## LACHMAN CONSULTANT SERVICES, INC.

CONSULTANTS TO THE PHARMACEUTICAL AND ALLIED INDUSTRIES

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May 15, 2006

#### **OVERNIGHT COURIER 5/15/06**

Division of Dockets Management Food and Drug Administration (HFA-305) Department of Health and Human Services 5630 Fishers Lane, Room 1061 Rockville, MD 20852

## **Citizen Petition**

Dear Sir or Madam:

The undersigned submits this petition in quadruplicate pursuant to 21 CFR 10.30 and in accordance with the regulations at 21 CFR 314.161, requesting the Commissioner of the Food and Drug Administration to determine whether four listed drug products have been withdrawn for reasons of safety or effectiveness.

## A. Action Requested

The petitioner requests that the Commissioner of the Food and Drug Administration determine whether Diastat® (diazepam rectal gel), 5 mg/mL, 10 mg/2 mL, 15 mg/3 mL and 20 mg/4 mL held by Valeant Pharmaceuticals have been voluntarily withdrawn from sale for reasons related to safety or efficacy. These products were approved under NDA 20-648 on July 29, 1997.

#### B. Statement of Grounds

The Food and Drug Administration maintains a list of drug products that are eligible for submission as abbreviated new drug applications (ANDAs). The list, referred to as the Orange Book, contains all FDA-approved drug products. Diastat<sup>®</sup> (diazepam rectal gel), 5 mg/mL, 10 mg/2 mL, 15 mg/3 mL and 20 mg/4 mL were approved by the FDA on July 29, 1997 and were considered to be "listed drug products" as evidenced by their listing in the Orange Book. It should be noted that FDA also approved Diastat<sup>®</sup> in a 2.5 mg/0.5 mL strength under NDA 20-648. This strength is presently listed in the Orange Book and remains on the market as of the date of the petition<sup>1</sup>.

The current listing of the product in the electronic Orange Book, accessed on May 15, 2006, does not list the 5 mg/mL, 10 mg/2 mL, 15 mg/3 mL or 20 mg/4 mL strengths in the section that covers active drug products. Rather, these strengths are presently found in the "Discontinued" section of the Orange Book. The NDA holder, Valeant, discontinued the sale of these individual strengths following FDA approval of a "second generation delivery system", referred to as "Acudial™" that offers a range of dosing options within a single unit.² Notably, the Acudial™ system is designed to deliver the doses that were approved in the original NDA, including those represented by the four strengths that are the subject of this petition. The Acudial™ system was approved under a supplement (S-008) to NDA 20-648. Furthermore, Acudial™ contains the same formulation as the original Diastat®.³

20069-0209

CP 1

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The following tables illustrate the Diastat® presentations originally approved under NDA 20-648 and those approved under supplement S-008, respectively:

Table 1 - Diastat® (diazepam rectal gel) - NDA 20-648

Delivery System	Concentration (mg diazepam / mL gel)	Strength	Delivered Dose	Marketing Status
Single-use syringe	5 mg/mL	2.5 mg/0.5 mL	2.5 mg	Marketed
Singe-use syringe	5 mg/mL	5 mg/mL	5 mg	Discontinued
Single-use syringe	5 mg/mL	10 mg/2 mL	10 mg	Discontinued
Single-use syringe	5 mg/mL	15 mg/3 mL	15 mg	Discontinued
Single-use syringe	5 mg/mL	20 mg/4 mL	20 mg	Discontinued

Table 2 - Diastat<sup>®</sup> (diazepam rectal gel) Acudial™ - Supplement S-008

Delivery System	Concentration (mg diazepam / mL gel)	Strength	Deliverable Doses*	Marketing Status
Single-use syringe with flexible dosing options	5 mg/mL	10 mg/2 mL	5 mg, 7.5 mg, or 10 mg	Marketed
Single-use syringe with flexible dosing options	5 mg/mL	20 mg/4 mL	10 mg <sup>†</sup> , 12.5 mg, 15 mg, 17.5 mg or 20 mg	Marketed

<sup>\*</sup>The dispensing pharmacist dials and locks the prescribed dose into place.

Under FDA regulations, drugs are withdrawn from the list if the Agency withdraws or suspends approval of the drug product's application for reasons of safety or effectiveness, or if the FDA determines that the listed drug was withdrawn or withheld from sale for reasons of safety or effectiveness (21 CFR 314.162). The regulations also provide that the Agency must make a determination as to whether a listed drug is withdrawn from sale for reasons of safety or effectiveness before an ANDA that refers to that listed drug may be approved (21 CFR 314.161(a)(1)).

As stated above, at the time of submission of this petition, Diastat<sup>®</sup> (diazepam rectal gel), 5 mg/mL, 10 mg/2 mL, 15 mg/mL and 20 mg/4 mL appear in the discontinued section of the Orange Book and are no longer marketed. Petitioner believes that the Agency should conclude that the voluntary withdrawal of the Discontinued Products was not related to issues of safety or efficacy. Petitioner's belief is supported by the following facts:

The continued presence of the 2.5 mg/0.5 mL product on the market is a clear indication that the Discontinued Products remain safe and effective if used in accordance with their approved labeling. All Diastat products, i.e., the 2.5 mg/0.5 mL product, the Discontinued Products, and the NDA-holder's new Acudial products, contain the same diazepam rectal gel composition.

Further, the 2.5 mg/0.5 mL product and the Discontinued Products all employ the same applicator system. If, in fact, the Discontinued Products were withdrawn due to any concern with respect to the

<sup>&</sup>lt;sup>†</sup> Valeant has agreed to revise the 20 mg syringe in the future so that the minimum achievable dose is 12.5 mg as opposed to 10 mg.

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safety or efficacy of the applicator system, the NDA holder would have been expected to either withdraw the 2.5 mg/0.5 mL product as well or, if medical necessity required the continued availability of that product, to alert the Agency, prescribers, and the public of such concerns. To the Petitioner's knowledge, the NDA sponsor has not taken any such action.

Therefore, it is respectfully requested that the FDA determine whether the appearance of these listed drug products in the discontinued section of the Orange Book represents a discontinuation of marketing for reasons of safety or effectiveness, to enable Agency action on pending ANDAs for Diazepam Rectal Gel, 5 mg/mL, 10 mg/mL, 15 mg/mL and 20 mg/mL that rely on the original Diatstat® single-use syringe products.

### C. Environmental Impact

A claim for categorical exclusion of the requirement for submission of an environmental assessment is made pursuant to 21 CFR 25.31.

### D. Economic Impact

Pursuant to 21 CFR 10.30(b) economic impact information is to be submitted only when requested by the Commissioner. This information will promptly be submitted, if so requested.

### E. Certification

The undersigned certifies, that to the best of the undersigned's knowledge and belief, this petition includes all information and views on which the petitioner relies, and includes representative data and information known to the petitioner, which are unfavorable to the petition.

