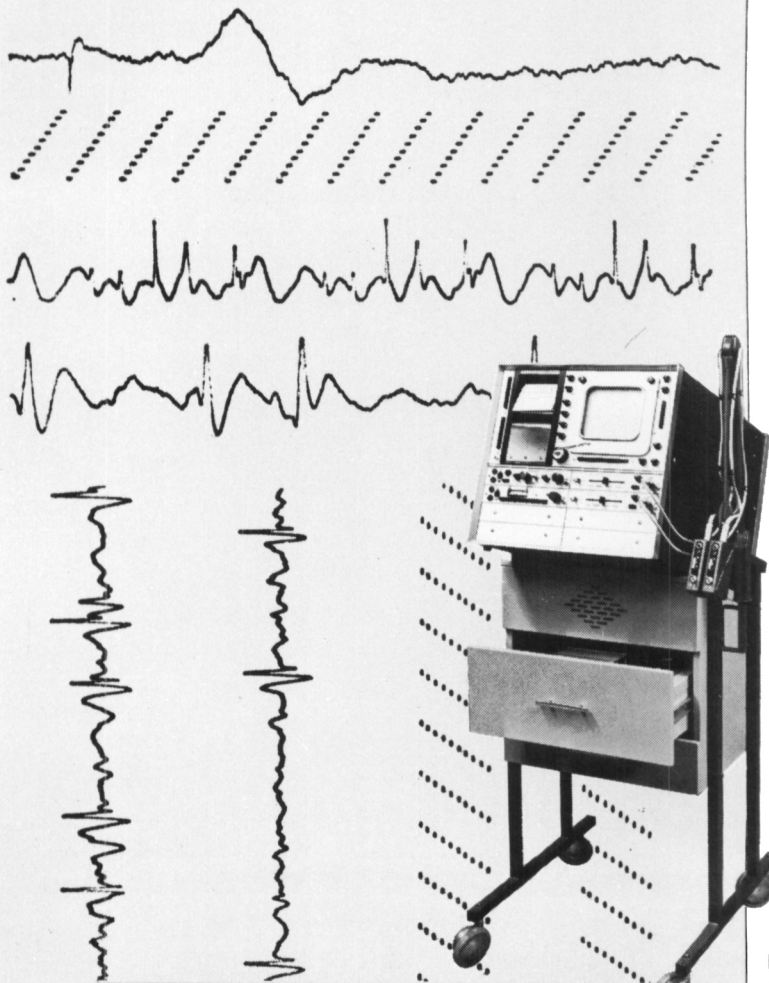




# FROM TECA: A UNIQUE NEW DIRECT RECORDING ELECTROMYOGRAPH

Multiple, single sweep and continuous records appear rapidly on inexpensive 100 mm wide recording paper—without chemical processing—on the TECA Model TE-4 Direct Recording EMG—using a new inertialess recording method.



The new **TECA TE-4** permits, through modular plug-in design, one to four EMG channels. ■ Four traces of information are displayed on a large 7" cathode ray tube and may be automatically recorded simultaneously on 100 mm wide recording paper. ■ An electronic time ruler, a direct reading latency indicator, a delayed stimulus nerve stimulator with dual pulse capability, and a stabilized current muscle stimulator, permit a wide range of accurate rapid tests. ■ A two channel magnetic tape recorder is integrated into the System. ■ The TE-4 is of solid state design, making extensive use of integrated circuits. Modular plug-in construction simplifies service and permits easy expansion of capabilities by addition of modules listed. ■ Many of the above standard EMG features pioneered by TECA are further detailed in the TE-4 Specifications. Also included are new amplifier, stimulator, and System features and extended performance ranges offered. ■ Optional plug-ins: Evoked Potential Averager, Dual Pulse Train Stimulator, Signal Delay Unit (Delay Line), Integrator, Strain Gauge Amplifier.

