparrow 130\%$ rilpivirine $C_{min} \uparrow 178\%$ rilpivirine $C_{max} \uparrow 79\%$ (inhibition of CYP3A enzymes)	Concomitant use of rilpivirine with ritonavir-boosted PIs causes an increase in the plasma concentrations of rilpivirine, but no dose adjustment is required.
Lopinavir/ritonavir (soft gel capsule)*# 400/100 mg twice daily	lopinavir AUC ↔ lopinavir $C_{min} \downarrow 11\%$ lopinavir $C_{max} ↔$ rilpivirine AUC ↑ 52% rilpivirine $C_{min} \uparrow 74\%$ rilpivirine $C_{max} \uparrow 29\%$ (inhibition of CYP3A enzymes)	
Other boosted PIs (atazanavir/ritonavir, fosamprenavir/ritonavir, saquinavir/ritonavir, tipranavir/ritonavir)	Not studied.	
HIV PIs – without co-administ	ration of low dose ritonavir	
Unboosted PIs (atazanavir, fosamprenavir, indinavir, nelfinavir)	Not studied. Increased exposure of rilpivirine is expected. (inhibition of CYP3A enzymes)	No dose adjustment is required.
CCR5 Antagonists	k ,	
Maraviroc	Not studied. No clinically relevant drug-drug interaction is expected.	No dose adjustment is required.
HIV Integrase Strand Transfer		XT 1 1
Raltegravir*	raltegravir AUC \uparrow 9% raltegravir C _{min} \uparrow 27% raltegravir C _{max} \uparrow 10% rilpivirine AUC \leftrightarrow rilpivirine C _{min} \leftrightarrow rilpivirine C _{max} \leftrightarrow	No dose adjustment is required.
Other Antiviral Agents	- max	
Ribavirin	Not studied. No clinically relevant drug-drug interaction is expected.	No dose adjustment is required.
Simeprevir*	simeprevir AUC \leftrightarrow simeprevir C _{min} \leftrightarrow simeprevir C _{max} \uparrow 10% rilpivirine AUC \leftrightarrow rilpivirine C _{min} \uparrow 25% rilpivirine C _{max} \leftrightarrow	No dose adjustment is required.

ANTICONVULSANTS		
Carbamazepine	Not studied. Significant decreases	Rilpivirine must not be used in
Oxcarbazepine	in rilpivirine plasma concentrations	combination with these
Phenobarbital	are expected.	anticonvulsants as co-administration
Phenytoin	1	may result in loss of therapeutic effect
	(induction of CYP3A enzymes)	of rilpivirine (see section 4.3).
ZOLE ANTIFUNGAL A		
Ketoconazole*#	ketoconazole AUC $\downarrow 24\%$	At the recommended dose of 25 mg
400 mg once daily	ketoconazole $C_{min} \downarrow 66\%$	once daily, no dose adjustment is
	ketoconazole $C_{max} \leftrightarrow$	required when rilpivirine is
		co-administered with ketoconazole.
	(induction of CYP3A due to high	
	rilpivirine dose in the study)	
	rilpivirine AUC ↑ 49%	
	rilpivirine $C_{min} \uparrow 76\%$	
	rilpivirine $C_{min} \uparrow 30\%$	
	Inpivitine C _{max} 30%	
	(inhibition of CYP3A enzymes)	
Fluconazole	Not studied. Concomitant use of	No dose adjustment is required.
Itraconazole	EDURANT with azole antifungal	
Posaconazole	agents may cause an increase in the	
Voriconazole	plasma concentrations of rilpivirine.	
NTIMUCODACTEDIA	(inhibition of CYP3A enzymes)	
NTIMYCOBACTERIAL Rifabutin*	rifabutin AUC \leftrightarrow	Throughout co-administration of
300 mg once daily [†]	rifabutin $C_{min} \leftrightarrow$	rilpivirine with rifabutin, the rilpiviri
500 mg onee dany	rifabutin $C_{max} \leftrightarrow$	dose should be increased from 25 mg
	25- <i>O</i> -desacetyl-rifabutin AUC \leftrightarrow	once daily to 50 mg once daily. When
	25-O-desacetyl-rifabutin $C_{min} \leftrightarrow$	rifabutin co-administration is stopped
		the rilpivirine dose should be
	25- <i>O</i> -desacetyl-rifabutin $C_{max} \leftrightarrow$	decreased to 25 mg once daily.
300 mg once daily	rilpivirine AUC ↓ 42%	decreased to 25 mg once daily.
(+25 mg once daily)	rilpivirine $C_{min} \downarrow 48\%$	
rilpivirine)	rilpivirine $C_{max} \downarrow 31\%$	
inpr(ninc)		
300 mg once daily	rilpivirine AUC ↑ 16%*	
(+ 50 mg once daily	rilpivirine $C_{\min} \leftrightarrow *$	
rilpivirine)	rilpivirine C _{max} ↑ 43%*	
	* compared to 25 mg once daily rilpivirine	
	alone	
Diformi air *#	(induction of CYP3A enzymes)	Dilaining must set be seed in
Rifampicin ^{*#}	rifampicin AUC \leftrightarrow	Rilpivirine must not be used in
600 mg once daily	rifampicin C _{min} NA	combination with rifampicin as
	rifampicin $C_{max} \leftrightarrow$	co-administration is likely to result in
	25-desacetyl-rifampicin AUC \downarrow 9%	loss of the apeutic effect of rilpiviring $(a = a = b = a)$
	25-desacetyl-rifampicin C _{min} NA	(see section 4.3).
	25-desacetyl-rifampicin $C_{max} \leftrightarrow$	
	rilpivirine AUC ↓ 80%	
	rilpivirine $C_{\min} \downarrow 89\%$	
	rilpivirine $C_{max} \downarrow 69\%$	
	(induction of CYP3A enzymes)	
Rifapentine	Not studied. Significant decreases	Rilpivirine must not be used in
ĩ	in rilpivirine plasma concentrations	combination with rifapentine as
	are expected.	co-administration is likely to result in
	1	loss of therapeutic effect of rilpiviring
	(induction of CYP3A enzymes)	(see section 4.3).

