



## Summary of Product Characteristics

**RECADA<sup>®</sup> Capsule**

**RECADA<sup>®</sup> Sachet**



# **RECADA<sup>®</sup>**

(R a c e c a d o t r i l)

## **1. NAME OF THE PRODUCT**

**RECADA<sup>®</sup>** (Racecadotril) 100mg Capsule

## **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

**RECADA<sup>®</sup> 100mg Capsule**

Each capsule contains:

Racecadotril Ph. Eur....100mg

Also contains lactose

## **3. PHARMACEUTICAL FORM**

Capsule

**Appearance:** White to off-white color granules in unprinted, hard gelatin capsules having purple opaque color cap and pink opaque color body.

## **4. CLINICAL PARTICULARS**

### **4.1. THERAPEUTIC INDICATIONS:**

**RECADA<sup>®</sup>** is indicated for the symptomatic treatment of acute diarrhoea in adults when causal treatment is not possible. If causal treatment is possible, racecadotril can be administered as a complementary treatment.

### **4.2. POSOLOGY AND METHOD OF ADMINISTRATION:**

**Posology:**

**For adults only:** One capsule initially regardless of the time of day. Then, one capsule three times daily preferably before the main meals. Treatment should be continued until two normal stools are recorded. Treatment should not exceed 7 days.

**Special populations:**

- Elderly: Dosage adjustment is not necessary in the elderly.
- Caution is advised in patients with hepatic or renal impairment.

**Method of Administration:**

For oral use. The capsule should be swallowed whole with water.

### **4.3. CONTRAINDICATIONS:**

Hypersensitivity to the active substance or to any of the excipients.



#### 4.4. SPECIAL WARNINGS AND PRECAUTIONS FOR USE:

**Rehydration (including vomiting and diarrhoea):** The administration of racecadotril does not modify the usual rehydration regimens. The presence of bloody or purulent stools and fever may indicate the presence of invasive bacteria as a reason for diarrhoea, or the presence of other severe disease. Also, racecadotril has not been tested in antibiotic-associated diarrhoea, therefore, racecadotril should not be administered under these conditions. There is a possible reduced availability in patients with prolonged vomiting. Chronic diarrhoea has not been sufficiently studied with this medicinal product.

**Hypersensitivity:** Occurrence of skin reactions has been reported with the use of the product. These are in most cases mild and do not require treatment but in some cases, they can be severe, even life-threatening. Association with racecadotril cannot be fully excluded. When experiencing severe skin reactions, the treatment has to be stopped immediately.

**Angioedema:** Angioedema of the face, extremities, lips, mucous membranes may occur during racecadotril treatment. This angioedema can be allergic (mast cell mediator-induced angioedema), or non-allergic (bradykinin-mediated angioedema). The combination of racecadotril with medicinal products which increase the concentration of bradykinin, in particular Angiotensin-Converting Enzyme (ACE) inhibitors, increases the risk of bradykinin-mediated angioedema. Therefore, a careful risk/benefit assessment is required before initiating the treatment with racecadotril in patients on ACE inhibitors. If upper airway obstruction, emergency therapy should be administered whatever the aetiology of angioedema, as the outcome of this condition can be fatal. If angioedema occurs, racecadotril should be discontinued, and the patient should be under close medical supervision until complete and sustained resolution of symptoms. Racecadotril should not be reintroduced.

**Severe cutaneous adverse reactions (SCARs):** Severe cutaneous adverse reactions (SCARs) including drug reaction with eosinophilia and systemic symptoms (DRESS), which can be life-threatening or fatal, have been reported in association with racecadotril treatment. Patients should be advised of the signs and symptoms and monitored closely for skin reactions. If signs and symptoms suggestive of DRESS appear, racecadotril should be withdrawn immediately and an alternative treatment considered. If the patient has developed DRESS with the use of racecadotril, treatment with racecadotril must not be restarted in these patients at any time.

**Renal or hepatic impairment:** There are limited data in patients with renal or hepatic impairment. These patients should be treated with caution.

**Excipients:** This medicinal product contains lactose. Patients with rare hereditary problems of galactose intolerance, The Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine.



