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

Rybrevant 350 mg concentrate for solution for infusion.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

One mL of concentrate for solution for infusion contains 50 mg amivantamab. One 7 mL vial contains 350 mg of amivantamab.

Amivantamab is a fully-human Immunoglobulin G1 (IgG1)-based bispecific antibody directed against the epidermal growth factor (EGF) and mesenchymal-epidermal transition (MET) receptors, produced by a mammalian cell line (Chinese Hamster Ovary [CHO]) using recombinant DNA technology.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Concentrate for solution for infusion.

The solution is colourless to pale yellow, with a pH of 5.7 and an osmolality of approximately 310 mOsm/kg.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Rybrevant is indicated:

- in combination with carboplatin and pemetrexed for the first-line treatment of adult patients with advanced non-small cell lung cancer (NSCLC) with activating EGFR Exon 20 insertion mutations.
- as monotherapy for treatment of adult patients with advanced NSCLC with activating EGFR Exon 20 insertion mutations, after failure of platinum-based therapy.

4.2 Posology and method of administration

Treatment with Rybrevant should be initiated and supervised by a physician experienced in the use of anticancer medicinal products.

Rybrevant should be administered by a healthcare professional with access to appropriate medical support to manage infusion-related reactions (IRRs) if they occur.

Before initiation of Rybrevant therapy, EGFR Exon 20 insertion mutation-positive status in tumour tissue or plasma specimens must be established using a validated test method. If no mutation is detected in a plasma specimen, tumour tissue should be tested if available in sufficient amount and quality due to the potential for false negative results using a plasma-test (see section 5.1).

Posology

Premedications should be administered to reduce the risk of IRRs with Rybrevant (see below "Dose modifications" and "Recommended concomitant medicinal products").

Every 3 weeks

The recommended dosages of Rybrevant, when used in combination with carboplatin and pemetrexed, is provided in Table 1 (see below "Infusion rates" and Table 5).

 Table 1:
 Recommended dosage of Rybrevant every 3 weeks

Body weight at	Rybrevant	Schedule	Number of
baseline ^a	dose		vials
Less than 80 kg	1400 mg	Weekly (total of 4 doses) from Weeks 1 to 4	4
		• Week 1 - split infusion on Day 1 and Day 2	
		• Weeks 2 to 4 - infusion on Day 1	
	1750 mg	Every 3 weeks starting at Week 7 onwards	5
Greater than or	1750 mg	Weekly (total of 4 doses) from Weeks 1 to 4	5
equal to 80 kg		• Week 1 - split infusion on Day 1 and Day 2	
		• Weeks 2 to 4 - infusion on Day 1	
	2100 mg	Every 3 weeks starting at Week 7 onwards	6

Dose adjustments not required for subsequent body weight changes.

When used in combination with carboplatin and pemetrexed, Rybrevant should be administered after carboplatin and pemetrexed in the following order: pemetrexed, carboplatin and then Rybrevant. See section 5.1 and the manufacturer's prescribing information for dosing instructions for carboplatin and pemetrexed.

Every 2 weeks

The recommended dosages of Rybrevant monotherapy is provided in Table 2 (see below "Infusion rates" and Table 6).

Table 2: Recommended dosage of Rybrevant every 2 weeks

Body weight at	Rybrevant	Schedule Numbe	
baseline ^a	dose		vials
Less than 80 kg		Weekly (total of 4 doses) from weeks 1 to 4	
	1050 mg	• Week 1 - split infusion on Day 1 and Day 2	2
	1030 mg	• Weeks 2 to 4 - infusion on Day 1	3
		Every 2 weeks starting at Week 5 onwards	
Greater than or		Weekly (total of 4 doses) from Weeks 1 to 4	
equal to 80 kg	1400 mg	• Week 1 - split infusion on Day 1 and Day 2	4
	1400 mg	• Weeks 2 to 4 - infusion on Day 1	4
		Every 2 weeks starting at Week 5 onwards	

^a Dose adjustments not required for subsequent body weight changes.

Duration of treatment

It is recommended that patients are treated with Rybrevant until disease progression or unacceptable toxicity.

Missed dose

If a planned dose is missed, the dose should be administered as soon as possible and the dosing schedule should be adjusted accordingly, maintaining the treatment interval.

Dose modifications

Dosing should be interrupted for Grade 3 or 4 adverse reactions until the adverse reaction resolves to \leq Grade 1 or baseline. If an interruption is 7 days or less, restart at the current dose. If an interruption is longer than 7 days, it is recommended restarting at a reduced dose as presented in Table 3. See also specific dose modifications for specific adverse reactions below Table 3.

Table 3: Recommended dose modifications for adverse reactions

Dose*	Dose after 1 st interruption for adverse reaction	Dose after 2 nd interruption for adverse reaction	Dose after 3 rd interruption for adverse reaction
1050 mg	700 mg	350 mg	
1400 mg	1050 mg	700 mg	Discontinuo Dyknovant
1750 mg	1400 mg	1050 mg	Discontinue Rybrevant
2100 mg	1750 mg	1400 mg	

^{*} Dose at which the adverse reaction occurred

Infusion-related reactions

Infusion should be interrupted at the first sign of IRRs. Additional supportive medicinal products (e.g., additional glucocorticoids, antihistamine, antipyretics and antiemetics) should be administered as clinically indicated (see section 4.4).

- Grade 1-3 (mild-severe): Upon recovery of symptoms, resume infusion at 50% of the previous rate. If there are no additional symptoms, the rate may be increased per the recommended infusion rate (see Tables 5 and 6). Concomitant medicinal products should be administered at the next dose (including dexamethasone (20 mg) or equivalent (see Table 4).
- Recurrent Grade 3 or Grade 4 (life-threatening): Permanently discontinue Rybrevant.

Skin and nail reactions

If the patient develops a Grade 1-2 skin or nail reaction, supportive care should be initiated; if there is no improvement after 2 weeks, dose reduction should be considered for persistent Grade 2 rash (see Table 3). If the patient develops a Grade 3 skin or nail reaction, supportive care should be initiated, and interruption of Rybrevant should be considered until the adverse reaction improves. Upon recovery of the skin or nail reaction to \leq Grade 2, Rybrevant should be resumed at a reduced dose. If the patient develops Grade 4 skin reactions, permanently discontinue Rybrevant (see section 4.4).

Interstitial lung disease

Rybrevant should be withheld if interstitial lung disease (ILD) or ILD-like adverse reactions (pneumonitis) is suspected. If the patient is confirmed to have ILD or ILD-like adverse reactions (e.g., pneumonitis), permanently discontinue Rybrevant (see section 4.4).

Recommended concomitant medicinal products

Prior to infusion (Week 1, Days 1 and 2), antihistamines, antipyretics, and glucocorticoids should be administered to reduce the risk of IRRs (see Table 4). For subsequent doses, antihistamines and antipyretics are required to be administered. Glucocorticoids should also be re-initiated after prolonged dose interruptions. Antiemetics should be administered as needed.

Table 4: Dosing schedule of premedications

Premedication	Dose	Route of administration	Recommended dosing window prior to Rybrevant administration
1 Temedication			
Antihistamine*	Diphenhydramine (25 to 50 mg)	Intravenous	15 to 30 minutes
Antinistannie	or equivalent	Oral	30 to 60 minutes
Antinywatia*	Paracetamol/Acetaminophen (650	Intravenous	15 to 30 minutes
Antipyretic*	to 1000 mg)	Oral	30 to 60 minutes
Glucocorticoid‡	Dexamethasone (20 mg) or	Intervior	45 to 60 minutes
Giucocorticola	equivalent	Intravenous	43 to 60 minutes
Clussestissid	Dexamethasone (10 mg) or	T., 4.,	15 to 60 minutes
Glucocorticoid ⁺	equivalent	Intravenous	45 to 60 minutes

^{*} Required at all doses.