Respectfully submitted,

Joan Januiis

Director

JJ/pk

<sup>1</sup> See Package Insert for Diastat<sup>®</sup> and Diastat<sup>®</sup> Acudial<sup>™</sup>, included as Attachment 1

<sup>2</sup> See FDA approval letter for Supplement S-008, included as Attachment 2

<sup>3</sup> See Diastat<sup>®</sup> website: http://www.diastat.com./Diastat\_New\_Delivery.htm

cc: Martin Shimer (Office of Generic Drugs)

P04JD6135

# **ATTACHMENT 1**





#### **Rectal Delivery System**

 ${f R}$  Only

Diazepam rectal gel rectal delivery system is a non-sterile diazepam gel provided in a prefilled, unit-dose, rectal delivery system. Diazepam rectal gel contains 5 mg/mL diazepam, propylene glycol, ethyl alcohol (10%), hydroxypropyl methylcellulose, sodium benzoate, benzyl alcohol (1.5%), benzoic acid and water. Diazepam rectal gel is clear to slightfly yellow and has a pH between 6.5-7.2.

Diazepam, the active ingredient of diazepam rectal get, is a benzodiazepine anticonvulsant with the chemical 7-chloro-1,3-dihydro-1-methyl-5-phenyl-2+1,4-benzodiazepin-2-one. The structural formula is as follows:

#### **CLINICAL PHARMACOLOGY**

echanism of Action

Mechanism of Action

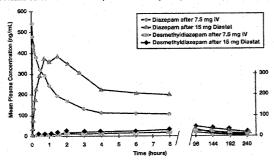
Although the precise mechanism by which diazepam exerts its antiseizure effects is unknown, animal and in vitro studies suggest that diazepam acts to suppress seizures through an interaction with y-aminobutyric acid (SABA) receptors of the A-type (GABA,). GABA, the major inhibitory neurotransmitter in the central nervous system, acts at this receptor to open the membrane channel allowing chloride ions to flow into neurons. Entry of chloride ions causes an inhibitory potential that reduces the ability of neurons to depolarize to the threshold potential necessary to produce action potentials. Excessive depolarization of neurons is implicated in the generation and spread of seizures. It is believed that diazepam enhances the actions of GABA by causing GABA to bind more tightly to the

#### Pharmacokinetics

Pharmacokinetics information of diazepam following rectal administration was obtained from studies conducted in healthy adult subjects. No pharmacokinetic studies were conducted in pediatric patients. Therefore, information from the literature is used to define pharmacokinetic labeling in the pediatric population.

Trom the interactive is used to define pharmacovantect alzeling in the pediative population possible. Diazepam rectal gel is well absorbed following rectal administration, reaching peak plasma concentrations in 1.5 hours. The absolute bioavailability of Diazepam rectal gel relative to Valium® injectable is 90%. The volume of distribution of Diazepam rectal gel is calculated to be approximately 1 L/kg. The mean elimination half-life of diazepam and desmethyldiazepam following administration of a 15 mg dose of Diazepam rectal gel was found to be about 46 hours (CV=43%) and 71 hours (CV=37%), respectively.

Both diazepam and its major active metabolite desmethyldiazepam bind extensively to plasma proteins (95-98%). FIGURE 1: Plasma Concentrations of Diazepam and Desmethyldiazepam Following Diastat or IV Diazepam



Metabolism and Elimination: It has been reported in the literature that diazepam is extensively metabolized to one major active metabolite (desmethyldiazepam) and two minor active metabolites, 3-hydroxydiazepam (termazepam) and 3-hydroxy-N-diazepam (oxazepam) in plasma. At therapeutic doses, desmethyldiazepam is found in plasma at concentrations equivalent to those of diazepam while oxazepam ame not usually detectable. The metabolism of diazepam is primarily hepatic and involves demethylation (involving primarily CYP2C19 and CYP3A4) and 3-hydroxylation (involving primarily CYP3C19 and CYP3A4) in the clearance of diazepam reported in the literature is probably attributable to variability of CYP2C19 within is known to exhibit genetic polymorphism; about 3-5% of Caucasians have little or no activity and are "poor metabolizers") and CYP3A4. No inhibition was demonstrated in the presence of inhibitors selective for CYP2A6, CYP2C9, CY enzymes are not significantly involved in metabolism of diazepam.

Special Populations

Special Populations
Hepatic Impairment: No pharmacokinetic studies were conducted with diazepam rectal gel in hepatically impaired subjects. Literature review indicates that following administration of 0.1 to 0.15 mg/kg of diazepam intravenously, the half-life of diazepam was prolonged by two- to five-fold in subjects with alcoholic cirrhosis (n=24) compared to age-matched control subjects (n=37) with a corresponding decrease in clearance by half; however, the exact degree of hepatic impairment in these subjects was not characterized in this literature (see PRECAUTIONS

Renal Impairment: The pharmacokinetics of diazepam have not been studied in renally impaired subjects (see PRECAUTIONS section).

Pediatrics: No pharmacokinetic studies were conducted with diazepam rectal gel in the pediatric population. However, literature review indicates that following IV administration (0.33 mg/kg), diazepam has a longer half-life in neonates (birth up to one month; approximately 50-95 hours) and infants (one month up to two years; about 40-50 hours), whereas it has a shorter half-life in children (two to 12 years; approximately 15-21 hours) and adolescents (12 to 16 years; about 18-20 hours) (see PRECAUTIONS section).

Elderly: A study of single dose IV administration of diazepam (0.1 mg/kg) indicates that the elimination half-life of diazepam increases linearly with age, ranging from about 15 hours at 18 years (healthy young adults) to about 100 hours at 35 years (healthy elderly) with a corresponding decrease in clearance of free diazepam (see PRECAUTIONS and DOSAGE AND ADMINISTRATION sections).

Effect of Gender, Race, and Cigarette Smoking: No targeted pharmacokinetic studies have been conducted to evaluate the effect of gender, race, and cigarette smoking on the pharmacokinetics of diazepam. However, covariate analysis of a population of treated patients following administration of diazepam rectal gel, indicated that neither gender nor cigarette smoking had any effect on the pharmacokinetics of diazepam.

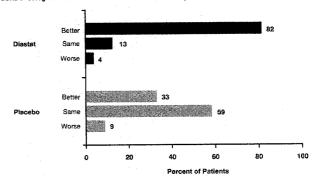
#### Clinical Studies

The effectiveness of diazepam rectal gel has been established in two adequate and well controlled clinical studies in children and adults exhibiting the seizure pattern described below under INDICATIONS AND USAGE.

