ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

INTELENCE 25 mg tablets INTELENCE 100 mg tablets INTELENCE 200 mg tablets

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

INTELENCE 25 mg tablets

Each tablet contains 25 mg of etravirine.

Excipient with known effect Each tablet contains 40 mg lactose (as monohydrate). Each tablet contains less than 1 mmol sodium (23 mg), and is essentially sodium-free.

INTELENCE 100 mg tablets

Each tablet contains 100 mg of etravirine.

Excipient with known effect Each tablet contains 160 mg lactose (as monohydrate). Each tablet contains less than 1 mmol sodium (23 mg), and is essentially sodium-free.

INTELENCE 200 mg tablets

Each tablet contains 200 mg of etravirine.

Excipient with known effect Each tablet contains less than 1 mmol sodium (23 mg), and is essentially sodium-free.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

INTELENCE 25 mg tablets

Tablet White to off-white, oval, scored tablet, debossed with "TMC" on one side. The tablet can be divided into two equal doses.

INTELENCE 100 mg tablets

Tablet White to off-white, oval tablet debossed with "T125" on one side and "100" on the other side.

INTELENCE 200 mg tablets

Tablet White to off-white, biconvex, oblong tablet debossed with "T200" on one side.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

INTELENCE, in combination with a boosted protease inhibitor and other antiretroviral medicinal products, is indicated for the treatment of human immunodeficiency virus type 1 (HIV-1) infection in antiretroviral treatment-experienced adult patients and in antiretroviral treatment-experienced paediatric patients from 2 years of age (see sections 4.4, 4.5 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

INTELENCE must always be given in combination with other antiretroviral medicinal products.

Adults

The recommended dose of etravirine for adults is 200 mg (one 200 mg tablet or two 100 mg tablets) taken orally twice daily following a meal (see section 5.2).

Paediatric population (2 years to less than 18 years of age)

The recommended dose of etravirine for paediatric patients (2 years to less than 18 years of age and weighing at least 10 kg) is based on body weight (see table below). INTELENCE tablet(s) should be taken orally, following a meal (see section 5.2).

Table 1:Recommended dose of etravirine for paediatric patients 2 years to less than
18 years of age

Body weight	Dose	Tablets
\geq 10 to < 20 kg	100 mg twice	four 25 mg tablets twice daily or
	daily	one 100 mg tablet twice daily
\geq 20 to < 25 kg	125 mg twice	five 25 mg tablets twice daily or
	daily	one 100 mg tablet and one 25 mg tablet twice daily
\geq 25 to < 30 kg	150 mg twice	six 25 mg tablets twice daily or
	daily	one 100 mg tablet and two 25 mg tablets twice daily
\geq 30 kg	200 mg twice	eight 25 mg tablets twice daily or
	daily	two 100 mg tablets twice daily
		or one 200 mg tablet twice daily

Missed dose

If the patient misses a dose of INTELENCE within 6 hours of the time it is usually taken, the patient should take it following a meal as soon as possible and then take the next dose at the regularly scheduled time. If a patient misses a dose by more than 6 hours of the time it is usually taken, the patient should not take the missed dose and simply resume the usual dosing schedule.

If a patient vomits within 4 hours of taking the medicine, another dose of INTELENCE should be taken following a meal as soon as possible. If a patient vomits more than 4 hours after taking the medicine, the patient does not need to take another dose until the next regularly scheduled time.

Elderly

There is limited information regarding the use of INTELENCE in patients > 65 years of age (see section 5.2), therefore caution should be used in this population.

Hepatic impairment

No dose adjustment is suggested in patients with mild or moderate hepatic impairment (Child-Pugh Class A or B); INTELENCE should be used with caution in patients with moderate hepatic

impairment. The pharmacokinetics of etravirine have not been studied in patients with severe hepatic impairment (Child-Pugh Class C). Therefore, INTELENCE is not recommended in patients with severe hepatic impairment (see sections 4.4 and 5.2).

Renal impairment

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

Paediatric population (less than 2 years of age)

INTELENCE should not be used in children less than 2 years of age. Currently available data for children between 1 and 2 years old are described in sections 4.8, 5.1 and 5.2 and suggest that the benefits do not outweigh the risks in this age group. No data are available for children less than 1 year of age.

Method of administration

Oral use.

Patients should be instructed to swallow the tablet(s) whole with a liquid such as water. Patients who are unable to swallow the tablet(s) whole may disperse the tablet(s) in a glass of water (see section 4.4).

For instructions on dispersion of the medicinal product before administration, see section 6.6.

4.3 Contraindications

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

Co-administration with elbasvir/grazoprevir (see section 4.5).

4.4 Special warnings and precautions for use

INTELENCE should optimally be combined with other antiretrovirals that exhibit activity against the patient's virus (see section 5.1).

A decreased virologic response to etravirine was observed in patients with viral strains harbouring 3 or more among the following mutations V90I, A98G, L100I, K101E/P, V106I, V179D/F, Y181C/I/V, and G190A/S (see section 5.1).

Conclusions regarding the relevance of particular mutations or mutational patterns are subject to change with additional data, and it is recommended to always consult current interpretation systems for analysing resistance test results.

No data other than drug-drug interaction data (see section 4.5) are available when etravirine is combined with raltegravir or maraviroc.

Severe cutaneous and hypersensitivity reactions

Severe cutaneous adverse reactions have been reported with etravirine. In clinical trials, Stevens-Johnson Syndrome and erythema multiforme have been rarely (< 0.1%) reported. Treatment with INTELENCE should be discontinued if a severe cutaneous reaction develops.

The clinical data are limited and an increased risk of cutaneous reactions in patients with a history of NNRTI-associated cutaneous reactions cannot be excluded. Caution should be observed in such patients, especially in case of history of a severe cutaneous drug reaction.

Cases of severe hypersensitivity syndromes, including DRESS (Drug Rash with Eosinophilia and Systemic Symptoms) and TEN (toxic epidermal necrolysis), sometimes fatal, have been reported with the use of etravirine (see section 4.8). The DRESS syndrome is characterised by rash, fever,

eosinophilia and systemic involvement (including, but not limited to, severe rash or rash accompanied by fever, general malaise, fatigue, muscle or joint aches, blisters, oral lesions, conjunctivitis, hepatitis and eosinophilia). Time to onset is usually around 3-6 weeks and the outcome in most cases is favourable upon discontinuation and after initiation of corticosteroid therapy.

Patients should be informed to seek medical advice if severe rash or hypersensitivity reactions occur. Patients who are diagnosed with a hypersensitivity reaction whilst on therapy must discontinue INTELENCE immediately.

Delay in stopping INTELENCE treatment after the onset of severe rash may result in a life-threatening reaction.

Patients who have stopped treatment due to hypersensitivity reactions should not restart therapy with INTELENCE.

Rash

Rash has been reported with etravirine. Most frequently, rash was mild to moderate, occurred in the second week of therapy, and was infrequent after week 4. Rash was mostly self-limiting and generally resolved within 1 to 2 weeks on continued therapy. When prescribing INTELENCE to females, prescribers should be aware that the incidence of rash was higher in females (see section 4.8).

Paediatric population

For children who cannot swallow the tablet(s) whole, the tablet(s) may be dispersed in liquid. This should only be considered if the child is likely to take the entire dose of the tablet(s) in liquid (see sections 4.2 and 6.6). The importance of consuming the entire dose needs to be highlighted to the child and his/her caregiver to avoid too low exposure and lack of virologic response. In case of any doubt that a child will take the entire dose of the tablet(s) dispersed in liquid, treatment with another antiretroviral product needs to be considered.

Elderly

Experience in geriatric patients is limited: in the Phase III trials, 6 patients aged 65 years or older and 53 patients aged 56-64 years received etravirine. The type and incidence of adverse reactions in patients > 55 years of age were similar to the ones in younger patients (see sections 4.2 and 5.2).

Pregnancy

Given the increased etravirine exposure during pregnancy, caution should be applied for those pregnant patients that require concomitant medicinal products or have comorbidities that may further increase etravirine exposure.

Patients with coexisting conditions

Hepatic impairment

Etravirine is primarily metabolised and eliminated by the liver and highly bound to plasma proteins. Effects on unbound exposure could be expected (has not been studied) and therefore caution is advised in patients with moderate hepatic impairment. Etravirine has not been studied in patients with severe hepatic impairment (Child-Pugh Class C) and its use is therefore not recommended in this group of patients (see sections 4.2 and 5.2).

Co-infection with HBV (hepatitis B virus) or HCV (hepatitis C virus)

Caution should be exercised in patients co-infected with hepatitis B or C virus due to the current limited data available. A potential increased risk of liver enzymes increase cannot be excluded.

Weight and metabolic parameters

An increase in weight and in levels of blood lipids and glucose may occur during antiretroviral therapy. Such changes may in part be linked to disease control and life style. For lipids, there is in some cases evidence for a treatment effect, while for weight gain there is no strong evidence relating this to any particular treatment. For monitoring of blood lipids and glucose reference is made to established HIV treatment guidelines. Lipid disorders should be managed as clinically appropriate.

Immune reconstitution 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).

Osteonecrosis

Although the aetiology is considered to be multifactorial (including corticosteroid use, alcohol consumption, severe immunosuppression, higher body mass index), cases of osteonecrosis have been reported particularly in patients with advanced HIV disease and/or long-term exposure to CART. Patients should be advised to seek medical advice if they experience joint aches and pain, joint stiffness or difficulty in movement.

Interactions with medicinal products

It is not recommended to combine etravirine with tipranavir/ritonavir, due to a marked pharmacokinetic interaction (76% decrease of etravirine AUC) that could significantly impair the virologic response to etravirine.

The combination of etravirine with daclatasvir, atazanavir/cobicistat or darunavir/cobicistat is not recommended (see section 4.5).

For further information on interactions with medicinal products see section 4.5.

Lactose intolerance and lactase deficiency

INTELENCE 25 mg tablets

Each tablet contains 40 mg of lactose monohydrate. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.

INTELENCE 100 mg tablets

Each tablet contains 160 mg of lactose monohydrate. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.

4.5 Interaction with other medicinal products and other forms of interaction

Medicinal products that affect etravirine exposure

Etravirine is metabolised by CYP3A4, CYP2C9 and CYP2C19 followed by glucuronidation of the metabolites by uridine diphosphate glucuronosyl transferase (UDPGT). Medicinal products that

induce CYP3A4, CYP2C9 or CYP2C19 may increase the clearance of etravirine, resulting in lowered plasma concentrations of etravirine.

Co-administration of etravirine and medicinal products that inhibit CYP3A4, CYP2C9 or CYP2C19 may decrease the clearance of etravirine and may result in increased plasma concentrations of etravirine.

Medicinal products that are affected by the use of etravirine

Etravirine is a weak inducer of CYP3A4. Co-administration of etravirine with medicinal products primarily metabolised by CYP3A4 may result in decreased plasma concentrations of such medicinal products, which could decrease or shorten their therapeutic effects.

Etravirine is a weak inhibitor of CYP2C9 and CYP2C19. Etravirine is also a weak inhibitor of P-glycoprotein. Co-administration with medicinal products primarily metabolised by CYP2C9 or CYP2C19, or transported by P-glycoprotein, may result in increased plasma concentrations of such medicinal products, which could increase or prolong their therapeutic effect or alter their adverse events profile.

Known and theoretical interactions with selected antiretrovirals and non-antiretroviral medicinal products are listed in table 2. The table is not all-inclusive.

Interaction table

Interactions between etravirine and co-administered medicinal products are listed in table 2 (increase is indicated as " \uparrow ", decrease as " \downarrow ", no change as " \leftrightarrow ", not done as "ND", confidence interval as "CI").

Medicinal products by	Effects on drug levels	Recommendations	
therapeutic areas	Least Squares Mean Ratio	concerning	
	(90% CI; 1.00 = No effect)	co-administration	
ANTI-INFECTIVES			
Antiretrovirals			
NRTIs			
Didanosine	didanosine	No significant effect on	
400 mg once daily	AUC \leftrightarrow 0.99 (0.79-1.25)	didanosine and etravirine PK	
	C _{min} ND	parameters is seen.	
	$C_{max} \leftrightarrow 0.91 \ (0.58-1.42)$	INTELENCE and didanosine	
	etravirine	can be used without dose	
	AUC \leftrightarrow 1.11 (0.99-1.25)	adjustments.	
	$C_{\min} \leftrightarrow 1.05 \ (0.93 \text{-} 1.18)$		
	$C_{max} \leftrightarrow 1.16 (1.02 - 1.32)$		
Tenofovir disoproxil	tenofovir	No significant effect on	
245 mg once daily ^b	AUC \leftrightarrow 1.15 (1.09-1.21)	tenofovir and etravirine PK	
	$C_{\min} \uparrow 1.19 (1.13 - 1.26)$	parameters is seen.	
	$C_{max} \uparrow 1.15 \ (1.04-1.27)$	INTELENCE and tenofovir	
	etravirine	can be used without dose	
	AUC $\downarrow 0.81 \ (0.75 - 0.88)$	adjustments.	
	$C_{\min} \downarrow 0.82 \ (0.73 - 0.91)$		
	$C_{max} \downarrow 0.81 \ (0.75 - 0.88)$		
Other NRTIs	Not studied, but no interaction expected based	INTELENCE can be used	
	on the primary renal elimination route for other	with these NRTIs without	
	NRTIs (e.g., abacavir, emtricitabine,	dose adjustment.	
	lamivudine, stavudine and zidovudine).		

 Table 2:
 Interactions and dose recommendations with other medicinal products

NNRTIs		
Efavirenz	Combining two NNRTIs has not been shown to	It is not recommended to
Nevirapine	be beneficial. Concomitant use of etravirine	co-administer INTELENCE
Rilpivirine	with efavirenz or nevirapine may cause a	with other NNRTIs.
1	significant decrease in the plasma concentration	
	of etravirine and loss of therapeutic effect of	
	etravirine.	
	Concomitant use of etravirine with rilpivirine	
	may cause a decrease in the plasma	
	concentration of rilpivirine and loss of	
	therapeutic effect of rilpivirine.	
HIV Protease Inhibitors (PL	s) - Unboosted (i.e. without co-administration of lo	w-dose ritonavir)
Indinavir	Concomitant use of etravirine with indinavir	It is not recommended to
manavn	may cause a significant decrease in the plasma	co-administer INTELENCE
	concentration of indinavir and loss of	with indinavir
	therapeutic effect of indinavir	with manavit.
HIV PIs - Boosted with low	dose ritonquir	
Atazanavir/ritonavir	atazanavir	INTEL ENCE and
300/100 mg once daily	$\frac{\text{attazana vii}}{\text{AUC} + 0.86 (0.79-0.93)}$	atazanavir/ritonavir can be
500/100 mg once dany	C = 10.62 (0.55-0.71)	used without dose
	$C_{\min} \downarrow 0.02 (0.35 - 0.71)$	adjustment
	$C_{\text{max}} \leftrightarrow 0.97 (0.89 - 1.03)$	adjustment.
	$\frac{\text{etravirine}}{\text{AUC} + 1.20 (1.18, 1.44)}$	
	AUC 1.30 (1.18-1.44)	
	$C_{min} = 1.20 (1.12 - 1.42)$	
	C_{max} 1.30 (1.1/-1.44)	
Darunavır/ritonavir	darunavir Allo	INTELENCE and
600/100 mg twice daily	$AUC \leftrightarrow 1.15 (1.05 \cdot 1.26)$	darunavır/ritonavır can be
	$C_{\min} \leftrightarrow 1.02 \ (0.90 - 1.17)$	used without dose
	$C_{\text{max}} \leftrightarrow 1.11 \ (1.01 - 1.22)$	adjustments (see also
	etravirine	section 5.1).
	AUC ↓ 0.63 (0.54-0.73)	
	$C_{\min} \downarrow 0.51 (0.44-0.61)$	
	$C_{\text{max}} \downarrow 0.68 \ (0.57 - 0.82)$	
Fosamprenavır/ritonavır	amprenavir	Amprenavir/ritonavir and
700/100 mg twice daily	$AUC \uparrow 1.69 (1.53-1.86)$	fosamprenavır/ritonavır may
	$C_{\min} \uparrow 1.77 (1.39-2.25)$	require dose reduction when
	$C_{max} \uparrow 1.62 \ (1.47 - 1.79)$	co-administered with
	etravirine	INTELENCE. Using the oral
	$AUC \leftrightarrow^a$	solution may be considered
	$C_{\min} \leftrightarrow^a$	for dose reduction.
	$C_{\max} \leftrightarrow^a$	
Lopinavir/ritonavir	lopinavir	INTELENCE and
(tablet)	AUC $\leftrightarrow 0.87 (0.83 - 0.92)$	lopinavir/ritonavir can be
400/100 mg twice daily	$C_{\min} \downarrow 0.80 \ (0.73 - 0.88)$	used without dose
	$C_{max} \leftrightarrow 0.89 \ (0.82 \text{-} 0.96)$	adjustments.
	etravirine	
	AUC $\downarrow 0.65 (0.59-0.71)$	
	$C_{\min} \downarrow 0.55 \ (0.49-0.62)$	
	$C_{max} \downarrow 0.70 \ (0.64-0.78)$	
Saquinavir/ritonavir	saquinavir	INTELENCE and
1,000/100 mg twice daily	AUC $\leftrightarrow 0.95 (0.64 - 1.42)$	saquinavir/ritonavir can be
	$C_{\min} \downarrow 0.80 \ (0.46-1.38)$	used without dose
	$C_{max} \leftrightarrow 1.00 \ (0.70\text{-}1.42)$	adjustments.
	etravirine	
	AUC $\downarrow 0.67 \ (0.56-0.80)$	
	$C_{\min} \downarrow 0.71 \ (0.58-0.87)$	
	$C_{max} \downarrow 0.63 \ (0.53-0.75)$	

