### INDICATIONS

#### **Mighty and Mutated**

Forget doping. The next generation of athletic enhancement was reported by researchers at Case Western Reserve University, Cleveland, where overexpression of the PEPCK-C gene in the skeletal muscle tissue of mice gave subjects the ability to run a stunning 6 km at a speed of 20 m/min on a rodent treadmill, a feat the Bureau of Indications has not been able to accomplish since ninth grade, despite the dual advantages of being a biped and owning an expensive gym membership. The PEPCK-C gene normally is involved with gluconeogenesis in the liver and kidney cortex and in glyceroneogenesis in liver and adipose tissue. The researchers, whose finding were published in the Journal of Biological Chemistry, wrote that, "the three PEPCK-Cmus mice tested ate, on a body weight basis, an average of 60% more food than controls. Despite eating more, 18-month-old PEPCK-C<sup>mus</sup> mice weighed less and had dramatically less body fat." If this all sounds too good to be true, take it from Whiskers, who completed the annual Iron Mouse triathlon this year in a record 8 hours flat: "This record is not tainted at all. At all. Period." He then lifted his treadmill over his head and threw it to the opposite end of the cage in anger.

### fMRI Study: Giuliani in '08

In anticipation of the 2008 presidential election, researchers recently performed functional magnetic resonance imaging on the brains of 20 likely voters as they viewed videos and pictures of different 2008 presidential candidates. In a letter to the New York Times, investigators reported that initial activity in the amygdala at the sight of a photo of Mitt Romney indicated anxiety in some of the 20 subjects, but that activity died down once voters watched videos of the candidate giving a stump speech, showing that voters may grow more comfortable with Mitt over time. In another finding, a video of Fred Thompson promoted activity in the superior temporal sulcus and

## INDEX OF ADVERTISERS

Amylin Pharmaceuticals, Inc. Byetta	31-32
Bayer HealthCare LLC Aspirin	21
<b>Boehringer Ingelheim Pharmaceuticals, inc.</b> Flomax	4a-4b
Forest Laboratories, Inc.	
Namenda Corporate Lexapro	8a-8b 22a-22b 28a-28b, 29
Eli Lilly and Company Cymbalta	17-19
Merck & Co., Inc.	
Corporate Janumet	6-7, 15 10a-10b, 11
Novo Nordisk Inc. Corporate	4
Pfizer Inc.	
Lyrica Lipitor	3, 26a-26f 31-32
Reliant Pharmaceuticals, Inc.	
Lovaza	24-26
Wyeth Pharmaceuticals Inc.	
Lybrel	12-14

the inferior frontal cortex, "both areas involved in empathy," reported the researchers. And finally, voters' brains exhibited greater activity in the right amygdala, right anterior temporal pole, and hypothalamus—areas typically associated with erotic arousal—to photos of Rudy Giuliani dressed as a woman than in response to pictures of Hillary Clinton. "Our results reveal some voter impressions on which this election may well turn," wrote the investigators. "A pair of red high heels could clinch the nomination for Giuliani." The researchers conceded that their investigation was somewhat compromised by the inclusion of photos of little-known Republican candidate Ron Paul, whom voters routinely mistook for Mr. Rogers.

### FDA: Fun Is Toxic. Happy Holidays!

In a recently issued, presumably taxpayer-funded pamphlet, "Food Safety Tips for Healthy Holidays," the Food and Drug Administration cautioned consumers against the many perils of the holiday season. "Parties, family dinners, and other gatherings where food is served are all part of the holiday cheer. But the merriment can change to misery if food

makes you or others ill." Indeed. Among the FDA's suggestions for a healthy, happy holiday: "Don't eat uncooked cookie dough." "Make sure oysters in oyster dressing are thoroughly cooked." And "when making your own eggnog or other recipe calling for raw eggs, use pasteurized shell eggs, liquid or frozen pasteurized egg products, or powdered egg whites." But enough brandy kills the bacteria, right? Hopefully, Santa heeds the agency's warning to wash thoroughly before dunking those thoroughly cooked cookies into milk—the reindeer stall is a breeding ground for germs.

