## PRODUCT MONOGRAPH

## NTEVA-OXYCODONE CR

oxycodone hydrochloride

Controlled Release Tablets 10mg, 20mg, 40 mg and 80 mg

Opioid Analgesic

Teva Canada Limited 30 Novopharm Court Toronto, Ontario M1B 2K9

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## PART I: HEALTH PROFESSIONAL INFORMATION

## SUMMARY PRODUCT INFORMATION

Route of	Dosage Form /	All Nonmedicinal Ingredients
	G	Tim I (Omnouncement Ingretations)
Administration Oral	Strength Controlled Release Tablet / 10mg, 20mg, 40 mg and 80 mg	10 mg Colloidal silicon dioxide, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, polyethylene glycol, polyvinyl alcohol, silicified microcrystalline cellulose, talc and titanium dioxide.  20 mg Colloidal silicon dioxide, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, polyethylene glycol, polydextrose, silicified microcrystalline cellulose, synthetic iron oxide red, triacetin and titanium dioxide.  40 mg Colloidal silicon dioxide, D&C Yellow No. 10 Aluminum lake, FD&C Red No. 40 Aluminium lake, iron oxide yellow, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polyvinyl alcohol-part hydrolyzed, talc and titanium dioxide.  80 mg Colloidal silicon dioxide, FD&C Blue No. 2 Aluminium lake, FD&C Red No. 40 Aluminium lake , FD&C Yellow No. 5 Aluminium lake, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polyvinyl alcohol-part hydrolyzed, soya bean lecithin, talc and titanium dioxide.

#### INDICATIONS AND CLINICAL USE

<sup>N</sup>TEVA-OXYCODONE CR (oxycodone hydrochloride) controlled release tablets is indicated for the management of pain severe enough to require daily, continuous, long-term opioid treatment and:

- that is opioid-responsive; and
- for which alternative options are inadequate

<sup>N</sup>TEVA-OXYCODONE CR (oxycodone hydrochloride) is not indicated as an as-needed (prn) analgesic.

#### Geriatrics (> 65 years of age):

In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, concomitant disease or other drug therapy (see DOSAGE AND ADMINISTRATION).

## **Pediatrics** (< 18 years of age):

The safety and efficacy of <sup>N</sup>TEVA-OXYCODONE CR has not been studied in the pediatric population. Therefore the use of <sup>N</sup>TEVA-OXYCODONE CR is not recommended in patients under 18 years of age.

#### **CONTRAINDICATIONS**

<sup>N</sup>TEVA-OXYCODONE CR (oxycodone hydrochloride) controlled release tablets are contraindicated for:

- Patients who are hypersensitive to the active substance (oxycodone) or other opioid analgesics or to any ingredient in the formulation. For a complete listing, see the DOSAGE FORMS, COMPOSITION AND PACKAGING section of the Product Monograph.
- In patients with known or suspected mechanical gastrointestinal obstruction (e.g., bowel obstruction, strictures) or any diseases/conditions that affect bowel transit (e.g., ileus of any type).
- Patients with suspected surgical abdomen (e.g., acute appendicitis or pancreatitis).
- Patients with mild, intermittent or short duration pain that can be managed with other pain medications.
- The management of acute pain.
- Patients with acute asthma or other obstructive airway, and status asthmaticus.
- Patients with acute respiratory depression, elevated carbon dioxide levels in the blood, and cor pulmonale.
- Patients with acute alcoholism, delirium tremens, and convulsive disorders.
- Patients with severe CNS depression, increased cerebrospinal or intracranial pressure, and head injury.
- Patients taking monoamine oxidase (MAO) inhibitors (or within 14 days of such therapy).

• Women who are breast-feeding, pregnant, or during labour and delivery.

#### WARNINGS AND PRECAUTIONS

## **Serious Warnings and Precautions**

#### • Limitations of Use

Because of the risks of addiction, abuse, and misuse with opioids, even at recommended doses, and because of the greater risks of overdose and death with controlled release opioid formulations, <sup>N</sup>TEVA-OXYCODONE CR should only be used in patients for whom alternative treatment options (eg. non-opioid analgesic) are ineffective, not tolerated or would be otherwise inadequate to provide appropriate management of pain (e.g., immediate-release opioids) (see DOSAGE AND ADMINISTRATION).

## • Addiction, Abuse, and Misuse

NTEVA-OXYCODONE CR poses risks of opioid addiction, abuse, and misuse, which can lead to overdose and death. Each patient's risk should be assessed prior to prescribing NTEVA-OXYCODONE CR and all patients should be monitored regularly for the development of these behaviours or conditions (see WARNINGS AND PRECAUTIONS). NTEVA-OXYCODONE CR should be stored securely to avoid theft or misuse.

#### Life-threatening Respiratory Depression

Serious, life-threatening, or fatal respiratory depression may occur with use of <sup>N</sup>TEVA-OXYCODONE CR. Patients should be monitored for respiratory depression, especially during initiation of <sup>N</sup>TEVA-OXYCODONE CR or following a dose increase. <sup>N</sup>TEVA-OXYCODONE CR should be swallowed whole. Cutting, breaking, crushing, chewing, or dissolving <sup>N</sup>TEVA-OXYCODONE CR tablets can lead to rapid release and absorption of a potentially fatal dose of oxycodone (see WARNINGS AND PRECAUTIONS).

## • Accidental Exposure

Accidental consumption of even one dose of <sup>N</sup>TEVA-OXYCODONE CR especially by children, can result in a fatal overdose of oxycodone (see DOSAGE AND ADMINISTRATION subsection <u>Disposal</u>, for instructions on proper disposal).

## • Neonatal Opioid Withdrawal Syndrome

Prolonged maternal use of NTEVA-OXYCODONE CR during pregnancy can result in neonatal opioid withdrawal syndrome, which may be life-threatening (see WARNINGS AND PRECAUTIONS).

#### General

<sup>N</sup>TEVA-OXYCODONE CR 80 mg tablets, or a single dose greater than 40 mg, are for use in opioid tolerant patients only (see also DOSAGE AND ADMINISTRATION). A single dose greater than 40 mg of oxycodone, or total daily doses greater than 80 mg of oxycodone, may cause fatal respiratory depression when administered to patients who are not tolerant to the respiratory depressant effects of opioids (see WARNINGS AND PRECAUTIONS, Drug Interactions).

Patients should be instructed not to give <sup>N</sup>TEVA-OXYCODONE CR to anyone other than the patient for whom it was prescribed as such inappropriate use may have severe medical consequences, including death.

Patients should be cautioned not to consume alcohol while taking <sup>N</sup>TEVA-OXYCODONE CR, as it may increase the chance of experiencing dangerous side effects.

Hyperalgesia that will not respond to a further dose increase of oxycodone, may occur at particularly high doses. An oxycodone dose reduction or change in opioid may be required.

## **Addiction, Abuse and Misuse**

Like all opioid, <sup>N</sup>TEVA-OXYCODONE CR is a potential drug of abuse and misuse, which can lead to overdose and death. Therefore, <sup>N</sup>TEVA-OXYCODONE CR should be prescribed and handled with caution.

Patients should be assessed for their clinical risks for opioid abuse or addiction prior to being prescribed opioids. All patients receiving opioids should be routinely monitored for signs of misuse and abuse.

Opioids, such as <sup>N</sup>TEVA-OXYCODONE CR should be used with particular care in patients with a history of alcohol and illicit/prescription drug abuse. However, concerns about abuse, addiction, and diversion should not prevent the proper management of pain

#### Carcinogenesis and Mutagenesis

See TOXICOLOGY section.

#### Cardiovascular

Oxycodone administration may result in severe hypotension in patients whose ability to maintain adequate blood pressure is compromised by reduced blood volume, or concurrent administration of such drugs as phenothiazines or certain anaesthetics.

#### **Dependence/Tolerance**

As with other opioids, tolerance and physical dependence may develop upon repeated administration of <sup>N</sup>TEVA-OXYCODONE CR and there is a potential for development of psychological dependence.

Physical dependence and tolerance reflect the neuroadaptation of the opiate receptors to chronic

exposure to an opioid, and are separate and distinct from abuse and addiction. Tolerance, as well as physical dependence, may develop upon repeated administration of opioids, and are not by themselves evidence of an addictive disorder or abuse.

Patients on prolonged therapy should be tapered gradually from the drug if it is no longer required for pain control. Withdrawal symptoms may occur following abrupt discontinuation of therapy or upon administration of an opioid antagonist.

## **Use in Drug and Alcohol Addiction**

Oxycodone hydrochloride is an opioid with no approved use in the management of addictive disorders. Their proper usage in individuals with drug or alcohol dependence, either active or in remission is for the management of pain requiring opioid analgesia.

## **Gastrointestinal Effects**

Oxycodone and other morphine-like opioids have been shown to decrease bowel motility. Oxycodone may obscure the diagnosis or clinical course of patients with acute abdominal conditions.

#### Neonatal Opioid Withdrawal Syndrome (NOWS)

Prolonged maternal use of opioid during pregnancy can result in withdrawal signs in the neonate. Neonatal opioid withdrawal syndrome, unlike opioid withdrawal syndrome in adults, may be life-threatening.

Neonatal opioid withdrawal syndrome presents as irritability, hyperactivity and abnormal sleep pattern, high pitched cry, tremor, vomiting, diarrhea and failure to gain weight. The onset, duration, and severity of neonatal opioid withdrawal syndrome vary based on the specific opioid used, duration of use, timing and amount of last maternal use, and rate of elimination of the drug by the newborn.

Use of oxycodone hydrochloride is contraindicated in pregnant women (see **CONTRAINDICATIONS**).

## **Neurologic**

## **Interactions with Central Nervous System Depressants (Including Alcohol):**

Oxycodone hydrochloride should be used with caution and in a reduced dosage during concomitant administration of other opioid analgesics, general anesthetics, phenothiazines and other tranquilizers, sedative-hypnotics, tricyclic antidepressants, antipsychotics, antihistamines, benzodiazepines, centrally-active anti-emetics and other CNS depressants. Respiratory depression, hypotension and profound sedation, coma or death may result. When such combination therapy is contemplated, a substantial reduction in the dose of one or both agents should be considered and patients should be carefully monitored. Oxycodone hydrochloride should not be consumed with alcohol as it may increase the chance of experiencing dangerous side effects (see DRUG INTERACTIONS).

Severe pain antagonizes the subjective and respiratory depressant actions of opioid analgesics. Should pain suddenly subside, these effects may rapidly become manifest.