Tipranavir/ritonavir	tipranavir	It is not recommended to
500/200 mg twice daily	AUC ↑ 1.18 (1.03-1.36)	co-administer
	$C_{\min} \uparrow 1.24 \ (0.96-1.59)$	tipranavir/ritonavir and
	$C_{max} \uparrow 1.14 (1.02 - 1.27)$	INTELENCE (see
	etravirine	section 4.4).
	$\overline{AUC \downarrow 0.24}$ (0.18-0.33)	,
	$C_{\min} \downarrow 0.18 (0.13-0.25)$	
	$C_{max} \downarrow 0.29 (0.22 - 0.40)$	
HIV PIs – Boosted with cob	icistat	•
Atazanavir/cobicistat	Not studied. Co-administration of etravirine	Co-administration of
Darunavir/cobicistat	with atazanavir/cobicistat or	INTELENCE with
	darunavir/cobicistat may decrease plasma	atazanavir/cobicistat or
	concentrations of the PI and/or cobicistat,	darunavir/cobicistat is not
	which may result in loss of therapeutic effect	recommended.
	and development of resistance.	
	1	
CCR5 Antagonists	•	·
Maraviroc	maraviroc	The recommended dose for
300 mg twice daily	AUC ↓ 0.47 (0.38-0.58)	maraviroc when combined
	$C_{\min} \downarrow 0.61 \ (0.53-0.71)$	with INTELENCE and a PI
	$C_{max} \downarrow 0.40 \ (0.28-0.57)$	is 150 mg twice daily, except
	etravirine	for fosamprenavir/ritonavir
	$\overline{\text{AUC}} \leftrightarrow 1.06 \ (0.99\text{-}1.14)$	which is not recommended
	$C_{\min} \leftrightarrow 1.08 (0.98-1.19)$	with maraviroc. No dose
	$C_{max} \leftrightarrow 1.05 (0.95 - 1.17)$	adjustment for INTELENCE
Maraviroc/darunavir/	maraviroc*	is necessary.
ritonavir	AUC ↑ 3.10 (2.57-3.74)	See also section 4.4.
150/600/100 mg twice	$C_{\min} \uparrow 5.27 (4.51-6.15)$	
daily	$C_{max} \uparrow 1.77 (1.20-2.60)$	
5	* compared to maraviroc 150 mg twice daily	
Fusion Inhibitors		•
Enfuvirtide	etravirine*	No interaction is expected for
90 mg twice daily	$AUC \leftrightarrow^a$	either INTELENCE or
	$C_{0h} \leftrightarrow^a$	enfuvirtide when
	Enfuvirtide concentrations not studied and no	co-administered.
	effect is expected.	
	* based on population pharmacokinetic analyses	

Integrase Strand Transfer In	hibitors	
Dolutegravir	dolutegravir	Etravirine significantly
50 mg once daily	AUC ↓ 0.29 (0.26-0.34)	reduced plasma
-	$C_{\min} \downarrow 0.12 \ (0.09-0.16)$	concentrations of
	$C_{max} \downarrow 0.48 (0.43-0.54)$	dolutegravir. The effect of
	etravirine	etravirine on dolutegravir
	$\overline{\text{AUC}} \leftrightarrow^{a}$	plasma concentrations was
	$C_{\min} \leftrightarrow^a$	mitigated by
	$C_{max} \leftrightarrow^{a}$	co-administration of
		darunavir/ritonavir or
Dolutegravir +	dolutegravir	lopinavir/ritonavir and is
darunavir/ritonavir	$AUC \mid 0.75 (0.69-0.81)$	expected to be mitigated by
50 mg once daily +	$C \rightarrow 10.63 (0.52-0.77)$	atazanavir/ritonavir
600/100 mg twice daily	$C_{mm} \downarrow 0.88 (0.78-1.00)$	
ooor roo nig twiee duity	etravirine	INTELENCE should only be
	$\Delta UC \rightarrow^a$	used with dolutegravir when
	$C \rightarrow \lambda^{a}$	as administered with
	C_{\min}	co-administered with
	$C_{\max} \leftrightarrow$	dammavin/nitonavin,
Delutegravir	delutegravir	loningvir/ritongvir, This
Loningerin(sit	$\frac{\text{dotutegravir}}{\text{AUC} + 1} = 11(1.02, 1.20)$	iopinavir/ritonavir. I nis
Lopinavir/ritonavir	$AUC \leftrightarrow 1.11(1.02 - 1.20)$	combination can be used
50 mg once daily +	$C_{\min} \uparrow 1.28 (1.13 - 1.45)$	without dose adjustment.
400/100 mg twice daily	$C_{\text{max}} \leftrightarrow 1.07 (1.02 \text{-} 1.13)$	
	etravirine	
	$AUC \leftrightarrow^a$	
	$C_{\min} \leftrightarrow^a$	
	$C_{max} \leftrightarrow^a$	
Raltegravir	raltegravir	INTELENCE and raltegravir
400 mg twice daily	AUC $\downarrow 0.90 \ (0.68-1.18)$	can be used without dose
	$C_{\min} \downarrow 0.66 \ (0.34-1.26)$	adjustments.
	$C_{max} \downarrow 0.89 \ (0.68-1.15)$	
	etravirine	
	AUC \leftrightarrow 1.10 (1.03-1.16)	
	$C_{\min} \leftrightarrow 1.17 \ (1.10\text{-}1.26)$	
	$C_{max} \leftrightarrow 1.04 \ (0.97 \text{-} 1.12)$	
ANTIARRHYTHMICS		
Digoxin	digoxin	INTELENCE and digoxin
0.5 mg single dose	AUC ↑ 1.18 (0.90-1.56)	can be used without dose
	C _{min} ND	adjustments. It is
	$C_{max} \uparrow 1.19 \ (0.96-1.49)$	recommended that digoxin
		levels be monitored when
		digoxin is combined with
		INTELENCE.
Amiodarone	Not studied. INTELENCE is expected to	Caution is warranted and
Bepridil	decrease plasma concentrations of these	therapeutic concentration
Disopyramide	antiarrhythmics.	monitoring, if available, is
Flecainide		recommended for
Lidocaine (systemic)		antiarrhythmics when
Mexiletine		co-administered with
Propafenone		INTELENCE
Quinidine		INTELLINCE.
ANTIBIOTICS	<u> </u>	l
Azithromycin	Not studied Based on the hiliary elimination	INTELENCE and
	not suched. Dasce on the officially eminimation	azithromyoin can be used
	painway of azimioniyoni, no drug interactions	without dogo adjustments
	INTELENCE	without dose adjustments.
	INTELENCE.	

Clarithromycin 500 mg twice daily	$\begin{array}{l} \hline clarithromycin\\ AUC \downarrow 0.61 (0.53-0.69)\\ C_{min} \downarrow 0.47 (0.38-0.57)\\ C_{max} \downarrow 0.66 (0.57-0.77)\\ \hline 14-OH-clarithromycin\\ AUC \uparrow 1.21 (1.05-1.39)\\ C_{min} \leftrightarrow 1.05 (0.90-1.22)\\ C_{max} \uparrow 1.33 (1.13-1.56)\\ \hline etravirine\\ AUC \uparrow 1.42 (1.34-1.50)\\ C_{min} \uparrow 1.46 (1.36-1.58)\\ C_{max} \uparrow 1.46 (1.38-1.56)\\ \end{array}$	Clarithromycin exposure was decreased by etravirine; however, concentrations of the active metabolite, 14-OH-clarithromycin, were increased. Because 14-OH-clarithromycin has reduced activity against <i>Mycobacterium avium</i> complex (MAC), overall activity against this pathogen may be altered; therefore alternatives to clarithromycin should be considered for the
ANTICOACULANTS		treatment of MAC.
Warfarin	Not studied. Etravirine is expected to increase plasma concentrations of warfarin.	It is recommended that the international normalised ratio (INR) be monitored when warfarin is combined with INTELENCE.
ANTICONVULSANTS		
Carbamazepine Phenobarbital Phenytoin	Not studied. Carbazamepine, phenobarbital and phenytoin are expected to decrease plasma concentrations of etravirine.	Combination not recommended.
ANTIFUNGALS		DITELENCE 1
Fluconazole 200 mg once in the morning	$\begin{array}{l} \underline{\text{fluconazole}} \\ \overline{\text{AUC}} \leftrightarrow 0.94 \ (0.88\text{-}1.01) \\ \overline{\text{C}}_{\min} \leftrightarrow 0.91 \ (0.84\text{-}0.98) \\ \overline{\text{C}}_{\max} \leftrightarrow 0.92 \ (0.85\text{-}1.00) \\ \underline{\text{etravirine}} \\ \overline{\text{AUC}} \uparrow 1.86 \ (1.73\text{-}2.00) \\ \overline{\text{C}}_{\min} \uparrow 2.09 \ (1.90\text{-}2.31) \\ \overline{\text{C}}_{\max} \uparrow 1.75 \ (1.60\text{-}1.91) \end{array}$	INTELENCE and fluconazole can be used without dose adjustments.
Itraconazole Ketoconazole Posaconazole	Not studied. <u>Posaconazole</u> , a potent inhibitor of CYP3A4, may increase plasma concentrations of etravirine. <u>Itraconazole</u> and <u>ketoconazole</u> are potent inhibitors as well as substrates of CYP3A4. Concomitant systemic use of itraconazole or ketoconazole and etravirine may increase plasma concentrations of etravirine. Simultaneously, plasma concentrations of itraconazole or ketoconazole may be decreased by etravirine.	INTELENCE and these antifungals can be used without dose adjustments.
Voriconazole 200 mg twice daily	$\begin{array}{ l l l l l l l l l l l l l l l l l l l$	INTELENCE and voriconazole can be used without dose adjustments.

ANTIMALARIALS		
Artemether/	artemether	Close monitoring of
Lumefantrine	$AUC \downarrow 0.62 (0.48-0.80)$	antimalarial response is
80/480 mg, 6 doses at 0.	$C_{min} \downarrow 0.82 (0.67-1.01)$	warranted when
8, 24, 36, 48, and	$C_{max} = 0.72 (0.55 - 0.94)$	co-administering
60 hours	dihydroartemisinin	INTELENCE and
00 nouis	$\frac{\text{diffydroutorinsinin}}{\text{AUC} + 0.85 (0.75-0.97)}$	artemether/lumefantrine as a
	$C_{\text{min}} = 0.83 (0.71 - 0.97)$	significant decrease in
	$C_{mm} \downarrow 0.84 (0.71 \cdot 0.97)$	exposure of artemether and
	lumefantrine	its active metabolite
	$\frac{1}{4}$ AUC $\pm 0.87 (0.77-0.98)$	dihydroartemisinin may
	$C \rightarrow 0.97 (0.83 - 1.15)$	result in decreased
	$C \longrightarrow 1.07 (0.03 - 1.13)$	antimalarial efficacy. No
	$C_{\text{max}} \rightarrow 1.07 (0.94-1.25)$	dose adjustment is needed for
	$\frac{\text{cuavinine}}{\text{AUC}} = 1.10 (1.06 \ 1.15)$	INTELENCE
	$AUC \leftrightarrow 1.10 (1.00-1.13)$	INTELENCE.
	$C_{\min} \leftrightarrow 1.08 (1.04 - 1.14)$	
	$C_{\text{max}} \leftrightarrow 1.11 (1.06 - 1.17)$	
ANTIMYCOBACTERIAI		
Rifampicin	Not studied. Rifampicin and rifapentine are	Combination not
Rifapentine	expected to decrease plasma concentrations of	recommended.
	etravirine.	
	INTELENCE should be used in combination	
	with a boosted PI. Rifampicin is contraindicated	
	in combination with boosted Pis.	
Rifabutin	With an associated boosted PI:	The combination of
300 mg once daily	No interaction study has been performed. Based	INTELENCE with a boosted
	on historical data, a decrease in etravirine	PI and rifabutin should be
	exposure may be expected whereas an increase	used with caution due to the
	in rifabutin exposure and especially in	risk of decrease in etravirine
	25-O-desacetyl-rifabutin may be expected.	exposure and the risk of
	<i>y y i</i>	increase in rifabutin and
	With no associated boosted PI (out of the	25-O-desacetyl-rifabutin
	recommended indication for etravirine):	exposures.
	rifabutin	Close monitoring for
	AUC + 0.83 (0.75 - 0.94)	virologic response and for
	$C_{\text{min}} = 0.76 (0.66-0.87)$	rifabutin related adverse
	$C = \frac{1}{1000} \frac{0.70}{0.78} \frac{0.000}{0.000} \frac{0.000}{0.000}$	reactions is recommended
	25Ω desacetyl rifabutin	Please refer to the product
	$\frac{25-6-\text{desacety}-\text{fitabutili}}{\text{AUC} + 0.83 (0.74-0.92)}$	information of the associated
	$AOC \downarrow 0.83 (0.74-0.92)$	hoosted PL for the dose
	$C_{\min} \downarrow 0.78 (0.70 - 0.87)$	adjustment of rifebutin to be
	$C_{max} \downarrow 0.85 (0.72 - 1.00)$	adjustment of mabutin to be
	$\frac{\text{etravirine}}{\text{ALIC} + 0} (2 (0.54, 0.74))$	usea.
	$AUC \downarrow 0.63 (0.54-0.74)$	
	$C_{\min} \downarrow 0.65 (0.56 - 0.74)$	
	$C_{\text{max}} \downarrow 0.63 \ (0.53 - 0.74)$	
BENZODIAZEPINES		
Diazepam	Not studied. Etravirine is expected to increase	Alternatives to diazepam
	plasma concentrations of diazepam.	should be considered.
CORTICOSTEROIDS		r
Dexamethasone	Not studied. Dexamethasone is expected to	Systemic dexamethasone
(systemic)	decrease plasma concentrations of etravirine	should be used with caution
		or alternatives should be
		considered, particularly for
		chronic use.