A randomized, double-blind study compared sequential doses of diazepam rectal gel and placeboin 91 patients (47 children, 44 adults) exhibiting the appropriate seizure profile. The first dose was given at the onset of an identified episode. Children were dosed again four hours after the first dose and were observed for a total of 12 hours. Adults were dosed at four and 12 hours after the first dose and were observed for a total of 12 hours. Are the first dose and were observed for a total of 14 hours. Primary outcomes for this study were seizure frequency during the period of observation and a global assessment that took into account the severity and nature of the seizures as well as their frequency.

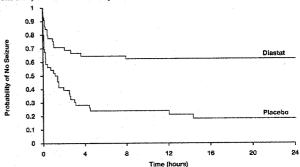
that took into account the severify and nature of the seizures as well as unail requency. The median seizure frequency for the diazepam rectal get treated group was zero seizures per hour, compared to a median seizure frequency of 0.3 seizures per hour for the placebo group, a difference that was statistically significant (p < 0.0001). All three categories of the global assessment (seizure frequency, seizure severify, and "overall") were also found to be statistically significant in favor of Diazepam rectal get (p < 0.0001). The following histogram displays the results for the "overall" category of the global assessment.

FIGURE 2: Caregiver Overall Global Assessment of the Efficacy of Diastat



Patients treated with Diazepam rectal gel experienced prolonged time-to-next-seizure compared to placebo (p = 0.0002) as shown in the following graph.

FIGURE 3: Kaplan-Meier Survival Analysis of Time-to-Next-Seizure - First Study

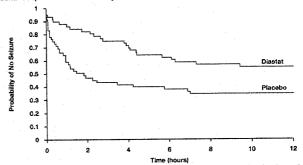


In addition, 62% of patients treated with diazepam rectal gel were seizure-free during the observation period compared to 20% of placebo patients.

Analysis of response by gender and age revealed no substantial differences between treatment in either of these subgroups. Analysis of response by race was considered unreliable, due to the small percentage of non-

A second double-blind study compared single doses of diazepam rectal gel and placebo in 114 patients (53 children, 61 adults). The dose was given at the onset of the identified episode and patients were observed for a total of 12 hours. The primary outcome in this study was seizure frequency. The median seizure frequency for the diazepam rectal gel-treated group was zero seizures per 12 hours, compared to a median seizure quency of 2.0 seizures per 12 hours for the placebo group, a difference that was statistically significant (p < 0.03). Patients treated with diazepam rectal gel experienced prolonged time-to-next-seizure compared to placebo (p = 0.0072) as shown in the following graph as shown in the following graph

FIGURE 4: Kaplan-Meier Survival Analysis of Time-to-Next-Seizure - Second Study



In addition, 55% of patients treated with diazepam rectal gel were seizure-free during the observation period compared to 34% of patients receiving placebo. Overall, caregivers judged diazepam rectal gel to be more effective than placebo (p = 0.018), based on a 10 centimeter visual analog scale. In addition, investigators also evaluated the effectiveness of diazepam rectal gel and judged diazepam rectal gel to be more effective than placebo (p < 0.001).

An analysis of response by gender revealed a statistically significant difference between treatments in females but not in males in this study, and the difference between the 2 genders in response to the treatments reached borderline statistical significance. Analysis of response by race was considered unreliable, due to the small percentage of non-Gaucasians

#### INDICATIONS AND USAGE

Diazepam rectal gel is a gel formulation of diazepam intended for rectal administration in the management of selected, refractory, patients with epilepsy, on stable regimens of AEDs, who require intermittent use of diazepam to control bouts of increased seizure activity.

to control bouts of increased seizure activity.

Evidence to support the use of diazepam rectal gel was adduced in two controlled trials (see CLINICAL PHARMACOLOGY, CLINICAL STUDIES subsection) that enrolled patients with partial onset or generalized convulsive seizures who were identified jointly by their caregivers and physicians as suffering intermittent and periodic episodes of markedly increased seizure activity, sometimes heralded by nonconvulsive symptoms, that for the individual patient were characteristic and were deemed by the prescriber to be of a kind for which a benzodiazepine would ordinarily be administered acutely. Although these clusters or bouts of seizures differed among patients, for any individual patient the clusters of seizure activity were not only stereotypical twere judged by those conducting and participating in these studies to be distinguishable from other seizures suffered by that patient. The conclusion that a patient experienced such unique episodes of seizure activity was based on historical information.

#### CONTRAINDICATIONS

Diazepam rectal gel is contraindicated in patients with a known hypersensitivity to diazepam. Diazepam rectal gel may be used in patients with open angle glaucoma who are receiving appropriate therapy but is contraindicated in acute narrow angle glaucoma.

#### WARNINGS

General Diazepam rectal get should only be administered by caregivers who in the opinion of the prescribing physician 1) are able to distinguish the distinct cluster of seizures (and/or the events presumed to herald their onset) from the patient's ordinary seizure activity, 2) have been instructed and judged to be competent to administer the treatment rectally, 3) understand explicitly which seizure manifestations may or may not be treated with diazepam rectal get, and 4) are able to monitor the clinical response and recognize when that response is such that immediate professional medical evaluation is required.

#### **CNS Degression**

Because diazepam rectal gel produces CNS depression, patients receiving this drug who are otherwise capable and qualified to do so should be cautioned against engaging in hazardous occupations requiring mental alertness, such as operating machinery, driving a motor vehicle, or riding a bicycle until they have completely returned to their level of baseline functioning

Although diazepam rectal gel is indicated for use solely on an intermittent basis, the potential for a synergistic CNS-depressant effect when used simultaneously with alcohol or other CNS depressants must be considered by the prescribing physician, and appropriate recommendations made to the patient and/or caregiver.

Protonged CNS depression has been observed in neonates treated with diazepam. Therefore, diazepam rectal gel is not recommended for use in children under six months of age.

#### Pregnancy Bisks

No clinical studies have been conducted with diazepam rectal gel in pregnant women. Data from several sources raise concerns about the use of diazepam during pregnancy.

Animal Findings: Diazepam has been shown to be teratogenic in mice and hamsters when given orally at single doses of 100 mg/kg or greater (approximately eight times the maximum recommended human dose [MRHD=1 mg/kg/day] or greater on a mg/m² basis). Cleft palate and exencephaly are the most common and consistently reported malformations produced in these species by administration of high, maternally-toxic doses of diazepam during organogenesis. Rodent studies have indicated that prenatal exposure to diazepam doses similar to those used clinically can produce longterm changes in cellular immune responses, brain neurochemistry, and behavior.

General Concerns and Considerations About Anticonvulsants: Reports suggest an association between the use of anticonvulsant drugs by women with epilepsy and an elevated incidence of birth defects in children born to these women. Data are more extensive with respect to phenytoin and phenobarbital, but a smaller number of systematic or anecdotal reports suggest a possible similar association with the use of all known anticonvulsant drugs.

drugs.

