September 22, 2005

IMPORTANT ALERT REGARDING MEDICATION ERRORS
TOPROL-XL® and TOPAMAX®
TOPROL-XL® and TEGRETOL® and TEGRETOL-XR®

Dear Pharmacist:

AstraZeneca has received reports of medication errors involving confusion between its beta blocker **TOPROL-XL®** (metoprolol succinate) extended release tablets, indicated for the treatment of hypertension, long-term treatment of angina pectoris, and heart failure NYHA Class II or III, and **Topamax®** (topiramate), a product of Ortho-McNeil Neurologics, Inc, indicated for the treatment of epilepsy and migraine prophylaxis. There have also been reports of medication errors involving confusion between TOPROL-XL and **Tegretol®** or **Tegretol-XR®** (carbamazepine), products of Novartis Pharmaceuticals Corporation, indicated for the treatment of complex partial seizures, generalized tonic-clonic seizures, and trigeminal neuralgia. These reports include instances where TOPROL-XL was incorrectly administered to patients instead of Topamax, Tegretol, or Tegretol-XR, and vice versa, some of them leading to adverse events.

Adverse events have been reported to occur as a result of nonadministration of the intended medication and/or exposure to the wrong medication. In some cases, hospitalization was required. Examples of serious events reported that might represent relapses and/or worsening of the underlying conditions under treatment include recurrence of seizures; return of hallucinations; suicide attempt; and recurrence of hypertension. Examples of serious events consistent with the pharmacologic activity of the administered agent include bradycardia in a patient erroneously receiving TOPROL-XL.

According to the medication error reports, verbal and written prescriptions were incorrectly interpreted and/or filled due to the similarity in names between TOPROL-XL, Topamax, Tegretol, and Tegretol-XR. Furthermore, overlapping strengths between TOPROL-XL and Topamax (25 mg, 50 mg, 100 mg, and 200 mg) and between TOPROL-XL, Tegretol and Tegretol-XR (100 mg and 200 mg), and the fact that these three products were stocked close together in pharmacies may also have contributed to causing these errors.

TOPROL-XL® (metoprolol succinate)extended release tablets are available as white, biconvex, film-coated, and scored tablets with the following characteristics

Tablet	Shape	Engraving	Sample
25 mg*	Oval	A ß	
50 mg	Round	A mo	
100 mg	Round	A ms	
200 mg	Oval	A my	

*The 25 mg tablet is scored on both sides

Topamax tablets are available as debossed, coated, round tablets with the following characteristics

Tablet	Color	Engraving	Sample
25 mg	White	“TOP” on one side, “25” on the other	
50 mg	Light-Yellow	“TOPAMAX” on one side, “50” on the other	
100 mg	Yellow	“TOPAMAX” on one side, “100” on the other	
200 mg	Salmon	ìTOPAMAX ”on one side, “200” on the other	

Tegretol tablets are single-scored tablets with the following characteristics

Tablet	Color/Shape	Engraving	Sample
100 mg	Red speckled, Pink Round	“TEGRETOL” on one side, “52” twice on the scored side	
200 mg	Pink Capsule-shaped	“TEGRETOL” on one side, “27” twice on the scored side	

Tegretol XR tablets are coated, round tablets with the following characteristics

Tablet	Color	Engraving	Sample
100 mg	Yellow	“T” on one side, “100 mg”on the other side	
200 mg	Pink	“T” on one side, “200 mg”on the other side	
400 mg	Brown	“T” on one side, “400 mg”on the other side	

TOPROL-XL® (metoprolol succinate) has a boxed warning against abrupt cessation of therapy in patients with ischemic heart disease as it may precipitate angina or myocardial infarction.

Tegretol has a boxed warning regarding aplastic anemia and agranulocytosis.

Topamax, Tegretol-XR, and Tegretol have a warning that as with all antiepileptic drugs, they should be withdrawn gradually to minimize the potential of increased seizure frequency.

The products involved in medication errors are indicated for the treatment of serious medical conditions. Erroneous administration, or delay in administration of the prescribed medications of Toprol-XL, Topamax, Tegretol, and Tegretol-XR may cause serious health consequences.

Your assistance is requested in helping to avoid future dispensing errors. Steps you can take to decrease the potential for medication errors include

- Review and provide ongoing training about accepted standards of practice related to accurate medication administration with all staff members
- Arrange product inventory to help differentiate medications from one another, with special consideration for products with similar looking labels, names, or strengths. This may include the use of visual discriminators such as signs or markers
- Read labels several times to confirm the appropriate product is being dispensed, including when selecting the product, when packaging the product, and when returning the product to the shelf
- Be sure a pharmacist reviews all prescriptions/orders before they are dispensed

To help minimize the risk for dispensing errors, AstraZeneca will also be notifying health care professionals as to the potential for drug name confusion.

If you become aware of any name confusion and/or dispensing errors, you should report them immediately to the appropriate manufacturer (AstraZeneca 1-800-236-9933; Ortho-McNeil Neurologics, Inc. 1-800-682-6532, Novartis Pharmaceuticals Corporation 1-888-669-6682). You can also report medication errors to the FDA's MEDWATCH program at www.fda.gov/medwatch, 1-800-FDA-1088 or fax to 1-800-FDA-0178 or the USP-ISMP Medication Errors Reporting Program 1-800-233-7767.

Also, please refer to the enclosed full Prescribing Information for TOPROL-XL, or visit www.TOPROL-XL.com

Thank you for your attention to this matter.

Sincerely,

Glenn J. Gormley MD, PhD
Chief Medical Officer