OESTROGEN-BASED CO	OESTROGEN-BASED CONTRACEPTIVES				
Ethinylestradiol	ethinylestradiol	The combination of			
0.035 mg once daily	$\overline{AUC} \uparrow 1.22 (1.13 - 1.31)$	oestrogen- and/or			
Norethindrone	$C_{min} \leftrightarrow 1.09(1.01-1.18)$	progesterone-based			
1 mg once daily	$C_{max} \uparrow 1.33 (1.21-1.46)$	contraceptives and			
	norethindrone	INTELENCE can be used			
	$\frac{\text{NOCOMMERCINE}}{\text{AUC} \leftrightarrow 0.95 (0.90-0.99)}$	without dose adjustment			
	$C_{min} \perp 0.78 (0.68-0.90)$	Winout dobe adjubilitent.			
	$C \leftrightarrow 1.05 (0.98-1.12)$				
	etravirine				
	$\Delta IIC \bigtriangleup^a$				
	$A \cup C \leftrightarrow$				
	$C_{\min} \leftrightarrow C_{\min} \leftrightarrow C_{\min} \circ C_{\max} \circ C_{\max$				
HEDATITIS C VIDUS (H	$\bigcirc \qquad \qquad$				
Bibovirin	Not studied, but no internation expected based	The combination of			
Kloaviiiii	Not studied, but no interaction expected based	DITELENCE 1			
	on the renal elimination pathway of ribavirin.	INTELENCE and ribavirin			
		can be used without dose			
		adjustments.			
Daclatasvır	Not studied. Co-administration of etravirine	Co-administration of			
	with daclatasvir may decrease daclatasvir	INTELENCE and daclatasvir			
	concentrations.	is not recommended.			
Elbasvir/grazoprevir	Not studied. Co-administration of etravirine	Co-administration is			
	with elbasvir/grazoprevir may decrease elbasvir	contraindicated (see			
	and grazoprevir concentrations, leading to	section 4.3).			
	reduced therapeutic effect of				
	elbasvir/grazoprevir.				
HERBAL PRODUCTS					
St John's wort	Not studied. St John's wort is expected to	Combination not			
(Hypericum perforatum)	decrease the plasma concentrations of	recommended.			
	etravirine.				
etravirine.					
HMG CO-A REDUCTAS	E INHIBITORS				
HMG CO-A REDUCTASI Atorvastatin	E INHIBITORS atorvastatin	The combination of			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS atorvastatin AUC 0.63 (0.58-0.68)	The combination of INTELENCE and			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS atorvastatin AUC \downarrow 0.63 (0.58-0.68) Cmin ND	The combination of INTELENCE and atoryastatin can be given			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS <u>atorvastatin</u> AUC \downarrow 0.63 (0.58-0.68) C _{min} ND C _{max} \uparrow 1.04 (0.84-1.30)	The combination of INTELENCE and atorvastatin can be given without any dose			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS <u>atorvastatin</u> AUC \downarrow 0.63 (0.58-0.68) C _{min} ND C _{max} \uparrow 1.04 (0.84-1.30) 2-OH-atorvastatin	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS <u>atorvastatin</u> AUC \downarrow 0.63 (0.58-0.68) C _{min} ND C _{max} \uparrow 1.04 (0.84-1.30) <u>2-OH-atorvastatin</u> AUC \uparrow 1.27 (1.19-1.36)	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS <u>atorvastatin</u> AUC \downarrow 0.63 (0.58-0.68) C _{min} ND C _{max} \uparrow 1.04 (0.84-1.30) <u>2-OH-atorvastatin</u> AUC \uparrow 1.27 (1.19-1.36) C \downarrow ND	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS <u>atorvastatin</u> AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04 (0.84-1.30)$ <u>2-OH-atorvastatin</u> AUC ↑ 1.27 (1.19-1.36) C_{min} ND C_{min} ND $C_{min} \uparrow 1.76 (1.60, 1.94)$	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS <u>atorvastatin</u> AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04 (0.84-1.30)$ <u>2-OH-atorvastatin</u> AUC ↑ 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76 (1.60-1.94)$ atravising	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS <u>atorvastatin</u> AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04 (0.84-1.30)$ <u>2-OH-atorvastatin</u> AUC ↑ 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76 (1.60-1.94)$ <u>etravirine</u> AUC () 1.02 (0.07, 1.07)	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS atorvastatin AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04 (0.84-1.30)$ <u>2-OH-atorvastatin</u> AUC ↑ 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76 (1.60-1.94)$ <u>etravirine</u> AUC ↔ 1.02 (0.97-1.07) $C_{max} \downarrow 1.00 (1.02, 1.10)$	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS atorvastatin AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04 (0.84-1.30)$ <u>2-OH-atorvastatin</u> AUC ↑ 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76 (1.60-1.94)$ <u>etravirine</u> AUC ↔ 1.02 (0.97-1.07) $C_{min} \leftrightarrow 1.10 (1.02-1.19)$	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily	E INHIBITORS atorvastatin AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04 (0.84-1.30)$ <u>2-OH-atorvastatin</u> AUC ↑ 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76 (1.60-1.94)$ <u>etravirine</u> AUC ↔ 1.02 (0.97-1.07) $C_{min} \leftrightarrow 1.10 (1.02-1.19)$ $C_{max} \leftrightarrow 0.97 (0.93-1.02)$	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin	$\begin{array}{l} \hline \textbf{E INHIBITORS} \\ \hline \textbf{atorvastatin} \\ AUC \downarrow 0.63 (0.58-0.68) \\ C_{min} ND \\ C_{max} \uparrow 1.04 (0.84-1.30) \\ \hline \textbf{2-OH-atorvastatin} \\ AUC \uparrow 1.27 (1.19-1.36) \\ C_{min} ND \\ C_{max} \uparrow 1.76 (1.60-1.94) \\ \hline \textbf{etravirine} \\ AUC \leftrightarrow 1.02 (0.97-1.07) \\ C_{min} \leftrightarrow 1.10 (1.02-1.19) \\ C_{max} \leftrightarrow 0.97 (0.93-1.02) \\ \hline \textbf{Not studied. No interaction between pravastatin} \\ \hline AUC torus in the state of the$	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin	$\begin{array}{l} \hline \textbf{E INHIBITORS} \\ \hline \textbf{atorvastatin} \\ AUC \downarrow 0.63 (0.58-0.68) \\ C_{min} ND \\ \hline \textbf{C}_{max} \uparrow 1.04 (0.84-1.30) \\ \hline \textbf{2-OH-atorvastatin} \\ AUC \uparrow 1.27 (1.19-1.36) \\ \hline \textbf{C}_{min} ND \\ \hline \textbf{C}_{max} \uparrow 1.76 (1.60-1.94) \\ \hline \textbf{etravirine} \\ AUC \leftrightarrow 1.02 (0.97-1.07) \\ \hline \textbf{C}_{min} \leftrightarrow 1.10 (1.02-1.19) \\ \hline \textbf{C}_{max} \leftrightarrow 0.97 (0.93-1.02) \\ \hline \textbf{Not studied. No interaction between pravastatin} \\ \textbf{and etravirine is expected.} \end{array}$	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin	$\begin{array}{c} \underline{\text{atorvastatin}} \\ \underline{\text{AUC}} \downarrow 0.63 \ (0.58-0.68) \\ C_{\text{min}} \ \text{ND} \\ C_{\text{max}} \uparrow 1.04 \ (0.84-1.30) \\ \underline{2\text{-OH-atorvastatin}} \\ \text{AUC} \uparrow 1.27 \ (1.19-1.36) \\ C_{\text{min}} \ \text{ND} \\ C_{\text{max}} \uparrow 1.76 \ (1.60-1.94) \\ \underline{\text{etravirine}} \\ \text{AUC} \leftrightarrow 1.02 \ (0.97-1.07) \\ C_{\text{min}} \leftrightarrow 1.10 \ (1.02-1.19) \\ C_{\text{max}} \leftrightarrow 0.97 \ (0.93-1.02) \\ \text{Not studied. No interaction between pravastatin and etravirine is expected. \\ \underline{\text{Lovastatin}, rosuvastatin} \text{ and } \underline{\text{simvastatin}} \text{ are} \\ \hline \end{array}$	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin	$\begin{array}{l} \hline \textbf{E INHIBITORS} \\ \hline \textbf{atorvastatin} \\ \hline \textbf{AUC} \downarrow 0.63 (0.58-0.68) \\ \hline \textbf{C}_{min} \ \textbf{ND} \\ \hline \textbf{C}_{max} \uparrow 1.04 (0.84-1.30) \\ \hline \textbf{2-OH-atorvastatin} \\ \hline \textbf{AUC} \uparrow 1.27 (1.19-1.36) \\ \hline \textbf{C}_{min} \ \textbf{ND} \\ \hline \textbf{C}_{max} \uparrow 1.76 (1.60-1.94) \\ \hline \textbf{etravirine} \\ \hline \textbf{AUC} \leftrightarrow 1.02 (0.97-1.07) \\ \hline \textbf{C}_{min} \leftrightarrow 1.10 (1.02-1.19) \\ \hline \textbf{C}_{max} \leftrightarrow 0.97 (0.93-1.02) \\ \hline \textbf{Not studied. No interaction between pravastatin} \\ \textbf{and etravirine is expected.} \\ \hline \textbf{Lovastatin, rosuvastatin and simvastatin} are \\ \hline \textbf{CYP3A4 substrates and co-administration with} \\ \hline \end{array}$	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin	E INHIBITORSatorvastatin AUC \downarrow 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) 2-OH-atorvastatin AUC \uparrow 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76$ (1.60-1.94) etravirine AUC \leftrightarrow 1.02 (0.97-1.07) $C_{min} \leftrightarrow 1.10$ (1.02-1.19) $C_{max} \leftrightarrow 0.97$ (0.93-1.02)Not studied. No interaction between pravastatin and etravirine is expected. Lovastatin, rosuvastatin and simvastatin are CYP3A4 substrates and co-administration with etravirine may result in lower plasma	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin	E INHIBITORSatorvastatin AUC \downarrow 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) 2-OH-atorvastatin AUC \uparrow 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76$ (1.60-1.94) etravirine AUC \leftrightarrow 1.02 (0.97-1.07) $C_{min} \leftrightarrow 1.10$ (1.02-1.19) $C_{max} \leftrightarrow 0.97$ (0.93-1.02)Not studied. No interaction between pravastatin and etravirine is expected. Lovastatin, rosuvastatin and simvastatin are CYP3A4 substrates and co-administration with etravirine may result in lower plasma concentrations of the HMG Co-A reductase	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin	E INHIBITORSatorvastatin AUC \downarrow 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) 2-OH-atorvastatin AUC \uparrow 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76$ (1.60-1.94) etravirine AUC \leftrightarrow 1.02 (0.97-1.07) $C_{min} \leftrightarrow 1.10$ (1.02-1.19) $C_{max} \leftrightarrow 0.97$ (0.93-1.02)Not studied. No interaction between pravastatin and etravirine is expected. Lovastatin, rosuvastatin and simvastatin are CYP3A4 substrates and co-administration with etravirine may result in lower plasma concentrations of the HMG Co-A reductase inhibitor. Fluvastatin, and rosuvastatin are	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin	E INHIBITORSatorvastatin AUC \downarrow 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) 2-OH-atorvastatin AUC \uparrow 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76$ (1.60-1.94) etravirine AUC \leftrightarrow 1.02 (0.97-1.07) $C_{min} \leftrightarrow 1.10$ (1.02-1.19) $C_{max} \leftrightarrow 0.97$ (0.93-1.02)Not studied. No interaction between pravastatin and etravirine is expected. Lovastatin, rosuvastatin and simvastatin are CYP3A4 substrates and co-administration with etravirine may result in lower plasma concentrations of the HMG Co-A reductase inhibitor. Fluvastatin, and rosuvastatin are metabolised by CYP2C9 and co-administration	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin	E INHIBITORSatorvastatin AUC \downarrow 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) 2-OH-atorvastatin AUC \uparrow 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76$ (1.60-1.94) etravirine AUC \leftrightarrow 1.02 (0.97-1.07) $C_{min} \leftrightarrow 1.10$ (1.02-1.19) $C_{max} \leftrightarrow 0.97$ (0.93-1.02)Not studied. No interaction between pravastatin and etravirine is expected. Lovastatin, rosuvastatin and simvastatin are CYP3A4 substrates and co-administration with etravirine may result in lower plasma concentrations of the HMG Co-A reductase inhibitor. Fluvastatin, and rosuvastatin are metabolised by CYP2C9 and co-administration with etravirine may result in higher plasma	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin	E INHIBITORSatorvastatin AUC \downarrow 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) 2-OH-atorvastatin AUC \uparrow 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76$ (1.60-1.94) etravirine AUC \leftrightarrow 1.02 (0.97-1.07) $C_{min} \leftrightarrow 1.10$ (1.02-1.19) $C_{max} \leftrightarrow 0.97$ (0.93-1.02)Not studied. No interaction between pravastatin and etravirine is expected. Lovastatin, rosuvastatin and simvastatin are CYP3A4 substrates and co-administration with etravirine may result in lower plasma concentrations of the HMG Co-A reductase inhibitor. Fluvastatin, and rosuvastatin are metabolised by CYP2C9 and co-administration with etravirine may result in higher plasma concentrations of the HMG Co-A reductase	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin	E INHIBITORS atorvastatin AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) <u>2-OH-atorvastatin</u> AUC ↑ 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76$ (1.60-1.94) <u>etravirine</u> AUC $\leftrightarrow 1.02$ (0.97-1.07) $C_{min} \leftrightarrow 1.10$ (1.02-1.19) $C_{max} \leftrightarrow 0.97$ (0.93-1.02) Not studied. No interaction between <u>pravastatin</u> and etravirine is expected. <u>Lovastatin</u> , rosuvastatin and <u>simvastatin</u> are CYP3A4 substrates and co-administration with etravirine may result in lower plasma concentrations of the HMG Co-A reductase inhibitor. <u>Fluvastatin</u> , and <u>rosuvastatin</u> are metabolised by CYP2C9 and co-administration with etravirine may result in higher plasma concentrations of the HMG Co-A reductase inhibitor.	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin Simvastatin H ₂ -RECEPTOR ANTAGO	atorvastatin AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) 2-OH-atorvastatin AUC ↑ 1.27 (1.19-1.36) $C_{max} \uparrow 1.76$ (1.60-1.94) etravirine AUC ↔ 1.02 (0.97-1.07) $C_{max} \leftrightarrow 0.97$ (0.93-1.02) Not studied. No interaction between pravastatin and etravirine is expected. Lovastatin, rosuvastatin and simvastatin are CYP3A4 substrates and co-administration with etravirine may result in lower plasma concentrations of the HMG Co-A reductase inhibitor. Fluvastatin, and rosuvastatin are metabolised by CYP2C9 and co-administration with etravirine may result in higher plasma concentrations of the HMG Co-A reductase inhibitor. NISTS	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin Simvastatin Kosuvastatin Rosuvastatin Simvastatin Simvastatin Simvastatin Simvastatin	E INHIBITORS atorvastatin AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) 2-OH-atorvastatin AUC ↑ 1.27 (1.19-1.36) $C_{max} \uparrow 1.76$ (1.60-1.94) etravirine AUC ↔ 1.02 (0.97-1.07) $C_{max} \leftrightarrow 0.97$ (0.93-1.02) Not studied. No interaction between pravastatin and etravirine is expected. Lovastatin, rosuvastatin and simvastatin are CYP3A4 substrates and co-administration with etravirine may result in lower plasma concentrations of the HMG Co-A reductase inhibitor. Fluvastatin, and rosuvastatin are metabolised by CYP2C9 and co-administration with etravirine may result in higher plasma concentrations of the HMG Co-A reductase inhibitor. NISTS etravirine	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin Simvastatin Simvastatin Simvastatin 150 mg twice daily	E INHIBITORSatorvastatinAUC \downarrow 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30)2-OH-atorvastatinAUC \uparrow 1.27 (1.19-1.36) C_{min} ND $C_{max} \uparrow 1.76$ (1.60-1.94)etravirineAUC \leftrightarrow 1.02 (0.97-1.07) $C_{min} \leftrightarrow 1.10$ (1.02-1.19) $C_{max} \leftrightarrow 0.97$ (0.93-1.02)Not studied. No interaction between pravastatinand etravirine is expected.Lovastatin, rosuvastatin and simvastatin areCYP3A4 substrates and co-administration withetravirine may result in lower plasmaconcentrations of the HMG Co-A reductaseinhibitor. Fluvastatin, and rosuvastatin aremetabolised by CYP2C9 and co-administrationwith etravirine may result in higher plasmaconcentrations of the HMG Co-A reductaseinhibitor. NISTS etravirineAUC \downarrow 0.86 (0.76-0.97)	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			
HMG CO-A REDUCTASI Atorvastatin 40 mg once daily Fluvastatin Lovastatin Pravastatin Rosuvastatin Simvastatin Simvastatin Simvastatin Simvastatin Simvastatin Simvastatin Loogan Job Daily Rosuvastatin Simvastatin Simvastatin	E INHIBITORS atorvastatin AUC ↓ 0.63 (0.58-0.68) C_{min} ND $C_{max} \uparrow 1.04$ (0.84-1.30) 2-OH-atorvastatin AUC ↑ 1.27 (1.19-1.36) $C_{max} \uparrow 1.76$ (1.60-1.94) etravirine AUC ↔ 1.02 (0.97-1.07) $C_{max} \leftrightarrow 0.97$ (0.93-1.02) Not studied. No interaction between pravastatin and etravirine is expected. Lovastatin, rosuvastatin and simvastatin are CYP3A4 substrates and co-administration with etravirine may result in lower plasma concentrations of the HMG Co-A reductase inhibitor. Fluvastatin, and rosuvastatin are metabolised by CYP2C9 and co-administration with etravirine may result in higher plasma concentrations of the HMG Co-A reductase inhibitor. PNISTS etravirine AUC ↓ 0.86 (0.76-0.97) C _{min} ND	The combination of INTELENCE and atorvastatin can be given without any dose adjustments, however, the dose of atorvastatin may need to be altered based on clinical response. Dose adjustments for these HMG Co-A reductase inhibitors may be necessary.			

IMMUNOSUPPRESSANT	TS	
Cyclosporin Sirolimus Tacrolimus	Not studied. Etravirine is expected to decrease plasma concentrations of cyclosporine, sirolimus and tacrolimus.	Co-administration with systemic immunosuppressants should be done with caution because plasma concentrations of cyclosporin, sirolimus and tacrolimus may be affected when co-administered with INTELENCE.
NARCOTIC ANALGESIC	ĊS	•
Methadone individual dose ranging from 60 mg to 130 mg once daily	$\begin{array}{l} \underline{R(-) \mbox{ methadone}} \\ AUC \leftrightarrow 1.06 \ (0.99-1.13) \\ C_{min} \leftrightarrow 1.10 \ (1.02-1.19) \\ C_{max} \leftrightarrow 1.02 \ (0.96-1.09) \\ \underline{S(+) \mbox{ methadone}} \\ AUC \leftrightarrow 0.89 \ (0.82-0.96) \\ C_{min} \leftrightarrow 0.89 \ (0.81-0.98) \\ C_{max} \leftrightarrow 0.89 \ (0.83-0.97) \\ \underline{etravirine} \\ AUC \leftrightarrow^{a} \\ C_{min} \leftrightarrow^{a} \\ C_{max} \leftrightarrow^{a} \end{array}$	No changes in methadone dosage were required based on clinical status during or after the period of INTELENCE co-administration.
PHOSPHODIESTERASE.	, TYPE 5 (PDE-5) INHIBITORS	
Sildenafil 50 mg single dose Tadalafil Vardenafil	$\frac{\text{sildenafil}}{\text{AUC} \downarrow 0.43 \ (0.36-0.51)} \\ C_{\text{min}} \text{ND} \\ C_{\text{max}} \downarrow 0.55 \ (0.40-0.75) \\ \underline{\text{N-desmethyl-sildenafil}} \\ \text{AUC} \downarrow 0.59 \ (0.52-0.68) \\ C_{\text{min}} \text{ND} \\ C_{\text{max}} \downarrow 0.75 \ (0.59-0.96) \\ \end{array}$	Concomitant use of PDE-5 inhibitors with INTELENCE may require dose adjustment of the PDE-5 inhibitor to attain the desired clinical effect.
PLATELET AGGREGGA	TION INHIBITORS	L
Clopidogrel	<i>In vitro</i> data show that etravirine has inhibitory properties on CYP2C19. It is therefore possible that etravirine may inhibit the metabolism of clopidogrel to its active metabolite by such inhibition of CYP2C19 <i>in vivo</i> . The clinical relevance of this interaction has not been demonstrated.	As a precaution it is recommended that concomitant use of etravirine and clopidogrel should be discouraged.
PROTON PUMP INHIBIT	TORS	1
Omeprazole 40 mg once daily SELECTIVE SEROTONI	$\begin{array}{c} \underline{\text{etravirine}}\\ AUC \uparrow 1.41 \ (1.22\text{-}1.62)\\ C_{\min} \ ND\\ C_{\max} \uparrow 1.17 \ (0.96\text{-}1.43)\\ \textbf{N REUPTAKE INHIBITORS (SSRIS)} \end{array}$	INTELENCE can be co-administered with proton pump inhibitors without dose adjustments.
Paroxetine	paroxetine	INTELENCE can be
20 mg once daily	$\begin{array}{l} \hline AUC \leftrightarrow 1.03 \ (0.90\text{-}1.18) \\ C_{\text{min}} \downarrow 0.87 \ (0.75\text{-}1.02) \\ C_{\text{max}} \leftrightarrow 1.06 \ (0.95\text{-}1.20) \\ \hline etravirine \\ AUC \leftrightarrow 1.01 \ (0.93\text{-}1.10) \\ C_{\text{min}} \leftrightarrow 1.07 \ (0.98\text{-}1.17) \\ C_{\text{max}} \leftrightarrow 1.05 \ (0.96\text{-}1.15) \end{array}$	co-administered with paroxetine without dose adjustments.

