Control acute agitation with

for Injection | ziprasidone mesylate |

In schizophrenia.

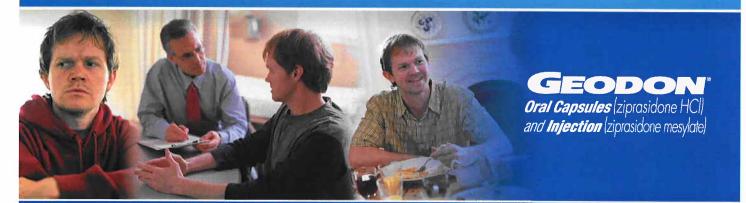
Rapid improvement with low EPS^{1,2}

- Significant control achieved between 15 and 30 minutes* after injection^{1,3}
- Proven advantages over haloperidol IM
 - twice the improvement as measured on the BPRS^{4†}
 - significantly lower incidence of movement disorders^{2‡}
- Smooth transition, with continued improvement, from IM to oral therapy^{2,4}
- May be used concomitantly with benzodiazepines

In 2 pivotal studies vs control, significance was achieved at 15 minutes (with 10 mg dose) and 30 minutes (with 20 mg dose), respectively.

In a 7-day, open-label IM-to-oral transition study.

*In a 6-week, open-label IM-to-oral transition study.



Elderly patients with dementia-related psychosis treated with atypical antipsychotic drugs are at an increased risk of death compared to placebo. GEODON is not approved for the treatment of patients with dementia-related psychosis.

GEODON is contraindicated in patients with a known history of QT prolongation, recent acute myocardial infarction, or uncompensated heart failure, and should not be used with other QT-prolonging drugs. GEODON has a greater capacity to prolong the QT_C interval than several antipsychotics. In some drugs, QT prolongation has been associated with torsade de pointes, a potentially fatal arrhythmia. In many cases this would lead to the conclusion that other drugs should be tried first.

In fixed-dose, pivotal studies, the most commonly observed adverse events associated with the use of GEODON for Injection (incidence $\geq 5\%$) and observed at a rate in the higher GEODON dose groups (10 mg, 20 mg) of at least twice that of the lowest GEODON dose group (2 mg control) were somnolence (20%), headache (13%), and nausea (12%).

Please see brief summary of prescribing information in this bulletin.

GEODON (ziprasidone) is not available for sale in Canada.

Increased Montality in Elderly Patients with Dementia-Related Psychosis: Elderly patients with dementia-related psychosis treated with atypical antipsychotic drugs are at an increased risk of death compared to placebo. Analyses of seventeen placebo controlled trials (model duration of 10 weeks) in these patients revealed a risk of death in the drug-treated patients of between 1.5 to 1.7 times that set in placebo-treated patients. Over the course of a typical 10 week controlled trial, the rate of death in drug-treated patients. Over the course of a typical 10 week controlled trial, the rate of death in drug-treated patients. Over the course of a typical 10 week controlled trial, the rate of death are varied, most of the deaths appeared 4.5%, compared to a rate of about 2.6% in the placebo group. Although the causes of death were varied, most of the deaths appeared to be either cardiovascular (e.g., heart failure, sudden death) or infectious (e.g., pneumonia) in nature. GEODON (ziprasidone) is not approved for the treatment of patients with Dementia-Related Psychosis.

INDICATIONS—GEODON Capsules is indicated for the treatment of schizophrenia and acute manic or mixed episodes associated with bipolar disorder with or without osychotic features, GEODON® (zigrasidone mesylate) for Injection is indicated for acute agitation in