**Head Injury:** The respiratory depressant effects of oxycodone, and the capacity to elevate cerebrospinal fluid pressure, may be greatly increased in the presence of an already elevated intracranial pressure produced by trauma. Also, oxycodone may produce confusion, miosis, vomiting and other side effects which obscure the clinical course of patients with head injury. In such patients, oxycodone must be used with extreme caution and only if it is judged essential

## **Peri-Operative Considerations:**

Oxycodone hydrochloride is not indicated for pre-emptive analgesia (administration pre-operatively for the management of post-operative pain).

In the case of planned chordotomy or other pain-relieving operations, patients should not be treated with <sup>N</sup>TEVA-OXYCODONE CR for at least 24 hours before the operation and <sup>N</sup>TEVA-OXYCODONE CR should not be used in the immediate post-operative period.

Physicians should individualize treatment, moving from parenteral to oral analgesics as appropriate. Thereafter, if <sup>N</sup>TEVA-OXYCODONE CR is to be continued after the patient recovers from the postoperative period, a new dosage should be administered in accordance with the changed need for pain relief. The risk of withdrawal in opioid-tolerant patients should be addressed as clinically indicated.

The administration of analgesics in the peri-operative period should be managed by healthcare providers with adequate training and experience (e.g., by an anesthesiologist).

Oxycodone and other morphine-like opioids have been shown to decrease bowel motility. Ileus is a common post-operative complication, especially after intra-abdominal surgery with opioid analgesia. Caution should be taken to monitor for decreased bowel motility in post-operative patients receiving opioids. Standard supportive therapy should be implemented.

<sup>N</sup>TEVA-OXYCODONE CR should not be used in the early post-operative period (12-24 hours post-surgery) unless the patient is ambulatory and gastrointestinal function is normal.

#### **Psychomotor Impairment**

Oxycodone may impair the mental and/or physical abilities needed for certain potentially hazardous activities such as driving a car or operating machinery. Patients should be cautioned accordingly. Patients should also be cautioned about the combined effects of oxycodone with other CNS depressants, including other opioids, phenothiazines, sedative/hypnotics and alcohol.

#### **Respiratory**

Respiratory Depression: Serious, life-threatening, or fatal respiratory depression has been reported with the use of opioids, even when used as recommended. Respiratory depression from opioid use, if not immediately recognized and treated, may lead to respiratory arrest and death. Management of respiratory depression may include close observation, supportive measures, and use of opioid antagonists, depending on the patient's clinical status. Carbon dioxide (CO2)

retention from opioid-induced respiratory depression can exacerbate the sedating effects of opioids.

While serious, life-threatening, or fatal respiratory depression can occur at any time during the use of TEVA-OXYCODONE CR, the risk is greatest during the initiation of therapy or following a dose increase. Patients should be closely monitored for respiratory depression when initiating therapy with TEVA-OXYCODONE CR and following dose increases.

To reduce the risk of respiratory depression, proper dosing and titration of TEVA-OXYCODONE CR are essential (see DOSAGE AND ADMINISTRATION). Overestimating the TEVA-OXYCODONE CR dose when converting patients from another opioid product can result in fatal overdose with the first dose.

## **Patient Counselling Information:**

A patient information sheet should be provided when TEVA-OXYCODONE CR tablets are dispensed to the patient.

Patients receiving TEVA-OXYCODONE CR should be given the following instructions by the physician:

- 1. Patients should be informed that accidental ingestion or use by individuals (including children) other than the patient for whom it was originally prescribed, may lead to severe, even fatal consequences.
- 2. Patients should be advised that TEVA-OXYCODONE CR contains oxycodone, an opioid pain medicine.
- 3. Patients should be advised that TEVA-OXYCODONE CR should only be taken as directed. The dose of TEVA-OXYCODONE CR should not be adjusted without consulting with a physician.
- 4. TEVA-OXYCODONE CR must be swallowed whole (not cut, broken, chewed, dissolved or crushed) due to the risk of fatal oxycodone overdose.
- 5. Patients should be advised to report episodes of pain and adverse experiences occurring during therapy. Individualization of dosage is essential to make optimal use of this medication.
- 6. Patients should not combine TEVA-OXYCODONE CR with alcohol or other central nervous system depressants (sleep aids, tranquilizers) because dangerous additive effects may occur, resulting in serious injury or death.
- 7. Patients should be advised to consult their physician or pharmacist if other medications are being used or will be used with TEVA-OXYCODONE CR.

- 8. Patients should be advised that if they have been receiving treatment with TEVA-OXYCODONE CR and cessation of therapy is indicated, it may be appropriate to taper TEVA-OXYCODONE CR dose, rather than abruptly discontinue it, due to the risk of precipitating withdrawal symptoms (see ADVERSE REACTIONS, Withdrawal (Abstinence) Syndrome).
- 9. Patients should be advised that the most common adverse reactions that may occur while taking TEVA-OXYCODONE CR are asthenic conditions, constipation, dizziness, dry mouth, headache, nausea, pruritus, somnolence, sweating and vomiting.
- 10. Patients should be advised that they may pass empty matrix "ghosts" (tablets) via colostomy or in the stool, and that this is of no concern since the active medication has already been absorbed.
- 11. Patients should be advised that TEVA-OXYCODONE CR may cause drowsiness, dizziness or lightheadedness and may impair mental and/or physical ability required for the performance of potentially hazardous tasks (e.g., driving, operating machinery). Patients started on TEVA-OXYCODONE CR or patients whose dose has been adjusted should be advised not to drive a car or operate machinery unless they are tolerant to the effects of TEVA-OXYCODONE CR.
- 12. Patients should be advised that TEVA-OXYCODONE CR is a potential drug of abuse. They should protect it from theft or misuse.
- 13. Patients should be advised that TEVA-OXYCODONE CR should never be given to anyone other than the individual for whom it was prescribed.
- 14. Patients should be advised that TEVA-OXYCODONE CR 80 mg tablets or a single dose greater than 40 mg are for use only in individuals tolerant to the effect of opioids.
- 15. Women of childbearing potential who become or are planning to become pregnant should be advised to consult a physician prior to initiating or continuing therapy with TEVA-OXYCODONE CR. Women who are breastfeeding or pregnant should not use TEVA-OXYCODONE CR.

#### **Special Populations**

**Special Risk Groups:** Oxycodone should be administered with caution in a reduced dosage to debilitated patients, to patients with severely reduced hepatic or renal function or severely impaired pulmonary function, and in patients with Addison's disease, hypothyroidism, myxedema,toxic psychosis, pancreatitis, prostatic hypertrophy or urethral stricture.

Female subjects have, on average, plasma oxycodone concentrations up to 25% higher than males on a body weight adjusted basis. Plasma concentrations of oxycodone are increased by approximately 15% in elderly subjects receiving oxycodone hydrochloride; by 50 - 60% in patients with moderate degrees of renal impairment; and by approximately two-fold in patients with hepatic cirrhosis.

**Pregnant Women**: Animal reproduction studies have revealed no evidence of harm to the fetus due to oxycodone, however, as studies in humans have not been conducted, oxycodone hydrochloride is contraindicated in patients who are pregnant (see CONTRAINDICATIONS).

Prolonged maternal use of opioids during pregnancy can result in withdrawal signs in the neonate. Neonatal opioid withdrawal syndrome, unlike opioid withdrawal syndrome in adults, may be life-threatening (see WARNINGS AND PRECAUTIONS – NEONATAL OPIOID WITHDRAWAL SYNDROME).

**Labour, Delivery and Nursing Women:** In view of the potential for opioids to cross the placental barrier and to be excreted in breast milk, oxycodone hydrochloride is contraindicated during labour or in nursing mothers. Physical dependence or respiratory depression may occur in the infant if opioids are administered during labour.

**Pediatrics** (< 18 years of age): The safety and efficacy of oxycodone hydrochloride have not been studied in the pediatric population. Therefore, use of oxycodone hydrochloride is not recommended in patients under 18 years of age.

**Geriatrics** (> **65** years of age): In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy (see **DOSAGE AND ADMINISTRATION**).

## "In Vitro" Dissolution Studies of Interaction with Alcohol

Increasing concentrations of alcohol in the dissolution medium resulted in a slight decrease in the rate of release of oxycodone from oxycodone hydrochloride tablets.

#### ADVERSE REACTIONS

#### **Adverse Drug Reaction Overview**

Adverse effects of oxycodone hydrochloride controlled release tablets are similar to those of other opioid analgesics, and represent an extension of pharmacological effects of the drug class. The major hazards of opioids include respiratory and central nervous system depression and to a lesser degree, circulatory depression, respiratory arrest, shock and cardiac arrest.

The most frequently observed adverse effects of oxycodone hydrochloride are asthenia, constipation, dizziness, dry mouth, headache, nausea, pruritus, somnolence, sweating and vomiting.

**Sedation:** Sedation is a common side effect of opioid analgesics, especially in opioid naïve individuals. Sedation may also occur partly because patients often recuperate from prolonged fatigue after the relief of persistent pain. Most patients develop tolerance to the sedative effects of opioids within three to five days and, if the sedation is not severe, will not require any

treatment except reassurance. If excessive sedation persists beyond a few days, the dose of the opioid should be reduced and alternate causes investigated. Some of these are: concurrent CNS depressant medication, hepatic or renal dysfunction, brain metastases, hypercalcemia and respiratory failure. If it is necessary to reduce the dose, it can be carefully increased again after three or four days if it is obvious that the pain is not being well controlled. Dizziness and unsteadiness may be caused by postural hypotension, particularly in elderly or debilitated patients, and may be alleviated if the patient lies down.

Nausea and Vomiting: Nausea is a common side effect on initiation of therapy with opioid analgesics and is thought to occur by activation of the chemoreceptor trigger zone, stimulation of the vestibular apparatus and through delayed gastric emptying. The prevalence of nausea declines following continued treatment with opioid analgesics. When instituting therapy with an opioid for chronic pain, the routine prescription of an antiemetic should be considered. In the cancer patient, investigation of nausea should include such causes as constipation, bowel obstruction, uremia, hypercalcemia, hepatomegaly, tumour invasion of celiac plexus and concurrent use of drugs with emetogenic properties. Persistent nausea which does not respond to dosage reduction may be caused by opioid-induced gastric stasis and may be accompanied by other symptoms including anorexia, early satiety, vomiting and abdominal fullness. These symptoms respond to chronic treatment with gastrointestinal prokinetic agents.

