

Applicant/PHRC: **Hetero Drugs South Africa (Pty) Ltd**

Product proprietary name (s): **AMPOMY 1 mg/2 mg/3 mg/ 4 mg.**

Dosage form and strength: **Each Hard gelatin capsule contains Pomalidomide 1 mg, 2 mg, 3 mg and 4 mg.**

SCHEDULING STATUS

S4

1. NAME OF THE MEDICINE

AMPOMY 1 mg, hard capsules.

AMPOMY 2 mg, hard capsules.

AMPOMY 3 mg, hard capsules.

AMPOMY 4 mg, hard capsules.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

AMPOMY 1 mg: Each Hard gelatin capsule contains Pomalidomide 1 mg.

Contains sugar: Sucrose 10,100 mg

AMPOMY 2 mg: Each Hard gelatin capsule contains Pomalidomide 2 mg.

Contains sugar: Sucrose 20,200 mg

AMPOMY 3 mg: Each Hard gelatin capsule contains Pomalidomide 3 mg.

Contains sugar: Sucrose 30,300 mg

AMPOMY 4 mg: Each Hard gelatin capsule contains Pomalidomide 4 mg.

Contains sugar: Sucrose 40,400 mg

For full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

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Hard capsules.

AMPOMY 1 mg,

Opaque, white cap and opaque white body, size '5' hard gelatin capsules imprinted with 'H' on cap and 'P6' on body, filled with pale yellow to yellowish colour powder, free from physical defects.

AMPOMY 2 mg,

Opaque, white cap and opaque brown body, size '4' hard gelatin capsules imprinted with 'H' on cap and 'P7' on body, filled with pale yellow to yellowish colour powder, free from physical defects.

AMPOMY 3 mg,

Opaque, white cap and opaque pink body, size '3' hard gelatin capsules imprinted with 'H' on cap and 'P8' on body, filled with pale yellow to yellowish colour powder, free from physical defects.

AMPOMY 4 mg,

Opaque, white cap and opaque white body, size '2' hard gelatin capsules imprinted with 'H' on cap and 'P9' on body, filled with pale yellow to yellowish colour powder, free from physical defects.

WARNING: SEVERE LIFE-THREATENING HUMAN BIRTH DEFECTS.

Pomalidomide is structurally related to thalidomide. Thalidomide is a known human teratogenic active substance that causes severe life-threatening birth defects. Pomalidomide was found to be teratogenic in both rats and rabbits when administered during the period of major organogenesis (see section 4.6).

If Pomalidomide is taken during pregnancy, a teratogenic effect of pomalidomide in humans is expected.

BECAUSE OF THIS TOXICITY AND IN AN EFFORT TO MAKE THE CHANCE OF FOETAL EXPOSURE TO AMPOMY AS NEGLIGIBLE AS POSSIBLE, AMPOMY IS APPROVED FOR MARKETING UNDER A SPECIAL RESTRICTED DISTRIBUTION

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PROGRAMME.

UNDER THIS RESTRICTED DISTRIBUTION PROGRAMME, ONLY PRECRIBERS REGISTERED WITH THE PROGRAMME ARE ALLOWED TO PRESCRIBE THE PRODUCT AND PHARMACISTS REGISTERED WITH THE PROGRAMME ARE ALLOWED TO DISPENSE THE PRODUCT. IN ADDITION, PATIENTS MUST BE ADVISED OF, AGREE TO, AND COMPLY WITH THE REQUIREMENTS OF THE RISK MANAGEMENT PROGRAMME.

WARNING: VENOUS THROMBO EMBOLISM:

Deep Venous Thrombosis (DVT) and Pulmonary Embolism (PE) occur in patients with multiple myeloma treated with AMPOMY. Consider prophylactic measures after assessing an individual patient's underlying risk factors (see section 4.4).

4. CLINICAL PARTICULARS

4.1. Therapeutic indications

AMPOMY in combination with bortezomib and dexamethasone (PBd) is indicated in the treatment of adult patients with multiple myeloma who have received at least one prior treatment regimen including lenalidomide.

AMPOMY in combination with dexamethasone (Pd) is indicated in the treatment of adult patients with relapsed and refractory multiple myeloma who have received at least two prior treatment regimens, including both lenalidomide and a proteasome inhibitor (e.g. bortezomib), and have demonstrated disease progression on the last therapy.

4.2. Posology and method of administration

Posology

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Treatment must be initiated and monitored under the supervision of medical practitioner experienced in the management of multiple myeloma.

In combination with Bortezomib and Dexamethasone (PBd) - patients with relapsed or refractory multiple myeloma after at least one prior therapy including lenalidomide:

Recommended dosage:

The recommended starting dose of AMPOMY is:

4 mg orally once daily on days 1-14 for each 21-day cycle.

The recommended dose of bortezomib is:

For cycles 1-8: 1.3mg/m² on Days 1, 4, 8 and 11 of a 21-day cycle.

From cycle 9 onwards: 1.3mg/m² on Days 1 and 8 of a 21-day cycle.

The recommended dose of dexamethasone is:

For cycles 1-8: 20 mg orally once daily on days 1, 2, 4, 5, 8, 9, 11, and 12 of a 21-day cycle.

From cycle 9 onwards: 20 mg orally once daily on days 1, 2, 8, and 9 of a 21-day cycle.

For patients greater than 75 years of age, see section below.

Dosing is continued or modified based upon clinical and laboratory findings.

Treatment should be discontinued upon progression of disease.

In combination with Dexamethasone (Pd) – patients with relapsed and refractory multiple myeloma after at least two prior therapies including lenalidomide and a proteasome inhibitor:

Recommended dosage:

The recommended starting dose of is 4 mg/day taken orally on Days 1-21 of repeated 28-day cycles (21/28 days) until disease progression. The recommended dose of dexamethasone is 40 mg/day on Days 1, 8, 15 and 22 of each 28-day treatment cycle.

Dosing is continued or modified based upon clinical and laboratory findings.

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AMPOMY dose modification or interruption

Instructions for dose interruptions and reductions for AMPOMY related to haematologic adverse reactions are outlined in the table below:

Dose modification instructions for AMPOMY for haematologic toxicities:

Toxicity	Dose Modification
- ANC < 500/μL or Febrile neutropenia (fever $\geq 38,5^{\circ}\text{C}$ and ANC <1 000/μL) - Pd regimen: ANC return to $\geq 500/\mu\text{L}$ - PBd regimen: ANC return to $\geq 1000/\mu\text{L}$	Interrupt AMPOMY treatment, follow CBC weekly. Add G-CSF (at the discretion of the treating doctor) Resume pomalidomide at 3 mg daily.
- For each subsequent drop < 500/μL - Pd regimen: Return to $\geq 500/\mu\text{L}$ - PBd regimen: Return to $\geq 1000/\mu\text{L}$	Interrupt AMPOMY treatment Resume AMPOMY at 1 mg less than the previous dose
Thrombocytopenia - Platelets < 25 000/μL - Platelets return to > 50 000/μL	Interrupt AMPOMY treatment, follow CBC weekly Resume AMPOMY treatment at 3 mg daily
- For each subsequent drop < 25 000/μL - Return to $\geq 50000/\mu\text{L}$	Interrupt AMPOMY treatment Resume AMPOMY at 1 mg less than previous dose.