[‡] Required at initial dose (Week 1, Day 1) or at the next subsequent dose in the event of an IRR.

Required at second dose (Week 1, Day 2); optional for subsequent doses.

Special populations

Paediatric population

There is no relevant use of amivantamab in the paediatric population in the treatment of non-small cell lung cancer.

Elderly

No dose adjustments are necessary (see section 4.8, section 5.1, and section 5.2).

Renal impairment

No formal studies of amivantamab in patients with renal impairment have been conducted. Based on population pharmacokinetic (PK) analyses, no dose adjustment is necessary for patients with mild or moderate renal impairment. Caution is required in patients with severe renal impairment as amivantamab has not been studied in this patient population (see section 5.2). If treatment is started, patients should be monitored for adverse reactions with dose modifications per the recommendations above.

Hepatic impairment

No formal studies of amivantamab in patients with hepatic impairment have been conducted. Based on population PK analyses, no dose adjustment is necessary for patients with mild hepatic impairment. Caution is required in patients with moderate or severe hepatic impairment as amivantamab has not been studied in this patient population (see section 5.2). If treatment is started, patients should be monitored for adverse reactions with dose modifications per the recommendations above.

Method of administration

Rybrevant is for intravenous use. It is administered as an intravenous infusion following dilution with sterile 5% glucose solution or sodium chloride 9 mg/mL (0.9%) solution for injection. Rybrevant must be administered with in-line filtration.

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

Infusion rates

Following dilution, the infusion should be administered intravenously at the infusion rates presented in Table 5 or 6 below. Due to the frequency of IRRs at the first dose, amivantamab should be infused via a peripheral vein at Week 1 and Week 2; infusion via a central line may be administered for subsequent weeks when the risk of IRR is lower (see section 6.6). It is recommended for the first dose to be prepared as close to administration as possible to maximise the likelihood of completing the infusion in the event of an IRR.

Table 5: Infusion rates for Rybrevant every 3 weeks

Body weight less than 80 kg			
Week	Dose (per 250 mL bag)	Initial infusion rate	Subsequent infusion rate [†]
Week 1 (split dose infusion)			
Week 1 Day 1	350 mg	50 mL/hr	75 mL/hr
Week 1 Day 2	1050 mg	33 mL/hr	50 mL/hr
Week 2	1400 mg	65 :	mL/hr
Week 3	1400 mg	85 :	mL/hr
Week 4	1400 mg	125	mL/hr
Subsequent weeks*	1750 mg	125	mL/hr

Body weight greater than or equal to 80 kg			
Week	Dose (per 250 mL bag)	Initial infusion rate	Subsequent infusion rate [†]
Week 1 (split dose infusion)			
Week 1 Day 1	350 mg	50 mL/hr	75 mL/hr
Week 1 Day 2	1400 mg	25 mL/hr	50 mL/hr
Week 2	1750 mg	65	mL/hr
Week 3	1750 mg	85	mL/hr
Week 4	1750 mg	125	mL/hr
Subsequent weeks*	2100 mg	125	mL/hr

^{*} Starting at Week 7, patients are dosed every 3 weeks.

Table 6: Infusion rates for Rybrevant every 2 weeks

Body weight less than 80 kg					
Week	Dose	Initial infusion	Subsequent		
	(per 250 mL bag)	rate	infusion rate [‡]		
Week 1 (split dose infusion)	Week 1 (split dose infusion)				
Week 1 Day 1	350 mg	50 mL/hr	75 mL/hr		
Week 1 Day 2	700 mg	50 mL/hr	75 mL/hr		
Week 2	1050 mg	85 mL/hr			
Subsequent weeks*	1050 mg	125 mL/hr			
Body v	veight greater than or eq	ual to 80 kg			
Week	Dose	Initial infusion	Subsequent		
	(per 250 mL bag)	rate	infusion rate‡		
Week 1 (split dose infusion)					
Week 1 Day 1	350 mg	50 mL/hr	75 mL/hr		
Week 1 Day 2	1050 mg	35 mL/hr	50 mL/hr		
Week 2	1400 mg 65 mL/hr		L/hr		
Week 3	1400 mg	85 mL/hr			
Subsequent weeks*	1400 mg	125 mL/hr			

^{*} After Week 5, patients are dosed every 2 weeks.

4.3 Contraindications

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

4.4 Special warnings and precautions for use

Traceability

In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded.

<u>Infusion-related reactions</u>

Infusion-related reactions commonly occurred in patients treated with amivantamab (see section 4.8).

Prior to initial infusion (Week 1), antihistamines, antipyretics, and glucocorticoids should be administered to reduce the risk of IRRs. For subsequent doses, antihistamines and antipyretics should be administered. The initial infusion should be administered in split doses on Week 1, Day 1 and 2.

Patients should be treated in a setting with appropriate medical support to treat IRRs. Infusions should be interrupted at the first sign of IRRs of any severity and post-infusion medicinal products should be administered as clinically indicated. Upon resolution of symptoms, the infusion should be resumed at

[†] Increase the initial infusion rate to the subsequent infusion rate after 2 hours in the absence of infusion-related reactions.

[‡] Increase the initial infusion rate to the subsequent infusion rate after 2 hours in the absence of IRRs.

50% of the previous rate. For recurrent Grade 3 or Grade 4 IRRs, Rybrevant should be permanently discontinued (see section 4.2).

Interstitial lung disease

Interstitial lung disease (ILD) or ILD-like adverse reactions (e.g., pneumonitis) have been reported in patients treated with amivantamab (see section 4.8). Patients should be monitored for symptoms indicative of ILD/pneumonitis (e.g., dyspnoea, cough, fever). If symptoms develop, treatment with Rybrevant should be interrupted pending investigation of these symptoms. Suspected ILD or ILD-like adverse reactions should be evaluated and appropriate treatment should be initiated as necessary. Rybrevant should be permanently discontinued in patients with confirmed ILD or ILD-like adverse reactions (see section 4.2).

Skin and nail reactions

Rash (including dermatitis acneiform), pruritus and dry skin occurred in patients treated with amivantamab (see section 4.8). Patients should be instructed to limit sun exposure during and for 2 months after Rybrevant therapy. Protective clothing and use of broad-spectrum UVA/UVB sunscreen are advisable. Alcohol-free emollient cream is recommended for dry areas. If skin reactions develop, topical corticosteroids and topical and/or oral antibiotics should be administered. For Grade 3 or poorly-tolerated Grade 2 events, systemic antibiotics and oral steroids should also be administered. Patients presenting with severe rash that has an atypical appearance or distribution or lack improvement within 2 weeks should be referred promptly to a dermatologist. Rybrevant should be dose reduced, interrupted, or permanently discontinued based on severity (see section 4.2).

Toxic epidermal necrolysis (TEN) has been reported. Treatment with this medicinal product should be discontinued if TEN is confirmed.

Eve disorders

Eye disorders, including keratitis, occurred in patients treated with amivantamab (see section 4.8). Patients presenting with worsening eye symptoms should promptly be referred to an ophthalmologist and should discontinue use of contact lenses until symptoms are evaluated. For dose modifications for Grade 3 or 4 eye disorders, see section 4.2.

Sodium content

This medicinal product contains less than 1 mmol (23 mg) sodium per dose, that is to say essentially "sodium-free". This medicinal product may be diluted in sodium chloride 9 mg/mL (0.9%) solution for infusion. This should be taken into consideration for patients on a controlled sodium diet (see section 6.6).