Constipation: Practically all patients become constipated while taking opioids on a persistent basis. In some patients, particularly the elderly or bedridden, fecal impaction may result. It is essential to caution the patients in this regard and to institute an appropriate regimen of bowel management at the start of prolonged opioid therapy. Stimulant laxatives, stool softeners, and other appropriate measures should be used as required. As fecal impaction may present as overflow diarrhea, the presence of constipation should be excluded in patients on opioid therapy prior to initiating treatment for diarrhea.

The following adverse effects occur less frequently with opioid analgesics and include those reported in oxycodone hydrochloride clinical trials, whether related or not to oxycodone.

General and CNS: abnormal dreams, abnormal gait, agitation, amnesia, anaphylactic

reaction, anaphylactoid reaction, anxiety, confusional state, convulsion, delirium, depersonalization, depression, disorientation, drug dependence, drug tolerance, drug withdrawal syndrome,

dysphoria, edema peripheral, emotional lability, euphoria, hallucinations, headache, hypertonia, hypoaesthesia, hypotonia, insomnia, miosis, muscle contractions involuntary, nervousness, paresthesia, speech disorder, thought abnormalities, tinnitus, tremor,

twitching, vertigo and vision abnormalities

Cardiovascular: chest pain, faintness, hypotension, migraine, palpitation, ST

depression, syncope, tachycardia and vasodilation

Respiratory: bronchitis, bronchospasm, cough, dyspnea, pharyngitis, pneumonia,

respiratory depression, sinusitis and yawning

Gastrointestinal: abdominal pain, anorexia, biliary spasm, cholestatis, dental caries,

diarrhea, dyspepsia, dysphagia, eructation, flatulence, gastritis,

gastrointestinal disorder, hiccups, ileus, increased appetite, stomatitis

and taste perversion

Genitourinary: amenorrhea, antidiuretic effects, libido decreased, dysuria, hematuria,

impotence, polyuria, urinary retention or hesitancy

Dermatologic: dry skin, exfoliative dermatitis, edema, other skin rashes and urticaria

allergic reaction, chills, dehydration, fever, hypoglycemia,

increased hepatic enzymes, lymphadenopathy, malaise, thirst and

weight loss

<u>Withdrawal (Abstinence) Syndrome:</u> Physical dependence with or without psychological dependence tends to occur with chronic administration. An abstinence syndrome may be precipitated when opioid administration is discontinued or opioid antagonists administered. The following withdrawal symptoms may be observed after opioids are discontinued: body aches, diarrhea, gooseflesh, loss of appetite, nausea, nervousness or restlessness, runny nose, sneezing, tremors or shivering, stomach cramps, tachycardia, trouble with sleeping, unusual increase in sweating, palpitations, unexplained fever, weakness and yawning. In patients who are appropriately treated with opioid analgesics and who undergo gradual withdrawal from the drug, these symptoms are usually mild.

#### **DRUG INTERACTIONS**

## Overview

Other:

Interactions with Central Nervous System (CNS) Depressants: Oxycodone should be used with caution and started in a reduced dosage (1/3 to 1/2 of the usual dosage) in patients who are currently taking other central nervous system depressants (eg. other opioids, sedatives, hypnotics, anti-depressants, phenothiazines, neuroleptics, antihistamines and anti-emetics) and beta-blockersas they may enhance the CNS-depressant effect (eg. respiratory depression) of oxycodone hydrochloride. TEVA-OXYCODONE CR should not be consumed with alcohol as it may increase the chance of experiencing dangerous side effects.

#### **Drug-Drug Interactions**

Drugs Metabolized by Cytochrome P450 Isozymes: Oxycodone is metabolized in part by cytochrome CYP 2D6 and cytochrome P450 3A4 pathways. The activities of these metabolic pathways may be inhibited or induced by various coadministered drugs or dietary elements, which may alter plasma oxycodone concentrations. Oxycodone doses may need to be adjusted accordingly.

## *Inhibitors of CYP3A4*:

Since the CYP3A4 isoenzyme plays a major role in the metabolism of oxycodone hydrochloride, drugs that inhibit CYP3A4 activity, such as macrolide antibiotics (e.g., erythromycin, clarithromycin), azole-antifungal agents (e.g., ketoconazole), and protease inhibitors (e.g., ritonavir), and grapefruit juice may cause decreased clearance of oxycodone which could lead to

an increase in oxycodone plasma concentrations. A published study showed that the co-administration of the antifungal drug, voriconazole, increased oxycodone AUC and Cmax by 3.6 and 1.7 fold, respectively. Although clinical studies have not been conducted with other CYP3A4 inhibitors, the expected clinical results would be increased or prolonged opioid effects. If co-administration with oxycodone hydrochloride is necessary, caution is advised when initiating therapy with, currently taking, or discontinuing CYP450 inhibitors. Evaluate these patients at frequent intervals and consider dose adjustments until stable drug effects are achieved.

#### *Inducers of CYP3A4*:

CYP450 inducers, such as rifampin, carbamazepine and phenytoin, and St. John's wort, may induce the metabolism of oxycodone and, therefore, may cause increased clearance of the drug which could lead to a decrease in oxycodone plasma concentrations, lack of efficacy or, possibly, the development of an abstinence syndrome in a patient who had developed physical dependence to oxycodone. A published study showed that the co-administration of rifampin, a drug metabolizing enzyme inducer, decreased oxycodone (oral) AUC and Cmax by 86% and 63% respectively. If coadministration with oxycodone hydrochloride is necessary, caution is advised when initiating therapy with, currently taking or discontinuing CYP3A4 inducers. Evaluate these patients at frequent intervals and consider dose adjustments until stable drug effects are achieved.

## *Inhibitors of CYP2D6*:

Oxycodone is metabolized in part to oxymorphone via cytochrome CYP2D6. While this pathway may be blocked by a variety of drugs (e.g., certain cardiovascular drugs including amiodarone and quinidine as well as polycyclic antidepressants), such blockade has not been shown to be of clinical significance during oxycodone treatment.

## Administration with Mixed Activity Agonist/Antagonist Opioids

Mixed agonist/antagonist opioid analgesics (i.e., pentazocine, nalbuphine, butorphanol, and buprenorphine) should be administered with caution to a patient who has received or is receiving a course of therapy with a pure opioid agonist analgesic such as oxycodone. In this situation, mixed agonist/antagonist analgesics may reduce the analgesic effect of oxycodone and/or may precipitate withdrawal symptoms in these patients.

#### **MAO** Inhibitors

MAO Inhibitors intensify the effects of opioid drugs which can cause anxiety, confusion and decreased respiration. TEVA-OXYCODONE CR is contraindicated in patients receiving MAO Inhibitors or who have used them within the previous 14 days (see CONTRAINDICATIONS).

**Warfarin and Other Coumarin Anticoagulants:** Clinically relevant changes in International Normalized Ratio (INR or Quick-value) in both directions have been observed in individuals when oxycodone and coumarin anticoagulants are co-administered.

#### **Drug-Food Interactions**

Administration of oxycodone hydrochloride controlled release tablets with food results in an increase in peak plasma oxycodone concentration of up to 1.5-fold but has no significant effect on the extent of absorption of oxycodone.

#### **Drug-Herb Interactions**

Interactions with herbal products have not been established.

#### **Drug-Laboratory Interactions**

Interactions with laboratory tests have not been established.

## **Drug-Lifestyle Interactions**

The concomitant use of alcohol should be avoided (see WARNINGS AND PRECAUTIONS, Serious Warnings and Precautions, General).

## DOSAGE AND ADMINISTRATION

## **Dosing Considerations**

TEVA-OXYCODONE CR should only be used in patients for whom alternative treatment options (e.g., non-opioid analgesics) are ineffective, or not tolerated, or would be otherwise inadequate to provide appropriate management of pain.

TEVA-OXYCODONE CR must be swallowed whole. Cutting, breaking, crushing, chewing, or dissolving TEVA-OXYCODONE CR tablets can lead to rapid release and absorption of a potentially fatal dose of oxycodone (see WARNINGS AND PRECAUTIONS).

TEVA-OXYCODONE CR 80 mg tablets, or a single dose greater than 40 mg, are for use in opioid tolerant patients only. A single dose greater than 40 mg, or total daily doses greater than 80 mg, may cause fatal respiratory depression when administered to patients who are not tolerant to the respiratory depressant effects of opioids.

TEVA-OXYCODONE CR should not be used in the early post-operative period (12 - 24 hours post-surgery) unless the patient is ambulatory and gastrointestinal function is normal.

TEVA-OXYCODONE CR is not indicated for rectal administration. The controlled release tablets may be taken with or without food, with a glass of water.

In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, concomitant disease or other drug therapy. The dosage should be adjusted to the lowest TEVA-OXYCODONE CR dose that will achieve the goal of satisfactory pain relief with acceptable side effects.

## **Recommended Dose and Dosage Adjustment**

**Adults:** Individual dosing requirements vary considerably based on each patient's age, weight, severity and cause of pain, and medical and analgesic history.

Patients Not Receiving Opioids at the Time of Initiation of Oxycodone Treatment: The usual initial adult dose of TEVA-OXYCODONE CR for patients who have not previously received opioid analyses is 10 or 20 mg every 12 hours.

**Patients Currently Receiving Opioids:** Patients currently receiving other oral oxycodone formulations may be transferred to TEVA-OXYCODONE CR tablets at the same total daily oxycodone dosage, equally divided into two 12 hourly TEVA-OXYCODONE CR doses.

For patients who are receiving an alternate opioid, the "oral oxycodone equivalent" of the analgesic presently being used should be determined. Having determined the total daily dosage of the present analgesic, Table 1 can be used to calculate the approximate daily oral oxycodone dosage that should provide equivalent analgesia. This total daily oral oxycodone dose should then be equally divided into two 12 hourly TEVA-OXYCODONE CR doses. It is usually appropriate to treat a patient with only one opioid at a time. Further dose reductions should be considered due to incomplete cross-tolerance between opioids.

**Table 1: Opioid Analgesics: Approximate Analgesic Equivalences**<sup>1</sup>

Drug	Equivalen	t Dose (mg) <sup>2</sup>	<b>Duration of</b>
	(compared to mo	orphine 10 mg IM)	Action (hours)
	Parenteral	Oral	
Strong Opioid Agonists			
Morphine	10	$60^{3}$	3-4
Oxycodone	15	$30^{4}$	2-4
Hydromorphone	1.5	7.5	2-4
Anileridine	25	75	2-3
Levorphanol	2	4	4-8
Meperidine <sup>6</sup>	75	300	1-3
Oxymorphone	1.5	5 (rectal)	3-4
Methadone <sup>5</sup>	-	-	-
Heroin	5-8	10-15	3-4
Weak Opioid Agonists			•
Codeine	120	200	3-4
Propoxyphene	50	100	2-4
Mixed Agonist-Antagonis	sts <sup>7</sup>		
Pentazocine <sup>6</sup>	60	180	3-4
Nalbuphine	10	-	3-6
Butorphanol	2	-	3-4

#### **References:**

<sup>&</sup>lt;sup>1</sup> Expert Advisory Committee on the Management of Severe Chronic Pain in Cancer Patients, Health and Welfare

Canada. Cancer pain: A monograph on the management of cancer pain. Ministry of Supplies and Services Canada, 1987. Cat. No. H42-2/5-1984E.