*ANC – Absolute Neutrophil Count; **CBC – Complete Blood Count

PBd regimen: To initiate a new cycle of AMPOMY, the neutrophil count must be $\geq 1000/\mu\text{L}$, and the platelet count must be $\geq 50\,000/\mu\text{L}$.

Pd regimen: To initiate a new cycle of AMPOMY, the neutrophil count must be $\geq 500/\mu\text{L}$, the platelet count must be $\geq 50\,000/\mu\text{L}$.

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For other Grade 3/4 toxicities judged to be related to AMPOMY, stop treatment and restart treatment at 1 mg less than the previous dose when toxicity has resolved to $\leq$ Grade 2 at the medical practitioner's discretion.

If toxicities occur after dose reductions to 1 mg, then the medicine should be discontinued.

Dose Adjustment for Co-Administration of CYP1A2 Inhibitors:

If strong inhibitors of CYP1A2 (e.g., fluvoxamine, ciprofloxacin) are co-administered with AMPOMY, reduce the recommended starting AMPOMY dose to 2 mg (a 50 % reduction for patients with multiple myeloma) (see Section below).

PBd regimen: For dose adjustments due to toxicity with bortezomib, refer to the product prescribing information.

Dexamethasone dose modification instructions

Dexamethasone dose reduction levels:

Toxicity	Dose Modification
Dyspepsia = Grade 1-2 Dyspepsia $\geq$ Grade 3	Maintain dose and treat with histamine (H ₂) blockers or equivalent. Decrease by one dose level if symptoms persist. Interrupt dose until symptoms are controlled. Add H ₂ blocker or equivalent and decrease one dose level when dose restarted.
Oedema $\geq$ Grade 3	Use diuretics as needed and decrease dose by one dose level.
Confusion or mood alteration $\geq$ Grade 2	Interrupt dose until symptoms resolve. When dose restarted decrease dose by one dose level.
Muscle weakness $\geq$ Grade 2	Interrupt dose until muscle weakness $\leq$ Grade 1.

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	Restart with dose decreased by one level.
Hyperglycaemia $\geq$ Grade 3	Decrease dose by one dose level. Treat with insulin or oral hypoglycaemic agents as needed
Acute pancreatitis	Discontinue patient from dexamethasone treatment regimen.
Other $\geq$ Grade 3 dexamethasone-related adverse events	Stop dexamethasone dosing until adverse event resolves to $\leq$ Grade 2. Resume with dose reduced by one level.

Discontinuation of AMPOMY

AMPOMY interruption or discontinuation should be considered for Grade 2-3 skin rash.

AMPOMY must be discontinued for angioedema, anaphylaxis, Grade 4 rash, exfoliative or bullous rash, or if Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN) or medicine reaction with eosinophilia and systemic symptoms (DRESS) is suspected and should not be resumed following discontinuation for these reactions.

Dose reduction levels ($\leq$ 75 years of age): Starting dose 40 mg; dose level -1 20 mg; dose level-2 10 mg on Days 1, 8, 15 and 22 of each 28-day treatment cycle.

Dose reduction levels ($>$ 75 years of age): Starting dose 20 mg; dose level -1 12 mg; dose level -2 8 mg on Days 1, 8, 15 and 22 of each 28-day treatment cycle.

If recovery from toxicities is prolonged beyond 14 days, then the dose of dexamethasone will be decreased by one dose level.

Special populations:

Renal impairment:

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No dose adjustment of AMPOMY is required for patients with renal impairment. On haemodialysis days, patients should take their AMPOMY dose following haemodialysis.

Hepatic impairment:

No adjustment of the starting dose of pomalidomide is required for patients with hepatic impairment as defined by the Child-Pugh criteria. However, patients with hepatic impairment should be carefully monitored. Interruption of AMPOMY should be used as needed.

Elderly patients:

No dose adjustment is required for AMPOMY.

Pd regimen after at least 2 prior therapies:

For patients > 75 years of age, the starting dose of dexamethasone is 20 mg once daily on Days 1, 8, 15 and 22 of each 28-day treatment cycle.

PBd regimen after at least one prior therapy:

For patients greater than 75 years of age, the dose of dexamethasone is:

Cycles 1-8: 10 mg once daily on days 1, 2, 4, 5, 8, 9, 11, and 12 of a 21-day cycle. From cycle 9 onwards: 10 mg once daily on days 1, 2, 8, and 9 of a 21-day cycle.

Paediatric population

The safety and effectiveness of pomalidomide have not been established in paediatric patients with recurrent or progressive brain tumours.

Method of administration

Oral use.

AMPOMY should be taken at the same time each day. The capsules should not be opened, broken or chewed. This medicine should be swallowed whole, preferably with water, with or without food.

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4.3. Contraindications

AMPOMY is contraindicated in:

- Hypersensitivity to AMPOMY (pomalidomide) or to any of the excipients.
- Pregnancy and lactation (see section 4.6).
- Females of childbearing potential, unless all the conditions of the pregnancy prevention programme are met (see section 4.4).
- Male patients unable to follow or comply with the required contraceptive measures (see section 4.4).

4.4. Special warnings and precautions for use

General:

Pregnancy warning

Pomalidomide is a thalidomide analogue. Thalidomide is a known human teratogenic active substance that causes severe life-threatening birth defects. Pomalidomide was found to be teratogenic in both rats and rabbits when administered during the period of major organogenesis. If AMPOMY is taken during pregnancy, a teratogenic effect of pomalidomide in humans is expected. The conditions of the Risk Management Programme must be fulfilled for all patients unless there is reliable evidence that the patient does not have childbearing potential.

Criteria for females of non-childbearing potential

A female patient or a female partner of a male patient is considered to have childbearing potential unless she meets at least one of the following criteria:

- Age $\geq$ 50 years and naturally amenorrhoeic for $\geq$ 2 years*.
- Premature ovarian failure confirmed by a specialist gynaecologist.
- Previous bilateral salpingo-oophorectomy, or hysterectomy.

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- XY genotype, Turner syndrome, uterine agenesis.

*Amenorrhoea following cancer therapy or during breast-feeding does not rule out childbearing potential.