MACROLIDE ANTIBIOTIC		
Clarithromycin	Not studied. Increased exposure of	Where possible, alternatives such as
Erythromycin	rilpivirine is expected.	azithromycin should be considered.
	(inhibition of CYP3A enzymes)	
GLUCOCORTICOIDS		
Dexamethasone	Not studied. Dose dependent	Rilpivirine should not be used in
(systemic, except for	decreases in rilpivirine plasma	combination with systemic
single dose use)	concentrations are expected.	dexamethasone (except as a single
-	-	dose) as co-administration may result
	(induction of CYP3A enzymes)	in loss of therapeutic effect of
		rilpivirine (see section 4.3).
		Alternatives should be considered,
		particularly for long-term use.
PROTON PUMP INHIBITO		
Omeprazole*#	omeprazole AUC ↓ 14%	Rilpivirine must not be used in
20 mg once daily	omeprazole C _{min} NA	combination with proton pump
	omeprazole $C_{max} \downarrow 14\%$	inhibitors as co-administration is likely
	rilpivirine AUC ↓ 40%	to result in loss of therapeutic effect of
	rilpivirine $C_{min} \downarrow 33\%$	rilpivirine (see section 4.3).
	rilpivirine $C_{max} \downarrow 40\%$	
	(reduced absorption due to gastric	
	pH increase)	4
Lansoprazole	Not studied. Significant decreases	
Rabeprazole	in rilpivirine plasma concentrations	
Pantoprazole Esomeprazole	are expected.	
Esomeprazole	(reduced absorption due to gastric	
	pH increase)	
H ₂ -RECEPTOR ANTAGON	1 /	1
Famotidine*#	rilpivirine AUC ↓ 9%	The combination of rilpivirine and
40 mg single dose taken	rilpivirine C _{min} NA	H ₂ -receptor antagonists should be used
12 hours before	rilpivirine $C_{max} \leftrightarrow$	with particular caution. Only
rilpivirine	1	H ₂ -receptor antagonists that can be
Famotidine*#	rilpivirine AUC ↓ 76%	dosed once daily should be used.
40 mg single dose taken	rilpivirine C _{min} NA	A strict dosing schedule, with intake of
	milnivining C 850/	H ₂ -receptor antagonists at least
2 hours before rilpivirine	rilpivirine $C_{max} \downarrow 85\%$	
2 hours before rilpivirine	$111 \text{ prvi me } C_{\text{max}} \downarrow 85\%$	12 hours before or at least 4 hours
2 hours before rilpivirine	(reduced absorption due to gastric	
·	(reduced absorption due to gastric pH increase)	12 hours before or at least 4 hours
Famotidine*#	(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13%	12 hours before or at least 4 hours
Famotidine*# 40 mg single dose taken	(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C _{min} NA	12 hours before or at least 4 hours
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine	(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C _{min} NA rilpivirine C _{max} ↑ 21%	12 hours before or at least 4 hours
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine Cimetidine	(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C _{min} NA	12 hours before or at least 4 hours
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine Cimetidine Nizatidine	(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C _{min} NA rilpivirine C _{max} ↑ 21% Not studied.	12 hours before or at least 4 hours
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine Cimetidine	(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C _{min} NA rilpivirine C _{max} ↑ 21% Not studied. (reduced absorption due to gastric	12 hours before or at least 4 hours
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine Cimetidine Nizatidine Ranitidine	(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C _{min} NA rilpivirine C _{max} ↑ 21% Not studied.	12 hours before or at least 4 hours
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine Cimetidine Nizatidine Ranitidine ANTACIDS	<pre>(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C_{min} NA rilpivirine C_{max} ↑ 21% Not studied. (reduced absorption due to gastric pH increase)</pre>	12 hours before or at least 4 hours after rilpivirine should be used.
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine Cimetidine Nizatidine Ranitidine ANTACIDS Antacids (e.g.,	<pre>(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C_{min} NA rilpivirine C_{max} ↑ 21% Not studied. (reduced absorption due to gastric pH increase) Not studied. Significant decreases</pre>	12 hours before or at least 4 hours after rilpivirine should be used.
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine Cimetidine Nizatidine Ranitidine ANTACIDS Antacids (e.g., aluminium or magnesium	 (reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C_{min} NA rilpivirine C_{max} ↑ 21% Not studied. (reduced absorption due to gastric pH increase) Not studied. Significant decreases in rilpivirine plasma concentrations 	12 hours before or at least 4 hours after rilpivirine should be used. The combination of rilpivirine and antacids should be used with particular
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine Cimetidine Nizatidine Ranitidine ANTACIDS Antacids (e.g., aluminium or magnesium hydroxide, calcium	<pre>(reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C_{min} NA rilpivirine C_{max} ↑ 21% Not studied. (reduced absorption due to gastric pH increase) Not studied. Significant decreases</pre>	12 hours before or at least 4 hours after rilpivirine should be used. The combination of rilpivirine and antacids should be used with particular caution. Antacids should only be
Famotidine*# 40 mg single dose taken 4 hours after rilpivirine Cimetidine Nizatidine Ranitidine ANTACIDS Antacids (e.g., aluminium or magnesium	 (reduced absorption due to gastric pH increase) rilpivirine AUC ↑ 13% rilpivirine C_{min} NA rilpivirine C_{max} ↑ 21% Not studied. (reduced absorption due to gastric pH increase) Not studied. Significant decreases in rilpivirine plasma concentrations 	12 hours before or at least 4 hours after rilpivirine should be used. The combination of rilpivirine and antacids should be used with particular

NARCOTIC ANALGESICS		
Methadone*	R(-) methadone AUC \downarrow 16%	No dose adjustments are required
60-100 mg once daily,	R(-) methadone $C_{min} \downarrow 22\%$	when initiating co-administration of
individualised dose	R(-) methadone $C_{max} \downarrow 14\%$	methadone with rilpivirine. However,
marviadansed dose	rilpivirine AUC \leftrightarrow *	clinical monitoring is recommended as
	rilpivirine $C_{\min} \leftrightarrow *$	methadone maintenance therapy may
	rilpivirine $C_{max} \leftrightarrow *$	need to be adjusted in some patients.
	* based on historic controls	
ANTIARRHYTHMICS		I
Digoxin*	digoxin AUC \leftrightarrow	No dose adjustment is required.
	digoxin C _{min} NA	
	digoxin $C_{max} \leftrightarrow$	
ANTICOAGULANTS		
Dabigatran etexilate	Not studied. A risk for increases in	The combination of rilpivirine and
	dabigatran plasma concentrations	dabigatran etexilate should be used
	cannot be excluded.	with caution.
	(inhibition of intestinal P-gp)	
ANTIDIABETICS		
Metformin*	metformin AUC ↔	No dose adjustment is required.
850 mg single dose	metformin C _{min} NA	
	metformin $C_{max} \leftrightarrow$	
HERBAL PRODUCTS		
St John's wort	Not studied. Significant decreases	Rilpivirine must not be used in
(Hypericum perforatum)	in rilpivirine plasma concentrations	combination with products containing
	are expected.	St John's wort as co-administration
	are expected.	may result in loss of therapeutic effect
	(in Institute of CVD2 A surgery as)	
ANALGESICS	(induction of CYP3A enzymes)	of rilpivirine (see section 4.3).
ANALGESICS Paracetamol ^{*#}		NI- dana adimatena anti- ara anima d
	paracetamol AUC \leftrightarrow	No dose adjustment is required.
500 mg single dose	paracetamol C _{min} NA	
	paracetamol $C_{max} \leftrightarrow$	
	rilpivirine AUC \leftrightarrow	
	rilpivirine $C_{min} \uparrow 26\%$	
	rilpivirine $C_{max} \leftrightarrow$	
ORAL CONTRACEPTIVES	5	
Ethinylestradiol*	ethinylestradiol AUC \leftrightarrow	No dose adjustment is required.
0.035 mg once daily	ethinylestradiol $C_{\min} \leftrightarrow$	5 1
Norethindrone*	ethinylestradiol $C_{max} \uparrow 17\%$	
	norethindrone AUC \leftrightarrow	
1 mg once daily		
	norethindrone $C_{\min} \leftrightarrow$	
	norethindrone $C_{max} \leftrightarrow$	
	rilpivirine AUC ↔*	
	rilpivirine $C_{min} \leftrightarrow *$	
	Inprvninc C _{min} v	
	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls	
HMG CO-A REDUCTASE I	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls	
HMG CO-A REDUCTASE I Atorvastatin*#	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls	No dose adjustment is required.
Atorvastatin*#	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls NHIBITORS atorvastatin AUC \leftrightarrow	No dose adjustment is required.
	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls NHIBITORS atorvastatin AUC \leftrightarrow atorvastatin $C_{min} \downarrow 15\%$	No dose adjustment is required.
Atorvastatin*#	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls NHIBITORS atorvastatin AUC \leftrightarrow atorvastatin $C_{min} \downarrow 15\%$ atorvastatin $C_{max} \uparrow 35\%$	No dose adjustment is required.
Atorvastatin*#	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls NHIBITORS atorvastatin AUC ↔ atorvastatin $C_{min} \downarrow 15\%$ atorvastatin $C_{max} \uparrow 35\%$ rilpivirine AUC ↔	No dose adjustment is required.
Atorvastatin*#	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls NHIBITORS atorvastatin AUC ↔ atorvastatin $C_{min} \downarrow 15\%$ atorvastatin $C_{max} \uparrow 35\%$ rilpivirine AUC ↔ rilpivirine $C_{min} \leftrightarrow$	No dose adjustment is required.
Atorvastatin ^{*#} 40 mg once daily	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls NHIBITORS atorvastatin AUC \leftrightarrow atorvastatin $C_{min} \downarrow 15\%$ atorvastatin $C_{max} \uparrow 35\%$ rilpivirine AUC \leftrightarrow rilpivirine $C_{min} \leftrightarrow$ rilpivirine $C_{max} \downarrow 9\%$	No dose adjustment is required.
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Atorvastatin ^{*#} 40 mg once daily PHOSPHODIESTERASE TY Sildenafil ^{*#}	rilpivirine $C_{max} \leftrightarrow *$ * based on historic controls NHIBITORS atorvastatin AUC ↔ atorvastatin $C_{min} \downarrow 15\%$ atorvastatin $C_{max} \uparrow 35\%$ rilpivirine AUC ↔ rilpivirine $C_{min} \leftrightarrow$ rilpivirine $C_{max} \downarrow 9\%$ YPE 5 (PDE-5) INHIBITORS sildenafil AUC ↔	No dose adjustment is required. No dose adjustment is required.
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- * The interaction between rilpivirine and the medicinal product was evaluated in a clinical study. All other drug-drug interactions shown are predicted.
- [#] This interaction study has been performed with a dose higher than the recommended dose for rilpivirine assessing the maximal effect on the co-administered medicinal product. The dosing recommendation is applicable to the recommended dose of rilpivirine of 25 mg once daily.
- [†] This interaction study has been performed with a dose higher than the recommended dose for rilpivirine.