The reports suggesting an elevated incidence of birth defects in children of drug treated epileptic women cannot be regarded as adequate to prove a definite cause and effect relationship. There are intrinsic methodologic problems in obtaining adequate data on drug teratogenicity in humans; the possibility also exists that other factors, e.g., genetic factors or the epileptic condition itself, may be more important than drug therapy in leading to birth defects. The great majority of mothers on anticonvulsant medication deliver normal infants. It is important to note that anticonvulsant drugs should not be discontinued in patients in whom the drug is administered to prevent seizures because of the strong possibility of precipitating status epilepticus with attendant hypoxia and threat to life. In individual cases where the severity and frequency of the seizure disorder are such that the removal of medication does not pose a serious threat to the patient, discontinuation of the drug may be considered prior to and during pregnancy, although it cannot be said with any confidence that even mild seizures do not pose some hazards to the developing embryo or fetus.

\*\*Repeal Congress Abnut Reparadiazantanes\*\* An increased risk of congenital melformations associated with the

General Concerns About Benzediazepines: An increased risk of congenital malformations associated with the use of benzediazepine drugs has been suggested in several studies.

There may also be non-teratogenic risks associated with the use of benzodiazepines during pregnancy. There have been reports of neonatal flaccidity, respiratory and feeding difficulties, and hypothermia in children born to mothers who have been receiving benzodiazepines late in pregnancy. In addition, children born to mothers receiving benzodiazepines on a regular basis late in pregnancy may be at some risk of experiencing withdrawal symptoms during the postnatal period.

Advice Regarding the Use of Diazepam rectal gel in Women of Childbearing Potential: In general, the use of Diazepam rectal gel in women of childbearing potential, and more specifically during known pregnancy, should be considered only when the clinical situation warrants the risk to the fetus.

The specific considerations addressed above regarding the use of anticonvulsants in epileptic women of childbearing potential should be weighed in treating or counseling these women.

Because of experience with other members of the benzodiazepine class, Diazepam rectal gel is assumed to be because or experience with order memoers of the Denzouazepine class, Diazepam rectal get is assumed to be capable of causing an increased risk of congenital abnormalities when administered to a pregnant woman during the first trimester. The possibility that a woman of childbearing potential may be pregnant at the time of institution of therapy should be considered. If this drug is used during pregnancy, or if the patient becomes pregnant while taking this drug, the patient should be apprised of the potential hazard to the fetus. Patients should also be advised that if they become pregnant during therapy or intend to become pregnant they should communicate with their physician about the desirability of discontinuing the drug.

#### Withdrawal Symptoms

Withdrawal symptoms of the barbiturate type have occurred after the discontinuation of regular use of benzodiazepines (see DRUG ABUSE AND DEPENDENCE section).

#### Chronic Use

Diazepam rectal gel is not recommended for chronic, daily use as an anticonvulsant because of the potential for development of tolerance to diazepam. Chronic daily use of diazepam may increase the frequency and/or seventy of tonic clonic seizures, requiring an increase in the dosage of standard anticonvulsant medication. In such cases, abrupt withdrawal of chronic diazepam may also be associated with a temporary increase in the frequency and/or severity of seizures.

Use in Patients with Petit Mai Status
Tonic status epilepticus has been precipitated in patients treated with IV diazepam for petit mai status or petit mai variant status

#### **PRECAUTIONS**

Caution in Renalty Impaired Patients

Metabolites of Diazepam rectal gel are excreted by the kidneys; to avoid their excess accumulation, caution should be exercised in the administration of the drug to patients with impaired renal function.

Caution in Hepatically Impaired Patients
Concomitant liver disease is known to decrease the clearance of diazepam (see CLINICAL PHARMACOLOGY, Special Populations, Hepatic Impairment). Therefore, Diazepam rectal gel should be used with caution in patients

#### Use in Pediatrics

The controlled trials demonstrating the effectiveness of Diazepam rectal gel included children two years of age and older, Clinical studies have not been conducted to establish the efficacy and safety of Diazepam rectal gel in children under two years of age.

Use in Patients with Compromised Respiratory Function
Diazepam rectal gel should be used with caution in patients with compromised respiratory function related to a concurrent disease process (e.g., asthma, pneumonia) or neurologic damage.

Use in Elderly In elderly patients Diazepam rectal gel should be used with caution due to an increase in halfilife with a corresponding decrease in the clearance of free diazepam. It is also recommended that the dosage be decreased to reduce the likelihood of ataxia or oversedation.

#### Information to be Communicated by the Prescriber to the Caregiver

Information to be communicated by the Prescribers of the Caregiver Prescribers are strongly advised to take all reasonable steps to ensure that caregivers fully understand their role and obligations vis a vis the administration of Diazepam rectal gel to individuals in their care. Prescribers should routinely discuss the steps in the Patient/Caregiver Package Insert (see Patient/Caregiver Insert printed at the end of the product tabeling and also included in the product carton). The successful and safe use of Diazepam rectal gel depends in large measure on the competence and performance of the caregiver.

Prescribers should advise caregivers that they expect to be informed immediately if a patient develops any new findings which are not typical of the patient's characteristic seizure episode.

Interference With Cognitive and Motor Performance: Because benzodiazepines have the potential to impair judgment, thinking, or motor skills, patients should be cautioned about operating hazardous machinery, including automobiles, until they are reasonably certain that Diazepam rectal gel therapy does not affect them adversely.

Pregnancy: Patients should be advised to notify their physician if they become pregnant or intend to become pregnant during therapy with Diazepam rectal gel (see WARNINGS section).

Nursing: Because diazepam and its metabolites may be present in human breast milk for prolonged periods of time after acute use of Diazepam rectal gel, patients should be advised not to breast-feed for an appropriate period of time after receiving treatment with Diazepam rectal gel.

#### Concomitant Medication

Although Diszepam rectal gel is indicated for use solely on an intermittent basis, the potential or a synergistic CNS-depressant effect when used simultaneously with alcohol or other CNS-depressants must be considered by the prescribing physician, and appropriate recommendations made to the patient and/or caregiver.

If Diazepam rectal gel is to be combined with other psychotropic agents or other CNS-depressants, careful consideration should be given to the pharmacology of the agents to be employed particularly with known compounds which may potentiate the action of diazepam, such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants.

The clearance of diazepam and certain other benzodiazepines can be delayed in association with cimetidine administration. The clinical significance of this is unclear,

Valproate may potentiate the CNS-depressant effects of diazepam.

There have been no clinical studies or reports in literature to evaluate the interaction of rectally administered diazepam with other drugs. As with all drugs, the potential for interaction by a variety of mechanisms is a possibility.

possibility.