#### 4.5. INTERACTION WITH OTHER MEDICINAL PRODUCTS AND OTHER FORM OF INTERACTIONS:

**Bradykinin-mediated angioedema:** Certain drugs or classes of drugs may cause a vascular reaction such as angioedema of the face and neck, resulting from inhibition of bradykinin degradation. The most frequently implicated drugs are ACE inhibitors, and to a lesser extent: angiotensin II antagonists, mammalian target of rapamycin inhibitors (mTORi) immunosuppressants, antidiabetic drugs of the gliptin class, racecadotril, estramustine, sacubitril and recombinant alteplase. Concomitant use of racecadotril and other drugs known to cause bradykinin-mediated angioedema may increase the risk of angioedema and are not recommended.

#### 4.6. FERTILITY, PREGNANCY AND LACTATION:

**Fertility:** Not known.

**Pregnancy:** There are no adequate data from the use of Racecadotril in pregnant women. However, since no specific clinical studies are available, racecadotril should not be administered to pregnant women.

**Breast-feeding:** Due to lack of information on the excretion of racecadotril in human milk; this medicinal product should not be administered to breast-feeding women.

#### 4.7. EFFECTS ON ABILITY TO DRIVE AND USE MACHINES:

Racecadotril has no or negligible influence on the ability to drive and use machines.

#### 4.8. UNDESIRABLE EFFECTS:

The following adverse drug reactions listed below have occurred with racecadotril more often than with placebo, or have been reported during post-marketing surveillance. The frequency of adverse reactions is defined using the following convention: very common ( $\geq 1/10$ ), common ( $\geq 1/100$  to  $< 1/10$ ), uncommon ( $\geq 1/1,000$  to  $< 1/100$ ), rare ( $\geq 1/10,000$  to  $< 1/10,000$ ), very rare: ( $< 1/10,000$ ) not known (cannot be estimated from the available data).

Severe cutaneous adverse reactions (SCARs) including drug reaction with eosinophilia and systemic symptoms (DRESS) have been reported in association with racecadotril treatment.

##### **Nervous system disorders:**

**Common:** Headache.

##### **Skin and subcutaneous tissue disorders:**

**Uncommon:** Rash, erythema.

**Unknown:** Erythema multiforme, tongue oedema, face oedema, lip oedema, eyelid oedema, angioedema, urticaria, erythema nodosum, rash papular, prurigo, pruritus, toxic skin eruption, drug reaction with eosinophilia and systemic symptoms (DRESS).

**Immune system disorder:**

**Unknown:** Anaphylactic shock.

**4.9. OVERDOSE:**

No cases of overdose have been reported. In adults, single doses above 2g, which is equivalent to 20 times the therapeutic dose, have been administered, and no harmful effects have been described.

**5. PHARMACOLOGICAL PROPERTIES****5.1. PHARMACODYNAMIC PROPERTIES:**

**Pharmacotherapeutic group:** Other antidiarrhoeals.

**ATC code:** A07XA04

**Mechanism of action:** Racecadotril is a prodrug that needs to be hydrolyzed to its active metabolite thiorphan, which is an inhibitor of enkephalinase, a cell membrane peptidase located in various tissues, notably the epithelium of the small intestine. This enzyme contributes both to the hydrolysis of exogenous peptides and to the breakdown of endogenous peptides such as enkephalins. Racecadotril protects enkephalins from enzymatic degradation thereby prolonging their action at enkephalinergic synapses in the small intestine and reducing hypersecretion. Racecadotril is a pure intestinal antisecretory active substance. It decreases the intestinal hypersecretion of water and electrolytes induced by cholera toxin or inflammation, and does not have effects on basal secretory activity. Racecadotril exerts rapid antidiarrhoeal action, without modifying the duration of intestinal transit. Racecadotril does not produce abdominal distension. During its clinical development, racecadotril produced secondary constipation at a rate comparable to placebo. When administered via the oral route, its activity is exclusively peripheral, with no effects on the central nervous system.

**5.2. PHARMACOKINETICS PROPERTIES:**

**Absorption:** Following oral administration, racecadotril is rapidly absorbed. The exposure at steady state is comparable with the exposure following a single dose. The bioavailability of racecadotril is not modified by food, but peak activity is delayed by about one hour and a half.

**Distribution:** Ninety percent of the active metabolite of racecadotril, thiorphan=(RS)-N-(1-oxo-2- (mercaptomethyl)-3- phenylpropyl) glycine, is bound to plasma proteins, mainly to albumin. The duration and extent of the effect of racecadotril are dose-dependent. Time to peak plasma enkephalinase inhibition is approximately 2 hours and corresponds to 75% inhibition with the dose of 100mg. With a dose of 100mg; the duration of plasma enkephalinase inhibition is about 8 hours.