QT prolonging medicinal products

There is limited information available on the potential for a pharmacodynamic interaction between rilpivirine and medicinal products that prolong the QTc interval of the ECG. In a study of healthy subjects, supratherapeutic doses of rilpivirine (75 mg once daily and 300 mg once daily) have been shown to prolong the QTc interval of the ECG (see section 5.1). EDURANT should be used with caution when co-administered with a medicinal product with a known risk of Torsade de Pointes.

4.6 Fertility, pregnancy and lactation

Pregnancy

A moderate amount of data on pregnant women (between 300-1000 pregnancy outcomes) indicate no malformative or feto/neonatal toxicity of rilpivirine (see sections 4.4, 5.1 and 5.2). Lower exposures of rilpivirine were observed during pregnancy, therefore viral load should be monitored closely.

Animal studies do not indicate reproductive toxicity (see section 5.3).

The use of rilpivirine may be considered during pregnancy, if necessary.

Breast-feeding

It is not known whether rilpivirine is excreted in human milk. Rilpivirine is excreted in the milk of rats. Because of both the potential for HIV transmission and the potential for adverse reactions in breastfed infants, mothers should be instructed not to breast-feed if they are receiving rilpivirine.

Fertility

No human data on the effect of rilpivirine on fertility are available. No clinically relevant effects on fertility were seen in animal studies (see section 5.3).

4.7 Effects on ability to drive and use machines

EDURANT has no or negligible influence on the ability to drive and use machines. However, fatigue, dizziness and somnolence have been reported in some patients taking EDURANT and should be considered when assessing a patient's ability to drive or operate machinery.

4.8 Undesirable effects

Summary of the safety profile

During the clinical development program (1,368 patients in the Phase III controlled trials TMC278-C209 (ECHO) and TMC278-C215 (THRIVE)), 55.7% of subjects experienced at least one adverse drug reaction (see section 5.1). The most frequently reported adverse drug reactions (ADRs) ($\geq 2\%$) that were at least of moderate intensity were depression (4.1%), headache (3.5%), insomnia (3.5%), rash (2.3%), and abdominal pain (2.0%). The most frequent serious treatment-related ADRs were reported in 7 (1.0%) patients receiving rilpivirine. The median duration of exposure for patients in the rilpivirine arm and efavirenz arm was 104.3 and 104.1 weeks, respectively. Most ADRs occurred in the first 48 weeks of treatment.

Selected treatment emergent clinical laboratory abnormalities (grade 3 or grade 4), considered as ADRs, reported in EDURANT treated patients were increased pancreatic amylase (3.8%), increased AST (2.3%), increased ALT (1.6%), increased LDL cholesterol (fasted, 1.5%), decreased white blood cell count (1.2%), increased lipase (0.9%), increased bilirubin (0.7%), increased triglycerides (fasted, 0.6%), decreased haemoglobin (0.1%), decreased platelet count (0.1%), and increased total cholesterol (fasted, 0.1%).

Tabulated summary of adverse reactions

ADRs reported in adult patients treated with rilpivirine are summarised in Table 2. The ADRs are listed by system organ class (SOC) and frequency. Frequencies are defined as very common ($\geq 1/10$), common ($\geq 1/100$ to < 1/10) and uncommon ($\geq 1/1,000$ to < 1/100). Within each frequency grouping, ADRs are presented in order of decreasing frequency.

Table 2:ADRs reported in antiretroviral treatment-naïve HIV-1 infected adult patientstreated with Rilpivirine				
(pooled data from the week 96 analysis of the Phase III ECHO and THRIVE trials) N=686				
System Organ Class (SOC)	Frequency Category	ADRs		
		(Rilpivirine + BR)		
Blood and lymphatic system	common	decreased white blood cell count		
disorders		decreased haemoglobin		
		decreased platelet count		
Immune system disorders	uncommon	immune reactivation syndrome		
Metabolism and nutrition	very common	increased total cholesterol (fasted)		
disorders		increased LDL cholesterol (fasted)		
	common	decreased appetite		
		increased triglycerides (fasted)		
Psychiatric disorders	very common	insomnia		
	common	abnormal dreams		
		depression		
		sleep disorders		
		depressed mood		
Nervous system disorders	very common	headache		
		dizziness		
	common	somnolence		
Gastrointestinal disorders	very common	nausea		
		increased pancreatic amylase		
	common	abdominal pain		
		vomiting		
		increased lipase		
		abdominal discomfort		
		dry mouth		
Hepatobiliary disorders	very common	increased transaminases		
	common	increased bilirubin		
Skin and subcutaneous tissue disorders	common	rash		
General disorders and administration site conditions	common	fatigue		

BR=background regimen

N=number of subjects

Laboratory abnormalities

In the rilpivirine arm in the week 96 analysis of the Phase III ECHO and THRIVE trials, mean change from baseline in total cholesterol (fasted) was 5 mg/dl, in HDL cholesterol (fasted) 4 mg/dl, in LDL cholesterol (fasted) 1 mg/dl, and in triglycerides (fasted) -7 mg/dl.

Description of selected adverse reactions

Immune reactivation syndrome

In HIV infected patients with severe immune deficiency at the time of initiation of combination antiretroviral therapy (CART), an inflammatory reaction to asymptomatic or residual opportunistic infections may arise. Autoimmune disorders (such as Graves' disease and autoimmune hepatitis) have also been reported; however, the reported time to onset is more variable and these events can occur many months after initiation of treatment (see section 4.4).

Paediatric population (12 to less than 18 years of age)

The safety assessment is based on the week 48 analysis of the single-arm, open-label, Phase II trial, TMC278-C213, in which 36 antiretroviral treatment-naïve HIV-1 infected adolescent patients weighing at least 32 kg received rilpivirine (25 mg once daily) in combination with other antiretroviral agents (see section 5.1). The median duration of exposure for patients was 63.5 weeks. There were no patients who discontinued treatment due to ADRs. No new ADRs were identified compared to those seen in adults.

Most ADRs were grade 1 or 2. The most common ADRs (all grades, greater than or equal to 10%) were headache (19.4%), depression (19.4%), somnolence (13.9%), and nausea (11.1%). No grade 3-4 laboratory abnormalities for AST/ALT or grade 3-4 ADRs of transaminase increased were reported.

There were no new safety concerns identified in the Week 240 analysis of the TMC278-C213 trial in adolescents.

The safety and efficacy of rilpivirine in children aged <12 years have not yet been established. No data are available.

Other special populations

Patients co-infected with hepatitis B and/or hepatitis C virus

In patients co-infected with hepatitis B or C virus receiving rilpivirine, the incidence of hepatic enzyme elevation was higher than in patients receiving rilpivirine who were not co-infected. This observation was the same in the efavirenz arm. The pharmacokinetic exposure of rilpivirine in co-infected patients was comparable to that in patients without co-infection.

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

There is no specific antidote for overdose with EDURANT. Human experience of overdose with rilpivirine is limited. Symptoms of overdose may include headache, nausea, dizziness and/or abnormal dreams. Treatment of overdose with rilpivirine consists of general supportive measures including monitoring of vital signs and ECG (QT interval) as well as observation of the clinical status of the patient. Further management should be as clinically indicated or as recommended by the national poisons centre, where available. Since rilpivirine is highly bound to plasma protein, dialysis is unlikely to result in significant removal of the active substance.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Antiviral for systemic use, non-nucleoside reverse transcriptase inhibitors, ATC code: J05AG05.

Mechanism of action

Rilpivirine is a diarylpyrimidine NNRTI of HIV-1. Rilpivirine activity is mediated by non-competitive inhibition of HIV-1 reverse transcriptase (RT). Rilpivirine does not inhibit the human cellular DNA polymerases α , β and γ .

Antiviral activity in vitro

Rilpivirine exhibited activity against laboratory strains of wild-type HIV-1 in an acutely infected T-cell line with a median EC_{50} value for HIV-1/IIIB of 0.73 nM (0.27 ng/ml). Although rilpivirine demonstrated limited *in vitro* activity against HIV-2 with EC_{50} values ranging from 2,510 to 10,830 nM (920 to 3,970 ng/ml), treatment of HIV-2 infection with rilpivirine is not recommended in the absence of clinical data.