PHOTOCOPY OF ACTUAL TRACING

**TECA** is an independent company concerned for the past 15 years with the development, production and maintenance of neuromuscular instrumentation and electrodes for clinical and research studies. TECA also offers a complete range of autoclavable electrodes.

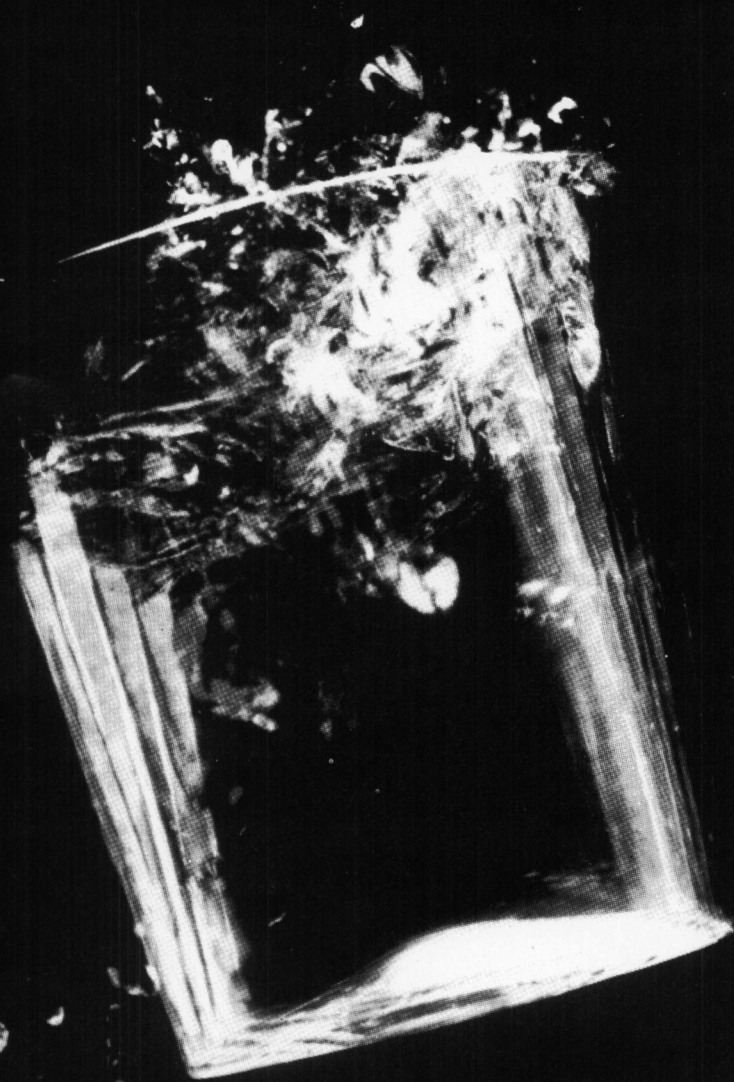
**GENIE AUDIO inc.**

ELECTRO MEDICAL & ACOUSTIC INSTRUMENTS  
1460 UNION AVENUE, MONTREAL 111, CANADA  
PHONE: (514) 844-7122 CABLE: GENIODIO

**TECA**  
CORPORATION

220 FERRIS AVE., WHITE PLAINS, N.Y.

# GET A HOLD ON THE SYMPTOMS OF PARKINSONISM



When the symptoms of Parkinson's disease begin to get out of hand, start Akineton® Tablets. Akineton, alone or as an adjunct to other therapy, can improve function in postencephalitic, arteriosclerotic, or idiopathic parkinsonism.

Used as initial therapy, Akineton reduces tremor, akinesia, and rigidity with minimal side effects. Used concomitantly with L-dopa, Akineton can enhance the potential usefulness of L-dopa, by allowing a reduction in its dosage and consequently in its side effects.