—Denise Napoli

# **LIPITOR**<sup>®</sup> (Atorvastatin Calcium) Tablets Brief Summary of Prescribing Information

LIPITOR® (Atorvastatin Calcium) Tablets

Brief Summary of Prescribing Information

CONTRAINDICATIONS: Active liver disease or unexplained persistent elevations of serum transaminases. Hypersensitivity to any component of this medication. Pregnancy and Lactation — Atherosclerosis is a chronic process and discontinuation of lipid-lowering drugs during pregnancy should have little impact on the outcome of long-term therapy of primary hypercholesterolemia. Cholesterol and other products of cholesterol biosynthesis are essential components for fetal development (including synthesis of steroids and cell membranes). Since HMG-CoA reductase inhibitors decrease cholesterol synthesis and possibly the synthesis of other biologically active substances derived from cholesterol, they may cause fetal harm when administered to pregnant women. Therefore, HMG-CoA reductase inhibitors are contraindicated during pregnancy and in nursing mothers. ATDRIVASTATIN SHOULD BE ADMINISTERED TO WOMEN OF CHILDBEARING AGE ONLY WHEN SUCH PATIENTS ARE HIGHLY UNLIKELY TO CONCEIVE AND HAVE BEN INFORMED OF THE POTENTIAL HAZARDS. If the patient becomes pregnant while taking this drug, therapy should be discontinued and the patient apprised of the potential hazard to the fetus.

WARNINGS: Liver Dysfunction — HMG-CoA reductase inhibitors, like some other lipid-lowering therapies, have been associated with biochemical abnormalities of liver function. Persistent elevations (>3 times the upper limit of normal [UNI] occurring on 2 or more occasions) in serum transaminases occurred in 0.7% of patients who received atorvastatin in clinical trials developed jaundice. Increases in liver function tests (LFT) in other patients were not associated with jaundice or other clinical signs or symptoms. Upon dose reduction, drug interruption, or discontinuation, transaminase levels returned to or near pretreatment levels without sequelae. Eighteen of 30 patients with persistent LFF elevations continued treatment with a torvastatin. Patients who develop increased tran

ins such situations, but there is no assurance that such monitoring will prevent the occurrence of severe impopathy. Abrovatatin therapy should be temporarily withheld or discontinued in any patient with an acute, serious condition suggestive of a myopathy or having a risk factor profisposing to the development of renal failure secondary to habdomyloyis (e.g. severe acute infection, hypotesion, major surgery, traums, severe metabolic, endocrine and electrolyte disorders, and uncontrolled seturos; and the severe acute infection, hypotesion, major surgery, traums, severe metabolic, endocrine and electrolyte disorders, and uncontrolled seturos; and the severe acute infection, hypotesion, and the made to creat other underlying medical problems (see INDICATIONS AND USAGE in full prescribing information), information for Patients. Patients should be advised to report promptly unexplained muscle pain, tenderness, or weakness, particularly if accompanied by malaise or lever. Drug Interactions — The risk of myopathy during treatment with drugs of this caless in circased with concurrent administration of any opathy during treatment with drugs of this caless in circased with concurrent administration of any opathy during treatment with drugs of this cales in circased with concurrent administration of a myopathy during treatment with drugs of the cales in the created approximately 38%. However, LDL-C reduction was not interaction with other drugs metabolicady with the same cytochrome accompanies are not expected. Interaction with other drugs metabolicady with the same cytochrome accompanies are not expected. Interaction with other drugs metabolicady with the same disponance of the contraction of the contra