4.5 Interaction with other medicinal products and other forms of interaction

No drug interaction studies have been performed. As an IgG1 monoclonal antibody, renal excretion and hepatic enzyme-mediated metabolism of intact amivantamab are unlikely to be major elimination routes. As such, variations in drug-metabolising enzymes are not expected to affect the elimination of amivantamab. Due to the high affinity to a unique epitope on EGFR and MET, amivantamab is not anticipated to alter drug-metabolising enzymes.

Vaccines

No clinical data are available on the efficacy and safety of vaccinations in patients taking amivantamab. Avoid the use of live or live-attenuated vaccines while patients are taking amivantamab.

4.6 Fertility, pregnancy and lactation

Women of child-bearing potential/Contraception

Women of child-bearing potential should use effective contraception during and for 3 months after cessation of amivantamab treatment.

Pregnancy

There are no human data to assess the risk of amivantamab use during pregnancy. No animal reproductive studies were conducted to inform a drug-associated risk. Administration of EGFR and MET inhibitor molecules in pregnant animals resulted in an increased incidence of impairment of embryo-foetal development, embryo lethality, and abortion. Therefore, based on its mechanism of action and findings in animal models, amivantamab could cause foetal harm when administered to a pregnant woman. Amivantamab should not be given during pregnancy unless the benefit of treatment of the woman is considered to outweigh potential risks to the foetus. If the patient becomes pregnant while taking this medicinal product the patient should be informed of the potential risk to the foetus (see section 5.3).

Breast-feeding

It is unknown whether amivantamab is excreted in human milk. Human IgGs are known to be excreted in breast milk during the first few days after birth, which is decreasing to low concentrations soon afterwards. A risk to the breast-fed child cannot be excluded during this short period just after birth, although IgGs are likely to be degraded in the gastrointestinal tract of the breast-fed child and not absorbed. A decision must be made whether to discontinue breast-feeding or to discontinue/abstain from amivantamab therapy taking into account the benefit of breast-feeding for the child and the benefit of therapy for the woman.

Fertility

There are no data on the effect of amivantamab on human fertility. Effects on male and female fertility have not been evaluated in animal studies.

4.7 Effects on ability to drive and use machines

Rybrevant may have moderate influence on the ability to drive and use machines. Please see section 4.8 (e.g., dizziness, fatigue, visual impairment). If patients experience treatment-related symptoms, including vision-related adverse reactions, affecting their ability to concentrate and react, it is recommended that they do not drive or use machines until the effect subsides.

4.8 Undesirable effects

Summary of the safety profile

In the dataset of amivantamab as monotherapy (N=380), the most frequent adverse reactions in all grades were rash (76%), infusion-related reactions (67%), nail toxicity (47%), hypoalbuminaemia (31%), oedema (26%), fatigue (26%), stomatitis (24%), nausea (23%), and constipation (23%). Serious adverse reactions included ILD (1.3%), IRR (1.1%), and rash (1.1%). Three percent of patients discontinued Rybrevant due to adverse reactions. The most frequent adverse reactions leading to treatment discontinuation were IRR (1.1%), ILD (0.5%), and nail toxicity (0.5%).

Tabulated list of adverse reactions

Table 7 summarises the adverse drug reactions that occurred in patients receiving amivantamab as monotherapy.

The data reflects exposure to amivantamab in 380 patients with locally advanced or metastatic non-small cell lung cancer after failure of platinum-based chemotherapy. Patients received amivantamab 1050 mg (for patients \leq 80 kg) or 1400 mg (for patients \geq 80 kg). The median exposure to amivantamab was 4.1 months (range: 0.0 to 39.7 months).

Adverse reactions observed during clinical studies are listed below by frequency category. Frequency categories are defined as follows: very common ($\geq 1/10$); common ($\geq 1/100$ to < 1/10); uncommon ($\geq 1/1000$ to < 1/100); rare ($\geq 1/10000$ to < 1/1000); very rare (< 1/10000); and not known (frequency cannot be estimated from the available data).

Within each frequency grouping, adverse reactions are presented in the order of decreasing seriousness.

Table 7: Adverse reactions in patients receiving amivantamab as monotherapy

System organ class	Frequency	Any Grade	Grade 3-4 (%)
Adverse reaction	category	(%)	
Metabolism and nutrition disorders			
Hypoalbuminaemia* (see section 5.1)	Very common	31	2†
Decreased appetite		16	0.5^{\dagger}
Hypocalcaemia		10	0.3 [†]
Hypokalaemia	Common	9	2
Hypomagnesaemia		8	0
Nervous system disorders			
Dizziness*	Very common	13	0.3^{\dagger}
Eye disorders			
Visual impairment*	Common	3	0
Growth of eyelashes*		1	0
Other eye disorders*		6	0
Keratitis	Uncommon	0.5	0
Uveitis		0.3	0
Respiratory, thoracic and mediastinal dis	orders	•	-
Interstitial lung disease*	Common	3	0.5^{\dagger}
Gastrointestinal disorders	<u>.</u>		
Diarrhoea	Very common	11	2†
Stomatitis*		24	0.5^{\dagger}
Nausea		23	0.5^{\dagger}
Constipation		23	0
Vomiting		12	0.5^{\dagger}
Abdominal pain*	Common	9	0.8^{\dagger}
Haemorrhoids		3.7	0
Hepatobiliary disorders	•	•	
Alanine aminotransferase increased	Very common	15	2
Aspartate aminotransferase increased		13	1
Blood alkaline phosphatase increased		12	0.5^{\dagger}
Skin and subcutaneous tissue disorders	•	•	
Rash*	Very common	76	3 [†]
Nail toxicity*		47	2†
Dry skin*		19	0
Pruritus		18	0
Toxic epidermal necrolysis	Uncommon	0.3	0.3^{\dagger}
Musculoskeletal and connective tissue dis		•	
Myalgia	Very common	11	0.3^{\dagger}
General disorders and administration site	•		
Oedema*	Very common	26	0.8^{\dagger}
Fatigue*	7	26	0.8^{\dagger}
Pyrexia		11	0
Injury, poisoning and procedural complic	cations	<u> </u>	· · · · · · · · · · · · · · · · · · ·
Infusion related reaction	Very common	67	2
* Grouped terms			<u> </u>

^{*} Grouped terms

Summary of the safety profile

In the dataset of amivantamab in combination with carboplatin and pemetrexed (N=151), the most frequent adverse reactions in all grades were rash (90%), nail toxicity (62%), stomatitis (43%), infusion related reactions (42%), hypoalbuminaemia (41%), oedema (40%), constipation (40%), nausea (36%), decreased appetite (36%), fatigue (34%), alanine aminotransferase increased (33%), aspartate aminotransferase increased (31%), diarrhoea (21%), vomiting (21%), and hypokalaemia (21%). Serious adverse reactions included rash (4.6%), ILD (2.6%), hypokalaemia (2.0%) and vomiting (2.0%). Five percent of patients discontinued Rybrevant due to adverse reactions. The most

[†] Grade 3 events only

frequent adverse reactions leading to treatment discontinuation were ILD (2.6%), rash (2.0%), nail toxicity (2.0%) and IRR (0.7%).

Table 8 summarises the adverse drug reactions that occurred in patients receiving amivantamab in combination with chemotherapy.

The data reflects exposure to amivantamab in combination with carboplatin and pemetrexed in 151 patients with locally advanced or metastatic non-small cell lung cancer. Patients received amivantamab 1400 mg (for patients < 80 kg) or 1750 mg (for patients \ge 80 kg) weekly for 4 weeks. Starting at Week 7, patients received amivantamab 1750 mg (for patients < 80 kg) or 2100 mg (for patients \ge 80 kg) every 3 weeks. The median exposure to amivantamab in combination with carboplatin and pemetrexed was 9.7 months (range: 0.0 to 26.9 months).

