# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions. See section 4.8 for how to report adverse reactions.

#### 1. NAME OF THE MEDICINAL PRODUCT

REKAMBYS 600 mg prolonged-release suspension for injection REKAMBYS 900 mg prolonged-release suspension for injection

#### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

2 mL vial

Each vial contains 600 mg rilpivirine

3 mL vial

Each vial contains 900 mg rilpivirine

For the full list of excipients, see section 6.1.

#### 3. PHARMACEUTICAL FORM

Prolonged-release suspension for injection White to off-white suspension.

#### 4. CLINICAL PARTICULARS

#### 4.1 Therapeutic indications

REKAMBYS is indicated, in combination with cabotegravir injection, for the treatment of human immunodeficiency virus type 1 (HIV-1) infection in adults and adolescents (at least 12 years of age and weighing at least 35 kg) who are virologically suppressed (HIV-1 RNA < 50 copies/mL) on a stable antiretroviral regimen without present or past evidence of viral resistance to, and no prior virological failure with, agents of the non-nucleoside reverse transcriptase inhibitor (NNRTI) and integrase inhibitor (INI) class (see sections 4.2, 4.4 and 5.1).

#### 4.2 Posology and method of administration

Therapy should be prescribed by a physician experienced in the management of HIV infection. Each injection should be administered by a healthcare professional.

<u>Prior to starting REKAMBYS</u>, the healthcare professional should carefully select patients who agree to the required injection schedule and counsel patients about the importance of adherence to scheduled dosing visits to help maintain viral suppression and reduce the risk of viral rebound and potential development of resistance associated with missed doses.

<u>Following discontinuation of REKAMBYS in combination with cabotegravir injection</u>, it is essential to adopt an alternative, fully suppressive antiretroviral regimen no later than one month after the last every 1 month injection, or two months after the last every 2 months injection (see section 4.4).

The prescribing information for cabotegravir injection should be consulted for recommended dosing.

#### **Posology**

REKAMBYS (rilpivirine injection) may be initiated with oral lead-in or without (direct to injection).

The healthcare professional and patient may decide to use rilpivirine tablets as an oral lead-in prior to the initiation of rilpivirine injections to assess tolerability (see Table 1), or proceed directly to rilpivirine injections (see Tables 2 and 3, for monthly and every 2 months dosing recommendations, respectively).

Adults and adolescents (at least 12 years of age and weighing at least 35 kg)

#### Oral lead-in

When used for oral lead-in prior to the initiation of REKAMBYS, rilpivirine oral tablets, together with cabotegravir oral tablets, should be taken for approximately 1 month (at least 28 days) to assess tolerability to rilpivirine and cabotegravir. One rilpivirine 25-mg tablet should be taken with a meal with one cabotegravir 30-mg tablet once daily (see Table 1).

**Table 1** Oral Lead-in Dosing Schedule

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	Oral Lead-In			
Drug	For one month (at least 28 days), followed by the Initiation Injection <sup>a</sup>			
Rilpivirine	25 mg once daily with a meal			
Cabotegravir	30 mg once daily			

a see Table 2 for monthly injection dosing schedule and Table 3 for every 2 months injection dosing schedule.

#### Every 1 month dosing

Initiation injection (900 mg corresponding to 3 mL)

On the final day of current antiretroviral therapy or oral lead-in, the recommended initiation injection dose of rilpivirine is a single 900 mg intramuscular injection.

Continuation injection (600 mg corresponding to 2 mL)

After the initiation injection, the recommended continuation injection dose of rilpivirine is a single 600 mg monthly intramuscular injection. Patients may be given injections up to 7 days before or after the date of the monthly injection schedule.

 Table 2
 Recommended monthly intramuscular injection dosing schedule

	Initiation injection	<b>Continuation injections</b>		
Medicinal Product	Initiate injection on the last day of either current ART therapy or oral lead-in (if used)	One month after initiation injection and monthly onwards		
Rilpivirine	900 mg	600 mg		
Cabotegravir	600 mg	400 mg		

#### Every 2 months dosing

*Initiation Injections – 1 month apart (900 mg corresponding to 3 mL)* 

On the final day of current antiretroviral therapy or oral lead-in, the recommended initial rilpivirine injection dose is a single 900 mg intramuscular injection.

One month later, a second 900 mg intramuscular injection should be administered. Patients may be given the second 900 mg injection up to 7 days before or after the scheduled dosing date.

Continuation Injections – 2 months apart (900 mg corresponding to 3 mL)

After the initiation injections, the recommended rilpivirine continuation injection dose is a single 900 mg intramuscular injection administered every 2 months. Patients may be given injections up to 7 days before or after the date of the every 2 months injection schedule.

 Table 3
 Recommended every 2 months intramuscular injection dosing schedule

	Initiation injections	Continuation injections
Medicinal Product	Initiate injection on the last day of either current ART therapy or oral lead-in (if used). One month later, a second initiation injection should be administered.	Two months after last initiation injection and every 2 months onwards
Rilpivirine	900 mg	900 mg
Cabotegravir	600 mg	600 mg

#### Dosing recommendations when switching from monthly to every 2 months injections

Patients switching from a monthly continuation injection schedule to an every 2 months continuation injection schedule should receive a single 900 mg intramuscular injection of REKAMBYS one month after the last 600 mg REKAMBYS continuation injection dose and then 900 mg every 2 months thereafter.

#### Dosing recommendations when switching from every 2 months to monthly injections

Patients switching from an every 2 months continuation injection schedule to a monthly continuation injection schedule should receive a single 600 mg intramuscular injection of REKAMBYS two months after the last 900 mg REKAMBYS continuation injection dose and then 600 mg monthly thereafter.

#### Missed doses

Patients who miss an injection visit should be clinically reassessed to ensure resumption of therapy is appropriate. See Table 4 and 5 for dosing recommendations after a missed injection.

#### Missed every 1 month injection (Oral Dosing to Replace Up to 2 Consecutive Monthly Injections)

If a patient plans to miss a scheduled injection by more than 7 days, daily oral therapy (one rilpivirine tablet [25 mg] and one cabotegravir tablet [30 mg]) may be used to replace up to 2 consecutive monthly injection visits. Limited data is available on oral bridging with other fully suppressive antiretroviral therapy (ART) (mainly INI-based), see section 5.1.

The first dose of oral therapy should be taken 1 month ( $\pm$  7 days) after the last injection doses of REKAMBYS and cabotegravir. Injection dosing should be resumed on the day oral dosing completes, as recommended in Table 4.

In case more than two months need to be covered for, i.e., missing more than two monthly injections, an alternative oral regimen should be initiated one month ( $\pm$  7 days) after the final injection of REKAMBYS.

Table 4 REKAMBYS dosing recommendations after missed injections or oral therapy for patients on monthly injection dosing

Time since last injection	Recommendation	
$\leq$ 2 months:	Continue with the monthly 600 mg injection schedule as soon as	
	possible.	
> 2 months:	Re-initiate the patient on the 900 mg dose, and then continue to follow	
	the monthly 600 mg injection schedule.	

#### Missed every 2 months injection (Oral Dosing to Replace 1 Every 2 Months Injection)

If a patient plans to miss a scheduled injection visit by more than 7 days, daily oral therapy (one rilpivirine tablet [25 mg] and one cabotegravir tablet [30 mg]) may be used to replace one 'every 2 months' injection visit. Limited data is available on oral bridging with other fully suppressive ART (mainly INI-based), see section 5.1.

The first dose of oral therapy should be taken approximately two months ( $\pm 7$  days) after the last injection doses of REKAMBYS and cabotegravir. Injection dosing should be resumed on the day oral dosing completes, as recommended in Table 5.

In case more than two months need to be covered for, i.e., missing more than one 'every 2 months' injection, an alternative oral regimen should be initiated two months ( $\pm$  7 days) after the final injection of REKAMBYS.

Table 5 REKAMBYS dosing recommendations after missed injections or oral therapy for patients on every 2 months injection dosing

patients on every 2 months injection dosing					
Missed Injection	Time since	Recommendation (all injections are 3 mL)			
Visit	last injection				
Injection 2	≤2 months	Continue with the 900 mg injection as soon as possible and			
		continue with every 2 months injection schedule.			
	> 2 months	Re-initiate the patient on the 900 mg dose, followed by a			
		second 900 mg initiation injection one month later. Then			
		follow the every 2 months injection schedule.			
Injection 3 or	≤3 months	Continue with the 900 mg injection as soon as possible and			
later		continue with every 2 months injection schedule.			
	> 3 months	Re-initiate the patient on the 900 mg dose, followed by a			
		second 900 mg initiation injection one month later. Then			
		follow the every 2 months injection schedule.			

#### Special populations

#### Elderly

There is limited information regarding the use of REKAMBYS in patients > 65 years of age. No dose adjustment of REKAMBYS is required in older patients (see sections 5.1 and 5.2).

#### Renal impairment

No dose adjustment is required in patients with mild or moderate renal impairment. In patients with severe renal impairment or end stage renal disease, the combination of REKAMBYS with a strong CYP3A inhibitor should only be used if the benefit outweighs the risk. Subjects with estimated creatinine clearance < 50 mL/min/1.73 m² were not included in the Phase 3 studies. No data are available in subjects receiving dialysis although differences in pharmacokinetics are not expected in this population (see section 5.2).

#### Hepatic impairment

No dose adjustment is required in patients with mild or moderate hepatic impairment (Child-Pugh score A or B), but caution is advised in patients with moderate hepatic impairment. No data are available in patients with severe hepatic impairment (Child-Pugh score C); therefore REKAMBYS is not recommended in these patients (see section 5.2).

#### Paediatric population

The safety and efficacy of REKAMBYS in children aged less than 12 years and adolescents weighing less than 35 kg have not been established. No data are available.

#### Method of administration

For intramuscular use.

Care should be taken to avoid inadvertent injection of REKAMBYS into a blood vessel. The suspension should be injected slowly (see section 4.4).

Prior to administration, the REKAMBYS vial should be brought to room temperature.

For instructions on administration, see "Instructions for Use" in the package leaflet. These instructions should be carefully followed when preparing the suspension for injection to avoid leakage.

REKAMBYS should always be co-administered with a cabotegravir injection. REKAMBYS and cabotegravir injections should be administered at separate gluteal injection sites during the same visit. The order of injections is not important.

When administering REKAMBYS, the healthcare professional should take into consideration the body mass index (BMI) of the patient to ensure that the needle length is sufficient to reach the gluteus muscle. The pack contains 1 injection needle (see section 6.5).

The vial should be held firmly and shaken vigorously for a full 10 seconds. The vial should be inverted and the resuspension should be checked. It should look uniform. If the suspension is not uniform, the vial should be shaken again. It is normal to see small air bubbles.

Injections must be administered to the ventrogluteal (recommended) or the dorsogluteal sites.

#### 4.3 Contraindications

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

Co-administration with the following medicinal products (see section 4.5):

- the anticonvulsants carbamazepine, oxcarbazepine, phenobarbital, phenytoin
- the antimycobacterials rifabutin, rifampicin, rifapentine
- the systemic glucocorticoid dexamethasone, except as a single dose treatment
- St John's wort (*Hypericum perforatum*).

#### 4.4 Special warnings and precautions for use

#### Risk of resistance following treatment discontinuation

To minimise the risk of developing viral resistance it is essential to adopt an alternative, fully suppressive antiretroviral regimen no later than one month after the last every 1 month injection of rilpivirine or two months after the last every 2 months injection of rilpivirine.

If virologic failure is suspected, an alternative regimen should be adopted as soon as possible.

#### Long-acting properties of rilpivirine injection

Residual concentrations of rilpivirine may remain in the systemic circulation of patients for prolonged periods (up to 4 years in some patients) and should be considered upon discontinuation of rilpivirine (see sections 4.5, 4.6, 4.7, 4.9).

#### Baseline factors associated with virological failure

Before starting the regimen, it should be taken into account that multivariable analyses indicate that a combination of at least 2 of the following baseline factors may be associated with an increased risk of virological failure: archived rilpivirine resistance mutations, HIV-1 subtype A6/A1, or BMI  $\geq 30 \text{ kg/m}^2$ . Available data suggest that virologic failure occurs more often when these patients are treated according to the every 2 months dosing schedule as compared to the monthly dosing regimen. In patients with an incomplete or uncertain treatment history without pre-treatment resistance analyses, caution is warranted in the presence of either BMI  $\geq 30 \text{ kg/m}^2$  or HIV-1 subtype A6/A1 (see section 5.1).

#### Post-injection reactions

Accidental intravenous administration may result in Adverse Reactions due to temporarily high plasma concentrations. In clinical studies, serious post-injection reactions were reported within minutes after the injection of rilpivirine. These events included symptoms such as dyspnoea, bronchospasm, agitation, abdominal cramping, rash/urticaria, dizziness, flushing, sweating, oral numbness, changes in blood pressure, and pain (e.g., back and chest). These events were very rare and began to resolve within minutes after the injection. Some of the patients received symptomatic treatment, at the discretion of the treating physician.

Carefully follow the Instructions for Use when preparing and administering rilpivirine (see section 4.2). Patients should be briefly observed (approximately 10 minutes) after the injection. If a patient experiences a post-injection reaction, monitoring and treatment should be provided as clinically indicated.

#### Cardiovascular

Rilpivirine should be used with caution when co-administered with a medicinal product with a known risk of Torsade de Pointes. At supra-therapeutic doses (75 and 300 mg once daily), oral rilpivirine has been associated with prolongation of the QTc interval of the electrocardiogram (ECG) (see sections 4.5, 4.8 and 5.2). Oral rilpivirine at the recommended dose of 25 mg once daily is not associated with a clinically relevant effect on QTc. Plasma rilpivirine concentrations after rilpivirine injections are comparable to those during such oral rilpivirine therapy.

#### HBV/HCV co-infection

Patients with hepatitis B co-infection were excluded from studies with rilpivirine. It is not recommended to initiate rilpivirine in patients with hepatitis B co-infection. In patients co-infected with hepatitis B receiving oral rilpivirine, the incidence of hepatic enzyme elevation was higher than in patients receiving oral rilpivirine who were not hepatitis B co-infected. Physicians should refer to current treatment guidelines for the management of HIV infection in patients co-infected with hepatitis B virus.

Limited data is available in patients with hepatitis C co-infection. In patients co-infected with hepatitis C receiving oral rilpivirine, the incidence of hepatic enzyme elevation was higher than in patients receiving oral rilpivirine who were not hepatitis C co-infected. The pharmacokinetic exposure of oral and injectable rilpivirine in co-infected patients was comparable to that in patients without hepatitis C co-infection. Monitoring of liver function is recommended in patients with hepatitis C co-infection.

#### <u>Interactions</u> with other medicinal products

Rilpivirine should not be administered with other antiretroviral medicinal products, except for cabotegravir injection for the treatment of HIV-1 infection (see section 4.5).

#### **Pregnancy**

There are limited data of rilpivirine in pregnant women. Rilpivirine is not recommended during pregnancy unless the expected benefit justifies the potential risk. Lower exposures of oral rilpivirine were observed when rilpivirine 25 mg once daily was taken during pregnancy. In the Phase 3 studies with oral rilpivirine, lower rilpivirine exposure, similar to that seen during pregnancy, has been associated with an increased risk of virological failure, therefore viral load should be monitored closely. Alternatively, switching to another ART regimen could be considered (see sections 4.6, 5.1 and 5.2).

#### Immune reactivation syndrome

In HIV-infected patients with severe immune deficiency at the time of institution of combination antiretroviral therapy (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 few weeks or months of initiation of CART. Relevant examples are cytomegalovirus retinitis, generalised and/or focal mycobacterial infections, and Pneumocystis jirovecii 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 reconstitution, however, the reported time to onset is more variable and these events can occur many months after initiation of treatment.

#### Opportunistic infections

Patients should be advised that rilpivirine or any other antiretroviral therapy does not cure HIV infection and that they may still develop opportunistic infections and other complications of HIV infection. Therefore, patients should remain under close clinical observation by physicians experienced in the treatment of these associated HIV diseases.

