

**CENTER FOR DRUG EVALUATION AND
RESEARCH**

APPLICATION NUMBER:

22-246

LABELING

HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use METOZOLV ODT safely and effectively. See full prescribing information for METOZOLV ODT.

METOZOLV ODT (metoclopramide hydrochloride) orally disintegrating tablets

Initial U.S. Approval: 1976

WARNING: TARDIVE DYSKINESIA

See full prescribing information for complete boxed warning.

Treatment with metoclopramide can cause tardive dyskinesia, a serious movement disorder that is often irreversible. The risk of developing tardive dyskinesia increases with the duration of treatment and the total cumulative dose.

Metoclopramide therapy should be discontinued in patients who develop signs or symptoms of tardive dyskinesia. There is no known treatment for tardive dyskinesia. In some patients, symptoms may lessen or resolve after metoclopramide treatment is stopped.

Treatment with metoclopramide for longer than 12 weeks should be avoided in all but rare cases where therapeutic benefit is thought to outweigh the risk of developing tardive dyskinesia. (5.1)

INDICATIONS AND USAGE

METOZOLV ODT is a dopamine receptor antagonist indicated for:

- Relief of Symptomatic Gastroesophageal Reflux : short-term (4 to 12 weeks) therapy for adults with symptomatic, documented gastroesophageal reflux who fail to respond to conventional therapy (1.1)
- Diabetic Gastroparesis (Diabetic Gastric Stasis): the relief of symptoms in adults associated with acute and recurrent diabetic gastroparesis (gastric stasis) (1.2)

Important Limitations:

- Therapy should not exceed 12 weeks in duration (1.3)
- METOZOLV ODT is recommended only for adults. The safety and effectiveness in pediatric patients have not been established (1.3)

DOSAGE AND ADMINISTRATION

- Gastroesophageal Reflux Disease: 10 mg to 15 mg dose up to four times daily at least 30 minutes before eating and at bedtime (2.2)
- Diabetic Gastroparesis (Diabetic Gastric Stasis): 10 mg dose four times daily at least 30 minutes before eating and at bedtime for two to eight weeks (2.3)

DOSAGE FORMS AND STRENGTHS

Orally Disintegrating Tablets: 5 mg and 10 mg (3)

CONTRAINDICATIONS

- Intestinal Obstruction, Hemorrhage, or Perforation (4.1)
- Pheochromocytoma (4.2)
- Known Sensitivity or Intolerance (4.3)
- Epilepsy (4.4)
- Concomitant Medications with Extrapryamidal Reactions (4.5)

WARNINGS AND PRECAUTIONS

- Tardive Dyskinesia (5.1)
- Acute Dystonic Reactions, Drug-induced Parkinsonism and Other Extrapryamidal Symptoms (5.2)
- Neuroleptic Malignant Syndrome (5.3)
- Depression (5.4)
- Hypertension (5.5)
- Congestive Heart Failure and Ventricular Arrhythmia (5.6)
- Withdrawal from Metoclopramide (5.7)

ADVERSE REACTIONS

The most common adverse reactions (>2%) are headache, nausea, vomiting, fatigue, and somnolence.(6.1).

To report SUSPECTED ADVERSE REACTIONS, contact Salix Pharmaceuticals at 1-800-508-0024 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

DRUG INTERACTIONS

- Anticholinergic drugs: Antagonize effects of metoclopramide (7.1)
- Narcotic analgesic drugs: May increase sedation (7.1)
- Monoamine oxidase inhibitors: May cause hypertensive crisis (due to catecholamine release) (7.2)
- Altered drug absorption: May decrease absorption of drugs from the stomach and increase absorption of drugs from the small bowel (7.3)
- Insulin: Changes in food transit time may require adjustment of insulin dose or timing to avoid hypoglycemia (7.4)
- Antidepressants, Antipsychotics, and Neuroleptics: Concomitant use with metoclopramide is associated with increased risk of tardive dyskinesia and Neuroleptic Malignant Syndrome (7.5)

USE IN SPECIFIC POPULATIONS

- Pediatric Use: The safety and effectiveness of METOZOLV ODT in pediatric patients have not been established (8.4)
- Geriatric Use: Elderly patients may be more sensitive to adverse reactions such as sedation and drug-induced movement disorders. (8.5)
- Impaired Renal Function: Initial dosing may need to be reduced and titrated (8.6).

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide

Revised: xx/xx

1 FULL PRESCRIBING INFORMATION: CONTENTS*

2

3 WARNING: TARDIVE DYSKINESIA

4 1 INDICATIONS AND USAGE

5 1.1 Symptomatic Gastroesophageal Reflux Disease

6 1.2 Diabetic Gastroparesis (Diabetic Gastric Stasis)

7 1.3 Important Limitations

8 2 DOSAGE AND ADMINISTRATION

9 2.1 Important Instructions for Use

10 2.2 Symptomatic Gastroesophageal Reflux Disease

11 2.3 Diabetic Gastroparesis (Diabetic Gastric Stasis)

12 2.4 Renal Impairment

13 3 DOSAGE FORMS AND STRENGTHS

14 4 CONTRAINDICATIONS

15 4.1 Intestinal Obstruction, Hemorrhage, or Perforation

16 4.2 Pheochromocytoma

17 4.3 Known Sensitivity or Intolerance

18 4.4 Epilepsy

19 4.5 Concomitant Medications with Extrapryamidal Reactions

20 5 WARNINGS AND PRECAUTIONS

21 5.1 Tardive Dyskinesia

22 5.2 Acute Dystonic Reactions, Drug-induced Parkinsonism, and Other Extrapryamidal Symptoms

23 5.3 Neuroleptic Malignant Syndrome

24 5.4 Depression

25 5.5 Hypertension

26 5.6 Congestive Heart Failure and Ventricular Arrhythmia

27 5.7 Withdrawal from Metoclopramide

28

29 6 ADVERSE REACTIONS

30 6.1 Clinical Trials Experience

31 6.2 Post-Marketing Experience

32 7 DRUG INTERACTIONS

33 7.1 Anticholinergic and Narcotic Analgesic Drugs

34 7.2 Monoamine Oxidase Inhibitors

35 7.3 Drug Absorption

36 7.4 Insulin

37 7.5 Antidepressants, Antipsychotics, and Neuroleptics

38 8 USE IN SPECIFIC POPULATIONS

39 8.1 Pregnancy

40 8.2 Labor and Delivery

41 8.3 Nursing Mothers

42 8.4 Pediatric Use

43 8.5 Geriatric Use

44 8.6 Other Special Populations

45 10 OVERDOSAGE

46 11 DESCRIPTION

47 12 CLINICAL PHARMACOLOGY

48 12.1 Mechanism of Action

49 12.2 Pharmacodynamics

50 12.3 Pharmacokinetics

51 13 NONCLINICAL TOXICOLOGY

52 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

53 16 HOW SUPPLIED/STORAGE AND HANDLING

54 17 PATIENT COUNSELING INFORMATION

55 *Sections or subsections omitted from the full prescribing information are not listed

56

WARNING: TARDIVE DYSKINESIA

Treatment with metoclopramide can cause tardive dyskinesia, a serious movement disorder that is often irreversible. The risk of developing tardive dyskinesia increases with duration of treatment and total cumulative dose.

Metoclopramide therapy should be discontinued in patients who develop signs or symptoms of tardive dyskinesia. There is no known treatment for tardive dyskinesia. In some patients, symptoms may lessen or resolve after metoclopramide treatment is stopped.

Treatment with metoclopramide for longer than 12 weeks should be avoided in all but rare cases where therapeutic benefit is thought to outweigh the risk of developing tardive dyskinesia.
[see Warnings and Precautions (5.1)]

58

59 **1 INDICATIONS AND USAGE**

60 **1.1 Symptomatic Gastroesophageal Reflux Disease**

61 METOZOLV ODT is indicated as short-term (4 to 12 weeks) therapy for adults with symptomatic, documented
62 gastroesophageal reflux disease (GERD) who fail to respond to conventional therapy.

63 **1.2 Diabetic Gastroparesis (Diabetic Gastric Stasis)**

64 METOZOLV ODT is indicated for the relief of symptoms associated with acute and recurrent diabetic gastroparesis
65 (gastric stasis) in adults.