Counselling

For females of childbearing potential, AMPOMY is contraindicated unless all of the following are met:

- She understands the expected teratogenic risk to the unborn child.
- She understands the need for effective contraception, without interruption, 4 weeks before starting treatment, throughout the entire duration of treatment including dose interruptions, and for 4 weeks after the end of treatment.
- Even if a female of childbearing potential has amenorrhoea, she must follow all the advice on effective contraception.
- She should be capable of complying with effective contraceptive measures.
- She is informed and understands the potential consequences of pregnancy and the need to rapidly consult if there is a risk of pregnancy.
- She understands the need to commence the treatment as soon as AMPOMY is dispensed following a negative pregnancy test.
- She understands the need and accepts to undergo pregnancy testing every 4 weeks except in case of confirmed tubal sterilization.
- She acknowledges that she understands the hazards and necessary precautions associated with the use of AMPOMY.

The prescriber must ensure that for females of childbearing potential:

- The patient complies with the conditions of the Risk Management Programme, including confirmation that she has an adequate level of understanding.
- The patient has acknowledged the aforementioned conditions.

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For male patients taking AMPOMY, pharmacokinetic data has demonstrated that pomalidomide is present in human semen. As a precaution, all male patients taking AMPOMY must meet the following conditions:

- He understands the expected teratogenic risk if engaged in sexual activity with a pregnant female or a female of childbearing potential.
- He understands the need for the use of a condom if engaged in sexual activity with a pregnant female or a female of childbearing potential not using effective contraception, during treatment and for 4 weeks after dose interruptions and/or cessation of treatment. Vasectomised males should wear a condom if engaged in sexual activity with a pregnant female as seminal fluid may still contain pomalidomide in the absence of spermatozoa.
- He understands that if his female partner becomes pregnant whilst he is taking AMPOMY or for 4 weeks after he has stopped taking AMPOMY, he should inform his treating medical practitioner immediately and that it is recommended to refer the female partner to a medical practitioner specialised or experienced in teratology for evaluation and advice.

Contraception

Females of childbearing potential must use two reliable methods of contraception for 4 weeks before therapy, during therapy including dose interruptions, and until 4 weeks after AMPOMY therapy unless the patient commits to absolute and continuous abstinence confirmed on a monthly basis. If not established on effective contraception, the patient must be referred to an appropriately trained health care professional for contraceptive advice in order that contraception can be initiated.

The following can be considered to be examples of suitable methods of contraception:

Highly effective methods

- Intra Uterine Device (IUD).

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- Hormonal (hormonal implants, levonorgestrel-releasing intrauterine system (IUS)), medroxyprogesterone acetate depot injections, ovulation inhibitory progesterone-only pills (e.g. desogestrel).
- Tubal ligation.
- Partner's vasectomy.

Effective methods

- Male condom.
- Diaphragm.
- Cervical cap.

Because there is an increased risk of venous thromboembolism (VTE) in patients taking combined oral contraceptive pills, medical practitioners should discuss the risk/benefit of contraceptive methods with their patients

Pregnancy testing

According to local practice, medically supervised pregnancy tests with a minimum sensitivity of 25 mIU/ml must be performed for females of childbearing potential as outlined below. This requirement includes females of childbearing potential who practice absolute and continuous abstinence. Ideally, pregnancy testing, issuing a prescription and dispensing should occur on the same day. Dispensing of AMPOMY to females of childbearing potential should occur within 7 days of the last pregnancy test.

Prior to starting treatment

A medically supervised pregnancy test should be performed within 7 days prior to the patient starting AMPOMY once the patient had been using effective contraception for at least 4 weeks. The test should ensure the patient is not pregnant when she starts treatment with AMPOMY.

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Follow-up and end of treatment

A medically supervised pregnancy test should be repeated every 4 weeks, including 4 weeks after the end of treatment, except in the case of confirmed tubal sterilisation. These pregnancy tests should be performed on the day of the prescribing visit or within the 7 days prior to the visit to the prescriber.

Men

Pomalidomide is present in human semen during treatment. As a precaution, and taking into account special populations with potentially prolonged elimination time such as renal impairment, all male patients taking AMPOMY, including those who have had a vasectomy, should use condoms throughout treatment duration, during dose interruption and for 4 weeks after cessation of treatment if their partner is pregnant or of childbearing potential and has no contraception.

Male patients should not donate semen or sperm during treatment (including during dose interruptions) and for 4 weeks following discontinuation of AMPOMY.

Additional precautions

Patients should be instructed never to give AMPOMY to another person and to return any unused capsules to their pharmacist at the end of treatment.

Patients should not donate blood during therapy including dose interruptions and for 4 weeks following discontinuation of AMPOMY.

Educational materials

In order to assist patients in avoiding foetal exposure to pomalidomide, Hetero Drugs will provide educational material to healthcare professionals to reinforce the warnings about the expected teratogenicity of AMPOMY, to provide advice on contraception before therapy is started, and to provide guidance on the need for pregnancy testing. Full patient information about the expected teratogenic risk and the strict pregnancy prevention measures as specified in the Risk

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Management Programme should be given by the medical practitioner to females of childbearing potential and, as appropriate, to male patients.

Haematological events

Neutropenia was the most frequently reported Grade 3/4 haematologic adverse reaction (AR) in subjects with relapsed/refractory multiple myeloma, followed by anaemia and thrombocytopenia. Monitor patients for haematologic toxicities, especially neutropenia.

Patients should be advised to report febrile episodes promptly. Medical practitioners should observe patients for signs of bleeding including epistaxes, especially with use of concomitant medicines known to increase the risk of bleeding (see Section 4.8).

Monitor complete blood counts at baseline, weekly for the first 8 weeks and monthly thereafter. A dose modification may be required. Patients may require use of blood product support and/or growth factors.

Thromboembolic events

Patients receiving AMPOMY have commonly developed venous thromboembolic events (VTE) (predominantly deep vein thrombosis and pulmonary embolism) and arterial thrombotic events (myocardial infarction and cerebrovascular accident). Patients with known risk factors for thromboembolism – including prior thrombosis – should be closely monitored. Action should be taken to try to minimise all modifiable risk factors (e.g. smoking, hypertension, and hyperlipidaemia). Patients and medical practitioners are advised to be observant for the signs and symptoms of thromboembolism. Patients should be instructed to seek medical care if they develop symptoms such as shortness of breath, chest pain, arm or leg swelling. Anti- coagulation therapy (unless contraindicated) is (such as acetylsalicylic acid, warfarin, heparin or clopidogrel), especially in patients with additional thrombotic risk factors. A decision to take prophylactic measures should be made after a careful assessment of the individual patient's underlying risk factors. In clinical studies, patients received prophylactic acetylsalicylic acid or alternative anti- thrombotic therapy.

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The use of erythropoietic agents carries a risk of thrombotic events including thromboembolism. Therefore, erythropoietic agents, a may increase the risk of thromboembolic events, should be used with caution.

Thyroid disorders

Cases of hypothyroidism have been reported. Optimal control of co-morbid conditions influencing thyroid function is recommended before start of treatment. Baseline and ongoing monitoring of thyroid function is recommended.

