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The reasons to prescribe Glucotrol can pile up fast

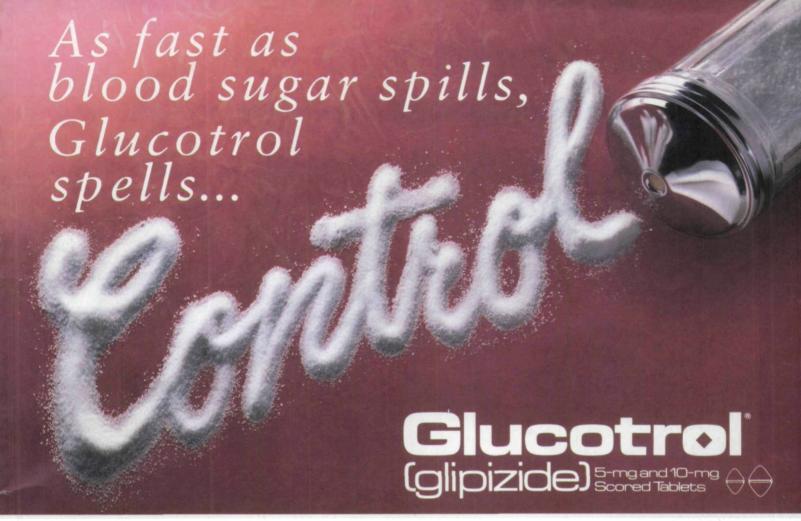
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Please see brief summary of GLUCOTROL* (glipizide) prescribing information on next page.

When diet alone fails in non-insulin-dependent diabetes mellitus



References: 1. Goebel R, Leb G: Effects of glyburide and glipizide on levels of immunoreactive insulin and blood sugar, in *Glipizide: A Worldwide Review.* Princeton, NJ, Excerpta Medica, 1984, pp 9-15. 2. Melander A, Wählin-Boll E: Clinical pharmacology of glipizide. *Am J Med* 1983;75:8-14.

Brief Summary of Prescribing Information
INDICATIONS AND USAGE: GLUCOTROL is indicated as an adjunct to diet for the control of hyperglycemia in patients with non-insulin-dependent diabetes mellitus (NIDDM, type II) after an adequate trial of dietary therapy has proved

CONTRAINDICATIONS: GLUCOTROL is contraindicated in patients with known hypersensitivity to the drug or with

diabetic ketoacidosis, with or without coma, which should be treated with insulin.

SPECIAL WARNING ON INCREASED RISK OF CARDIOVASCULAR MORTALITY: The administration of oral hypoglycemic diabetic ketoacidosis, with or without coma, which should be treated with insulin.

SPECIAL WARNING ON INCREASED RISK OF CARDIOVASCULAR MORTALITY: The administration of oral hypoglycemic drugs has been reported to be associated with increased cardiovascular mortality as compared to treatment with diet alone or diet plus insulin. This warning is based on the study conducted by the University Group Diabetes Program (IGBDP), a long-term prospective clinical trial designed to evaluate the effectiveness of glucose-lowering drugs in preventing or delaying vascular complications in patients with non-insulin-dependent diabetes. The study involved 823 patients who were randomly assigned to one of four treatment groups (Diabetes, 19, supp. 2:74-830, 1970).

UGDP reported that patients treated for 5 to 5 years with diet plus a fixed dose of tolbutamide (1.5 grams per day) had a rate of cardiovascular mortality approximately 2-1/2 times that of patients treated with diet alone. A significant increase in total mortality was not observed, but the use of tolbutamide vas discontinued based on the increase in cardiovascular mortality, thus limiting the opportunity for the study to show an increase in overall mortality. Despite controversy regarding the interpretation of these results, the findings of the UGDP study provide an adequate basis for this warning. The patient should be informed of the potential risks and advantages of GLUCOTROL and of alternative modes of therapy.

Although only one drug in the sulfonylurea class (tolbutamide) was included in this study, it is prudent from a safety standpoint to consider that this warning may also apply to other oral hypoglycemic drugs in this class, in view of their close similarities in mode of action and chemical structure.