Effect of Other Drugs on Diazepam Metabolism: In vitro studies using human liver preparations suggest that CYP2C19 and CYP3A4 are the principal isozymes involved in the initial oxidative metabolism of diazepam. Therefore, potential inhibitors when diazepam is given concurrently with agents that affect CYP2C19 and CYP3A4 activity. Potential inhibitors of CYP2C19 (e.g., cimetidine, quinidine, and transforpment) and CYP3A4 (e.g., ketroonazole, troleandomycin, and ciotrimazole) could decrease the rate of diazepam elimination, while inducers of CYP2C19 (e.g., riampin) and CYP3A4 (e.g., carbamazepine, phenytoin, dexamethasone and phenobarbital) could increase the rate of elimination of diazepam.

Effect of Diazepam on the Melabolism of Other Drugs: There are no reports as to which isozymes could be inhibited or induced by diazepam. But, based on the fact that diazepam is a substrate for CYP2C19 and CYP3A4, it is possible that diazepam may interfere with the metabolism of drugs which are substrates for CYP2C19, (e.g., omeprazole, propranolol, and imigramine) and CYP3A4 (e.g. cyclosporine, paclitaxel, terlenadine, theophylline, and controlled from country interpretability of the controlled from country interpretability. warfarin) leading to a potential drug-drug interaction.

Carcinogenesis, Mutagenesis, Impairment of Fertility

The carcinogenic potential of rectal diazepam has not been evaluated. In studies in which mice and rats were administered diazepam in the diet at a dose of 75 mg/kg/day (approximately six and 12 times, respectively, the maximum recommended human dose [MRHD=1 mg/kg/day] on a mg/m² basis) for 80 and 104 weeks, respectively, an increased incidence of liver tumors was observed in males of both species.

The data currently available are inadequate to determine the mutagenic potential of diazepam.

Reproduction studies in rats showed decreases in the number of pregnancies and in the number of surviving offspring following administration of an oral dose of 100 mg/kg/day (approximately 16 times the MRHO on a mg/m² basis) prior to and during mating and throughout gestation and lactation. No adverse effoo nefurlity or offspring viability were noted at a dose of 80 mg/kg/day (approximately 13 times the MRHD on a mg/m² basis).

## Pregnancy - Category D (see WARNINGS section)

Pregnancy - Lategury b (see Winnington)

Labor and Delivery

In humans, measurable amounts of diazepam have been found in maternal and cord blood, indicating placental transfer of the drug. Until additional information is available, Diazepam rectal gel is not recommended for

#### Nursing Mothers

Nursing woulders. Because diazepam and its metabolites may be present in human breast milk for prolonged periods of time after acute use of Diazepam rectal gel, patients should be advised not to breast-feed for an appropriate period of time after receiving treatment with Diazepam rectal gel.

#### ADVERSE REACTIONS

Diazepam rectal gel adverse event data were collected from double-blind, placebo-controlled studies and open-label studies. The majority of adverse events were mild to moderate in severity and transient in nature.

Two patients who received Diazepam rectal gel died seven to 15 weeks following treatment; neither of these deaths was deemed related to Diazepam rectal cel.

The most frequent adverse event reported to be related to Diazepam rectal gel in the two double-blind, placebo-controlled studies was somnolence (23%). Less frequent adverse events were dizziness, headache, pain, abdominal pain, nervousness, vasodilatation, diarrhea, ataxia, euphoria, incoordination, asthma, rhinitis, and rash, which occurred in approximately 2-5% of patients.

Approximately 1.4% of the 573 patients who received Diazepam rectal gel in clinical trials of epilepsy discontinued Applicational department of the 30 september o patient were asthenia, hyperkinesia, incoordination, vaso dilatation and urticaria. These events were judged to be related to diazepam rectal gel.

In the two domestic double-blind, placebo-controlled, parallel-group studies, the proportion of patients who discontinued treatment because of adverse events was 2% for the group treated with Diazepam rectal gel, versus 2% for the placebo group. In the Diazepam rectal gel group, the adverse events considered the primary reason for discontinuation were different in the two patients who discontinued treatment; one discontinued due to rash and one discontinued due to lethargy. The primary reason for discontinuation in the patients treated with placebo was larked reflect.

Adverse Event Incidence in Controlled Clinical Trials
Table 1 lists treatment-emergent signs and symptoms that occurred in > 1% of patients enrolled in parallel-group, placebo-controlled trials and were numerically more common in the Diazepam rectal gel group. Adverse events re usually mild or moderate in intensity.

The prescriber should be aware that these figures, obtained when Diazepam rectal gel was added to concurrent antieplieptic drug therapy, cannot be used to predict the frequency of adverse events in the course of usual medical practice when patient characteristics and other factors may differ from those prevailing during clinical studies. Similarly, the cited frequencies cannot be directly compared with figures obtained from other clinical investigations involving different treatments, uses, or investigators. An inspection of these frequencies, however, does provide the prescribing physician with one basis to estimate the relative contribution of drug and non-drug factors to the adverse event incidences in the population studied.

TABLE 1: Treatment-Emergent Signs And Symptoms That Occurred In > 1% Of Patients Enrolled in Parallel-Group, Placebo-Controlled Trials And Were Numerically More Common in The Diazepam rectal

ger aroup			
Body System	COSTART Term	Diastat N = 101 %	Placebo N = 104 %
Body As A Whole	Headache	5%	4%
Cardiovascular	Vasodilatation	2%	0%
Digestive	Diarrhea	4%	<1%
Nervous	Ataxia	3%	<1%
	Dizziness	3%	2%
1	Euphoria	3%	0%
l l	Incoordination	3%	0%
	Somnolence	23%	8%
Respiratory	Asthma	2%	0%
Skin and Appendages	Rash	3%	0%

Other events reported by 1% or more of patients treated in controlled trials but equally or more frequent in the placebo group than in the Diazepam rectal gel group were abdominal pain, pain, nervousness, and rhinitis. Other events reported by fewer than 1% of patients were infection, anorexia, vomiting, anemia, lymphadenopathy, grand mai convulsion, hyperkinesia, cough increased, pruritus, sweating, mydriasis, and urinary tract infection.

The pattern of adverse events was similar for different age, race and gender groups.

The pattern of adverse events was similar for direcent age, race and gender groups.

Other Adverse Events Observed During All Clinical Trials
Diazepam rectal gel has been administered to 573 patients with epilepsy during all clinical trials, only some of which were placebo-controlled. During these trials, all adverse events were recorded by the clinical investigators using terminology of their own choosing. To provide a meaningful estimate of the proportion of individuals having adverse events, similar types of events were grouped into a smaller number of standardize tagories using modified COSTART dictionary terminology. These categories are used in the listing below. All of the events listed below occurred in at least 1% of the 573 individuals exposed to Diazepam rectal gel.