**Metabolism:** The biological half-life of racecadotril, measured as plasma enkephalinase inhibition, is approximately 3 hours. Racecadotril is rapidly



hydrolyzed to thiorphan (RS)-N-(1-oxo-2-(mercaptomethyl)-3-phenylpropyl) glycine, the active metabolite, which is in turn transformed into inactive metabolites identified as sulfoxide of S-methylthiorphan, S-methyl thiorphan, 2-methanesulfinylmethyl propionic acid and 2-methylsulfonylmethyl propionic acid, which all were formed at greater than 10% of parent drug systemic exposure. Additional minor metabolites were also detected and quantified in urine and faeces. Repeated administration of racecadotril does not cause any accumulation in the body. Racecadotril does not modify protein binding of active substances strongly bound to proteins, such as tolbutamide, warfarin, niflumic acid, digoxin or phenytoin.

**Elimination:** Racecadotril is eliminated as active and inactive metabolites. Elimination is mainly via the renal route (81.4%), and to a much lesser extent via the faecal route (around 8%). The pulmonary route is not significant (less than 1% of the dose).

### 5.3. PRECLINICAL SAFETY DATA

Chronic 4-week toxicity studies in monkeys and dogs, relevant for the duration of treatment in human, do not point out any effect at doses up to 1250mg/kg/day and 200mg/kg, respectively corresponding to safety margins of 625 and 62 (vs human). Racecadotril was not immunotoxic in mice given racecadotril for up to 1 month. Longer exposure (1 year) in monkeys showed generalized infections and reduced antibody responses to vaccination at a 500mg/kg/day dose and no infection/immune depression at 120mg/kg/day. Similarly in the dog receiving 200mg/kg/day for 26 weeks some infection/immune parameters were affected. The clinical relevance is unknown. No mutagenic or clastogenic effect of racecadotril has been found in the standard *in vitro* and *in vivo* tests. Carcinogenicity testing has not been performed with racecadotril as the drug is provided for short-term treatment. Reproductive and developmental toxicity (fertility and early embryonic development, prenatal and postnatal development including maternal function, embryo-foetal development studies) revealed no special effects of racecadotril. Other preclinical effects (e.g., severe, most likely aplastic anaemia, increased diuresis, ketonuria, diarrhoea,) were observed only at exposures considered sufficiently in excess of the maximum human exposure. Their clinical relevance is unknown. Other safety pharmacology studies did not evidence any deleterious effects of racecadotril on the central nervous system, the cardiovascular and the respiratory functions. In animals, racecadotril reinforced the effects of butylhyoscine upon bowel transit and on the anticonvulsive effects of phenytoin.

## 6. PHARMACEUTICAL PARTICULARS

### 6.1. LIST OF EXCIPIENTS:

- Lactose Monohydrate
- Maize Starch



- Silicon Dioxide Fumed
- Magnesium Stearate
- Hard Gelatin Capsule

**6.2. INCOMPATIBILITIES:**

Not applicable

**6.3. SHELF LIFE:**

See expiry on the pack.

**6.4. SPECIAL PRECAUTIONS FOR STORAGE:**

Do not store over 30°C, and protect from heat, light and moisture.  
Improper storage may deteriorate the medicine.  
Keep out of reach of children.

**6.5. NATURE AND CONTENTS OF CONTAINER:**

Alu/Alu blister, pack size is 10's.

**6.6. SPECIAL PRECAUTIONS FOR DISPOSAL OF A USED PRODUCT:**

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

**6.7. DRUG PRODUCT SPECIFICATIONS:**

Innovator's Specs.

**7. REGISTRATION / MARKETING AUTHORISATION HOLDER**

Manufactured by:



**SAMI Pharmaceuticals (Pvt.) Ltd.**

F-95, S.I.T.E., Karachi-Pakistan

[www.samipharma.com](http://www.samipharma.com)

Mfg Lic. No. 000072

**8. REGISTRATION / MARKETING AUTHORISATION NUMBER(S)**

110027

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

3<sup>rd</sup> September, 2021

**10. DATE OF REVISION OF THE TEXT**

N/A



# ری کیڈا® کیپسول (ریسیکا ڈوٹرل)

ہدایات:

- خوراک ڈاکٹر کی ہدایت کے مطابق استعمال کریں۔
- صرف رجسٹرڈ ڈاکٹر کے نسخے کے مطابق فروخت کریں۔
- بچوں کی پہنچ سے دور رکھیں۔
- دوا کو ۳۰ ڈگری سینٹی گریڈ سے زیادہ درجہ حرارت پر نہ رکھیں،
- گرمی، روشنی اور نمی سے محفوظ رکھیں ورنہ دوا خراب ہو جائیگی۔



# **RECADA<sup>®</sup>**

( R a c e c a d o t r i l )

## **1. NAME OF THE PRODUCT**

**RECADA<sup>®</sup>** (Racecadotril) Infants Sachet 10mg

**RECADA<sup>®</sup>** (Racecadotril) Children Sachet 30mg

## **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

**RECADA<sup>®</sup>** Infants Sachet 10mg

Each sachet contains:

Racecadotril Ph. Eur.....10mg

**RECADA<sup>®</sup>** Children Sachet 30mg

Each sachet contains:

Racecadotril Ph. Eur.....30mg

## **3. PHARMACEUTICAL FORM**

Granules for oral suspension (Sachet)

**Appearance:**

**RECADA<sup>®</sup>** Infants Sachet 10mg: White to off white colored granules.

**RECADA<sup>®</sup>** Children Sachet 30mg: White to off white colored granules.

## **4. CLINICAL PARTICULARS**

### **4.1. THERAPEUTIC INDICATIONS:**

**RECADA<sup>®</sup>** Infants 10mg, **RECADA<sup>®</sup>** Children 30mg: Complementary, symptomatic treatment of acute diarrhoea in infants (older than 3 months) and children, when oral rehydration and usual support measures are insufficient to control the clinical condition, and when causal treatment is not possible.

If causal treatment is possible, racecadotril can be administered as a complementary treatment.

### **4.2. POSOLOGY AND METHOD OF ADMINISTRATION:**

**Posology:**

**RECADA<sup>®</sup>** Infants 10mg and **RECADA<sup>®</sup>** Children 30mg are administered via the oral route, together with oral rehydration.

**RECADA<sup>®</sup>** Infants 10mg is intended for children <13kg.

**RECADA<sup>®</sup>** Children 30mg is intended for children ≥ 13kg.



The recommended dose is determined according to body weight: 1.5mg/kg per dose (corresponding to 1 to 2 sachets), three times daily at regular intervals.

In infants less than 9kg: one 10mg sachet 3 times daily.

In infants from 9kg to <13kg: two 10mg sachets 3 times daily.

In children from 13kg to 27kg: one 30mg sachet 3 times daily.

In children of more than 27kg: two 30mg sachets 3 times daily.

The duration of treatment in the clinical trials with children was 5 days. Treatment should be continued until two normal stools are recorded. Treatment should not exceed 7 days. Long term treatment with racecadotril is not recommended.

There are no clinical trials in infants under 3 months of age.

**Special populations:**

There are no studies in infants or children with renal impairment or hepatic impairment. Caution is advised in patients with hepatic or renal impairment. The granules can be added to food, dispersed in a glass of water or in the feeding-bottle, mixing well and followed by immediate administration.

**Method of administration:**

**RECADA**<sup>®</sup> Infants 10mg and **RECADA**<sup>®</sup> Children 30mg are administered via the oral route, together with oral rehydration. The granules can be added to food, dispersed in a glass of water or in the feeding-bottle, mixing well and followed by immediate administration.

**4.3. CONTRAINDICATIONS:**

Hypersensitivity to the active substance or to any of the excipients. Patients who have reported angioedema with angiotensin converting enzyme inhibitors (such as captopril, enalapril, lisinopril, perindopril, ramipril) should not take racecadotril. Due to the presence of sucrose, Racecadotril sachet is contraindicated in patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption syndrome or sucrase-isomaltase insufficiency.

**4.4. SPECIAL WARNINGS AND PRECAUTIONS FOR USE:**

The administration of racecadotril does not modify usual rehydration regimens. Rehydration is highly important in the management of acute diarrhoea in infants. The requirement for rehydration and route should be adapted to the age and weight of the patient and the stage and severity of the condition, specifically in case of serious or prolonged diarrhoea with significant vomiting or a lack of appetite. Additionally, it is important that regular feeding (incl. breast-feeding) is not interrupted and that adequate fluid intake is monitored. The presence of bloody or purulent stool and fever may indicate either the presence of invasive bacteria as a reason for diarrhoea, or the presence of other severe disease, warranting causal (e.g. antibiotic) treatment or further investigation. Therefore,



racecadotril should not be administered under these conditions. Use of racecadotril in antibiotic-associated diarrhoea and chronic diarrhoea is not recommended due to insufficient data.