PRECAUTIONS: Renal and Hepatic Disease: The metabolism and excretion of GLUCOTROL may be slowed in patients with impaired renal and/or hepatic function. Hypoglycemia may be prolonged in such patients should it occur. Hypoglycemia: All sulfonylureas are capable

than one glucose-lowering drug is used.

Loss of Control of Blood Glucose: A loss of control may occur in diabetic patients exposed to stress such as fever, trauma, infection or surgery. It may then be necessary to discontinue GLUCOTROL and administer insulin.

Laboratory Tests: Blood and urine glucose should be monitored periodically. Measurement of glycosylated

may be useful.

nemogroon may be userur. Information for Patients: Patients should be informed of the potential risks and advantages of GLUCOTROL, of alternative modes of therapy, as well as the importance of adhering to dietary instructions, of a regular exercise program, and of regular testing of urine and/or blood glucose. The risks of hypoglycemia, its symptoms and treatment, and conditions that predispose to its development should be explained to patients and responsible family

members. Primary and secondary failure should also be explained. **Drug Interactions:** The hypoglycemic action of sulfonylureas may be potentiated by certain drugs including nonsteroidal anti-inflammatory agents and other drugs that are highly protein bound, salicylates, sulfonamides, chloramphenicol, probenecid, coumarins, monoamine oxidase inhibitors, and beta-adrenergic blocking agents. In vitro studies indicate that GLUCOTROL binds differently than tolbutamide and does not interact with salicylate or official management of the control o

patronimetrics, calcium channel piocaning ordigs, and somiazio. A potential interaction between that microfazone can oral hypoglycemic agents leading to severe hypoglycemia has been reported. Whether this interaction also occurs with the intravenous, topical, or vaginal preparations of micronazole is not known. Carcinogenesis, Mutagenesis, Impairment of Fertility: A 20-month study in rats and an 18-month study in mice at doses up to 75 times the maximum human dose revealed no evidence of drug-related carcinogenicity. Bacterial and in vivo mutagenicity tests were uniformly negative. Studies in rats of both sexes at doses up to 75 times the human dose showed no effects on fertility.

Pregnancy: Pregnancy Category C. GLUCOTROL (glipizide) was found to be mildly fetotoxic in rat reproductive studies at all dose levels (5-50 mg/kg). This fetotoxicity has been similarly noted with other sulfonylureas, such as tolibutamide and toliazamide. The effect is perinatal and believed to be directly related to the pharmacologic (hypoglycemic) action of GLUCOTROL. In studies in rats and rabbits no teratogenic effects were found. There are no adequate and well-controlled studies in pregnant women. GLUCOTROL should be used during pregnancy only if the potential benefit justifies the potential benefit is to the fetus.

Because recent information suggests that abnormal blood glucose levels during pregnancy are associated with a

higher incidence of congenital abnormalities, many experts recommend that insulin be used during pregnancy to

because recent information suggests that abnormal blood glucose levels during pregnancy are associated with a higher incidence of congenital abnormalities, many experts recommend that insulin be used during pregnancy to maintain blood glucose levels as close to normal as possible.

Nonteratogenic Effects: Prolonged severe hypoglycemia has been reported in neonates born to mothers who were receiving a sulfonylurea drug at the time of delivery. This has been reported more frequently with the use of agents with prolonged half-lives. GLUCOTROL should be discontinued at least one month before the expected delivery date. Nursing Mothers: Since some sulfonylurea drugs are known to be excreted in human milk, insulin therapy should be considered if nursing is to be continued.

Pediatric Use: Safety and effectiveness in children have not been established.

ADVERSE REACTIONS: In controlled studies, the frequency of serious adverse reactions reported was very low. Of 702 patients, 11.8% reported adverse reactions and in only 1.5% was GLUCOTROL discontinued.

Hypoglycemia: See PRECAUTIONS and OVERDOSAGE sections.

Gastrointestinal: Gastrointestinal disturbances, the most common, were reported with the following approximate incidence nausea and diarrhea, one in 70, constipation and gastralgia, one in 100. They appear to be dose-related and may disappear on division or reduction of dosage. Cholestatic jaundice may occur rarely with sulfonylureas: GLUCOTROL should be discontinued if this occurs.

Dermatologic: Allergic skin reactions including erythema, morbilliform or maculopapular eruptions, urticais: GLUCOTROL should be descontinued if this occurs.