Adverse reactions observed during clinical studies are listed below by frequency category. Frequency categories are defined as follows: very common ($\geq 1/10$); common ($\geq 1/100$ to < 1/10); uncommon ($\geq 1/1000$ to < 1/100); rare ($\geq 1/10000$ to < 1/1000); very rare (< 1/10000); and not known (frequency cannot be estimated from the available data).

Within each frequency grouping, adverse reactions are presented in the order of decreasing seriousness.

Table 8: Adverse reactions in patients receiving amivantamab in combination with carboplatin and pemetrexed

carboplatin and pemetrexed			
System organ class	Frequency	Any Grade	Grade 3-4 (%)
Adverse reaction	category	(%)	
Metabolism and nutrition disorders			
Hypoalbuminaemia*	Very common	41	4.0
Decreased appetite		36	2.6
Hypokalaemia		21	8.6
Hypomagnesaemia		15	2.0
Hypocalcaemia		13	1.3
Nervous system disorders			
Dizziness*	Common	9.9	0
Vascular disorders			
Venous thromboembolism*	Very common	16	3.3
Eye disorders			
Other eye disorders*	Common	7.3	0
Visual impairment*		1.3	0
Respiratory, thoracic and mediastinal dis	orders		
Interstitial lung disease*	Common	2.6	2.6
Gastrointestinal disorders			
Stomatitis*	Very common	43	4.0
Constipation		40	0
Nausea		36	0.7
Vomiting		21	3.3
Diarrhoea		21	3.3
Haemorrhoids		12	1.3
Abdominal pain*		11	0.7
Hepatobiliary disorders			
Alanine aminotransferase increased	Very common	33	4.0
Aspartate aminotransferase increased		31	0.7
Blood alkaline phosphatase increased		13	0.7
Skin and subcutaneous tissue disorders			
Rash*	Very common	90	19
Nail toxicity*		62	6.6
Dry skin*		17	0

Pruritus	Common	6.6	0	
Musculoskeletal and connective tissue disor	Musculoskeletal and connective tissue disorders			
Myalgia	Common	5.3	1.3	
General disorders and administration site conditions				
Oedema*	Very common	40	1.3	
Fatigue*		34	6.0	
Pyrexia		16	0	
Injury, poisoning and procedural complications				
Infusion related reaction	Very common	42	1.3	

^{*} Grouped terms

Description of selected adverse reactions

Infusion-related reactions

In patients treated with amivantamab monotherapy, infusion-related reactions occurred in 67% of patients. Ninety-eight percent of IRRs were Grade 1-2. Ninety-nine percent of IRRs occurred at the first infusion with a median time to onset of 60 minutes, and the majority occurring within 2 hours of infusion start. The most frequent signs and symptoms include chills, dyspnoea, nausea, flushing, chest discomfort, and vomiting (see section 4.4).

In patients treated with amivantamab in combination with carboplatin and pemetrexed, infusion-related reactions occurred in 42% of patients. Greater than 98% of IRRs were Grade 1-2. A majority of IRRs occurred at the first infusion with a median time to onset of 60 minutes (range 0-7 hours), and the majority occurring within 2 hours of infusion start.

Occasionally an IRR can occur at re-initiation of amivantamab after prolonged dose interruptions of more than 6 weeks.

Interstitial lung disease

Interstitial lung disease or ILD-like adverse reactions have been reported with the use of amivantamab as well as with other EGFR inhibitors. Interstitial lung disease or pneumonitis was reported in 2.6% of patients treated with amivantamab monotherapy and 2.6% of patients treated with amivantamab in combination with carboplatin and pemetrexed. Patients with a medical history of ILD, drug-induced ILD, radiation pneumonitis that required steroid treatment, or any evidence of clinically active ILD were excluded from the clinical study (see section 4.4).

Skin and nail reactions

Rash (including dermatitis acneiform), pruritus, and dry skin occurred in 86% of patients treated with amivantamab alone or in combination with carboplatin and pemetrexed. Most cases were Grade 1 or 2, with Grade 3 rash events occurring in 8% of patients. Rash leading to amivantamab discontinuation occurred in 0.9% of patients. Rash usually developed within the first 4 weeks of therapy, with a median time to onset of 14 days. Nail toxicity occurred in patients treated with amivantamab. Most events were Grade 1 or 2, with Grade 3 nail toxicity occurring in 3.2% of patients (see section 4.4).

Eye disorders

Eye disorders, including keratitis (0.4%), occurred in 9% of patients treated with amivantamab alone or in combination with carboplatin and pemetrexed. Other reported adverse reactions included growth of eyelashes, visual impairment, and other eye disorders. All events were Grade 1-2 (see section 4.4).

Other special populations

Elderly

There are limited clinical data with amivantamab in patients 75 years of age or over (see section 5.1). No overall differences in safety were observed between patients \geq 65 years of age and patients \leq 65 years of age.

Immunogenicity

As with all therapeutic proteins, there is the potential for immunogenicity. In clinical studies of patients with locally advanced or metastatic NSCLC treated with amivantamab, 3 of the 663 (0.5%) participants who were treated with Rybrevant and evaluable for the presence of anti-drug antibodies (ADA), tested positive for treatment-emergent anti-amivantamab antibodies. There was no evidence of an altered pharmacokinetic, efficacy, or safety profile due to anti-amivantamab antibodies.

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

No maximum tolerated dose has been determined in a clinical study in which patients received up to 2100 mg administered intravenously. There is no known specific antidote for amivantamab overdose. In the event of an overdose, treatment with Rybrevant should be stopped, the patient should be monitored for any signs or symptoms of adverse events and appropriate general supportive measures should be instituted immediately until clinical toxicity has diminished or resolved.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Monoclonal antibodies and antibody drug conjugates, ATC code: L01FX18.

Mechanism of action

Amivantamab is a low-fucose, fully-human IgG1-based EGFR-MET bispecific antibody with immune cell-directing activity that targets tumours with activating EGFR Exon 20 insertion mutations. Amivantamab binds to the extracellular domains of EGFR and MET.

Amivantamab disrupts EGFR and MET signalling functions through blocking ligand binding and enhancing degradation of EGFR and MET, thereby preventing tumour growth and progression. The presence of EGFR and MET on the surface of tumour cells also allows for targeting of these cells for destruction by immune effector cells, such as natural killer cells and macrophages, through antibody-dependent cellular cytotoxicity (ADCC) and trogocytosis mechanisms, respectively.

Pharmacodynamic effects

<u>Albumin</u>

Amivantamab decreased serum albumin concentration, a pharmacodynamic effect of MET inhibition, typically during the first 8 weeks (see section 4.8); thereafter, albumin concentration stabilised for the remainder of amivantamab treatment.

Clinical efficacy and safety

<u>Previously-untreated non-small cell lung cancer (NSCLC) with Exon 20 insertion mutations</u> (<u>PAPILLON</u>)

PAPILLON is a randomised, open-label, multicentre Phase 3 study comparing treatment with Rybrevant in combination with carboplatin and pemetrexed to chemotherapy alone (carboplatin and pemetrexed) in patients with treatment-naïve, locally advanced or metastatic NSCLC with activating EGFR Exon 20 insertion mutations. Tumour tissue (92.2%) and/or plasma (7.8%) samples for all 308 patients were tested locally to determine EGFR Exon 20 insertion mutation status using next generation sequencing (NGS) in 55.5% of patients and/or polymerase chain reaction (PCR) in 44.5%

of patients. <u>Central testing was also performed using the AmoyDx® LC10 tissue test, Thermo Fisher Oncomine Dx Target Test, and the Guardant 360® CDx plasma test.</u>

Patients with brain metastases at screening were eligible for participation once they were definitively treated, clinically stable, asymptomatic, and off corticosteroid treatment for at least 2 weeks prior to randomisation.