In patient with diabetes, it should be taken into account that each sachet contains sucrose. If the quantity of sucrose (source of glucose and fructose) present in the daily dose of racecadotril exceeds 5g a day, the latter should be taken into account in the daily sugar ration. The product must not be administered to infants less than 3 months old, as there are no clinical trials in this population. The product must not be administered to children with renal or liver impairment, whatever the degree of severity, due to a lack of information on these patient populations. Because of possible reduced bioavailability, the product must not be administered in cases of prolonged or uncontrolled vomiting.

**Hypersensitivity:** Occurrence of skin reactions has been reported with the use of the product. These are in most cases mild and do not require treatment but in some cases they can be severe, even life-threatening. Association with racecadotril cannot be fully excluded. When experiencing severe skin reactions, the treatment has to be stopped immediately.

**Angioedema:** Angioedema of the face, extremities, lips, mucous membranes may occur during racecadotril treatment. This angioedema can be allergic (mast cell mediator-induced angioedema), or non-allergic (bradykinin-mediated angioedema). The combination of racecadotril with medicinal products which increase the concentration of bradykinin, in particular Angiotensin-Converting Enzyme (ACE) inhibitors, increases the risk of bradykinin-mediated angioedema. Therefore, a careful risk/benefit assessment is required before initiating the treatment with racecadotril in patients on ACE inhibitors. If upper airway obstruction, emergency therapy should be administered promptly whatever the aetiology of angioedema, as the outcome of this condition can be fatal. If angioedema occurs, racecadotril should be discontinued, and the patient should be under close medical supervision until complete and sustained resolution of symptoms. Racecadotril should not be reintroduced.

**Severe cutaneous adverse reactions (SCARs):** Severe cutaneous adverse reactions (SCARs) including drug reaction with eosinophilia and systemic symptoms (DRESS), which can be life-threatening or fatal, have been reported in association with racecadotril treatment. Patients should be advised of the signs and symptoms and monitored closely for skin reactions. If signs and symptoms suggestive of DRESS appear, racecadotril should be withdrawn immediately and an alternative treatment considered. If the patient has developed DRESS with the use of racecadotril, treatment with racecadotril must not be restarted in these patients at any time

**Renal or hepatic impairment:** The product must not be administered to children with renal or liver impairment, whatever the degree of severity, due to a lack of information on these patient populations.



#### 4.5. INTERACTION WITH OTHER MEDICINAL PRODUCTS AND OTHER FORM OF INTERACTIONS:

**Bradykinin-mediated angioedema:** Certain drugs or classes of drugs may cause a vascular reaction such as angioedema of the face and neck, resulting from inhibition of bradykinin degradation. The most frequently implicated drugs are ACE inhibitors, and to a lesser extent: angiotensin II antagonists, mammalian target of rapamycin inhibitors (mTORi) immunosuppressants, antidiabetic drugs of the gliptin class, racecadotril, estramustine, sacubitril and recombinant alteplase. Concomitant use of racecadotril and other drugs known to cause bradykinin-mediated angioedema may increase the risk of angioedema and are not recommended.

Angiotensin converting enzyme inhibitors (such as captopril, enalapril, lisinopril, fosinopril, perindopril, ramipril) are known to induce angioedema. This risk could be increased in presence of racecadotril. In humans, the concomitant treatment of racecadotril with loperamide or nifuroxazide does not modify the kinetics of racecadotril.

#### 4.6. FERTILITY, PREGNANCY AND LACTATION:

**Fertility:** Not known

**Pregnancy:** There are no adequate data from the use of racecadotril in pregnant women. However, since no specific clinical studies are available, racecadotril should not be administered to pregnant women.

**Breast-feeding:** Due to the lack of information on secretion of racecadotril in human milk, the product should not be administered to breast-feeding women.

#### 4.7. EFFECTS ON ABILITY TO DRIVE AND USE MACHINES:

Racecadotril has no negligible influence on the ability to drive and use machines.