Dermatologic: Allergic skin reactions including erythema, morbilliform or maculopapular eruptions, urticais and and and decema have been reported in about one in 70 patients. These may be transient and may disappear despite continued use of GLUCOTROL; if skin reactions persist, the drug should be discontinued. Porphyria cutanea tard and photosensitivity reactions have been repor

Hematologic: Leukopenia, agranulocytosis, thrombocytopenia, hemolytic anemia, aplastic anemia, and pan-cytopenia have been reported with sulfonylureas.

Metabolic: Hepatic porphyria and disulfiram-like alcohol reactions have been reported with sulfonylureas. Clinical

Metabolic: Hepatic porphyra and disulfiram-like alcohol reactions have been reported with sulfonylureas. Clinical experience to date has shown that GLUCOTROL has an extremely low incidence of disulfiram-like reactions. Endocrine Reactions: Cases of hyponatremia and the syndrome of inappropriate antidiuretic hormone (SIADH) secretion have been reported with this and other sulfonylureas.

Miscellaneous: Dizziness, drowsiness, and headache have each been reported in about one in fifty patients treated with GLUCOTROL. They are usually transient and seldom require discontinuance of therapy.

OVERIOSAGE: Overdosage of sulfonylureas including GLUCOTROL can produce hypoglycemia. If hypoglycemic coma is diagnosed or suspected, the patient should be given a rapid intravenous injection of concentrated (50%) glucose solution. This should be followed by a continuous infusion of a more dilute (10%) glucose solution at a rate that will maintain the blood glucose at a level above 100 mg/dL. Patients should be closely monitored for a minimum of 24 to AB bours size benephenghengian many series after a paragractic fusions for some contents. 48 hours since hypoglycemia may recur after apparent clinical recovery. Clearance of GLUCOTROL from plasma would be prolonged in persons with liver disease. Because of the extensive protein binding of GLUCOTROL, dialysis is unlikely to be of benefit.

DOBASE AND ADMINISTRATION: There is no fixed dosage regimen for the management of diabetes mellitus with GLUCOTROL; in general, it should be given approximately 30 minutes before a meal to achieve the greatest reduction in postprandial hyperglycemia.

in postprandial hyperglycemia. Imitial Dose: The recommended starting dose is 5 mg before breakfast. Geriatric patients or those with liver disease may be started on 2.5 mg. Dosage adjustments should ordinarily be in increments of 2.5-5 mg, as determined by blood glucose response. At least several days should elapse between titration steps. Maximum Dose: The maximum recommended total daily dose is 40 mg. Maintenance: Some patients may be effectively controlled on a once-a-day regimen, while others show better response with divided dosing. Total daily doses above 15 mg should ordinarily be divided. HOW SUPPLIED: GLUCOTROL is available as white, dye-free, scored, diamond-shaped tablets imprinted as follows: 5 mg tablet—Pfizer 411 (NDC 5 mg 0049-4110-66) Bottles of 100: 10 mg tablet—Pfizer 412 (NDC 10 mg 0049-4120-66) Bottles of 100: All TIME federal law grophilist dispensions without prescription.