Foley KM. The treatment of cancer pain. N Engl J Med 1985;313(2):84-95.

Aronoff GM, Evans WO. Pharmacological management of chronic pain: A review. In: Aronoff GM, editor.

Evaluation and treatment of chronic pain. 2nd ed. Baltimore (MD): Williams and Wilkins; 1992. p. 359-68.

Cherny NI, Portenoy RK. Practical issues in the management of cancer pain. In: Wall PD, Melzack R, editors.

Textbook of pain. 3rd ed. New York: Churchill Livingstone; 1994. p. 1437-67.

- Most of the data were derived from single-dose, acute pain studies and should be considered an approximation for selection of doses when treating chronic pain. As analgesic conversion factors are approximate and patient response may vary, dosing should be individualized according to relief of pain and side effects. Because of incomplete cross-tolerance, dose reductions of 25-50% of the equianalgesic dose may be appropriate in some patients when converting from one opioid to another, particularly at high doses. Upward titration may be required to reach appropriate maintenance doses.
  - <sup>†</sup>Levy MH. Pharmacologic treatment of cancer pain. N Engl J Med 1996;335:1124-1132.
- For acute pain, the oral or rectal dose of morphine is six times the injectable dose. However, for chronic dosing, clinical experience indicates that this ratio is 2 3: 1 (i.e., 20-30 mg of oral or rectal morphine is equivalent to 10 mg of parenteral morphine).
- <sup>4</sup> Based on single entity oral oxycodone in acute pain.
- Extremely variable equianalgesic dose. Patients should undergo individualized titration starting at an equivalent to 1/10 of the morphine dose.
- Not recommended for the management of chronic pain.
- Mixed agonist-antagonists can precipitate withdrawal in patients on pure opioid agonists.

Patients who are receiving 1 to 5 tablets/capsules per day of a fixed-dose combination opioid/non-opioid containing 5 mg of oxycodone or 30 mg codeine should be started on 10 to 20 mg TEVA-OXYCODONE CR q12h. For patients receiving 6 to 9 tablets/capsules per day of a fixed-dose combination opioid/non-opioid containing 5 mg of oxycodone or 30 mg codeine, a starting dose of 20 to 30 mg q12h should be used and for patients receiving 10 to 12 tablets/capsules per day of a fixed-dose combination opioid/non-opioid containing 5 mg of oxycodone or 30 mg codeine, a starting dose of 30 to 40 mg q12h is suggested. For those receiving > 12 tablets/capsules per day of a fixed-dose combination opioid/non-opioid containing 5 mg of oxycodone or 30 mg codeine, conversions should be based on the total daily opioid dose.

**Use with Non-Opioid Medications:** If a non-opioid analgesic is being provided, it may be continued. If the non-opioid is discontinued, consideration should be given to increasing the opioid dose to compensate for the non-opioid analgesic. TEVA-OXYCODONE CR can be safely used concomitantly with usual doses of other non-opioid analgesics.

**Dose Titration:** Dose titration is the key to success with opioid analgesic therapy. **Proper optimization of doses scaled to the relief of the individual's pain should aim at the regular** 

administration of the lowest dose of controlled release oxycodone (TEVA-OXYCODONE CR) which will achieve the overall treatment goal of satisfactory pain relief with acceptable side effects.

Dosage adjustments should be based on the patient's clinical response. In patients receiving TEVA-OXYCODONE CR, the dose may be titrated at intervals of 24-36 hours to that which provides satisfactory pain relief without unmanageable side effects. TEVA-OXYCODONE CR is designed to allow 12 hourly dosing.

If pain repeatedly occurs at the end of the dosing interval it is generally an indication for a dosage increase rather than more frequent administration of controlled release oxycodone (TEVA-OXYCODONE CR).

**Adjustment or Reduction of Dosage:** Following successful relief of pain, periodic attempts to reassess the opioid analgesic requirements should be made. If treatment discontinuation is required, the dose of opioid may be decreased as follows: one-half of the previous daily dose given q12h TEVA-OXYCODONE CR for the first two days, followed thereafter by a 25% reduction every two days.

Withdrawal symptoms may occur following abrupt discontinuation of therapy. These symptoms may include body aches, diarrhea, gooseflesh, loss of appetite, nausea, nervousness or restlessness, runny nose, sneezing, tremors or shivering, stomach cramps, tachycardia, trouble with sleeping, unusual increase in sweating, palpitations, unexplained fever, weakness and yawning.

Patients on prolonged therapy should be withdrawn gradually from the drug if it is no longer required for pain control. In patients who are appropriately treated with opioid analgesics and who undergo gradual withdrawal for the drug, these symptoms are usually mild.

Opioid analgesics may only be partially effective in relieving dysesthetic pain, postherpetic neuralgia, stabbing pains, activity-related pain and some forms of headache. That is not to say that patients with these types of pain should not be given an adequate trial of opioid analgesics, but it may be necessary to refer such patients at an early time to other forms of pain therapy.

## Missed Dose

If the patient forgets to take one or more doses, they should take their next dose at the next scheduled time and in the normal amount.

#### **Disposal**

TEVA-OXYCODONE CR should be kept in a safe place, such as under lock and out of the sight and reach of children before, during and after use. TEVA-OXYCODONE CR should not be used in front of children, since they may copy these actions.

Unused or expired TEVA-OXYCODONE CR should be properly disposed of as soon as it is no longer needed to prevent accidental exposure to others, including children or pets. TEVA-OXYCODONE CR should not be shared with others and steps should be taken to protect it from

theft or misuse. The patient should speak to their pharmacist about temporary storage options, if required, until the medication can be returned to the pharmacy for safe disposal.

**TEVA-OXYCODONE CR should never be disposed of in household trash.** Disposal via a pharmacy take back program is recommended.

#### **OVERDOSAGE**

For management of a suspected drug overdose, contact your regional Poison Control Centre immediately.

**Symptoms:** Serious overdosage with oxycodone may be characterized by respiratory depression (a decrease in respiratory rate and/or tidal volume, Cheyne-Stokes respiration, cyanosis), extreme somnolence progressing to stupor or coma, miosis, hypotonia, cold and clammy skin, and sometimes bradycardia and hypotension. Severe overdosage may result in apnea, circulatory collapse, cardiac arrest and death.

**Treatment:** Primary attention should be given to the establishment of adequate respiratory exchange through the provision of a patent airway and controlled or assisted ventilation. The opioid antagonist naloxone hydrochloride is a specific antidote against respiratory depression due to overdosage or as a result of unusual sensitivity to oxycodone. An appropriate dose of an opioid antagonist should therefore be administered, preferably by the intravenous route. The usual initial i.v. adult dose of naloxone is 0.4 mg or higher. Concomitant efforts at respiratory resuscitation should be carried out. Since the duration of action of oxycodone, particularly sustained release formulations, may exceed that of the antagonist, the patient should be under continued surveillance and doses of the antagonist should be repeated as needed to maintain adequate respiration.

An antagonist should not be administered in the absence of clinically significant respiratory or cardiovascular depression. Oxygen, intravenous fluids, vasopressors and other supportive measures should be used as indicated.

In individuals physically dependent on opioids, the administration of the usual dose of narcotic antagonist will precipitate an acute withdrawal syndrome. The severity of this syndrome will depend on the degree of physical dependence and the dose of antagonist administered. The use of narcotic antagonists in such individuals should be avoided if possible. If a narcotic antagonist must be used to treat serious respiratory depression in the physically dependent patient, the antagonist should be administered with extreme care by using dosage titration, commencing with 10 to 20% of the usual recommended initial dose.

Evacuation of gastric contents may be useful in removing unabsorbed drug, particularly when a sustained release formulation has been taken.

#### ACTION AND CLINICAL PHARMACOLOGY

#### **Mechanism of Action**

Oxycodone is a semi-synthetic opioid analgesic which exerts an agonist effect at specific, saturable opioid receptors in the CNS and other tissues. In man, oxycodone produces a variety of effects including analgesia, constipation from decreased gastrointestinal motility, suppression of the cough reflex, respiratory depression from reduced responsiveness of the respiratory center to CO<sub>2</sub>, nausea and vomiting via stimulation of the chemoreceptor trigger zone, changes in mood including euphoria and dysphoria, sedation, mental clouding, and alterations of the endocrine and autonomic nervous systems.

## **Pharmacodynamics**

Oxycodone retains at least one-half of its analgesic activity when administered orally and with acute dosing is approximately twice as potent as orally administered morphine.

There is no intrinsic limit to the analgesic effect of oxycodone; like morphine, adequate doses will relieve even the most severe pain. Clinically however, dosage limitations are imposed by the adverse effects, primarily respiratory depression, nausea and vomiting, which can result from high doses.

Studies with oxycodone hydrochloride controlled release tablets in normal volunteers and patients demonstrate a consistent relationship between oxycodone dosage and plasma oxycodone concentrations as well as between concentration and pharmacodynamic effects. In a single dose analgesic assay, the peak effect of oxycodone hydrochloride controlled release tablets (20 and 30 mg) was greater than that of 10 mg oxycodone hydrochloride controlled release tablets and was equivalent to that of two tablets of oxycodone (5 mg) plus acetaminophen (325 mg), or 15 mg of immediate release oxycodone but with a longer duration of action. In patients with pain due to osteoarthritis, oxycodone hydrochloride controlled release tablets q12h was more effective than placebo in decreasing pain and in improving quality of life, mood and sleep. In patients with cancer pain, oxycodone hydrochloride controlled release tablets administered q12h produced equivalent analgesia to immediate release oxycodone hydrochloride tablets administered four times per day. In patients with low back pain, oxycodone hydrochloride controlled release tablets q12h and immediate release oxycodone hydrochloride given four times per day, were equally effective. Titration to analgesic effect was achieved as easily with oxycodone hydrochloride controlled release tablets as with immediate release oxycodone hydrochloride tablets.

**Central Nervous System:** Oxycodone produces respiratory depression by direct action on brain stem respiratory centres. The respiratory depression involves both a reduction in the responsiveness of the brain stem centres to increases in CO<sub>2</sub> tension and to electrical stimulation.