^a Comparison based on historic control.
 ^b Study was conducted with tenofovir di

Study was conducted with tenofovir disoproxil fumarate 300 mg once daily

Note: In drug-drug interaction studies, different formulations and/or doses of etravirine were used which led to similar exposures and, therefore, interactions relevant for one formulation are relevant for the other.

Paediatric population

Interaction studies have only been performed in adults.

4.6 Fertility, pregnancy and lactation

Pregnancy

As a general rule, when deciding to use antiretroviral agents for the treatment of HIV infection in pregnant women, and consequently for reducing the risk of HIV vertical transmission to the newborn, the animal data as well as the clinical experience in pregnant women should be taken into account in order to characterise the safety for the foetus.

Placental transfer has been seen in pregnant rats, but it is not known whether placental transfer of etravirine also occurs in pregnant women. Studies in animals do not indicate direct or indirect harmful effects with respect to pregnancy, embryonal/foetal development, parturition or postnatal development (see section 5.3). Based on animal data the malformative risk is unlikely in humans. The clinical data do not raise safety concern but are very limited.

Breast-feeding

Etravirine is excreted in human milk.

Because of the potential for adverse events in nursing infants, women should be instructed not to breastfeed if they are receiving INTELENCE. It is recommended that women living with HIV do not breastfeed in order to avoid transmission of HIV.

Fertility

No human data on the effect of etravirine on fertility are available. In rats, there was no effect on mating or fertility with etravirine treatment (see section 5.3).

4.7 Effects on ability to drive and use machines

INTELENCE has minor influence on the ability to drive and use machines. No studies on the effects of INTELENCE on the ability to drive or operate machines have been performed. Adverse reactions such as somnolence and vertigo have been reported in etravirine-treated patients and should be considered when assessing a patient's ability to drive or operate machinery (see section 4.8).

4.8 Undesirable effects

Summary of the safety profile

The most frequent (incidence $\geq 10\%$) adverse reactions of all intensities reported for etravirine were rash, diarrhoea, nausea and headache. In the Phase III studies, the rates of discontinuation due to any adverse reaction were 7.2% in patients receiving etravirine. The most common adverse reaction leading to discontinuation was rash.

Tabulated list of adverse reactions

Adverse reactions reported in patients treated with etravirine are summarised in Table 3. The adverse reactions are listed by system organ class (SOC) and frequency. Within each frequency grouping, adverse reactions are presented in order of decreasing seriousness. 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), rare ($\geq 1/10,000$ to < 1/1,000) and very rare (< 1/10,000).

Table 3: Adverse reactions observed with etravirine in clinical trials and post-marketing experience

System Organ Class (SOC)	Frequency category	Adverse Reaction
Blood and lymphatic	common	thrombocytopaenia, anaemia, decreased neutrophils

1. 1. 1		1 1 1 1 1 1 1
system disorders	uncommon	decreased white blood cell count
Immune system	common	drug hypersensitivity
disorders	uncommon	immune reconstitution syndrome
Metabolism and	common	diabetes mellitus, hyperglycaemia,
nutrition disorders		hypercholesterolaemia, increased low density
		lipoprotein (LDL), hypertriglyceridaemia,
		hyperlipidaemia, dyslipidaemia, anorexia
Psychiatric disorders	common	anxiety, insomnia, sleep disorders
	uncommon	confusional state, disorientation, nightmares,
		nervousness, abnormal dreams
Nervous system	very common	headache
disorders	common	peripheral neuropathy, paraesthesia, hypoaesthesia,
		amnesia, somnolence
	uncommon	convulsion, syncope, tremor, hypersomnia, disturbance
		in attention
Eve disorders	common	blurred vision
Ear and labyrinth	uncommon	vertigo
disorders		
Cardiac disorders	common	myocardial infarction
	uncommon	atrial fibrillation, angina pectoris
Vascular disorders	common	hypertension
	rare	haemorrhagic stroke ^a
Respiratory thoracic	common	evertional dysphoea
and mediastinal	uncommon	bronchosnosm
disorders	uncommon	biolicilospasiii
Gastrointestinal	Very common	diampoon nouson
disorders		gastroogenhagen reflux disease vemiting abdominal
disorders	common	pain abdominal distonsion flatulance costritis
		pani, addominal distension, naturence, gastitus,
		blood emulase increased
	uncommon	paparostitic hometomosic retaining
Hanatahiliany digandang		increased aloning aminetronsforess (ALT) increased
nepatobiliary disorders	common	increased alarine animotralisterase (ALT), increased
		aspartate aminotransferase (AST)
	uncommon	nepatitis, nepatic steatosis, cytolytic nepatitis,
		hepatomegaly
Skin and subcutaneous	very common	rash
tissue disorders	common	night sweats, dry skin, prurigo
	uncommon	angioneurotic oedema ^a , swelling face, hyperhidrosis
	rare	Stevens-Johnson Syndrome ^a , erythema multiforme ^a
	very rare	toxic epidermal necrolysis ^a , DRESS ^b
Renal and urinary	common	renal failure, blood creatinine increased
disorders		
Reproductive system	uncommon	gynaecomastia
and breast disorders		
General disorders and	common	fatigue
administration site		1 • 1
	uncommon	sluggishness

^a These adverse reactions were observed in other clinical trials than DUET-1 and DUET-2.

^b These adverse reactions have been identified through postmarketing experience with etravirine.

Description of selected adverse reactions

Rash

Rash was most frequently mild to moderate, generally macular to maculopapular or erythematous, mostly occurred in the second week of therapy, and was infrequent after week 4. Rash was mostly self-limiting, and generally resolved within 1-2 weeks on continued therapy (see section 4.4). The

incidence of rash was higher in women compared to men in the etravirine arm in the DUET trials (rash \geq grade 2 was reported in 9/60 [15.0%] women versus 51/539 [9.5%] men; discontinuations due to rash were reported in 3/60 [5.0%] women versus 10/539 [1.9%] men) (see section 4.4). There was no gender difference in severity or treatment discontinuation due to rash. The clinical data are limited and an increased risk of cutaneous reactions in patients with a history of NNRTI-associated cutaneous reaction cannot be excluded (see section 4.4).

Metabolic parameters

Weight and levels of blood lipids and glucose may increase during antiretroviral therapy (see section 4.4)

Immune reconstitution 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).

Osteonecrosis

Cases of osteonecrosis have been reported, particularly in patients with generally acknowledged risk factors, advanced HIV disease or long-term exposure to combination antiretroviral therapy. The frequency of this is unknown (see section 4.4).

Paediatric population (1 year to less than 18 years of age)

The safety assessment in children and adolescents is based on two single-arm trials. PIANO (TMC125-C213) is a Phase II trial in which 101 antiretroviral treatment-experienced HIV-1 infected paediatric patients 6 years to less than 18 years of age received INTELENCE in combination with other antiretroviral agents. TMC125-C234/IMPAACT P1090 is a Phase I/II trial in which 26 antiretroviral treatment-experienced HIV-1 infected paediatric patients aged 1 years to less than 6 years received INTELENCE in combination with other antiretroviral agents (see section 5.1).

In PIANO and TMC125-C234/IMPAACT P1090, the frequency, type and severity of adverse reactions in paediatric patients were comparable to those observed in adults. In PIANO, rash was reported more frequently in female subjects than in male subjects (rash \geq grade 2 was reported in 13/64 [20.3%] females versus 2/37 [5.4%] males; discontinuations due to rash were reported in 4/64 [6.3%] females versus 0/37 [0%] males) (see section 4.4). Most often, rash was mild to moderate, of macular/papular type, and occurred in the second week of therapy. Rash was mostly self-limiting and generally resolved within 1 week on continued therapy.

In a postmarketing retrospective cohort study aiming at substantiating the long-term safety profile of etravirine in HIV-1-infected children and adolescents receiving etravirine with other HIV-1 antiretrovirals (N = 182), Stevens-Johnson Syndrome was reported at a higher incidence (1%) than has been reported in adult clinical trials (< 0.1%).

Other special populations

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

In the pooled analysis for DUET-1 and DUET-2, the incidence of hepatic events tended to be higher in co-infected subjects treated with etravirine compared to co-infected subjects in the placebo group. INTELENCE should be used with caution in these patients (see also sections 4.4 and 5.2).

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 are no data with regard to symptomatic overdose with etravirine, but it is possible that the most frequent adverse reactions of etravirine, i.e. rash, diarrhoea, nausea, and headache would be the most common symptoms noted. There is no specific antidote for overdose with etravirine. Treatment of overdose with INTELENCE consists of general supportive measures including monitoring of vital signs and observation of the clinical status of the patient. Since etravirine is highly protein bound, dialysis is unlikely to result in significant removal of the active substance.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Antivirals for systemic use, non-nucleoside reverse transcriptase inhibitors, ATC code: J05AG04.

Mechanism of action

Etravirine is an NNRTI of human immunodeficiency virus type 1 (HIV-1). Etravirine binds directly to reverse transcriptase (RT) and blocks the RNA-dependent and DNA-dependent DNA polymerase activities by causing a disruption of the enzyme's catalytic site.

Antiviral activity in vitro

Etravirine exhibits activity against wild type HIV-1 in T-cell lines and primary cells with median EC_{50} values ranging from 0.9 to 5.5 nM. Etravirine demonstrates activity against HIV-1 group M (subtypes A, B, C, D, E, F, and G) and HIV-1 group O primary isolates with EC_{50} values ranging from 0.3 to 1.7 nM and from 11.5 to 21.7 nM, respectively. Although etravirine demonstrates *in vitro* activity against wild type HIV-2 with median EC_{50} values ranging from 5.7 to 7.2 μ M, treatment of HIV-2 infection with etravirine is not recommended in the absence of clinical data. Etravirine retains activity against HIV-1 viral strains resistant to nucleoside reverse transcriptase and/or protease inhibitors. In addition, etravirine demonstrates a fold change (FC) in $EC_{50} \leq 3$ against 60% of 6,171 NNRTI-resistant clinical isolates.

Resistance

Etravirine efficacy in relation to NNRTI resistance at baseline has mainly been analysed with etravirine given in combination with darunavir/ritonavir (DUET-1 and DUET-2). Boosted protease inhibitors, like darunavir/ritonavir, show a higher barrier to resistance compared to other classes of antiretrovirals. The breakpoints for reduced efficacy with etravirine (> 2 etravirine-associated mutations at baseline, see clinical results section) applies when etravirine is given in combination with a boosted protease inhibitor. This breakpoint might be lower in antiretroviral combination therapy not including a boosted protease inhibitor.

In the Phase III trials DUET-1 and DUET-2, mutations that developed most commonly in patients with virologic failure to the etravirine containing regimen were V108I, V179F, V179I, Y181C and Y181I, which usually emerged in a background of multiple other NNRTI resistance-associated mutations (RAMs). In all the other trials conducted with etravirine in HIV-1 infected patients, the following mutations emerged most commonly: L100I, E138G, V179F, V179I, Y181C and H221Y.

Cross-resistance

Following virologic failure of an etravirine-containing regimen it is not recommended to treat patients with efavirenz and/or nevirapine.

Clinical efficacy and safety

Treatment-experienced adult patients Pivotal studies

The evidence of efficacy of etravirine is based on 48-week data from 2 Phase III trials DUET-1 and DUET-2. These trials were identical in design and similar efficacy for etravirine was seen in each trial. The results below are pooled data from the two trials.

Trial characteristics

- Design: randomised (1:1), double-blinded, placebo-controlled.
- Treatment: Etravirine vs. placebo, in addition to a background regimen (BR) including darunavir/ritonavir (DRV/rtv), investigator-selected N(t)RTIs and optional enfuvirtide (ENF).
 Main inclusion criteria:
 - HIV-1 plasma viral load > 5,000 HIV-1 RNA copies/ml at screening
 - 1 or more NNRTI resistance-associated mutations (RAMs) at screening or from prior genotypic analysis (i.e., archived resistance)
 - 3 or more primary PI mutations at screening
 - on a stable antiretroviral regimen for at least 8 weeks.
- Stratification: Randomisation was stratified by the intended use of ENF in the BR, previous use of darunavir and screening viral load.
- Virologic response was defined as achieving a confirmed undetectable viral load (< 50 HIV-1 RNA copies/ml).

Summary of efficacy results

	Etravirine + BR N = 599	Placebo + BR N = 604	Treatment difference (95% CI)
Baseline characteristics		•	
Median plasma HIV-1 RNA	4.8 log ₁₀ copies/ml	4.8 log ₁₀ copies/ml	
Median CD4 cell count	99 x 10 ⁶ cells/l	109 x 10 ⁶ cells/l	
Outcomes			
Confirmed undetectable viral load (< 50 HIV-1 RNA copies/ml) ^a n (%)			
Overall	363 (60.6%)	240 (39.7%)	20.9% (15.3%; 26.4%) ^d
de novo ENF	109 (71.2%)	93 (58.5%)	12.8% (2.3%; 23.2%) ^f
Not <i>de novo</i> ENF	254 (57.0%)	147 (33.0%)	23.9% (17.6%; 30.3%) ^f
< 400 HIV-1 RNA copies/ml ^a n (%)	428 (71.5%)	286 (47.4%)	24.1% (18.7%; 29.5%) ^d
HIV-1 RNA log_{10} mean change from baseline $(log_{10} \text{ copies/ml})^b$	-2.25	-1.49	-0.6 (-0.8; -0.5) ^c
CD4 cell count mean change from baseline $(x \ 10^6/l)^b$	+98.2	+72.9	24.4 (10.4; 38.5) ^c
Any AIDS defining illness and/or death n (%)	35 (5.8%)	59 (9.8%)	-3.9% (-6.9%; -0.9%) ^e

Table 4: DUET-1 and DUET-2 pooled 48-week data

- ^a Imputations according to the TLOVR algorithm (TLOVR = Time to Loss of Virologic Response).
- ^b Non-completer is failure (NC = F) imputation.
- ^c Treatment differences are based on Least Square Means from an ANCOVA model including the stratification factors.
 P-value < 0.0001 for mean decrease in HIV-1 RNA; P-value = 0.0006 for mean change in CD4 cell count.
- ^d Confidence interval around observed difference of response rates; P-value < 0.0001 from logistic regression model, including stratification factors.
- ^e Confidence interval around observed difference of response rates; P-value = 0.0408.
- ^f Confidence interval around observed difference of response rates; P-value from CMH test controlling for stratification factors = 0.0199 for *de novo*, and < 0.0001 for not *de novo*.

Since there was a significant interaction effect between treatment and ENF, the primary analysis was done for 2 ENF strata (patients reusing or not using ENF versus patients using ENF *de novo*). The week 48 results from the pooled analysis of DUET-1 and DUET-2 demonstrated that the etravirine arm was superior to the placebo arm irrespective of whether ENF was used *de novo* (p = 0.0199) or not (p < 0.0001). Results of this analysis (week 48 data) by ENF stratum are shown in table 4.

Significantly fewer patients in the etravirine arm reached a clinical endpoint (AIDS-defining illness and/or death) as compared to the placebo arm (p = 0.0408).

A subgroup analysis of the virologic response (defined as a viral load < 50 HIV-1 RNA copies/ml) at week 48 by baseline viral load and baseline CD4 count (pooled DUET data) is presented in table 5.

Subgroups	Proportion of subjects with HIV-1 RNA < 50 copies/ml at week 48		
Subgroups	Etravirine + BR N = 599	Placebo + BR N = 604	
Baseline HIV-1 RNA			
< 30,000 copies/ml	75.8%	55.7%	
\geq 30,000 and < 100,000 copies/ml	61.2%	38.5%	
\geq 100,000 copies/ml	49.1%	28.1%	
Baseline CD4 count (x 10 ⁶ /l)			
< 50	45.1%	21.5%	
\geq 50 and < 200	65.4%	47.6%	
\geq 200 and < 350	73.9%	52.0%	
\geq 350	72.4%	50.8%	

Table 5: DUET-1 and DUET-2 pooled data

Note: Imputations according to the TLOVR algorithm (TLOVR = Time to Loss of Virologic Response)

Baseline genotype or phenotype and virologic outcome analyses

In DUET-1 and DUET-2, the presence at baseline of 3 or more of the following mutations: V90I, A98G, L100I, K101E, K101P, V106I, V179D, V179F, Y181C, Y181I, Y181V, G190A and G190S, (etravirine RAMs) was associated with a decreased virologic response to etravirine (see table 6). These individual mutations occurred in the presence of other NNRTI RAMs. V179F was never present without Y181C.

Conclusions regarding the relevance of particular mutations or mutational patterns are subject to change with additional data, and it is recommended to always consult current interpretation systems for analysing resistance test results.