-QT Prolongation: Because of GEODON's dose-related prolongation of the QT interval and the known association of fatal arritythmias with QT prolongation by some other drugs, GEODON is contraindicated in patients with a known history of QT prolongation (including congenital long QT syndrome), with recent acute mycoardal infanction, or with uncompensated heart failure (see WARNINGS). Pramacokinetic/bharmacokynetic/studies between GEODON and other drugs that prolong the QT interval cannot be excluded. Therefore, GEODON should not performed. An acomive emector recurvor, van come urugs via procung via cu i meura cameru executure. The conversariane, droperidol, be given with objeditide, sobalo, quindine, other Class Is and Ill land "arritythmics, mesordaziae, introdazine, chiopromazine, droperidol, primazire, sparfloxacin, gatifloxacin, moxilioxacin, hakdantine, melloquine, pentamidine, arsenic trioxide, levormethadyla acetate, dobsestron mesyate, provincuo, or stercolimies. GEODON is also contradindizated with drugs that have demonstrated Of prolongalizate pharmacodynamic effects and lave this effect described in the full prescribing information as a contraindication or a boxed or boilded warning be given with didellide, solated, quincidine, other Class Ia and Ill ania-strythmics, mesodazine, chiorotazine, choprocrazine, droperation, primotics, gardiocatine, patients, mesodate, and procedure, monotological haddenine, melloquine, permandine, arraintic indicio, levomethad picture, discussed to produce of their patients with common feeds and travel in silendic described in the Uprescribing information as a contradication or zo bood or boiled warring (see WARNINGS). GEODON is contraindicated in individuals with a known hypersonsibility to the product. WARNINGS—Increased Mortally in Edieby Palents with Dementia-related spruhosis trated with a physical antipsychotic drugs are at an increased risk of death compared to placebo. GEODON Librariation is a paperated for the treatment of palents with dementia-related spruhosis treated with a physical antipsychotic drugs are at an increased risk of death compared to placebo. GEODON Student Palents GEODON as about do a be volided in combination with other drugs that are known to protong the Classification of their drugs that these been consistently observed to protong the Clinication and the protong of the compared to the described protong the Clinication of the Clinication and the compared to the described protong the Clinication of the Clinication and the compared to the compared to the compared to relate the protongation described for the compared to relate the compared to relate the protongation described for this discourage of the presence of a metabolic inhibitor (betocorazole 200 mg bild). In placebo-controlled trials, GEODON Increased the old, related to the celebration of the compared to placebo by approximately 10 mg and the protongation of the compared to placebo by approximately 10 mg and the celebration of the compared to placebo by approximately 10 mg and the celebration of the celebration syntpoints or hypergyceinar. PracEou Into Mon-Berland Residue 1, Assair, in principated and a spot of the COON plateatists developed as another unicaria, with discontinuation of treatment in about one-sixth of these cases. The occurrence of rash was dose related, although the finding might also be explained by longer exposure in higher-dose patients. Several patients with rash had signs and symptoms of associated systemic illness, e.g., elevated WBCs. Most spatients improved promptly upon treatment with antihistamines or storis and/or upon discontinuation of GEODON, and all patients were reported to recover completely. Upon appearance of rash for which an alternative eliology cannot be identified, GEODON should be discontinued. Orthostatic Hypotension. GEODON may induce orthostatic hypotension associated with dizziness, tachycardia, and, in some patients, syncope, especially during the initial dose-titration period, probably reflecting its α_1 -adrenergic antagonist properties. Syncope was reported in 0.8% of ECODON patients. GEODON should be used with particular caution in patients with known cardiovascular disease, place this known cardiovascular disease, place this known cardiovascular disease, bear this correct of the complex of the control of the patients with known cardiovascular disease, bear this correct of the control of th nemer conicar squares one representations controlled to dear new source and the controlled and the controlle disruption of the body's ability to reduce core body temperature has been attributed to artitize/choic agents. Suicide. The possibility of a suicide attempt is inherent in psychotic illness and close supervision of high-risk patients should accompany drug therapy. GEODON prescriptions should be written for the smallest quantity of capsules consistent with good patient management to reduce overdose risk. Use in Patients with Concomitant titness. Clinical experience with GEODON in patients with certain concomitant systemic illnesses is limited.