66 **1.3 Important Limitations**

67 METOZOLV ODT is indicated for adults only. Therapy should not exceed 12 weeks in duration. The safety and
68 effectiveness in pediatric patients have not been established.

69 **2 DOSAGE AND ADMINISTRATION**

70 **2.1 Important Instructions for Use**

71
72 Take on an empty stomach at least 30 minutes before eating since food can decrease the peak concentrations of drug
73 in the bloodstream and/or the time it takes to achieve the maximum drug level in the bloodstream *[see Clinical*
74 *Pharmacology (12.3)]*. Do not repeat dose if inadvertently taken with food.

75 Since the tablet absorbs moisture rapidly, only remove each dose from the packaging just prior to taking. Handle the
76 tablet with dry hands and place on the tongue. If the tablet should break or crumble while handling, discard and
77 remove a new tablet.

78 Metozolv ODT disintegrates on the tongue in approximately one minute (with a range of 10 seconds to 14 minutes).
79 METOZOLV ODT is designed to be taken without liquid; however, the effect on the pharmacokinetics of taking
80 METOZOLV ODT with liquid is unknown.

81 **2.2 Symptomatic Gastroesophageal Reflux Disease**

82 For the relief of symptomatic, documented gastroesophageal reflux disease (GERD), therapy should not exceed 12
83 weeks in duration.

84 Take 10 mg to 15 mg dose of METOZOLV ODT up to four times daily (e.g., at least 30 minutes before each meal
85 and at bedtime). Doses may vary depending upon the symptoms being treated and the clinical response. If
86 symptoms only occur intermittently or at specific times of the day, metoclopramide may be used in single doses up
87 to 20 mg prior to the symptoms rather than continuous treatment.

88 Since there is a poor correlation between symptomatic relief and healing of esophageal lesions, any therapy directed
89 at esophageal lesions is best confirmed by endoscopic evaluation. Although experience with the effects of
90 metoclopramide on esophageal erosions and ulcerations is limited, healing was documented in a controlled trial
91 using four times daily therapy at 15 mg/dose. Prolonged treatment (>12 weeks) with metoclopramide should be
92 avoided in all but rare cases where therapeutic benefit is thought to counterbalance the risks to the patient of
93 developing tardive dyskinesia. [see *Warnings and Precautions (5.1)*]
94

95 **2.3 Diabetic Gastroparesis (Diabetic Gastric Stasis)**

96 For the relief of symptoms associated with diabetic gastroparesis (diabetic gastric stasis), therapy of two to eight
97 weeks is recommended. Therapy should not exceed 12 weeks in duration.

98 Take a 10 mg dose of METOZOLV ODT up to four times a day (e.g., at least 30 minutes before each meal and at
99 bedtime).

100 The initial route of administration should be determined by the severity of the presenting symptoms. If only the
101 earliest manifestations of diabetic gastric stasis are present, oral administration of METOZOLV ODT may be
102 initiated. However, if severe symptoms are present, therapy should begin with metoclopramide injection.

103 Administration of metoclopramide injection up to 10 days may be required before symptoms subside, at which time
104 oral administration may be instituted. Since diabetic gastric stasis is frequently recurrent, METOZOLV ODT
105 therapy should be reinstated at the earliest manifestation.

106 **2.4 Renal Impairment**

107 Some patients, such as the elderly or those with impaired kidney function (creatinine clearance below 40 mL/min)
108 may be more sensitive to the therapeutic dose or the adverse effects of metoclopramide. Therefore, these patients
109 should start therapy at a lower dose (approximately half the recommended dosage) and the dose should be titrated
110 according to their overall clinical response and/or adverse event profile. Dialysis is not likely to be an effective
111 method of drug removal in overdose situations.

112 **3 DOSAGE FORMS AND STRENGTHS**

113 5 mg Tablets: Each white round 5 mg tablet is debossed with “5” on one side and plain on the other.

114 10 mg Tablets: Each white round 10 mg tablet is debossed with “10” on one side and plain on the other.

115 **4 CONTRAINDICATIONS**

116 **4.1 Intestinal Obstruction, Hemorrhage, or Perforation**

117 Do not use Metoclopramide whenever stimulation of gastrointestinal motility may be dangerous such as in the
118 presence of gastrointestinal hemorrhage, mechanical obstruction, or perforation.

119 **4.2 Pheochromocytoma**

120 Metoclopramide is contraindicated in patients with pheochromocytoma because the drug may precipitate a
121 hypertensive crisis, most likely due to release of catecholamines from the tumor. Such hypertensive crises may be
122 controlled by phentolamine.

123 **4.3 Known Sensitivity or Intolerance**

124 Metoclopramide is contraindicated in patients with known sensitivity or intolerance to the drug.

125 **4.4 Epilepsy**

126 Do not use Metoclopramide in patients with epilepsy since the frequency and severity of seizures may be increased.

127 **4.5 Concomitant Medications with Extrapyrimal Reactions**

128 Do not use Metoclopramide in patients receiving other drugs which are likely to cause extrapyramidal reactions,
129 since the frequency and severity of extrapyramidal reactions may be increased [*see Warnings and Precautions (5.2),*
130 *Adverse Reactions (6.2) and Drug Interactions (7.5)*].

131 **5 WARNINGS AND PRECAUTIONS**

132 **5.1 Tardive Dyskinesia**

133 Treatment with metoclopramide can cause tardive dyskinesia (TD) [*see Boxed Warning*], a potentially irreversible
134 and disfiguring disorder characterized by involuntary movements of the face, tongue, or extremities. Although the
135 risk of TD with metoclopramide has not been extensively studied, one published study reported a TD prevalence of
136 20% among patients treated for at least 12 weeks. Treatment with metoclopramide for longer than 12 weeks should
137 be avoided in all but rare cases where therapeutic benefit is thought to outweigh the risk of developing TD.

138
139 Although the risk of developing TD in the general population may be increased among the elderly, women, and
140 diabetics, it is not possible to predict which patients will develop metoclopramide-induced TD. Both the risk of
141 developing TD and the likelihood that TD will become irreversible increase with duration of treatment and total
142 cumulative dose.

143
144 Metoclopramide should be discontinued in patients who develop signs or symptoms of TD. There is no known
145 effective treatment for established cases of TD, although in some patients, TD may remit, partially or completely,
146 within several weeks to months after metoclopramide is withdrawn.

147
148 Metoclopramide itself may suppress, or partially suppress, the signs of TD, thereby masking the underlying disease
149 process. The effect of this symptomatic suppression upon the long-term course of TD is unknown. Therefore,
150 metoclopramide should not be used for the symptomatic control of TD.

151 **5.2 Acute Dystonic Reactions, Drug-induced Parkinsonism, and Other Extrapyrimal Symptoms**

152 Extrapyrimal symptoms (EPS), manifested primarily as acute dystonic reactions, occur in approximately 1 in 500
153 patients treated with the usual adult dosages of 30 to 40 mg/day of metoclopramide. These usually are seen during
154 the first 24 to 48 hours of treatment with metoclopramide, occur more frequently in pediatric patients and adult
155 patients less than 30 years of age and are even more frequent at higher doses. These symptoms may include
156 involuntary movements of limbs and facial grimacing, torticollis, oculogyric crisis, rhythmic protrusion of tongue,
157 bulbar type of speech, trismus, or dystonic reactions resembling tetanus. Rarely, dystonic reactions may present as
158 stridor and dyspnea, possibly due to laryngospasm. If these symptoms occur, inject 50 mg diphenhydramine
159 hydrochloride intramuscularly. Benztropine mesylate, 1 to 2 mg intramuscularly, may also be used to reverse these
160 reactions.

161 Drug-induced Parkinsonism can occur during metoclopramide therapy, more commonly within the first 6 months
162 after beginning treatment, but also after longer periods. Parkinsonian symptoms generally subside within 2 to 3
163 months following discontinuation of metoclopramide. Patients with a history of Parkinson's disease should be given
164 metoclopramide cautiously, if at all, since such patients can experience exacerbation of Parkinsonian symptoms
165 when taking metoclopramide.