Rilpivirine also demonstrated antiviral activity against a broad panel of HIV-1 group M (subtype A, B, C, D, F, G, H) primary isolates with EC_{50} values ranging from 0.07 to 1.01 nM (0.03 to 0.37 ng/ml) and group O primary isolates with EC_{50} values ranging from 2.88 to 8.45 nM (1.06 to 3.10 ng/ml).

Resistance

In cell culture

Rilpivirine-resistant strains were selected in cell culture starting from wild-type HIV-1 of different origins and subtypes as well as NNRTI resistant HIV-1. The most commonly observed resistance-associated mutations that emerged included L100I, K101E, V108I, E138K, V179F, Y181C, H221Y, F227C and M230I.

Resistance to rilpivirine was determined as a fold change in EC_{50} value (FC) above the biological cut-off (BCO) of the assay.

In treatment-naïve adult subjects

For the resistance analysis, a broader definition of virologic failure was used than in the primary efficacy analysis. In the week 48 pooled resistance analysis from the Phase III trials, 62 (of a total of 72) virologic failures in the rilpivirine arm had resistance data at baseline and time of failure. In this analysis, the resistance-associated mutations (RAMs) associated with NNRTI resistance that developed in at least 2 rilpivirine virologic failures were: V90I, K101E, E138K, E138Q, V179I, Y181C, V189I, H221Y, and F227C. In the trials, the presence of the mutations V90I and V189I, at baseline, did not affect response. The E138K substitution emerged most frequently during rilpivirine treatment, commonly in combination with the M184I substitution. In the week 48 analysis, 31 out of 62 of rilpivirine virologic failures had concomitant NNRTI and NRTI RAMs; 17 of those 31 had the combination of E138K and M184I. The most common mutations were the same in the week 48 and week 96 analyses.

In the week 96 pooled resistance analysis, lower rates of virologic failure were observed in the second 48 weeks than in the first 48 weeks of treatment. From the week 48 to the week 96 analysis, 24 (3.5%) and 14 (2.1%) additional virologic failures occurred in the rilpivirine and efavirenz arm, respectively. Of these virologic failures, 9 out of 24 and 4 out of 14 were in subjects with a baseline viral load < 100,000 copies/ml, respectively.

In treatment-naïve adolescent subjects

In the week 240 resistance analysis of the TMC278-C213 trial, rilpivirine resistance-associated mutations (RAMs) were observed in 46.7% (7/15) of subjects with virologic failure and post-baseline genotypic data. All subjects with rilpivirine RAMs also had at least 1 treatment-emergent NRTI RAM at the last post-baseline time point with genotypic data.

Considering all of the available *in vitro* and *in vivo* data in treatment-naïve subjects, the following resistance-associated mutations, when present at baseline, may affect the activity of rilpivirine: K101E, K101P, E138A, E138G, E138K, E138R, E138Q, V179L, Y181C, Y181I, Y181V, Y188L, H221Y, F227C, M230I, and M230L. These rilpivirine resistance-associated mutations should only guide the use of EDURANT in the treatment-naïve population. These resistance-associated mutations were derived from *in vivo* data involving treatment-naïve subjects only and therefore cannot be used to predict the activity of rilpivirine in subjects who have virologically failed an antiretroviral-containing regimen.

As with other antiretroviral medicinal products, resistance testing should guide the use of EDURANT.

Cross-resistance

Site-directed NNRTI mutant virus

In a panel of 67 HIV-1 recombinant laboratory strains with one resistance-associated mutation at RT positions associated with NNRTI resistance, including the most commonly found K103N and Y181C, rilpivirine showed antiviral activity against 64 (96%) of these strains. The single resistance-associated mutations associated with a loss of susceptibility to rilpivirine were: K101P, Y181I and Y181V. The K103N substitution did not result in reduced susceptibility to rilpivirine by itself, but the combination of K103N and L100I resulted in a 7-fold reduced susceptibility to rilpivirine.

Recombinant clinical isolates

Rilpivirine retained sensitivity (FC \leq BCO) against 62% of 4,786 HIV-1 recombinant clinical isolates resistant to efavirenz and/or nevirapine.

Treatment-naïve HIV-1 infected adult patients

In the week 96 pooled resistance analysis of the Phase III trials (ECHO and THRIVE), 42 out of 86 subjects with virologic failure on rilpivirine showed treatment-emergent resistance to rilpivirine (genotypic analysis). In these patients, phenotypic cross-resistance to other NNRTIs was noted as follows: etravirine 32/42, efavirenz 30/42, and nevirapine 16/42. In patients with a baseline viral load $\leq 100,000$ copies/ml, 9 out of 27 patients with virologic failure on rilpivirine showed treatment-emergent resistance to rilpivirine (genotypic analysis), with the following frequency of phenotypic cross-resistance: etravirine 4/9, efavirenz 3/9, and nevirapine 1/9.

Effects on electrocardiogram

The effect of rilpivirine at the recommended dose of 25 mg once daily on the QTcF interval was evaluated in a randomised, placebo and active (moxifloxacin 400 mg once daily) controlled crossover study in 60 healthy adults, with 13 measurements over 24 hours at steady-state. EDURANT at the recommended dose of 25 mg once daily is not associated with a clinically relevant effect on QTc.

When supratherapeutic doses of 75 mg once daily and 300 mg once daily of rilpivirine were studied in healthy adults, the maximum mean time-matched (95% upper confidence bound) differences in QTcF interval from placebo after baseline correction were 10.7 (15.3) and 23.3 (28.4) ms, respectively. Steady-state administration of rilpivirine 75 mg once daily and 300 mg once daily resulted in a mean C_{max} approximately 2.6-fold and 6.7-fold, respectively, higher than the mean steady-state C_{max} observed with the recommended 25 mg once daily dose of rilpivirine.

Clinical efficacy and safety

Treatment-naïve HIV-1 infected adult patients

The evidence of efficacy of rilpivirine is based on the analysis of 96 week data from 2 randomised, double-blinded, active-controlled, Phase III trials TMC278-C209 (ECHO) and TMC278-C215 (THRIVE). The trials were identical in design, with the exception of the background regimen (BR). In the week 96 efficacy analysis, the virologic response rate [confirmed undetectable viral load (< 50 HIV-1 RNA copies/ml)] was evaluated in patients receiving rilpivirine 25 mg once daily in addition to a BR versus patients receiving effavirenz 600 mg once daily in addition to a BR. Similar efficacy for rilpivirine was seen in each trial demonstrating non-inferiority to effavirenz.

Antiretroviral treatment-naïve HIV-1 infected patients were enrolled who had a plasma HIV-1 RNA \geq 5,000 copies/ml and were screened for susceptibility to N(t)RTIs and for absence of specific NNRTI resistance-associated mutations. In ECHO, the BR was fixed to the N(t)RTIs, tenofovir disoproxil fumarate plus emtricitabine. In THRIVE, the BR consisted of 2 investigator-selected N(t)RTIs: tenofovir disoproxil fumarate plus emtricitabine <u>or</u> zidovudine plus lamivudine <u>or</u> abacavir plus lamivudine. In ECHO, randomisation was stratified by screening viral load. In THRIVE, randomisation was stratified by screening viral load and by N(t)RTI BR.

This analysis included 690 patients in ECHO and 678 patients in THRIVE who had completed 96 weeks of treatment or discontinued earlier.

In the pooled analysis for ECHO and THRIVE, demographics and baseline characteristics were balanced between the rilpivirine arm and the efavirenz arm. Table 3 displays selected baseline disease characteristics of the patients in the rilpivirine and efavirenz arms.