Oxycodone depresses the cough reflex by direct effect on the cough centre in the medulla. Antitussive effects may occur with doses lower than those usually required for analgesia.

Oxycodone causes miosis, even in total darkness. Pinpoint pupils are a sign of opioid overdose but are not pathognomonic (e.g., pontine lesions of hemorrhagic or ischemic origin may produce

similar findings). Marked mydriasis rather than miosis may be seen with hypoxia in the setting of oxycodone overdose.

Gastrointestinal Tract and Other Smooth Muscle: Oxycodone causes a reduction in motility associated with an increase in smooth muscle tone in the antrum of the stomach and duodenum. Digestion of food in the small intestine is delayed and propulsive contractions are decreased. Propulsive peristaltic waves in the colon are decreased, while tone may be increased to the point of spasm resulting in constipation. Other opioid-induced effects may include a reduction in gastric, biliary and pancreatic secretions, spasm of the sphincter of Oddi, and transient elevations in serum amylase.

**Cardiovascular System:** Oxycodone may produce release of histamine with or without associated peripheral vasodilation. Manifestations of histamine release and/or peripheral vasodilation may include pruritus, flushing, red eyes, sweating and/or orthostatic hypotension.

**Endocrine System:** Opioids may influence the hypothalamic-pituitary-adrenal or -gonadal axes. Some changes that can be seen include an increase in serum prolactin, and decreases in plasma cortisol and testosterone. Clinical signs and symptoms may be manifested from these hormonal changes.

**Immune System:** In vitro and animal studies indicate that opioids have a variety of effects on immune functions, depending on the context in which they are used. The clinical significance of these findings is unknown.

## <u>Concentration – Efficacy Relationships</u>

Studies in normal volunteers and patients reveal predictable relationships between oxycodone dosage and plasma oxycodone concentrations, as well as between concentration and certain expected opioid effects, such as papillary constriction, sedation, overall subjective "drug effect", analgesia and feelings of "relaxation".

The minimum effective analgesic concentration will vary widely among patients, especially among patients who have been previously treated with potent agonist opioids. As a result, patients must be treated with individualized titration of dosage to the desired effect. The minimum effective analgesic concentration of oxycodone for any individual patient may increase over time due to an increase in pain, the development of a new pain syndrome and/or the development of analgesic tolerance.

## <u>Concentration – Adverse Reaction Relationship</u>

There is a significant relationship between increasing oxycodone plasma concentrations and increasing frequency of dose-related opioid adverse reactions such as nausea, vomiting, CNS effects, and respiratory depression. In opioid-tolerant patients, the situation may be altered by the development of tolerance to opioid-related side effects.

The dose of oxycodone hydrochloride must be individualized (see DOSAGE AND ADMINISTRATION) because the effective analgesic dose for some patients will be too high to be tolerated by other patients.

## **Pharmacokinetics**

The activity of oxycodone hydrochloride is primarily due to the parent drug oxycodone. Oxycodone hydrochloride is designed to provide delivery of oxycodone over 12 hours.

Cutting, breaking, chewing, crushing or dissolving TEVA-OXYCODONE CR impairs the controlled release delivery mechanism and could lead to the rapid release and absorption of a potentially fatal dose of oxycodone.

## **Absorption**

About 60% to 87% of an oral dose of oxycodone reaches the central compartment in comparison to a parenteral dose. The high oral bioavailability is due to low pre-systemic and/or first-pass metabolism.

#### **Distribution**

Following intravenous administration, the steady-state volume of distribution (Vss) for oxycodone was 2.6 L/kg. Oxycodone binding to plasma protein at 37°C and a pH of 7.4 was about 45%. Once absorbed, oxycodone is distributed to skeletal muscle, liver, intestinal tract, lungs, spleen, and brain. Oxycodone has been found in breast milk.

#### Metabolism

Oxycodone is extensively metabolized by multiple metabolic pathways to produce noroxycodone, oxymorphone and noroxymorphone, which are subsequently glucuronidated. Noroxycodone and noroxymorphone are the major circulating metabolites. CYP3A mediated N-demethylation to noroxycodone is the primary metabolic pathway of oxycodone with a lower contribution from CYP2D6 mediated O-demethylation to oxymorphone. Therefore, the formation of these and related metabolites can, in theory, be affected by other drugs (see DRUG INTERACTIONS).

Noroxycodone exhibits very weak anti-nociceptive potency compared to oxycodone, however, it undergoes further oxidation to produce noroxymorphone, which is active at opioid receptors. Although noroxymorphone is an active metabolite and is present at relatively high concentrations in circulation, it does not appear to cross the blood-brain barrier to a significant extent.

Oxymorphone has been shown to be active and possessing analgesic activity but its contribution to analgesia following oxycodone administration is thought to be clinically insignificant. Other metabolites ( $\alpha$ - and  $\beta$ -oxycodol, noroxycodol and oxymorphol) may be present at very low concentrations and demonstrate limited penetration in to the brain as compared to oxycodone. The enzymes responsible for keto-reduction and glucuronidation pathways in oxycodone metabolism have not been established.

#### **Excretion**

Oxycodone and its metabolites are excreted in both urine and feces. The amounts measured in the urine have been reported as follows: free and conjugated oxycodone 8.9%, free noroxycodone 23%, free oxymorphone less than 1%, conjugated oxymorphone 10%, free and

conjugated noroxymorphone 14%, reduced free and conjugated metabolites up to 18%. The total plasma clearance was approximately 1.4 L/min in adults.

Pharmacokinetic studies of oxycodone hydrochloride controlled release tablets in normal volunteers demonstrate that both AUC and  $C_{max}$  increase in a dose proportional manner and that the six tablet strengths are bioequivalent. In single dose studies, oxycodone hydrochloride controlled release tablet was absorbed to an equivalent extent as immediate release oxycodone but with a reduced maximum concentration ( $C_{max}$  ratio approximately 50%), a prolonged (2.4x) time to maximum concentration ( $t_{max}$  approximately 2.8 hours), with a biphasic absorption pattern, with two apparent absorption half-times of 0.6 and 6.9 hours, which describe the initial release of oxycodone from the tablet, followed by a prolonged release. Release in vitro is pH-independent.

In steady state pharmacokinetic studies of oxycodone hydrochloride controlled release tablets q12h, maximum plasma concentrations ( $C_{max}$ ) of oxycodone were equivalent to those obtained with q6h administration of oral immediate release preparations and was achieved approximately 3 hours after administration of oxycodone hydrochloride controlled release tablets. Steady-state was achieved within 24-36 hours of initiation of dosing. The absorption of oxycodone from oxycodone hydrochloride controlled release tablets is not significantly influenced when administered in the presence of food.

## **Special Populations and Conditions**

**Pediatrics:** oxycodone hydrochloride controlled release tablets has not been studied in children and is not indicated for patients less than 18 years of age.

**Geriatrics:** Plasma concentrations of oxycodone are increased by approximately 15% in elderly subjects receiving oxycodone hydrochloride controlled release tablets.

**Race:** No data available.

**Hepatic Insufficiency:** Plasma concentrations of oxycodone are increased by approximately 2-fold in patients with hepatic cirrhosis.

**Renal Insufficiency:** Plasma concentrations of oxycodone are increased by 50% to 60% in patients with moderate degrees of renal impairment.

**Genetic Polymorphism:** No data available.

#### STORAGE AND STABILITY

Store TEVA-OXYCODONE CR Tablets between 15° and 30°C. Keep container tightly closed. Protect from moisture.

#### DOSAGE FORMS, COMPOSITION AND PACKAGING

**TEVA-OXYCODONE CR 10 mg** tablets are round, unscored, white to off-white, biconvex, controlled release tablet, engraved with "N" on one side and "10" on the other side. They are available in white HDPE bottles of 50 or 100 tablets or in 100 unit dose blister packages.

**TEVA-OXYCODONE CR 20 mg** tablets are round, unscored, pink, biconvex, controlled release tablet, engraved with "N" on one side and "20" on the other side. They are available in white HDPE bottles of 50 or 100 tablets or in 100 unit dose blister packages.

**TEVA-OXYCODONE CR 40 mg** tablets are round, unscored, yellow, biconvex, controlled release tablet, engraved with "N" on one side and "40" on the other side. They are available in white HDPE bottles of 50 or 100 tablets or in 20 unit dose blister packages.

**TEVA-OXYCODONE CR 80 mg** tablets are round, unscored, green, biconvex, controlled release tablet, engraved with "N" on one side and "80" on the other side. They are available in white HDPE bottles of 50 or 100 tablets or in 20 unit dose blister packages.

## **Nonmedicinal Ingredients:**

## **TEVA-OXYCODONE CR 10 mg**

Colloidal silicon dioxide, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, polyethylene glycol, polyvinyl alcohol, silicified microcrystalline cellulose, talc and titanium dioxide.

## **TEVA-OXYCODONE CR 20 mg**

Colloidal silicon dioxide, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, polyethylene glycol, polydextrose, silicified microcrystalline cellulose, synthetic iron oxide red, triacetin and titanium dioxide.

## **TEVA-OXYCODONE CR 40 mg**

Colloidal silicon dioxide, D&C Yellow No. 10 Aluminum lake, FD&C Red No. 40 Aluminium lake, iron oxide yellow, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polyvinyl alcohol-part hydrolyzed, talc and titanium dioxide.

#### **TEVA-OXYCODONE CR 80 mg**

Colloidal silicon dioxide, FD&C Blue No. 2 Aluminium lake, FD&C Red No. 40 Aluminium lake, FD&C Yellow No. 5 Aluminium lake, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polyvinyl alcohol-part hydrolyzed, soya bean lecithin, talc and titanium dioxide.

#### PART II: SCIENTIFIC INFORMATION

#### PHARMACEUTICAL INFORMATION

## **Drug Substance**

Oxycodone hydrochloride is a semi-synthetic derivative of the naturally occurring opium alkaloid, thebaine.

Proper name: Oxycodone Hydrochloride

Chemical name: 1) morphinan-6-one, 4,5-epoxy-14-hydroxy-3-methoxy-17methyl-,

hydrochloride,  $(5\alpha)$ 

2) 4,5-epoxy-14-hydroxy-3-methoxy-17-methyl morphinana-6-one hydrochloride

3) 4,5-epoxy-14-hydroxy-3-methoxy-N-methyl-6-oxomorphinan

4) 7,8-dihydro-14-hydroxycodeinone, hydrochloride

5) 6-deoxy-7,8-dihydro-14-hydroxy-3-O-methyl-6-oxomorphine

hydrochloride

6) (-)-(5R, 6S, 14S)-4,5-epoxy-14-hydroxy-3-methoxy-9a-methyl-morphinan-6-one, hydrochloride

Molecular formula:  $C_{18}H_{21}NO_4.HCl \cdot H_2O$ 

Molecular mass: Oxycodone hydrochloride 351.8

Oxycodone hydrochloride hydrate 369.8

Structural formula:

Physicochemical properties:

Description: A white to off-white crystalline powder.