THE  
STABILIZER  
AKINETON®\*  
(biperiden)



Making Good Medicine Better

**pentagone**  
LABORATORY LTD.

montreal . quebec

\* Reg. T.M. of Knoll AG, Chemische Fabriken, Ludwigshafen, Germany



# AKINETON<sup>®</sup>

**works well  
in any  
Parkinsonism  
syndrome,  
regardless of  
etiology.  
Organic or  
drug-induced.**

- effective at low daily doses
- reduces rigidity and tremors
- infrequent adverse reactions
- versatile – available in 2 mg. tablets and injectable
- can be used concomitantly with other anti-parkinson drugs

## **AKINETON<sup>®</sup> (biperiden hydrochloride) Tablets**

**Contraindications:** The only known contraindication is sensitivity to Akineton hydrochloride.

**Warnings:** Isolated instances of mental confusion, euphoria, agitation and disturbed behavior have been reported in susceptible patients.

**Precautions:** Caution should be observed in patients with manifest

glaucoma, though no prohibitive rise in intraocular pressure has been noted following either oral or parenteral administration. Patients with prostatism or cardiac arrhythmia should be given this drug with caution. Occasionally, drowsiness may occur.

**Adverse reactions:** Adverse reactions encountered are primarily dry mouth and blurred vision. These side effects are usually slight and can be overcome by judicious reduction of dosage. If gastric irritation occurs, it can be avoided by administering during or after meals.

**Dosage and Administration:** Doses required to achieve the therapeutic goal are variable and must be individually and gradually adjusted.

Parkinson's disease: 1 tablet, 2 mg. three or four times daily.

Drug-induced extrapyramidal disorders: 1 tablet, 2 mg. one to three times daily.

### **How Supplied:**

Akineton hydrochloride tablets, 2 mg. each, bisected – bottles of 100 and 1000.

In epilepsy  
**Tegretol**<sup>(R)</sup>  
 provides control of  
 seizures and alleviation  
 of personality disorders

**References**

- 1 Livingston, S. F.: Comprehensive Management of Epilepsy in Infancy, Childhood and Adolescence, Charles C. Thomas, 1972.
- 2 Rodin, E. A., Rim, G. S., and Rennick, P.: Abstract from Program of the American Epilepsy Society Annual Meeting (Dec. 6) 1973, N.Y.
- 3 Livingston, S. F., et al: Carbamazepine (Tegretol) in Epilepsy Nine Year Follow-up Study with Special Emphasis on Untoward Reactions, Dis. Nerv. System 35:103-107 (March) 1974.

**Brief Prescribing Information****Tegretol® 200 mg****Anticonvulsant****Properties**

Tegretol has a proven anticonvulsant effect. In addition, Tegretol also has a distinct psychotropic effect, improving the mood and relieving irritability of the epileptic patient with associated behavioral or personality disturbances. Tegretol relieves or diminishes the pain associated with trigeminal neuralgia, usually within 24 - 48 hours.

**Indications****1 Epilepsy**

Temporal lobe (psychomotor) epilepsy, and as an adjunct in secondary epilepsy or partial epilepsy with complex symptoms or secondarily generalized seizures.

**2 Neuralgia**

Trigeminal neuralgia (tic douloureux), glossopharyngeal neuralgia.

**Dosage**

A gradual increasing schedule is recommended with adjustment to suit the needs of the individual. When Tegretol is added to, or substituted for, existing anticonvulsant therapy, the dosage of the other drug(s) should be gradually reduced.

**Epilepsy**

Initially ½ - 1 tablet (100 mg - 200 mg) twice daily increasing over a period of 4 - 6 days until optimal control is achieved (usually with 3 tablets daily).

**Trigeminal Neuralgia**

Initially - 200 mg daily in divided doses of 100 mg (½ tablet), increasing by 200 mg (1 tablet) daily until pain relief is obtained. Dosage in excess of 1200 mg (6 tablets) daily is not recommended.

All patients should be maintained on the minimum effective dose.