Table 3: Baseline disease characteristics of antiretroviral treatment-naïve HIV-1 infected adult subjects in the ECHO and THRIVE trials (pooled analysis)				
u u	Pooled data from the ECHO and THRIVE trials			
	Rilpivirine + BR N=686	Efavirenz + BR N=682		
Baseline disease characteristics				
Median baseline plasma HIV-1 RNA (range),	5.0	5.0		
log ₁₀ copies/ml	(2-7)	(3-7)		
Median baseline CD4+ cell count (range),	249	260		
x 10 ⁶ cells/l	(1-888)	(1-1,137)		
Percentage of subjects with:				
hepatitis B/C virus co-infection	7.3%	9.5%		
Percentage of patients with the following				
background regimens:				
tenofovir disoproxil fumarate plus	80.2%	80.1%		
emtricitabine				
zidovudine plus lamivudine	14.7%	15.1%		
abacavir plus lamivudine	5.1%	4.8%		

BR=background regimen

Table 4 below shows the results of the week 48 and the week 96 efficacy analysis for patients treated with rilpivirine and patients treated with efavirenz from the pooled data from the ECHO and THRIVE trials. The response rate (confirmed undetectable viral load < 50 HIV-1 RNA copies/ml) at week 96 was comparable between the rilpivirine arm and the efavirenz arm. The incidence of virologic failure was higher in the rilpivirine arm than the efavirenz arm at week 96; however, most of the virologic failures occurred within the first 48 weeks of treatment. Discontinuations due to adverse events were higher in the efavirenz arm at week 96 than the rilpivirine arm. Most of these discontinuations occurred in the first 48 weeks of treatment.

Table 4:Virologic outcome in adult subjects in the ECHO and THRIVE trials (pooled data in the week 48 (primary) and week 96 analysis; ITT-TLOVR*)						
¥		in the week 4			in the week	96 analysis
	Rilpivirine	Efavirenz	Observed	Rilpivirine	Efavirenz	Observed
	+ BR	+ BR	difference	+ BR	+ BR	difference
	N=686	N=682	(95% CI) [±]	N=686	N=682	(95% CI) [±]
Response (confirmed	84.3%	82.3%	2.0	77.6%	77.6%	0
< 50 HIV-1 RNA	(578/686)	(561/682)	(-2.0; 6.0)	(532/686)	(529/682)	(-4.4; 4.4)
copies/ml) ^{§#}		× ,			× ,	
Non-response						
Virologic failure [†]						
Overall	9.0%	4.8%	ND	11.5%	5.9%	ND
	(62/686)	(33/682)		(79/686)	(40/682)	
≤ 100,000	3.8%	3.3%	ND	5.7%	3.6%	ND
	(14/368)	(11/330)		(21/368)	(12/329)	
> 100,000	15.1%	6.3%	ND	18.2%	7.9%	ND
	(48/318)	(22/352)		(58/318)	(28/353)	
Death	0.1%	0.4%	ND	0.1%	0.9%	ND
	(1/686)	(3/682)		(1/686)	(6/682)	
Discontinued due to	2.0%	6.7%	ND	3.8%	7.6%	ND
adverse event (AE)	(14/686)	(46/682)		(26/682)	(52/682)	
Discontinued for non-AE	4.5%	5.7%	ND	7.0%	8.1%	ND
reason¶	(31/686)	(39/682)		(48/682)	(55/682)	
Response by subcategory						
By background NRTI						
Tenofovir/emtricitabine	83.5%	82.4%	1.0	76.9%	77.3%	-0.4%
	(459/550)	(450/546)	(-3.4; 5.5)	(423/550)	(422/546)	(-5.4; 4.6)
Zidovudine/lamivudine	87.1%	80.6%	6.5	81.2%	76.7%	4.5%
	(88/101)	(83/103)	(-3.6; 16.7)	(82/101)	(79/103)	(-6.8; 15.7)
Abacavir/lamivudine	88.6%	84.8%	3.7	77.1%	84.8%	-7.7%
	(31/35)	(28/33)	(-12.7; 20.1)	(27/35)	(28/33)	(-26.7; 11.3)
By baseline viral load (copies						
\leq 100,000	90.2%	83.6%	6.6	84.0%	79.9%	4.0
	(332/368)	(276/330)	(1.6; 11.5)	(309/368)	(263/329)	(-1.7; 9.7)
> 100,000	77.4%	81.0%	-3.6	70.1%	75.4%	-5.2
	(246/318)	(285/352)	(-9.8; 2.5)	(223/318)	(266/353)	(-12.0;1.5)
By baseline CD4 count (× 10						
< 50	58.8%	80.6%	-21.7	55.9%	69.4%	-13.6
	(20/34)	(29/36)	(-43.0; -0.5)	(19/34)	(25/36)	(-36.4; 9.3)
\geq 50-< 200	80.4%	81.7%	-1.3	71.1%	74.9%	-3.7
	(156/194)	(143/175)	(-9.3; 6.7)	(138/194)	(131/175)	(-12.8; 5.4)
\geq 200-< 350	86.9%	82.4%	4.5	80.5%	79.5%	1.0
	(272/313)	(253/307)	(-1.2; 10.2)	(252/313)	(244/307)	(-5.3; 7.3)
\geq 350	90.3%	82.9%	7.4	85.4%	78.7%	6.8
	(130/144)	(136/164)	(-0.3; 15.0)	(123/144)	(129/164)	(-1.9; 15.4)

BR=background regimen; CI=confidence interval; N=number of subjects per treatment group; ND=not determined.

* Intent-to-treat time to loss of virologic response.

 $^\pm$ $\;$ Based on normal approximation.

§ Subjects achieved virologic response (two consecutive viral loads < 50 copies/ml) and maintained it through week 48/96.

[#] Predicted difference of response rates (95% CI) for the week 48 analysis: 1.6% (-2.2%; 5.3%) and for the week 96 analysis: -0.4% (-4.6%; 3.8%); both p-value < 0.0001 (non-inferiority at 12% margin) from logistic regression model, including stratification factors and study.</p>

[†] Virologic failure in pooled efficacy analysis: includes subjects who were rebounder (confirmed viral load ≥ 50 copies/ml after being responder) or who were never suppressed (no confirmed viral load < 50 copies/ml, either ongoing or discontinued due to lack or loss of efficacy).

¶ e.g. lost to follow-up, non-compliance, withdrew consent.

At week 96, the mean change from baseline in CD4+ cell count was $+228 \times 10^6$ cells/l in the rilpivirine arm and $+219 \times 10^6$ cells/l in the efavirenz arm in the pooled analysis of the ECHO and THRIVE trials [estimated treatment difference (95% CI): 11.3 (-6.8; 29.4)].

From the week 96 pooled resistance analysis, the resistance outcome for patients with protocol defined virological failure, and paired genotypes (baseline and failure) is shown in table 5.

Table 5:Resistance outcome by background NRTI regimen used(pooled data from the ECHO and THRIVE trials in the week 96 resistance analysis)					
	tenofovir/ emtricitabine	zidovudine/ lamivudine	abacavir/ lamivudine	All*	
Rilpivirine-treated					
Resistance [#] to emtricitabine/lamivudine % (n/N)	6.9 (38/550)	3.0 (3/101)	8.6 (3/35)	6.4 (44/686)	
Resistance to rilpivirine % (n/N)	6.5 (36/550)	3.0 (3/101)	8.6 (3/35)	6.1 (42/686)	
Efavirenz-treated					
Resistance to emtricitabine/lamivudine % (n/N)	1.1 (6/546)	1.9 (2/103)	3.0 (1/33)	1.3 (9/682)	
Resistance to efavirenz % (n/N)	2.4 (13/546)	2.9 (3/103)	3.0 (1/33)	2.5 (17/682)	

* The number of patients with virologic failure and paired genotypes (baseline and failure) were 71, 11, and 4 for rilpivirine and 30, 10, and 2 for efavirenz, for the tenofovir/emtricitabine, zidovudine/lamivudine, and abacavir/lamivudine regimens, respectively.

[#] Resistance was defined as the emergence of any resistance-associated mutation at failure.

For those patients failing therapy with rilpivirine and who developed resistance to rilpivirine, cross-resistance to other approved NNRTIs (etravirine, efavirenz, nevirapine) was generally seen.

Study TMC278-C204 was a randomised, active-controlled, Phase IIb trial in antiretroviral treatment-naïve HIV-1 infected adult patients consisting of 2 parts: an initial partially blinded dose-finding part [(rilpivirine) doses blinded] up to 96 weeks, followed by a long-term, open label part. In the open label part of the trial, patients originally randomised to one of the three doses of rilpivirine were all treated with rilpivirine 25 mg once daily in addition to a BR, once the dose for the Phase III studies was selected. Patients in the control arm received efavirenz 600 mg once daily in addition to a BR in both parts of the study. The BR consisted of 2 investigator-selected N(t)RTIs: zidovudine plus lamivudine or tenofovir disoproxil fumarate plus emtricitabine.