166 **5.3 Neuroleptic Malignant Syndrome**

167 There have been rare reports of an uncommon but potentially fatal symptom complex sometimes referred to as
168 Neuroleptic Malignant Syndrome (NMS) associated with metoclopramide. Clinical manifestations of NMS include
169 hyperthermia, muscle rigidity, altered consciousness, and evidence of autonomic instability (irregular pulse or blood
170 pressure, tachycardia, diaphoresis and cardiac arrhythmias). The diagnostic evaluation of patients with this
171 syndrome is complicated. In arriving at a diagnosis, it is important to identify cases where the clinical presentation
172 includes both serious medical illness (e.g., pneumonia, systemic infection) and untreated or inadequately treated
173 extrapyramidal signs and symptoms (EPS). Other important considerations in the differential diagnosis include
174 central anticholinergic toxicity, heat stroke, malignant hyperthermia, drug fever and primary central nervous system
175 (CNS) pathology. The management of NMS should include immediate discontinuation of metoclopramide and other

176 drugs not essential to concurrent therapy; intensive symptomatic treatment and medical monitoring; and, treatment
177 of any concomitant serious medical problems for which specific treatments are available. Bromocriptine and
178 dantrolene sodium have been used in treatment of NMS, but their effectiveness has not been established [see
179 *Adverse Reactions (6)*].

180 **5.4 Depression**

181 Depression associated with metoclopramide use has occurred in patients with and without a history of depression.
182 Symptoms ranged from mild to severe and included suicidal ideation and suicide. For those patients with a prior
183 history of depression, metoclopramide should only be given if the expected benefits outweigh the potential risks.

184 **5.5 Hypertension**

185 In one study in hypertensive patients, intravenously administered metoclopramide was shown to release
186 catecholamines; hence, caution should be exercised when metoclopramide is used in patients with hypertension.
187 There are also clinical reports of hypertensive crises in some patients with undiagnosed pheochromocytoma, thus
188 any rapid rise in blood pressure associated with METOZOLV ODT use should result in immediate cessation of
189 metoclopramide use in those patients [see *Contraindications (4.2)*].

190 **5.6 Congestive Heart Failure and Ventricular Arrhythmia**

191 Since metoclopramide produces a transient increase in plasma aldosterone, patients with cirrhosis or congestive
192 heart failure may be at risk of developing fluid retention and volume overload. If these side effects occur at any
193 time in any patients during metoclopramide therapy, the drug should be discontinued.

194 **5.7 Withdrawal from Metoclopramide**

195 Adverse reactions, especially those involving the nervous system, may occur after stopping the use of METOZOLV
196 ODT. A small number of patients may experience withdrawal symptoms after stopping that could include dizziness,
197 nervousness, and/or headaches.

198 **6 ADVERSE REACTIONS**

199 **6.1 Clinical Trials Experience**

200 Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical
201 trials of a drug cannot be directly compared to rates in the clinical studies of another drug and may not reflect the
202 rates observed in clinical practice.

203
204 A total of 86 subjects entered three studies with METOZOLV ODT; 12 subjects entered a pilot bioavailability study
205 (BA); 44 subjects entered a bioequivalence (BE) study, and 30 subjects entered a food-effect study. The adverse
206 reactions from the BE and food-effect study are summarized in Table 1. The pilot BA study data are not included
207 because it was performed with a formulation different from the METOZOLV ODT formulation.

208 The adverse experience profile seen with METOZOLV ODT was similar to metoclopramide tablets. Thirty-three
209 (33) adverse reactions were reported after receiving METOZOLV ODT and 30 adverse reactions were reported after
210 receiving metoclopramide tablets.

211

212 Table 1: Adverse Reactions in BE and Food-Effect Study in $\geq 2\%$ of Subjects

Adverse Reaction	METOZOLV ODT N¹ (%) ²	Metoclopramide tablets N¹ (%) ²
Nausea	4 (4.2 %)	4 (5.6 %)
Vomiting	2 (2.1 %)	1 (1.4 %)
Fatigue	2 (2.1 %)	2 (2.8 %)
Headache	5 (5.2 %)	3 (4.2 %)
Somnolence	2 (2.1 %)	2 (2.8 %)

Dizziness	1 (1.0 %)	3 (4.2 %)	213
¹ N = number of subjects that reported adverse reactions ² Percent (%) occurrence = N divided by number of subjects dosed with respective study drug ³ Number of subjects dosed with METOZOLV ODT: 68 under fasted conditions and 28 under fed conditions. ⁴ Number of subjects dosed with metoclopramide tablets: 28 under fed conditions and 44 under fasted conditions.			

214
215 The most frequently reported adverse reactions (greater than 2%) associated with METOZOLV ODT were: nausea,
216 vomiting, fatigue, somnolence and headache. The most frequently reported adverse reactions (greater than 2%)
217 associated with metoclopramide tablets were: nausea, headache, fatigue, somnolence, and dizziness. The combined
218 data from the fasted BE study and the food-effect study did not demonstrate any significant differences in the
219 adverse event profile for METOZOLV ODT compared to metoclopramide tablets.
220

221 6.2 Post-Marketing Experience

222 The following adverse reactions are from the cumulative post-marketing experience with metoclopramide tablets.
223 Since the reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably
224 estimate their frequency or establish a causal relationship to drug exposure.

225 *CNS Effects:* Restlessness, drowsiness, fatigue, and lassitude occur in approximately 10% of patients receiving the
226 most commonly prescribed dosage of 10 mg four times a day. Insomnia, headache, confusion, dizziness, or
227 depression with suicidal ideation occurs less frequently. The incidence of drowsiness is greater at higher doses.
228 There are isolated reports of seizures without clear-cut relationship to metoclopramide. Rarely, hallucinations have
229 been reported.

230 *Extrapyramidal Syndromes (EPS):*

231 Acute dystonic reactions, the most common type of EPS associated with metoclopramide, occur in approximately
232 0.2% of patients (1 in 500) treated with 30 to 40 mg of metoclopramide per day. Symptoms include involuntary
233 movements of limbs, facial grimacing, torticollis, oculogyric crisis, rhythmic protrusion of tongue, bulbar type of
234 speech, trismus, opisthotonus (tetanus-like reactions), and rarely, stridor and dyspnea possibly due to laryngospasm;
235 ordinarily these symptoms are readily reversed by diphenhydramine [see *Warnings and Precautions (5.1)*].

236 Drug-induced parkinsonian-like symptoms may include bradykinesia, tremor, cogwheel rigidity, mask-like facies
237 [see *Warnings and Precautions (5.2)*].

238 Tardive dyskinesia is most frequently characterized by involuntary movements of the tongue, face, mouth, or jaw,
239 and sometimes by involuntary movements of the trunk and/or extremities; movements may be choreoathetotic in
240 appearance. Motor restlessness (akathisia) may include inability to sit still, pacing, and foot tapping. These
241 symptoms may disappear spontaneously or respond to a reduction in dosage.

242 *Neuroleptic Malignant Syndrome:* Rare occurrences of Neuroleptic Malignant Syndrome (NMS) have been
243 reported [see *Warnings and Precautions (5.3)*].

244 *Endocrine Disturbances:* Galactorrhea, amenorrhea, gynecomastia, and impotence secondary to
245 hyperprolactinemia. Fluid retention secondary to transient elevation of aldosterone.

246 *Cardiovascular:* Hypotension, hypertension, supraventricular tachycardia, bradycardia, fluid retention, acute
247 congestive heart failure, possible AV block.

248 *Gastrointestinal:* Nausea, bowel disturbances, primarily diarrhea.

249 *Hepatic:* Rarely, cases of hepatotoxicity characterized by such findings as jaundice and altered liver function tests,
250 when metoclopramide was administered with other drugs with known hepatotoxic potential.

251 *Renal:* Urinary frequency and incontinence.

252 *Hematologic:* A few cases of neutropenia, leukopenia, or agranulocytosis, generally without clear-cut relationship
253 to metoclopramide. Methemoglobinemia in adults and especially with overdosage in neonates.
254 Sulfhemoglobinemia in adults.

255 *Allergic Reactions:* A few cases of rash, urticaria, or bronchospasm, especially in patients with a history of asthma.
256 Rarely, angioneurotic edema, including glossal or laryngeal edema.

257 *Miscellaneous:* Visual disturbances. Porphyria.