#### **Excipients**

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

#### 4.5 Interaction with other medicinal products and other forms of interaction

Rilpivirine, in combination with cabotegravir injection, is intended for use as a complete regimen for the treatment of HIV-1 infection and should not be administered with other antiretroviral medicinal products for the treatment of HIV-1. Therefore, information regarding drug-drug interactions with other antiretroviral medicinal products is not provided. From a drug interaction perspective, there are no limitations on the use of other antiretroviral medicinal products after discontinuing rilpivirine.

For the oral lead-in rilpivirine treatment and in case missed doses are replaced by oral rilpivirine treatment, refer to the oral rilpivirine tablet SmPC for information about drug interactions.

#### Medicinal products that affect rilpivirine exposure

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

When using oral rilpivirine, proton pump inhibitors are contraindicated (see rilpivirine tablet SmPC, section 4.3).

#### Medicinal products that are affected by the use of rilpivirine

Rilpivirine is not likely to have a clinically relevant effect on the exposure of medicinal products metabolised by CYP enzymes.

Rilpivirine inhibits P-glycoprotein *in vitro* (IC<sub>50</sub> is 9.2 μM). In a clinical study, oral rilpivirine (25 mg once daily) did not significantly affect the pharmacokinetics of digoxin.

Rilpivirine is an *in vitro* inhibitor of the transporter MATE-2K with an IC<sub>50</sub> of  $\leq$  2.7 nM. The clinical implications of this finding are currently unknown.

#### Interaction table

Selected established and theoretical interactions between rilpivirine and co-administered medicinal products are listed in Table 6 and are based on the studies conducted with oral rilpivirine or are potential drug interactions that may occur (increase is indicated as "\", decrease as "\", no change as "\", not applicable as "NA", confidence interval as "CI").

 Table 6
 Interactions and dose recommendations with other medicinal products

Medicinal products by	Interaction	Recommendations concerning
- ·	therapeutic areas Geometric mean change $(\%)^{\Omega}$	
ANTIVIRAL AGENTS	g (, o)	co-administration
Cabotegravir	cabotegravir AUC ↔	No dose adjustment is required.
8	cabotegravir C <sub>min</sub> ↔	J 1
	cabotegravir C <sub>max</sub> ↔	
	rilpivirine AUC ↔	
	rilpivirine C <sub>min</sub> ↓ 8%	
	rilpivirine $C_{max} \leftrightarrow$	
Ribavirin	Not studied. No clinically relevant	No dose adjustment is required.
	drug-drug interaction is expected.	J 1
ANTICONVULSANTS		
Carbamazepine	Not studied. Significant decreases in	Rilpivirine must not be used in
Oxcarbazepine	rilpivirine plasma concentrations are	combination with these
Phenobarbital	expected.	anticonvulsants as
Phenytoin	1	co-administration may result in loss
	(induction of CYP3A enzymes)	of therapeutic effect of rilpivirine
	,	(see section 4.3).
AZOLE ANTIFUNGAL AG	ENTS	/
Ketoconazole*#	ketoconazole AUC ↓ 24%	No dose adjustment is required.
400 mg once daily	ketoconazole C <sub>min</sub> ↓ 66%	J 1
	ketoconazole $C_{max} \leftrightarrow$	
	IIII	
	(induction of CYP3A due to high	
	rilpivirine dose in the study)	
	impromise dese in the standy)	
	rilpivirine AUC ↑ 49%	
	rilpivirine C <sub>min</sub> ↑ 76%	
	rilpivirine C <sub>max</sub> ↑ 30%	
	That   U.S.	
	(inhibition of CYP3A enzymes)	
Fluconazole	Not studied. Concomitant use of	No dose adjustment is required.
Itraconazole	REKAMBYS with azole antifungal	
Posaconazole	agents may cause an increase in the	
Voriconazole	plasma concentrations of rilpivirine.	
	(inhibition of CYP3A enzymes)	
ANTIMYCOBACTERIALS		
Rifabutin*#	rifabutin AUC ↔	Rilpivirine must not be used in
300 mg once daily	rifabutin $C_{min} \leftrightarrow$	combination with rifabutin as
	rifabutin $C_{max} \leftrightarrow$	specific dosing recommendations
	25-O-desacetyl-rifabutin AUC ↔	have not been established.
	25-O-desacetyl-rifabutin C <sub>min</sub> ↔	Co-administration is likely to result
	25-O-desacetyl-rifabutin C <sub>max</sub> ↔	in loss of therapeutic effect of
		rilpivirine (see section 4.3).
300 mg once daily	rilpivirine AUC ↓ 42%	
(+ 25 mg once daily	rilpivirine C <sub>min</sub> ↓ 48%	
rilpivirine)	rilpivirine C <sub>max</sub> \ 31%	
, ,	1 max 4	
<u> </u>	1	

200	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
300 mg once daily	rilpivirine AUC ↑ 16%*	
(+ 50 mg once daily	rilpivirine $C_{min} \leftrightarrow *$	
rilpivirine)	rilpivirine C <sub>max</sub> ↑ 43%*	
	* compared to 25 mg once daily rilpivirine	
	alone	
	(induction of CYP3A enzymes)	
Rifampicin*#	rifampicin AUC ↔	Rilpivirine must not be used in
600 mg once daily	rifampicin C <sub>min</sub> NA	combination with rifampicin as
	rifampicin $C_{max} \leftrightarrow$	co-administration is likely to result
	25-desacetyl-rifampicin AUC ↓ 9%	in loss of therapeutic effect of
	25-desacetyl-rifampicin C <sub>min</sub> NA	rilpivirine (see section 4.3).
	25-desacetyl-rifampicin $C_{max} \leftrightarrow$	(
	rilpivirine AUC \ 80%	
	rilpivirine $C_{min} \downarrow 89\%$	
	rilpivirine C <sub>max</sub> ↓ 69%	
	(' 1 ' COMPA	
Dia di	(induction of CYP3A enzymes)	<u> </u>
Rifapentine	Not studied. Significant decreases in	Rilpivirine must not be used in
	rilpivirine plasma concentrations are	combination with rifapentine as
	expected.	co-administration is likely to result
		in loss of therapeutic effect of
	(induction of CYP3A enzymes)	rilpivirine (see section 4.3).
MACROLIDE ANTIBIOTIC	CS	
Clarithromycin	Not studied. Increased exposure of	Where possible, alternatives such as
Erythromycin	rilpivirine is expected.	azithromycin should be considered.
		,
	(inhibition of CYP3A enzymes)	
GLUCOCORTICOIDS OR		
Dexamethasone	Not studied. Dose dependent	Rilpivirine should not be used in
	decreases in rilpivirine plasma	combination with systemic
(systemic, except for		
single dose use)	concentrations are expected.	dexamethasone (except as a single
	(' 1- 4' COVD2 A	dose) as co-administration may
	(induction of CYP3A enzymes)	result in loss of therapeutic effect of
		rilpivirine (see section 4.3).
		Alternatives should be considered,
		particularly for long-term use.
NARCOTIC ANALGESICS		T
Methadone*	R(-) methadone AUC ↓ 16%	No dose adjustments are required
60-100 mg once daily,	R(-) methadone $C_{min} \downarrow 22\%$	when initiating co-administration of
individualised dose	R(-) methadone $C_{max} \downarrow 14\%$	methadone with rilpivirine.
	rilpivirine AUC ↔*	However, clinical monitoring is
	rilpivirine $C_{min} \leftrightarrow^*$	recommended as methadone
	rilpivirine $C_{max} \leftrightarrow *$	maintenance therapy may need to
	* based on historic controls	be adjusted in some patients.
ANTIARRHYTHMICS		
Digoxin*	digoxin AUC ↔	No dose adjustment is required.
	digoxin C <sub>min</sub> NA	1.1. acct any somion is required.
	$\begin{array}{c} \text{digoxin } C_{\min} \text{ ivA} \\ \text{digoxin } C_{\max} \leftrightarrow \end{array}$	
ANTIDIABETICS	argonii omax v	1
Metformin*	matformin ALIC	No dogo adjustment is
wienormin*	metformin AUC ↔	No dose adjustment is required.
	metformin C <sub>min</sub> NA	
	metformin $C_{max} \leftrightarrow$	
HERBAL PRODUCTS		1
St John's wort	Not studied. Significant decreases in	Rilpivirine must not be used in
(Hypericum perforatum)	rilpivirine plasma concentrations are	combination with products
- '	expected.	containing St. John's wort as
	_	co-administration may result in loss
	(induction of CYP3A enzymes)	of therapeutic effect of rilpivirine
		(see section 4.3).
		(550 50011011 1.5).

ANALGESICS		
Paracetamol*#	paracetamol AUC ↔	No dose adjustment is required.
500 mg single dose	paracetamol C <sub>min</sub> NA	
	paracetamol $C_{max} \leftrightarrow$	
	rilpivirine AUC ↔	
	rilpivirine C <sub>min</sub> ↑ 26%	
	rilpivirine $C_{max} \leftrightarrow$	
ORAL CONTRACEPTIV	ES	
Ethinylestradiol*	ethinylestradiol AUC ↔	No dose adjustment is required.
0.035 mg once daily	ethinylestradiol $C_{min} \leftrightarrow$	
Norethindrone*	ethinylestradiol C <sub>max</sub> ↑ 17%	
1 mg once daily	norethindrone AUC ↔	
	norethindrone $C_{min} \leftrightarrow$	
	norethindrone $C_{max} \leftrightarrow$	
	rilpivirine AUC ↔*	
	rilpivirine $C_{min} \leftrightarrow *$	
	rilpivirine $C_{max} \leftrightarrow *$	
	* based on historic controls	
HMG CO-A REDUCTAS		
Atorvastatin*#	atorvastatin AUC ↔	No dose adjustment is required.
40 mg once daily	atorvastatin C <sub>min</sub> ↓ 15%	
	atorvastatin C <sub>max</sub> ↑ 35%	
	rilpivirine AUC ↔	
	rilpivirine $C_{min} \leftrightarrow$	
	rilpivirine C <sub>max</sub> ↓ 9%	
<b>PHOSPHODIESTERASE</b>	TYPE 5 (PDE-5) INHIBITORS	
Sildenafil*#	sildenafil AUC ↔	No dose adjustment is required.
50 mg single dose	sildenafil C <sub>min</sub> NA	
	sildenafil $C_{max} \leftrightarrow$	
	rilpivirine AUC ↔	
	rilpivirine $C_{min} \leftrightarrow$	
	rilpivirine $C_{max} \leftrightarrow$	
Vardenafil	Not studied.	No dose adjustment is required.
Tadalafil		

 $<sup>^{\</sup>Omega}$  % increase/decrease based on Drug-Drug Interaction studies with oral rilpivirine

#### QT prolonging medicinal products

Oral rilpivirine at the recommended dose of 25 mg once daily is not associated with a clinically relevant effect on QTc. Rilpivirine plasma concentrations after rilpivirine injections at the recommended dose of 600 mg monthly or 900 mg every 2 months, are comparable to those achieved with oral rilpivirine at a dose of 25 mg qd. In a study of healthy subjects, supratherapeutic doses of oral rilpivirine (75 mg once daily and 300 mg once daily) have been shown to prolong the QTc interval of the ECG (see section 5.1). Rilpivirine should be used with caution when co-administered with a medicinal product with a known risk of Torsade de Pointes (see section 4.4).

#### 4.6 Fertility, pregnancy and lactation

#### **Pregnancy**

The effect of rilpivirine on human pregnancy is unknown.

A moderate amount of data with oral rilpivirine in pregnant women (between 300-1000 pregnancy outcomes) indicate no malformative or foetal/neonatal toxicity of rilpivirine.

<sup>\*</sup> The interaction between rilpivirine and the medicinal product was evaluated in a clinical study. All other drug-drug interactions shown are predicted.

This interaction study has been performed with a dose higher than the recommended dose for rilpivirine assessing the maximal effect on the co-administered medicinal product. The dosing recommendation is applicable to the recommended dose of rilpivirine of 25 mg once daily.

A study of 19 pregnant women treated with oral rilpivirine in combination with a background regimen during the second and third trimesters, and postpartum, showed lower exposures of oral rilpivirine during pregnancy, therefore viral load should be monitored closely if rilpivirine is used during pregnancy.

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

Rilpivirine is not recommended during pregnancy unless the expected benefit justifies the potential risk.

An alternative oral regimen should be considered in line with current treatment guidelines. After discontinuation of rilpivirine, rilpivirine may remain in systemic circulation for up to 4 years in some patients (see section 4.4).

#### **Breast-feeding**

It is expected that rilpivirine will be secreted into human milk based on animal data, although this has not been confirmed in humans. Rilpivirine may be present in human milk for up to 4 years in some patients after discontinuation of rilpivirine.

In order to avoid transmission of HIV to the infant it is recommended that women living with HIV do not breast-feed.

#### **Fertility**

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

#### 4.7 Effects on ability to drive and use machines

Patients should be informed that fatigue, dizziness and somnolence could occur when treated with rilpivirine (see section 4.8).

#### 4.8 Undesirable effects

#### Summary of the safety profile

The most frequently reported ARs were injection site reactions, headache, and pyrexia.

#### Tabulated summary of adverse reactions

The ARs identified for rilpivirine and/or cabotegravir are listed by system organ class (SOC) and frequency (see Table 7). 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).

Table 7 Tabulated summary of adverse reactions<sup>1</sup>

MedDRA System Organ	Frequency	ARs for rilpivirine + cabotegravir regimen	
Class (SOC)	Category		
Blood and lymphatic	Common	decreased white blood cell count <sup>2</sup> , decreased	
system disorders		haemoglobin <sup>2</sup> , decreased platelet count <sup>2</sup>	
Immune System Disorders	Uncommon	immune reactivation syndrome <sup>2</sup>	
Metabolism and nutrition	Very common	increased total cholesterol (fasted) <sup>2</sup> , increased LDL	
disorders		cholesterol (fasted) <sup>2</sup>	
	Common	decreased appetite <sup>2</sup> , increased triglycerides (fasted) <sup>2</sup>	
Psychiatric disorders	Common	depression, anxiety, abnormal dreams, insomnia,	
		sleep disorder <sup>2</sup> , depressed mood <sup>2</sup>	
Nervous system disorders	Very common	headache	

	Common	dizziness
	Uncommon	somnolence, vasovagal reactions (in response to injections)
Gastrointestinal disorders	Very common	increased pancreatic amylase <sup>2</sup>
	Common	nausea, vomiting, abdominal pain <sup>3</sup> , flatulence, diarrhoea, abdominal discomfort <sup>2</sup> , dry mouth <sup>2</sup> , increased lipase <sup>2</sup>
Hepatobiliary disorders	Uncommon	hepatotoxicity
Skin and subcutaneous	Common	rash <sup>4</sup>
tissue disorders		
Musculoskeletal and connective tissue disorders	Common	myalgia
General disorders and administrative site	Very common	injection site reactions (pain and discomfort, nodule, induration), pyrexia <sup>5</sup>
conditions	Common	injection site reactions (swelling, erythema, pruritus, bruising, warmth, haematoma), fatigue, asthenia, malaise
	Uncommon	injection site reactions (cellulitis, abscess,
		anaesthesia, haemorrhage, discolouration)
Investigations	Common	weight increased
	Uncommon	transaminase increased, blood bilirubin increased

- The frequency of the identified ARs are based on all reported occurrences of the events and are not limited to those considered at least possibly related by the investigator.
- Additional adverse reactions seen with oral rilpivirine in other studies.
- <sup>3</sup> Abdominal pain includes the following grouped MedDRA preferred term: abdominal pain, upper abdominal pain.
- Rash includes the following grouped MedDRA preferred terms: rash, rash erythematous, rash generalised, rash macular, rash maculo-papular, rash morbilliform, rash papular, rash pruritic.
- Pyrexia includes the following grouped MedDRA preferred terms: pyrexia, feeling hot, body temperature increased. The majority of pyrexia events were reported within one week of injections.