Peripheral neuropathy

Patients with ongoing $\geq$ Grade 2 peripheral neuropathy were excluded from clinical studies with pomalidomide. Appropriate caution should be exercised when considering the treatment of such patients with pomalidomide.

Significant cardiac dysfunction

Patients with significant cardiac dysfunction (congestive heart failure [NY Heart Association Class III or IV]; myocardial infarction within 12 months of starting study; unstable or poorly controlled angina pectoris) were excluded from clinical studies with pomalidomide. Cardiac events, including congestive cardiac failure, pulmonary oedema and atrial fibrillation (see Section 4.8), have been reported, mainly in patients with pre-existing cardiac disease or cardiac risk factors. Appropriate caution should be exercised when considering the treatment of such patients with pomalidomide, including periodic monitoring for signs or symptoms of cardiac events.

Tumour lysis syndrome

Patients at greatest risk of tumour lysis syndrome are those with high tumour burden prior to treatment. These patients should be monitored closely and appropriate precautions taken.

Second Primary Malignancies

Second primary malignancies, such as non-melanoma skin cancer, have been reported in patients receiving AMPOMY, (see section 4.8). Medical practitioners should carefully evaluate patients before and during treatment using standard cancer screening for occurrence of second primary malignancies and institute treatment as indicated.

Allergic reactions and Serious Skin Reactions

- Angioedema, anaphylaxis and severe dermatologic reactions including Stevens-Johnson syndrome (SJS), and toxic epidermal necrolysis (TEN), and drug reaction with eosinophilia and systemic symptoms (DRESS) have been reported. DRESS may present with a cutaneous reaction (such as rash or exfoliative dermatitis), eosinophilia, fever, and/or lymphadenopathy with systemic complications such as hepatitis, nephritis, pneumonitis, myocarditis, and/or pericarditis. These events can be fatal.
- Patients with a prior history of serious allergic reactions associated with thalidomide or lenalidomide were excluded from clinical studies, may be at higher risk of hypersensitivity and should not receive AMPOMY. AMPOMY interruption or discontinuation should be considered for Grade 2-3 skin rash. AMPOMY must be discontinued for angioedema, anaphylaxis, Grade 4 rash, exfoliative or bullous rash or if SJS, TEN or DRESS is suspected, and should not be resumed following discontinuation for these reactions.

Dizziness and confusion

Confusion, fatigue, depressed level of consciousness and dizziness have been reported with the use of AMPOMY. Patients must avoid situations where dizziness or confusion may be a problem and not to take other medicines that may cause dizziness or confusion without first seeking medical advice.

Interstitial lung disease (ILD)

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ILD and related events, including cases of pneumonitis, have been observed with pomalidomide. Careful assessment of patients with an acute onset or unexplained worsening of pulmonary symptoms should be performed to exclude ILD. AMPOMY should be interrupted pending investigation of these symptoms and if ILD is confirmed, appropriate treatment should be should only be resumed after a thorough evaluation of the benefits and the risks.

Hepatic Disorders

Markedly elevated levels of alanine aminotransferase and bilirubin have been observed in patients treated with AMPOMY (see section 4.8). There have also been cases of hepatitis that resulted in discontinuation of AMPOMY. Regular monitoring of liver function is recommended.

Infection

Reactivation of hepatitis B has been reported rarely in patients receiving AMPOMY in combination with dexamethasone who have previously been infected with the hepatitis B virus (HBV). Some of these cases have progressed to acute hepatic failure, resulting in discontinuation of AMPOMY. Caution should be exercised when AMPOMY in combination with dexamethasone is used in patients previously infected with HBV. These patients should be closely monitored for signs and symptoms of active HBV infection throughout therapy.

Sodium content

AMPOMY contains less than 1 mmol sodium (1.2 mg) per capsule, i.e. essentially 'sodium-free'.

4.5. Interaction with other medicines and other forms of interaction

Effect of pomalidomide on other medicinal products:

Pomalidomide is not anticipated to cause clinically relevant pharmacokinetic interactions due to P450 isoenzyme inhibition or induction or transporter inhibition when co-administered with substrates of these enzymes or transporters. The potential for such interactions, including the

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potential impact of pomalidomide on the pharmacokinetics of combined oral contraceptives, has not been evaluated clinically.

Effect of other medicinal products on pomalidomide

Pomalidomide is partly metabolised by CYP1A2 and CYP3A4/5. It is also a substrate for P-glycoprotein. Co-administration of pomalidomide with the strong CYP3A4/5 and P-gp inhibitor ketoconazole, or the strong CYP3A4/5 inducer carbamazepine, had no clinically relevant effect on exposure to pomalidomide. Co-administration of the strong CYP1A2 inhibitor fluvoxamine with pomalidomide in the presence of ketoconazole, increased mean exposure to pomalidomide by 107 % with a 90 % confidence interval (91% to 124%) compared to pomalidomide plus ketoconazole. In a second study to evaluate the contribution of a CYP1A2 inhibitor alone to metabolism changes, coadministration of fluvoxamine alone with pomalidomide increased mean exposure to pomalidomide by 125 % with a 90 % confidence interval (98% to 157%) compared to pomalidomide alone. If strong inhibitors of CYP1A2 (e.g. ciprofloxacin, enoxacin and fluvoxamine) are co-administered with pomalidomide, reduce the dose of pomalidomide by 50 %.

Dexamethasone

Co-administration of multiple doses of up to 4 mg pomalidomide with 20 mg to 40 mg dexamethasone (a weak to moderate inducer of several CYP enzymes including CYP3A) to patients with multiple myeloma had no effect on the pharmacokinetics of pomalidomide compared with pomalidomide administered alone.

The effect of dexamethasone on warfarin is unknown. Close monitoring of warfarin concentration is advised during treatment.

4.6. Fertility, pregnancy and lactation

Women of childbearing potential / Contraception in males and females

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Women of childbearing potential should use effective method of contraception. If pregnancy occurs in a woman treated with pomalidomide, treatment must be stopped and the patient should be referred to a medical practitioner specialised or experienced in teratology for evaluation and advice. If pregnancy occurs in a partner of a male patient taking pomalidomide, it is recommended to refer the female partner to a medical practitioner specialised or experienced in teratology for evaluation and advice. Pomalidomide is present in human semen. As a precaution, all male patients taking pomalidomide should use condoms throughout treatment duration, during dose interruption and for 4 weeks after cessation of treatment if their partner is pregnant or of childbearing potential and has no contraception (see sections 4.4).

Pregnancy

AMPOMY is contraindicated during pregnancy and in women of childbearing potential (see sections 4.3).

Pomalidomide was found to be teratogenic in embryo-foetal development toxicity studies in rats and rabbits. Pomalidomide crosses the placenta and was detected in foetal blood following administration to pregnant rabbits.

Breastfeeding

Breastfeeding of infants is contraindicated in mothers taking AMPOMY. Pomalidomide was detected in milk of lactating rats following administration to the mother.