**Adverse Reactions**

Most frequently reported are: drowsiness, disturbances of accommodation, vertigo, dizziness and gastrointestinal disturbances. They usually occur only during initial phase of therapy and can be minimized, if not prevented, by starting treatment at a low dosage. Although rare, effects on the blood forming elements, skin, genitourinary and circulatory system have been reported. The most serious adverse reactions which may require discontinuation of therapy are the haematological including blood dyscrasias, the hepatic including jaundice, the dermatological, the neurological, the cardiovascular, the genito-urinary, the digestive, and the ocular. Miscellaneous including fever and chills, lymphadenopathy aching joints and muscles, leg cramps and conjunctivitis.

**Precautions**

Careful clinical and laboratory supervision should be instituted prior to and maintained throughout treatment. Caution should be observed while treating patients with increased ocular pressure or urinary retention and also in patients with a history of coronary artery disease, organic heart disease or congestive failure. There is a possibility of agitation and confusion in the elderly or activating a latent psychosis.

**Contraindications**

Concomitant use of monoamine oxidase inhibitors (two weeks should elapse before Tegretol is prescribed for patients who have received MAOI drugs), first trimester of pregnancy, nursing mothers, patients with a history of hepatic disease or serious blood disorder, or known sensitivity to any tricyclic compound. Tegretol should not be given to women of child-bearing potential unless, in the opinion of the physician, the expected benefits to the patient outweigh the possible risk to the foetus.


**Warnings**

Although reported infrequently, serious adverse effects have been observed during the use of Tegretol. Agranulocytosis and aplastic anemia have occurred in a few instances with a fatal outcome. Leucopenia, thrombocytopenia and hepatocellular and cholestatic jaundice have also been reported. It is, therefore, important that Tegretol should be used carefully and close clinical and frequent laboratory supervision should be maintained throughout treatment in order to detect as early as possible signs and symptoms of a possible blood dyscrasia.

**Treatment of Overdosage**

No specific antidote.

**Availability****Tegretol 200 mg:**

Each round, white, single scored tablet with  seal contains: carbamazepine 200 mg, available in bottles of 50 and 500.

Full information is available on request.

## IVth INTERNATIONAL CONGRESS ON NEUROMUSCULAR DISEASES

The IVth International Congress on Neuromuscular Diseases will be held in Montreal, Canada from **Sunday 17th to Thursday 21st, September, 1978**. The Scientific Program will consist of symposia, free communications, work shops and poster presentations. Attractive social events are also planned.

Information may be requested from the Secretariat of the Congress, 3587 University Street, Montreal, Quebec, Canada.

**Geigy**

Dorval, P.Q. H9S 1B1

G-5052

# <sup>P</sup> Symmetrel<sup>®</sup> Capsules 100 mg (amantadine HCl)

## for the management of Parkinson's syndrome

 **Chemically distinct**

(Not related to levodopa or anticholinergic antiparkinson drugs.)

 **Fast onset of action**

(Usually effective within 1 week in contrast to the slower response from levodopa.)

 **Effective with levodopa**

(Either initiated concurrently or added to levodopa. Additional benefit may result — such as smoothing out of fluctuations in performance which sometimes occur when levodopa is administered alone. When the levodopa dose must be reduced because of side effects, the addition of Symmetrel may result in better control of Parkinson's syndrome than is possible with levodopa alone.)

 **Effective with other anticholinergic antiparkinson drugs**

(When these drugs, e.g. benzotropine mesylate, provide only marginal benefits, Symmetrel used concomitantly may provide the same degree of control of Parkinson's syndrome, often with a lower dose of anticholinergic medication, and a possible reduction in anticholinergic side effects.)

 **Effective alone**

(Lessening of Parkinsonian symptomatology usually evident within one week in responsive patients.)