Table 6:Proportion of subjects with < 50 HIV-1 RNA copies/ml at week 48 by baseline
number of etravirine RAMs in the non-viral failure excluded population of pooled
DUET-1 and DUET-2 trials

Baseline number of Etravirine RAMs*	Etravirine arms N = 549		
	Reused/not used ENF	de novo ENF	
All ranges	63.3% (254/401)	78.4% (109/139)	
0	74.1% (117/158)	91.3% (42/46)	

1	61.3% (73/119)	80.4% (41/51)
2	64.1% (41/64)	66.7% (18/27)
≥ 3	38.3% (23/60)	53.3% (8/15)
	Plac	cebo arms
	Γ	N = 569
All ranges	37.1% (147/396)	64.1% (93/145)

* Etravirine RAMs = V90I, A98G, L100I, K101E/P, V106I, V179D/F, Y181C/I/V, G190A/S Note: all patients in the DUET trials received a background regimen consisting of darunavir/rtv, investigator-selected NRTIs and optional enfuvirtide.

The presence of K103N alone, which was the most prevalent NNRTI mutation in DUET-1 and DUET-2 at baseline, was not identified as a mutation associated with resistance to etravirine. Furthermore, the presence of this mutation alone did not affect the response in the etravirine arm. Additional data is required to conclude on the influence of K103N when associated with other NNRTIs mutations.

Data from the DUET studies suggest that baseline fold change (FC) in EC_{50} to etravirine was a predictive factor of virologic outcome, with gradually decreasing responses observed above FC 3 and FC 13.

FC subgroups are based on the select patient populations in DUET-1 and DUET-2 and are not meant to represent definitive clinical susceptibility breakpoints for etravirine.

Exploratory head to head comparison with protease inhibitor in protease inhibitor naïve patients (trial TMC125-C227)

TMC125-C227 was an exploratory, randomised, active-controlled open-label trial, which investigated the efficacy and safety of etravirine in a treatment regimen, which is not approved under the current indication. In the TMC125-C227 study, etravirine (N = 59) was administered with 2 investigator-selected NRTIs (i.e. without a ritonavir-boosted PI) and compared to an investigator-selected combination of a PI with 2 NRTIs (N = 57). The trial population included PI-naïve, NNRTI-experienced patients with evidence of NNRTI resistance.

At week 12, virologic response was greater in the control-PI arm (-2.2 \log_{10} copies/ml from baseline; n = 53) compared to the etravirine arm (-1.4 \log_{10} copies/ml from baseline; n = 40). This difference between treatment arms was statistically significant.

Based on these trial results, etravirine is not recommended for use in combination with N(t)RTIs only in patients who have experienced virological failure on an NNRTI- and N(t)RTI-containing regimen.

Paediatric population

Treatment-experienced paediatric patients (6 years to less than 18 years of age)

PIANO is a single-arm, Phase II trial evaluating the pharmacokinetics, safety, tolerability, and efficacy of etravirine in 101 antiretroviral treatment-experienced HIV-1 infected paediatric patients 6 years to less than 18 years of age and weighing at least 16 kg. The study enrolled patients on a stable but virologically failing antiretroviral treatment regimen, with a confirmed HIV-1 RNA plasma viral load \geq 500 copies/ml. Sensitivity of the virus to etravirine at screening was required.

The median baseline plasma HIV-1 RNA was 3.9 \log_{10} copies/ml, and the median baseline CD4 cell count was 385 x 10^6 cells/l.

Study Age at screening Treatment group	TMC125-C213 6 to < 12 years ETR N = 41	TMC125-C213 12 to < 18 years ETR N = 60	TMC125-C213 6 to < 18 years ETR N = 101	Pooled DUET Studies ≥ 18 years ETR N = 599
Virologic parameters				
Viral load < 50 copies/ml at week 24, n (%)	24 (58.5)	28 (46.7)	52 (51.5)	363 (60.6)
Viral load < 400 copies/ml at week 24, n (%)	28 (68.3)	38 (63.3)	66 (65.3)	445 (74.3)
\geq 1 log ₁₀ decrease from baseline at week 24, n (%)	26 (63.4)	38 (63.3)	64 (63.4)	475 (79.3)
Change from baseline in log ₁₀ viral load (copies/ml) at week 24, mean (SE) and median (range)	-1.62 (0.21) -1.68 (-4.3; 0.9)	-1.44 (0.17) -1.68 (-4.0; 0.7)	-1.51 (0.13) -1.68 (-4.3; 0.9)	-2.37 (0.05) -2.78 (-4.6; 1.4)
Immunologic parameters				
Change from baseline in CD4 cell count (x 10^6 cells/l), mean (SE) and median (range)	125 (33.0) 124 (-410; 718)	104 (17.5) 81 (-243; 472)	112 (16.9) 108 (-410; 718)	83.5 (3.64) 77.5 (-331; 517)
Change from baseline in CD4 percentage, median (range)	4% (-9; 20)	3% (-4; 14)	4% (-9; 20)	3% (-7; 23)

Table 7:Virologic responses (ITT – TLOVR), change from baseline in log10 viral load (NC = F), and
change from baseline in CD4 percentage and cell count (NC = F) at week 24 in the
TMC125-C213 and pooled DUET studies

N = number of subjects with data; n = number of observations.

At week 48, 53.5% of all paediatric patients had a confirmed undetectable viral load < 50 HIV-1 RNA copies/ml according to the TLOVR algorithm. The proportion of paediatric patients with < 400 HIV-1 RNA copies/ml was 63.4%. The mean change in plasma HIV-1 RNA from baseline to week 48 was -1.53 log₁₀ copies/ml, and the mean CD4 cell count increase from baseline was 156 x 10^6 cells/l.

Treatment-experienced paediatric patients (1 year to less than 6 years of age)

TMC125-C234/IMPAACT P1090 is a Phase I/II trial evaluating the pharmacokinetics, safety, tolerability, and efficacy of INTELENCE in 20 antiretroviral treatment-experienced HIV-1 infected pediatric patients 2 years to less than 6 years of age (Cohort I) and 6 antiretroviral treatment-experienced HIV-1 infected pediatric patients 1 year to less than 2 years of age (Cohort II). No patients have been enrolled in Cohort III (\geq 2 months to < 1 year). The study enrolled patients on a virologically failing antiretroviral treatment regimen for at least 8 weeks or on a treatment interruption of at least 4 weeks with a history of virologic failure while on an antiretroviral regimen, with a confirmed HIV-1 RNA plasma viral load greater than 1,000 copies/ml and with no evidence of phenotypic resistance to etravirine at screening.

Table 8 summarizes the virologic response results for the TMC125-C234/IMPAACT P1090 study.

Table 8:	Virologic responses (ITT-FDA Snapshot*) at week 48 in the TMC125-C234/IMPAACT
	P1090 Study

	Cohort I ≥ 2 to < 6 years (N = 20)	Cohort II ≥ 1 to < 2 years (N = 6)
Baseline		
Plasma HIV-1 RNA	4.4 log ₁₀ copies/ml	$4.4 \log_{10}$ copies/ml
Median CD4+ cell count Median baseline CD4+ percentage	817.5 x 10 ⁶ cells/l (27.6%)	1,491.5 x 10 ⁶ cells/l (26.9%)

Week 48		
Virologic Response (plasma viral load < 400 HIV-1 RNA copies/ml)	16/20 (80.0%)	1/6 (16.7%)
Median change in plasma HIV-1 RNA from baseline to Week 48	-2.31 log ₁₀ copies/ml	-0.665 log ₁₀ copies/ml
Median CD4+ change from	298.5 x 10 ⁶ cells/l	$0 \ge 10^6 \text{ cells/l}$
baseline	(5.15%)	(-2.2%)

N = number of subjects per treatment group.

* Intent-to-treat-FDA Snapshot approach.

Subgroup analyses showed that for subjects aged 2 to less than 6 years virologic response [HIV RNA < 400 copies/ml] was 100.0% [6/6] for subjects who swallowed the etravirine tablet whole, 100% [4/4] for subjects who took a combination of both etravirine dispersed in liquid and etravirine tablet whole and 60% [6/10] for subjects who took etravirine dispersed in liquid. Of the 4 subjects who did not show virologic response and took etravirine dispersed in liquid, 3 showed virologic failure and had adherence issues, and one discontinued prior to Week 48 for safety reasons.

The European Medicines Agency has deferred the obligation to submit the results of studies with INTELENCE in one or more subsets of the paediatric population in human immunodeficiency virus infection, as per Paediatric Investigation Plan (PIP) decision in the granted indication (see section 4.2 for information on paediatric use).

Pregnancy and postpartum

Etravirine (200 mg twice daily), evaluated in combination with other antiretroviral medicinal products in a study of 15 pregnant women during the second and third trimesters of pregnancy and postpartum, demonstrated that exposure to total etravirine was generally higher during pregnancy compared with postpartum, and less so for unbound etravirine exposure (see section 5.2). There were no new clinically relevant safety findings in the mothers or in the newborns in this trial.

5.2 Pharmacokinetic properties

The pharmacokinetic properties of etravirine have been evaluated in adult healthy subjects and in adult and paediatric treatment-experienced HIV-1 infected patients. Exposure to etravirine was lower (35-50%) in HIV-1 infected patients than in healthy subjects.

Table 9:	Population pharmacokinetic estimates of etravirine 200 mg twice daily in HIV-1
	infected adult subjects (integrated data from Phase III trials at week 48)*

Parameter	Etravirine 200 mg twice daily N = 575	
AUC_{12h} (ng•h/ml)		
Geometric Mean ± Standard Deviation	$4,522 \pm 4,710$	
Median (Range)	4,380 (458 - 59,084)	
C_{0h} (ng/ml)		
Geometric Mean ± Standard Deviation	297 ± 391	
Median (Range)	298 (2 - 4,852)	

* All HIV-1 infected subjects enrolled in Phase III clinical trials received darunavir/ritonavir 600/100 mg twice daily as part of their background regimen. Therefore, the pharmacokinetic parameter estimates shown in the table account for reductions in the pharmacokinetic parameters of etravirine due to co-administration of etravirine with darunavir/ritonavir.

Note: The median protein binding adjusted EC₅₀ for MT4 cells infected with HIV-1/IIIB in vitro = 4 ng/ml.

Absorption

An intravenous formulation of etravirine is unavailable, thus, the absolute bioavailability of etravirine is unknown. After oral administration with food, the maximum plasma concentration of etravirine is generally achieved within 4 hours.

In healthy subjects, the absorption of etravirine is not affected by co-administration of oral ranitidine or omeprazole, medicinal products that are known to increase gastric pH.

Effect of food on absorption

The systemic exposure (AUC) to etravirine was decreased by about 50% when etravirine was administered under fasting conditions, as compared to administration following a meal. Therefore, INTELENCE should be taken following a meal.

Distribution

Etravirine is approximately 99.9% bound to plasma proteins, primarily to albumin (99.6%) and α_1 -acid glycoprotein (97.66%-99.02%) *in vitro*. The distribution of etravirine into compartments other than plasma (e.g., cerebrospinal fluid, genital tract secretions) has not been evaluated in humans.

Biotransformation

In vitro experiments with human liver microsomes (HLMs) indicate that etravirine primarily undergoes oxidative metabolism by the hepatic cytochrome CYP450 (CYP3A) system and, to a lesser extent, by the CYP2C family, followed by glucuronidation.

Elimination

After administration of a radiolabeled ¹⁴C-etravirine dose, 93.7% and 1.2% of the administered dose of ¹⁴C-etravirine could be retrieved in faeces and urine, respectively. Unchanged etravirine accounted for 81.2% to 86.4% of the administered dose in faeces. Unchanged etravirine in faeces is likely to be unabsorbed drug. Unchanged etravirine was not detected in urine. The terminal elimination half-life of etravirine was approximately 30-40 hours.

Special populations

Paediatric population (1 year to less than 18 years of age)

The pharmacokinetics of etravirine in 122 treatment-experienced HIV-1 infected paediatric patients, 1 year to less than 18 years of age, showed that the administered weight-based dosages resulted in etravirine exposure comparable to that in adults receiving etravirine 200 mg twice daily (see sections 4.2 and 5.2). The population pharmacokinetic estimates for etravirine AUC_{12h} and C_{0h} are summarised in the table below.

Table 10:Pharmacokinetic parameters for etravirine in treatment-experienced HIV-1
infected paediatric patients 1 year to less than 18 years of age (TMC125-
C234/IMPAACT P1090 [48 week analysis, intensive PK] and PIANO [48 Weeks
analysis, population PK])

Age Range (years)	\geq 1 year to < 2 years (Cohort II)	\geq 2 years to < 6 years (Cohort I)	6 years to < 18 years
Parameter	Etravirine N = 6	Etravirine N = 15	Etravirine N = 101
AUC _{12h} (ng•h/ml)			
Geometric	$3,328 \pm 3,138$	3,824 ± 3,613	$3,729 \pm 4,305$
Mean \pm Standard			
Deviation			
Median (Range)	3,390 (1,148 - 9,989)	3,709 (1,221 - 12,999)	4,560 (62 - 28,865)
C _{0h} (ng/ml)			
Geometric	193 ± 186	203 ± 280	205 ± 342
Mean \pm Standard			
Deviation			
Median (Range)	147 (0 ^a - 503)	180 (54 - 908)	287 (2 - 2,276)

^a One subject in Cohort II had etravirine predose concentrations below the detection limit at the intensive PK visit.

Elderly

Population pharmacokinetic analysis in HIV infected patients showed that etravirine pharmacokinetics are not considerably different in the age range (18 to 77 years) evaluated, with 6 subjects aged 65 years or older (see sections 4.2 and 4.4).

Gender

No significant pharmacokinetic differences have been observed between males and females. A limited number of females were included in the studies.

Race

Population pharmacokinetic analysis of etravirine in HIV infected patients indicated no apparent difference in the exposure to etravirine between Caucasian, Hispanic and Black subjects. The pharmacokinetics in other races have not been sufficiently evaluated.

Hepatic impairment

Etravirine is primarily metabolised and eliminated by the liver. In a study comparing 8 patients with mild (Child-Pugh Class A) hepatic impairment to 8 matched controls and 8 patients with moderate (Child-Pugh Class B) hepatic impairment to 8 matched controls, the multiple dose pharmacokinetic disposition of etravirine was not altered in patients with mild to moderate hepatic impairment. However, unbound concentrations have not been assessed. Increased unbound exposure could be expected. No dose adjustment is suggested but caution is advised in patients with moderate hepatic impairment. INTELENCE has not been studied in patients with severe hepatic impairment (Child-Pugh Class C) and is therefore not recommended (see sections 4.2 and 4.4).

Hepatitis B and/or hepatitis C virus co-infection

Population pharmacokinetic analysis of the DUET-1 and DUET-2 trials showed reduced clearance (potentially leading to increased exposure and alteration of the safety profile) for etravirine in HIV-1 infected patients with hepatitis B and/or hepatitis C virus co-infection. In view of the limited data available in hepatitis B and/or C co-infected patients, particular caution should be paid when INTELENCE is used in these patients (see sections 4.4 and 4.8).

Renal impairment

The pharmacokinetics of etravirine have not been studied in patients with renal insufficiency. Results from a mass balance study with radioactive ¹⁴C-etravirine showed that < 1.2% of the administered dose of etravirine is excreted in the urine. No unchanged drug was detected in urine so the impact of renal impairment on etravirine elimination is expected to be minimal. As etravirine 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

Study TMC114HIV3015 evaluated etravirine 200 mg twice daily in combination with other antiretroviral medicinal products in 15 pregnant women during the second and third trimesters of pregnancy and postpartum. The total etravirine exposure after intake of etravirine 200 mg twice daily as part of an antiretroviral regimen was generally higher during pregnancy compared with postpartum (see Table 11). The differences were less pronounced for unbound etravirine exposure. In women receiving etravirine 200 mg twice daily, higher mean values for C_{max} , AUC_{12h} and C_{min} were observed during pregnancy compared to postpartum. During the 2nd and 3rd trimester of pregnancy mean values of these parameters were comparable.

Table 11:Pharmacokinetic results of total etravirine after administration of etravirine200 mg twice daily as part of an antiretroviral regimen, during the 2nd trimester of
pregnancy, the 3rd trimester of pregnancy, and postpartum.

Pharmacokinetics of etravirine Mean ± SD (median)	Etravirine 200 mg twice daily postpartum N = 10	Etravirine 200 mg twice daily 2 nd trimester N = 13	Etravirine 200 mg twice daily 3 rd trimester N = 10 ^a
C _{min} , ng/ml	269 ± 182 (284)	383 ± 210 (346)	349 ± 103 (371)

C _{max} , ng/ml	569 ± 261 (528)	774 ± 300 (828)	785 ± 238 (694)
AUC _{12h} , h*ng /ml	5004 ± 2521 (5246)	6617 ± 2766 (6836)	$6846 \pm 1482 \ (6028)$

^a n = 9 for AUC_{12h}

Each subject served as her own control, and with an intra-individual comparison, the total etravirine C_{min} , C_{max} and AUC_{12h} values were 1.2-, 1.4- and 1.4-fold higher, respectively, during the 2nd trimester of pregnancy as compared to postpartum, and 1.1-, 1.4- and 1.2-fold higher, respectively, based during the 3rd trimester of pregnancy as compared to postpartum.

5.3 Preclinical safety data

Animal toxicology studies have been conducted with etravirine in mice, rats, rabbits and dogs. In mice, the key target organs identified were the liver and the coagulation system. Haemorrhagic cardiomyopathy was only observed in male mice and was considered to be secondary to severe coagulopathy mediated via the vitamin K pathway. In the rat, the key target organs identified were the liver, the thyroid and the coagulation system. Exposure in mice was equivalent to human exposure while in rats it was below the clinical exposure at the recommended dose. In the dog, changes were observed in the liver and gall bladder at exposures approximately 8-fold higher than human exposure observed at the recommended dose (200 mg twice daily).