Study TMC278-C204 enrolled 368 HIV-1 infected treatment-naïve adult patients who had a plasma HIV-1 RNA \geq 5,000 copies/ml, previously received \leq 2 weeks of treatment with an N(t)RTI or protease inhibitor, had no prior use of NNRTIs and were screened for susceptibility to N(t)RTI and for absence of specific NNRTI resistance-associated mutations.

At 96 weeks, the proportion of patients with < 50 HIV-1 RNA copies/ml receiving rilpivirine 25 mg (N=93) compared to patients receiving efavirenz (N=89) was 76% and 71%, respectively. The mean increase from baseline in CD4+ counts was 146×10^6 cells/l in patients receiving rilpivirine 25 mg and 160×10^6 cells/l in patients receiving efavirenz.

Of those patients who were responders at week 96, 74% of patients receiving rilpivirine remained with undetectable viral load (< 50 HIV-1 RNA copies/ml) at week 240 compared to 81% of patients receiving efavirenz. There were no safety concerns identified in the week 240 analyses.

Paediatric population

The pharmacokinetics, safety, tolerability and efficacy of rilpivirine 25 mg once daily, in combination with an investigator-selected BR containing two NRTIs, was evaluated in trial TMC278-C213, a single-arm, open-label Phase II trial in antiretroviral treatment-naïve HIV-1 infected adolescent subjects weighing at least 32 kg. This analysis included 36 patients who had completed at least 48 weeks of treatment or discontinued earlier.

The 36 subjects had a median age of 14.5 years (range: 12 to 17 years), and were 55.6% female, 88.9% Black and 11.1% Asian. The median baseline plasma HIV-1 RNA was 4.8 \log_{10} copies per ml, and the median baseline CD4+ cell count was 414×10^6 cells/l (range: 25 to 983×10^6 cells/l).

Table 6 summarizes the week 48 and week 240 virologic outcome results for trial TMC278-C213. Six subjects discontinued due to virological failure up to week 48 and 3 subjects discontinued beyond week 48. One subject discontinued due to an adverse event at week 48, and no additional subjects discontinued due to adverse events in the week 240 analysis.

Table 6:Virologic outcome in adolescent subjects in the TMC278-C213 trial – week 48 and week 240 analysis; ITT-TLOVR*					
Week 48 Week 240					
	N=36	N=32			
Response (confirmed < 50 HIV-1	72.2%	43.8%			
RNA copies/ml) [§]	(26/36)	(14/32)			
	78.6%	48%			
$\leq 100,000$	(22/28)	(12/25)			
> 100 000	50%	28.6%			
> 100,000	(4/8)	(2/7)			
Non-response					
Virologic failure [±]					
Overall	22.2%	50%			
Overall	(8/36)	(16/32)			
< 100.000	17.9%	48%			
\leq 100,000	(5/28)	(12/25)			
> 100.000	37.5%	57.1%			
> 100,000	(3/8)	(4/7)			
Increase in CD4+ cell count (mean)	201.2×10^6 cells/l	113.6×10^{6} cells/l			

N=number of subjects per treatment group.

* Intent-to-treat time to loss of virologic response.

[§] Subjects achieved virologic response (two consecutive viral loads < 50 copies/ml) and maintained it through week 48 and week 240.

[±] Virologic failure in efficacy analysis: includes subjects who were rebounder (confirmed viral load ≥ 50 copies/ml after being responder) or who were never suppressed (no confirmed viral load < 50 copies/ml, either ongoing or discontinued due to lack or loss of efficacy).</p>

The European Medicines Agency has deferred the obligation to submit the results of studies with rilpivirine in one or more subsets of the paediatric population in the treatment of Human Immunodeficiency Virus (HIV-1) infection (see section 4.2 for information on paediatric use).

Pregnancy

Rilpivirine in combination with a background regimen was evaluated in a clinical trial of 19 pregnant women during the second and third trimesters, and postpartum. The pharmacokinetic data demonstrate that total exposure (AUC) to rilpivirine as a part of an antiretroviral regimen was approximately 30% lower during pregnancy compared with postpartum (6-12 weeks). The virologic response was generally preserved throughout the study: of the 12 subjects that completed the study, 10 subjects were suppressed at the end of the study; in the other 2 subjects an increase in viral load was observed only postpartum, for at least 1 subject due to suspected suboptimal adherence. No mother to child transmission occurred in all 10 infants born to the mothers who completed the trial and for whom the HIV status was available. Rilpivirine was well tolerated during pregnancy and postpartum. There were no new safety findings compared with the known safety profile of rilpivirine in HIV-1 infected adults (see sections 4.2, 4.4 and 5.2).

5.2 Pharmacokinetic properties

The pharmacokinetic properties of rilpivirine have been evaluated in adult healthy subjects and in antiretroviral treatment-naïve HIV-1 infected patients 12 years of age and older. Exposure to rilpivirine was generally lower in HIV-1 infected patients than in healthy subjects.

Absorption

After oral administration, the maximum plasma concentration of rilpivirine is generally achieved within 4-5 hours. The absolute bioavailability of EDURANT is unknown.

Effect of food on absorption

The exposure to rilpivirine was approximately 40% lower when EDURANT was taken in a fasted condition as compared to a normal caloric meal (533 kcal) or high-fat high-caloric meal (928 kcal). When EDURANT was taken with only a protein-rich nutritional drink, exposures were 50% lower than when taken with a meal. EDURANT **must be taken with a meal** to obtain optimal absorption. Taking EDURANT in fasted condition or with only a nutritional drink may result in decreased plasma concentrations of rilpivirine, which could potentially reduce the therapeutic effect of EDURANT (see section 4.2).

Distribution

Rilpivirine is approximately 99.7% bound to plasma proteins *in vitro*, primarily to albumin. The distribution of rilpivirine into compartments other than plasma (e.g., cerebrospinal fluid, genital tract secretions) has not been evaluated in humans.

Biotransformation

In vitro experiments indicate that rilpivirine primarily undergoes oxidative metabolism mediated by the cytochrome P450 (CYP) 3A system.

Elimination

The terminal elimination half-life of rilpivirine is approximately 45 hours. After single dose oral administration of ¹⁴C-rilpivirine, on average 85% and 6.1% of the radioactivity could be retrieved in faeces and urine, respectively. In faeces, unchanged rilpivirine accounted for on average 25% of the administered dose. Only trace amounts of unchanged rilpivirine (< 1% of dose) were detected in urine.

Additional information on special populations

Paediatric population (less than 18 years of age)

The pharmacokinetics of rilpivirine in antiretroviral treatment-naïve HIV-1 infected adolescent subjects receiving EDURANT 25 mg once daily were comparable to those in treatment-naïve HIV-1 infected adults receiving EDURANT 25 mg once daily. There was no impact of body weight on rilpivirine pharmacokinetics in paediatric subjects in trial TMC278-C213 (33 to 93 kg), similar to what was observed in adults.

The pharmacokinetics of rilpivirine in paediatric patients less than 12 years of age are under investigation. Dosing recommendations for paediatric patients less than 12 years of age cannot be made due to insufficient data (see section 4.2).

Older people

Population pharmacokinetic analysis in HIV infected patients showed that rilpivirine pharmacokinetics are not different across the age range (18 to 78 years) evaluated, with only 3 subjects aged 65 years or older. No dose adjustment of EDURANT is required in older patients. EDURANT should be used with caution in this population (see section 4.2).

Gender

No clinically relevant differences in the pharmacokinetics of rilpivirine have been observed between men and women.

Race

Population pharmacokinetic analysis of rilpivirine in HIV infected patients indicated that race had no clinically relevant effect on the exposure to rilpivirine.

Hepatic impairment

Rilpivirine is primarily metabolised and eliminated by the liver. In a study comparing 8 patients with mild hepatic impairment (Child-Pugh score A) to 8 matched controls, and 8 patients with moderate hepatic impairment (Child-Pugh score B) to 8 matched controls, the multiple dose exposure of rilpivirine was 47% higher in patients with mild hepatic impairment and 5% higher in patients with moderate hepatic impairment. However, it may not be excluded that the pharmacologically active, unbound, rilpivirine exposure is significantly increased in moderate hepatic impairment.

No dose adjustment is suggested but caution is advised in patients with moderate hepatic impairment. EDURANT has not been studied in patients with severe hepatic impairment (Child-Pugh score C). Therefore, EDURANT is not recommended in patients with severe hepatic impairment (see section 4.2).

Hepatitis B and/or hepatitis C virus co-infection

Population pharmacokinetic analysis indicated that hepatitis B and/or C virus co-infection had no clinically relevant effect on the exposure to rilpivirine.