All reported events are included except those already listed above, events unlikely to be drug-related, and those too general to be informative. Events are included without regard to determination of a causal relationship to diazepam. BODY AS A WHOLE: Asthenia

CARDIOVASCULAR: Hypotension, vasodilatation

NERVOUS: Agitation, confusion, convulsion, dysarthria, emotional lability, speech disorder, thinking abnormal,

RESPIRATORY: Hiccup

The following infrequent adverse events were not seen with Diazepam rectal gel but have been reported previously with diazepam use: depression, slurred speech, syncope, constipation, changes in libido, urinary retention, bradycardia, cardiovascular collapse, nystagmus, urticaria, neutropenia and jaundice.

bradycatura, cardionascura consequences, rystagarus, paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances and stimulation have been reported with diazepam; should these occur, use of Diazepam rectal gel should be discontinued.

DRUG ABUSE AND DEPENDENCE

repam is a Schedule IV controlled substance and can produce drug dependence. It is recommended that patients be treated with Diazepam rectal gel no more frequently than every five days and no more than five times

Addiction-prone individuals (such as drug addicts or alcoholics) should be under careful surveillance when receiving diazepam or other psychotropic agents because of the predisposition of such patients to habituation and dependence.

dependence.

Abrupt discontinuation of diazepam following chronic regular use has resulted in withdrawal symptoms, similar in character to those noted with barbiturates and alcohol (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). The more severe withdrawal symptoms have usually been limited to those patients who had received excessive doses over an extended period of time. Generally milder withdrawal symptoms (e.g., dysphoria and insomnia) have been reported following abrupt discontinuation of benzodiazepines taken continuously at therapeutic levels for several months.

OVERDOSAGE

wo patients in the clinical studies received more than twice the target dose; no adverse events were reported.

Previous reports of diazepam overdosage have shown that manifestations of diazepam overdosage include somnolence, confusion, coma, and diminished reflexes. Respiration, pulse and blood pressure should be monitored, as in all cases of drug overdosage, although, in general, these effects have been minimal. General supportive measures should be employed, along with intravenous fluids, and an adequate any maintained. Hypotension may be combated by the use of levarterenol or metaraminol. Dialysis is of limited value.

Flumazenil, a specific benzodiazepine-receptor antagonist, is indicated for the complete or partial reversal of the Flumazenii, a specific benzodiazepine-receptor antagonist, is indicated for the complete or partial reversal of the seadative effects of benzodiazepines and may be used in situations when an overdose with a broodiazepine is known or suspected. Prior to the administration of flumazenii, necessary measures should be instituted to secure airway, ventilation and intravenous access. Flumazenii is intended as an adjunct to, not as a substitute for proper management of benzodiazepine overdose. Patients treated with flumazenii should be monitored resedation, respiratory depression and other residual benzodiazepine effects for an appropriate period after treatment. The prescriber should be aware of a risk of setzure in association with flumazenii treatment, particularly in long-term benzodiazepine users and in cyclic antidepressant overdose. The complete flumazenii package insert, including CONTRAINDICATIONS, WARNINGS and PRECAUTIONS, should be consulted prior to use.

DOSAGE AND ADMINISTRATION (see also Patient/Caregiver Package Insert)

This section is intended primarily for the prescriber; however, the prescriber should also be aware of the dosing information and directions for use provided in the patient package insert.

A decision to prescribe Diazepam rectal gel involves more than the diagnosis and the selection of the correct dose

First, the prescriber must be convinced from historical reports and/or personal observations that the patient exhibits the characteristic identifiable seizure cluster that can be distinguished from the patient's usual seizure

activity by the caregiver who will be responsible for administering Diazepam rectal gel Second, because Diazepam rectal gel is only intended for adjunctive use, the prescriber must ensure that the patient is receiving an optimal regimen of standard anti-epileptic drug treatment and is, nevertheless, continuing to experience these characteristic episodes.

Third, because a non-health professional will be obliged to identify episodes suitable for treatment, make the decision to administer treatment upon that identification, administer the drug, monitor the patient, and assess the adequacy of the response to treatment, a major component of the prescribing process involves the necessary instruction of the individual to the i instruction of this individual

Fourth, the prescriber and caregiver must have a common understanding of what is and is not an episode of seizures that is appropriate for treatment, the timing of administration in relation to the onset of the episode, the mechanics of administering the drug, how and what to observe following administration, and what would constitute an outcome requiring immediate and direct medical attention.

Calculating Prescribed Dose
The Diazepam rectal gel dose should be individualized for maximum beneficial effect. The recommended dose of Diazepam rectal gel is 0.2-0.5 mg/kg depending on age. See the dosing table for specific recommendations.

lge (years)	Recommended Dose
through 5	0.5 mg/kg
through 11	0.3 mg/kg
2 and older	0.2 mg/kg

Because Diazepam rectal gel is provided as unit doses of 2.5, 5, 7.5, 10, 12.5, 15, 17.5, and 20 mg, the prescribed dose is obtained by rounding upward to the next available dose. The following table provides acceptable weight ranges for each dose and age category, such that patients will receive between 90% and 180% of the calculated recommended dose. The safety of this strategy has been established in clinical trials.

2 - 5 Years 0.5 mg/kg		
Weight (kg)	Dose (mg)	
6 to 10	5	
11 to 15	7.5	
16 to 20	10	
21 to 25	12.5	
26 to 30	15	
31 to 35	17.5	
36 to 44	20	

6 - 11 Years 0.3 mg/kg		
Weight (kg)	Dose (mg)	
10 to 16	5	
17 to 25	7.5	
26 to 33	10	
34 to 41	12.5	
42 to 50	15	
51 to 58	17.5	
59 to 74	20	

12+ Years 0.2 mg/kg		
Weight (kg)	Dose (mg)	
14 to 25	5	
26 to 37	7.5	
38 to 50	10	
51 to 62	12.5	
63 to 75	15	
76 to 87	17.5	
88 to 111	20	

The rectal delivery system includes a plastic applicator with a flexible, molded tip available in two lengths. The Diastat® AcuDial™ 10 mg syringe is available with a 4.4 cm tip and the Diastat® AcuDial™ 20 mg syringe is available with a 6.0 cm tip. Diastat® 2.5 mg is also available with a 4.4 cm tip.

In elderly and debilitated patients, it is recommended that the dosage be adjusted downward to reduce the likelihood of ataxia or oversedation.

The prescribed dose of Diazepam rectal gel should be adjusted by the physician periodically to reflect changes in the patient's age or weight.

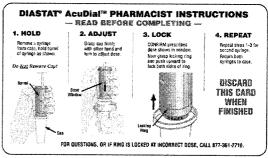
The Diastat® 2.5 mg dose may also be used as a partial replacement dose for patients who may expel a portion of

Additional Dose

The prescriber may wish to prescribe a second dose of Diazepam rectal gel. A second dose, when required, may be given 4-12 hours after the first dose.

Treatment Frequency
It is recommended that Diazepam rectal gel be used to treat no more than five episodes per month and no more than one episode every five days.