258 **7 DRUG INTERACTIONS**

259 The effects of metoclopramide on gastrointestinal motility can impact the absorption of other drugs. The known
260 drug-drug interactions are listed below.

261 **7.1 Anticholinergic and Narcotic Analgesic Drugs**

262 The effects of metoclopramide on gastrointestinal motility are antagonized by anticholinergic drugs and narcotic
263 analgesics. Additive sedative effects can occur when metoclopramide is given with alcohol, sedatives, hypnotics,
264 narcotics, or tranquilizers.

265 **7.2 Monoamine Oxidase Inhibitors**

266 Metoclopramide has been shown to release catecholamines in patients with essential hypertension suggests that it
267 should be used cautiously, if at all, in patients taking monoamine oxidase (MAO) inhibitors.

268 **7.3 Drug absorption**

269 Absorption of drugs from the stomach may be diminished by metoclopramide (e.g., digoxin), whereas the rate
270 and/or extent of absorption of drugs from the small bowel may be increased (e.g., acetaminophen, tetracycline,
271 levodopa, ethanol, cyclosporine).

272 **7.4 Insulin**

273 Because the action of metoclopramide will hasten the movement of food to the intestines and therefore the rate of
274 absorption, insulin dosage or timing of dosage may require adjustment. Increasing movement of food to the
275 intestines may lead to absorption of less glucose from a meal, hence less glucose in the circulation for a particular
276 dose of administered insulin to act upon, resulting in hypoglycemia.

277 **7.5 Antidepressants, antipsychotics, and neuroleptics**

278 Concomitant use of metoclopramide should be avoided in patients taking antidepressants, antipsychotics, and/or
279 neuroleptics that have been associated with extrapyramidal reactions such as tardive dyskinesia or Neuroleptic
280 Malignant Syndrome (NMS) that have occurred in association with metoclopramide [*see Warnings and Precautions*
281 (5.2), (5.3) and *Adverse Reactions* (6.2)].

282 **8 USE IN SPECIFIC POPULATIONS**

283 **8.1 Pregnancy**

284 **Teratogenic effects: Pregnancy Category B**

285 Reproduction studies have been performed in rats at oral doses about 6 times the maximum recommended human
286 dose calculated on the basis of surface area, and in rabbits at oral doses about 12 times the maximum recommended
287 human dose calculated on the basis of surface area, and have revealed no evidence of impaired fertility or harm to
288 the fetus due to metoclopramide. There are, however, no adequate and well-controlled studies in pregnant women.
289 Because animal reproduction studies are not always predictive of human response, this drug should be used during
290 pregnancy only if clearly needed.

291 **8.2 Labor and Delivery**

292 The use of metoclopramide in labor and delivery has not been studied.

293 **8.3 Nursing Mothers**

294 Metoclopramide is excreted in human milk. Caution should be exercised when metoclopramide is administered to a
295 nursing mother. Because of the potential for serious adverse reactions from metoclopramide in nursing infants and

296 because of the potential for tumorigenicity (including tumor promoting potential in rats), a decision should be made
297 whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the
298 mother.

299 **8.4 Pediatric Use**

300 The safety and effectiveness of METOZOLV ODT in pediatric patients have not been established.

301 The safety profile of METOZOLV ODT in adults cannot be extrapolated to pediatric patients. Dystonias and other
302 extrapyramidal reactions associated with metoclopramide are more common in the pediatric population than in
303 adults. In addition, neonates have reduced levels of NADH-cytochrome b5 reductase making them more susceptible
304 to methemoglobinemia, a possible side effect of metoclopramide use in neonates.

305 Pediatric PK

306 The pharmacodynamics of metoclopramide following oral and intravenous administration in pediatric populations
307 are highly variable and a concentration-effect relationship has not been established. Thus, there are insufficient data
308 to conclude whether the pharmacokinetics of Metozolv ODT in adults and the pediatric population are similar.
309 Although there are insufficient data to support the efficacy of metoclopramide in pediatric patients with
310 symptomatic gastroesophageal reflux disease (GERD) or cancer chemotherapy-related nausea and vomiting, the
311 pharmacokinetics of metoclopramide have been studied in these patient populations and are summarized as follows.

312 In an open-label study, six pediatric patients (ranging in age from 3.5 weeks to 5.4 months) with GERD received
313 metoclopramide 0.15 mg/kg oral solution every 6 hours for 10 doses. The mean peak plasma concentration of
314 metoclopramide after the tenth dose was twice the level (56.8 mcg/L) compared to after the first dose (29 mcg/L)
315 indicating drug accumulation with repeated dosing. However, the PK parameters after the tenth dose were
316 comparable to those observed after the first dose for the mean time to reach peak concentrations (2.2 hr); half-life
317 (4.1 hr); clearance (0.67 L/h/kg); and volume of distribution (4.4 L/kg). The youngest patient (3.5 weeks) showed a
318 significantly longer half-life after the first dose (23.1 hr) compared to after the tenth dose (10.3 hr), suggesting the
319 reduced clearance observed at birth may be a reflection of the immature hepatic and renal systems.

320 **8.5 Geriatric Use**

321 Clinical studies of metoclopramide did not include sufficient numbers of subjects aged 65 and over to determine
322 whether elderly subjects respond differently from younger subjects.

323 The risk of developing drug-induced parkinsonism due to metoclopramide is dose-related. Geriatric patients should
324 receive the lowest dose that is effective. If drug-induced parkinsonism symptoms develop in a geriatric patient,
325 METOZOLV ODT should be discontinued. The elderly may be at greater risk for tardive dyskinesia [see *Warnings*
326 *and Precautions* (5.1)].

327 Sedation is a potential adverse event associated with metoclopramide use in the elderly.

328 Metoclopramide is known to be substantially excreted by the kidney, and the risk of toxic reactions to this drug may
329 be greater in patients with impaired renal function. For these reasons, dose selection for an elderly patient should be
330 cautious, starting at the low end of the dosing range, due to the greater frequency of decreased renal function,
331 concomitant disease, or other drug therapy in the elderly. [see *Warnings and Precautions* (5.4)].

332 **8.6 Other Special Populations**

333 Patients with NADH-cytochrome b5 reductase deficiency are at an increased risk of developing methemoglobinemia
334 and/or sulfhemoglobinemia when metoclopramide is administered. In patients with G6PD deficiency who
335 experience metoclopramide-induced methemoglobinemia, methylene blue treatment is not recommended.

336 Since metoclopramide is excreted principally through the kidneys, therapy should be initiated at approximately one-
337 half the recommended dose in those patients whose creatinine clearance is below 40 mL/min. Depending upon
338 clinical efficacy and safety considerations, the dosage may be increased or decreased as appropriate.

339 Metoclopramide has been safely used in patients with advanced liver disease whose renal function was normal.

340 **10 OVERDOSAGE**

341

342 Symptoms of overdose may include drowsiness, disorientation, and extrapyramidal reactions. Anticholinergic or
343 anti-Parkinson drugs or antihistamines with anti-cholinergic properties may be helpful in controlling the
344 extrapyramidal reactions. Symptoms are self-limiting and may disappear within 24 hours.

345 Hemodialysis removes relatively little metoclopramide, probably because of the small amount of the drug in blood
346 relative to tissues. Similarly, continuous ambulatory peritoneal dialysis does not remove significant amounts of
347 drug. It is unlikely that dosage would need to be adjusted to compensate for losses through dialysis. Dialysis is not
348 likely to be an effective method of drug removal in overdose situations.

349 Unintentional overdose has been reported in infants and children with the use of metoclopramide oral solution.
350 While there was no consistent pattern to the reports associated with these overdoses, events included seizures,
351 extrapyramidal reactions, and lethargy.

352 Methemoglobinemia has occurred in premature and full-term neonates who were given overdoses of
353 metoclopramide (1 to 4 mg/kg/day orally, intramuscularly or intravenously for 1 to 3 or more days).
354 Methemoglobinemia can be reversed by the intravenous administration of methylene blue. However, methylene
355 blue may cause hemolytic anemia in patients with G6PD deficiency, which may be fatal.