Rybrevant was administered intravenously at 1400 mg (for patients < 80 kg) or 1750 mg (for patients ≥ 80 kg) once weekly through 4 weeks, then every 3 weeks with a dose of 1750 mg (for patients < 80 kg) or 2100 mg (for patients ≥ 80 kg) starting at Week 7 until disease progression or unacceptable toxicity. Carboplatin was administered intravenously at area under the concentration-time curve 5 mg/mL per minute (AUC 5) once every 3 weeks, for up to 12 weeks. Pemetrexed was administered intravenously at 500 mg/m² on once every 3 weeks until disease progression or unacceptable toxicity. Randomisation was stratified by ECOG performance status (0 or 1), and prior brain metastases (yes or no). Patients randomised to the carboplatin and pemetrexed arm who had confirmed disease progression were permitted to cross over to receive Rybrevant monotherapy. A total of 308 subjects were randomised (1:1) to Rybrevant in combination with carboplatin and pemetrexed (N=153) or carboplatin and pemetrexed (N=155). The median age was 62 (range: 27 to 92) years, with 39% of the subjects ≥ 65 years of age; 58% were female; and 61% were Asian and 36% were White. Baseline Eastern Cooperative Oncology Group (ECOG) performance status was 0 (35%) or 1 (64%); 58% never smoked; 23% had history of brain metastasis and 84% had Stage IV cancer at initial diagnosis.

The primary endpoint for PAPILLON was PFS, as assessed by BICR. The median follow-up was 14.9 months (range: 0.3 to 27.0).

Efficacy results are summarised in Table 9.

Table 9: Efficacy results in PAPILLON

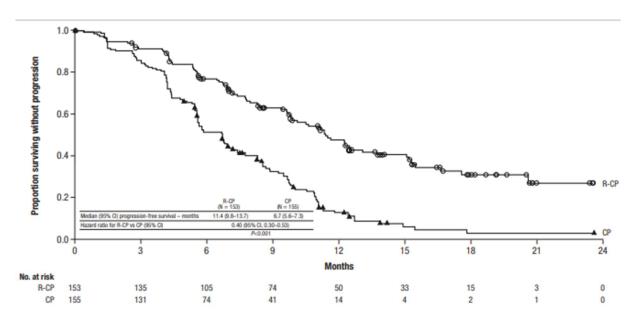
Table 7. Efficacy results in 1741 IEI	2011	
	Rybrevant + carboplatin+ pemetrexed (N=153)	carboplatin+ pemetrexed (N=155)
Progression-free survival (PFS) a		
Number of events	84 (55%)	132 (85%)
Median, months (95% CI)	11.4 (9.8, 13.7)	6.7 (5.6, 7.3)
HR (95% CI); p-value	0.395 (0.29,	0.52); p<0.0001
Objective response rate ^{a, b}		
ORR, % (95% CI)	73% (65%, 80%)	47% (39%, 56%)
Odds ratio (95% CI); p-value	3.0 (1.8, 4	.8); p<0.0001
Complete response	3.9%	0.7%
Partial response	69%	47%
Overall survival (OS) ^c		
Number of events	40	52
Median OS, months (95% CI)	NE (28.3, NE)	28.6 (24.4, NE)
HR (95% CI); p-value	0.756 (0.50,	1.14); p=0.1825

CI = confidence interval

NE = not estimable

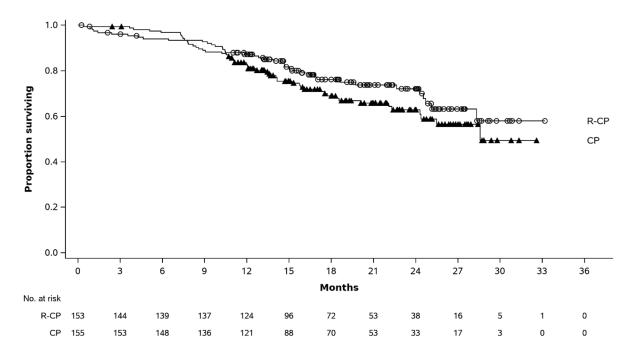
- ^a Blinded Independent Central Review by RECIST v1.1
- b Based on Kaplan-Meier estimate.
- Based on the results of an updated OS with median follow-up of 20.9 months. The OS analysis was not adjusted for the potentially confounding effects of crossover (78 [50.3%] patients on the carboplatin + pemetrexed arm who received subsequent Rybrevant monotherapy treatment).

Figure 1: Kaplan-Meier curve of PFS in previously untreated NSCLC patients by BICR assessment



The PFS benefit of Rybrevant in combination with carboplatin and pemetrexed compared to carboplatin and pemetrexed was consistent across all the predefined subgroups of brain metastases at study entry (yes or no), age (< 65 or ≥ 65), sex (male or female), race (Asian or non-Asian), weight (< 80 kg or ≥ 80 kg), ECOG performance status (0 or 1), and smoking history (yes or no).

Figure 2: Kaplan-Meier curve of OS in previously untreated NSCLC patients by BICR assessment



<u>Previously-treated non-small cell lung cancer(NSCLC) with Exon 20 insertion mutations (CHRYSALIS)</u>

CHRYSALIS is a multicentre, open-label, multi-cohort study conducted to assess the safety and efficacy of Rybrevant in patients with locally advanced or metastatic NSCLC. Efficacy was evaluated in 114 patients with locally advanced or metastatic NSCLC who had EGFR Exon 20 insertion mutations, whose disease had progressed on or after platinum-based chemotherapy, and who had a median follow-up of 12.5 months. Tumour tissue (93%) and/or plasma (10%) samples for all patients were tested locally to determine EGFR Exon 20 insertion mutation status using next generation

sequencing (NGS) in 46% of patients and/or polymerase chain reaction (PCR) in 41% of patients; for 4% of patients, the testing methods were not specified. Patients with untreated brain metastases or a history of ILD requiring treatment with prolonged steroids or other immunosuppressive agents within the last 2 years were not eligible for the study. Rybrevant was administered intravenously at 1050 mg for patients \leq 80 kg or 1400 mg for patients \geq 80 kg once weekly for 4 weeks, then every 2 weeks starting at Week 5 until loss of clinical benefit or unacceptable toxicity. The primary efficacy endpoint was investigator-assessed overall response rate (ORR), defined as confirmed complete response (CR) or partial response (PR) based on RECIST v1.1. In addition, the primary endpoint was assessed by a blinded independent central review (BICR). Secondary efficacy endpoints included duration of response (DOR).

The median age was 62 (range: 36-84) years, with 41% of the patients ≥ 65 years of age; 61% were female; and 52% were Asian and 37% were White. The median number of prior therapies was 2 (range: 1 to 7 therapies). At baseline, 29% had Eastern Cooperative Oncology Group (ECOG) performance status of 0 and 70% had ECOG performance status of 1; 57% never smoked; 100% had Stage IV cancer; and 25% had previous treatment for brain metastases. Insertions in Exon 20 were observed at 8 different residues; the most common residues were A767 (22%), S768 (16%), D770 (12%), and N771 (11%).

Efficacy results are summarised in Table 10.