Fertility

No studies on the effect on human fertility have been conducted for AMPOMY or with the individual components.

4.7. Effects on ability to drive and use machines

Applicant/PHRC: **Hetero Drugs South Africa (Pty) Ltd**

Product proprietary name (s): **AMPOMY 1 mg/2 mg/3 mg/ 4 mg.**

Dosage form and strength: **Each Hard gelatin capsule contains Pomalidomide 1 mg, 2 mg, 3 mg and 4 mg.**

AMPOMY may cause confusion, fatigue, depressed level of consciousness and dizziness and affect mental and/or physical abilities to perform or execute tasks or activities requiring mental alertness, judgment and/or sound coordination and vision.

4.8. Undesirable effects

a. Summary of the safety profile

Pomalidomide in combination with bortezomib and dexamethasone

The most commonly reported blood and lymphatic system disorders were neutropenia, thrombocytopenia and anaemia. Other most frequently reported adverse reactions included peripheral sensory neuropathy, fatigue, diarrhoea, constipation, and oedema peripheral. The most commonly reported Grade 3 or 4 adverse reactions were blood and lymphatic system disorders including neutropenia, thrombocytopenia and anaemia. The most commonly reported serious adverse reaction was pneumonia.

Other serious adverse reactions reported included pyrexia, lower respiratory tract infection, influenza, pulmonary embolism, atrial fibrillation, and acute kidney injury.

Pomalidomide in combination with dexamethasone

The most commonly reported adverse reactions in clinical studies have been blood and lymphatic system disorders including anaemia, neutropenia and thrombocytopenia in general disorders and administration site conditions including fatigue, pyrexia and oedema peripheral and in infections and infestations including pneumonia. Peripheral neuropathy adverse reactions were reported in patients and venous embolic or thrombotic (VTE) adverse reactions were reported in patients. The most commonly reported Grade 3 or 4 adverse reactions were in the blood and lymphatic system disorders including neutropenia, anaemia and thrombocytopenia in infections and infestations including pneumonia and in general disorders and administration site conditions including fatigue pyrexia and oedema peripheral. The most commonly reported serious adverse reaction was pneumonia. Other

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Product proprietary name (s): **AMPOMY 1 mg/2 mg/3 mg/ 4 mg.**
Dosage form and strength: **Each Hard gelatin capsule contains Pomalidomide 1 mg, 2 mg, 3 mg and 4 mg.**

serious adverse reactions reported included febrile neutropenia, neutropenia, thrombocytopenia and VTE adverse reactions.

b. Tabulated list of adverse reactions

Combination of treatment	Pomalidomide/ bortezomib/dexamethasone		Pomalidomide/ dexamethasone	
System Organ Class /Preferred term	All ADRs	Grade 3–4 ADRs	All ADRs	Grade 3–4 ADRs
Infections and infestations				
Pneumonia	Frequent	Frequent	-	-
Pneumonia (bacterial, viral and fungal infections, including opportunistic infections)	-	-	Frequent	Frequent
Bronchitis	Frequent	Frequent	Frequent	Less frequent
Upper respiratory tract infection	Frequent	Frequent	Frequent	Frequent
Viral upper respiratory tract infection	Frequent	-	-	-
Sepsis	Frequent	Frequent	-	-
Septic shock	Frequent	Frequent	-	-
Neutropenic sepsis	-	-	Frequent	Frequent
<i>Clostridium difficile</i> colitis	Frequent	Frequent	-	-
Bronchopneumonia	-	-	Frequent	Frequent
Respiratory tract infection	Frequent	Frequent	Frequent	Frequent

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Lower respiratory tract infection	Frequent	Frequent	-	-
Lung infection	Frequent	Less frequent	-	-
Influenza	Frequent	Frequent	-	-
Bronchiolitis	Frequent	Frequent	-	-
Urinary tract infection	Frequent	Frequent	-	-
Nasopharyngitis	-	-	Frequent	-
Herpes zoster	-	-	Frequent	Less frequent
Hepatitis B reactivation	-	-	Frequency unknown*	Frequency unknown*
Neoplasms benign, malignant and unspecified (incl cysts and polyps)				
Basal cell carcinoma	Frequent	Less frequent	-	-
Basal cell carcinoma of the skin	-	-	Less frequent	Less frequent
Squamous cell carcinoma of the skin	-	-	Less frequent	Less frequent
Blood and lymphatic system disorders				
Neutropenia	Frequent	Frequent	Frequent	Frequent
Thrombocytopenia	Frequent	Frequent	Frequent	Frequent
Leucopenia	Frequent	Frequent	Frequent	Frequent
Anaemia	Frequent	Frequent	Frequent	Frequent
Febrile neutropenia	Frequent	Frequent	Frequent	Frequent
Lymphopenia	Frequent	Frequent	-	-
Pancytopenia	-	-	Frequent*	Frequent*
Immune system disorders				
Angioedema	-	-	Frequent*	Less frequent*

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Urticaria	-	-	Frequent*	Less frequent*
Anaphylactic reaction	Frequency unknown*	Frequency unknown*	-	-
Solid organ transplant rejection	Frequency unknown*	-	-	-
Endocrine disorders				
Hypothyroidism	Less frequent*	-	-	-
Metabolism and nutrition disorders				
Hypokalaemia	Frequent	Frequent	-	-
Hyperglycaemia	Frequent	Frequent	-	-
Hypomagnesaemia	Frequent	Frequent	-	-
Hypocalcaemia	Frequent	Frequent	-	-
Hypophosphataemia	Frequent	Frequent	-	-
Hyperkalaemia	Frequent	Frequent	Frequent	Frequent
Hypercalcaemia	Frequent	Frequent	-	-
Hyponatraemia	-	-	Frequent	Frequent
Decreased appetite	-	-	Frequent	Less frequent
Hyperuricaemia	-	-	Frequent*	Frequent*
Tumour lysis syndrome	-	-	Less frequent*	Less frequent*
Psychiatric disorders				
Insomnia	Frequent	Frequent	-	-
Depression	Frequent	Frequent	-	-
Confusional state	-	-	Frequent	Frequent
Nervous system disorders				

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Product proprietary name (s): **AMPOMY 1 mg/2 mg/3 mg/ 4 mg.**

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Peripheral sensory neuropathy	Frequent	Frequent	Frequent	Less frequent
Dizziness	Frequent	Less frequent	Frequent	Less frequent
Tremor	Frequent	Less frequent	Frequent	Less frequent
Syncope	Frequent	Frequent	-	-
Peripheral sensorimotor neuropathy	Frequent	Frequent	-	-
Paraesthesia	Frequent	-	-	-
Dysgeusia	Frequent	-	-	-
Depressed level of consciousness	-	-	Frequent	Frequent
Intracranial haemorrhage	-	-	Frequent*	Less frequent*
Cerebrovascular accident	-	-	Less frequent*	Less frequent*
Eye disorders				
Cataract	Frequent	Frequent	-	-
Ear and labyrinth disorders				
Vertigo	-	-	Frequent	Frequent
Cardiac disorders				
Atrial fibrillation	Frequent	Frequent	Frequent*	Frequent*
Cardiac failure	-	-	Frequent*	Frequent*
Myocardial infarction	-	-	Frequent*	Less frequent*
Vascular disorders				
Deep vein thrombosis	Frequent	Less frequent	Frequent	Less frequent
Hypotension	Frequent	Frequent	-	-
Hypertension	Frequent	Frequent	-	-