356 11 DESCRIPTION

357 METOZOLV ODT is an orally disintegrating tablet formulation of metoclopramide hydrochloride. The 5 mg
358 strength is a round white tablet debossed on one side with a “5” and plain on the other side; it is comprised of 5 mg
359 metoclopramide (as 5.91 mg of metoclopramide hydrochloride) with gelatin, mannitol, mint flavoring, and
360 Acesulfame K (artificial sweetener). The 10 mg strength is a round white tablet debossed on one side with a “10”
361 and plain on the other side; it is comprised of 10 mg metoclopramide (as 11.82 mg of metoclopramide
362 hydrochloride) with gelatin, mannitol, mint flavoring, and Acesulfame K.

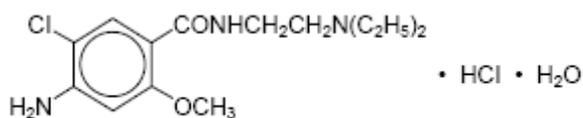
363 The active ingredient, metoclopramide hydrochloride, is a white crystalline, odorless substance, freely soluble in
364 water. Chemically, it is 4-amino-5-chloro-N-[2-(diethylamino)ethyl]-2-methoxy benzamide monohydrochloride
365 monohydrate. Its molecular formula is $C_{14}H_{22}ClN_3O_2 \cdot HCl \cdot H_2O$. Its molecular weight is 354.3. The structural
366 formula is shown in Figure 1.

367

368

369

Figure 1



370

371 METOZOLV ODT includes the following inactive ingredients: gelatin, mannitol, mint flavoring, Acesulfame
372 Potassium (artificial sweetener), and trace amounts of sodium chloride and sodium hydroxide.

373

374 12 CLINICAL PHARMACOLOGY

375 12.1 Mechanism of Action

376 Metoclopramide stimulates motility of the upper gastrointestinal tract without stimulating gastric, biliary, or
377 pancreatic secretions. While its mode of action is unclear, it appears to sensitize tissues to the action of
378 acetylcholine. The effect on motility is not dependent on intact vagal innervation, but can be abolished by
379 anticholinergic drugs. Metoclopramide increases the tone and amplitude of gastric (especially antral) contractions,
380 relaxes the pyloric sphincter and the duodenal bulb, and increases peristalsis of the duodenum and jejunum resulting
381 in accelerated gastric emptying and intestinal transit. It increases the resting tone of the lower esophageal sphincter.
382 It has little, if any, effect on the motility of the colon or gallbladder.

383 The antiemetic properties of metoclopramide appear to be a result of its antagonism of central and peripheral
384 dopamine receptors. Dopamine produces nausea and vomiting by stimulation of the medullary chemoreceptor
385 trigger zone (CTZ), and metoclopramide blocks stimulation of the CTZ by agents like l-dopa or apomorphine, which

386 are known to increase dopamine levels or to possess dopamine-like effects. Metoclopramide also abolishes the
387 slowing of gastric emptying caused by apomorphine. Like the phenothiazines and related drugs, which are also
388 dopamine antagonists, metoclopramide produces sedation and may produce extrapyramidal reactions [see *Warnings*
389 *and Precautions* (5.2), (5.3)]. Metoclopramide inhibits the central and peripheral effects of apomorphine, induces
390 release of prolactin, and causes a transient increase in circulating aldosterone levels, which may be associated with
391 transient fluid retention.

392 12.2 Pharmacodynamics

393 The onset of pharmacological action of metoclopramide is 30 to 60 minutes following an oral dose; pharmacological
394 effects persist for 1 to 2 hours. In patients with gastroesophageal reflux and low LESP (lower esophageal sphincter
395 pressure), single oral doses of metoclopramide produce dose-related increases in LESP. Effects begin at about 5 mg
396 and increase through 20 mg (the largest dose tested). The increase in LESP from a 5 mg dose lasts about 45 minutes
397 and that of a 20 mg dose lasts between 2 and 3 hours. Increased rate of stomach emptying has been observed with
398 single oral doses of 10 mg.

399 The principal effect of metoclopramide is on symptoms of post-prandial and daytime heartburn with less observed
400 effect on nocturnal symptoms. If symptoms are confined to particular situations, such as following the evening
401 meal, use of metoclopramide as single doses prior to the provocative situation should be considered, rather than
402 using the drug throughout the day. Healing of esophageal ulcers and erosions has been endoscopically demonstrated
403 at the end of a 12-week trial using doses of 15 mg taken four times a day. As there is no documented correlation
404 between symptoms and healing of esophageal lesions, patients with documented lesions should be monitored
405 endoscopically. For gastroparesis, the usual manifestations of delayed gastric emptying (e.g., nausea, vomiting,
406 heartburn, persistent fullness after meals, and anorexia) appear to respond within different time intervals.

407 12.3 Pharmacokinetics

408 Adult PK of METOZOLV ODT

409 In a randomized, two-arm, two-way crossover study in 44 healthy adult (male and female) fasted subjects,
410 METOZOLV ODT was bioequivalent to Reglan Tablets.

411 In a food-effect study with 28 subjects, METOZOLV ODT taken immediately after a high-fat meal had a 17% lower
412 peak blood level than when taken after an overnight fast. The time to peak blood levels increased from about 1.75
413 hours under fasted conditions to 3 hours when taken immediately after a high fat meal. The extent of
414 metoclopramide absorbed (area under the curve) was comparable whether METOZOLV ODT was administered
415 with or without food. The clinical effect of the decrease in peak plasma level if Metozolv ODT is inadvertently
416 taken with food is unknown.

417 Adult PK of Metoclopramide

418 Metoclopramide is rapidly and well absorbed. Relative to an intravenous dose of 20 mg, the absolute oral
419 bioavailability of metoclopramide is $80\% \pm 15.5\%$ as demonstrated in a crossover study of 18 subjects. Peak plasma
420 concentrations occur at about 1 to 2 hr after a single oral dose. Similar time to peak is observed after individual
421 doses at steady state. A single dose study of 12 subjects showed that the area under the drug concentration-time
422 curve increases linearly with doses from 20 to 100 mg (results summarized in Table 2). Peak concentrations
423 increase linearly with dose; time to peak concentrations remains the same; whole body clearance is unchanged; and
424 the elimination rate remains the same. The average elimination half-life in individuals with normal renal function is
425 5 to 6 hr. Linear kinetic processes adequately describe the absorption and elimination of metoclopramide.

Table 2: Adult Pharmacokinetic Data

Parameter	Value
Vd (L/kg)	~ 3.5
Plasma Protein Binding	~ 30%
T _{1/2}	5 to 6 hours
Oral Bioavailability	80% ± 15.5%

426

427 Approximately 85% of the radioactivity of an orally administered dose appears in the urine within 72 hr. Of the
428 85% eliminated in the urine, about half is present as free or conjugated metoclopramide.

429 The drug is not extensively bound to plasma proteins (about 30%). The whole body volume of distribution is high
430 (about 3.5 L/kg) which suggests extensive distribution of drug to the tissues.

431 The *in-vivo* disintegration time (time reported between placing the tablet on the tongue and it completely
432 disintegrated into fine particles) was approximately one minute (with a range of 10 seconds to 14 minutes). In the
433 two clinical trials (N = 96) with a mean \pm SD being 76.8 ± 110.6 seconds and a median of 53.5 seconds.

434 Renal impairment affects the clearance of metoclopramide. In a study with patients with varying degrees of renal
435 impairment, a reduction in creatinine clearance was correlated with a reduction in plasma clearance, renal clearance,
436 non-renal clearance, and increase in elimination half-life. The kinetics of metoclopramide in the presence of renal
437 impairment remained linear. The reduction in clearance as a result of renal impairment suggests that reduction of
438 maintenance dosage should be done to avoid drug accumulation.