The overall safety profile at week 96 and week 124 in the FLAIR study was consistent with that observed at week 48, with no new safety findings identified. In the extension phase of the FLAIR study, initiating the rilpivirine plus cabotegravir injection regimen without oral lead-in (direct to injection) was not associated with any new safety concerns related to omitting the oral lead-in phase.

#### Description of selected adverse reactions

Local Injection Site Reactions (ISRs)

Up to 1% of subjects discontinued treatment with rilpivirine and cabotegravir injections because of ISRs.

Injection site reactions were generally mild (Grade 1, 70%-75% of subjects) or moderate (Grade 2, 27%-36% of subjects). 3-4% of subjects experienced severe (Grade 3) ISRs. The median duration of ISR events was 3 days. The percentage of subjects reporting ISRs decreased over time.

#### Weight increased

At the week 48 time point, subjects in Phase 3 Studies FLAIR and ATLAS, who received rilpivirine plus cabotegravir gained a median of 1.5 kg in weight; subjects continuing on their current antiretroviral regimen (CAR) group gained a median of 1.0 kg (pooled analysis).

In the individual studies FLAIR and ATLAS, the median weight gains in the rilpivirine plus cabotegravir arms were 1.3 kg and 1.8 kg, respectively, compared to 1.5 kg and 0.3 kg in the CAR arms.

At the 48 week timepoint, in ATLAS-2M the median weight gain in both the monthly and every 2 months rilpivirine+cabotegravir dosing arms was 1.0 kg.

#### Changes in laboratory chemistry

Elevated transaminases (ALT/AST) were observed in subjects receiving rilpivirine plus cabotegravir during the clinical studies. These elevations were primarily attributed to acute viral hepatitis. A few subjects on oral rilpivirine plus oral cabotegravir treatment had transaminase elevations attributed to suspected drug-related hepatotoxicity; these changes were reversible upon discontinuation of treatment.

Small, non-progressive increases in total bilirubin (without clinical jaundice) were observed with treatment with rilpivirine plus cabotegravir. These changes are not considered clinically relevant as they likely reflect competition between cabotegravir and unconjugated bilirubin for a common clearance pathway (UGT1A1).

Elevated lipases were observed during clinical trials with rilpivirine plus cabotegravir. Grade 3 and 4 lipase increases occurred at a higher incidence with rilpivirine plus cabotegravir compared with CAR. These elevations were generally asymptomatic and did not lead to rilpivirine plus cabotegravir discontinuation. One case of fatal pancreatitis with Grade 4 lipase and confounding factors (including history of pancreatitis) has been reported in study ATLAS-2M for which the causality to the injection regimen could not be ruled out.

#### Paediatric population

Based on data from the week 16 (Cohort 1; n=25) and week 24 (Cohort 2; n=144) analyses of the MOCHA study (IMPAACT 2017), no new safety concerns were identified in adolescents (aged at least 12 years and weighing 35 kg or more) when compared with the safety profile established in adults.

#### 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 Appendix V.

#### 4.9 Overdose

There is currently limited experience with rilpivirine overdose. If overdose occurs, the patient should be treated supportively and as clinically indicated, with monitoring of vital signs and ECG (QT interval), as necessary. Since rilpivirine is highly bound to plasma protein, dialysis is unlikely to result in significant removal of the active substance.

#### 5. PHARMACOLOGICAL PROPERTIES

#### 5.1 Pharmacodynamic properties

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

#### Mechanism of action

Rilpivirine is a diarylpyrimidine NNRTI of HIV-1. Rilpivirine activity is mediated by non-competitive inhibition of HIV-1 reverse transcriptase (RT). Rilpivirine does not inhibit the human cellular DNA polymerases  $\alpha$ ,  $\beta$  and  $\gamma$ .

#### Antiviral activity in vitro

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

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

#### Resistance

Considering all of the available *in vitro* data and *in vivo* data generated with oral rilpivirine in previously untreated patients, the following resistance-associated mutations, when present at baseline, may affect the activity of rilpivirine: K101E, K101P, E138A, E138G, E138K, E138R, E138Q, V179L, Y181C, Y181I, Y181V, Y188L, H221Y, F227C, M230I, M230L, and the combination of L100I and K103N.

#### In cell culture

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

#### Virologically suppressed adults

The number of subjects who met confirmed virologic failure (CVF) criteria was low across the pooled Phase 3 studies ATLAS and FLAIR. There were 7 CVFs on rilpivirine plus cabotegravir (7/591, 1.2%) and 7 CVFs on current antiretroviral regimen (7/591, 1.2%) through week 48. In the rilpivirine plus cabotegravir group in the pooled analysis, 5/591 (0.8%) subjects had resistance development: 5/591 (0.8%) and 4/591 (0.7%) with resistance-associated mutations to rilpivirine (K101E [n=1], E138A/E/K/T [n=1], E138A [n=1], or E138K [n=2]) and/or cabotegravir (G140R [n=1], Q148R [n=2], or N155H [n=1]), respectively. The 4 CVFs on cabotegravir plus rilpivirine in FLAIR had HIV-1 subtype A1 (n=3) or AG (n=1). One CVF in FLAIR never received an injection. The 3 CVFs on cabotegravir plus rilpivirine in ATLAS had HIV-1 subtype A, A1, or AG. In 2 of these 3 CVFs the rilpivirine resistance-associated mutations observed at failure were also observed at baseline in PBMC HIV-1 DNA.

In the ATLAS-2M study 10 subjects met CVF criteria through week 48: 8/522 (1.5%) in the Q8W arm and 2/523 (0.4%) in the Q4W arm. In the Q8W group 5/522 (1.0%) had resistance development: 4/522 (0.8%) and 5/522 (1.0%) with resistance-associated mutations to rilpivirine (E138A [n=1], E138K [n=1], K101E [n=2], or Y188L [n=1]) and/or cabotegravir (Q148R [n=3] or N155H [n=4]), respectively. In the Q4W group 2/523 (0.4%) had resistance development: 1/523 (0.2%) and 2/523 (0.4%) had rilpivirine (K101E [n=1], M230L [n=1]) and/or cabotegravir (E138K [n=1], Q148R [n=1], or N155H [n=1]) resistance-associated mutations, respectively. At baseline in the Q8W arm, 5 subjects had rilpivirine resistance-associated mutations and 1 of those subjects carried a cabotegravir resistance-associated mutation. Neither subject in the Q4W arm had any rilpivirine or cabotegravir resistance-associated mutation at baseline. The 10 CVFs on cabotegravir plus rilpivirine in ATLAS-2M had HIV-1 subtype A (n=1), A1 (n=2), B (n=4), C (n=2), or Complex (n=1).

#### Cross-resistance

#### Site-directed NNRTI mutant virus

In a panel of 67 HIV-1 recombinant laboratory strains with one mutation at RT positions associated with NNRTI resistance, including the most commonly found K103N and Y181C, rilpivirine showed antiviral activity against 64 (96%) of these strains. The single resistance-associated mutations

associated with a loss of susceptibility to rilpivirine were: K101P, Y181I and Y181V. The K103N mutation did not result in reduced susceptibility to rilpivirine by itself, but the combination of K103N and L100I resulted in a 7-fold reduced susceptibility to rilpivirine.

#### Recombinant clinical isolates

Rilpivirine retained sensitivity (fold change ≤ biological cut-off) against 62% of 4,786 HIV-1 recombinant clinical isolates resistant to efavirenz and/or nevirapine.

#### Virologically suppressed adults

In the week 48 analysis of the Phase 3 studies ATLAS and FLAIR, 5/7 CVFs had phenotypic resistance against rilpivirine at failure. Among these 5 patients, phenotypic cross-resistance was observed against efavirenz (n=4), etravirine (n=3), and nevirapine (n=4).

#### Effects on electrocardiogram

No effect on QTcF interval was shown for oral rilpivirine at the recommended dose of 25 mg once daily in a randomised, placebo and active (moxifloxacin 400 mg once daily) controlled crossover study in 60 healthy adults, with 13 measurements over 24 hours at steady-state. Plasma rilpivirine concentrations after REKAMBYS injections are comparable to those achieved with oral rilpivirine at dose of 25 mg qd. REKAMBYS at the recommended dose of 600 mg monthly or 900 mg every 2 months is not associated with a clinically relevant effect on QTc.

When supratherapeutic doses of 75 mg once daily and 300 mg once daily of oral rilpivirine were studied in healthy adults, the maximum mean time-matched (95% upper confidence bound) differences in QTcF interval from placebo after baseline correction were 10.7 (15.3) and 23.3 (28.4) ms, respectively. Steady-state administration of oral rilpivirine 75 mg once daily and 300 mg once daily resulted in a mean  $C_{max}$  approximately 4.4-fold and 11.6-fold, respectively, higher than the mean steady-state  $C_{max}$  observed with the recommended 600 mg once monthly dose of REKAMBYS. Steady state administration of oral rilpivirine 75 mg once daily and 300 mg once daily resulted in a mean  $C_{max}$  approximately 4.1-fold and 10.7-fold, respectively, higher than the mean steady state  $C_{max}$  observed with the recommended 900 mg every 2 months dose of REKAMBYS.

#### Clinical efficacy and safety

Adults

#### Every 1 month dosing

The efficacy of REKAMBYS plus cabotegravir injection has been evaluated in two Phase 3 randomised, multicentre, active-controlled, parallel-arm, open-label, non-inferiority studies, FLAIR (201584) and ATLAS (201585). The primary analysis was conducted after all subjects completed their week 48 visit or discontinued the study prematurely.

#### Patients virologically suppressed (on prior dolutegravir-based regimen for 20 weeks)

In FLAIR, 629 HIV-1-infected, antiretroviral treatment (ART)-naive subjects received a dolutegravir INI containing regimen for 20 weeks (either dolutegravir/abacavir/lamivudine or dolutegravir + 2 other nucleoside reverse transcriptase inhibitors if subjects were HLA-B\*5701 positive). Subjects who were virologically suppressed (HIV-1 RNA < 50 copies per mL, n=566) were then randomised (1:1) to receive either a rilpivirine plus cabotegravir regimen or remain on the CAR. Subjects randomised to receive the rilpivirine plus cabotegravir regimen, initiated treatment with oral lead-in dosing with a cabotegravir (30 mg) tablet plus a rilpivirine (25 mg) tablet once daily for at least 4 weeks, followed by treatment with cabotegravir injection (month 1: 600 mg, month 2 onwards: 400 mg injection) plus rilpivirine injection (month 1: 900 mg injection, month 2 onwards: 600 mg injection), monthly, for up to 96 weeks.

#### Patients virologically suppressed (stable on prior ART for at least 6 months)

In ATLAS, 616 HIV-1-infected, ART-experienced, virologically-suppressed (for at least 6 months) subjects (HIV-1 RNA < 50 copies per mL) were randomised (1:1) and received either a rilpivirine plus cabotegravir regimen or remained on the CAR. Subjects randomised to receive the rilpivirine plus cabotegravir regimen initiated treatment with oral lead-in dosing with a cabotegravir (30 mg) tablet plus a rilpivirine (25 mg) tablet once daily for at least 4 weeks, followed by treatment with cabotegravir injection (month 1: 600 mg, month 2 onwards: 400 mg injection) plus rilpivirine injection (month 1: 900 mg injection, month 2 onwards: 600 mg injection), monthly, for an additional 44 weeks. In ATLAS, 50%, 17%, and 33% of subjects received an NNRTI, PI, or INI (respectively) as their baseline third treatment agent class prior to randomisation and this was similar between treatment arms.

#### Pooled Phase 3 studies

At baseline, in the pooled analysis, in the rilpivirine plus cabotegravir arm the median age of subjects was 38 years, 27% were female, 27% were non-white, 1% were  $\geq$  65 years and 7% had CD4+ cell count less than 350 cells per mm<sup>3</sup>; these characteristics were similar between treatment arms.

The primary endpoint of both studies was the proportion of subjects with plasma HIV-1 RNA  $\geq$  50 copies/mL at week 48 (snapshot algorithm for the ITT-E population).

In a pooled analysis of the two Phase 3 studies, rilpivirine plus cabotegravir was non-inferior to CAR on the proportion of subjects having plasma HIV-1 RNA  $\geq$  50 c/mL (1.9% and 1.7%, respectively) at week 48. The adjusted treatment difference between rilpivirine plus cabotegravir and CAR (0.2; 95% CI: -1.4, 1.7) met the non-inferiority criterion (upper bound of the 95% CI below 4%) [See Table 8].

The primary endpoint and other week 48 outcomes, including outcomes by key baseline factors, for FLAIR, ATLAS, and pooled data are shown in Table 8 and Table 9.

Table 8 Virologic outcomes of randomised treatment in FLAIR and ATLAS at week 48 (Snapshot analysis)

(Snapshot analysis)						
	FLAIR		ATLAS		Pooled Data	
	RPV+ CAB N=283	CAR N=283	RPV+ CAB N=308	CAR N=308	RPV+ CAB N=591	CAR N=591
HIV-1 RNA ≥ 50 copies/mL <sup>†</sup>	6 (2.1)	7 (2.5)	5 (1.6)	3 (1.0)	11 (1.9)	10 (1.7)
Treatment Difference % (95% CI)*	-0.4 (-2	2.8, 2.1)	0.7 (-1	.2, 2.5)	0.2 (-1.	4, 1.7)
HIV-1 RNA < 50 copies/mL	265 (93.6)	264 (93.3)	285 (92.5)	294 (95.5)	550 (93.1)	558 (94.4)
Treatment Difference % (95% CI)*	0.4 (-3	.7, 4.5)	-3.0 (-6	5.7, 0.7)	-1.4 (-4	.1, 1.4)
No virologic data at week 48 window	12 (4.2)	12 (4.2)	18 (5.8)	11 (3.6)	30 (5.1)	23 (3.9)
Reasons						
Discontinued study/study drug due to adverse event or death	8 (2.8)	2 (0.7)	11 (3.6)	5 (1.6)	19 (3.2)	7 (1.2)
Discontinued study/study drug for other reasons	4 (1.4)	10 (3.5)	7 (2.3)	6 (1.9)	11 (1.9)	16 (2.7)
Missing data during window but on study	0	0	0	0	0	0

Table 9 Proportion of subjects with plasma HIV-1 RNA ≥ 50 copies/mL at week 48 for key baseline factors (Snapshot outcomes)

	,	Pooled data from FLAIR and ATLAS			
Baseline	factors	RPV+CAB	CAR		
Baseline	lactors	N=591	N=591		
		n/N (%)	n/N (%)		
<b>Baseline CD4+</b>	< 350	0/42	2/54 (3.7)		
(cells/ mm <sup>3</sup> )	$\geq$ 350 to < 500	5/120 (4.2)	0/117		
	≥ 500	6/429 (1.4)	8/420 (1.9)		
Gender	Male	6/429 (1.4)	9/423 (2.1)		
	Female	5/162 (3.1)	1/168 (0.6)		
Race	White	9/430 (2.1)	7/408 (1.7)		
	Black African/American	2/109 (1.8)	3/133 (2.3)		
	Asian/Other	0/52	0/48		
BMI	$< 30 \text{ kg/m}^2$	6/491 (1.2)	8/488 (1.6)		
	$\geq 30 \text{ kg/m}^2$	5/100 (5.0)	2/103 (1.9)		
Age (years)	< 50	9/492 (1.8)	8/466 (1.7)		
,	≥ 50	2/99 (2.0)	2/125 (1.6)		
Baseline antiviral	PI	1/51 (2.0)	0/54		
therapy at randomisation	INI	6/385 (1.6)	9/382 (2.4)		
	NNRTI	4/155 (2.6)	1/155 (0.6)		

BMI=body mass index, PI=Protease inhibitor, INI=Integrase inhibitor, NNRTI=non-nucleoside reverse transcriptase inhibitor, RPV=rilpivirine, CAB=cabotegravir, CAR=current antiretroviral regimen

In the FLAIR and ATLAS studies, treatment differences across baseline characteristics (CD4+ count, gender, age, race, BMI, baseline third agent treatment class) were comparable.