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Product proprietary name (s): **AMPOMY 1 mg/2 mg/3 mg/ 4 mg.**

Dosage form and strength: **Each Hard gelatin capsule contains Pomalidomide 1 mg, 2 mg, 3 mg and 4 mg.**

Respiratory, thoracic and mediastinal disorders				
Dyspnoea	Frequent	Frequent	Frequent	Frequent
Cough	Frequent	-	Frequent	Less frequent
Pulmonary embolism	Frequent	Frequent	Frequent	Less frequent
Epistaxis	-	-	Frequent*	Less frequent&
Interstitial lung disease	-	-	Frequent*	Less frequent&
Gastrointestinal disorders				
Diarrhoea	Frequent	Frequent	Frequent	Frequent
Vomiting	Frequent	Frequent	Frequent	Frequent
Nausea	Frequent	Less frequent	Frequent	Less frequent
Constipation	Frequent	Frequent	Frequent	Frequent
Abdominal pain	Frequent	Frequent	-	-
Abdominal pain upper	Frequent	Less frequent	-	-
Stomatitis	Frequent	Less frequent	-	-
Dry mouth	Frequent	-	-	-
Abdominal distension	Frequent	Less frequent	-	-
Gastrointestinal haemorrhage	-	-	Frequent	Less frequent
Hepatobiliary disorders				
Hyperbilirubinaemia	-	-	Less frequent	Less frequent
Hepatitis	-	-	Less frequent*	-
Skin and subcutaneous tissue disorders				
Rash	Frequent	Frequent	Frequent	Frequent
Pruritus	-	-	Frequent	-

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Drug Reaction with Eosinophilia and Systemic Symptoms	-	-	Frequency unknown*	Frequency unknown*
Toxic Epidermal Necrolysis	-	-	Frequency unknown*	Frequency unknown*
Stevens-Johnson Syndrome	-	-	Frequency unknown*	Frequency unknown*
Musculoskeletal and connective tissue disorders				
Muscular weakness	Frequent	Frequent	-	-
Back pain	Frequent	Frequent	-	-
Bone pain	Frequent	Less frequent	Frequent	Frequent
Muscle spasms	Frequent	-	Frequent	Less frequent
Renal and urinary disorders				
Acute kidney injury	Frequent	Frequent	-	-
Chronic kidney injury	Frequent	Frequent	-	-
Urinary retention	Frequent	Frequent	Frequent	Less frequent
Renal failure	-	-	Frequent	Frequent
Reproductive system and breast disorders				
Pelvic pain	-	-	Frequent	Frequent
General disorders and administration site conditions				
Fatigue	Frequent	Frequent	Frequent	Frequent
Pyrexia	Frequent	Frequent	Frequent	Frequent
Oedema peripheral	Frequent	Frequent	Frequent	Frequent
Non-cardiac chest pain	Frequent	Frequent	-	-
Oedema	Frequent	Frequent	-	-
Investigations				

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Alanine aminotransferase increased	Frequent	Frequent	Frequent	Frequent
Weight decreased	Frequent	Frequent	-	-
Neutrophil count decreased	-	-	Frequent	Frequent
White blood cell count decreased	-	-	Frequent	Frequent
Platelet count decreased	-	-	Frequent	Frequent
Blood uric acid increased	-	-	Frequent*	Less frequent*
Injury, poisoning and procedural complications				
Fall	Frequent	Frequent	-	-

* Reported during post-marketing use.

c. Description of selected adverse reactions

Teratogenicity:

AMPOMY is structurally related to thalidomide. Thalidomide is a known human teratogenic active substance that causes severe life-threatening birth defects. Pomalidomide was found to be teratogenic in both rats and rabbits when administered during the period of major organogenesis. If AMPOMY is taken during pregnancy, a teratogenic effect of pomalidomide in humans is expected (see section 4.4 Special warnings and precautions for use, section 4.6).

Neutropenia and thrombocytopenia:

Neutropenia occurred in 45,3 % of patients who received pomalidomide plus low dose dexamethasone (Pom + LD-Dex), and in 19,5 % of patients who received high dose dexamethasone (HD-Dex). Neutropenia was Grade 3 or 4 in 41,7 % of patients who received Pom + LD-Dex, compared with 14,8 % who received HD-Dex. In Pom + LD-Dex treated patients

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neutropenia was infrequently serious (2,0 % of patients), did not lead to treatment discontinuation, and was associated with treatment interruption in 21,0 % of patients, and with dose reduction in 7,7 % of patients.

Febrile neutropenia (FN) was experienced in 6,7 % of patients who received Pom + LD-Dex, and in no patients who received HD-Dex. All were reported to be Grade 3 or 4. FN was reported to be serious in 4,0 % of patients. FN was associated with dose interruption in 3,7 % of patients, and with dose reduction in 1,3 % of patients, and with no treatment discontinuations.

Thrombocytopenia occurred in 27,0 % of patients who received Pom + LD-Dex, and 26,8 % of patients who received HD-Dex. Thrombocytopenia was Grade 3 or 4 in 20,7% of patients who received Pom + LD-Dex and in 24,2 % who received HD-Dex. In Pom + LD-Dex treated patients, thrombocytopenia was serious in 1,7 % of patients, led to dose reduction in 6,3 % of patients, to dose interruption in 8 % of patients and to treatment discontinuation in 0,7 % of patients (see section 4.4 Special warnings and precautions for use, section 4.6 Fertility, pregnancy and lactation).

Infection:

Infection was the most common non haematological toxicity; it occurred in 55,0 % of patients who received Pom + LD-Dex, and 48,3 % of patients who received HD-Dex. Approximately half of those infections were Grade 3 or 4; 24,0 % in Pom + LD-Dex-treated patients and 22,8 % in patients who received HD-Dex.

In Pom + LD-Dex treated patients, pneumonia and upper respiratory tract infections were the most commonly reported infections (in 10,7 % and 9,3 % of patients, respectively); with 24,3 % of reported infections being serious and fatal infections (Grade 5) occurring in 2,7 % of treated patients. In Pom + LD-Dex treated patients infections led to dose discontinuation in 2,0 % of patients, to treatment interruption in 14,3 % of patients, and to a dose reduction in 1,3 % of patients.