439 **13 NONCLINICAL TOXICOLOGY**

440 **13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility**

441 A 77-week study was conducted in rats with oral doses up to 40 mg/kg/day (about 5 times the maximum
442 recommended human dose on surface area basis). Metoclopramide elevates prolactin levels and the elevation
443 persists during chronic administration. Tissue culture experiments indicate that approximately one-third of human
444 breast cancers are prolactin-dependent *in vitro*, a factor of potential importance if the prescription of
445 metoclopramide is contemplated in a patient with previously detected breast cancer. Although disturbances such as
446 galactorrhea, amenorrhea, gynecomastia, and impotence have been reported with prolactin-elevating drugs, the
447 clinical significance of elevated serum prolactin levels is unknown for most patients. An increase in mammary
448 neoplasms has been found in rodents after chronic administration of prolactin-stimulating neuroleptic drugs and
449 metoclopramide. Neither clinical studies nor epidemiologic studies conducted to date, however, have shown an
450 association between chronic administration of these drugs and mammary tumorigenesis; the available evidence is
451 too limited to be conclusive at this time.

452 In a rat model for assessing the tumor promotion potential, a two-week oral treatment with metoclopramide at a dose
453 of 260 mg/kg/day (about 35 times the maximum recommended human dose based on body surface area) enhanced
454 the tumorigenic effect of N-nitrosodiethylamine.

455
456 Metoclopramide was positive in the *in vitro* Chinese hamster lung cell /HGPRT forward mutation assay for
457 mutagenic effects and the *in vitro* human lymphocyte chromosome aberration assay for clastogenic effects. It was
458 negative in the *in vitro* Ames mutation assay, the *in vitro* unscheduled DNA synthesis (UDS) assay with rat and
459 human hepatocytes and the *in vivo* rat micronucleus assay.

460
461 Metoclopramide at intramuscular doses up to 20 mg/kg/day (about 3 times the maximum recommended human dose
462 based on body surface area) was found to have no effect on fertility and reproductive performance of male and
463 female rats.

464 **16 HOW SUPPLIED/STORAGE AND HANDLING**

465 5 mg Tablets: Available in blister pack with 10 tablets individually sealed in a foil-backed unit-dose container; a
466 carton contains 10 cards (NDC 65649-431-02).

467 10 mg Tablets: Available in blister pack with 10 tablets individually sealed in a foil-backed unit-dose container; a
468 carton contains 10 cards (NDC 65649-432-02).

469 Tablets should be stored at controlled room temperature, between 20°C and 25°C (68°F and 77°F).

470

471 **17 PATIENT COUNSELING INFORMATION**

- 472
- Instruct patients to take Metozolv ODT at least 30 minutes before eating and at bedtime.

- 473 • A patient Medication Guide is available for METOZOLV ODT and printed at the end of the prescribing
474 information. Instruct patients, families, and caregivers to read the Medication Guide and assist them in
475 understanding its contents.
- 476 • Inform patients or their caregivers of serious potential issues associated with metoclopramide use such as
477 tardive dyskinesia, extrapyramidal symptoms, and neuroleptic malignant syndrome. Advise patients to inform
478 their physician if symptoms associated with these disorders occur during or after treatment with METOZOLV
479 ODT.
- 480 • Inform patients that METOZOLV ODT may cause drowsiness, dizziness, or otherwise impair mental alertness
481 or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a
482 motor vehicle. Sedation may be more pronounced in the elderly.
- 483 • Inform patients that the most common adverse reactions in patients treated with METOZOLV ODT or other
484 metoclopramide-containing products are headache, nausea, vomiting, tiredness, sleepiness, dizziness, and
485 restlessness.
- 486

Manufactured by:
Catalent UK Swindon Zydis Limited
Swindon, UK

Manufactured for:
Salix Pharmaceuticals, Inc.
Morrisville, North Carolina

487
488 VENART-xxx-x/ Sep 2009

490
491 MEDICATION GUIDE

492
493 **METOZOLV™ (MĚ-tō-zolv) ODT**
494 (metoclopramide hydrochloride)
495 **Orally Disintegrating Tablets**

496
497
498 Read the Medication Guide that comes with METOZOLV ODT before you take it and each time you get
499 a refill. There may be new information. If you take another product that contains metoclopramide (such as
500 REGLAN tablets, REGLAN ODT, REGLAN injection or metoclopramide oral solution), you should read
501 the Medication Guide that comes with that product. Some of the information may be different. This
502 Medication Guide does not take the place of talking with your doctor about your medical condition or
503 your treatment.

504
505 **What is the most important information I should know about METOZOLV ODT?**

506 METOZOLV ODT can cause serious side effects, including:

507 **Abnormal muscle movements** called tardive dyskinesia (TD). These movements happen mostly in
508 the face muscles. You cannot control these movements. They may not go away even after stopping
509 METOZOLV ODT. There is no treatment for TD, but symptoms may lessen or go away over time after
510 you stop taking METOZOLV ODT.

511 Your chances for getting TD go up:

- 512 • the longer you take METOZOLV ODT and the more METOZOLV ODT you take. You should not
513 take METOZOLV ODT for more than 12 weeks.
- 514 • if you are older, especially if you are an older woman
- 515 • if you have diabetes

516 It is not possible for your doctor to know if **you** will get TD if you take Metozolv ODT.

517 Call your doctor right away if you have movements you can not stop or control, such as:

- 518 • lip smacking, chewing, or puckering of your lips
- 519 • frowning or scowling
- 520 • sticking out your tongue
- 521 • blinking and moving your eyes
- 522 • shaking of your arms and legs

523

524 See the section “What are the possible side effects of METOZOLV ODT?” for more information about
525 side effects.

526

527 **What is METOZOLV ODT?**

528 METOZOLV ODT is a prescription medicine used in adults:

- 529 • for 4 to 12 weeks to relieve heartburn symptoms of gastroesophageal reflux disease (GERD) when
530 certain other treatments do not work.
- 531 • to relieve the symptoms of slow stomach emptying in people with diabetes.

532

533 It is not known if METOZOLV ODT is safe or works in children.

534

535 **Who should not take METOZOLV ODT?**

536 Do not take METOZOLV ODT if you:

- 537 • have stomach or intestine problems that could get worse with METOZOLV ODT, such as bleeding,
538 blockage or a tear in your stomach or bowel wall
- 539 • have an adrenal tumor called pheochromocytoma
- 540 • are allergic to metoclopramide or any of the ingredients in METOZOLV ODT. See the end of this
541 Medication Guide for a list of ingredients in METOZOLV ODT.
- 542 • take medicines that can cause uncontrolled movements, such as medicines for mental illness.
- 543 • have seizures

544

545

546 **What should I tell my doctor before taking METOZOLV ODT?**

547 Before you take METOZOLV ODT, tell your doctor if you:

- 548 • have kidney or liver disease
- 549 • have depression or mental illness
- 550 • have high blood pressure
- 551 • have heart failure or heart rhythm problems
- 552 • have diabetes. Your dose of insulin may need to be changed.
- 553 • have Parkinson’s disease
- 554 • have any other medical conditions
- 555 • drink alcohol
- 556 • are pregnant or plan to become pregnant. It is not known if METOZOLV ODT will harm your unborn
557 baby.
- 558 • are breast-feeding or plan to breast-feed. METOZOLV ODT can pass into your milk and may harm your
559 baby. You and your doctor should decide if you will take METOZOLV ODT or breast-feed. You should
560 not do both.

561

562 **Tell your doctor about all the medicines you take, including prescription and non-prescription**
563 **medicines, vitamins, and herbal supplements.** METOZOLV ODT and some medicines can affect each

564 other and may not work as well, or cause possible side effects. Do not start any new medicine while
565 taking METOZOLV ODT until you talk with your doctor.

566

567 **Especially tell your doctor if you take:**

- 568 • another medicine that contains metoclopramide, such as REGLAN tablets, REGLAN ODT, or
- 569 metoclopramide oral syrup
- 570 • a blood pressure medicine
- 571 • a medicine for depression, especially a monoamine oxidase inhibitor (MAOI)
- 572 • an anti-psychotic medicine
- 573 • insulin
- 574 • medicines that can make you sleepy, such as anti-anxiety medicines, sleep medicines, and narcotics.

575

576 Ask your doctor or pharmacist if you are not sure if your medication is listed above.

577

578 Know the medicines you take. Keep a list of your medicines to show your doctor and pharmacist when
579 you get new medicine.

580

581 **How should I take METOZOLV ODT?**

- 582 • METOZOLV ODT comes as a tablet that melts in your mouth.
- 583 • Take METOZOLV ODT exactly as prescribed by your doctor. Do not change your dose unless your
- 584 doctor tells you to.
- 585 • You should not take METOZOLV ODT for more than 12 weeks.
- 586 • Take METOZOLV ODT at least 30 minutes before eating and at bedtime.