#### Week 96 FLAIR

In the FLAIR study at 96 weeks, the results remained consistent with the results at 48 weeks. The proportion of subjects having plasma HIV-1 RNA  $\geq$  50 c/mL in rilpivirine plus cabotegravir (n=283) and CAR (n=283) was 3.2% and 3.2%, respectively (adjusted treatment difference between rilpivirine plus cabotegravir and CAR [0.0; 95% CI: -2.9, 2.9]). The proportion of subjects having plasma HIV-1 RNA  $\leq$  50 c/mL in rilpivirine plus cabotegravir and CAR was 87% and 89%, respectively (adjusted treatment difference between rilpivirine plus cabotegravir and CAR [-2.8; 95% CI: -8.2, 2.5]).

#### Week 124 FLAIR Direct to Injection versus Oral Lead-In

In the FLAIR study, an evaluation of safety and efficacy was performed at week 124 for patients electing to switch at week 100 from abacavir/dolutegravir/lamivudine to rilpivirine plus cabotegravir in the Extension Phase. Subjects were given the option to switch with or without an oral lead-in phase, creating an oral lead-in group and a direct to injection group.

At week 124, the proportion of subjects having plasma HIV-1 RNA  $\geq$  50 c/mL was 1/121 (0.8%) and 1/111 (0.9%) for the oral lead-in and direct to injection groups, respectively. The rates of virologic suppression (HIV-1 RNA < 50 c/mL) were similar in both the oral lead-in group (113/121 [93.4%]) and direct to injection group (110/111 [99.1%]).

<sup>\*</sup> Adjusted for baseline stratification factors.

<sup>†</sup> Includes subjects who discontinued for lack of efficacy, discontinued while not suppressed. N=Number of subjects in each treatment group, CI=confidence interval, CAR=current antiretroviral regimen, RPV=rilpivirine, CAB=cabotegravir.

#### Every 2 months dosing

#### Patients virologically suppressed (stable on prior ART for at least 6 months)

The efficacy and safety of rilpivirine injection given every 2 months, has been evaluated in one Phase 3b randomised, multicentre, parallel-arm, open-label, non-inferiority study, ATLAS-2M (207966). The primary analysis was conducted after all subjects completed their week 48 visit or discontinued the study prematurely.

In ATLAS-2M, 1045 HIV-1 infected, ART-experienced, virologically suppressed subjects were randomised (1:1) and received a rilpivirine plus cabotegravir injection regimen administered either every 2 months or monthly. Subjects initially on non-cabotegravir/rilpivirine treatment received oral lead-in treatment comprising one rilpivirine tablet (25 mg) plus one cabotegravir tablet (30 mg), daily, for at least 4 weeks. Subjects randomised to monthly rilpivirine injections (month 1: 900 mg injection, month 2 onwards: 600 mg injection) and cabotegravir injections (month 1: 600 mg injection, month 2 onwards: 400 mg injection administered) received treatment for an additional 44 weeks. Subjects randomised to every 2 months rilpivirine injections (900 mg injection at months 1, 2, 4 and every 2 months thereafter) and cabotegravir injections (600 mg injection at months 1, 2, 4 and every 2 months thereafter) received treatment for an additional 44 weeks. Prior to randomisation, 63%, 13% and 24% of subjects received rilpivirine plus cabotegravir for 0 weeks, 1 to 24 weeks and > 24 weeks, respectively.

At baseline, the median age of subjects was 42 years, 27% were female, 27% were non-white, 4% were ≥65 years, and 6% had a CD4+ cell count less than 350 cells per mm³; these characteristics were similar between the treatment arms.

The primary endpoint in ATLAS-2M was the proportion of subjects with a plasma HIV-1 RNA ≥50 c/mL at week 48 (snapshot algorithm for the ITT-E population).

In ATLAS-2M, rilpivirine plus cabotegravir administered every 2 months was non-inferior to cabotegravir and rilpivirine administered every month on the proportion of subjects having plasma HIV-1 RNA  $\geq$  50 c/mL (1.7% and 1.0%, respectively) at week 48. The adjusted treatment difference between cabotegravir plus rilpivirine administered every 2 months and every month (0.8; 95% CI: -0.6, 2.2) met the non-inferiority criterion (upper bound of the 95% CI below 4%).

Table 10 Virologic outcomes of randomised treatment of ATLAS-2M at 48 weeks (Snapshot analysis)

	Every 2 months Dosing (Q8W)	Monthly Dosing (Q4W)	
	N=522 (%)	N=523 (%)	
HIV-1 RNA≥ 50 copies/mL <sup>†</sup>	9 (1.7)	5 (1.0)	
Treatment Difference % (95% CI)*	0.8 (-0.6, 2.2)		
HIV-1 RNA < 50 copies/mL	492 (94.3)	489 (93.5)	
Treatment Difference % (95% CI)*	0.8 (-2.1, 3.7)		
No virologic data at week 48 window	21 (4.0)	29 (5.5)	
Reasons:			
Discontinued study due to AE or death	9 (1.7)	13 (2.5)	
Discontinued study for other reasons	12 (2.3)	16 (3.1)	
On study but missing data in window	0	0	

Table 11 Proportion of subjects with plasma HIV-1 RNA  $\geq$  50 copies/mL in ATLAS-2M at week 48 for key baseline factors (Snapshot outcomes).

Number of HIV-1 RNA  $\geq$  50 c/mL/ Total Assessed (%) **Baseline factors Every 2 months dosing** Monthly dosing (Q4W) (Q8W) **Baseline CD4+ cell** 1/27 (3.7) < 350 1/35 (2.9) 1/96 (1.0) count (cells/mm<sup>3</sup>) 350 to < 500 0/89 ≥ 500 7/391 (1.8) 4/407 (1.0) 4/385 (1.0) Gender Male 5/380 (1.3) Female 5/137 (3.5) 0/143 Race White 5/370 (1.4) 5/393 (1.3) Non-White 4/152 (2.6) 0/130 Black/African 0/90 4/101 (4.0) American Non-Black/African 5/421 (1.2) 5/421 (1.2) American **BMI**  $< 30 \text{ kg/m}^2$ 3/409 (0.7) 3/425 (0.7)  $\overline{6/1}13 (5.3)$  $> 30 \text{ kg/m}^2$ 2/98 (2.0) 4/137 (2.9) < 35 1/145 (0.7) Age (years) 35 to < 503/242 (1.2) 2/239 (0.8)  $\geq 50$ 2/143 (1.4) 2/139 (1.4) Prior exposure None 5/327 (1.5) 5/327 (1.5) CAB/RPV 1-24 weeks 3/69 (4.3) 0/68 > 24 weeks 1/126 (0.8) 0/128

BMI=body mass index, CAB=cabotegravir, RPV=rilpivirine

In the ATLAS-2M study, treatment differences on the primary endpoint across baseline characteristics (CD4+ lymphocyte count, gender, race, BMI, age and prior exposure to cabotegravir/rilpivirine) were not clinically meaningful.

The efficacy results at week 96 are consistent with the results of the primary endpoint at week 48. Rilpivirine plus cabotegravir injections administered every 2 months is non-inferior to rilpivirine and cabotegravir administered every month. The proportion of subjects having plasma HIV-1 RNA ≥50 c/mL at week 96 in rilpivirine plus cabotegravir every 2 months dosing (n=522) and rilpivirine plus cabotegravir monthly dosing (n=523) was 2.1% and 1.1% respectively (adjusted treatment difference between rilpivirine plus cabotegravir every 2 months dosing and monthly dosing [1.0; 95% CI: -0.6, 2.5]). The proportion of subjects having plasma HIV-1 RNA <50 c/mL at week 96 in rilpivirine plus cabotegravir every 2 months dosing and rilpivirine plus cabotegravir monthly dosing was 91% and 90.2% respectively (adjusted treatment difference between rilpivirine plus cabotegravir every 2 months dosing and monthly dosing [0.8; 95% CI: -2.8, 4.3]).

The efficacy results at week 152 are consistent with the results of the primary endpoint at week 48 and at week 96. Rilpivirine plus cabotegravir injections administered every 2 months is non-inferior to rilpivirine and cabotegravir administered every month. In an ITT analysis, the proportion of subjects having plasma HIV-1 RNA ≥50 c/mL at week 152 in rilpivirine plus cabotegravir every 2 months dosing (n=522) and rilpivirine plus cabotegravir monthly dosing (n=523) was 2.7% and 1.0% respectively (adjusted treatment difference between rilpivirine plus cabotegravir every 2 months dosing and monthly dosing [1.7; 95% CI: 0.1, 3.3]). In an ITT analysis, the proportion of subjects having plasma HIV-1 RNA <50 c/mL at week 152 in rilpivirine plus cabotegravir every 2 months dosing and rilpivirine plus cabotegravir monthly dosing was 87% and 86% respectively (adjusted treatment difference between rilpivirine plus cabotegravir every 2 months dosing and monthly dosing [1.5; 95% CI: -2.6, 5.6]).

<sup>\*</sup> Adjusted for baseline stratification factors.

<sup>†</sup> Includes subjects who discontinued for lack of efficacy, discontinued while not suppressed.

N=Number of subjects in each treatment group, CI=confidence interval, CAR=current antiretroviral regimen.

#### Post-hoc analyses

Multivariable analyses of pooled Phase 3 studies (ATLAS through 96 weeks, FLAIR through 124 weeks, ATLAS-2M through 152 weeks) examined the influence of various factors on the risk of CVF. The baseline factors analysis (BFA) examined baseline viral and participants characteristics and dosing regimen; and the multivariable analysis (MVA) included the baseline factors and incorporated post-baseline predicted plasma drug concentrations on CVF using regression modelling with a variable selection procedure. Following a total of 4291 person-years, the unadjusted CVF incidence rate was 0.54 per 100 person-years; 23 CVFs were reported (1.4% of 1651 individuals in these studies).

The BFA demonstrated rilpivirine resistance mutations (incidence rate ratio IRR=21.65, p<0.0001), HIV-1 subtype A6/A1 (IRR=12.87, p<0.0001), and body mass index IRR=1.09 per 1 unit increase, p=0.04; IRR=3.97 of  $\geq$ 30 kg/m², p=0.01) were associated with CVF. Other variables including Q4W or Q8W dosing, female gender, or CAB/INI resistance mutations had no significant association with CVF. A combination of at least 2 of the following key baseline factors was associated with an increased risk of CVF: rilpivirine resistance associated mutations, HIV-1 subtype A6/A1, or BMI  $\geq$  30 kg/m² (Table 12).

Table 12 Virologic outcomes by presence of key baseline factors of rilpivirine resistance mutations, HIV-1 Subtype  $A6/A1^1$  and  $BMI \ge 30 \text{ kg/m}^2$ 

Baseline Factors (number)	Virologic Successes <sup>2</sup>	Confirmed Virologic Failure (%) <sup>3</sup>
0	844/970 (87.0)	4/970 (0.4)
1	343/404 (84.9)	8/404 (2.0) <sup>4</sup>
≥ 2	44/57 (77.2)	11/57 (19.3) <sup>5</sup>
TOTAL	1231/1431 (86/0)	23/1431 (1.6) <sup>6</sup>
(95% Confidence Interval)	(84.1%, 87.8%)	(1.0%, 2.4%)

<sup>&</sup>lt;sup>1</sup> HIV-1 subtype A1 or A6 classification based on Los Alamos National Library panel from HIV Sequence database (June 2020).

In patients with at least two of these risk factors, the proportion of subjects who had a CVF was higher than observed in patients with none or one risk factor, with CVF identified in 6/24 patients [25.0%, 95% CI (9.8%, 46.7%)] treated with the every 2 months dosing regimen and 5/33 patients [15.2%, 95% CI (5.1%, 31.9%)] treated with the monthly dosing regimen.

#### Oral bridging with other ART

In a retrospective analysis of pooled data from 3 clinical studies (FLAIR, ATLAS-2M, and LATTE-2/study 200056), 29 subjects were included who received oral bridging for a median duration of 59 days (25<sup>th</sup> and 75<sup>th</sup> percentile 53-135) with ART other than rilpivirine plus cabotegravir (alternative oral bridging) during treatment with rilpivirine plus cabotegravir long-acting (LA) intramuscular (IM) injections. The median age of subjects was 32 years, 14% were female, 31% were non-white, 97% received an INI-based regimen for alternative oral bridging, 41% received an NNRTI as part of their alternative oral bridging regimen (including rilpivirine in 11/12 cases) and 62% received an NRTI. Three subjects withdrew during oral bridging or shortly following oral bridging for non-safety reasons. The majority (≥96%) of subjects maintained virologic suppression (plasma HIV-1 RNA <50 c/mL). During bridging with alternative oral bridging and during the period following alternative oral bridging (up to 2 rilpivirine plus cabotegravir injections following oral bridging), no cases of CVF (confirmed plasma HIV-1 RNA ≥200 c/mL) were observed.

Based on the FDA Snapshot algorithm of RNA <50 copies/mL at week 48 for ATLAS, at week 124 for FLAIR, at week 152 for ATLAS-2M.</p>

Defined as two consecutive measurements of HIV RNA ≥200 copies/mL.

<sup>&</sup>lt;sup>4</sup> Positive Predictive Value (PPV) <1%; Negative Predictive Value (NPV) 98.5%; sensitivity 34.8%; specificity 71.9%.

<sup>&</sup>lt;sup>5</sup> PPV 19.3%; NPV 99.1%; sensitivity 47.8%; specificity 96.7%.

Analysis dataset with all non-missing covariates for baseline factors (out of a total of 1651 individuals).

#### Paediatric population

The safety, acceptability, tolerability and pharmacokinetics of rilpivirine plus cabotegravir have been evaluated in an ongoing Phase 1/2 multicentre, open-label, non-comparative study, MOCHA (IMPAACT 2017).

In Cohort 2 of this study, 144 virologically suppressed adolescents discontinued their pre-study cART regimen and received one 25 mg rilpivirine tablet plus one 30 mg cabotegravir tablet daily for at least 4 weeks followed by every 2 months rilpivirine IM injections (months 1 and 2: 900 mg injection, and then 900 mg injection every 2 months) and cabotegravir IM injections (months 1 and 2: 600 mg injection, and then 600 mg injection every 2 months).

At baseline, the median age of participants was 15.0 years, the median weight was 48.5 kg (range: 35.2, 100.9), the median BMI was 19.5 kg/m2 (range: 16.0, 34.3), 51.4% were female, 98.6% were non-white, and 4 participants had a CD4+ cell count less than 350 cells per mm<sup>3</sup>.

Antiviral activity was assessed as a secondary objective, with 139 of the 144 participants (96.5% [snapshot algorithm]) remaining virologically suppressed (plasma HIV-1 RNA value <50 c/mL) at week 24.

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

#### 5.2 Pharmacokinetic properties

The population pharmacokinetic properties of rilpivirine have been evaluated in healthy and HIV-1 infected adults.

Table 13 Pharmacokinetic parameters of rilpivirine following once daily oral dosing, and after initial, monthly, or every two months intramuscular injections of rilpivirine in adults

ili auuits				
		Geometric mean (5th; 95th Percentile)		
Dosing phase	Dose regimen	AUC <sub>(0-tau)</sub> b	Cmax	Ctaub
		(ng•h/mL)	(ng/mL)	(ng/mL)
Oral Lead-In <sup>c</sup>	25 mg PO	2,083	116	79
	once daily	(1,125; 3,748)	(49; 244)	(32; 177)
Initial Injection <sup>a,d</sup>	900 mg IM	44,842	144	42
	initial dose	(21,712; 87,575)	(94; 221)	(22; 79)
Monthly Injection <sup>a,e</sup>	600 mg IM	68,324	121	86
	monthly	(39,042; 118,111)	(68; 210)	(50; 147)
Every 2 months	900 mg IM	132,450	138	69
Injection <sup>a,e</sup>	every 2 months	(76,638; 221,783)	(81; 228)	(38; 119)

<sup>&</sup>lt;sup>a</sup> Based on individual post-hoc estimates from rilpivirine IM population pharmacokinetic model (pooled data FLAIR, ATLAS and ATLAS-2M).

b tau is dosing interval: 24 hours for oral; 1 or 2 months for monthly or every 2 months IM injections.