Thromboembolic events:

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Venous embolic or thrombotic events (VTE) occurred in 3,3 % of patients who received Pom + LD-Dex, and 2,0 % of patients who received HD-Dex. Grade 3 or 4 reactions occurred in 1,3 % of patients who received Pom + LD-Dex, and no patients who received HD-Dex. In Pom + LD-Dex treated patients, VTE was reported as serious in 1,7 % of patients, no fatal reactions were reported in clinical studies, and VTE was not associated with dose discontinuation.

Peripheral neuropathy:

Patients with ongoing peripheral neuropathy $\geq$ Grade 2 were excluded from clinical studies. Peripheral neuropathy, mostly Grade 1 or 2 occurred in 12,3 % patients who received Pom + LD-Dex, and 10,7 % of patients who received HD-Dex. Grade 3 or 4 reactions occurred in 1,0 % of patients who received Pom + LD-Dex and in 1,3 % of patients who received HD-Dex. In patients treated with Pom + LD-Dex, no peripheral neuropathy reactions were reported to have been serious in clinical trials and peripheral neuropathy led to dose discontinuation in 0,3 % of patients (see section 4.4 and, section 4.6).

Haemorrhage:

Haemorrhagic disorders have been reported with AMPOMY, especially in patients with risk factors such as concomitant medicines that increase susceptibility to bleeding. Haemorrhagic events have included epistaxis, intracranial haemorrhage and gastrointestinal haemorrhage.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare professionals are asked to report any suspected adverse reactions to SAHPRA via the Med Safety APP (Medsafety X SAHPRA) and eReporting platform (who-umc.org) found on the SAHPRA website or to the Holder of certificate of registration through the mail: pvg.cdma@heterogroups.com. By reporting side effects, you can help provide more information on the safety of AMPOMY.

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4.9. Overdose

Treatment should be symptomatic and supportive.

It is unknown whether pomalidomide or its metabolites are dialysable.

5. PHARMACOLOGICAL PROPERTIES

5.1. Pharmacodynamic properties

Category and class: A 32.16 Other (Immuno-suppressants)

Pharmacotherapeutic group: Immunosuppressants, Other immunosuppressants, ATC code: L04AX06

Mechanism of Action

Pomalidomide has direct anti-myeloma tumoricidal activity, immunomodulatory activities and inhibits stromal cell support for multiple myeloma tumour cell growth. Specifically, pomalidomide inhibits proliferation and induces apoptosis of haematopoietic tumour cells. Additionally, pomalidomide inhibits the proliferation of lenalidomide-resistant multiple myeloma cell lines and synergizes with dexamethasone in both lenalidomide-sensitive and lenalidomide-resistant cell lines to induce tumour cell apoptosis. Pomalidomide enhances T cell- and natural killer (NK) cell-mediated immunity and inhibits production of pro-inflammatory cytokines (e.g., TNF- α and IL-6) by monocytes. Pomalidomide also inhibits angiogenesis by blocking the migration and adhesion of endothelial cells.

Pomalidomide binds directly to the protein cereblon (CRBN), which is part of an E3 ligase complex that includes deoxyribonucleic acid (DNA) damage-binding protein 1 (DDB1), cullin 4 (CUL4), and Roc1, and can inhibit the auto-ubiquitination of CRBN within the complex. E3 ubiquitin ligases are responsible for the poly-ubiquitination of a variety of substrate proteins and may partially explain the pleiotropic cellular effects observed with pomalidomide treatment.

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Pomalidomide pro-erythropoietic activities were demonstrated in CD34+ haematopoietic stem cells induced to differentiate toward the erythroid phenotype. These activities were manifested as a delayed erythroid maturation, increased proliferation of immature erythroid cells, and induction of foetal haemoglobin (HbF) production.

A QTc study was conducted to evaluate the effects of pomalidomide on QT interval at single doses of 4 mg and 20 mg. A single dose of pomalidomide up to 20 mg was not associated with prolongation of the QT interval in healthy male subjects. Pomalidomide is not expected to result in clinically significant prolongation of the QT interval in patients at the approved therapeutic doses.

5.2. Pharmacokinetic properties

Absorption:

Pomalidomide is absorbed with a C_{max} occurring between 2 and 3 hours and is > 70 % absorbed following administration of single oral dose. The systemic exposure (AUC) of pomalidomide increases in an approximately dose proportional manner. Following multiple doses, pomalidomide has an accumulation ratio of 27 - 31 %.

Co-administration with a high-fat and high-calorie meal slows the rate of absorption, decreasing plasma C_{max} by ~25 %, but has minimal effect on the overall extent of absorption with an 8 % decrease in AUC. Therefore, pomalidomide can be administered without regard to food intake.

Distribution:

Pomalidomide has a mean apparent volume of distribution (V_d/F) between 62 and 138 L at steady state. Pomalidomide is distributed in semen of healthy subjects at a concentration of approximately 67 % of plasma level at 4 hours post-dose ($\sim T_{max}$) after 4 days of once daily dosing at 4 mg. *In vitro* binding of pomalidomide enantiomers to proteins in human plasma ranges from 12 % to 44 % and is not concentration dependent.

Biotransformation

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Pomalidomide is the major circulating component (approximately 70 % of plasma radioactivity) *in vivo* in healthy subjects who received a single oral dose of [¹⁴C]-pomalidomide (2 mg). No metabolites were present at > 10 % relative to parent or total radioactivity in plasma.

Pomalidomide is eliminated in humans via multiple pathways including CYP-mediated metabolism, non-CYP dependent hydrolysis, and excretion of unchanged agent. The predominant metabolic pathways of excreted radioactivity are hydroxylation with subsequent glucuronidation, or hydrolysis. *In vitro*, CYP1A2 and CYP3A4 were identified as the primary enzymes involved in the CYP-mediated hydroxylation of pomalidomide, with additional minor contributions from CYP2C19 and CYP2D6.

Co-administration of pomalidomide with the strong CYP3A4/5 (and P-gp inhibitor) ketoconazole, or the strong CYP3A4/5 inducer carbamazepine, had no clinically relevant effect on exposure to pomalidomide.

Co-administration of the strong CYP1A2 inhibitor fluvoxamine with pomalidomide in the presence of ketoconazole, increased exposure to pomalidomide by 104 % with a 90 % confidence interval [88 % to 122 %] compared to pomalidomide plus ketoconazole. In a second study to evaluate the contribution of a CYP1A2 inhibitor alone to metabolism changes, co-administration of fluvoxamine alone with pomalidomide increased mean exposure to pomalidomide by 125 % with a 90 % confidence interval [98 % to 157 %] compared to pomalidomide alone. If strong inhibitors of CYP1A2 are co-administered with pomalidomide, reduce the pomalidomide dose either by 50 % for patients with multiple myeloma (based on the recommended starting doses) (see Section 4.2).