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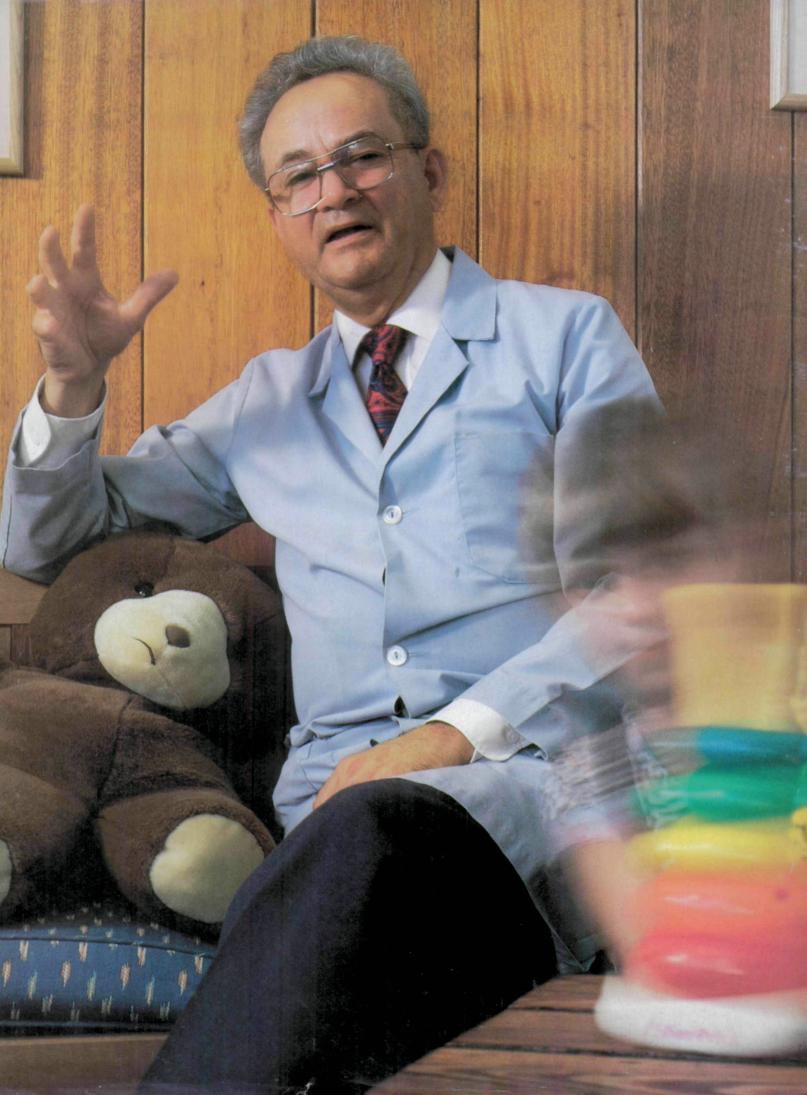
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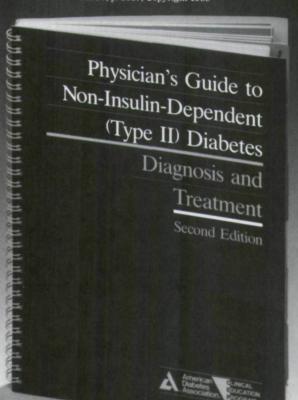
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- NIDDM: Challenges of the Next Decade
- · Insulin Therapy
- · Lipids, Vascular Disease, and NIDDM
- · Nutrition Management
- · The Diabetic Foot
- · Diabetes in the Elderly Population
- · Effective Treatment Strategies in Minorities
- · Cost-Effective Diagnosis of Complications

ADA Recognition Conference

An eight-hour conference, Meeting the National Standards for Diabetes Patient Education Programs and Applying for ADA Recognition, will be held at the San Diego Marriott on Wednesday, January 9, and Thursday, January 10. For more details and registration information, call 703/549-1500, extension 214.

AADE Advanced Studies Institute for Diabetes Education (ASIDE)

The ASIDE Program will be offered during the 38th Postgraduate Course. Enrollment is limited by both the entry requirements and the educational design of the courses. For further information, call the AADE national office at 312/661-1700.

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The 38th Postgraduate Course is approved for continuing medical education credits.

General Information

Registration

The registration fee for the Postgraduate Course (see schedule below) includes the course syllabus and admission to all sessions, commercial exhibits, and social events. Guest registration will admit individuals to the exhibit floor and social functions only. Register early to receive significant savings.

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Nonmember	285	325	350
Student	30	35	40

Exhibits

Time is included in the course program for attendees to visit the commercial exhibits to review the latest developments in products and services for the treatment of diabetes. Exhibits will be open:

Thursday, January 10 7:30 am-2:00 pm

Friday, January 11 7:30 am-1:30 pm

NO ONE UNDER 16 YEARS OF AGE WILL BE PERMITTED IN THE EXHIBIT HALL.