<sup>&</sup>lt;sup>c</sup> For oral rilpivirine, C<sub>tau</sub> represents observed pooled data FLAIR, ATLAS and ATLAS-2M, AUC<sub>(0-tau)</sub> and C<sub>max</sub> represent pharmacokinetic data from oral rilpivirine Phase 3 studies.

When administered with oral lead-in, initial injection C<sub>max</sub> primarily reflects oral dosing because the initial injection was administered on the same day as the last oral dose. When administered without oral lead-in (direct to injection, n=110), the rilpivirine observed geometric mean (5<sup>th</sup>; 95<sup>th</sup> percentile) C<sub>max</sub> (1 week post initial injection) was 68 ng/mL (28, 220) and the C<sub>tau</sub> was 49 ng/mL (18, 138).

e Week 48 data.

#### **Absorption**

Rilpivirine prolonged-release injection exhibits absorption rate-limited kinetics (i.e., flip-flop pharmacokinetics) resulting from slow absorption from the gluteal muscle into the systemic circulation resulting in sustained rilpivirine plasma concentrations.

Following a single intramuscular dose, rilpivirine plasma concentrations are detectable the first day and gradually rise to reach maximum plasma concentrations after a median of 3-4 days. Rilpivirine has been detected in plasma up to 52 weeks or longer after administration of a single dose of rilpivirine. After 1 year of monthly or every 2 months injections, approximately 80% of the rilpivirine pharmacokinetic steady-state exposure is reached.

Plasma rilpivirine exposure increases in proportion or slightly less than in proportion to dose following single and repeat IM injections of doses ranging from 300 to 1200 mg.

#### Distribution

Rilpivirine is approximately 99.7% bound to plasma proteins *in vitro*, primarily to albumin. Based on population pharmacokinetics analysis, the typical apparent volume of the central compartment (Vc/F) for rilpivirine after IM administration was estimated to be 132 L, reflecting a moderate distribution to peripheral tissues.

Rilpivirine is present in cerebrospinal fluid (CSF). In HIV-1-infected subjects receiving a regimen of rilpivirine injection plus cabotegravir injection, the median rilpivirine CSF to plasma concentration ratio (n=16) was 1.07 to 1.32% (range: not quantifiable to 1.69%). Consistent with therapeutic rilpivirine concentrations in the CSF, CSF HIV-1 RNA (n=16) was < 50 c/mL in 100% and < 2 c/mL in 15/16 (94%) of subjects. At the same time point, plasma HIV-1 RNA (n=18) was < 50 c/mL in 100% and < 2 c/mL in 12/18 (66.7%) of subjects.

#### **Biotransformation**

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

#### Elimination

The mean apparent half-life of rilpivirine following rilpivirine administration is absorption rate-limited and was estimated to be 13-28 weeks.

The apparent plasma clearance (CL/F) of rilpivirine was estimated to be 5.08 L/h.

After single dose administration of oral <sup>14</sup>C-rilpivirine, on average 85% and 6.1% of the radioactivity could be retrieved in faeces and urine, respectively. In faeces, unchanged rilpivirine accounted for on average 25% of the administered dose. Only trace amounts of unchanged rilpivirine (< 1% of dose) were detected in urine.

#### Special patient populations

#### Gender

No clinically relevant differences in the rilpivirine exposure after intramuscular (IM) administration have been observed between men and women.

#### Race

No clinically relevant effect of race on the rilpivirine exposure after intramuscular administration has been observed.

#### BMI

No clinically relevant effect of BMI on the rilpivirine exposure after intramuscular administration has been observed.

#### **Elderly**

No clinically relevant effect of age on the rilpivirine exposure after intramuscular administration has been observed. Pharmacokinetic data for rilpivirine in subjects of > 65 years old are limited.

#### Renal impairment

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

#### Hepatic impairment

Rilpivirine is primarily metabolised and eliminated by the liver. In a study comparing 8 patients with mild hepatic impairment (Child-Pugh score A) to 8 matched controls, and 8 patients with moderate hepatic impairment (Child-Pugh score B) to 8 matched controls, the multiple dose exposure of oral rilpivirine was 47% higher in patients with mild hepatic impairment and 5% higher in patients with moderate hepatic impairment. However, it may not be excluded that the pharmacologically active, unbound, rilpivirine exposure is significantly increased in moderate hepatic impairment. No dose adjustment is suggested but caution is advised in patients with moderate hepatic impairment. Rilpivirine has not been studied in patients with severe hepatic impairment (Child-Pugh score C). Therefore, rilpivirine is not recommended in patients with severe hepatic impairment (see section 4.2).

#### HBV/HCV Co-infected Patients

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

#### Paediatric Patients

The pharmacokinetics of rilpivirine in children less than 12 years of age and adolescents weighing less than 35 kg have not been established with rilpivirine.

#### Adolescents

Population pharmacokinetic analyses revealed no clinically relevant differences in exposure between adolescent participants (at least 12 years of age and weighing 35 kg or more) and HIV-1 infected and uninfected adult participants. Therefore, no dosage adjustment is needed for adolescents weighing  $\geq$ 35 kg.

Table 14 Pharmacokinetic parameters of rilpivirine following once daily oral dosing, and after initial, monthly, or every two months intramuscular injections of rilpivirine in adolescents (aged 12 to less than 18 years and weighing ≥35 kg)

Dose G			Geometric me	Geometric mean (5th; 95th Percentile)		
Population	Dosing phase	regimen	AUC <sub>(0-tau)</sub> <sup>b</sup> (ng•h/mL)	C <sub>max</sub> (ng/mL)	C <sub>tau</sub> b (ng/mL)	
Adolescents	Oral Lead-In <sup>c</sup>	25 mg PO	2,389	144	76	
		once daily	(1,259; 4,414)	(81; 234)	(28; 184)	
	Initial Injection <sup>a,d</sup>	900 mg IM	35,259	135	37	
		initial dose	(20,301; 63,047)	(86; 211)	(22; 59)	
	Monthly	600 mg IM	84,280	146	109	
	Injection <sup>a,e</sup>	monthly	(49,444; 156,987)	(85; 269)	(65; 202)	

Every 2 months Injection <sup>a,f</sup>	900 mg IM every	110,686	108	62
'	2 months	(78,480; 151,744)	(68; 164)	(45; 88)

<sup>&</sup>lt;sup>a</sup> Based on individual post-hoc estimates from rilpivirine IM population pharmacokinetic model (MOCHA, IMPAACT 2017).

- b tau is dosing interval: 24 hours for oral; 1 or 2 months for monthly or every 2 months IM injections.
- <sup>c</sup> OLI PK parameter values represent steady state.
- When administered with oral lead-in, initial injection C<sub>max</sub> primarily reflects oral dosing because the initial injection was administered on the same day as the last oral dose; however, the AUC<sub>tau</sub> and the C<sub>tau</sub> value at Week 4 reflect the initial injection.
- <sup>e</sup> Every month injection: 11<sup>th</sup> RPV LA IM Injection (40-44 weeks after initiation injection).
- f Every 2 months injection: 6<sup>th</sup> RPV LA IM Injection (36-44 weeks after initiation injection).

#### 5.3 Preclinical safety data

All studies were performed with rilpivirine for oral use except for the studies on local tolerance with rilpivirine injections.

#### Repeated dose toxicity

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

#### Reproductive toxicology studies

Studies in animals have shown no evidence of relevant embryonic or foetal toxicity or an effect on reproductive function. There was no teratogenicity with oral rilpivirine in rats and rabbits. The exposures at the embryo-foetal No Observed Adverse Effects Levels (NOAELs) in rats and rabbits were respectively  $\geq 12$  times and  $\geq 57$  times the exposure in humans at the maximum recommended human daily dose of 25 mg once daily in HIV-1 infected patients or 600 mg or 900 mg intramuscular injection dose of rilpivirine long-acting injectable suspension.

#### Carcinogenesis and mutagenesis

Oral rilpivirine was evaluated for carcinogenic potential by oral gavage administration to mice and rats up to 104 weeks. At the lowest tested doses in the carcinogenicity studies, the systemic exposures (based on AUC) to rilpivirine were  $\geq 17$  times (mice) and  $\geq 2$  times (rats) the exposure in humans at the maximum recommended human daily dose of 25 mg once daily in HIV-1 infected patients or 600 mg or 900 mg intramuscular injection dose of rilpivirine long-acting injectable suspension. In rats, there were no drug-related neoplasms. In mice, rilpivirine was positive for hepatocellular neoplasms in both males and females. The observed hepatocellular findings in mice may be rodent-specific.

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

#### Local tolerance for rilpivirine

After long-term repeated IM administration of rilpivirine in dogs and minipigs, slight, short-lasting (i.e., 1-4 days in minipigs) erythema was observed, and white deposits were noted at the injection sites at necropsy, accompanied by swelling and discolouration of draining lymph nodes. Microscopic examination showed macrophage infiltration and eosinophilic deposits at the injection sites. A macrophage infiltration response was also noted in the draining/regional lymph nodes. These findings were considered to be a reaction to the deposited material rather than a manifestation of local irritation.

#### 6. PHARMACEUTICAL PARTICULARS

#### 6.1 List of excipients

poloxamer 338 citric acid monohydrate (E330) glucose monohydrate sodium dihydrogen phosphate monohydrate sodium hydroxide (E524) (to adjust pH and ensure isotonicity) water for injections

#### 6.2 Incompatibilities

This medicinal product must not be mixed with other medicinal products or diluents.

#### 6.3 Shelf life

3 years

Chemical and physical in-use stability has been demonstrated for 6 hours at 25 °C.

Once the suspension has been drawn into the syringe, the injection should be administered as soon as possible, but may remain in the syringe for up to 2 hours. If 2 hours are exceeded, the medicine, syringe, and needle must be discarded.

#### 6.4 Special precautions for storage

Store in a refrigerator (2  $^{\circ}$ C – 8  $^{\circ}$ C). Do not freeze.

Prior to administration, the vial should be brought to room temperature (not to exceed 25 °C). The vial may remain in the carton at room temperature for up to 6 hours; do not put back into the refrigerator. If not used within 6 hours, the vial must be discarded (refer to section 6.3).

#### 6.5 Nature and contents of container

Type I glass vial.

#### 600 mg pack

Each pack contains one clear 4-mL glass vial, with a butyl elastomer stopper and an aluminium overseal with a plastic flip-off button, 1 syringe (0.2 mL graduation), 1 vial adaptor and 1 needle for injection (23 gauge, 1½ inch).

#### 900 mg pack

Each pack contains one clear 4-mL glass vial, with a butyl elastomer stopper and an aluminium overseal with a plastic flip-off button, 1 syringe (0.2 mL graduation), 1 vial adaptor and 1 needle for injection (23 gauge, 1½ inch).

#### 6.6 Special precautions for disposal and other handling

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

Full instructions for use and handling of REKAMBYS are provided in the package leaflet (see Instructions for Use).

#### 7. MARKETING AUTHORISATION HOLDER

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

#### 8. MARKETING AUTHORISATION NUMBER

600 mg: EU/1/20/1482/001 900 mg: EU/1/20/1482/002

#### 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 17 December 2020

Date of latest renewal:

#### 10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency <a href="https://www.ema.europa.eu">https://www.ema.europa.eu</a>

#### **ANNEX II**

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

#### A. MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE

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

Janssen Pharmaceutica NV Turnhoutseweg 30 B-2340 Beerse Belgium

#### 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.
- Obligation to conduct post-authorisation measures

The MAH shall complete, within the stated timeframe, the below measures:

Description	Due date
The MAH will conduct a prospective cohort study (COMBINE-2 study) to collect	September
data from patients in order to assess clinical effectiveness, adherence, durability	2026
and discontinuations after initiating the cabotegravir and rilpivirine long acting	
regimen. The study will also monitor for resistance and response to subsequent	
antiretroviral regimens among patients who switched from cabotegravir and	
rilpivirine long acting regimen to another regimen. The MAH will submit interim	
study results annually and the final results of the study by September 2026.	
The MAH will conduct a real-world five-year Drug Utilisation Study (DUS). This	September
observational cohort study will aim to better understand the patient population	2027
receiving cabotegravir long acting injection and/or rilpivirine long acting injection	
containing regimens in routine clinical practice. The study will assess usage	
patterns, adherence, and post marketing clinical effectiveness of these regimens	
and monitor for resistance among virologic failures for whom data on resistance	
testing are available. The MAH will submit interim study results annually and the	
final results of the DUS by September 2027.	

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

# OUTER CARTON – 600 mg 1. NAME OF THE MEDICINAL PRODUCT REKAMBYS 600 mg prolonged-release suspension for injection rilpivirine

#### 2. STATEMENT OF ACTIVE SUBSTANCE(S)

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

Each vial contains 600 mg of rilpivirine

#### 3. LIST OF EXCIPIENTS

Excipients: poloxamer 338, citric acid monohydrate, glucose monohydrate, sodium dihydrogen phosphate monohydrate, sodium hydroxide to adjust pH and ensure isotonicity, water for injections

#### 4. PHARMACEUTICAL FORM AND CONTENTS

Prolonged-release suspension for injection

Contents:

1 vial

1 vial adaptor

1 syringe

1 injection needle

2 mL

#### 5. METHOD AND ROUTE OF ADMINISTRATION

Read the package leaflet before use.

For intramuscular use.

Open here

## 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	e at 2 °C - 8 °C. Do not freeze.
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
Turn	sen-Cilag International NV houtseweg 30 40 Beerse ium
12.	MARKETING AUTHORISATION NUMBER(S)
EU/1	./20/1482/001
13.	BATCH NUMBER
Lot	
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE
17.	UNIQUE IDENTIFIER – 2D BARCODE
2D b	arcode carrying the unique identifier included.
18.	UNIQUE IDENTIFIER – HUMAN READABLE DATA
PC SN NN	

## PARTICULARS TO APPEAR ON THE INTERMEDIATE PACKAGING BACKING CARD (IN CARTON) – 600 mg

1. NAME OF THE MEDICINAL PRODUCT
REKAMBYS 600 mg prolonged-release suspension for injection rilpivirine
2. STATEMENT OF ACTIVE SUBSTANCE(S)
2. STATEMENT OF ACTIVE SUBSTANCE(S)
3. LIST OF EXCIPIENTS
3. EIST OF EACH LENTS
4 DHADMACEUTICAL EODM AND CONTENTS
4. PHARMACEUTICAL FORM AND CONTENTS
2 mL
5. METHOD AND ROUTE OF ADMINISTRATION
For intramuscular use.
Dood the Instructions For Health fore grouping DEVAMOVS
Read the Instructions For Use before preparing REKAMBYS
6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT
6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN
7. OTHER SPECIAL WARNING(S), IF NECESSARY
8. EXPIRY DATE
9. SPECIAL STORAGE CONDITIONS
The strain of th
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
12. MARKETING AUTHORISATION NUMBER(S)

EU/1/20/1482/001

13.	BATCH NUMBER
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE
17.	UNIQUE IDENTIFIER – 2D BARCODE
18.	UNIQUE IDENTIFIER – HUMAN READABLE DATA

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS		
VIAL – 600 mg		
1. NAME OF THE MEDICINAL PRODUCT		
REKAMBYS 600 mg prolonged-release suspension for injection rilpivirine IM		
2. METHOD OF ADMINISTRATION		
3. EXPIRY DATE		
EXP		
4. BATCH NUMBER		
Lot		
5. CONTENTS BY WEIGHT, BY VOLUME, OR UNIT		
2 mL		
6. OTHER		

# OUTER CARTON – 900 mg 1. NAME OF THE MEDICINAL PRODUCT REKAMBYS 900 mg prolonged-release suspension for injection rilpivirine 2. STATEMENT OF ACTIVE SUBSTANCE(S)

## 3. LIST OF EXCIPIENTS

Each vial contains 900 mg of rilpivirine

Excipients: poloxamer 338, citric acid monohydrate, glucose monohydrate, sodium dihydrogen phosphate monohydrate, sodium hydroxide to adjust pH and ensure isotonicity, water for injections

#### 4. PHARMACEUTICAL FORM AND CONTENTS

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

Prolonged-release suspension for injection

Contents:

1 vial

1 vial adaptor

1 syringe

1 injection needle

3 mL

#### 5. METHOD AND ROUTE OF ADMINISTRATION

Read the package leaflet before use.