Renal impairment

The pharmacokinetics of rilpivirine have not been studied in patients with renal insufficiency. Renal elimination of rilpivirine is negligible. No dose adjustment is needed for patients with mild or moderate renal impairment. In patients with severe renal impairment or end-stage renal disease, EDURANT should be used with caution, as plasma concentrations may be increased due to alteration of drug absorption, distribution and/or metabolism secondary to renal dysfunction. In patients with severe renal impairment or end-stage renal disease, the combination of EDURANT with a strong CYP3A inhibitor should only be used if the benefit outweighs the risk. As rilpivirine is highly bound to plasma proteins, it is unlikely that it will be significantly removed by haemodialysis or peritoneal dialysis (see section 4.2).

Pregnancy and Postpartum

The exposure to total rilpivirine after intake of rilpivirine 25 mg once daily as part of an antiretroviral regimen was lower during pregnancy (similar for the 2nd and 3rd trimester) compared with postpartum (see table 7). The decrease in unbound (ie, active) rilpivirine pharmacokinetic parameters during pregnancy compared to postpartum was less pronounced than for total rilpivirine.

In women receiving rilpivirine 25 mg once daily during the 2^{nd} trimester of pregnancy, mean intraindividual values for total rilpivirine C_{max} , AUC_{24h} and C_{min} values were, respectively, 21%, 29% and 35% lower as compared to postpartum; during the 3^{rd} trimester of pregnancy, C_{max} , AUC_{24h} and C_{min} values were, respectively, 20%, 31% and 42% lower as compared to postpartum.

Table 7:Pharmacokinetic Results of Total Rilpivirine After Administration of Rilpivirine 25 mgOnce Daily as Part of an Antiretroviral Regimen, During the 2 nd Trimester of Pregnancy, the 3 rd Trimester of Pregnancy and Postpartum							
Pharmacokinetics of totalPostpartum2nd Trimester3rd Trimester							
rilpivirine	(6-12 Weeks)	of pregnancy	of pregnancy				
$(mean \pm SD, t_{max}: median [range])$	ge]) (n=11) (n=15) (n=13)						
C _{min} , ng/ml	84.0 ± 58.8	54.3 ± 25.8	52.9 ± 24.4				
C _{max} , ng/ml	167 ± 101	121 ± 45.9	123 ± 47.5				
t _{max} , h	4.00 (2.03-25.08)	4.00 (1.00-9.00)	4.00 (2.00-24.93)				
AUC _{24h} , ng.h/ml	2714 ± 1535	1792 ± 711	1762 ± 662				

5.3 Preclinical safety data

Repeated dose toxicity

Liver toxicity associated with liver enzyme induction was observed in rodents. In dogs, cholestasis-like effects were noted.

Reproductive toxicology studies

Studies in animals have shown no evidence of relevant embryonic or foetal toxicity or an effect on reproductive function. There was no teratogenicity with rilpivirine in rats and rabbits. The exposures at the embryo-foetal No Observed Adverse Effects Levels (NOAELs) in rats and rabbits were respectively 15 and 70 times higher than the exposure in humans at the recommended dose of 25 mg once daily.

Carcinogenesis and mutagenesis

Rilpivirine was evaluated for carcinogenic potential by oral gavage administration to mice and rats up to 104 weeks. At the lowest tested doses in the carcinogenicity studies, the systemic exposures (based on AUC) to rilpivirine were 21-fold (mice) and 3-fold (rats), relative to those observed in humans at the recommended dose (25 mg once daily). In rats, there were no drug-related neoplasms. In mice, rilpivirine was positive for hepatocellular neoplasms in both males and females. The observed hepatocellular findings in mice may be rodent-specific.

Rilpivirine has tested negative in the absence and presence of a metabolic activation system in the *in vitro* Ames reverse mutation assay and the *in vitro* clastogenicity mouse lymphoma assay. Rilpivirine did not induce chromosomal damage in the *in vivo* micronucleus test in mice.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Tablet core

Lactose monohydrate Croscarmellose sodium Povidone K30 Polysorbate 20 Silicified microcrystalline cellulose Magnesium stearate

Tablet coating

Lactose monohydrate Hypromellose 2910 6 mPa.s Titanium dioxide E171 Macrogol 3000 Triacetin

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

3 years

6.4 Special precautions for storage

Store in the original bottle in order to protect from light.

6.5 Nature and contents of container

75 ml high density polyethylene (HDPE) bottle with a polypropylene (PP) child resistant closure and induction seal liner. Each carton contains one bottle of 30 tablets.

6.6 Special precautions for disposal

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

7. MARKETING AUTHORISATION HOLDER

Janssen-Cilag International NV Turnhoutseweg 30 B-2340 Beerse Belgium

8. MARKETING AUTHORISATION NUMBER

EU/1/11/736/001

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 28 November 2011 Date of latest renewal: 22 July 2016

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(S) 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(S) RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer(s) responsible for batch release

Janssen-Cilag SpA Via C. Janssen Borgo San Michele 04100 Latina Italy

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal product subject to restricted medical prescription (see Annex I: Summary of Product Characteristics, section 4.2).

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

• Periodic Safety Update Reports

The requirements for submission of periodic safety update reports 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 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

1. NAME OF THE MEDICINAL PRODUCT

EDURANT 25 mg film-coated tablets rilpivirine

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each film-coated tablet contains rilpivirine hydrochloride equivalent to 25 mg rilpivirine.

3. LIST OF EXCIPIENTS

Contains lactose monohydrate. See package leaflet for further information.

4. PHARMACEUTICAL FORM AND CONTENTS

30 film-coated tablets

5. METHOD AND ROUTE OF ADMINISTRATION

Read the package leaflet before use. Oral use

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

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Store in the original bottle in order to protect from light.

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

Janssen-Cilag International NV Turnhoutseweg 30 B-2340 Beerse Belgium

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/11/736/001

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

edurant 25 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER – HUMAN READABLE DATA

PC: {number} [product code]

SN: {number} [serial number]

NN: {number} [national reimbursement number or other national number identifying the medicinal product]

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGING

BOTTLE LABEL

1. NAME OF THE MEDICINAL PRODUCT

EDURANT 25 mg film-coated tablets rilpivirine

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each film-coated tablet contains rilpivirine hydrochloride equivalent to 25 mg rilpivirine.

3. LIST OF EXCIPIENTS

Contains lactose monohydrate.

4. PHARMACEUTICAL FORM AND CONTENTS

30 film-coated tablets

5. METHOD AND ROUTE OF ADMINISTRATION

Read the package leaflet before use. Oral use

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

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Store in the original bottle in order to protect from light.

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

Janssen-Cilag International NV Turnhoutseweg 30 B-2340 Beerse Belgium

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/11/736/001

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

B. PACKAGE LEAFLET

Package leaflet: Information for the user

EDURANT 25 mg film-coated tablets rilpivirine

Read all of this leaflet carefully before you start taking 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 or pharmacist.
- 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 or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

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

1. What EDURANT is and what it is used for

EDURANT contains rilpivirine that is used for the treatment of Human Immunodeficiency Virus (HIV) infection. It belongs to a group of HIV medicines called non-nucleoside reverse transcriptase inhibitors (NNRTIs). EDURANT works by reducing the amount of HIV in your body.

EDURANT is used in combination with other HIV medicines to treat adolescents and adults 12 years of age and older who are infected with HIV and who have never been treated before with HIV medicines.

Your doctor will discuss with you which combination of medicines is best for you.

2. What you need to know before you take EDURANT

Do not take EDURANT if you are allergic to rilpivirine or any of the other ingredients of this medicine (listed in section 6).

Do not take EDURANT in combination with any of the following medicines as they may affect the way EDURANT or the other medicine works:

- carbamazepine, oxcarbazepine, phenobarbital, phenytoin (medicines to treat epilepsy and prevent seizures)
- rifampicin, rifapentine (medicines to treat some bacterial infections such as tuberculosis)
- omeprazole, esomeprazole, lansoprazole, pantoprazole, rabeprazole, (proton pump inhibitors that are medicines to prevent and treat stomach ulcers, heartburn or acid reflux disease)
- dexamethasone (a corticosteroid used in a variety of conditions such as inflammation and allergic reactions) when taken by mouth or injected, except as a single dose treatment
- products that contain St John's wort (*Hypericum perforatum*) (a herbal product used for depression).

If you are taking any of the above, ask your doctor about alternatives.