In a study conducted in rats, there were no effects on mating or fertility at exposure levels equivalent to those in humans at the clinically recommended dose. There was no teratogenicity with etravirine in rats and rabbits at exposures equivalent to those observed in humans at the recommended clinical dose. Etravirine had no effect on offspring development during lactation or post weaning at maternal exposures equivalent to those observed at the recommended clinical dose.

Etravirine was not carcinogenic in rats and in male mice. An increase in the incidences of hepatocellular adenomas and carcinomas were observed in female mice. The observed hepatocellular findings in female mice are generally considered to be rodent specific, associated with liver enzyme induction, and of limited relevance to humans. At the highest tested doses, the systemic exposures (based on AUC) to etravirine were 0.6-fold (mice) and between 0.2- and 0.7-fold (rats), relative to those observed in humans at the recommended therapeutic dose (200 mg twice daily). *In vitro* and *in vivo* studies with etravirine revealed no evidence of a mutagenic potential.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

INTELENCE 25 mg tablets

Hypromellose Microcrystalline cellulose Colloidal anhydrous silica Croscarmellose sodium Magnesium stearate Lactose monohydrate

INTELENCE 100 mg tablets

Hypromellose Microcrystalline cellulose Colloidal anhydrous silica Croscarmellose sodium Magnesium stearate Lactose monohydrate

INTELENCE 200 mg tablets

Hypromellose Silicified microcrystalline cellulose Microcrystalline cellulose Colloidal anhydrous silica Croscarmellose sodium Magnesium stearate

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

INTELENCE 25 mg tablets

2 years.8 weeks after opening the bottle.

INTELENCE 100 mg tablets

2 years.

INTELENCE 200 mg tablets

2 years.6 weeks after opening the bottle.

6.4 Special precautions for storage

Store in the original bottle and keep the bottle tightly closed in order to protect from moisture. Do not remove the desiccant pouches.

6.5 Nature and contents of container

INTELENCE 25 mg tablets

The bottle is a high-density polyethylene (HDPE) plastic bottle containing 120 tablets and 2 desiccant pouches, fitted with a polypropylene (PP) child resistant closure. Each carton contains one bottle.

INTELENCE 100 mg tablets

The bottle is a high-density polyethylene (HDPE) plastic bottle containing 120 tablets and 3 desiccant pouches, fitted with a polypropylene (PP) child resistant closure. Each carton contains one bottle.

INTELENCE 200 mg tablets

The bottle is a high-density polyethylene (HDPE) plastic bottle containing 60 tablets and 3 desiccant pouches, fitted with a polypropylene (PP) child resistant closure. Each carton contains one bottle.

6.6 Special precautions for disposal and other handling

Patients who are unable to swallow the tablet(s) whole may disperse the tablet(s) in a glass of water. The patient should be instructed to do the following:

- place the tablet(s) in 5 ml (1 teaspoon) of water, or at least enough liquid to cover the medicine,
- stir well until the water looks milky,
- if desired, add more water or alternatively orange juice or milk (patients should not place the tablets in orange juice or milk without first adding water),
- drink it immediately,
- rinse the glass several times with water, orange juice, or milk and completely swallow the rinse each time to make sure the patient takes the entire dose.

INTELENCE tablet(s) dispersed in liquid should be taken before other antiretroviral liquids that may need to be taken concomitantly.

The patient and his/her caregiver should be instructed to contact the prescribing physician if unable to swallow the entire dose when dispersed in liquid (see section 4.4).

The use of warm (> 40°C) or carbonated beverages should be avoided.

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(S)

25 mg: EU/1/08/468/003 100 mg: EU/1/08/468/001 200 mg: EU/1/08/468/002

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 28 August 2008 Date of latest renewal: 23 August 2018

10. DATE OF REVISION OF THE TEXT

Detailed information on this medicine 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 responsible for batch release

Janssen-Cilag SpA Via C. Janssen 04100 Borgo San Michele 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 (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

1. NAME OF THE MEDICINAL PRODUCT

INTELENCE 25 mg tablets etravirine

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 25 mg etravirine.

3. LIST OF EXCIPIENTS

Contains lactose monohydrate. See leaflet for further information.

4. PHARMACEUTICAL FORM AND CONTENTS

120 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

Do not use after 8 weeks of first opening the bottle.

9. SPECIAL STORAGE CONDITIONS

Store in the original bottle and keep the bottle tightly closed in order to protect from moisture. Do not remove the desiccant pouches.

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

EU/1/08/468/003

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

intelence 25 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC SN

NN

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGING

BOTTLE LABEL

1. NAME OF THE MEDICINAL PRODUCT

INTELENCE 25 mg tablets etravirine

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 25 mg etravirine.

3. LIST OF EXCIPIENTS

Contains lactose monohydrate.

4. PHARMACEUTICAL FORM AND CONTENTS

120 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 and keep the bottle tightly closed 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

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

12. MARKETING AUTHORISATION NUMBER

EU/1/08/468/003

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

17. UNIQUE IDENTIFIER – 2D BARCODE

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

OUTER CARTON

1. NAME OF THE MEDICINAL PRODUCT

INTELENCE 100 mg tablets etravirine

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 100 mg etravirine.

3. LIST OF EXCIPIENTS

Contains lactose monohydrate. See leaflet for further information.

4. PHARMACEUTICAL FORM AND CONTENTS

120 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 and keep the bottle tightly closed in order to protect from moisture. Do not remove the desiccant pouches.

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

EU/1/08/468/001

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

intelence 100 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC SN

NN

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGING

BOTTLE LABEL

1. NAME OF THE MEDICINAL PRODUCT

INTELENCE 100 mg tablets etravirine

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 100 mg etravirine.

3. LIST OF EXCIPIENTS

Contains lactose monohydrate.

4. PHARMACEUTICAL FORM AND CONTENTS

120 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 and keep the bottle tightly closed 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

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

12. MARKETING AUTHORISATION NUMBER

EU/1/08/468/001

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

17. UNIQUE IDENTIFIER – 2D BARCODE

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

OUTER CARTON

1. NAME OF THE MEDICINAL PRODUCT

INTELENCE 200 mg tablets etravirine

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 200 mg etravirine.

3. LIST OF EXCIPIENTS

4. PHARMACEUTICAL FORM AND CONTENTS

60 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

Do not use after 6 weeks of first opening the bottle.

9. SPECIAL STORAGE CONDITIONS

Store in the original bottle and keep the bottle tightly closed in order to protect from moisture. Do not remove the desiccant pouches.

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

EU/1/08/468/002

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

intelence 200 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC SN

NN

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGING

BOTTLE LABEL

1. NAME OF THE MEDICINAL PRODUCT

INTELENCE 200 mg tablets etravirine

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 200 mg etravirine.

3. LIST OF EXCIPIENTS

4. PHARMACEUTICAL FORM AND CONTENTS

60 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 and keep the bottle tightly closed 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

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

12. MARKETING AUTHORISATION NUMBER

EU/1/08/468/002

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

17. UNIQUE IDENTIFIER – 2D BARCODE

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

B. PACKAGE LEAFLET

Package leaflet: Information for the user

INTELENCE 25 mg tablets

etravirine

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

1. What INTELENCE is and what it is used for

INTELENCE contains the active substance etravirine. INTELENCE belongs to a group of anti-HIV medicines called non-nucleoside reverse transcriptase inhibitors (NNRTIs).

INTELENCE is a medicine used for the treatment of Human Immunodeficiency Virus (HIV) infection. INTELENCE works by reducing the amount of HIV in your body. This will improve your immune system and reduces the risk of developing illnesses linked to HIV infection.

INTELENCE is used in combination with other anti-HIV medicines to treat adults and children 2 years of age and older who are infected by HIV and who have used other anti-HIV medicines before.

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

2. What you need to know before you take INTELENCE

Do not take INTELENCE

- if you are allergic to etravirine or any of the other ingredients of this medicine (listed in section 6)
- if you are taking elbasvir/grazoprevir (a medicine to treat hepatitis C infection).

Warnings and precautions

Talk to your doctor or pharmacist before taking INTELENCE.

INTELENCE is not a cure for HIV infection. It is part of a treatment reducing the amount of virus in the blood.

Elderly

INTELENCE 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 INTELENCE with your doctor.

Weight and increased blood lipids and glucose

During HIV therapy there may be an increase in weight and in levels of blood lipids and glucose. This is partly linked to restored health and life style, and in the case of blood lipids sometimes to the HIV medicines themselves. Your doctor will test for these changes.

Bone problems

Some patients taking combination antiretroviral therapy may develop a bone disease called osteonecrosis (death of bone tissue caused by loss of blood supply to the bone). The length of combination antiretroviral therapy, corticosteroid use, alcohol consumption, severe immunosuppression, higher body mass index, among others, may be some of the many risk factors for developing this disease. Signs of osteonecrosis are joint stiffness, aches and pains (especially of the hip, knee and shoulder) and difficulty in movement. If you notice any of these symptoms please inform 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 develop a **rash**. If a rash occurs, it usually appears soon after anti-HIV treatment with INTELENCE is started and often disappears within 1 to 2 weeks, even with continued use of the medicine. Rarely, during INTELENCE treatment, you can experience severe skin rash with blisters or peeling skin, particularly around the mouth or eyes or hypersensitivity reaction (allergic reaction including rash and fever but also swelling of the face, tongue or throat, difficulty in breathing or swallowing) which could be potentially life-threatening. Please contact your doctor immediately if you experience these symptoms. Your doctor will advise you how to deal with your symptoms and whether INTELENCE must be stopped. If you have stopped treatment due to a hypersensitivity reaction, you should not restart therapy with INTELENCE.
- Tell your doctor if you have or have had **problems with your liver**, including hepatitis B and/or C. Your doctor may evaluate how severe your liver disease is before deciding if you can take INTELENCE.
- Tell your doctor immediately if you notice any **symptoms of infections**. 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 anti-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.

Children and adolescents

Do not give this medicine to children less than 2 years of age and weighing less than 10 kg because the potential benefits and risks have not been established.

Other medicines and INTELENCE

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

In most cases, INTELENCE can be combined with anti-HIV medicines belonging to another class. However, some combinations are not recommended. In other cases, increased monitoring and/or a change in the dose of the medicine may be needed. Therefore, always tell your doctor which other anti-HIV medicines you take. Furthermore, it is important that you carefully read the package leaflets that are provided with these medicines. Follow your doctor's instruction carefully on which medicines can be combined.

It is not recommended to combine INTELENCE with any of the following medicines:

- tipranavir/ritonavir, efavirenz, nevirapine, rilpivirine, indinavir, atazanavir/cobicistat, darunavir/cobicistat (anti-HIV medicine)
- carbamazepine, phenobarbital, phenytoin (medicines to prevent seizures)
- rifampicin, because it is contraindicated with boosted protease inhibitors, and rifapentine (medicines to treat some infections such as tuberculosis)
- products that contain St John's wort (*Hypericum perforatum*) (a herbal product used for depression)
- daclatasvir (a medicine to treat hepatitis C infection).

If you are taking any of these, ask your doctor for advice.

The effects of INTELENCE or other medicines might be influenced if you take INTELENCE together with any of the following medicines. The dosages of some medicines might need to be changed since their therapeutic effect or side effects may be influenced when combined with INTELENCE. Tell your doctor if you take:

- dolutegravir, maraviroc, amprevanir/ritonavir and fosamprenavir/ritonavir (anti-HIV medicine)
- amiodarone, bepridil, digoxin, disopyramide, flecainide, lidocaine, mexiletine, propafenone and quinidine (medicines to treat certain heart disorders, e.g., abnormal heart beat)
- warfarin (a medicine used to reduce clotting of the blood). Your doctor will have to check your blood
- fluconazole, itraconazole, ketoconazole, posaconazole, voriconazole (medicines to treat fungal infections)
- clarithromycin, rifabutin (antibiotics)
- artemether/lumefantrine (a medicine to treat malaria)
- diazepam (medicines to treat trouble with sleeping and/or anxiety)
- dexamethasone (a corticosteroid used in a variety of conditions such as inflammation and allergic reactions)
- atorvastatin, fluvastatin, lovastatin, rosuvastatin, simvastatin (cholesterol-lowering medicines)
- cyclosporine, sirolimus, tacrolimus (immunosuppressants medicines used to dampen down your immune system)
- sildenafil, vardenafil, tadalafil (medicines to treat erectile dysfunction and/or pulmonary arterial hypertension)
- clopidogrel (a medicine to prevent blood clots).

Pregnancy and breast-feeding

Tell your doctor immediately if you are pregnant. Pregnant women should not take INTELENCE unless specifically directed by the doctor.

Because of the potential for side effects in breast-fed infants, it is recommended that women not breast-feed if they are receiving INTELENCE.

Breast-feeding is not recommended in women living with HIV because HIV infection can be passed on to the baby in breast milk. If you are breast-feeding, or thinking about breast-feeding, you should discuss it with your doctor as soon as possible.

Driving and using machines

Do not drive or operate machines if you feel sleepy or dizzy after taking your medicines.

INTELENCE contains lactose

INTELENCE tablets contain lactose. If you have been told by your doctor that you have an intolerance to some sugars (lactose), contact your doctor before taking this medicine.

INTELENCE 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 INTELENCE

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

Use in adults

Other form(s) of this medicine may be more suitable for adults.

The recommended dose of INTELENCE is 200 mg twice a day. In the morning, take two 100 milligram INTELENCE tablets, following a meal. In the evening, take two 100 milligram INTELENCE tablets, following a meal.

Use in children and adolescents 2 years of age and older and weighing at least 10 kg

The doctor will work out the right dose based on the weight of the child. The doctor will inform you exactly how much INTELENCE the child should take.

Instructions for taking INTELENCE for all patients

It is important that you take INTELENCE following a meal. If you take INTELENCE on an empty stomach, only half the amount of INTELENCE is absorbed. Follow your doctor's advice on the type of meal you should be taking with INTELENCE.

Swallow the INTELENCE tablet(s) whole with a glass of water. Do not chew the tablet(s). The tablet can be divided into two equal doses.

If you are unable to swallow the INTELENCE tablet(s) whole, you may do the following:

- place the tablet(s) in 5 ml (1 teaspoon) of water, or at least enough liquid to cover the medicine,
- stir well for about 1 minute until the water looks milky,
- if desired, add up to 30 ml (2 tablespoons) more of water or alternatively orange juice or milk (do not place the tablets directly in orange juice or milk),
- drink it immediately,
- rinse the glass several times with water, orange juice, or milk and completely swallow the rinse each time to make sure you take the entire dose.

If you mix INTELENCE tablet(s) with a liquid, take this first, before other liquid anti-HIV medicines that you need to take at the same time.

Contact your doctor if you are not able to swallow the entire dose when mixed with a liquid.

If your child needs to take INTELENCE tablet(s) mixed with a liquid, it is very important that he/she takes the entire dose so that the right amount of medicine enters into the body. If the full dose is not taken, the risk of the virus developing resistance is higher. Contact your doctor if your child is not able to swallow the entire dose when mixed with a liquid, as they may consider giving another medicine to treat your child.

Do not use warm (40°C and above) or carbonated beverages when taking INTELENCE tablet(s).

Removing the child resistant cap

_



The plastic bottle comes with a child resistant cap and should be opened as follows:

Push the plastic screw cap down while turning it counter clockwise.

Remove the unscrewed cap.

If you take more INTELENCE than you should

Contact your doctor or pharmacist immediately. The most frequent side effects of INTELENCE are rash, diarrhoea, nausea, and headache (see section '4. Possible side effects').

If you forget to take INTELENCE

If you notice within 6 hours of the time you usually take INTELENCE, you must take the tablet(s) as soon as possible. Always take the tablet(s) following a meal. Then take the next dose as usual. If you notice after 6 hours, then skip the intake 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 INTELENCE, take another dose following a meal. If you vomit more than 4 hours after taking INTELENCE, then you do not need to take another dose until your regularly scheduled dose.

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

Do not stop taking INTELENCE without talking to your doctor first

HIV therapy may increase your sense of well-being. Even if you feel better, do not stop taking INTELENCE or your other anti-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.

The frequency rate of the side effects associated with INTELENCE is given below.

Very common side effects (may affect more than 1 in 10 people)

- skin rash. The rash is usually mild to moderate. In rare instances, very serious rash has been reported which can be potentially life-threatening. It is therefore important to contact your doctor immediately if you develop a rash. Your doctor will advise you how to deal with your symptoms and whether INTELENCE must be stopped;
- headache;
- diarrhoea, nausea.

Common side effects (may affect up to 1 in 10 people)

- allergic reactions (hypersensitivity);
- diabetes, decrease of appetite;
- anxiety, sleepiness, sleeplessness, sleep disorders;
- tingling or pain in hands or feet, numbness, loss of skin sensibility, loss of memory tiredness;
- blurred vision;
- kidney failure, high blood pressure, heart attack, shortness of breath when exercising;
- vomiting, heartburn, abdominal pain, distension of the abdomen, inflammation of the stomach, flatulence, constipation, mouth inflammation, dry mouth;
- night sweats, itching, dry skin;
- Change in some values of your blood cells or chemistry. These can be seen in the results of blood and/or urine tests. Your doctor will explain these to you. Examples are: low red blood cells.

Uncommon side effects (may affect up to 1 in 100 people)

- decreased number of white blood cells;
- symptoms of infection (for example enlarged lymph nodes and fever);
- abnormal dreams, confusion, disorientation, nervousness, nightmares;
- drowsiness, trembling, fainting, seizures, disturbance in attention;

- dizziness, sluggishness;
- angina, irregular heart rhythm;
- difficulty breathing;
- retching, inflammation of the pancreas, vomiting blood;
- liver problems such as hepatitis, enlarged liver;
- excessive sweating, swelling of the face and/or throat;
- swelling of breasts in men.