**CONTRAINDICATIONS** "Symmetrel" is contraindicated in patients with known hypersensitivity to the drug.

**WARNINGS** Patients with a history of epilepsy or other "seizures" should be observed closely for possible untoward central nervous system effects. Patients with a history of congestive heart failure or peripheral edema should be followed closely as there are patients who developed congestive heart failure while receiving "Symmetrel" (amantadine HCl).

Safety of use in pregnancy has not been established. Therefore, "Symmetrel" should not be used in women with childbearing potential, unless in the opinion of the physician, the expected benefit to the patient outweighs the possible risks to the fetus (see Toxicology/Effects on Reproduction).

Since the drug is secreted in the milk, "Symmetrel" should not be administered to nursing mothers.

**PRECAUTIONS** The dose of "Symmetrel" may need careful adjustment in patients with renal impairment, congestive heart failure, peripheral edema, or orthostatic hypotension. Since "Symmetrel" is not metabolized and is mainly excreted in the urine, it may accumulate when renal function is inadequate.

Care should be exercised when administering "Symmetrel" to patients with liver disease, a history of recurrent eczematoid rash, or to patients with psychosis or severe psychoneurosis not controlled by chemotherapeutic agents. Careful observation is required when "Symmetrel" is administered concurrently with central nervous system stimulants.

Patients with Parkinson's syndrome improving on "Symmetrel" should resume normal activities gradually and cautiously, consistent with other medical considerations, such as the presence of osteoporosis or phlebotrombosis.

Patients receiving "Symmetrel" (amantadine HCl) who note central nervous system effects of blurring of vision should be cautioned against driving or working in situations where alertness is important.

"Symmetrel" (amantadine HCl) should not be discontinued abruptly since a few patients with Parkinson's syndrome experienced a Parkinsonian crisis, i.e., sudden marked clinical deterioration, when this medication was suddenly stopped.

The dose of anticholinergic drugs or of "Symmetrel" should be reduced if atropine-like effects appear when these drugs are used concurrently.

**ADVERSE REACTIONS** Adverse reactions reported below have occurred in patients while receiving "Symmetrel" (amantadine HCl) alone or in combination

with anticholinergic antiparkinson drugs and/or levodopa.

The more important adverse reactions are orthostatic hypotensive episodes, congestive heart failure, depression, psychosis and urinary retention; and rarely confusion, reversible leukopenia and neutropenia, and abnormal liver function test results. Other adverse reactions of less importance which have been observed are: anorexia, anxiety, ataxia, confusion, hallucinations, constipation, dizziness (lightheadedness), dry mouth, headache, insomnia, livedo reticularis, nausea, peripheral edema, drowsiness, dyspnea, fatigue, hyperkinesia, irritability, nightmares, rash, slurred speech, visual disturbance, vomiting and weakness; and very rarely eczematoid dermatitis and oculogyric episodes.

Some side effects were transient and disappeared even with continued administration of the drug.

**DOSAGE AND ADMINISTRATION** The initial dose of "Symmetrel" is 100 mg daily for patients with serious associated medical illnesses or who are receiving high doses of other antiparkinson drugs. After one to several weeks at 100 mg once daily, the dose may be increased to 100 mg twice daily. When "Symmetrel" and levodopa are initiated concurrently, "Symmetrel" should be held constant at 100 mg daily or twice daily while the daily dose of levodopa is gradually increased to optimal dose. When used alone, the usual dose of "Symmetrel" is 100 mg twice a day.

Patients whose responses are not optimal with "Symmetrel" (amantadine HCl) at 200 mg daily may benefit from an increase to 300 mg daily in divided doses. Patients who experience a fall-off of effectiveness may regain benefit by increasing the dose to 300 mg daily; such patients should be supervised closely by their physicians.

**DOSAGE FORMS** CAPSULES (bottles of 100) - each red, soft gelatin capsule contains 100 mg of amantadine HCl.

Product monograph, with complete references, available upon request.