Pharmacist Instructions



HOW SUPPLIED

HOW SUPPLIED
Diazpeam rectal gel rectal delivery system is a non-sterile, prefilled, unit dose, rectal delivery system. The rectal
delivery system includes a plastic applicator with a flexible, molded tip available in two lengths, designated for
convenience as 10 mg Delivery System and 20 mg Delivery System. The available doses from 20 mg delivery
system are 10 mg, 12.5 mg, 15 mg, 17.5 mg and 20 mg. The available doses from 10 mg delivery system are
5 mg. 7.5 mg and 10 mg. The Diazepam rectal gel delivery system is available in the following three presentations:

o mg, 7.5 mg and 10 mg. The biazepain rectal get delivery system is available in the following three presentations:				
Diastat®	Rectal Tip Size	NDC		
2.5 mg Twin Pack	4.4 cm	NDC 66490-650-20		
Diastat® AcuDiat™	Rectal Tip Size	NDC		
10 mg Delivery System Twin Pack	4.4 cm	NDC 0187-0658-20		
20 mg Delivery System Twin Pack	6.0 cm	NDC 0187-0659-20		

Each Twin Pack contains two diazepam rectal gel delivery systems, two packets of lubricating jelly, and administration and disposal Instructions available on the bottom of the package. Diastat® AcuDial™ is also packed with Instructions for Caregivers upon receipt from pharmacy.

Store at 25°C (77°F); excursions permitted to 15-30°C (59-86°F).

## Diastat® Acudia1™ INSTRUCTIONS FOR CAREGIVERS <u>UPON RECEIPT</u> FROM PHARMACY

Remove the syringe from the case

. Confirm the dose prescribed by your doctor is visible and if known, is correct. FOR EACH SYRINGE:

- Confirm that the prescribed dose is visible in the dose display window.
- . Confirm that the green "READY" band is visible.
- · Return the syringe to the case

#### SEE PHARMACIST IF YOU HAVE ANY QUESTIONS ABOUT THESE INSTRUCTIONS.

The instructions are also available on the bottom of each drug product package

CAUTION: Federal law prohibits the transfer of this drug to any person other than the patient for whom it was

Vallium® is a registered trademark of Roche Pharmaceuticals.

Distributed by: Valeant Pharmaceuticals International 3300 Hyland Av Costa Mesa, CA 92626 USA.



DPT Laboratories, LTD San Antonio, Texas 78215 D169-0905

# (diazepam rectal gel)

# **Diastat**®AcuDial™

(diazepam rectal gel)

## **ADMINISTRATION AND DISPOSAL INSTRUCTIONS**

## IMPORTANT

## Read first before using

#### To the caregiver using Diastat®:

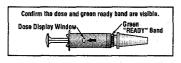
#### Please do not give DIASTAT® until:

- 1. You have thoroughly read these instructions
- 2. Reviewed administration steps with the doctor
- 3. Understand the directions

#### To the caregiver using Diastat® AcuDial™:

### Please do not give DIASTAT® AcuDial™ until:

- 1. You have confirmed:
  - · Prescribed dose is visible and if known, is correct
  - · green "ready" band is visible



- 2. You have thoroughly read these instructions
- 3. Reviewed administration steps with the doctor
- 4. Understand the directions

Please do not administer DIASTAT until you feel comfortable with how to use DIASTAT. The doctor will tell you exactly when to use DIASTAT. When you use DIASTAT correctly and safely you will help bring seizures under control. Be sure to discuss every aspect of your role with the doctor. If you are not comfortable, then discuss your role with the doctor again.

#### To help the person with seizures:

- You must be able to tell the difference between cluster and ordinary seizures.
- You must be comfortable and satisfied that you are able to give DIASTAT.
- You need to agree with the doctor on the exact conditions when to treat with DIASTAT.
- ✓ You must know how and for how long you should check the person after giving DIASTAT.

#### To know what responses to expect:

- ✓ You need to know how soon seizures should stop or decrease in frequency after giving DIASTAT.
- You need to know what you should do if the seizures do not stop or there is a change in the person's breathing, behavior or condition that alarms you.
- If you have any questions or feel unsure about using the treatment, **CALL THE DOCTOR** before using DIASTAT.

### Where can I find more information and support?

For information on Diastat® and Diastat® AcuDiat™: Cell 1-877-361-2719 or Vielt www.diestat.com

### Additional resource:

Epilepsy Foundation (EF). You can reach EF by calling 1-800-EFA-1000 or www.efa.org.

When to treat. Based on the doctor's directions or prescription Special considerations. DIASTAT should be used with caution: • In people with respiratory (breathing) difficulties (e.g., asthma or pneumonia) . In women of child bearing potential, pregnancy and nursing mothers Discuss beforehand with the doctor any additional steps you may need to take if there is leakage of DIASTAT or a bowel movement. Patient's DIASTAT dosage is: \_\_\_ Patient's resting breathing rate \_\_\_ Patient's current weight Confirm current weight is still the same as when DIASTAT was prescribed Check expiration date and always remove cap before using. Be sure seal pin is removed with the cap. TREATMENT 1 Important things to tell the doctor. Seizures After DIASTAT Seizures Before DIASTAT Seizure No. of Seizure No. of Date Time Туре Seizures Time Type Seizures Things to do after treatment with DIASTAT. Stay with the person for 4 hours and make notes on the following: · Changes in resting breathing rate \_ Changes in color · Possible side effects from treatment TREATMENT 2

Seizures After DIASTAT

Seizure

Type

Time

No. of

Seizures

## Things to do after treatment with DIASTAT.

Stay with the person for 4 hours and make notes on the following:

Seizures Before DIASTAT

Seizure

Type

No. of

Seizures

· Changes in resting breathing rate\_

Important things to tell the doctor.

Time

· Changes in color\_

Date

· Possible side effects from treatment

## HOW TO ADMINISTER AND DISPOSAL

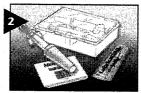
# Diastat® (diazepam rectal gel) Diastat®AcuDial™ (diazepam rectal gel)



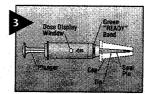




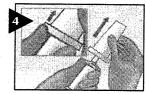
Put person on their side where they can't fall.



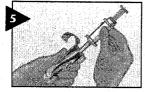
Get medicine.



Get syringe. Note: Seal Pin is attached to the cap.



Push up with thumb and pull to remove cap from syringe. Be sure Seal Pin is removed with the cap.



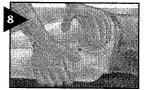
Lubricate rectal tip with lubricating jelly.



Turn person on side facing you.



Bend upper leg forward to expose rectum.



Separate buttocks to expose rectum.



Gently insert syringe tip into rectum. Note: Rim should be snug against rectal opening.



Slowly count to 3 while gently pushing plunger in until it stops.