fetus. Nursing Mothers — Nursing rat pups had plasma and liver drug levels of 50% and 40%, respectively, of that in their mother's milk. Because of the potential for adverse reactions in nursing infants, women taking LIPITOR should not breast-feed (see CONTRAINDICATIONS). Pediatric Use — Safety and effectiveness in patients 10-17 years of age with heterozygous familial hypercholesterolemia have been evaluated in a controlled clinical trial of 6 months duration in adolescent boys and postmenarchal girls. Patients treated with LIPITOR had an adverse experience profile generally similar to that of patients treated with placebo, the most common adverse experience profile generally similar to that of patients treated with placebo, the most common adverse experience profile generally similar to that of patients treated with placebo, the most common adverse experience profile generally similar to that of patients treated with placebo, the most common adverse experiences observed in both groups, regardless of causality assessment, were infections. Doses greater than 20 mg have not been studied in this patient population. In this limited controlled study, there was no detectable effect on growth or sexual maturation in boys or on menstrual cycle length in girls (see CLINICAL PHARMACOLOGY, Clinical Studies section in full prescribing information. Adolescent females should be counseled on appropriate contraceptive methods while on LIPITOR therapy (see CONTRAINDICATIONS and PRECAUTIONS, Pregnancy). LIPITOR has not been studied in controlled clinical trials involving pre-pubertal patients or patients younger than 10 years of age. Clinical efficacy with doses up to 80 mg/day for 1 year have been evaluated in an uncontrolled study of patients with homozygous FH including 8 pediatric patients (see CLINICAL PHARMACOLOGY, Clinical Studies: Homozygous Familial Hypercholesterolemia in full prescribing information). Geriatric Use — The safety and efficacy of atovastatin (10-80 mg) in the second properties of age was evaluated in th

Stroke on study entry appeared to be at increased risk for hemorrhagic stroke.

ADVERSE REACTIONS: LIPITOR is generally well-tolerated. Adverse reactions have usually been mild and transient. In controlled clinical studies of 2502 patients, <2% of patients were discontinued due to adverse experiences attributable to attorycatatin. The most frequent adverse events thought to be relat to atoryastatin were constituation, flatulence, dyspepsia, and addominal pain. Clinical Adverse Experie—Adverse experiences reported in ≥2% of patients in placebo-controlled clinical studies of atoryasta regardless of causality assessment, are shown in the following table.

Adverse Events in Placebo-Controlled Studies (% of Patients)						
BODY SYSTEM Adverse Event	Placebo N = 270	Atorvastatin 10 mg	Atorvastatin 20 mg	Atorvastatin 40 mg	Atorvastatin 80 mg	
	IN = 270	N = 863	N = 36	N = 79	N = 94	
BODY AS A WHOLE						
Infection	10.0	10.3	2.8	10.1	7.4	
Headache	7.0	5.4	16.7	2.5	6.4	
Accidental Injury	3.7	4.2	0.0	1.3	6.4 3.2 3.2	
Flu Syndrome	1.9	2.2	0.0	2.5	3.2	
Abdominal Pain	0.7	2.8	0.0	3.8	2.1	
Back Pain	3.0	2.8	0.0	3.8	1.1	
Allergic Reaction	2.6	0.9	2.8	1.3	0.0	
Asthenia	1.9	2.2	0.0	3.8	0.0	
DIGESTIVE SYSTEM						
Constipation	1.8	2.1	0.0	2.5	1.1	
Diarrhea	1.5	2.7	0.0	3.8	5.3	
Dyspepsia	4.1	2.3	2.8	1.3	2.1	
Flatulence	3.3	2.1	2.8	1.3	1.1	
RESPIRATORY SYSTEI	М					
Sinusitis	2.6	2.8	0.0	2.5	6.4	
Pharyngitis	1.5	2.5	0.0	1.3	2.1	
SKIN AND APPENDAG	GES					
Rash	0.7	3.9	2.8	3.8	1.1	
MUSCULOSKELETAL S	SYSTEM					
Arthralgia	1.5	2.0	0.0	5.1	0.0	
Myalgia	1.1	3.2	5.6	1.3	0.0	

Inglo-Scandinavian Cardiac Outcomes Trial (ASCOT) — In ASCOT (see CLINICAL PHARMACOLOGY, Dinical Studies in full prescribing information) involving 10,305 participants treated with LIPITOR 10 mg daily ne5,168) or placebo (ne5,137), the safety and tolerability profile of the group treated with LIPITOR was comparable to that of the group treated with placebo during a median of 3.3 years of follow-up. Collaborative Atorvastatin Diabetes Study (CARDS) — In CARDS (see CLINICAL PHARMACOLOGY, Clinical Studies in full prescribing information) involving 2838 subjects with type 2 diabetes treated with LIPTIOR 10 gdaily (n=1428) or placebo (n=1410), there was no difference in the overall frequency of adverse events serious adverse events between the treatment groups during a median follow-up of 3.9 years. No cases of rhabdomyolysis were reported.

thebdomyolysis were reported.