587

588 To take METOZOLV ODT:

- 589 1. Leave the tablet in the sealed blister METOZOLV ODT pack until you are ready to take it.
- 590 2. Use dry hands to open a blister and take out a tablet. If the tablet breaks or crumbles throw it away
- 591 and take a new tablet out of the blister pack.
- 592 3. Put the tablet on your tongue right away. Let it melt and then swallow. You do not need water to
- 593 take METOZOLV ODT.

594

595 If you take too much METOZOLV ODT, call your doctor or Poison Control Center.

596

597 **What should I avoid while taking METOZOLV ODT?**

- 598 • Do not drink alcohol while taking METOZOLV ODT. Alcohol may make some side effects of
- 599 METOZOLV ODT worse, such as feeling sleepy.
- 600 • Do not drive, work with machines, or do dangerous tasks until you know how METOZOLV ODT
- 601 affects you. METOZOLV ODT may cause sleepiness.

602

603 **What are the possible side effects of METOZOLV ODT?**

604

605 **METOZOLV ODT can cause serious side effects, including:**

- 606 • **Abnormal muscle movements.** See “What is the most important information I should know about
- 607 METOZOLV ODT?”
- 608 • **Uncontrolled spasms of your face and neck muscles, or muscles of your body, arms, and legs**
- 609 **(dystonia).** These muscle spasms can cause abnormal movements and body positions. These spasms
- 610 usually start within the first 2 days of treatment. These spasms happen more often in children and
- 611 adults younger than 30.

612

613 • **Depression, thoughts about suicide, and suicide.** Some people who take METOZOLV ODT may
614 become depressed. You may have thoughts about hurting or killing yourself. Some people who have
615 taken metoclopramide products have ended their own lives (suicide).

616
617 • **Neuroleptic Malignant Syndrome (NMS).** NMS is a rare but very serious condition that can
618 happen with METOZOLV ODT. NMS can cause death and must be treated in a hospital. Symptoms
619 of NMS include: high fever, stiff muscles, problems thinking, very fast or uneven heartbeat, and
620 increased sweating.

621 • **Parkinsonism.** Symptoms include slight shaking, body stiffness, trouble moving or keeping your
622 balance. If you have Parkinson’s Disease, your symptoms may become worse while you are taking
623 METOZOLV ODT.

624
625 • **High blood pressure.** METOZOLV ODT can cause your blood pressure to increase.

626
627 • **Too much body water.** People who have certain liver problems or heart failure and take
628 METOZOLV ODT may hold too much water in their body (fluid retention). Tell your doctor right
629 away if you have sudden weight gain, or swelling of your hands, legs, or feet.

630

631 **Call your doctor and get medical help right away if you:**

- 632 • feel depressed or have thoughts about hurting or killing yourself
- 633 • have high fever, stiff muscles, problems thinking, very fast or uneven heartbeat, and increased
- 634 sweating
- 635 • have muscle movements you cannot stop or control
- 636 • have muscle movements that are new or unusual

637

638 **The most common side effects of METOZOLV ODT are:**

- 639 • headache
- 640 • nausea
- 641 • vomiting
- 642 • tiredness
- 643 • sleepiness

644

645 You may have more side effects the longer you take METOZOLV ODT and the more METOZOLV ODT
646 you take.

647 You may still have side effects after you stop METOZOLV ODT. You may have symptoms from
648 stopping (withdrawal) METOZOLV ODT such as headaches, and feeling dizzy or nervous.

649 Tell your doctor about any side effects that bother you or do not go away. These are not all the possible
650 side effects of METOZOLV ODT.

651 Call your doctor for medical advice about side effects. You may report side effects to FDA at 1–800–
652 FDA-1088.

653

654 **How do I store METOZOLV ODT?**

- 655 • Store METOZOLV ODT at room temperature, between 68° F to 77° F (20°C to 25°C).
- 656 • Keep METOZOLV ODT away from moisture.
- 657 • Throw away any METOZOLV ODT that is not used.

658 **Keep METOZOLV ODT and all medicines away from children.**

659

660 **General information about METOZOLV ODT**

661 Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not
662 use METOZOLV ODT for a condition for which it was not prescribed. Do not give METOZOLV ODT to
663 other people, even if they have the same symptoms that you have. It may harm them.

664 This Medication Guide summarizes the most important information about METOZOLV ODT. If you
665 would like more information about METOZOLV ODT, talk with your doctor. You can ask your doctor or
666 pharmacist for information about METOZOLV ODT that is written for health professionals. For more
667 information, call 1-866-669-7597.

668
669 **What are the ingredients in METOZOLV ODT?**

670 Active ingredients: metoclopramide hydrochloride

671 Inactive ingredients: gelatin, mannitol, mint flavoring, acesulfame potassium (artificial sweetener), and
672 trace amounts of sodium chloride and sodium hydroxide

673

674

675 Salix Pharmaceuticals, Inc.

676 Morrisville, NC 27560, USA

677

678 This Medication Guide has been approved by the U.S. Food and Drug Administration.

679

680 VENART ###-#/ Sep 2009

- 473 • A patient Medication Guide is available for METOZOLV ODT and printed at the end of the prescribing
474 information. Instruct patients, families, and caregivers to read the Medication Guide and assist them in
475 understanding its contents.
- 476 • Inform patients or their caregivers of serious potential issues associated with metoclopramide use such as
477 tardive dyskinesia, extrapyramidal symptoms, and neuroleptic malignant syndrome. Advise patients to inform
478 their physician if symptoms associated with these disorders occur during or after treatment with METOZOLV
479 ODT.
- 480 • Inform patients that METOZOLV ODT may cause drowsiness, dizziness, or otherwise impair mental alertness
481 or physical abilities required for the performance of hazardous tasks such as operating machinery or driving a
482 motor vehicle. Sedation may be more pronounced in the elderly.
- 483 • Inform patients that the most common adverse reactions in patients treated with METOZOLV ODT or other
484 metoclopramide-containing products are headache, nausea, vomiting, tiredness, sleepiness, dizziness, and
485 restlessness.
- 486

Manufactured by:
Catalent UK Swindon Zydis Limited
Swindon, UK

Manufactured for:
Salix Pharmaceuticals, Inc.
Morrisville, North Carolina

487
488 VENART-xxx-x/ Sep 2009

490
491 MEDICATION GUIDE

492
493 **METOZOLV™ (MĚ-tō-zolv) ODT**
494 (metoclopramide hydrochloride)
495 **Orally Disintegrating Tablets**

496
497
498 Read the Medication Guide that comes with METOZOLV ODT before you take it and each time you get
499 a refill. There may be new information. If you take another product that contains metoclopramide (such as
500 REGLAN tablets, REGLAN ODT, REGLAN injection or metoclopramide oral solution), you should read
501 the Medication Guide that comes with that product. Some of the information may be different. This
502 Medication Guide does not take the place of talking with your doctor about your medical condition or
503 your treatment.

504
505 **What is the most important information I should know about METOZOLV ODT?**

506 METOZOLV ODT can cause serious side effects, including:

507 **Abnormal muscle movements** called tardive dyskinesia (TD). These movements happen mostly in
508 the face muscles. You cannot control these movements. They may not go away even after stopping
509 METOZOLV ODT. There is no treatment for TD, but symptoms may lessen or go away over time after
510 you stop taking METOZOLV ODT.

511 Your chances for getting TD go up:

- 512 • the longer you take METOZOLV ODT and the more METOZOLV ODT you take. You should not
513 take METOZOLV ODT for more than 12 weeks.
- 514 • if you are older, especially if you are an older woman
- 515 • if you have diabetes

516 It is not possible for your doctor to know if **you** will get TD if you take Metozolv ODT.

517 Call your doctor right away if you have movements you can not stop or control, such as:

- 518 • lip smacking, chewing, or puckering of your lips
- 519 • frowning or scowling
- 520 • sticking out your tongue
- 521 • blinking and moving your eyes
- 522 • shaking of your arms and legs

523

524 See the section “What are the possible side effects of METOZOLV ODT?” for more information about
525 side effects.

526

527 **What is METOZOLV ODT?**

528 METOZOLV ODT is a prescription medicine used in adults:

- 529 • for 4 to 12 weeks to relieve heartburn symptoms of gastroesophageal reflux disease (GERD) when
530 certain other treatments do not work.
- 531 • to relieve the symptoms of slow stomach emptying in people with diabetes.