#### 4.8. UNDESIRABLE EFFECTS:

The adverse reactions ranked under headings of system organ class and frequency using the following convention: very common ( $\geq 1/10$ ); common ( $\geq 1/100$  to  $< 1/10$ ); uncommon ( $\geq 1/1,000$  to  $< 1/100$ ); rare ( $\geq 1/10,000$  to  $< 1/1,000$ ); very rare ( $< 1/10,000$ ); not known (cannot be estimated from the available data)

##### **Infections and Infestations:**

**Uncommon:** Tonsillitis

##### **Skin and subcutaneous tissues disorders:**

**Uncommon:** Rash, erythema.

**Unknown:** Erythema multiforme, tongue oedema, face oedema, lip oedema, eyelid oedema, angioedema, urticaria, erythema nodosum, papular rash, prurigo, pruritus.



Serious skin reactions (including angioedema) have been reported in patients on racecadotril therapy. The incidence of these reactions is unknown but if they occur, racecadotril therapy must be discontinued and appropriate alternative therapy instituted. Patients should be aware not to take racecadotril again in these cases.

#### **4.9. OVERDOSE:**

Sporadic cases of overdose without adverse events have been reported in infants and children, ingested doses were up to 7 times the correct dose.

### **5. PHARMACOLOGICAL PROPERTIES**

#### **5.1. PHARMACODYNAMIC PROPERTIES:**

**Pharmacotherapeutic group:** Other antidiarrhoeals.

**ATC code:** A07XA04

**Mechanism of action:** Racecadotril is a prodrug that needs to be hydrolyzed to its active metabolite thiorphan, which is an inhibitor of enkephalinase, a cell membrane peptidase located in various tissues, notably the epithelium of the small intestine. This enzyme contributes both to the hydrolysis of exogenous peptides and to the breakdown of endogenous peptides such as enkephalins. Consequently, racecadotril protects endogenous enkephalins that are physiologically active at the digestive tract level, prolonging their antisecretory effect. Racecadotril is a pure intestinal antisecretory active substance. It decreases intestinal hypersecretion of water and electrolytes induced by cholera toxin or inflammation, and does not have effect on basal secretory activity. Racecadotril exerts rapid antidiarrheal action, without modifying the duration of intestinal transit.

#### **5.2. PHARMACOKINETICS PROPERTIES:**

**Absorption:** Following oral administration, racecadotril is rapidly absorbed. The initial time to plasma enkephalinase inhibition is 30 minutes. The bioavailability of racecadotril is not modified by food, but peak activity is delayed by about one hour and a half.

**Distribution:** In plasma, after an oral dose of <sup>14</sup>C-labeled racecadotril, measured exposure of radiocarbon was many orders of magnitude higher than in blood cells and 3-fold higher than in whole blood. Thus, the drug did not bind to blood cells to any significant extent. Radiocarbon distribution in other body tissues was moderate, as indicated by the mean apparent volume of distribution in plasma of 66.4kg. Ninety percent of the active metabolite of racecadotril, thiorphan is bound to plasma proteins, mainly to albumin. The duration and extent of the effect of racecadotril are dose-dependent. In children, time to peak enkephalinase inhibition is approximately 2 hours and corresponds to an inhibition of 90% with the dose of 1.5mg/kg. The duration of plasma enkephalinase inhibition is about 8 hours.



**Biotransformation/Metabolism:** The biological half-life of racecadotril, measured as plasma enkephalinase inhibition, is approximately 3 hours. Racecadotril is rapidly hydrolysed to thiorphan, the active metabolite, which is in turn transformed into inactive metabolites. In vitro data indicate that racecadotril/thiorphan and the four major inactive metabolites do not inhibit the major CYP enzymes isoforms 3A4, 2D6, 2C9, 1A2 and 2C19 to an extent that would be clinically relevant. In vitro data indicate that racecadotril/thiorphan and the four major inactive metabolites do not induce the CYP enzymes isoforms (3A family, 2A6, 2B6, 2C9/2C19, 1A family, 2E1) and UGTs conjugating enzymes to an extent that would be clinically relevant. Racecadotril does not modify protein binding of active substances strongly bound to proteins, such as tolbutamide, warfarin, niflumic acid, digoxin or phenytoin. In the paediatric population, pharmacokinetic results are similar to those of the adult population, reaching C<sub>max</sub> at 2 hours 30 min after administration. There is no accumulation after multiple doses administered every 8 hours, for 7 days.

**Elimination/Excretion:** Racecadotril is eliminated as active and inactive metabolites. Elimination is mainly via the renal route (81.4%), and to a much lesser extent via the faecal route (around 8%). The pulmonary route is insignificant.