information and instructions in the Patient Information Sectionshould be discussed with patients. Laboratory Tests: Patients being considered for GEODOM treatment who are at risk of significant electrolyte disturbances should have baseline serum potassium and magnesium measurements. Low serum potassium and magnesium should be repleted before treatment. Patients who are started on diuretics during measurements. Low serum potassum and magnesium should be repleted before treatment, realents who are started on durieus outline GEODOM therapy need periodic monitoring of serum potassium and magnesium. Discontinue GEODOM in patients who are a found to have persistent OT_c measurements >500 msec (see WARNINGS). *Ding Interactions*: (1) GEODOM should not be used with any drug that prolongs the QT interval. (2) Given the primary CNS effects of GEODOM, caution should be used when it is taken in combination with other certain sating variety and single discount of the primary CNS effects of GEODOM, caution should be used when it is taken in combination with other certain sating variety acting a discount of the primary CNS effects of GEODOM may enhance the effects of certain antihypertensive agents. (4) GEODOM may antagonize the effects of levodops and dopamine agonists. Effect of Other Drugs on GEODOM: Cartainazepine. 200 mg qd for 5 days, increased the AUC and C_{max} of GEODOM by about 35% 40%. Cimelidine, 800 mg qd for 2' days, clid not affect GEODOM pharmacokinetics. Population pharmacokinetics. And the cause of approximately and contracting contracting the cartain starting contracting calculations. The pharmacokinetics is expectation pharmacokinetics. Population pharmacokinetics and pharmacokinetic cartains and pharmacokinetics. Population pharmacokinetics interactions with beautoring establishment of the participal expectation and pharmacokinetic interactions beautoring the participal expectation. of schizophrenic patients in controlled clinical trials has not revealed any clinically significant pharmacokinetic interactions with benztropiae, propranciol, or forazepam. Effect of SCDON on Other Drugs: In vitro studies revealed little potential for GCDON to the there with the metabolism of drugs cleared primarity by CYP1A2, CYP2O8, CYP2OB, and CYP3A4, and little potential for drug interactions with GCDON due to displacement. GCDON 40 mg bit administered concomitantly with *thibiam* 450 mg bid for 7 days did not affect the steadysteel level or rena locarance of lithium. GEODON 20 mg bid did not affect the planarmacokinetics of concomilantly administered and contraceptives ethingly estradiol (0.03 mg) and levonorgestrel (0.15 mg). Consistent with in vitro results, a study in normal healthy volunteers showed that GEODON did not after the metabolism of dextromethorphan, a CYP2D6 model substrate, to its major metabolite, dextromphan. showed that GEODON did not after the metabolism of *dextromphan*, a CYP2D6 model substrate, to its major metabolite, dextromphan. There was no statistically significant change in the uniany dextromethorphan/dextromphan ratio. *Carcinogenesis*, *Mugagenesis*, *Impalment of Fertility*: Lifetime carcinogenicity studies were conducted with GEODON in Long Evans rats and CD-1 mice. In male mice, there was no increase in incidence of tumors relative to controls. In female mice there were dose-related increases in the incidences of pullulary pland a denorma and carcinoma, and mammary gland adenocarcinoma at all doses tested. In creases in serum postatin were observed in a 1-month dietary study in female, but not male, mice. GEODON had no effect on serum protactin in rats in a 5-week dietary study at the doses that were used in the carcinogenicity study. The relevance for human its of the findings of productin-mediated entocity tumors in rodents is unknown (see Hypernotactionmia). *Mutagenesis*: There was a reproductible mutagenic response in the Ames assay in one strain of S. *Ephimurium* in the absence of metabolic activation. Positive results were obtained in both the into mammarian called and control in burson to response in the Ames assay in one strain of S. *Ephimurium* in the absence of metabolic activation. Positive results were obtained in both the into mammarian called and the parent burson the control of Europhic Control in one strain of 5. *Spriminumi* m the absence of metabook: activation in Solarie results were obtained in both the in vitro mammain depending one mutation assay and the in vitro chromosomal aberration assay in human lymphocytes, Impairment of Fertility; cold increased time to