Table 10: Efficacy results in CHRYSALIS

•	Investigator assessment (N=114)
Overall response rate ^{a, b} (95% CI)	37% (28%, 46%)
Complete response	0%
Partial response	37%
Duration of response	
Median ^c (95% CI), months	12.5 (6.5, 16.1)
Patients with DOR \geq 6 months	64%

CI = Confidence Interval

Anti-tumour activity was observed across studied mutation subtypes.

Elderly

No overall differences in effectiveness were observed between patients \geq 65 years of age and patients \leq 65 years of age.

Paediatric population

The European Medicines Agency has waived the obligation to submit the results of studies with Rybrevant in all subsets of the paediatric population in non-small cell lung cancer (see section 4.2 for information on paediatric use).

5.2 Pharmacokinetic properties

Based on Rybrevant monotherapy data, amivantamab area under the concentration-time curve $(AUC_{1 \text{ week}})$ increases proportionally over a dose range from 350 to 1750 mg.

Based on simulations from the population pharmacokinetic model, $AUC_{1 \text{ week}}$ was approximately 2.8-fold higher after the fifth dose for the 2-week dosing regimen and 2.6-fold higher after the fourth

a Confirmed response

b ORR and DOR results by investigator assessment were consistent with those reported by BICR assessment; ORR by BICR assessment was 43% (34%, 53%), with a 3% CR rate and a 40% PR rate, median DOR by BICR assessment was 10.8 months (95% CI: 6.9, 15.0), and patients with DOR ≥ 6 months by BICR assessment was 55%.

^c Based on Kaplan-Meier estimate.

dose for the 3-week dosing regimen. Steady-state concentrations of amivantamab were reached by Week 13 for both the 3-week and 2-week dosing regimen and the systemic accumulation was 1.9-fold.

Distribution

Based on the individual amivantamab PK parameter estimates in population PK analysis, the geometric mean (CV%) total volume of distribution, is 5.12 (27.8%) L, following administration of the recommended dose of Rybrevant.

Elimination

Based on the individual amivantamab PK parameter estimates in population PK analysis, the geometric mean (CV%) linear clearance (CL) and terminal half-life associated with linear clearance is 0.266 (30.4%) L/day and 13.7 (31.9%) days respectively.

Special populations

Elderly

No clinically meaningful differences in the pharmacokinetics of amivantamab were observed based on age (27-87 years).

Renal impairment

No clinically meaningful effect on the pharmacokinetics of amivantamab was observed in patients with mild ($60 \le \text{creatinine clearance} [\text{CrCl}] < 90 \text{ mL/min}$) and moderate ($29 \le \text{CrCl} < 60 \text{ mL/min}$) renal impairment. The effect of severe renal impairment ($15 \le \text{CrCl} < 29 \text{ mL/min}$) on amivantamab pharmacokinetics is unknown.

Hepatic impairment

Changes in hepatic function are unlikely to have any effect on the elimination of amivantamab since IgG1-based molecules such as amivantamab are not metabolised through hepatic pathways.

No clinically meaningful effect in the pharmacokinetics of amivantamab was observed based on mild hepatic impairment [(total bilirubin \leq ULN and AST > ULN) or (ULN < total bilirubin \leq 1.5 x ULN)]. The effect of moderate (total bilirubin 1.5 to 3 times ULN) and severe (total bilirubin > 3 times ULN) hepatic impairment on amivantamab pharmacokinetics is unknown.

Paediatric population

The pharmacokinetics of Rybrevant in paediatric patients have not been investigated.

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of repeated dose toxicity.

Carcinogenicity and mutagenicity

No animal studies have been performed to establish the carcinogenic potential of amivantamab. Routine genotoxicity and carcinogenicity studies are generally not applicable to biologic pharmaceuticals as large proteins cannot diffuse into cells and cannot interact with DNA or chromosomal material.

Reproductive toxicology

No animal studies have been conducted to evaluate the effects on reproduction and foetal development; however, based on its mechanism of action, amivantamab can cause foetal harm or developmental anomalies. As reported in the literature, reduction, elimination, or disruption of embryo foetal or maternal EGFR signaling can prevent implantation, cause embryo foetal loss during various stages of gestation (through effects on placental development), cause developmental anomalies in multiple organs or early death in surviving foetuses. Similarly, knock out of MET or its ligand

hepatocyte growth factor (HGF) was embryonic lethal due to severe defects in placental development, and foetuses displayed defects in muscle development in multiple organs. Human IgG1 is known to cross the placenta; therefore, amivantamab has the potential to be transmitted from the mother to the developing foetus.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Ethylenediaminetetraacetic acid (EDTA) disodium salt dihydrate

L-Histidine

L-Histidine hydrochloride monohydrate

L-Methionine

Polysorbate 80 (E433)

Sucrose

Water for injections

6.2 Incompatibilities

This medicinal product must not be mixed with other medicinal products except those mentioned in section 6.6.

6.3 Shelf life

Unopened vial

3 years

After dilution

Chemical and physical in-use stability has been demonstrated for 10 hours at 15°C to 25°C in room light. From a microbiological point of view, unless the method of dilution precludes the risk of microbial contamination, the product should be used immediately. If not used immediately, in-use storage times and conditions are the responsibility of the user.

6.4 Special precautions for storage

Store in a refrigerator (2°C to 8°C).

Do not freeze.

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

For storage conditions after dilution of the medicinal product, see section 6.3.

6.5 Nature and contents of container

7 mL concentrate in a Type 1 glass vial with an elastomeric closure and aluminium seal with a flip-off cap containing 350 mg amivantamab. Pack size of 1 vial.

6.6 Special precautions for disposal and other handling

Prepare the solution for intravenous infusion using aseptic technique as follows:

Preparation

- Determine the dose required and the number of Rybrevant vials needed based on patient's baseline weight (see section 4.2). Each vial contains 350 mg of amivantamab.
- For every 2-week dosing, patients < 80 kg receive 1050 mg and for patients ≥ 80 kg, 1400 mg once weekly for a total of 4 doses, then every 2 weeks starting at Week 5.

- For every 3-week dosing, patients < 80 kg receive 1400 mg once weekly for a total of 4 doses, then 1750 mg every 3 weeks starting at Week 7, and for patients ≥ 80 kg, 1750 mg once weekly for a total of 4 doses, then 2100 mg every 3 weeks starting at Week 7.
- Check that the Rybrevant solution is colourless to pale yellow. Do not use if discolouration or visible particles are present.
- Withdraw and then discard a volume of either 5% glucose solution or sodium chloride 9 mg/mL (0.9%) solution for injection from the 250 mL infusion bag that is equal to the required volume of Rybrevant solution to be added (discard 7 mL diluent from the infusion bag for each vial). Infusion bags must be made of polyvinylchloride (PVC), polypropylene (PP), polyethylene (PE), or polyolefin blend (PP+PE).
- Withdraw 7 mL of Rybrevant from each vial needed then add it to the infusion bag. Each vial contains a 0.5 mL overfill to ensure sufficient extractable volume. The final volume in the infusion bag should be 250 mL. Discard any unused portion left in the vial.
- Gently invert the bag to mix the solution. Do not shake.
- Visually inspect for particulate matter and discolouration prior to administration. Do not use if discolouration or visible particles are observed.

Administration

- Administer the diluted solution by intravenous infusion using an infusion set fitted with a flow regulator and with an in-line, sterile, non-pyrogenic, low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometer). Administration sets must be made of either polyurethane (PU), polybutadiene (PBD), PVC, PP, or PE.
- The administration set with filter must be primed with either 5% glucose solution or 0.9% sodium chloride solution prior to the initiation of each Rybrevant infusion.
- Do not infuse Rybrevant concomitantly in the same intravenous line with other agents.
- The diluted solution should be administered within 10 hours (including infusion time) at room temperature (15°C to 25°C) and in room light.
- Due to the frequency of IRRs at the first dose, amivantamab should be infused via a peripheral vein at Week 1 and Week 2; infusion via a central line may be administered for subsequent weeks when the risk of IRR is lower. See infusion rates in section 4.2.