Warnings and precautions

Talk to your doctor or pharmacist before taking EDURANT.

EDURANT is not a cure for HIV infection. It is part of a treatment reducing the amount of virus in the blood. You can still pass on HIV when taking this medicine, although the risk is lowered by effective antiretroviral therapy. Discuss with your physician the precautions needed to avoid infecting other people.

EDURANT has only been used in a limited number of patients of 65 years or older. If you belong to this age group, please discuss the use of EDURANT with your doctor.

Tell your doctor about your situation

Make sure that you check the following points and tell your doctor if any of these apply to you.

- Tell your doctor if you have or have had **problems with your liver**, including hepatitis B and/or C, and/or **problems with your kidneys**. Your doctor may evaluate how severe your liver or kidney disease is before deciding if you can take EDURANT.
- Tell your doctor immediately if you notice any **symptoms of infections** (for example, fever, chills, sweats). In some patients with advanced HIV infection and a history of opportunistic infection, signs and symptoms of inflammation from previous infections may occur soon after HIV treatment is started. It is believed that these symptoms are due to an improvement in the body's immune response, enabling the body to fight infections that may have been present with no obvious symptoms.
- In addition to the opportunistic infections, autoimmune disorders (a condition that occurs when the immune system attacks healthy body tissue) may also occur after you start taking medicines for the treatment of your HIV infection. Autoimmune disorders may occur many months after the start of treatment. If you notice any symptoms of infection or other symptoms such as muscle weakness, weakness beginning in the hands and feet and moving up towards the trunk of the body, palpitations, tremor or hyperactivity, please inform your doctor immediately to seek necessary treatment.
- Tell your doctor if you are taking any medicines that may cause a life-threatening irregular heartbeat (Torsade de Pointes).

Children

EDURANT is not for use in children less than 12 years of age, because it has not been sufficiently studied in these patients.

Other medicines and EDURANT

You must take EDURANT together with other HIV medicines. Your doctor will advise on which HIV medicines can be combined with EDURANT and together you will decide which combination fits your needs best. Follow your doctor's instruction carefully.

Some medicines may affect the levels of EDURANT in the blood when they are taken at the same time as EDURANT.

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

It is not recommended to combine EDURANT with other non-nucleoside reverse transcriptase inhibitors (NNRTIs) such as delavirdine, efavirenz, etravirine, and nevirapine.

The effects of EDURANT or other medicines might be influenced if you take EDURANT together with any of the following medicines. Tell your doctor if you take:

- rifabutin (a medicine to treat some bacterial infections). If you take this medicine while taking EDURANT, please carefully read how to take EDURANT in section 3 "Instructions for proper use in adults and adolescents (12 to less than 18 years of age)".
- clarithromycin, erythromycin (antibiotics)
- cimetidine, famotidine, nizatidine, ranitidine (H₂-receptor antagonists used to treat stomach or intestinal ulcers or used to relieve heartburn due to acid reflux). If you take these medicines,

please carefully read how to take them in section 3 "Instructions for proper use in adults and adolescents (12 to less than 18 years of age)".

- antacids (used to treat diseases related to the acid in the stomach; for example, aluminium/magnesium hydroxide, calcium carbonate). If you take these medicines, please carefully read how to take them in section 3 "Instructions for proper use in adults and adolescents (12 to less than 18 years of age)".
- methadone (used to treat narcotic withdrawal and dependence)
- dabigatran etexilate (anticoagulant).

Pregnancy and breast-feeding

Tell your doctor immediately if you are pregnant or if you plan to become pregnant. Pregnant women should discuss the use of EDURANT with their doctor.

HIV infected mothers must not breastfeed, as there is a possibility of infecting the baby with HIV via breast milk.

Ask your doctor or pharmacist for advice before taking any medicine.

Driving and using machines

Some patients may experience tiredness, dizziness or drowsiness during treatment with EDURANT. Do not drive or operate machinery if you feel tired, dizzy or drowsy while taking EDURANT.

EDURANT contains lactose

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

EDURANT contains sodium

This medicine contains less than 1 mmol sodium (23 mg) per tablet, that is to say essentially 'sodium-free'.

3. How to take EDURANT

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

Instructions for proper use in adults and adolescents (12 to less than 18 years of age) The recommended dose of EDURANT is one tablet once a day.

EDURANT **must be taken with a meal**. A meal is important to get the right levels of active substance in your body. A nutritional drink (e.g. protein-rich) alone does not replace a meal.

There are four situations that require special attention:

- 1. **If you take rifabutin** (a medicine to treat some bacterial infections), take two tablets of EDURANT once a day. When you stop taking rifabutin, take one tablet of EDURANT once a day. Talk to your doctor or pharmacist if you are not sure.
- 2. **If you take an antacid** (a medicine to treat diseases related to the acid in the stomach such as aluminium / magnesium hydroxide, calcium carbonate). Take the antacid either at least 2 hours before or at least 4 hours after EDURANT (see section 2 "Other medicines and EDURANT").
- 3. If you take an H₂-receptor antagonist (medicines used to treat stomach or intestinal ulcers or used to relieve heartburn due to acid reflux (such as cimetidine, famotidine, nizatidine or ranitidine). Take the H₂-receptor antagonist at least 12 hours before or at least 4 hours after EDURANT (see section 2 "Other medicines and EDURANT"). H₂-receptor antagonists should not be taken in a twice a day regimen. Talk to your doctor about an alternative regimen.
- 4. **If you take didanosine** (a medicine to treat HIV infection), no dose adjustment is required. Didanosine should be administered on an empty stomach at least two hours before or at least four hours after EDURANT (which must be taken with a meal).

Removing the child resistant cap



The bottle comes with a child resistant cap. It can be opened by pushing the screw cap down while turning it anti-clockwise.

If you take more EDURANT than you should

Contact your doctor or pharmacist immediately. In case of overdose, you may have a headache, nausea, dizziness, and/or abnormal dreams.

If you forget to take EDURANT

If you notice within 12 hours of the time you usually take EDURANT, you must take the tablet as soon as possible. The EDURANT tablet must be taken with a meal. Then take the next dose as usual. If you notice after 12 hours, then skip that dose and take the next doses as usual. Do not take a double dose to make up for a forgotten dose.

If you vomit less than 4 hours after taking EDURANT, take another tablet with a meal. If you vomit more than 4 hours after taking EDURANT you do not need to take another tablet until your next regularly scheduled tablet.

Contact your doctor if uncertain about what to do if you miss a dose or vomit.

Do not stop using EDURANT

HIV treatment does not cure HIV infection! Do not stop using EDURANT without talking to your doctor first. Even if you feel better, do not stop taking EDURANT or your other HIV medicines. Doing so could increase the risk of the virus developing resistance. Talk to your doctor first.

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

4. **Possible side effects**

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

Very common:

- headache
- nausea
- difficulty falling asleep (insomnia)
- dizziness
- changes in one of your routine liver tests (transaminase)
- increase in cholesterol and/or pancreatic amylase in your blood

Common:

- abnormal dreams
- rash
- stomach pain
- depression
- tiredness
- vomiting
- drowsiness
- decreased appetite
- sleep disorders
- stomach discomfort
- depressed mood
- dry mouth

- low white blood cell and/or platelet count, decrease in haemoglobin in your blood, increase in triglycerides, lipase and/or bilirubin in your blood

Uncommon:

- signs or symptoms of inflammation or infection, for example fever, chills, sweats (immune reactivation syndrome)

Reporting of side effects

If you get any side effects, talk to your doctor or pharmacist. 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 EDURANT

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 and on the bottle after EXP. The expiry date refers to the last day of that month.

Store in the original bottle in order to protect from light.

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 EDURANT contains

- The active substance is rilpivirine in the form of rilpivirine hydrochloride. Each tablet of EDURANT contains rilpivirine hydrochloride equivalent to 25 mg rilpivirine.
- The other ingredients of the film-coated tablet core are lactose monohydrate, croscarmellose sodium, povidone K30, polysorbate 20, silicified microcrystalline cellulose and magnesium stearate. The film-coating contains lactose monohydrate, hypromellose 2910 6 mPa.s, titanium dioxide E171, macrogol 3000 and triacetin.

What EDURANT looks like and contents of the pack

White to off-white, film-coated, round, biconvex tablet, with "TMC" on one side and "25" on the other side.

A bottle with child resistant closure containing 30 film-coated tablets.

Marketing Authorisation Holder

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Manufacturer

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