copulation in Sprague-Dawley ratis in two fertility and early embryonic development studies at doses of 10 to 160 mg/kg/day (0.5 to 8 times the MRHD of 260 mg/day on a mg/m² basis). Fertility rate was nediect on fertility of ternale rats was reduced. **Pergnansy-Pregnansy-Category**. There are no adequate and well-controlled studies in pregnant women. ECDDON should be used during pregnancy only if the potential heaftility stiffs the potential risks to the fetus. **Labor and belivery: The effect of ECDDON on labor and development in humans is unknown. **Nursing Minters: It is not known whether; and it so in what amount, GEDDON or its metabolities are excelled in human miss is unknown. **Nursing Minters:** Its not known whether; and it so in what amount, GEDDON or its metabolities are excelled in human miss. Pregiancy Caregory. There are not exceptional and in the present of the presence of many titte potential benefit justifies the potential risk to the tetus. Labor and Delivery: The effect of ECDDN on labor and delivery in humans is unknown. Nursing Mothers: It is not known whether, and if so in what amount, ECDDON or its metabolites are excreted in human malk. It is recommended that women receiving ECDDON should not breast feed. Pediatric Use: The safety and effectiveness of ECDDON in pediatric patients have not been established. Geriatric Use: On the approximately 4500 patients trated with ECDDON or or feeduced clearnors. At the content of ECDDON in the elderly compared to younger adults. Nevertheless, the presence of multiple factors that might increase the pharmacodynamic response to ECDDON, or cause poorer tolerance or orthostasis, should lead to consideration of a lover starting dose, sower littration, and careful monitoring during the littlal dosing period for some elderly patients. ADVERSE REACTIONS.—Adverse Findings Observed in Short-term, Placebo-Controlled Trials: The following findings are based on the short-term placebo-controlled prantaking in this for school property of two Noverse starting dose, sower illustron, and careful monitoring during the Work over event of the property of the propert Litapyambia Symptoms (EPS). The incidence of reported EPS for ECDDON patients in the short-term, placebo-controlled schizophrenal trials was 14% vs 5% for placebo. Objectively collected data from those trials on the Simpson-Angus Rating Scale and the Barnes Akathisa Scale did not generally show a difference between GEDDON and placebo. Wital Sign Changas: GEDON is associated with orthoristic hypotension (see PRECAUTIONS). Weight Gain: In short-term schizophrenia trials, the proportions of patients meeting a weight gain critical not 2.7% to blody weight were compared, revealing a statistically spotines in ricidence of veight gain for GEDON patients (10%) vs placebo patients (4%). A median weight gain of 1.5 kg was observed in GEDON patients vs 0.0 kg in placebo patients. Weight gain was reported as an adverse event in 0.4% or both GEDON and placebo patients vs 0.0 kg in placebo patients. Weight gain was reported as an adverse event in 0.4% or both GEDON and placebo patients vs 0.0 kg in placebo patients. Weight gain was reported as an adverse event in 0.4% or both GEDON and placebo patients vs 0.0 kg in placebo patients. Weight gain was reported as an adverse event in 0.4% or both GEDON and placebo patients with a "long" state of the state of the state of the sign of the kingles incidence of clinically significant veight gain of 1.4 kg for patients with a "long" base of the state of the state of the sign of the kingles incidence of the state of the sta

WARMINGS and <u>Ortustageur hyporelisted in Precedual Datas)</u>, information for Patients: 10 elscules all and elicitate size of GetDurk, use Institution Sequella (III) in Precedual Communities Sequella (III) in Englishment (III) and III Day Politin SG, Revees KR, Swift RH, Harrigan EP. Intramuscular (III) in Effective in reducing acute agricultation associated with psychosis: a double-blind, randomized trial Psychopharmacology. 2001;155:128-134. 2. Brook S, Walden J, Benattia I, Siu CO, Romano SJ. Ziprasidone and haloperidol in the treatment of acute exacerbation of schizophrenia and schizoaffective disorder: comparison of intramuscular and oral formulations in a 6-week, randomized, blinded-assessment study. Psychopharmacology. 2005;178:514-523. 3. Lesem MD, Zajecka JM, Swift RH, Reeves KR, Harrigan EP. Intramuscular ziprasidone of intramuscular intramuscular intramuscular ziprasidone in the treatment of acute psychosis. J Clin Psychiatry. 2000;61:933-941.