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

- stroke;
- severe skin rash with blisters or peeling skin, particularly around the mouth or eyes; this may occur in children and adolescents more frequently than in adults.

Very rare side effects (may affect up to 1 in 10,000 people)

- severe hypersensitivity reactions characterised by rash accompanied by fever and organ inflammation such as hepatitis.

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 <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store INTELENCE

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.

Do not use after 8 weeks of first opening the bottle.

INTELENCE tablets should be stored in the original bottle and keep the bottle tightly closed in order to protect from moisture. The bottle contains 2 little pouches (desiccants) to keep the tablets dry. These pouches should stay in the bottle all the time and are not to be eaten.

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 INTELENCE contains

- The active substance is etravirine. Each tablet of INTELENCE contains 25 mg of etravirine.
- The other ingredients are hypromellose, microcrystalline cellulose, colloidal anhydrous silica, croscarmellose sodium, magnesium stearate and lactose (as monohydrate).

What INTELENCE looks like and contents of the pack

This medicinal product is presented as white to off-white, oval, scored tablet, with "TMC" on one side. The tablet can be divided into two equal doses.

A plastic bottle containing 120 tablets and 2 pouches to keep the tablets dry.

Marketing Authorisation Holder

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

Manufacturer

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

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

België/Belgique/Belgien Janssen-Cilag NV Tel/Tél: +32 14 64 94 11 janssen@jacbe.jnj.com

България

"Джонсън & Джонсън България" ЕООД Тел.: +359 2 489 94 00 jjsafety@its.jnj.com

Česká republika Janssen-Cilag s.r.o. Tel: +420 227 012 227

Danmark Janssen-Cilag A/S Tlf.: +45 4594 8282 jacdk@its.jnj.com

Deutschland Janssen-Cilag GmbH Tel: 0800 086 9247 / +49 2137 955 6955 jancil@its.jnj.com

Eesti UAB "JOHNSON & JOHNSON" Eesti filiaal Tel: +372 617 7410 ee@its.jnj.com

Ελλάδα Janssen-Cilag Φαρμακευτική Μονοπρόσωπη A.E.B.E. Τηλ: +30 210 80 90 000

España Janssen-Cilag, S.A. Tel: +34 91 722 81 00 contacto@its.jnj.com

France Janssen-Cilag Tél: 0 800 25 50 75 / +33 1 55 00 40 03 medisource@its.jnj.com

Hrvatska Johnson & Johnson S.E. d.o.o. Tel: +385 1 6610 700 jjsafety@JNJCR.JNJ.com Lietuva UAB "JOHNSON & JOHNSON" Tel: +370 5 278 68 88 lt@its.jnj.com

Luxembourg/Luxemburg Janssen-Cilag NV

Tél/Tel: +32 14 64 94 11 janssen@jacbe.jnj.com

Magyarország Janssen-Cilag Kft. Tel.: +36 1 884 2858

janssenhu@its.jnj.com Malta AM MANGION LTD.

Tel: +356 2397 6000

Nederland Janssen-Cilag B.V. Tel: +31 76 711 1111 janssen@jacnl.jnj.com

Norge Janssen-Cilag AS Tlf: +47 24 12 65 00 jacno@its.jnj.com

Österreich Janssen-Cilag Pharma GmbH Tel: +43 1 610 300

Polska Janssen-Cilag Polska Sp. z o.o. Tel.: +48 22 237 60 00

Portugal Janssen-Cilag Farmacêutica, Lda. Tel: +351 214 368 600

România Johnson & Johnson România SRL Tel: +40 21 207 1800 Ireland Janssen Sciences Ireland UC Tel: 1 800 709 122 medinfo@its.jnj.com

Ísland

Janssen-Cilag AB c/o Vistor hf. Sími: +354 535 7000 janssen@vistor.is

Italia

Janssen-Cilag SpA Tel: 800.688.777 / +39 02 2510 1 janssenita@its.jnj.com

Κύπρος Βαρνάβας Χατζηπαναγής Λτδ Τηλ: +357 22 207 700

Latvija

UAB "JOHNSON & JOHNSON" filiāle Latvijā Tel: +371 678 93561 lv@its.jnj.com

This leaflet was last revised in {MM/YYYY}.

Slovenija Johnson & Johnson d.o.o. Tel: +386 1 401 18 00 Janssen_safety_slo@its.jnj.com

Slovenská republika Johnson & Johnson s.r.o. Tel: +421 232 408 400

Suomi/Finland Janssen-Cilag Oy Puh/Tel: +358 207 531 300 jacfi@its.jnj.com

Sverige Janssen-Cilag AB Tfn: +46 8 626 50 00 jacse@its.jnj.com

United Kingdom (Northern Ireland) Janssen Sciences Ireland UC Tel: +44 1 494 567 444

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

Package leaflet: Information for the user

INTELENCE 100 mg tablets

etravirine

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

1. What INTELENCE is and what it is used for

INTELENCE contains the active substance etravirine. INTELENCE belongs to a group of anti-HIV medicines called non-nucleoside reverse transcriptase inhibitors (NNRTIs).

INTELENCE is a medicine used for the treatment of Human Immunodeficiency Virus (HIV) infection. INTELENCE works by reducing the amount of HIV in your body. This will improve your immune system and reduces the risk of developing illnesses linked to HIV infection.

INTELENCE is used in combination with other anti-HIV medicines to treat adults and children 2 years of age and older who are infected by HIV and who have used other anti-HIV medicines before.

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

2. What you need to know before you take INTELENCE

Do not take INTELENCE

- if you are allergic to etravirine or any of the other ingredients of this medicine (listed in section 6)
- if you are taking elbasvir/grazoprevir (a medicine to treat hepatitis C infection).

Warnings and precautions

Talk to your doctor or pharmacist before taking INTELENCE.

INTELENCE is not a cure for HIV infection. It is part of a treatment reducing the amount of virus in the blood.

Elderly

INTELENCE 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 INTELENCE with your doctor.

Weight and increased blood lipids and glucose

During HIV therapy there may be an increase in weight and in levels of blood lipids and glucose. This is partly linked to restored health and life style, and in the case of blood lipids sometimes to the HIV medicines themselves. Your doctor will test for these changes.

Bone problems

Some patients taking combination antiretroviral therapy may develop a bone disease called osteonecrosis (death of bone tissue caused by loss of blood supply to the bone). The length of combination antiretroviral therapy, corticosteroid use, alcohol consumption, severe immunosuppression, higher body mass index, among others, may be some of the many risk factors for developing this disease. Signs of osteonecrosis are joint stiffness, aches and pains (especially of the hip, knee and shoulder) and difficulty in movement. If you notice any of these symptoms please inform 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 develop a **rash**. If a rash occurs, it usually appears soon after anti-HIV treatment with INTELENCE is started and often disappears within 1 to 2 weeks, even with continued use of the medicine. Rarely, during INTELENCE treatment, you can experience severe skin rash with blisters or peeling skin, particularly around the mouth or eyes or hypersensitivity reaction (allergic reaction including rash and fever but also swelling of the face, tongue or throat, difficulty in breathing or swallowing) which could be potentially life-threatening. Please contact your doctor immediately if you experience these symptoms. Your doctor will advise you how to deal with your symptoms and whether INTELENCE must be stopped. If you have stopped treatment due to a hypersensitivity reaction, you should not restart therapy with INTELENCE.
- Tell your doctor if you have or have had **problems with your liver**, including hepatitis B and/or C. Your doctor may evaluate how severe your liver disease is before deciding if you can take INTELENCE.
- Tell your doctor immediately if you notice any **symptoms of infections**. 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 anti-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.

Children and adolescents

Do not give this medicine to children less than 2 years of age and weighing less than 10 kg because the potential benefits and risks have not been established.

Other medicines and INTELENCE

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

In most cases, INTELENCE can be combined with anti-HIV medicines belonging to another class. However, some combinations are not recommended. In other cases, increased monitoring and/or a change in the dose of the medicine may be needed. Therefore, always tell your doctor which other anti-HIV medicines you take. Furthermore, it is important that you carefully read the package leaflets that are provided with these medicines. Follow your doctor's instruction carefully on which medicines can be combined.

It is not recommended to combine INTELENCE with any of the following medicines:

- tipranavir/ritonavir, efavirenz, nevirapine, rilpivirine, indinavir, atazanavir/cobicistat, darunavir/cobicistat (anti-HIV medicine)
- carbamazepine, phenobarbital, phenytoin (medicines to prevent seizures)
- rifampicin, because it is contraindicated with boosted protease inhibitors, and rifapentine (medicines to treat some infections such as tuberculosis)
- products that contain St John's wort (*Hypericum perforatum*) (a herbal product used for depression)
- daclatasvir (a medicine to treat hepatitis C infection).

If you are taking any of these, ask your doctor for advice.

The effects of INTELENCE or other medicines might be influenced if you take INTELENCE together with any of the following medicines. The dosages of some medicines might need to be changed since their therapeutic effect or side effects may be influenced when combined with INTELENCE. Tell your doctor if you take:

- dolutegravir, maraviroc, amprevanir/ritonavir and fosamprenavir/ritonavir (anti-HIV medicine)
- amiodarone, bepridil, digoxin, disopyramide, flecainide, lidocaine, mexiletine, propafenone and quinidine (medicines to treat certain heart disorders, e.g., abnormal heart beat)
- warfarin (a medicine used to reduce clotting of the blood). Your doctor will have to check your blood
- fluconazole, itraconazole, ketoconazole, posaconazole, voriconazole (medicines to treat fungal infections)
- clarithromycin, rifabutin (antibiotics)
- artemether/lumefantrine (a medicine to treat malaria)
- diazepam (medicines to treat trouble with sleeping and/or anxiety)
- dexamethasone (a corticosteroid used in a variety of conditions such as inflammation and allergic reactions)
- atorvastatin, fluvastatin, lovastatin, rosuvastatin, simvastatin (cholesterol-lowering medicines)
- cyclosporine, sirolimus, tacrolimus (immunosuppressants medicines used to dampen down your immune system)
- sildenafil, vardenafil, tadalafil (medicines to treat erectile dysfunction and/or pulmonary arterial hypertension)
- clopidogrel (a medicine to prevent blood clots).

Pregnancy and breast-feeding

Tell your doctor immediately if you are pregnant. Pregnant women should not take INTELENCE unless specifically directed by the doctor.

Because of the potential for side effects in breast-fed infants, it is recommended that women not breast-feed if they are receiving INTELENCE.

Breast-feeding is not recommended in women living with HIV because HIV infection can be passed on to the baby in breast milk. If you are breast-feeding, or thinking about breast-feeding, you should discuss it with your doctor as soon as possible.

Driving and using machines

Do not drive or operate machines if you feel sleepy or dizzy after taking your medicines.

INTELENCE contains lactose

INTELENCE tablets contain lactose. If you have been told by your doctor that you have an intolerance to some sugars (lactose), contact your doctor before taking this medicine.

INTELENCE 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 INTELENCE

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

Use in adults

The recommended dose of INTELENCE is two tablets twice a day. In the morning, take two 100 milligram INTELENCE tablets, following a meal. In the evening, take two 100 milligram INTELENCE tablets, following a meal.

Use in children and adolescents 2 years of age and older and weighing at least 10 kg

The doctor will work out the right dose based on the weight of the child. The doctor will inform you exactly how much INTELENCE the child should take.

Instructions for taking INTELENCE for all patients

It is important that you take INTELENCE following a meal. If you take INTELENCE on an empty stomach, only half the amount of INTELENCE is absorbed. Follow your doctor's advice on the type of meal you should be taking with INTELENCE.

Swallow the INTELENCE tablet(s) whole with a glass of water. Do not chew the tablet(s).

If you are unable to swallow the INTELENCE tablet(s) whole, you may do the following:

- place the tablet(s) in 5 ml (1 teaspoon) of water, or at least enough liquid to cover the medicine,
- stir well for about 1 minute until the water looks milky,
- if desired, add up to 30 ml (2 tablespoons) more of water or alternatively orange juice or milk (do not place the tablets directly in orange juice or milk),
- drink it immediately,
- rinse the glass several times with water, orange juice, or milk and completely swallow the rinse each time to make sure you take the entire dose.

If you mix INTELENCE tablet(s) with a liquid, take this first, before other liquid anti-HIV medicines that you need to take at the same time.

Contact your doctor if you are not able to swallow the entire dose when mixed with a liquid.

If your child needs to take INTELENCE tablet(s) mixed with a liquid, it is very important that he/she takes the entire dose so that the right amount of medicine enters into the body. If the full dose is not taken, the risk of the virus developing resistance is higher. Contact your doctor if your child is not able to swallow the entire dose when mixed with a liquid, as they may consider giving another medicine to treat your child.

Do not use warm (40°C and above) or carbonated beverages when taking INTELENCE tablet(s).

Removing the child resistant cap



The plastic bottle comes with a child resistant cap and should be opened as follows:

- Push the plastic screw cap down while turning it counter clockwise.
- Remove the unscrewed cap.

If you take more INTELENCE than you should

Contact your doctor or pharmacist immediately. The most frequent side effects of INTELENCE are rash, diarrhoea, nausea, and headache (see section '4. Possible side effects').

If you forget to take INTELENCE

If you notice within 6 hours of the time you usually take INTELENCE, you must take the tablet(s) as soon as possible. Always take the tablet(s) following a meal. Then take the next dose as usual. If you notice **after 6 hours**, then skip the intake 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 INTELENCE, take another dose following a meal. If you vomit more than 4 hours after taking INTELENCE, then you do not need to take another dose until your regularly scheduled dose.

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

Do not stop taking INTELENCE without talking to your doctor first

HIV therapy may increase your sense of well-being. Even if you feel better, do not stop taking INTELENCE or your other anti-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.

The frequency rate of the side effects associated with INTELENCE is given below.

Very common side effects (may affect more than 1 in 10 people)

- skin rash. The rash is usually mild to moderate. In rare instances, very serious rash has been reported which can be potentially life-threatening. It is therefore important to contact your doctor immediately if you develop a rash. Your doctor will advise you how to deal with your symptoms and whether INTELENCE must be stopped;
- headache;
- diarrhoea, nausea.

Common side effects (may affect up to 1 in 10 people)

- allergic reactions (hypersensitivity);
- diabetes, decrease of appetite;
- anxiety, sleepiness, sleeplessness, sleep disorders;
- tingling or pain in hands or feet, numbness, loss of skin sensibility, loss of memory tiredness;
- blurred vision;
- kidney failure, high blood pressure, heart attack, shortness of breath when exercising;
- vomiting, heartburn, abdominal pain, distension of the abdomen, inflammation of the stomach, flatulence, constipation, mouth inflammation, dry mouth;
- night sweats, itching, dry skin;
- Change in some values of your blood cells or chemistry. These can be seen in the results of blood and/or urine tests. Your doctor will explain these to you. Examples are: low red blood cells.

Uncommon side effects (may affect up to 1 in 100 people)

- decreased number of white blood cells;
- symptoms of infection (for example enlarged lymph nodes and fever);
- abnormal dreams, confusion, disorientation, nervousness, nightmares;
- drowsiness, trembling, fainting, seizures, disturbance in attention;
- dizziness, sluggishness;
- angina, irregular heart rhythm;
- difficulty breathing;
- retching, inflammation of the pancreas, vomiting blood;

- liver problems such as hepatitis, enlarged liver;
- excessive sweating, swelling of the face and/or throat;
- swelling of breasts in men.

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

- stroke;
- severe skin rash with blisters or peeling skin, particularly around the mouth or eyes; this may occur in children and adolescents more frequently than in adults.

Very rare side effects (may affect up to 1 in 10,000 people)

severe hypersensitivity reactions characterised by rash accompanied by fever and organ inflammation such as hepatitis.

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 <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store INTELENCE

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.

INTELENCE tablets should be stored in the original bottle and keep the bottle tightly closed in order to protect from moisture. The bottle contains 3 little pouches (desiccants) to keep the tablets dry. These pouches should stay in the bottle all the time and are not to be eaten.

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 INTELENCE contains

- The active substance is etravirine. Each tablet of INTELENCE contains 100 mg of etravirine.
- The other ingredients are hypromellose, microcrystalline cellulose, colloidal anhydrous silica, croscarmellose sodium, magnesium stearate and lactose (as monohydrate).

What INTELENCE looks like and contents of the pack

This medicinal product is presented as white to off-white, oval tablet, with "T125" on one side and "100" on the other side.

A plastic bottle containing 120 tablets and 3 pouches to keep the tablets dry.