Co-administration of multiple doses of 4 mg pomalidomide with 20 mg to 40 mg of dexamethasone (a weak to moderate inducer of several CYP enzymes including CYP3A) to patients with multiple myeloma had no effect on the pharmacokinetics of pomalidomide compared with pomalidomide administered alone.

Pomalidomide is a substrate of P-glycoprotein *in vitro*, but this did not appear to limit its absorption in humans, where at least 73 % of the substance was absorbed. Co-administration of pomalidomide with the P-gp inhibitor ketoconazole had no clinically relevant effect on exposure to

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pomalidomide, therefore based on this, clinically relevant drug-drug interactions are not anticipated when pomalidomide is co-administered with inhibitors of P-glycoprotein.

Based on *in vitro* data, pomalidomide is not an inhibitor or inducer of cytochrome P-450 isoenzymes and does not inhibit P-glycoprotein, or other studied transporters. Clinically relevant drug-drug interactions are not anticipated when pomalidomide is co-administered with substrates of these pathways.

Excretion:

Pomalidomide is eliminated with a median plasma half-life of approximately 9,5 hours in healthy subjects and approximately 7,5 hours in patients with multiple myeloma. Pomalidomide has a mean total body clearance (CL/F) of 7-10 L/hr.

Following a single oral administration of [¹⁴C]-pomalidomide (2 mg) to healthy subjects, approximately 73 % and 15 % of the radioactive dose was eliminated in urine and faeces, respectively, with approximately 2 % and 8 % of the dosed radiocarbon eliminated as pomalidomide in urine and faeces.

Pomalidomide is extensively metabolised prior to excretion, with the resulting metabolites eliminated primarily in the urine. The 3 predominant metabolites in urine (formed via hydrolysis or hydroxylation with subsequent glucuronidation) account for approximately 23 %, 17 %, and 12 %, respectively, of the dose in the urine.

CYP dependent metabolites account for approximately 43 % of the total excreted radioactivity, while non-CYP dependent hydrolytic metabolites account for 25 %, and excretion of unchanged pomalidomide accounted for 10 % (2 % in urine and 8 % in faeces).

Children

Following a single oral dose of pomalidomide in children and young adults with recurrent or progressive primary brain tumor, the median T_{max} was 2 to 4 hours postdose and corresponded to

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geometric mean C_{max} (CV %) values of 74,8 (59,4 %), 79,2 (51,7 %), and 104 (18,3 %) ng/mL at the 1,9, 2,6, and 3,4 mg/m² dose levels, respectively. AUC_{0-24} and AUC_{0-inf} followed similar trends, with total exposure in the range of approximately 700 to 800 h·ng/mL at the lower 2 doses, and approximately 1200 h·ng/mL at the high dose. Estimates of $t_{1/2}$ were in the range of approximately 5 to 7 hours. There were no clear trends attributable to stratification by age and steroid use at the MTD.

Overall, data suggest that AUC increased nearly proportional to the increase in pomalidomide dose, while the increase in C_{max} was generally less than proportional.

Elderly

In subjects, aged 61 to 82, the mean pharmacokinetic parameters of AUC (0-∞) and C_{max} were generally similar to younger subjects.

Renal Impairment

Population pharmacokinetic analyses showed that the pomalidomide pharmacokinetic parameters were not remarkably affected in renal impaired patients (defined by creatinine clearance or estimated glomerular filtration rate [eGFR]) relative to patients with normal renal function ($CrCl \geq 60$ mL/minute). Mean normalized AUC exposure to pomalidomide was 98,2 % with a 90 % confidence interval [77,4 % to 120,6 %] in moderate renal impairment patients ($eGFR \geq 30$ to ≤ 45 mL/minute/1,73 m²) relative to patients with normal renal function. Mean normalized AUC exposure to pomalidomide was 100.2 % with a 90 % confidence interval [79,7 % to 127,0 %] in severe renal impairment patients not requiring dialysis ($CrCl < 30$ or $eGFR < 30$ mL/minute/1,73 m²) relative to patients with normal renal function. Mean normalized AUC exposure to pomalidomide increased by 35,8 % with a 90 % confidence interval [7,5 % to 70,0 %] in severe renal impairment patients requiring dialysis ($CrCl < 30$ mL/minute requiring dialysis) relative to patients with normal renal function. The mean changes in exposure to pomalidomide in each of these renal impairment groups are not of a magnitude that require dosage adjustments.

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Hepatic Impairment

The pharmacokinetic parameters were modestly changed in hepatic impaired patients (defined by Child-Pugh criteria) relative to healthy subjects. Mean exposure to pomalidomide increased by 51 % with a 90 % confidence interval [9 % to 110 %] in mildly hepatic impaired patients relative to healthy subjects. Mean exposure to pomalidomide increased by 58 % with a 90 % confidence interval [13 % to 119 %] in moderately hepatic impaired patients relative to healthy subjects. Mean exposure to pomalidomide increased by 72 % with a 90 % confidence interval [24 % to 138 %] in severely hepatic impaired patients relative to healthy subjects. The mean increases in exposure to pomalidomide in each of these hepatic impairment groups are not of a magnitude for which adjustments in schedule or dose are required.

6. PHARMACEUTICAL PARTICULARS

6.1. List of excipients

AMPOMY 1 mg, 2 mg, 3 mg and 4 mg:

Cellulose Microcrystalline

Starch Pregelatinized,

Sucrose,

Sodium Stearyl Fumarate

Hard gelatin shell composition for Capsule: Titanium Dioxide & Gelatin

6.2. Incompatibilities

Not applicable.

6.3. Shelf life

24 months

6.4. Special precautions for storage

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Store at or below 25°C.

Keep in outer carton until required for use.

Protect from light.

KEEP OUT OF REACH OF CHILDREN.

6.5. Nature and contents of container

AMPOMY 1 mg, 2 mg, 3 mg and 4 mg:

Cold formable laminated film (PVC/Microns Aluminium foil) / plain Aluminium foil (hard tampered) blisters. The blisters are packed in a cardboard carton.

Pack size: 6 x 10's Alu/Alu Blister Pack

6.6. Special precautions for disposal

Handling:

Capsules should not be opened or crushed. If powder from pomalidomide makes contact with the skin, the skin should be washed immediately and thoroughly with soap and water. If pomalidomide makes contact with the mucous membranes, they should be thoroughly flushed with water.

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

7. HOLDER OF CERTIFICATE OF REGISTRATION

Hetero Drugs South Africa (Pty) Ltd

Waterfall Corporate

Campus, Building No.2,

First Floor, 74 Waterfall Drive, Midrand, 2066

Telephone number: 012 644 1220

Fax number: 012 644 1564

e-mail address: nokuthula.n@hetero.com

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8. REGISTRATION NUMBER(S)

AMPOMY 1 mg: 59/32.16/0309

AMPOMY 2 mg: 59/32.16/0310

AMPOMY 3 mg: 59/32.16/0311

AMPOMY 4 mg: 59/32.16/0312

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