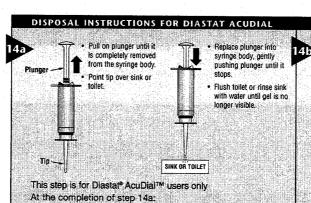
Slowly count to 3 before removing syringe from rectum.



Slowly count to 3 while holding buttocks together to prevent leakage.



Keep person on side facing you, note time given and continue to observe.



- Discard all used materials in the garbage can.
- · Do not reuse.
- Discard in a safe place away from children.

## **DISPOSAL FOR DIASTAT 2.5 MG**

At the completion of step 13:

- · Discard all used materials in the garbage can.
- Do not reuse.
- Discard in a safe place away from children.

/=-	A411 BAB 1481 B		FOLLOWING OCCUP
	CALL FOR HELP	IF ANY OF THE	FOLLOWING OCCUR



- Seizure(s) continues 15 minutes after giving DIASTAT or per the doctor's instructions:
- Seizure behavior is different from other episodes.
- You are alarmed by the frequency or severity of the seizure(s).
- You are alarmed by the color or breathing of the person.
- · The person is having unusual or senous problems.

#### **Local Emergency Number:**

(please be sure to note if your area has 911)

**Doctor's Number:** 

**Information for Emergency Squad:** 

Time DIASTAT given:\_\_\_\_ Dose:

Diastat® and Diastat® AcuDial™ are registered trademarks of Valeant Pharmaceuticals North America.

# **ATTACHMENT 2**

Public Health Service

Food and Drug Administration Rockville, MD 20857

NDA 20-648/S-008

Valeant Pharmaceuticals International Attention: Arthur L. Rosenthal, R.A.C. Director, Corporate Regulatory Affairs 3300 Hyland Avenue Costa Mesa, CA 92626

Dear Mr. Rosenthal:

Please refer to your supplemental new drug application dated November 4, 2004, received November 5, 2004, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Diastat® AcuDial<sup>TM</sup> (diazepam rectal gel) Rectal Delivery System 10 mg and 20 mg.

We acknowledge receipt of your submissions dated May 13, 2005, July 14, 2005, July 18, 2005, August 25, 2005, and September 9, 2005. Your submission of May 13, 2005 constituted a complete response to our March 2, 2005 action letter.

This supplemental new drug application provides for a second generation drug delivery system for Diastat® (diazepam rectal gel) Rectal Delivery System. Specifically, this new system consists of pre-filled unit-dose syringes (two configurations) that can deliver varying quantities of diazepam 5 mg/mL: a 10 mg syringe with a 4.4 cm tip (that can deliver doses of 5, 7.5, and 10 mg) and a 20 mg syringe with a 6.0 cm tip (that can deliver doses of 10, 12.5, 15, 17.5, and 20 mg).

We have completed our review of this application, as amended. This application is approved, effective on the date of this letter, for use as recommended in the agreed-upon labeling text.

### **Final Printed Labeling**

The final printed labeling (FPL) must be identical to the submitted labeling (package insert submitted August 25, 2005, patient package insert submitted August 25, 2005, immediate container and carton labels submitted July 14, 2005 and August 25, 2005).

Please submit an electronic version of the FPL according to the guidance for industry titled *Providing Regulatory Submissions in Electronic Format - NDA*. Alternatively, you may submit 20 paper copies of the FPL as soon as it is available but no more than 30 days after it is printed. Individually mount 15 of the copies on heavy-weight paper or similar material. For administrative purposes, designate this submission "FPL for approved supplement NDA 20-648/S-008." Approval of this submission by FDA is not required before the labeling is used.

NDA 20-648/S-008 Page 2

As agreed during a September 15, 2005 phone conversation between you and Division representatives, we note that, at your next printing of the physician package insert and patient package insert, you will delete the following sentence, "It is important to note that if a dose greater than 10 mg is to be administered to a pediatric patient, two prescriptions must be written for 2 different twin packs, one for the 10 mg dose and one for the additional dose (SEE HOW SUPPLIED SECTION)".

## Post-marketing Study Commitments

We remind you of your postmarketing study commitments described in your submission dated September 9, 2005. These commitments are listed below.

1. Development of a voluntary registry of 150 caregiver/patients and assessment of medication errors via questionnaires sent every six months in the first year and yearly thereafter for 3 years.

**Protocol Submission:** 

by December 2005

Study Start:

by March 2006

Final Report Submission:

by September 2008

2. Revision of the 20 mg Diastat® AcuDial<sup>TM</sup> syringe configuration such that the 12.5 mg dose (not the 10 mg dose) is the minimum achievable dose with the 20 mg syringe.

Completion:

by March 2007

Submit clinical protocols to your IND for this product. Submit nonclinical and chemistry, manufacturing, and controls protocols and all study final reports to this NDA. In addition, under 21 CFR 314.81(b)(2)(vii) and 314.81(b)(2)(viii), you should include a status summary of each commitment in your annual report to this NDA. The status summary should include expected summary completion and final report submission dates, any changes in plans since the last annual report, and, for clinical studies, number of patients entered into each study. All submissions, including supplements, relating to these postmarketing study commitments must be prominently labeled "Postmarketing Study Commitment Protocol", "Postmarketing Study Commitment Final Report", or "Postmarketing Study Commitment Correspondence."

### **Dear Healthcare Professional Letters**

We note that you have designed a risk management program (RMP) to minimize medication errors that may result from incorrect Diastat® AcuDial<sup>TM</sup> dosing due to failure to accurately dial and lock-in the prescribed dose in the delivery system and to ensure proper disposal of the unused diazepam gel after administration of the dose. A component of your RMP includes the mailing of several "Dear Pharmacist" and "Dear Doctor" letters. When these letters issue, we request that you submit a copy of each letter to this NDA and send a copy to the following address:

MEDWATCH, HFD-410 FDA 5600 Fishers Lane Rockville, MD 20857 NDA 20-648/S-008 Page 3

### Other Comments and Recommendations

We have the following additional recommendations regarding this supplemental application:

- Adding a reference to the tip length (4.4 cm. vs. 6 cm.) to the external packaging.
- Increasing the size of the dose window and the font of the dose appearing in the dose window of the Diastat AcuDial syringes.

While agreement on the above changes is not required prior to this action, we ask that you consider them post-approval and continue discussions with us regarding their implementation.

We remind you that you must comply with reporting requirements for an approved NDA (21 CFR 314.80 and 314.81).

If you have any questions, call Jacqueline H. Ware, Pharm.D., Senior Regulatory Project Manager, at (301) 594-2850.

Sincerely,

{See appended electronic signature page}

Russell Katz, M.D.
Director
Division of Neurology Products
Office of Drug Evaluation I
Center for Drug Evaluation and Research

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

Russell Katz 9/15/2005 03:20:04 PM