Disposal

This medicinal product is for single use only and any unused medicinal product that is not administered within 10 hours should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

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

8. MARKETING AUTHORISATION NUMBER(S)

EU/1/21/1594/001

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 09 December 2021 Date of latest renewal: 11 September 2023

10. DATE OF REVISION OF THE TEXT

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

ANNEX II

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

A. MANUFACTURER OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer of the biological active substance

Janssen Sciences Ireland UC Barnahely Ringaskiddy, Co. Cork Ireland

Name and address of the manufacturer responsible for batch release

Janssen Biologics B.V. Einsteinweg 101 2333 CB Leiden The Netherlands

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 Article 9 of Regulation (EC) No 507/2006 and, accordingly, the marketing authorisation holder (MAH) shall submit PSURs every 6 months.

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.

The marketing authorisation holder (MAH) shall submit the first PSUR for this product within 6 months following authorisation.

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

Risk management plan (RMP)

The marketing authorisation holder (MAH) shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the marketing authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:

- At the request of the European Medicines Agency;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGING **OUTER CARTON** NAME OF THE MEDICINAL PRODUCT Rybrevant 350 mg concentrate for solution for infusion amivantamab 2. STATEMENT OF ACTIVE SUBSTANCE(S) One vial of 7 mL contains 350 mg of amivantamab (50 mg/mL). 3. LIST OF EXCIPIENTS Excipients: ethylenediaminetetraacetic acid (EDTA), L-histidine, L-histidine hydrochloride monohydrate, L-methionine, polysorbate 80, sucrose, and water for injections. 4. PHARMACEUTICAL FORM AND CONTENTS Concentrate for solution for infusion 1 vial 5. METHOD AND ROUTE(S) OF ADMINISTRATION For intravenous use after dilution. Read the package leaflet before use. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT 6. OF THE SIGHT AND REACH OF CHILDREN Keep out of the sight and reach of children. 7. OTHER SPECIAL WARNING(S), IF NECESSARY Do not shake. **EXPIRY DATE** 8. **EXP**

9. SPECIAL STORAGE CONDITIONS

Store in a refrigerator.

Do not freeze.

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

10.	SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE
11.	NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
Janssen-Cilag International NV Turnhoutseweg 30 B-2340 Beerse Belgium	
12.	MARKETING AUTHORISATION NUMBER(S)
EU/1	./21/1594/001
13.	BATCH NUMBER
Lot	
14.	GENERAL CLASSIFICATION FOR SUPPLY
15.	INSTRUCTIONS ON USE
16.	INFORMATION IN BRAILLE
Justi	fication for not including Braille accepted.
17.	UNIQUE IDENTIFIER – 2D BARCODE
2D barcode carrying the unique identifier included.	
18.	UNIQUE IDENTIFIER - HUMAN READABLE DATA
PC SN NN	

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS	
VIAL	
1. NAME OF THE MEDICINAL PRODUCT AND ROUTE OF ADMINISTRATION	
Rybrevant 350 mg sterile concentrate amivantamab IV	
2. METHOD OF ADMINISTRATION	
3. EXPIRY DATE	
EXP	
4. BATCH NUMBER	
Lot	
5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT	
7 mL	
6. OTHER	

B. PACKAGE LEAFLET

Package leaflet: Information for the patient

Rybrevant 350 mg concentrate for solution for infusion

amivantamab

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 are given 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 nurse.
- If you get any side effects, talk to your doctor or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

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

1. What Rybrevant is and what it is used for

What Rybrevant is

Rybrevant is a cancer medicine. It contains the active substance 'amivantamab', which is an antibody (type of protein) designed to recognise and attach to specific targets in the body.

What Rybrevant is used for

Rybrevant is used in adults with a type of lung cancer called 'non-small cell lung cancer'. It is used when the cancer has spread to other parts of your body and has gone through certain changes (Exon 20 insertion mutations) in a gene called 'EGFR'.

Rybrevant can be prescribed for you:

- as the first medicine you receive for your cancer in combination with chemotherapy, or
- after chemotherapy stops working against your cancer.

How Rybrevant works

The active substance in Rybrevant, amivantamab, targets two proteins found on cancer cells:

- epidermal growth factor receptor (EGFR), and
- mesenchymal-epithelial transition factor (MET).

This medicine works by attaching to these proteins. This may help to slow or stop your lung cancer from growing. It may also help to reduce the size of the tumour.

Rybrevant may be given in combination with other anti-cancer medicines. It is important that you also read the package leaflets for these other medicines. If you have any questions about these medicines, ask your doctor.

2. What you need to know before you are given Rybrevant

Do not use Rybrevant if

• you are allergic to amivantamab or any of the other ingredients of this medicine (listed in section 6).

Do not use this medicine if the above applies to you. If you are not sure, talk to your doctor or nurse before you are given this medicine.

Warnings and precautions

Tell your doctor or nurse before you are given Rybrevant if:

• you have suffered from inflammation of your lungs (a condition called 'interstitial lung disease' or 'pneumonitis').

Tell your doctor or nurse straight away while taking this medicine if you get any of the following side effects (see section 4 for more information):

- Any side effect while the medicine is being given into your vein.
- Sudden difficulty in breathing, cough, or fever that may suggest inflammation of the lungs.
- Skin problems. To reduce the risk of skin problems, keep out of the sun, wear protective clothing, apply sunscreen, and use moisturisers regularly on your skin and nails while taking this medicine. You will need to continue doing this for 2 months after you stop treatment.
- Eye problems. If you have vision problems or eye pain contact your doctor or nurse straight away. If you use contact lenses and have any new eye symptoms, stop using contact lenses and tell your doctor straight away.

Children and adolescents

Do not give this medicine to children or young people below 18 years of age. This is because it is not known whether the medicine is safe and effective in this age group.

Other medicines and Rybrevant

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

Contraception

• If you could become pregnant, you must use effective contraception during Rybrevant treatment and for 3 months after stopping treatment.

Pregnancy

- Tell your doctor or nurse before you are given this medicine if you are pregnant, think you might be pregnant, or are planning to have a baby.
- It is possible that this medicine may harm an unborn baby. If you become pregnant while being treated with this medicine, tell your doctor or nurse straight away. You and your doctor will decide if the benefit of having the medicine is greater than the risk to your unborn baby.

Breast-feeding

It is not known if Rybrevant passes into breast milk. Ask your doctor for advice before being given this medicine. You and your doctor will decide if the benefit of breast-feeding is greater than the risk to your baby.

Driving and using machines

If you feel tired, feel dizzy, or if your eyes are irritated or vision is affected after taking Rybrevant, do not drive or use machinery.

Rybrevant contains sodium

This medicine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'. However, before Rybrevant is given to you, it may be mixed with a solution that contains sodium. Talk to your doctor if you are on a low salt diet.

3. How Rybrevant is given

How much is given

Your doctor will work out the correct dose of Rybrevant for you. The dose of this medicine will depend on your body weight at the start of your therapy. You will be treated with Rybrevant once every 2 or 3 weeks according to the treatment your doctor decides for you.

The recommended dose of Rybrevant every 2 weeks is:

- 1050 mg if you weigh less than 80 kg.
- 1400 mg if you weigh more than or equal to 80 kg.

The recommended dose of Rybrevant every 3 weeks is:

- 1400 mg for the first 4 doses and 1750 mg for subsequent doses if you weigh less than 80 kg.
- 1750 mg for the first 4 doses and 2100 mg for subsequent doses if you weigh more than or equal to 80 kg.