Marketing Authorisation Holder

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

Manufacturer

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

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

België/Belgique/Belgien Janssen-Cilag NV Tel/Tél: +32 14 64 94 11 janssen@jacbe.jnj.com

България "Джонсън & Джонсън България" ЕООД Тел.: +359 2 489 94 00 jjsafety@its.jnj.com

Česká republika Janssen-Cilag s.r.o. Tel: +420 227 012 227

Danmark Janssen-Cilag A/S Tlf.: +45 4594 8282 jacdk@its.jnj.com

Deutschland Janssen-Cilag GmbH Tel: 0800 086 9247 / +49 2137 955 6955 jancil@its.jnj.com

Eesti UAB "JOHNSON & JOHNSON" Eesti filiaal Tel: +372 617 7410 ee@its.jnj.com

Ελλάδα Janssen-Cilag Φαρμακευτική Μονοπρόσωπη A.E.B.E. Τηλ: +30 210 80 90 000

España Janssen-Cilag, S.A. Tel: +34 91 722 81 00 contacto@its.jnj.com

France Janssen-Cilag Tél: 0 800 25 50 75 / +33 1 55 00 40 03 medisource@its.jnj.com

Hrvatska Johnson & Johnson S.E. d.o.o. Tel: +385 1 6610 700 jjsafety@JNJCR.JNJ.com

Ireland Janssen Sciences Ireland UC Tel: 1 800 709 122 medinfo@its.jnj.com Lietuva UAB "JOHNSON & JOHNSON" Tel: +370 5 278 68 88 lt@its.jnj.com

Luxembourg/Luxemburg

Janssen-Cilag NV Tél/Tel: +32 14 64 94 11 janssen@jacbe.jnj.com

Magyarország Janssen-Cilag Kft. Tel.: +36 1 884 2858 janssenhu@its.jnj.com

Malta AM MANGION LTD. Tel: +356 2397 6000

Nederland Janssen-Cilag B.V. Tel: +31 76 711 1111 janssen@jacnl.jnj.com

Norge Janssen-Cilag AS Tlf: +47 24 12 65 00 jacno@its.jnj.com

Österreich Janssen-Cilag Pharma GmbH Tel: +43 1 610 300

Polska Janssen-Cilag Polska Sp. z o.o. Tel.: +48 22 237 60 00

Portugal Janssen-Cilag Farmacêutica, Lda. Tel: +351 214 368 600

România Johnson & Johnson România SRL Tel: +40 21 207 1800

Slovenija Johnson & Johnson d.o.o. Tel: +386 1 401 18 00 Janssen_safety_slo@its.jnj.com Ísland Janssen-Cilag AB c/o Vistor hf. Sími: +354 535 7000 janssen@vistor.is

Italia

Janssen-Cilag SpA Tel: 800.688.777 / +39 02 2510 1 janssenita@its.jnj.com

Κύπρος Βαρνάβας Χατζηπαναγής Λτδ Τηλ: +357 22 207 700

Latvija

UAB "JOHNSON & JOHNSON" filiāle Latvijā Tel: +371 678 93561 lv@its.jnj.com

Slovenská republika Johnson & Johnson s.r.o. Tel: +421 232 408 400

Suomi/Finland

Janssen-Cilag Oy Puh/Tel: +358 207 531 300 jacfi@its.jnj.com

Sverige

Janssen-Cilag AB Tfn: +46 8 626 50 00 jacse@its.jnj.com

United Kingdom (Northern Ireland)

Janssen Sciences Ireland UC Tel: +44 1 494 567 444

This leaflet was last revised in {MM/YYYY}.

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

Package leaflet: Information for the user

INTELENCE 200 mg tablets

etravirine

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

1. What INTELENCE is and what it is used for

INTELENCE contains the active substance etravirine. INTELENCE belongs to a group of anti-HIV medicines called non-nucleoside reverse transcriptase inhibitors (NNRTIs).

INTELENCE is a medicine used for the treatment of Human Immunodeficiency Virus (HIV) infection. INTELENCE works by reducing the amount of HIV in your body. This will improve your immune system and reduces the risk of developing illnesses linked to HIV infection.

INTELENCE is used in combination with other anti-HIV medicines to treat adults and children 2 years of age and older who are infected by HIV and who have used other anti-HIV medicines before.

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

2. What you need to know before you take INTELENCE

Do not take INTELENCE

- if you are allergic to etravirine or any of the other ingredients of this medicine (listed in section 6)
- if you are taking elbasvir/grazoprevir (a medicine to treat hepatitis C infection).

Warnings and precautions

Talk to your doctor or pharmacist before taking INTELENCE.

INTELENCE is not a cure for HIV infection. It is part of a treatment reducing the amount of virus in the blood.

Elderly

INTELENCE 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 INTELENCE with your doctor.

Weight and increased blood lipids and glucose

During HIV therapy there may be an increase in weight and in levels of blood lipids and glucose. This is partly linked to restored health and life style, and in the case of blood lipids sometimes to the HIV medicines themselves. Your doctor will test for these changes.

Bone problems

Some patients taking combination antiretroviral therapy may develop a bone disease called osteonecrosis (death of bone tissue caused by loss of blood supply to the bone). The length of combination antiretroviral therapy, corticosteroid use, alcohol consumption, severe immunosuppression, higher body mass index, among others, may be some of the many risk factors for developing this disease. Signs of osteonecrosis are joint stiffness, aches and pains (especially of the hip, knee and shoulder) and difficulty in movement. If you notice any of these symptoms please inform 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 develop a **rash**. If a rash occurs, it usually appears soon after anti-HIV treatment with INTELENCE is started and often disappears within 1 to 2 weeks, even with continued use of the medicine. Rarely, during INTELENCE treatment, you can experience severe skin rash with blisters or peeling skin, particularly around the mouth or eyes or hypersensitivity reaction (allergic reaction including rash and fever but also swelling of the face, tongue or throat, difficulty in breathing or swallowing) which could be potentially life-threatening. Please contact your doctor immediately if you experience these symptoms. Your doctor will advise you how to deal with your symptoms and whether INTELENCE must be stopped. If you have stopped treatment due to a hypersensitivity reaction, you should not restart therapy with INTELENCE.
- Tell your doctor if you have or have had **problems with your liver**, including hepatitis B and/or C. Your doctor may evaluate how severe your liver disease is before deciding if you can take INTELENCE.
- Tell your doctor immediately if you notice any **symptoms of infections**. 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 anti-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.

Children and adolescents

Do not give this medicine to children less than 2 years of age and weighing less than 10 kg because the potential benefits and risks have not been established.

Other medicines and INTELENCE

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

In most cases, INTELENCE can be combined with anti-HIV medicines belonging to another class. However, some combinations are not recommended. In other cases, increased monitoring and/or a change in the dose of the medicine may be needed. Therefore, always tell your doctor which other anti-HIV medicines you take. Furthermore, it is important that you carefully read the package leaflets that are provided with these medicines. Follow your doctor's instruction carefully on which medicines can be combined.

It is not recommended to combine INTELENCE with any of the following medicines:

- tipranavir/ritonavir, efavirenz, nevirapine, rilpivirine, indinavir, atazanavir/cobicistat, darunavir/cobicistat (anti-HIV medicine)
- carbamazepine, phenobarbital, phenytoin (medicines to prevent seizures)
- rifampicin, because it is contraindicated with boosted protease inhibitors, and rifapentine (medicines to treat some infections such as tuberculosis)
- products that contain St John's wort (*Hypericum perforatum*) (a herbal product used for depression)
- daclatasvir (a medicine to treat hepatitis C infection).

If you are taking any of these, ask your doctor for advice.

The effects of INTELENCE or other medicines might be influenced if you take INTELENCE together with any of the following medicines. The dosages of some medicines might need to be changed since their therapeutic effect or side effects may be influenced when combined with INTELENCE. Tell your doctor if you take:

- dolutegravir, maraviroc, amprevanir/ritonavir and fosamprenavir/ritonavir (anti-HIV medicine)
- amiodarone, bepridil, digoxin, disopyramide, flecainide, lidocaine, mexiletine, propafenone and quinidine (medicines to treat certain heart disorders, e.g., abnormal heart beat)
- warfarin (a medicine used to reduce clotting of the blood). Your doctor will have to check your blood
- fluconazole, itraconazole, ketoconazole, posaconazole, voriconazole (medicines to treat fungal infections)
- clarithromycin, rifabutin (antibiotics)
- artemether/lumefantrine (a medicine to treat malaria)
- diazepam (medicines to treat trouble with sleeping and/or anxiety)
- dexamethasone (a corticosteroid used in a variety of conditions such as inflammation and allergic reactions)
- atorvastatin, fluvastatin, lovastatin, rosuvastatin, simvastatin (cholesterol-lowering medicines)
- cyclosporine, sirolimus, tacrolimus (immunosuppressants medicines used to dampen down your immune system)
- sildenafil, vardenafil, tadalafil (medicines to treat erectile dysfunction and/or pulmonary arterial hypertension)
- clopidogrel (a medicine to prevent blood clots).

Pregnancy and breast-feeding

Tell your doctor immediately if you are pregnant. Pregnant women should not take INTELENCE unless specifically directed by the doctor.

Because of the potential for side effects in breast-fed infants, it is recommended that women not breast-feed if they are receiving INTELENCE.

Breast-feeding is not recommended in women living with HIV because HIV infection can be passed on to the baby in breast milk. If you are breast-feeding, or thinking about breast-feeding, you should discuss it with your doctor as soon as possible.

Driving and using machines

Do not drive or operate machines if you feel sleepy or dizzy after taking your medicines.

INTELENCE 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 INTELENCE

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

Use in adults

The recommended dose of INTELENCE is one tablet twice a day. In the morning, take one 200 milligram INTELENCE tablet, following a meal. In the evening, take one 200 milligram INTELENCE tablet, following a meal.

Use in children and adolescents 2 years of age and older and weighing at least 10 kg

The doctor will work out the right dose based on the weight of the child. The doctor will inform you exactly how much INTELENCE the child should take.

Instructions for taking INTELENCE for all patients

It is important that you take INTELENCE following a meal. If you take INTELENCE on an empty stomach, only half the amount of INTELENCE is absorbed. Follow your doctor's advice on the type of meal you should be taking with INTELENCE.

Swallow the INTELENCE tablet(s) whole with a glass of water. Do not chew the tablet(s).

If you are unable to swallow the INTELENCE tablet(s) whole, you may do the following:

- place the tablet(s) in 5 ml (1 teaspoon) of water, or at least enough liquid to cover the medicine,
- stir well for about 1 minute until the water looks milky,
- if desired, add up to 30 ml (2 tablespoons) more of water or alternatively orange juice or milk (do not place the tablets directly in orange juice or milk),
- drink it immediately,
- rinse the glass several times with water, orange juice, or milk and completely swallow the rinse each time to make sure you take the entire dose.

If you mix INTELENCE tablet(s) with a liquid, take this first, before other liquid anti-HIV medicines that you need to take at the same time.

Contact your doctor if you are not able to swallow the entire dose when mixed with a liquid.

If your child needs to take INTELENCE tablet(s) mixed with a liquid, it is very important that he/she takes the entire dose so that the right amount of medicine enters into the body. If the full dose is not taken, the risk of the virus developing resistance is higher. Contact your doctor if your child is not able to swallow the entire dose when mixed with a liquid, as they may consider giving another medicine to treat your child.

Do not use warm (40°C and above) or carbonated beverages when taking INTELENCE tablet(s).

Removing the child resistant cap



The plastic bottle comes with a child resistant cap and should be opened as follows:

- Push the plastic screw cap down while turning it counter clockwise.
- Remove the unscrewed cap.

If you take more INTELENCE than you should

Contact your doctor or pharmacist immediately. The most frequent side effects of INTELENCE are rash, diarrhoea, nausea, and headache (see section '4. Possible side effects').

If you forget to take INTELENCE

If you notice within 6 hours of the time you usually take INTELENCE, you must take the tablet as soon as possible. Always take the tablet following a meal. Then take the next dose as usual. If you notice **after 6 hours**, then skip the intake 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 INTELENCE, take another dose following a meal. If you vomit more than 4 hours after taking INTELENCE, then you do not need to take another dose until your regularly scheduled dose.

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

Do not stop taking INTELENCE without talking to your doctor first

HIV therapy may increase your sense of well-being. Even if you feel better, do not stop taking INTELENCE or your other anti-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.

The frequency rate of the side effects associated with INTELENCE is given below.

Very common side effects (may affect more than 1 in 10 people)

- skin rash. The rash is usually mild to moderate. In rare instances, very serious rash has been reported which can be potentially life-threatening. It is therefore important to contact your doctor immediately if you develop a rash. Your doctor will advise you how to deal with your symptoms and whether INTELENCE must be stopped;
- headache;
- diarrhoea, nausea.

Common side effects (may affect up to 1 in 10 people)

- allergic reactions (hypersensitivity);
- diabetes, decrease of appetite;
- anxiety, sleepiness, sleeplessness, sleep disorders;
- tingling or pain in hands or feet, numbness, loss of skin sensibility, loss of memory tiredness;
- blurred vision;
- kidney failure, high blood pressure, heart attack, shortness of breath when exercising;
- vomiting, heartburn, abdominal pain, distension of the abdomen, inflammation of the stomach, flatulence, constipation, mouth inflammation, dry mouth;
- night sweats, itching, dry skin;
- Change in some values of your blood cells or chemistry. These can be seen in the results of blood and/or urine tests. Your doctor will explain these to you. Examples are: low red blood cells.

Uncommon side effects (may affect up to 1 in 100 people)

- decreased number of white blood cells;
- symptoms of infection (for example enlarged lymph nodes and fever);
- abnormal dreams, confusion, disorientation, nervousness, nightmares;
- drowsiness, trembling, fainting, seizures, disturbance in attention;
- dizziness, sluggishness;
- angina, irregular heart rhythm;
- difficulty breathing;
- retching, inflammation of the pancreas, vomiting blood;

- liver problems such as hepatitis, enlarged liver;
- excessive sweating, swelling of the face and/or throat;
- swelling of breasts in men.

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

- stroke;
- severe skin rash with blisters or peeling skin, particularly around the mouth or eyes; this may occur in children and adolescents more frequently than in adults.

Very rare side effects (may affect up to 1 in 10,000 people)

severe hypersensitivity reactions characterised by rash accompanied by fever and organ inflammation such as hepatitis.

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 <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store INTELENCE

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.

Do not use after 6 weeks of first opening the bottle.

INTELENCE tablets should be stored in the original bottle and keep the bottle tightly closed in order to protect from moisture. The bottle contains 3 little pouches (desiccants) to keep the tablets dry. These pouches should stay in the bottle all the time and are not to be eaten.

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 INTELENCE contains

- The active substance is etravirine. Each tablet of INTELENCE contains 200 mg of etravirine.
- The other ingredients are hypromellose, silicified microcrystalline cellulose, microcrystalline cellulose, colloidal anhydrous silica, croscarmellose sodium and magnesium stearate.

What INTELENCE looks like and contents of the pack

This medicinal product is presented as white to off-white, biconvex, oblong tablet with "T200" on one side.

A plastic bottle containing 60 tablets and 3 pouches to keep the tablets dry.

Marketing Authorisation Holder

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

Manufacturer

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

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

België/Belgique/Belgien Janssen-Cilag NV Tel/Tél: +32 14 64 94 11 janssen@jacbe.jnj.com

България "Джонсън & Джонсън България" ЕООД Тел.: +359 2 489 94 00 jjsafety@its.jnj.com

Česká republika Janssen-Cilag s.r.o. Tel: +420 227 012 227

Danmark Janssen-Cilag A/S Tlf.: +45 4594 8282 jacdk@its.jnj.com

Deutschland Janssen-Cilag GmbH Tel: 0800 086 9247 / +49 2137 955 6955 jancil@its.jnj.com

Eesti UAB "JOHNSON & JOHNSON" Eesti filiaal Tel: +372 617 7410 ee@its.jnj.com

Ελλάδα Janssen-Cilag Φαρμακευτική Μονοπρόσωπη A.E.B.E. Τηλ: +30 210 80 90 000

España Janssen-Cilag, S.A. Tel: +34 91 722 81 00 contacto@its.jnj.com

France Janssen-Cilag Tél: 0 800 25 50 75 / +33 1 55 00 40 03 medisource@its.jnj.com

Hrvatska Johnson & Johnson S.E. d.o.o. Tel: +385 1 6610 700 jjsafety@JNJCR.JNJ.com

Ireland Janssen Sciences Ireland UC Tel: 1 800 709 122 medinfo@its.jnj.com Lietuva UAB "JOHNSON & JOHNSON" Tel: +370 5 278 68 88 lt@its.jnj.com

Luxembourg/Luxemburg

Janssen-Cilag NV Tél/Tel: +32 14 64 94 11 janssen@jacbe.jnj.com

Magyarország Janssen-Cilag Kft. Tel.: +36 1 884 2858 janssenhu@its.jnj.com

Malta AM MANGION LTD. Tel: +356 2397 6000

Nederland Janssen-Cilag B.V. Tel: +31 76 711 1111 janssen@jacnl.jnj.com

Norge Janssen-Cilag AS Tlf: +47 24 12 65 00 jacno@its.jnj.com

Österreich Janssen-Cilag Pharma GmbH Tel: +43 1 610 300

Polska Janssen-Cilag Polska Sp. z o.o. Tel.: +48 22 237 60 00

Portugal Janssen-Cilag Farmacêutica, Lda. Tel: +351 214 368 600

România Johnson & Johnson România SRL Tel: +40 21 207 1800

Slovenija Johnson & Johnson d.o.o. Tel: +386 1 401 18 00 Janssen_safety_slo@its.jnj.com Ísland Janssen-Cilag AB c/o Vistor hf. Sími: +354 535 7000 janssen@vistor.is

Italia

Janssen-Cilag SpA Tel: 800.688.777 / +39 02 2510 1 janssenita@its.jnj.com

Κύπρος Βαρνάβας Χατζηπαναγής Λτδ Τηλ: +357 22 207 700

Latvija

UAB "JOHNSON & JOHNSON" filiāle Latvijā Tel: +371 678 93561 lv@its.jnj.com

This leaflet was last revised in {MM/YYYY}.

Slovenská republika Johnson & Johnson s.r.o. Tel: +421 232 408 400

Suomi/Finland

Janssen-Cilag Oy Puh/Tel: +358 207 531 300 jacfi@its.jnj.com

Sverige

Janssen-Cilag AB Tfn: +46 8 626 50 00 jacse@its.jnj.com

United Kingdom (Northern Ireland)

Janssen Sciences Ireland UC Tel: +44 1 494 567 444

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