### 5.3. PRECLINICAL SAFETY DATA:

4-week toxicity studies in monkeys and dogs, relevant for the duration of treatment in human, do not point out any effect at doses up to 1250mg/kg/day and 200mg/kg, respectively corresponding to safety margins of 625 and 62 (vs human). Racecadotril was not immunotoxic in mice given for up to 1 month. Chronic exposure (1 year) in monkeys showed generalized infections and reduced antibody responses to vaccination at a 500mg/kg/day dose and no infection/immune depression at 120mg/kg/day. Similarly in the dog receiving 200mg/kg/day for 26 weeks some infection/immune parameters were affected. The clinical relevance is unknown. Preclinical effects (e.g. severe, most likely aplastic anaemia, increased diuresis, ketonuria, diarrhoea) were observed only at exposures considered sufficiently in excess of the maximum human exposure. The clinical relevance is unknown. No mutagenic or clastogenic effect of racecadotril has been found in the standard in vitro and in vivo tests. Carcinogenicity testing has not been performed with racecadotril as the drug is provided for short-term treatment. In animals, racecadotril enhanced the effects of butylhyoscine on bowel transit and on the anticonvulsive effects of phenytoin. Reproductive and developmental toxicity studies have not revealed any special effects of racecadotril. A toxicity study in juvenile rats has not revealed any significant effects of racecadotril up to a dose of 160mg/kg/day which is 35 times higher than the usual paediatric regimen (i.e. 4.5mg/kg/day).



## 6. PHARMACEUTICAL PARTICULARS

### 6.1. LIST OF EXCIPIENTS:

#### **RECADA<sup>®</sup> Infants Sachet 10mg:**

- Sucrose
- Eudragit
- Silicon dioxide fumed
- Apricot powder flavor
- Purified water

#### **RECADA<sup>®</sup> Children Sachet 30mg:**

- Sucrose
- Eudragit
- Silicon dioxide fumed
- Apricot powder flavor
- Purified water

### 6.2. INCOMPATIBILITIES:

Not applicable

### 6.3. SHELF LIFE:

See expiry on the pack.

### 6.4. SPECIAL PRECAUTIONS FOR STORAGE:

Avoid exposure to heat, light and humidity. Store between 15 to 30°C. Improper storage may deteriorate the medicine. Keep out of reach of children.

### 6.5. NATURE AND CONTENTS OF CONTAINER:

**RECADA<sup>®</sup> Infants Sachet 10mg:** Paper foil sachet, pack size is 16's.

**RECADA<sup>®</sup> Children Sachet 30mg:** Paper foil sachet, pack size is 10's.

### 6.6. SPECIAL PRECAUTIONS FOR DISPOSAL OF A USED PRODUCT:

No special requirements.

### 6.7. DRUG PRODUCT SPECIFICATIONS:

**RECADA<sup>®</sup> Infants Sachet 10mg:** Innovator's Specs.

**RECADA<sup>®</sup> Children Sachet 30mg:** Innovator's Specs.

## 7. REGISTRATION / MARKETING AUTHORISATION HOLDER

Manufactured by:



**SAMI Pharmaceuticals (Pvt.) Ltd.**

F-95, S.I.T.E., Karachi-Pakistan

[www.samipharma.com](http://www.samipharma.com)

Mfg Lic. No. 000072



**8. REGISTRATION / MARKETING AUTHORISATION NUMBER(S)**

**RECADA<sup>®</sup> Infants Sachet 10mg: 098700**

**RECADA<sup>®</sup> Children Sachet 30mg: 105246**

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

**RECADA<sup>®</sup> Infants Sachet 10mg: 10<sup>th</sup> October, 2019**

**RECADA<sup>®</sup> Children Sachet 30mg: 19<sup>th</sup> October, 2020**

**10. DATE OF REVISION OF THE TEXT**

N/A

## ری کیڈا<sup>®</sup> ساشے (ریسیکاڈوٹرل)

ہدایات:

خوراک ڈاکٹر کی ہدایت کے مطابق استعمال کریں۔

صرف رجسٹرڈ ڈاکٹر کے نسخے کے مطابق فروخت کریں۔

بچوں کی پہنچ سے دور رکھیں۔

دوا کو گرمی، روشنی اور نمی سے محفوظ ۱۵ سے ۳۰ ڈگری

سینٹی گریڈ کے درمیان میں رکھیں ورنہ دوا خراب ہو جائیگی۔