Melting Point: Melting point of oxycodone hydrochloride is about 275°C

pKa: The pKa at 20°C is 8.9

## **CLINICAL TRIALS**

## **Comparative Bioavailability Studies**

The objective of this study was to evaluate the comparative bioavailability between Teva-Oxycodone 20 mg Controlled Release (CR) tablets (manufactured by Teva Canada Limited, Canada) and OxyContin® 20 mg tablets (manufactured by Purdue Pharma, Canada), after a single-dose in healthy subjects under fasting conditions.

## SUMMARY TABLE OF THE COMPARATIVE BIOAVAILABILITY DATA FASTING STUDY

		Oxycodone		
		$(1 \times 20 \text{ mg})$		
	From me	asured data Geometr	ric Mean	
	Ar	ithmetic Mean (CV 9	%)	
Parameter	Teva-Oxycodone CR Tablets*	OxyContin® Tablets <sup>†</sup>	% Ratio of Geometric Means	Confidence Interval, 90%
AUC <sub>(0-t)</sub> (ng*h/mL)	232.407 237.931 (23)	228.546 233.777 (22)	101.69	96.08- 107.62
AUC <sub>(0-12)</sub> (ng*h/mL)	152.034 154.774 (20)	160.186 162.978 (19)	94.91	90.55 – 99.48
AUC <sub>(0-inf)</sub> (ng*h/mL)	237.681 243.554 (24)	232.050 237.325 (22)	102.43	96.75 – 108.43
C <sub>max</sub> (ng/mL)	17.920 18.341(23)	19.837 20.273 (22)	90.33	83.62 – 97.59
T <sub>max</sub> <sup>§</sup> (h)	4.61 (11)	3.26 (37)		
T <sub>half</sub> <sup>§</sup> (h)	5.62 (22)	5.30 (14)		

<sup>\*</sup> Teva-Oxycodone 20 mg CR Tablets (Teva Canada Limited, Canada)

<sup>†</sup>OxyContin® 20 mg CR Tablets (Purdue Pharma, Canada, purchased in Canada)

<sup>§</sup> Expressed as the arithmetic mean (CV%) only

The objective of this study was to evaluate the comparative bioavailability between Teva-Oxycodone 20 mg Controlled Release (CR) tablets (manufactured by Teva Canada Limited, Canada) and OxyContin<sup>®</sup> 20 mg tablets (manufactured by Purdue Pharma, Canada), after a single-dose in healthy subjects under fed conditions.

# SUMMARY TABLE OF THE COMPARATIVE BIOAVAILABILITY DATA FED STUDY

Oxycodone
(1 x 20 mg)
From measured data
Geometric Mean
Arithmetic Mean (CV %)

	1.11.	tillificate ivicali (C v )	*/	
Parameter	Teva-Oxycodone CR Tablets*	OxyContin® Tablets <sup>†</sup>	% Ratio of Geometric Means	Confidence Interval, 90%
$AUC_T$	211.317	220.437	95.86	89.62 - 102.54
(ng*h/mL)	254.133 (33)	261.859 (37)		
$AUC_x$	149.252	164.518	90.72	86.17 - 95.51
(ng*h/mL)	175.597 (31)	190.554 (33)		
AUC <sub>I</sub>	212.059	224.832	94.32	90.22 - 98.60
(ng*h/mL)	256.299 (34)	265.079 (37)		
C <sub>max</sub>	20.267	22.583	89.75	84.73 - 95.06
(ng/mL)	23.500 (33)	25.836 (33)		
T <sub>max</sub> §	4.50 (24)	3.40 (32)		
(h)				
T <sub>1/2</sub> §	4.52 (16)	4.61 (18)		
(h)	, ,	, ,		

<sup>\*</sup> Teva-Oxycodone 20 mg CR Tablets (Teva Canada Limited, Canada)

<sup>†</sup>OxyContin® 20 mg CR Tablets (Purdue Pharma, Canada, purchased in Canada)

<sup>§</sup> Expressed as the arithmetic mean (CV%) only

The objective of this study was to evaluate the comparative bioavailability between Teva-Oxycodone 20 mg CR Tablets (Teva Canada Limited, Canada) and OxyContin<sup>®</sup> 20 mg CR Tablets (Purdue Pharma, Canada), at steady-state after multiple doses (q12h) in healthy subjects.

# SUMMARY TABLE OF THE COMPARATIVE BIOAVAILABILITY DATA [MULTI DOSE STUDIES]

		Oxycodone $(N = 25)$		
		• '		
		(1 x 20 mg)		
		From measured data		
		Geometric Mean		
	Ar	rithmetic Mean (CV S	%)	
Parameter	Teva-Oxycodone CR Tablets*	OxyContin® Tablets <sup>†</sup>	% Ratio of Geometric Means	Confidence Interval, 90%
AUC <sub>tau</sub>	199.152	207.009	96.20	91.97 - 100.64
(ng*h/mL)	206.020 (29)	216.490 (36)		
C <sub>max</sub>	22.807	25.634	88.97	84.95 - 93.18
(ng/mL)	23.544 (30)	26.660 (32)		
$C_{\min}$	9.429	8.368	112.68	102.96 - 123.32
(ng/mL)	9.823 (29)	9.023 (50)		
T <sub>max</sub> §	2.93 (39)	2.36 (39)		
(h)				
FL§ (%)	80.18 (24)	100.65 (24)		

Teva-Oxycodone 20 mg CR Tablets (Teva Canada Limited, Canada)

<sup>†</sup>OxyContin® 20 mg CR Tablets (Purdue Pharma, Canada, purchased in Canada)

<sup>§</sup> Expressed as the arithmetic mean (CV%) only

This is a blinded, single-dose, two-period, two-sequence, two-treatment, study designed to evaluate the comparative bioavailability between Oxycodone 40 mg sustained release tablets (Teva Canada Limited, Canada) and OxyContin® 40 mg sustained release tablets (Purdue Pharma, Canada) after a single-dose in 26 healthy subjects under fasting conditions.

# SUMMARY TABLE OF THE COMPARATIVE BIOAVAILABILITY DATA FASTING STUDY

Ovvoodona

		Oxycodone		
		$(1 \times 40 \text{ mg})$		
		From measured data		
		Geometric Mean		
	Ar	ithmetic Mean (CV 9	%)	
Parameter	Test*	Reference <sup>†</sup>	% Ratio of Geometric Means	Confidence Interval, 90%
AUC <sub>T</sub> (ng·h/mL)	428.929 440.719 (22)	420.867 434.537 (22)	101.92	95.71 - 108.53
AUC <sub>0-12</sub> (ng·h/mL)	290.619 295.980 (18)	295.410 303.264 (19)	98.38	93.32 - 103.71
AUC <sub>I</sub> (ng·h/mL)	435.554 447.746 (21)	427.707 442.224 (23)	101.83	95.65 - 108.42

37.085

38.219 (22)

2.60 (44)

5.72 (13)

87.30 - 97.94

92.46

34.291

34.805 (17)

4.17 (23)

5.34 (21)

 $C_{\text{max}}$ 

T<sub>max</sub>§

 $\frac{(h)}{T_{1/2}^{\S}}$ 

(h)

(ng/mL)

Teva-Oxycodone 40 mg CR Tablets (Teva Canada Limited, Canada)

<sup>†</sup>OxyContin® 40 mg Tablets (Purdue Pharma, Canada, purchased in Canada)

<sup>§</sup> Expressed as the arithmetic mean (CV%) only

This is a blinded, single-dose, two-period, two-sequence, two-treatment, study designed to evaluate the comparative bioavailability between Oxycodone 40 mg sustained release tablets (Teva Canada Limited, Canada) and OxyContin® 40 mg sustained release tablets (Purdue Pharma, Canada) after a single-dose in 26 healthy subjects under fed conditions.

## SUMMARY TABLE OF THE COMPARATIVE BIOAVAILABILITY DATA **FED STUDY**

		Oxycodone		
		$(1 \times 40 \text{ mg})$		
		From measured data		
		Geometric Mean		
	A	rithmetic Mean (CV 9	%)	
Parameter	Test <sup>*</sup>	Reference <sup>†</sup>	% Ratio of Geometric Means	Confidence Interval, 90%
AUC <sub>T</sub> (ng·h/mL)	528.476 544.283 (23)	519.183 533.577 (24)	101.79	98.17 - 105.55
AUC <sub>0-12</sub> (ng·h/mL)	388.887 396.901 (18)	380.240 387.948 (20)	102.27	98.62 - 106.07
AUC <sub>I</sub> (ng h/mL)	532.643 548.819 (23)	525.023 540.113 (24)	101.45	97.85 - 105.19
C <sub>max</sub> (ng/mL)	50.628 51.709 (18)	51.936 52.900 (19)	97.48	93.92 - 101.18
T <sub>max</sub> §	4.41 (22)	2 22 (22)		

3.33 (32)

5.11 (13)

4.41 (23)

4.50 (13)

 $\frac{(h)}{T_{1/2}}$ 

(h)

Teva-Oxycodone 40 mg CR Tablets (Teva Canada Limited, Canada)

<sup>†</sup>OxyContin® 40 mg Tablets (Purdue Pharma, Canada, purchased in Canada)

<sup>§</sup> Expressed as the arithmetic mean (CV%) only

This is a blinded, single-dose, randomized, two-period, two-sequence, two-treatment, crossover study designed to evaluate the comparative bioavailability between Oxycodone 80 mg sustained release tablets (Teva Canada Limited, Canada) and OxyContin<sup>®</sup> 80 mg sustained release tablets (Purdue Pharma, Canada) after a single-dose in 20 healthy subjects under fasting conditions.