For intramuscular use.

Open here

# 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 at 2 °C - 8 °C. Do not freeze.
10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
Janssen-Cilag International NV Turnhoutseweg 30 B-2340 Beerse Belgium
12. MARKETING AUTHORISATION NUMBER(S)
EU/1/20/1482/002
13. BATCH NUMBER
Lot
14. GENERAL CLASSIFICATION FOR SUPPLY
15. INSTRUCTIONS ON USE
16. INFORMATION IN BRAILLE
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 INTERMEDIATE PACKAGING BACKING CARD (IN CARTON) – 900 mg

1.	NAME OF THE MEDICINAL PRODUCT		
	REKAMBYS 900 mg prolonged-release suspension for injection rilpivirine		
2.	STATEMENT OF ACTIVE SUBSTANCE(S)		
3.	LIST OF EXCIPIENTS		
	DAST OF BIRCH IE. (10		
4.	PHARMACEUTICAL FORM AND CONTENTS		
	THE MANAGE TENET ON THE CONTENTS		
3 mL			
5.	METHOD AND ROUTE OF ADMINISTRATION		
For i	ntramuscular use.		
Read	the Instructions For Use before preparing REKAMBYS		
read	and instructions for one before preparing field in 19		
6.	SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN		
7.	OTHER SPECIAL WARNING(S), IF NECESSARY		
8.	EXPIRY DATE		
9.	SPECIAL STORAGE CONDITIONS		
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		
12.	MARKETING AUTHORISATION NUMBER(S)		
EI 1/1	/20/1/82/002		
ĽU/I	EU/1/20/1482/002		

13.	BATCH NUMBER
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE
17.	UNIQUE IDENTIFIER – 2D BARCODE
18.	UNIQUE IDENTIFIER – HUMAN READABLE DATA

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS		
VIAL – 900 mg		
1. NAME OF THE MEDICINAL PRODUCT		
REKAMBYS 900 mg prolonged-release suspension for injection rilpivirine IM		
2. METHOD OF ADMINISTRATION		
3. EXPIRY DATE		
EXP		
4. BATCH NUMBER		
Lot		
5. CONTENTS BY WEIGHT, BY VOLUME, OR UNIT		
3 mL		
6. OTHER		

B. PACKAGE LEAFLET

#### Package leaflet: Information for the user REKAMBYS 600 mg prolonged-release suspension for injection rilpivirine

This medicine is subject to additional monitoring. This will allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

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

#### 1. What REKAMBYS is and what it is used for

REKAMBYS contains the active ingredient rilpivirine. It is one of a group of medicines called non-nucleoside reverse transcriptase inhibitors (NNRTIs) that are used for the treatment of human immunodeficiency virus type 1 (HIV-1) infection.

REKAMBYS works together with other HIV medicines to block the ability of the virus to make more copies of itself. REKAMBYS injections do not cure HIV infection but help reduce the amount of HIV in your body and keeps it at a low level. This holds off damage to the immune system and the development of infections and diseases associated with AIDS.

REKAMBYS is always given with another HIV medicine called cabotegravir injection. They are used together in adults and adolescents (at least 12 years of age and weighing at least 35 kg) whose HIV-1 infection is already under control.

#### 2. What you need to know before you use REKAMBYS

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

**Do not use REKAMBYS if you are taking any of the following medicines** as they may affect the way REKAMBYS or the other medicine works:

- carbamazepine, oxcarbazepine, phenobarbital, phenytoin (medicines to treat epilepsy and prevent seizures)
- rifabutin, rifampicin, rifapentine (medicines to treat some bacterial infections such as tuberculosis)
- dexamethasone (a corticosteroid used in a variety of conditions such as inflammation and allergic reactions) as a course of treatment by mouth or injection
- products that contain St John's wort (*Hypericum perforatum*, a herbal remedy used for depression).

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

#### Warnings and precautions

Talk to your doctor or pharmacist before using REKAMBYS.

#### Tell your doctor about your situation

Check the following points and tell your doctor if any of them apply to you.

- Tell your doctor if you have ever had **problems with your liver**, including hepatitis B or hepatitis C, or **problems with your kidneys**. Your doctor may check how well your liver or kidneys work to decide if you can use REKAMBYS. See 'Uncommon side effects' in section 4 of this leaflet for signs of liver damage.
- Tell your doctor immediately if you notice any **symptoms of infections** (for example, fever, chills, sweats). In some patients with HIV, inflammation from previous infections may occur soon after starting HIV treatment. It is believed that these symptoms are due to an improvement in the body's immune response, enabling the body to fight infections that were present previously but caused no obvious symptoms.
- Also tell your doctor straight away if you notice any 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. This is because autoimmune disorders (conditions in which the immune system mistakenly 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.
- Tell your doctor if you are taking any medicines that you have been told may cause a life-threatening irregular heartbeat (torsade de pointes).

#### **Reactions to Injections**

Post-injection reaction symptoms have happened within minutes in some people after receiving their rilpivirine injection. Most symptoms resolved within a few minutes after the injection. Symptoms of post-injection reactions may include: difficulty breathing, stomach cramps, rash, sweating, numbness of your mouth, feeling anxious, feeling warm, feeling lightheaded or feeling like you are going to pass out (faint), blood pressure changes, and pain (e.g., back and chest). Tell your healthcare professional if you experience these symptoms after you receive your injections.

#### Regular appointments are important

It is important that you **attend your planned appointments** to receive REKAMBYS, to control your HIV infection and to stop your illness from getting worse. Do not miss any visits, it is very important for the success of your treatment. If you cannot attend a planned visit, inform your doctor as soon as possible. Talk to your doctor if you are thinking about stopping treatment. If you are late receiving your REKAMBYS injection, or if you stop receiving REKAMBYS, you will need to take other medicines to treat HIV infection and to reduce the risk of the virus becoming resistant as the drug levels in your body will be too low to treat the HIV infection.

#### Children

REKAMBYS is not for use in children less than 12 years of age or adolescents weighing less than 35 kg, because it has not been studied in these patients.

#### Other medicines and REKAMBYS

Tell your healthcare provider if you are taking, have recently taken or might take any other medicines. Some medicines may affect the levels of REKAMBYS in the blood if you are taking them while being treated with REKAMBYS, or REKAMBYS may affect how well the other medicine works.

REKAMBYS must not be given with some other medicines (see 'Do not use REKAMBYS' in section 2).

The effects of REKAMBYS or other medicines might change if you use REKAMBYS together with any of the following medicines:

- clarithromycin, erythromycin (antibiotics)
- methadone (used to treat narcotic withdrawal and dependence)

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

#### **Pregnancy and breast-feeding**

Tell your doctor immediately if you are pregnant or if you plan to become pregnant. Your doctor will consider the benefit and the risk to you and your baby of using REKAMBYS while you are pregnant. If you are planning to have a baby, talk to your doctor in advance, as rilpivirine can remain in your body for up to 4 years after the last injection of REKAMBYS.

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**

Some patients may feel tired, dizzy or drowsy during treatment with REKAMBYS. Do not drive or operate machinery if you have any of these side effects.

#### **REKAMBYS** contains sodium

This medicine contains less than 1 mmol sodium (23 mg) per 2 mL injection, that is to say essentially 'sodium-free'.

#### 3. How REKAMBYS is given

A nurse or doctor will give you REKAMBYS as an injection in the muscle of your buttock (*intramuscular*, or IM injection).

You will be given your injection either once every month or once every 2 months, together with another injectable medicine called cabotegravir. Your doctor will explain how often the medicine will be given.

When you start treatment with REKAMBYS, you and your doctor may decide to start with daily treatment of one 25 mg rilpivirine tablet with a meal and one 30 mg cabotegravir tablet for one month before your first REKAMBYS injection. This is called the *lead-in period* - taking the tablets before you receive REKAMBYS and cabotegravir injections will allow your doctor to test how well these medicines suit you.

The other option is that you and your doctor may decide to start directly with REKAMBYS injections.

If you are going to be given REKAMBYS every month, your treatment will be as follows:

	When	
Medicine	First injection	Second injection onwards, every month
Rilpivirine	single injection of 900 mg	600 mg by injection every month
Cabotegravir	single injection of 600 mg	400 mg by injection every month

If you are going to be given REKAMBYS every 2 months, your treatment will be as follows:

	When	
Medicine	First and second injections, one	Third injection onwards, every two
	month apart	months
Rilpivirine	single injection of 900 mg	900 mg by injection, every 2 months
Cabotegravir	single injection of 600 mg	600 mg by injection, every 2 months

#### If you miss a REKAMBYS injection

It is important that you keep your regular planned appointments to receive your injection. If you miss an appointment, contact your doctor immediately to make a new appointment.

**Talk to your doctor** if you think you will not be able to receive your REKAMBYS injection at the usual time. Your doctor may recommend you take tablets instead, until you are able to have a REKAMBYS injection again.

#### If you are given too much REKAMBYS

A doctor or nurse will give this medicine to you, so it is unlikely that you will be given too much. If you are worried, tell the doctor or nurse.

#### Don't stop using REKAMBYS without advice from your doctor.

Use REKAMBYS for as long as your doctor recommends. Don't stop unless your doctor advises you to.

Low levels of rilpivirine (the active ingredient of REKAMBYS) can remain in your body for up to 4 years after stopping treatment. However, once you received your last REKAMBYS injection, the low levels of rilpivirine that remain will not work well enough against the virus which then can become resistant. To keep your HIV-1 infection under control and to stop the virus becoming resistant, you must start a different HIV treatment by the time your next REKAMBYS injection was planned.

#### 4. Possible side effects

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

The following is a list of side effects that have been reported when REKAMBYS is used with cabotegravir injection.

Very common side effects (affects at least 1 in 10 people)

- headache
- injection site reactions these are generally mild to moderate and became less frequent over time. Symptoms may include: pain and discomfort, a hardened mass or lump
- feeling hot/feverish (pyrexia), which may occur within one week after injections

Common side effects (affects less than 1 in 10 people)

- depression
- anxiety
- abnormal dreams
- sleeping difficulty (insomnia)
- dizziness
- feeling sick (nausea)
- vomiting
- belly pain (abdominal pain)
- wind (flatulence)
- diarrhoea
- rash
- muscle pain (myalgia)
- tiredness (fatigue)
- feeling weak (asthenia)
- generally feeling unwell (malaise)
- weight gain
- injection site reactions these are generally mild to moderate and became less frequent over time. Symptoms may include: redness, itching, swelling, warmth or bruising (which may include discolouration or a collection of blood under the skin)

Uncommon side effects (affects less than 1 in 100 people)

- feeling drowsy (somnolence)
- feeling lightheaded, during or after an injection. This may lead to fainting.
- liver damage (signs may include yellowing of the skin and the whites of the eyes loss of appetite, itching, tenderness in the belly, light-coloured stools or unusually dark urine).
- changes in liver blood tests (increase in *transaminases*)
- an increase in *bilirubin* (a substance produced by the liver) in the blood.
- injection site reactions these are generally mild to moderate and became less frequent over time. Symptoms may include: numbness, minor bleeding, an abscess (collection of pus) or cellulitis (heat, swelling or redness)

#### Other side effects

• Severe abdominal pain caused by inflammation of the pancreas (pancreatitis).

The following side effects that can occur with rilpivirine tablets may also occur with REKAMBYS injection:

Very Common side effects (affects at least 1 in 10 people)

• increase in cholesterol and/or pancreatic amylase in your blood

Common side effects (affects less than 1 in 10 people)

- decreased appetite
- sleep disorders
- depressed mood
- stomach discomfort
- dry mouth
- low white blood cell and/or platelet count, decrease in haemoglobin in your blood, increase in triglycerides and/or lipase in your blood

Uncommon side effects (affects less than 1 in 100 people)

• signs or symptoms of inflammation or infection, for example fever, chills, sweats (*immune reactivation syndrome, see section 2 for more details*)

#### **Reporting of side effects**

If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system listed in Appendix V. By reporting side effects you can help provide more information on the safety of this medicine.

#### 5. How to store REKAMBYS

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

Store in a refrigerator (2 °C - 8 °C). Do not freeze.

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 REKAMBYS contains

- The active substance is rilpivirine. Each 2 mL vial contains 600 mg rilpivirine.
- The excipients are poloxamer 338, citric acid monohydrate (E330), glucose monohydrate, sodium dihydrogen phosphate monohydrate, sodium hydroxide (E524) to adjust pH and ensure isotonicity, and water for injections.

#### What REKAMBYS looks like and contents of the pack

Prolonged-release suspension for injection. REKAMBYS is presented in a glass vial. The pack also contains 1 syringe, 1 vial adaptor, and 1 injection needle.

#### **Marketing Authorisation Holder**

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

#### Manufacturer

Janssen Pharmaceutica NV Turnhoutseweg 30 B-2340 Beerse Belgium

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

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#### The following information is intended for healthcare professionals only:

#### **REKAMBYS 2 mL injection Instructions for Use:**

#### **Overview**

A complete dose requires two injections:

2 mL of cabotegravir and 2 mL of rilpivirine.

Cabotegravir and rilpivirine are suspensions that do not need further dilution or reconstitution. The preparation steps for both medicines are the same. Carefully follow these instructions when preparing the suspension for injection to avoid leakage.

Cabotegravir and rilpivirine are for intramuscular use only. Both injections must be administered to separate gluteal injection sites.

Note: The ventrogluteal site is recommended. The administration order is not important.

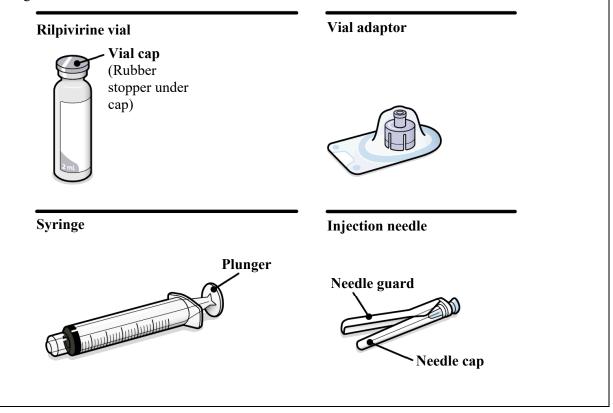
## **Storage information**

- Store in refrigerator at 2 °C to 8 °C.
  - Do not freeze.

#### Your pack contains

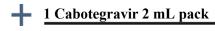
- 1 vial of rilpivirine
- 1 vial adaptor
- 1 syringe
- 1 injection needle (23 gauge, 1½ inch)

Consider the patient's build and use medical judgment to select an appropriate injection needle length.



## You will also need

- Non-sterile gloves
- 2 alcohol swabs
- 2 gauze pads
- A suitable sharps container

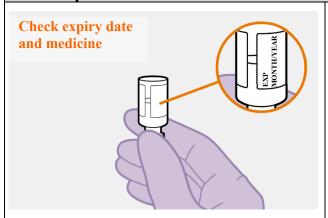




Make sure to have the cabotegravir pack close by before starting.

## **Preparation**

## 1. Inspect vial



- Check that the expiry date has not passed.
- Inspect the vials immediately. If you can see foreign matter, do not use the product.
- **Do not** use if the expiry date has passed.