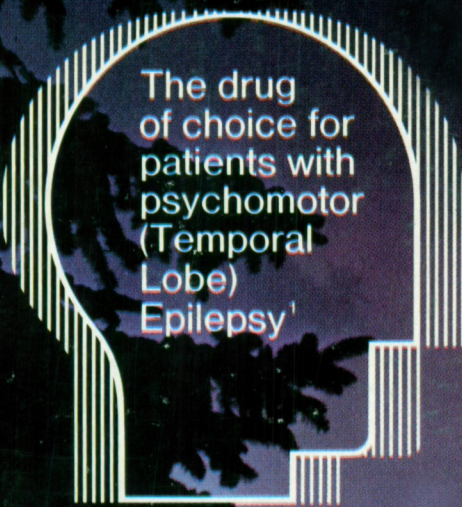


Subsidiary of E.I. du Pont de Nemours & Co. (Inc.)


In epilepsy\*

# Tegretol<sup>®</sup>

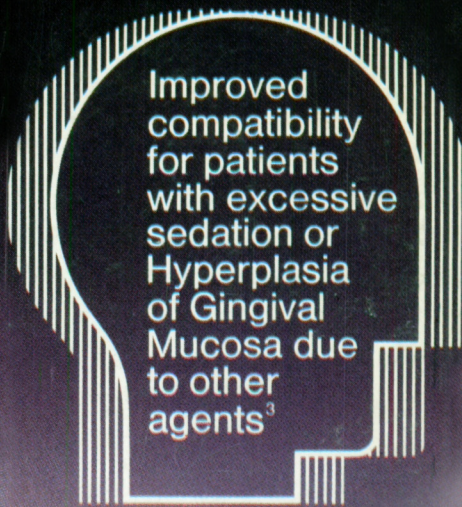
provides control of seizures  
and alleviation of personality  
disorders.



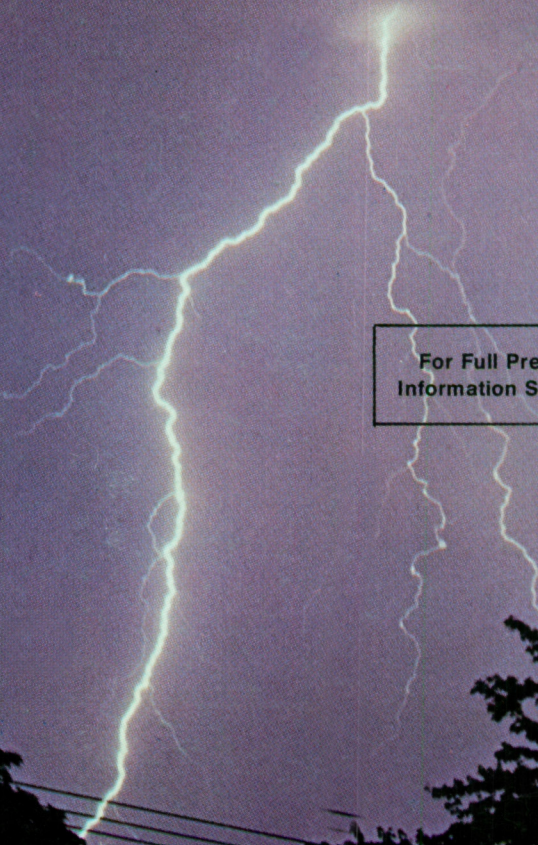
The drug  
of choice for  
patients with  
psychomotor  
(Temporal  
Lobe)  
Epilepsy<sup>1</sup>



Reliable  
control for  
patients who  
are refractory  
to treatment  
with other  
anticonvul-  
sants<sup>2</sup>



Improved  
compatibility  
for patients  
with excessive  
sedation or  
Hyperplasia  
of Gingival  
Mucosa due  
to other  
agents<sup>3</sup>



For Full Prescribing  
Information See Page x

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Complete information available  
from Geigy or through your  
Geigy representative

\*See indications, brief prescribing  
information