# SUMMARY TABLE OF THE COMPARATIVE BIOAVAILABILITY DATA FASTING STUDY

		Oxycodone		
		$(1 \times 80 \text{ mg})$		
		From measured data		
		Geometric Mean		
	Aı	rithmetic Mean (CV 9	%)	
Parameter	Test <sup>*</sup>	Reference <sup>†</sup>	% Ratio of Geometric Means	Confidence Interval, 90%
AUC <sub>T</sub> (ng h/mL)	923.956 957.249 (26)	851.799 876.350 (22)	108.47	102.19 - 115.14
AUC <sub>I</sub> (ng·h/mL)	935.878 970.555 (26)	876.882 904.101 (23)	106.73	100.15-113.74
C <sub>max</sub> (ng/mL)	75.334 76.500 (20)	67.795 68.820 (17)	111.12	105.49 - 117.06
T <sub>max</sub> § (h)	4.75 (36)	3.13 (40)		
T <sub>1/2</sub> § (h)	5.10 (15)	6.35 (30)		

Teva-Oxycodone 80 mg CR Tablets (Teva Canada Limited, Canada)

<sup>†</sup> OxyContin® 80 mg CR Tablets (Purdue Pharma, Canada, purchased in Canada)

<sup>§</sup> Expressed as the arithmetic mean (CV%) only

This is a blinded, single-dose, two-period, two-sequence, two-treatment, designed to evaluate the comparative bioavailability between Oxycodone 80 mg sustained release tablets (Teva Canada Limited, Canada) and OxyContin<sup>®</sup> 80 mg sustained release tablets (Purdue Pharma, Canada) after a single-dose in 26 healthy subjects under fed conditions.

## SUMMARY TABLE OF THE COMPARATIVE BIOAVAILABILITY DATA FED STUDY

Oxycodone  $(1 \times 80 \text{ mg})$ From measured data Geometric Mean Arithmetic Mean (CV %)

Parameter	Test*	Reference <sup>†</sup>	% Ratio of Geometric Means	Confidence Interval, 90%
AUC <sub>T</sub> (ng·h/mL)	1089.503 1127.631 (29)	1021.767 1056.972 (28)	106.63	102.92 - 110.47
AUC <sub>0-12</sub> (ng·h/mL)	789.729 806.597 (23)	681.971 694.718 (20)	115.80	112.59 - 119.10
AUC <sub>I</sub> (ng·h/mL)	1098.917 1138.994 (30)	1045.871 1084.462 (30)	105.07	101.26 - 109.03
C <sub>max</sub> (ng/mL)	102.328 104.809 (24)	91.328 93.030 (20)	112.04	107.12 - 117.19
T <sub>max</sub> <sup>§</sup> (h)	4.89 (31)	3.44 (29)		
T <sub>1/2</sub> § (h)	4.62 (15)	6.07 (16)		

<sup>\*</sup>Teva-Oxycodone 80 mg CR Tablets (Teva Canada Limited, Canada)
†OxyContin® 80 mg Tablets (Purdue Pharma, Canada, purchased in Canada)

<sup>§</sup> Expressed as the arithmetic mean (CV%) only

This is a blinded, multiple-dose, two-period, two-sequence, two-treatment, study designed to evaluate the comparative bioavailability between Teva-Oxycodone 80 mg CR Tablets (Teva Canada Limited, Canada) and OxyContin® 80 mg CR Tablets (Purdue Pharma Inc, Canada) after a multiple-dose in 28 healthy male subjects under fasting conditions.

# SUMMARY TABLE OF THE COMPARATIVE BIOAVAILABILITY DATA [MULTI DOSE STUDIES]

		Oxycodone		
		(80 mg q12h)		
		From measured data		
		Geometric Mean		
	Aı	rithmetic Mean (CV 9	%)	
Parameter	Test*	Reference <sup>†</sup>	% Ratio of Geometric Means	Confidence Interval, 90%
AUC <sub>tau</sub> (ng·h/mL)	1253.029 1287.336 (23)	1214.196 1241.928 (22)	103.20	99.55 - 106.98
C <sub>max</sub> (ng/mL)	136.364 140.411 (24)	135.949 139.039 (22)	100.30	96.23 - 104.55
C <sub>min</sub> (ng/mL)	59.884 62.568 (29)	58.590 60.493 (24)	102.21	96.34 - 108.44
T <sub>max</sub> § (h)	3.56 (28)	2.39 (50)		

<sup>\*</sup>Teva-Oxycodone 80 mg CR Tablets (Teva Canada Limited, Canada)

<sup>†</sup>OxyContin® 80 mg CR Tablets (Purdue Pharma Inc, Canada, purchased in Canada)

<sup>§</sup> Expressed as the arithmetic mean (CV%) only

#### DETAILED PHARMACOLOGY

## **Pharmacodynamics**

Oxycodone and related  $\mu$ -agonist opioids produce their major effects on the CNS and the bowel by acting at specific saturable opioid receptors in the CNS and other tissues. The effects include analgesia, drowsiness, changes in mood, respiratory depression, cough suppression, decreased gastrointestinal motility, nausea, vomiting, and alterations of the endocrine and autonomic nervous systems.

Oxycodone receptor selectivity has not been extensively studied or characterized, and there appears to be a discrepancy between its weak affinity for opioid receptors and its potent antinociceptive activity.

Oxycodone has been shown to be 2 - 4 times more potent than morphine after both subcutaneous and intraperitoneal administration in rats. In clinical studies in patients with acute post-operative pain, oxycodone has been demonstrated to be twice as potent as morphine.

#### **TOXICOLOGY**

The  $LD_{50}$  after subcutaneous administration of oxycodone in mice was 275 - 340 mg/kg. The lowest lethal dose has been reported to be 200 mg/kg after subcutaneous administration in mice. These values are similar to those obtained for morphine. In a preliminary 12 day study in rabbits, no drug related toxic effects were discernable at 5 mg/kg. Doses of 25, 75 and 150 mg/kg were associated with variable and transient pharmacotoxic effects typical of high dose opioid treatment in animals (decreased activity, decreased or absent defection and convulsions).

## Teratogenicity:

Oxycodone had no effect on fertility or early embryonic development in male and female rats at doses as high as 8 mg/kg/day. Also, oxycodone did not induce any malformations in rats at doses as high as 8 mg/kg/day or in rabbits at doses as high as 125 mg/kg/day. Dose-related increases in developmental variations (increased incidences of extra (27) presacral vertebrae and extra pairs of ribs) were observed in rabbits when the data for individual fetuses were analyzed. However, when the same data were analyzed using litters as opposed to individual fetuses, there was no dose-related increase in developmental variations although the incidence of extra presacral vertebrae remained significantly higher in the 125 mg/kg/day group compared to the control group. Since this dose level was associated with severe pharmacotoxic effects in the pregnant animals, the fetal findings may have been a secondary consequence of severe maternal toxicity.

In a study of peri- and postnatal development in rats, maternal body weight and food intake parameters were reduced for doses  $\ge 2$  mg/kg/day compared to the control group. Body weights were lower in the F1 generation from maternal rats in the 6 mg/kg/day dosing group. There were no effects on physical, reflexological, or sensory developmental parameters or on behavioural and reproductive indices in the F1 pups (the NOEL for F1 pups was 2 mg/kg/day based on body weight effects seen at 6 mg/kg/day). There were no effects on the F2 generation at any dose in the study.

There are no adequate and well-controlled studies in pregnant women, and no studies on fertility or the post-natal effects of intrauterine exposure have been carried out.

## Mutagenicity:

Oxycodone was not mutagenic in the following assays: Ames Salmonella and E. coli test with and without metabolic activation at doses of up to 5000 mcg, chromosomal aberration test in human lymphocytes in the absence of metabolic activation at doses of up to 1500 mcg/ml and with activation 48 hours after exposure at doses of up to 5000 mcg/ml, and in the in vivo bone marrow micronucleus test in mice at plasma levels of up to 48 mcg/ml. Mutagenic results occurred in the presence of metabolic activation in the human chromosomal aberration test (at greater than or equal to 1250 mcg/ml) at 24 but not 48 hours of exposure and in the mouse lymphoma assay at doses of 50 mcg/ml or greater with metabolic activation and at 400 mcg/ml or greater without metabolic activation. The data from these tests indicate that the genotoxic risk to humans may be considered low.

## Carcinogenicity:

Studies of oxycodone in animals to evaluate its carcinogenic potential have not been conducted owing to the length of clinical experience with the drug substance.

## REFERENCES

111	EFERENCES .			
<ol> <li>OxyContin<sup>®</sup> (Oxycodone Hydrochloride Controlled Release Tablets) Product No. 148343, Date of Revision: November 8, 2011.</li> </ol>				

## READ THIS FOR SAFE AND EFFECTIVE USE OF YOUR MEDICINE PATIENT MEDICATION INFORMATION

## NTEVA-OXYCODONE CR

Controlled Release Tablets 10mg, 20mg, 40 mg and 80 mg

Read this carefully before you start taking TEVA-OXYCODONE CR and each time you get a refill. This leaflet is a summary and will not tell you everything about this drug. Talk to your healthcare professional about your medical condition and treatment and ask if there is any new information about TEVA-OXYCODONE CR.

## **Serious Warnings and Precautions**

- Even if you take TEVA-OXYCODONE CR as prescribed you are at risk for opioid addiction, abuse, and misuse that can lead to overdose and death. To understand your risk of opioid addiction, abuse, and misuse, you should speak to your prescriber (eg. doctor).
- Life-threatening breathing problems can happen while taking TEVA-OXYCODONE CR, especially if not taken as directed.
- Never give anyone your TEVA-OXYCODONE CR. They could die from taking it. If a person has not been prescribed TEVA-OXYCODONE CR, taking even one dose can cause a fatal overdose. This is especially true for children.
- Babies born to mothers who have taken TEVA-OXYCODONE CR (for short or long periods, in small or large doses) during their pregnancy can suffer life-threatening withdrawal symptoms. This can occur in the days after birth and for up to 4 weeks after delivery. If your baby has breathing changes (weak, difficult or fast), is unusually difficult to comfort, has tremors (shakiness), or has increased stools, sneezing, yawning, vomiting, or fever, seek immediate medical help for your baby.

#### What is TEVA-OXYCODONE CR used for?

TEVA-OXYCODONE CR is used for the long-term management of pain, when:

- the pain is severe enough to require daily, around-the-clock pain medication
- the doctor determines that other treatment options are not able to effectively manage your pain

TEVA-OXYCODONE CR is NOT used ("as needed") to treat pain that you only have once in a while.

## How does TEVA-OXYCODONE CR work?

TEVA-OXYCODONE CR contains oxycodone which is a pain medication belonging to the class of medicines known as opioids. It relieves pain by acting on specific nerve cells of the spinal cord and brain.

## What are the ingredients in TEVA-OXYCODONE CR?

Medicinal ingredients: Oxycodone Hydrochloride

#### TEVA-OXYCODONE CR 10 mg

Colloidal silicon dioxide, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, polyethylene glycol, polyvinyl alcohol, silicified microcrystalline cellulose, talc and titanium dioxide.