How the medicine is given

This medicine will be given to you by a doctor or nurse. It is given as a drip into a vein ('intravenous infusion') over several hours.

Rybrevant is given as follows:

- once a week for the first 4 weeks
- then once every 2 weeks starting at week 5 or once every 3 weeks starting at week 7, for as long as you keep getting benefit from the treatment.

In the first week, your doctor will give you the Rybrevant dose split over two days.

Medicines given during treatment with Rybrevant

Before each infusion of Rybrevant, you will be given medicines which help lower the chance of infusion-related reactions. These may include:

- medicines for an allergic reaction (antihistamines)
- medicines for inflammation (corticosteroids)
- medicines for fever (such as paracetamol).

You may also be given additional medicines based on any symptoms you may experience.

If you are given more Rybrevant than you should

This medicine will be given by your doctor or nurse. In the unlikely event that you are given too much (an overdose), your doctor will check you for side effects.

If you forget your appointment to have Rybrevant

It is very important to go to all your appointments. If you miss an appointment, make another one as soon as possible.

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

4. Possible side effects

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

Serious side effects

Tell your doctor or nurse straight away if you notice the following serious side effects:

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

- Signs of a reaction to the infusion such as chills, feeling short of breath, feeling sick (nausea), flushing, chest discomfort, and vomiting while the medicine is being given. This can happen especially with the first dose. Your doctor may give you other medicines, or the infusion may need to be slowed down or stopped.
- Skin problems such as rash (including acne), infected skin around the nails, dry skin, itching, pain, and redness. Tell your doctor if your skin or nail problems get worse.

Common (may affect up to 1 in 10 people):

- Eye problems such as dry eye, swollen eyelid, itchy eyes, problems with vision, growth of eyelashes.
- Signs of an inflammation in the lungs such as sudden difficulty in breathing, cough, or fever. This could lead to permanent damage ('interstitial lung disease'). Your doctor may wish to stop Rybrevant if you get this side effect.

Uncommon (may affect up to 1 in 100 people):

- inflamed cornea (front part of the eye)
- inflammation inside the eye that may affect vision
- life-threatening rash with blisters and peeling skin over much of the body (toxic epidermal necrolysis).

Other side effects

Tell your doctor if you notice any of the following side effects:

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

- low level of the protein 'albumin' in the blood
- swelling caused by fluid build up in the body
- feeling very tired
- sores in the mouth
- constipation or diarrhoea
- decreased appetite
- increased level of the liver enzyme 'alanine aminotransferase' in the blood, a possible sign of liver problems
- increased level of the enzyme 'aspartate aminotransferase' in the blood, a possible sign of liver problems
- feeling dizzy
- increased level of the enzyme 'alkaline phosphatase' in the blood
- muscle aches
- low level of calcium in the blood
- stomach pain
- fever
- low level of potassium in the blood
- low level of magnesium in the blood
- blood clot in the veins
- haemorrhoids.

Reporting of side effects

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

5. How to store Rybrevant

Rybrevant will be stored at the hospital or clinic.

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

Do not use this medicine after the expiry date which is stated on the carton and the vial label after "EXP". The expiry date refers to the last day of that month.

Chemical and physical in-use stability has been demonstrated for 10 hours at 15°C to 25°C in room light. From a microbiological point of view, unless the method of dilution precludes the risk of microbial contamination, the product should be used immediately. If not used immediately, in-use storage times and conditions are the responsibility of the user.

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

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

Medicines should not be disposed of via wastewater or household waste. Your healthcare professional will throw away any medicines that are no longer being used. These measures will help protect the environment.

6. Contents of the pack and other information

What Rybrevant contains

- The active substance is amivantamab. One mL of concentrate for solution for infusion contains 50 mg of amivantamab. One vial of 7 mL concentrate contains 350 mg of amivantamab.
- The other ingredients are ethylenediaminetetraacetic acid (EDTA), L-histidine, L-histidine hydrochloride monohydrate, L-methionine, polysorbate 80, sucrose, and water for injections (see section 2).

What Rybrevant looks like and contents of the pack

Rybrevant is a concentrate for solution for infusion and is a colourless to pale yellow liquid. This medicine is available in a carton pack containing 1 glass vial of 7 mL of concentrate.

Marketing Authorisation Holder

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Manufacturer

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Other sources of information

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

The following information is intended for healthcare professionals only:

This medicinal product must not be mixed with other medicinal products except those mentioned below.

Prepare the solution for intravenous infusion using aseptic technique as follows:

Preparation

- Determine the dose required and the number of Rybrevant vials needed based on patient's baseline weight. Each vial of Rybrevant contains 350 mg of amivantamab.
- For every 2-week dosing, patients < 80 kg receive 1050 mg and for patients ≥ 80 kg, 1400 mg once weekly for a total of 4 doses, then every 2 weeks starting at Week 5.
- For every 3-week dosing, patients < 80 kg receive 1400 mg once weekly for a total of 4 doses, then 1750 mg every 3 weeks starting at Week 7, and for patients ≥ 80 kg, 1750 mg once weekly for a total of 4 doses, then 2100 mg every 3 weeks starting at Week 7.
- Check that the Rybrevant solution is colourless to pale yellow. Do not use if discolouration or visible particles are present.
- Withdraw and then discard a volume of either 5% glucose solution or sodium chloride 9 mg/mL (0.9%) solution for injection from the 250 mL infusion bag that is equal to the required volume of Rybrevant solution to be added (discard 7 mL diluent from the infusion bag for each vial). Infusion bags must be made of polyvinylchloride (PVC), polypropylene (PP), polyethylene (PE), or polyolefin blend (PP+PE).
- Withdraw 7 mL of Rybrevant from each vial needed then add it to the infusion bag. Each vial contains a 0.5 mL overfill to ensure sufficient extractable volume. The final volume in the infusion bag should be 250 mL. Discard any unused portion left in the vial.
- Gently invert the bag to mix the solution. Do not shake.
- Visually inspect for particulate matter and discolouration prior to administration. Do not use if discolouration or visible particles are observed.

Administration

- Administer the diluted solution by intravenous infusion using an infusion set fitted with a flow regulator and with an in-line, sterile, non-pyrogenic, low protein-binding polyethersulfone (PES) filter (pore size 0.22 or 0.2 micrometer). Administration sets must be made of either polyurethane (PU), polybutadiene (PBD), PVC, PP, or PE.
- The administration set with filter **must** be primed with either 5% glucose solution or 0.9% sodium chloride solution prior to the initiation of each Rybrevant infusion.
- Do not infuse Rybrevant concomitantly in the same intravenous line with other agents.
- The diluted solution should be administered within 10 hours (including infusion time) at room temperature (15°C to 25°C) and in room light.
- Due to the frequency of IRRs at the first dose, amivantamab should be infused via a peripheral vein at Week 1 and Week 2; infusion via a central line may be administered for subsequent weeks when the risk of IRR is lower.

Disposal

This medicinal product is for single use only and any unused medicinal product that is not administered within 10 hours should be disposed of in accordance with local requirements.

ANNEX IV

CONCLUSIONS ON THE REQUEST FOR ONE-YEAR MARKETING PROTECTION PRESENTED BY THE EUROPEAN MEDICINES AGENCY

Conclusions presented by the European Medicines Agency on:

• one-year marketing protection

The CHMP reviewed the data submitted by the marketing authorisation holder, taking into account the provisions of Article 14(11) of Regulation (EC) No 726/2004, and considers that the new therapeutic indication brings significant clinical benefit in comparison with existing therapies as further explained in the European Public Assessment Report.