532

533 It is not known if METOZOLV ODT is safe or works in children.

534

535 **Who should not take METOZOLV ODT?**

536 Do not take METOZOLV ODT if you:

- 537 • have stomach or intestine problems that could get worse with METOZOLV ODT, such as bleeding,
538 blockage or a tear in your stomach or bowel wall
- 539 • have an adrenal tumor called pheochromocytoma
- 540 • are allergic to metoclopramide or any of the ingredients in METOZOLV ODT. See the end of this
541 Medication Guide for a list of ingredients in METOZOLV ODT.
- 542 • take medicines that can cause uncontrolled movements, such as medicines for mental illness.
- 543 • have seizures

544

545

546 **What should I tell my doctor before taking METOZOLV ODT?**

547 Before you take METOZOLV ODT, tell your doctor if you:

- 548 • have kidney or liver disease
- 549 • have depression or mental illness
- 550 • have high blood pressure
- 551 • have heart failure or heart rhythm problems
- 552 • have diabetes. Your dose of insulin may need to be changed.
- 553 • have Parkinson’s disease
- 554 • have any other medical conditions
- 555 • drink alcohol
- 556 • are pregnant or plan to become pregnant. It is not known if METOZOLV ODT will harm your unborn
557 baby.
- 558 • are breast-feeding or plan to breast-feed. METOZOLV ODT can pass into your milk and may harm your
559 baby. You and your doctor should decide if you will take METOZOLV ODT or breast-feed. You should
560 not do both.

561

562 **Tell your doctor about all the medicines you take, including prescription and non-prescription**
563 **medicines, vitamins, and herbal supplements.** METOZOLV ODT and some medicines can affect each

564 other and may not work as well, or cause possible side effects. Do not start any new medicine while
565 taking METOZOLV ODT until you talk with your doctor.

566

567 **Especially tell your doctor if you take:**

- 568 • another medicine that contains metoclopramide, such as REGLAN tablets, REGLAN ODT, or
- 569 metoclopramide oral syrup
- 570 • a blood pressure medicine
- 571 • a medicine for depression, especially a monoamine oxidase inhibitor (MAOI)
- 572 • an anti-psychotic medicine
- 573 • insulin
- 574 • medicines that can make you sleepy, such as anti-anxiety medicines, sleep medicines, and narcotics.

575

576 Ask your doctor or pharmacist if you are not sure if your medication is listed above.

577

578 Know the medicines you take. Keep a list of your medicines to show your doctor and pharmacist when
579 you get new medicine.

580

581 **How should I take METOZOLV ODT?**

- 582 • METOZOLV ODT comes as a tablet that melts in your mouth.
- 583 • Take METOZOLV ODT exactly as prescribed by your doctor. Do not change your dose unless your
- 584 doctor tells you to.
- 585 • You should not take METOZOLV ODT for more than 12 weeks.
- 586 • Take METOZOLV ODT at least 30 minutes before eating and at bedtime.

587

588 To take METOZOLV ODT:

- 589 1. Leave the tablet in the sealed blister METOZOLV ODT pack until you are ready to take it.
- 590 2. Use dry hands to open a blister and take out a tablet. If the tablet breaks or crumbles throw it away
- 591 and take a new tablet out of the blister pack.
- 592 3. Put the tablet on your tongue right away. Let it melt and then swallow. You do not need water to
- 593 take METOZOLV ODT.

594

595 If you take too much METOZOLV ODT, call your doctor or Poison Control Center.

596

597 **What should I avoid while taking METOZOLV ODT?**

- 598 • Do not drink alcohol while taking METOZOLV ODT. Alcohol may make some side effects of
- 599 METOZOLV ODT worse, such as feeling sleepy.
- 600 • Do not drive, work with machines, or do dangerous tasks until you know how METOZOLV ODT
- 601 affects you. METOZOLV ODT may cause sleepiness.

602

603 **What are the possible side effects of METOZOLV ODT?**

604

605 **METOZOLV ODT can cause serious side effects, including:**

- 606 • **Abnormal muscle movements.** See “What is the most important information I should know about
- 607 METOZOLV ODT?”
- 608 • **Uncontrolled spasms of your face and neck muscles, or muscles of your body, arms, and legs**
- 609 **(dystonia).** These muscle spasms can cause abnormal movements and body positions. These spasms
- 610 usually start within the first 2 days of treatment. These spasms happen more often in children and
- 611 adults younger than 30.

612

613 • **Depression, thoughts about suicide, and suicide.** Some people who take METOZOLV ODT may
614 become depressed. You may have thoughts about hurting or killing yourself. Some people who have
615 taken metoclopramide products have ended their own lives (suicide).

616
617 • **Neuroleptic Malignant Syndrome (NMS).** NMS is a rare but very serious condition that can
618 happen with METOZOLV ODT. NMS can cause death and must be treated in a hospital. Symptoms
619 of NMS include: high fever, stiff muscles, problems thinking, very fast or uneven heartbeat, and
620 increased sweating.

621 • **Parkinsonism.** Symptoms include slight shaking, body stiffness, trouble moving or keeping your
622 balance. If you have Parkinson’s Disease, your symptoms may become worse while you are taking
623 METOZOLV ODT.

624
625 • **High blood pressure.** METOZOLV ODT can cause your blood pressure to increase.

626
627 • **Too much body water.** People who have certain liver problems or heart failure and take
628 METOZOLV ODT may hold too much water in their body (fluid retention). Tell your doctor right
629 away if you have sudden weight gain, or swelling of your hands, legs, or feet.

630

631 **Call your doctor and get medical help right away if you:**

- 632 • feel depressed or have thoughts about hurting or killing yourself
- 633 • have high fever, stiff muscles, problems thinking, very fast or uneven heartbeat, and increased
- 634 sweating
- 635 • have muscle movements you cannot stop or control
- 636 • have muscle movements that are new or unusual

637

638 **The most common side effects of METOZOLV ODT are:**

- 639 • headache
- 640 • nausea
- 641 • vomiting
- 642 • tiredness
- 643 • sleepiness

644

645 You may have more side effects the longer you take METOZOLV ODT and the more METOZOLV ODT
646 you take.

647 You may still have side effects after you stop METOZOLV ODT. You may have symptoms from
648 stopping (withdrawal) METOZOLV ODT such as headaches, and feeling dizzy or nervous.

649 Tell your doctor about any side effects that bother you or do not go away. These are not all the possible
650 side effects of METOZOLV ODT.

651 Call your doctor for medical advice about side effects. You may report side effects to FDA at 1–800–
652 FDA-1088.

653

654 **How do I store METOZOLV ODT?**

- 655 • Store METOZOLV ODT at room temperature, between 68° F to 77° F (20°C to 25°C).
- 656 • Keep METOZOLV ODT away from moisture.
- 657 • Throw away any METOZOLV ODT that is not used.

658 **Keep METOZOLV ODT and all medicines away from children.**

659

660 **General information about METOZOLV ODT**

661 Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not
662 use METOZOLV ODT for a condition for which it was not prescribed. Do not give METOZOLV ODT to
663 other people, even if they have the same symptoms that you have. It may harm them.

664 This Medication Guide summarizes the most important information about METOZOLV ODT. If you
665 would like more information about METOZOLV ODT, talk with your doctor. You can ask your doctor or
666 pharmacist for information about METOZOLV ODT that is written for health professionals. For more
667 information, call 1-866-669-7597.

668
669 **What are the ingredients in METOZOLV ODT?**

670 Active ingredients: metoclopramide hydrochloride

671 Inactive ingredients: gelatin, mannitol, mint flavoring, acesulfame potassium (artificial sweetener), and
672 trace amounts of sodium chloride and sodium hydroxide

673

674

675 Salix Pharmaceuticals, Inc.

676 Morrisville, NC 27560, USA

677

678 This Medication Guide has been approved by the U.S. Food and Drug Administration.

679

680 VENART ###-#/ Sep 2009