#### TEVA-OXYCODONE CR 20 mg

Colloidal silicon dioxide, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, polyethylene glycol, polydextrose, silicified microcrystalline cellulose, synthetic iron oxide red, triacetin and titanium dioxide.

#### TEVA-OXYCODONE CR 40 mg

Colloidal silicon dioxide, D&C Yellow No. 10 Aluminum lake, FD&C Red No. 40 Aluminium lake, iron oxide yellow, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polyvinyl alcohol-part hydrolyzed, talc and titanium dioxide.

#### TEVA-OXYCODONE CR 80 mg

Colloidal silicon dioxide, FD&C Blue No. 2 Aluminium lake, FD&C Red No. 40 Aluminium lake, FD&C Yellow No. 5 Aluminium lake, hydroxypropyl methylcellulose, lactose monohydrate, magnesium stearate, microcrystalline cellulose, polyethylene glycol, polyvinyl alcohol-part hydrolyzed, soya bean lecithin, talc and titanium dioxide.

## **TEVA-OXYCODONE CR comes in the following dosage forms:**

**10 mg** tablets are round, unscored, white to off-white, biconvex, controlled release tablet, engraved with "N" on one side and "**10**" on the other side. They are available in white HDPE bottles of 50 or 100 tablets or in 100 unit dose blister packages.

**20 mg** tablets are round, unscored, pink, biconvex, controlled release tablet, engraved with "N" on one side and "**20**" on the other side. They are available in white HDPE bottles of 50 or 100 tablets or in 100 unit dose blister packages.

**40 mg** tablets are round, unscored, yellow, biconvex, controlled release tablet, engraved with "N" on one side and "**40**" on the other side. They are available in white HDPE bottles of 50 or 100 tablets or in 20 unit dose blister packages.

**80 mg** tablets are round, unscored, green, biconvex, controlled release tablet, engraved with "N" on one side and "**80**" on the other side. They are available in white HDPE bottles of 50 or 100 tablets or in 20 unit dose blister packages.

#### Do not use TEVA-OXYCODONE CR if:

- you are allergic to oxycodone hydrochloride, other opioids, or any of the other ingredients of TEVA-OXYCODONE CR
- your pain can be controlled by the occasional use of pain medications including those available without a prescription
- you have severe asthma, trouble breathing, or any heart problems
- you have bowel blockage or narrowing of the stomach or intestines (eg. paralytic ileus)
- you have severe pain in your abdomen
- you have a head injury or other risks for seizures
- you suffer from alcoholism
- you have an irregular heartbeat
- you are pregnant or plan to become pregnant, breastfeeding, or in labour
- you are under 18 years of age

To help avoid side effects and ensure proper use, talk to your healthcare professional before you take TEVA-OXYCODONE CR. Talk about any health conditions or problems you may have, including if you:

- have severe kidney, liver disease
- are going to have or recently had, a planned surgery
- Have a history of illicit or prescription drug or alcohol abuse
- have past or current depression
- have problems with your thyroid, adrenal or prostate gland
- suffer from chronic or severe constipation

have, or had in the past hallucinations or other severe mental problems

## Other warnings you should know about:

There are important differences between physical dependence and addiction, and each is a reason for close medical supervision and honest discussions with your doctor. If you have questions or concerns about abuse, addiction or physical dependence, please tell your doctor.

**Driving and using machines:** Before you perform tasks which may require special attention, wait until you know how you respond to TEVA-OXYCODONE CR. Drowsiness, dizziness, or light-headedness, can especially occur after the first dose and when the dose is increased.

Tell your healthcare professional about all the medicines you take, including any drugs, vitamins, minerals, natural supplements or alternative medicines.

#### The following may interact with TEVA-OXYCODONE CR:

- alcohol, including prescription and non-prescription medications containing alcohol. Do
  not drink alcohol while taking TEVA-OXYCODONE CR. This can lead to drowsiness,
  depressed breathing, serious side effects or a fatal overdose.
- other sedative drugs which may enhance the drowsiness caused by TEVA-OXYCODONE CR
- other opioid analgesics (for pain)
- general anesthetics (used during surgery)
- drugs used to help you sleep or to reduce anxiety
- antidepressants (for depression and mood disorders). Do not take TEVA-OXYCODONE CR with monoamine oxide (MAO) inhibitors or if you have taken MAO inhibitors in the last 14 days before treatment with TEVA-OXYCODONE CR.
- drugs used to treat serious mental or emotional disorders such as schizophrenia
- antihistamines (for allergies)
- anti-emetics (for prevention of vomiting)
- drugs used to treat muscle spasms and back pain
- warfarin and other coumarin anticoagulants (for prevention/treatment of blood clots)
- some heart medications (beta blockers)
- anti-retroviral, azole anti-fungal and macrolide antibiotic drugs

#### How to take TEVA-OXYCODONE CR:

Swallow whole. Do not break, chew, dissolve or crush the tablet as this leads to quick release and absorption of a higher dose of oxycodone over a short period of time that may cause death.

#### **Usual dose:**

Take the dose prescribed by your doctor. TEVA-OXYCODONE CR tablets should be taken every 12 hours with a glass of water.

Dosage is individualized. Be sure to follow your doctor's dosing instructions exactly.

Your dose of TEVA-OXYCODONE CR will be clearly labelled on the medication bottle. Be sure to follow the directions on the label exactly; this is very important. Do not increase or decrease your dose without consulting your doctor. If your dosage is changed by your doctor, be sure to write it down at the time your doctor calls or sees you, and follow the new directions exactly. Review your pain regularly with your doctor to determine if you still need TEVA-OXYCODONE CR. Be sure to use TEVA-OXYCODONE CR only for the condition for which it was prescribed.

#### Overdose:

Signs of overdose may include abnormally slow or weak breathing, dizziness, confusion or extreme drowsiness.

If you think you have taken too much TEVA-OXYCODONE CR, contact your healthcare professional, hospital emergency department or regional Poison Control Centre immediately, even if there are no symptoms.

#### **Missed Dose:**

It is important that you do not miss any doss. If you miss one dose, take your next dose at your usual time. You should always try to get back on track with your regular dosing schedule (e.g., 8 o'clock in the morning and 8 o'clock in the evening). If you miss several doses in succession, talk to your doctor before restarting your medication.

#### **Discontinuation:**

You should not stop taking TEVA-OXYCODONE CR all at once if you have been taking it for more than a few days.

Consult your doctor for instructions on how to stop this medicine slowly to avoid uncomfortable symptoms such as body aches, diarrhea, gooseflesh, loss of appetite, nausea, nervousness or restlessness, runny nose, sneezing, tremors or shivering, stomach cramps, tachycardia, trouble with sleeping, unusual increase in sweating, unexplained fever, weakness and yawning

## **Refilling Prescriptions for TEVA-OXYCODONE CR:**

A new written prescription is required from your doctor each time you need more TEVA-OXYCODONE CR . Therefore, it is important that you contact your doctor before your current supply runs out.

## What are possible side effects from using TEVA-OXYCODONE CR?

These are not all the possible side effects you may feel when taking TEVA-OXYCODONE CR. If you experience any side effects not listed here, contact your healthcare professional.

Side effects may include:

- Drowsiness,
- Dizziness,
- Dry mouth
- Nausea and/or vomiting,
- Headache
- Problems with vision
- Lack of muscle strength

- Itching
- Sweating
- Constipation

Talk with your doctor or pharmacist about ways to prevent constipation when you start using TEVA-OXYCODONE CR.

Serious side effects and what to do about them			
Symptom / effect	Talk to your healthcare professional		Stop taking drug
	Only if severe	In all cases	and get immediate medical help
RARE			
Overdose: hallucinations,			
confusion, inability to walk			
normally, slow or weak breathing, extreme sleepiness,			✓
sedation, or dizziness,			
floppy muscles/low muscle tone			
cold and clammy skin.			
Respiratory Depression:			
Slow, shallow or weak			✓
breathing.			
Allergic Reaction: rash, hives,			
swelling of the face, lips, tongue			✓
or throat, difficulty swallowing			
or breathing			
Bowel Blockage (impaction):			
abdominal pain, severe			<b>Y</b>
constipation, nausea  Withdrawal: nausea, vomiting,			
diarrhea, anxiety, shivering, cold			
and clammy skin, body aches,		✓	
loss of appetite, sweating.			
Fast, Slow or Irregular		<b>√</b>	
heartbeat: heart palpitations.		<b>,</b>	
Low Blood Pressure: dizziness,	✓		
loss of appetite, sweating.  Fast, Slow or Irregular heartbeat: heart palpitations.	✓	<b>✓</b>	

If you have a troublesome symptom or side effect that is not listed here or becomes bad enough to interfere with your daily activities, talk to your healthcare professional.

## **Reporting Side Effects**

You can help improve the safe use of health products for Canadians by reporting serious and unexpected side effects to Health Canada. Your report may help to identify new side effects and change the product safety information.

3 ways to report:

- Online at MedEffect (http://hc-sc.gc.ca/dhp-mps/medeff/index-eng.php);
- By calling 1-866-234-2345 (toll-free);
- By completing a Consumer Side Effect Reporting Form and sending it by:
  - Fax to 1-866-678-6789 (toll-free), or
  - Mail to: Canada Vigilance Program

Health Canada, Postal Locator 0701E

Ottawa, ON

K1A 0K9

Postage paid labels and the Consumer Side Effect Reporting Form are available at MedEffect (http://hc-sc.gc.ca/dhp-mps/medeff/index-eng.php).

NOTE: Contact your health professional if you need information about how to manage your side effects. The Canada Vigilance Program does not provide medical advice.

## **Storage:**

Store TEVA-OXYCODONE CR Tablets between 15° and 30°C. Keep container tightly closed. Protect from moisture.

Keep unused or expired TEVA-OXYCODONE CR in a secure place to prevent theft, misuse or accidental exposure.

Keep TEVA-OXYCODONE CR under lock, out of sight and reach of children and pets.

## Disposal:

TEVA-OXYCODONE CR should never be thrown into household trash, where children and pets may find it. It should be returned to a pharmacy for proper disposal.

## If you want more information about TEVA-OXYCODONE CR:

Talk to your healthcare professionalFind the full product monograph that is prepared for health professionals and includes this consumer medication information by visiting the <a href="Health Canada">Health Canada</a> website; the manufacturer's website www.tevacanada.com, or by calling

1-800-268-4127 ext. 1255005 (English)

1-877-777-9117 (French)

or druginfo@tevacanada.com

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