Treating to New Targets Study (TNT) — In TNT (see CLINICAL PHARMACOLOGY, Clinical Studies in full prescribing information) involving 10,001 subjects with clinically evident CHD treated with LIPITOR 10 mg daily (n=5006) or LIPITOR 80 mg daily (n=4995), there were more serious adverse events and discontinuations due to adverse events in the high-dose atorvastatin group (92, 1.8%, 497, 9.9%, espectively) as compared to the low-dose group (69, 1.4%, 404, 8.1%, respectively) during a median follow up of 4.9 years. Persistent transaminase elevations (2.3 x ULN twice within 4-10 days) occurred in 2(1.3%, individuals with atorvastatin 80 mg and in nine (0.2%) individuals with atorvastatin 10 mg. Elevations of CK (2.10 x ULN) were low overall, but were higher in the high-dose atorvastatin treatment group (13, 0.3%). compared to the low-dose atorvastatin group (6, 0.1%).

Incremental Decrease in Endpoints Through Aggressive Lipid Lowering Study (IDEAL) — In IDEAL (see CLINICAL PHARMACOLOGY, Clinical Studies in full prescribing information) involving 8,888 subjects treat with LIPITOR 80 mg/day (n=4439) or simvastatin 20-40 mg/day (n=4439), there was no difference in the overall frequency of adverse events or serious adverse events between the treatment groups during a median follow-up of 4,8 years.

The following adverse events were reported, regardless of causality assessment in patients treated with atorvastatin in clinical trials. The events in italics occurred in ≥2% of patients and the events in plain type occurred in <2% of patients.

atorvastatu in clinical trials. The events in italics occurred in ≥2% of patients and the events in plain type occurred in ≥2% of patients. But of patients. But of patients. But of patients. Budy as a Whole: Chest pain, face edema, fever, neck rigidity, malaise, photosensitivity reaction, generalized edema. Digestive System: Nausea, gastroenteritis, liver function tests abnormal, colitis, owniting, gastritis, dry mouth, rectal hemorrhage, esophagitis, eructation, glossitis, mouth ulceration, anorexia, increased appetite, stomatitis, biliary pain, cheilitis, duodenal ulcer, dysphagia, enteritis, melena, gum hemorrhage, stomach ulcer, tensemus, ulcerative stomatitis, hepatitis, pancreastiis, cholestatic jaundice. Respiratory System: Bronchitis; rhinitis, pneumonia, dyspnea, asthma, epistaxis. Nervous System: Insomina, dizziness, paresthesia, somonlence, annesia, abnormal dreams, libiod decreased, emotional lability, incoordination, peripheral neuropathy, torticollis, facial paralysis, hyperkinesia, depression, hypesthesia, hypertonia: Missculoskeletal System: Arthritis, leg cramps, burstis, tenosynovitis, myesthenia, tendinous contracture, myositis. Skin and Appendages. Pruritus, contact dermatitis, alopecia, dry skin, sweating, acne, urticaria, eczema, seborrhea, skin ulcer. Urogenital System: Urinary tract infection, hematuria, albuminuria, urinary frequency, cystitis, impotence, dystira, kidney calculus, nocturia, epiddymitis, fibrocystic breast, vaginal hemorrhage, breast enlargement, metrorrhagia, nephritis, urinary incontinence, urinary retunion, urinary urgency, abnormal ejaculation, uterine hemorrhage. Special Senses: Amblyopia, tinnitus, dry eyes, refraction disorder, eye hemorrhage, deafness, glaucoma, parosmia, taste loss, taste perversion. Cardiovascular System: Palpitation, vasodilation, syncope, migraine, postural hypotension, phlebitis, arrhythmia, angina pectoris, hypertension. Netabolic and Nutritional Disorders: Peripheral dema, hyperglycemia, creatine phosphokinase increased, gout, weight gain

Please see full prescribing information for additional information about LIPITOR.

July 2007



Dublin, Ireland Rev. 15. March 2007

LPU00370B © 2007 Pfizer Inc. All rights reserved.