## 2. Wait 15 minutes



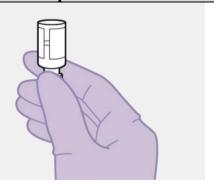
• Wait at least 15 minutes before you are ready to give the injection to allow the medicine to come to room temperature.

## 3. Shake vigorously



• Hold the vial firmly and vigorously shake for a full 10 seconds as shown.

## 4. Inspect suspension



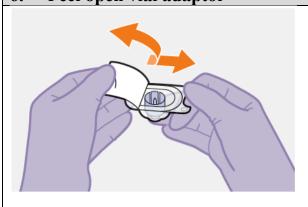
- Invert the vial and check the resuspension. It should look uniform. If the suspension is not uniform, shake the vial again.
- It is also normal to see small air bubbles.
  - **Note:** Vial preparation order is not important.

#### 5. Remove vial cap



- Remove the cap from the vial.
- Wipe the rubber stopper with an alcohol swab.
  - **Do not** allow anything to touch the rubber stopper after wiping it.

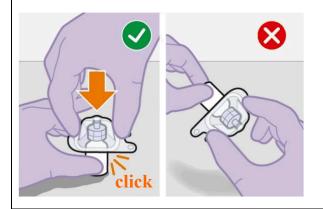
#### 6. Peel open vial adaptor



• Peel off the paper backing from the vial adaptor packaging.

**Note: Do not** remove the adaptor from its packaging for the next step. The adaptor **will not** fall out when the packaging is turned upside down.

## 7. Attach vial adaptor



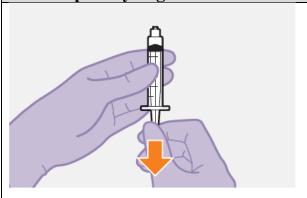
- Place the vial on a flat surface.
- Press the vial adaptor straight down onto the vial, as shown.
- The vial adaptor should click securely into place.

8. Lift off the packaging



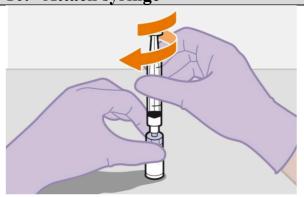
• Lift off the vial adaptor packaging, as shown.

## 9. Prepare syringe



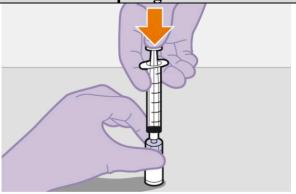
- Remove the syringe from its packaging.
- Draw 1 mL of air into the syringe. This will make it easier to draw up the liquid later.

## 10. Attach syringe



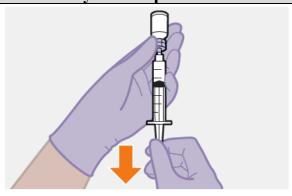
- Hold the vial adaptor and vial firmly, as shown.
- Screw the syringe firmly onto the vial adaptor.

## 11. Press the plunger



• Press the plunger all the way down to push the air into the vial.

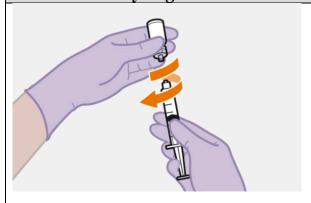
## 12. Slowly draw up dose



• Invert the syringe and vial, and slowly withdraw as much of the liquid as possible into the syringe. There might be more liquid than dose amount.

**Note:** Keep the syringe upright to avoid leakage.

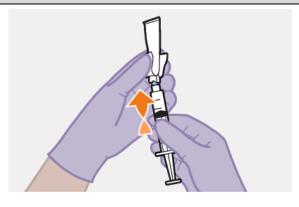
## 13. Unscrew syringe



- Hold the syringe plunger firmly in place as shown to prevent leakage. It is normal to feel some back pressure.
- Screw the syringe off the vial adaptor, holding the vial adaptor as shown.

**Note:** Check that the suspension looks uniform and milky white.

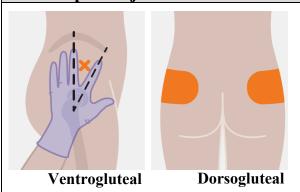
#### 14. Attach needle



- Peel open the needle packaging part way to expose the needle base.
- Keeping the syringe upright, firmly twist the syringe onto the needle.
- Remove the needle packaging from the needle.

## Injection

## 15. Prepare injection site

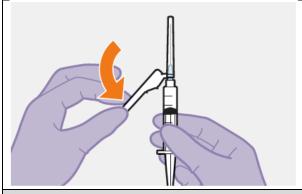


Injections must be administered to the gluteal sites. Select from the following areas for the injection:

- Ventrogluteal (recommended)
- Dorsogluteal (upper outer quadrant)

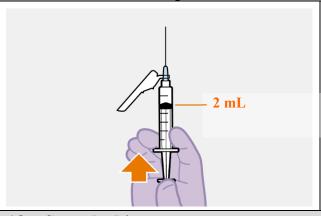
**Note:** For gluteal intramuscular use only. **Do not** inject intravenously.

#### 16. Remove cap



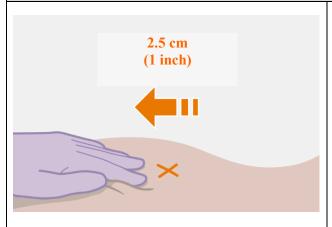
- Fold the needle guard away from the needle.
- Pull off the injection needle cap.

## 17. Remove extra liquid



- Hold the syringe with the needle pointing up. Press the plunger to the 2 mL dose to remove extra liquid and any air bubbles.
  - **Note:** Clean the injection site with an alcohol swab. Allow the skin to air dry before continuing.

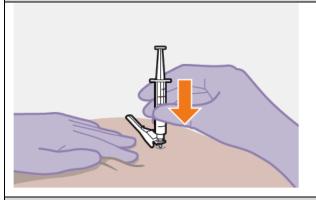
#### 18. Stretch skin



Use the z-track injection technique to minimise medicine leakage from the injection site.

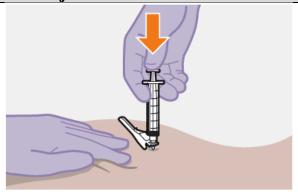
- Firmly drag the skin covering the injection site, displacing it by about 2.5 cm (1 inch).
- Keep it held in this position for the injection.

## 19. Insert needle



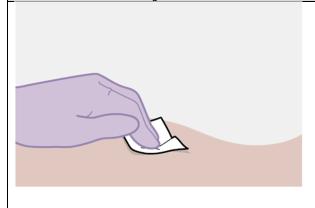
• Insert the needle to its full depth, or deep enough to reach the muscle.

## 20. Inject dose



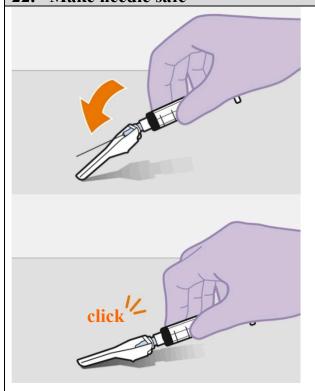
- Still holding the skin stretched slowly press the plunger all the way down.
- Ensure the syringe is empty.
- Withdraw the needle and release the stretched skin immediately.

## 21. Assess the injection site



- Apply pressure to the injection site using a gauze.
- A small bandage may be used if a bleed occurs.
- **Do not** massage the area.

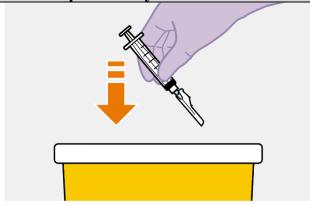
## 22. Make needle safe



- Fold the needle guard over the needle.
- Gently apply pressure using a hard surface to lock the needle guard in place.
- The needle guard will make a click when it locks.

## After injection

## 23. Dispose safely



• Dispose of used needles, syringes, vials and vial adaptors according to local health and safety laws.

## Repeat for 2nd medicine



If you have not yet injected cabotegravir follow its own specific instructions for use for preparation and injection of the medicine.

#### **Questions and Answers**

## 1. How long can the medicine be left out of the refrigerator?

It is best to inject the medicine as soon as it reaches room temperature. However, the vial may sit in the carton at room temperature (maximum temperature of 25 °C) for up to 6 hours; do not put back into the refrigerator. If not used within 6 hours, the vial must be discarded.

#### 2. How long can the medicine be left in the syringe?

It is best to inject the (room temperature) medicine as soon as possible after drawing it up. However, the medicine can remain in the syringe for up to 2 hours before injecting.

If 2 hours are exceeded, the medicine, syringe and needle must be discarded.

#### 3. Why do I need to inject air into the vial?

Injecting 1 mL of air into the vial makes it easier to draw up the dose into the syringe. Without the air, some liquid may flow back into the vial unintentionally, leaving less than intended in the syringe.

#### 4. Does the order in which I give the medicines matter?

No, the order is unimportant.

#### 5. Is it safe to warm the vial up to room temperature more quickly?

It is best to let the vial come to room temperature naturally. However, you can use the warmth of your hands to speed up the warm up time, but make sure the vial does not get above 25 °C. Do not use any other heating methods.

#### 6. Why is the ventrogluteal administration approach recommended?

The ventrogluteal approach, into the gluteus medius muscle, is recommended because it is located away from major nerves and blood vessels. A dorsogluteal approach, into the gluteus maximus muscle, is acceptable, if preferred by the healthcare professional. The injection should not be administered in any other site.

#### Package leaflet: Information for the user REKAMBYS 900 mg prolonged-release suspension for injection rilpivirine

This medicine is subject to additional monitoring. This will allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

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

#### 1. What REKAMBYS is and what it is used for

REKAMBYS contains the active ingredient rilpivirine. It is one of a group of medicines called non-nucleoside reverse transcriptase inhibitors (NNRTIs) that are used for the treatment of human immunodeficiency virus type 1 (HIV-1) infection.

REKAMBYS works together with other HIV medicines to block the ability of the virus to make more copies of itself. REKAMBYS injections do not cure HIV infection but help reduce the amount of HIV in your body and keeps it at a low level. This holds off damage to the immune system and the development of infections and diseases associated with AIDS.

REKAMBYS is always given with another HIV medicine called cabotegravir injection. They are used together in adults and adolescents (at least 12 years of age and weighing at least 35 kg) whose HIV-1 infection is already under control.

#### 2. What you need to know before you use REKAMBYS

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

**Do not use REKAMBYS if you are taking any of the following medicines** as they may affect the way REKAMBYS or the other medicine works:

- carbamazepine, oxcarbazepine, phenobarbital, phenytoin (medicines to treat epilepsy and prevent seizures)
- rifabutin, rifampicin, rifapentine (medicines to treat some bacterial infections such as tuberculosis)
- dexamethasone (a corticosteroid used in a variety of conditions such as inflammation and allergic reactions) as a course of treatment by mouth or injection
- products that contain St John's wort (*Hypericum perforatum*, a herbal remedy used for depression).

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

#### Warnings and precautions

Talk to your doctor or pharmacist before using REKAMBYS.

#### Tell your doctor about your situation

Check the following points and tell your doctor if any of them apply to you.

- Tell your doctor if you have ever had **problems with your liver**, including hepatitis B or hepatitis C, or **problems with your kidneys**. Your doctor may check how well your liver or kidneys work to decide if you can use REKAMBYS. See 'Uncommon side effects' in section 4 of this leaflet for signs of liver damage.
- Tell your doctor immediately if you notice any **symptoms of infections** (for example, fever, chills, sweats). In some patients with HIV, inflammation from previous infections may occur soon after starting HIV treatment. It is believed that these symptoms are due to an improvement in the body's immune response, enabling the body to fight infections that were present previously but caused no obvious symptoms.
- Also tell your doctor straight away if you notice any 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. This is because autoimmune disorders (conditions in which the immune system mistakenly 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.
- Tell your doctor if you are taking any medicines that you have been told may cause a life-threatening irregular heartbeat (torsade de pointes).

#### **Reactions to Injections**

Post-injection reaction symptoms have happened within minutes in some people after receiving their rilpivirine injection. Most symptoms resolved within a few minutes after the injection. Symptoms of post-injection reactions may include: difficulty breathing, stomach cramps, rash, sweating, numbness of your mouth, feeling anxious, feeling warm, feeling lightheaded or feeling like you are going to pass out (faint), blood pressure changes, and pain (e.g., back and chest). Tell your healthcare professional if you experience these symptoms after you receive your injections.

#### Regular appointments are important

It is important that you **attend your planned appointments** to receive REKAMBYS, to control your HIV infection and to stop your illness from getting worse. Do not miss any visits, it is very important for the success of your treatment. If you cannot attend a planned visit, inform your doctor as soon as possible. Talk to your doctor if you are thinking about stopping treatment. If you are late receiving your REKAMBYS injection, or if you stop receiving REKAMBYS, you will need to take other medicines to treat HIV infection and to reduce the risk of the virus becoming resistant as the drug levels in your body will be too low to treat the HIV infection.

#### Children

REKAMBYS is not for use in children less than 12 years of age or adolescents weighing less than 35 kg, because it has not been studied in these patients.

#### Other medicines and REKAMBYS

Tell your healthcare provider if you are taking, have recently taken or might take any other medicines. Some medicines may affect the levels of REKAMBYS in the blood if you are taking them while being treated with REKAMBYS, or REKAMBYS may affect how well the other medicine works.

REKAMBYS must not be given with some other medicines (see 'Do not use REKAMBYS' in section 2).

The effects of REKAMBYS or other medicines might change if you use REKAMBYS together with any of the following medicines:

- clarithromycin, erythromycin (antibiotics)
- methadone (used to treat narcotic withdrawal and dependence)

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

#### **Pregnancy and breast-feeding**

Tell your doctor immediately if you are pregnant or if you plan to become pregnant. Your doctor will consider the benefit and the risk to you and your baby of using REKAMBYS while you are pregnant. If you are planning to have a baby, talk to your doctor in advance, as rilpivirine can remain in your body for up to 4 years after the last injection of REKAMBYS.

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**

Some patients may feel tired, dizzy or drowsy during treatment with REKAMBYS. Do not drive or operate machinery if you have any of these side effects.

#### **REKAMBYS** contains sodium

This medicine contains less than 1 mmol sodium (23 mg) per 3 mL injection, that is to say essentially 'sodium-free'.

#### 3. How REKAMBYS is given

A nurse or doctor will give you REKAMBYS as an injection in the muscle of your buttock (*intramuscular*, or IM injection).

You will be given your injection either once every month or once every 2 months, together with another injectable medicine called cabotegravir. Your doctor will explain how often the medicine will be given.

When you start treatment with REKAMBYS, you and your doctor may decide to start with daily treatment of one 25 mg rilpivirine tablet with a meal and one 30 mg cabotegravir tablet for one month before your first REKAMBYS injection. This is called the *lead-in period* - taking the tablets before you receive REKAMBYS and cabotegravir injections will allow your doctor to test how well these medicines suit you.

The other option is that you and your doctor may decide to start directly with REKAMBYS injections.

If you are going to be given REKAMBYS every month, your treatment will be as follows:

	When	
Medicine	First injection	Second injection onwards, every month
Rilpivirine	single injection of 900 mg	600 mg by injection every month
Cabotegravir	single injection of 600 mg	400 mg by injection every month

If you are going to be given REKAMBYS every 2 months, your treatment will be as follows:

	When	
Medicine	First and second injections, one	Third injection onwards, every two
	month apart	months
Rilpivirine	single injection of 900 mg	900 mg by injection, every 2 months
Cabotegravir	single injection of 600 mg	600 mg by injection, every 2 months

#### If you miss a REKAMBYS injection

It is important that you keep your regular planned appointments to receive your injection. If you miss an appointment, contact your doctor immediately to make a new appointment.