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	1
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3. If you join ADA now, you can register at the member rate and save!	7. Previous Postgraduate Courses attended
Physicians (MD) Student † □ Member (01) □ Member (05)	1990 1989 1988 1987
□ Nonmember(02) □ Nonmember(06)	8. Previous Annual Meetings attended
Non-MD Professional See brochure for	6. Trevious Aitituai meetings attenueu
☐ Member (03) ☐ Nonmember (04) registration fees	1990 1989 1988 1987
†Verification of status must be included with registration in order for it to be processed.	9. Registration fee submitted \$
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Thursday, January 10 □ 1 □ 2 □ 3 □ 4 □ 5 Friday, January 11 □ 6 □ 7 □ 8 □ 9	11. Total \$ Date
5. Specialty Area (check one): a. Adult b. Family Practice c. Geriatrics d. Internal Medicine e. Nursing f. Nutrition g. Ophthalmology h. Ob/Gyn 5. Pediatric Endocrinology In Podiatry In Psychology In Public Health In Ob/Gyn In Other In Ot	Sorry, ADA cannot bill you. All fees must be paid in advance and must accompany the registration form. Vouchers or purchase orders cannot be accepted. All funds must be drawn on U.S. banks. Make checks payable to: American Diabetes Association Mail to: American Diabetes Association 1970 Chain Bridge Road P.O. Box 0594
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of Early-Bird Registration Rates!*	Expiration Date
	Signature

Cancellation Policy: The registration fee, less a cancellation fee of \$50.00 (student cancellation fee of \$15.00) will be refunded on written request postmarked by January 31, 1991. No refunds will be made after that date.

^{*}Registration must be postmarked by the preregistration cut-off to receive reduced fees.

36 New Grants Awarded in November 1989 by the



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TEN IN CLINICAL RESEARCH

Gerhard Baumann, MD

Mark E. Molitch, MD

'Growth hormone binding protein/receptor in diabetes mellitus'

Northwestern University Medical School, Chicago, IL

Paul J. Beisswenger, MD

"Advanced glycosylation end-products, Amadori products and glycemic control in IDDM'

Dartmouth Hitchcock Medical Center, Hanover, NH

David L. Cook, RN, BSN, CDE

'Comparison of diabetes care in two Washington State home health care agencies'

VNA Home Health Care Services, Spokane, WA

Linda B. Haas, MN, RN, CDE

Jerrie A. Larsen, MA, RN

'Prevention of lower extremity amputations associated with diabetes mellitus in high risk veterans

Seattle Veterans Affairs Medical Center, Seattle, WA

Harumi L. Hachiya, MD

"Angiogenin in diabetic retinopathy"

University of Michigan Medical Center, Ann Arbor, MI

Christopher L. Krogh, MD, MPH

'Diabetes among the Paipai: a tribe in transition'

University of Minnesota Medical School, Minneapolis, MN

Gary R. Matzke, PharmD, FCP, FCCP

Influence of Type I and Type II diabetes on the expression of genetic polymorphic drug metabolism'

University of North Carolina School of Pharmacy, Chapel Hill, NC

John E. Nestler, MD

'An examination of the effect of hyperinsulinemia on vascular permeability' Medical College of Virginia, Richmond, VA

Craig C. Porter, MD

"MHC class III genetic analyses in insulin dependent diabetes mellitus" The Johns Hopkins University School of Medicine, Baltimore, MD

Eric Ravussin, PhD

'Relationship between lipoprotein lipase activity, lipoprotein lipase gene expression, insulin resistance, and obesity in Pima Indians National Institutes of Health/NIDDK, Phoenix, AZ

TWELVE IN EDUCATION

Sheila Beckham, RD, MPH

'Malama Ola diabetes program''

University of Hawaii School of Public Health, Honolulu, HI

Jean E. Betschart, MN, RN, CDE

"Development and evaluation of a progressive-learning workbook on IDDM for school-age children'

Children's Hospital of Pittsburgh, Pittsburgh, PA

Patricia Carson, RN, MA, CDE

'Development, implementation and evaluation of a collaborative recognition program for diabetes patient education'

Princeton Diabetes Treatment and Education Center, Princeton, NJ

Anne C. Cottone, BSN, RN

Barbara A. Ryan, BSN, RN, CDE

The initial psychological impact of the diagnosis of IDDM in the toddler on his/her parents

Adelphi University Graduate Nursing Department, Garden City, NY

Laura C. Dzurec, PhD, RN

'Diabetic patients' perceptions of the teaching role of the home health care nurse