**Talk to your doctor** if you think you will not be able to receive your REKAMBYS injection at the usual time. Your doctor may recommend you take tablets instead, until you are able to have a REKAMBYS injection again.

#### If you are given too much REKAMBYS

A doctor or nurse will give this medicine to you, so it is unlikely that you will be given too much. If you are worried, tell the doctor or nurse.

#### Don't stop using REKAMBYS without advice from your doctor.

Use REKAMBYS for as long as your doctor recommends. Don't stop unless your doctor advises you to.

Low levels of rilpivirine (the active ingredient of REKAMBYS) can remain in your body for up to 4 years after stopping treatment. However, once you received your last REKAMBYS injection, the low levels of rilpivirine that remain will not work well enough against the virus which then can become resistant. To keep your HIV-1 infection under control and to stop the virus becoming resistant, you must start a different HIV treatment by the time your next REKAMBYS injection was planned.

#### 4. Possible side effects

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

The following is a list of side effects that have been reported when REKAMBYS is used with cabotegravir injection.

Very common side effects (affects at least 1 in 10 people)

- headache injection site reactions - these are generally mild to moderate and became less frequent over time. Symptoms may include: pain and discomfort, a hardened mass or lump
- feeling hot/feverish (pyrexia), which may occur within one week after injections.

Common side effects (affects less than 1 in 10 people)

- depression
- anxiety
- abnormal dreams
- sleeping difficulty (insomnia)
- dizziness
- feeling sick (nausea)
- vomiting
- belly pain (abdominal pain)
- wind (flatulence)
- diarrhoea
- rash
- muscle pain (myalgia)
- tiredness (fatigue)
- feeling weak (asthenia)
- generally feeling unwell (malaise)
- weight gain
- injection site reactions these are generally mild to moderate and became less frequent over time. Symptoms include: redness, itching, swelling, warmth or bruising (which may include discolouration or a collection of blood under the skin)

Uncommon side effects (affects less than 1 in 100 people)

- feeling drowsy (somnolence)
- feeling lightheaded, during or after an injection. This may lead to fainting.
- liver damage (signs may include yellowing of the skin and the whites of the eyes loss of appetite, itching, tenderness in the belly, light-coloured stools or unusually dark urine).
- changes in liver blood tests (increase in *transaminases*)
- an increase in *bilirubin* (a substance produced by the liver) in the blood.
- injection site reactions these are generally mild to moderate and became less frequent over time. Symptoms include: numbness, minor bleeding, an abscess (collection of pus) or cellulitis (heat, swelling or redness)

#### Other side effects

• Severe abdominal pain caused by inflammation of the pancreas (pancreatitis).

The following side effects that can occur with rilpivirine tablets may also occur with REKAMBYS injection:

Very Common side effects (affects at least 1 in 10 people)

• increase in cholesterol and/or pancreatic amylase in your blood

Common side effects (affects less than 1 in 10 people)

- decreased appetite
- sleep disorders
- depressed mood
- stomach discomfort
- dry mouth
- low white blood cell and/or platelet count, decrease in haemoglobin in your blood, increase in triglycerides and/or lipase in your blood

Uncommon side effects (affects less than 1 in 100 people)

• signs or symptoms of inflammation or infection, for example fever, chills, sweats (*immune reactivation syndrome, see section 2 for more details*)

#### Reporting of side effects

If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system listed in Appendix V. By reporting side effects you can help provide more information on the safety of this medicine.

#### 5. How to store REKAMBYS

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

Store in a refrigerator (2 °C - 8 °C). Do not freeze.

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 REKAMBYS contains

- The active substance is rilpivirine. Each 3 mL vial contains 900 mg rilpivirine.
- The excipients are poloxamer 338, citric acid monohydrate (E330), glucose monohydrate, sodium dihydrogen phosphate monohydrate, sodium hydroxide (E524) to adjust pH and ensure isotonicity, and water for injections.

#### What REKAMBYS looks like and contents of the pack

Prolonged-release suspension for injection. REKAMBYS is presented in a glass vial. The pack also contains 1 syringe, 1 vial adaptor, and 1 injection needle.

#### **Marketing Authorisation Holder**

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

#### Manufacturer

Janssen Pharmaceutica NV Turnhoutseweg 30 B-2340 Beerse Belgium

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

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#### This leaflet was last revised in

Detailed information on this medicine is available on the European Medicines Agency web site:  $\underline{\text{https://www.ema.europa.eu}}$ 

#### The following information is intended for healthcare professionals only:

#### **REKAMBYS 3 mL injection Instructions for Use:**

#### **Overview**

A complete dose requires two injections:

3 mL of cabotegravir and 3 mL of rilpivirine.

Cabotegravir and rilpivirine are suspensions that do not need further dilution or reconstitution. The preparation steps for both medicines are the same. Carefully follow these instructions when preparing the suspension for injection to avoid leakage.

Cabotegravir and rilpivirine are for intramuscular use only. Both injections must be administered to separate gluteal injection sites.

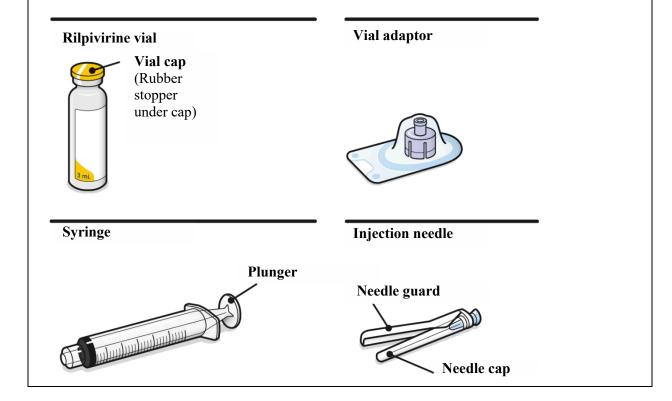
Note: The ventrogluteal site is recommended. The administration order is not important.

## Storage information

- Store in refrigerator at 2 °C to 8 °C.
- **Do not** freeze.

#### Your pack contains

- 1 vial of rilpivirine
- 1 vial adaptor
- 1 syringe
- 1 injection needle (23 gauge, 1½ inch) Consider the patient's build and use medical judgment to select an appropriate injection needle length.



## You will also need

- Non-sterile gloves
- 2 alcohol swabs
- 2 gauze pads
- A suitable sharps container



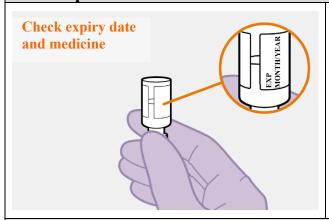
#### 1 Cabotegravir 3 mL pack



Make sure to have the cabotegravir pack close by before starting.

## **Preparation**

## 1. Inspect vial



- Check that the expiry date has not passed.
- Inspect the vials immediately. If you can see foreign matter, do not use the product.
- **Do not** use if the expiry date has passed.

## 2. Wait 15 minutes



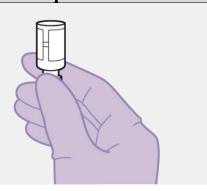
• Wait at least 15 minutes before you are ready to give the injection to allow the medicine to come to room temperature.

## 3. Shake vigorously



• Hold the vial firmly and vigorously shake for a full 10 seconds as shown.

#### 4. Inspect suspension



- Invert the vial and check the resuspension. It should look uniform. If the suspension is not uniform, shake the vial again.
- It is also normal to see small air bubbles.

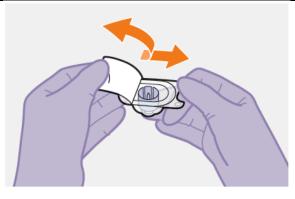
**Note:** Vial preparation order is not important.

## 5. Remove vial cap



- Remove the cap from the vial.
- Wipe the rubber stopper with an alcohol swab.
  - **Do not** allow anything to touch the rubber stopper after wiping it.

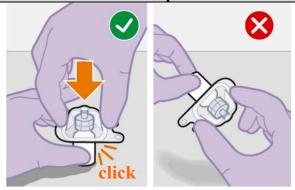
## 6. Peel open vial adaptor



• Peel off the paper backing from the vial adaptor packaging.

**Note: Do not** remove the adaptor from its packaging for the next step. The adaptor **will not** fall out when the packaging is turned upside down.

## 7. Attach vial adaptor



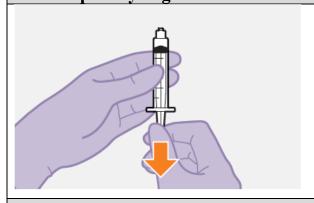
- Place the vial on a flat surface.
- Press the vial adaptor straight down onto the vial, as shown.
- The vial adaptor should click securely into place.

8. Lift off the packaging



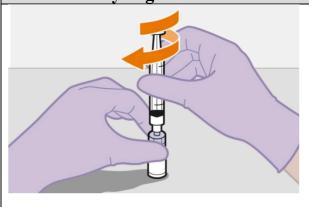
• Lift off the vial adaptor packaging, as shown.

## 9. Prepare syringe



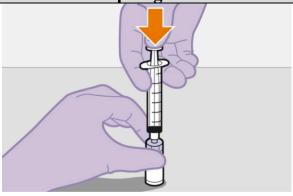
- Remove the syringe from its packaging.
- Draw 1 mL of air into the syringe. This will make it easier to draw up the liquid later.

## 10. Attach syringe



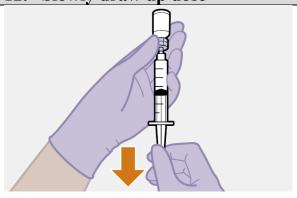
- Hold the vial adaptor and vial firmly, as shown.
- Screw the syringe firmly onto the vial adaptor.

## 11. Press the plunger



• Press the plunger all the way down to push the air into the vial.

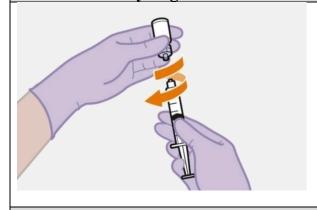
## 12. Slowly draw up dose



• Invert the syringe and vial, and slowly withdraw as much of the liquid as possible into the syringe. There might be more liquid than dose amount.

**Note:** Keep the syringe upright to avoid leakage.

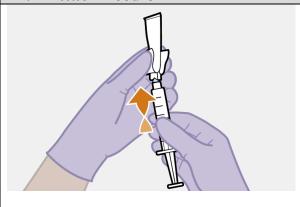
## 13. Unscrew syringe



- Hold the syringe plunger firmly in place as shown to prevent leakage. It is normal to feel some back pressure.
- Screw the syringe off the vial adaptor, holding the vial adaptor as shown.

**Note:** Check that the suspension looks uniform and milky white.

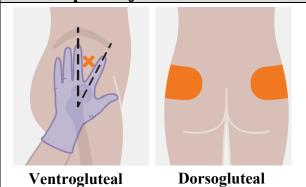
#### 14. Attach needle



- Peel open the needle packaging part way to expose the needle base.
- Keeping the syringe upright, firmly twist the syringe onto the needle.
- Remove the needle packaging from the needle.

#### **Injection**

## 15. Prepare injection site

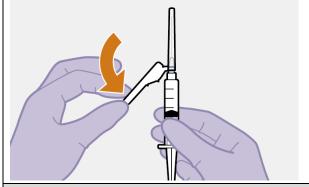


Injections must be administered to the gluteal sites. Select from the following areas for the injection:

- Ventrogluteal (recommended)
- Dorsogluteal (upper outer quadrant)

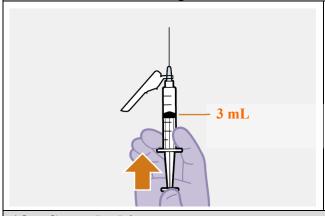
**Note:** For gluteal intramuscular use only. **Do not** inject intravenously.

## 16. Remove cap



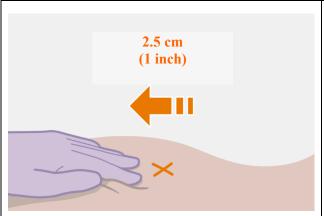
- Fold the needle guard away from the needle.
- Pull off the injection needle cap.

## 17. Remove extra liquid



- Hold the syringe with the needle pointing up. Press the plunger to the 3 mL dose to remove extra liquid and any air bubbles.
  - **Note:** Clean the injection site with an alcohol swab. Allow the skin to air dry before continuing.

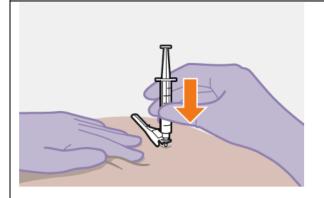
#### 18. Stretch skin



Use the z-track injection technique to minimise medicine leakage from the injection site.

- Firmly drag the skin covering the injection site, displacing it by about 2.5 cm (1 inch).
- Keep it held in this position for the injection.

## 19. Insert needle



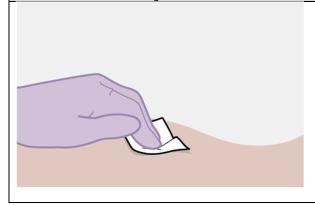
• Insert the needle to its full depth, or deep enough to reach the muscle.

## 20. Inject dose



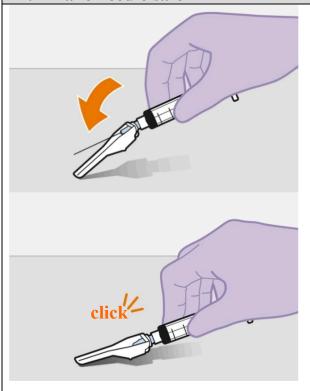
- Still holding the skin stretched slowly press the plunger all the way down.
- Ensure the syringe is empty.
- Withdraw the needle and release the stretched skin immediately.

## 21. Assess the injection site



- Apply pressure to the injection site using a gauze.
- A small bandage may be used if a bleed occurs.
- **Do not** massage the area.

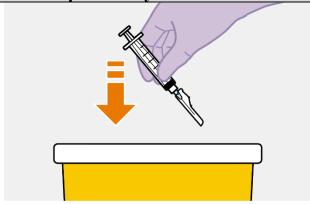
## 22. Make needle safe



- Fold the needle guard over the needle.
- Gently apply pressure using a hard surface to lock the needle guard in place.
- The needle guard will make a click when it locks.

## After injection

## 23. Dispose safely



• Dispose of used needles, syringes, vials and vial adaptors according to local health and safety laws.

## Repeat for 2nd medicine



If you have not yet injected cabotegravir follow its own specific instructions for use for preparation and injection of the medicine.

#### **Questions and Answers**

#### 1. How long can the medicine be left out of the refrigerator?

It is best to inject the medicine as soon as it reaches room temperature. However, the vial may sit in the carton at room temperature (maximum temperature of 25 °C) for up to 6 hours; do not put back into the refrigerator. If not used within 6 hours, the vial must be discarded.

#### 2. How long can the medicine be left in the syringe?

It is best to inject the (room temperature) medicine as soon as possible after drawing it up. However, the medicine can remain in the syringe for up to 2 hours before injecting.

If 2 hours are exceeded, the medicine, syringe and needle must be discarded.

#### 3. Why do I need to inject air into the vial?

Injecting 1 mL of air into the vial makes it easier to draw up the dose into the syringe. Without the air, some liquid may flow back into the vial unintentionally, leaving less than intended in the syringe.

#### 4. Does the order in which I give the medicines matter?

No, the order is unimportant.

#### 5. Is it safe to warm the vial up to room temperature more quickly?

It is best to let the vial come to room temperature naturally. However, you can use the warmth of your hands to speed up the warm up time, but make sure the vial does not get above 25 °C.

Do not use any other heating methods.

#### 6. Why is the ventrogluteal administration approach recommended?

The ventrogluteal approach, into the gluteus medius muscle, is recommended because it is located away from major nerves and blood vessels. A dorsogluteal approach, into the gluteus maximus muscle, is acceptable, if preferred by the healthcare professional. The injection should not be administered in any other site.