Ohio State University College of Nursing, Columbus, OH

Fran Hengel, MS, RD

"Foot screening and foot care education for the diabetic patients seen in field

PHS Indian Hospital, Rosebud, SD

Audrey A. Irvine, PhD

Jon Terry Saunders, PhD

"Gender differences in sex role expectations for social support and impact on diabetes outcomes in a Type II population

Blue Ridge Hospital/University of Virginia, Charlottesville, VA

Judy Ostrom Joynes, RN, MA, CDE

"Comparison of computerized and non-computerized diabetes management system in a formalized education and management program in insulin intensification'

International Diabetes Center, Minneapolis, MN

Donna M. Murphy, RN, MS, CDE

Joanne T. Marengo, PhD

'The assessment of restored cognitive function posthypoglycemia in adolescents with IDDM

Chicago Children's Diabetes Center/Northwestern University Medical School, Chicago, IL

Paulette O'Connell, RSM, MSN, RN, CDE

"Diabetes support group for mentally handicapped young adults" Mercy Hospital and Medical Center/Diabetes Treatment Center, Chicago, IL

Karen Johnson Ranen, RN, BS, CDE

The relationship between age, self-esteem and self-care in male adolescents with diabetes mellitus'

University of Massachusetts School of Nursing, Amherst, MA

Melissa Ann Spezia, RN, MSN

"Family functioning and self-care activities in school-age children with diabetes" Southeast Missouri State University Department of Nursing, Cape Girardeau, MO

FOURTEEN IN BASIC RESEARCH

F. Joy Archer, VMD, PhD

John W. Kramer, DVM, PhD

'Analysis of allelic polymorphisms of the MHC-II and insulin gene regions of megabase and chromosomal DNA, separated by pulse field electrophoresis in a spontaneous IDDM dog model Washington State University College of Veterinary Medicine, Pullman, WA

Morris J. Birnbaum

'Role of glucose transporter isoforms in insulin regulated hexose uptake' Harvard Medical School, Boston, MA

Steven R. Hager, PhD

'Regulation of glucose transport in single muscle fibers'

Medical College of Wisconsin, Milwaukee, WI

William A. Hagopian, MD, PhD

'Protein sequence of islet cell autoantigens targeted by the immune system' University of Washington Department of Medicine, Seattle, WA

Vicki E. Kelley, PhD

T cell clones capable of causing and suppressing diabetes'

Brigham and Women's Hospital, Boston, MA

Patricia A. King

'Insulin, exercise and the regulation of skeletal muscle amino acid transport' University of Vermont College of Medicine, Burlington, VT

Wlodzimierz M. Kozak, PhD, DSc

'Development of a magnetic resonance imaging method for studying bloodretinal barrier leakage in diabetes mellitus

Carnegie-Mellon University, Pittsburgh, PA

David R. Luke, PharmD

Role of vascular decongestants in diabetic nephropathy

University of Houston School of Pharmacy, Houston, TX

Dimitri S. Monos, PhD

'Generation of stable transectants expressing the HLA class II DQ molecules of the diabetogenic haplotypes DR3 and DR4

Harvard University Department of Biochemistry and Molecular Biology, Cambridge, MA

Dzung T. Nguyen, PhD

'Structural studies of high-potency insulin analogs: strategies toward the design of a new class of oral hypoglycemic agents'

Massachusetts General Hospital, Boston, MA

Gerald M. Reaven, MD

'Does insulin regulation of adipocyte metabolism vary as a function of anatomical location?

Stanford University Department of Medicine/VA Medical Center, Palo Alto, CA

Robert S. Sherwin, MD

'Production of diabetes by cloned T cells'

Yale University School of Medicine, New Haven, CT

Martin Sonenberg, MD, PhD

'Growth hormone effects on protein phosphorylation associated with diabetogenicity'

Sloan-Kettering Institute for Cancer Research, New York, NY

Francis T. Thomas, MD

Immunomodulation for xenogeneic pancreas islet transplantation' East Carolina School of Medicine, Greenville, NC

THE JOURNAL OF CLINICAL AND APPLIED RESEARCH AND EDUCATION

REVIEW ISSUE

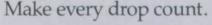
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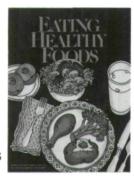
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