This workshop will discuss metabolic surgery for type 2 diabetes, its role as a therapeutic option and its implications for diabetes research and public health. Surgeons, endocrinologists, family physicians, scientists, public policy experts and journalists all are welcome.

**TOPICS**

- Epidemiology of diabetes and obesity in Asia-Pacific region
- Clinical outcomes of bariatric/metabolic surgery
- Mechanisms of surgical control of diabetes
- Role of the endocrinologist in metabolic surgery
- Conventional and novel gastrointestinal procedures
- Clinical trials in diabetes surgery
- Cost-effectiveness of metabolic surgery and the public health perspective

Diabetes: When is it time for Surgery?
LETTER FROM THE DIRECTORS

Bariatric/Metabolic surgery results in major improvements in glycemia as well as reduction of CV risk and mortality in severely obese patients with type 2 diabetes (T2DM). A recent position statement by the International Diabetes Federation (IDF) recognizes surgery as an appropriate treatment for obese persons with type 2 diabetes not achieving recommended targets with available medical therapies, especially when there are other major co-morbidities such as hypertension and dyslipidemia.

The clinical efficacy of bariatric-metabolic surgery in the control of diabetes and the evidence suggesting that some of its effects are independent of weight loss has fueled enthusiasm of clinicians and basic researchers for this emerging field. In fact, a better understanding of the mechanisms of surgical control of diabetes may provide insights into the pathogenesis of the disease and help develop novel procedures, devices and medications.

In spite of the potential gains, however, access to surgery for those eligible is very limited and barriers are substantial. Professional educational programs in metabolic surgery are therefore critical to promote a scientifically sound, safe and orderly development of this emerging field.

The Diabetes Surgery Center at Weill Cornell Medical College-New York Presbyterian Hospital (DSC) is committed to promote education in metabolic/diabetes surgery and fostering regional collaborations between endocrinologists, surgeons, scientists and policy makers. Such workshops are organized in conjunction with other prestigious academic institutions.

The Asia-Pacific Workshop on Metabolic Surgery for Diabetes is co-organized with the A*STAR Singapore Institute for Clinical Sciences and the Baker IDI Heart and Diabetes Institute of Melbourne, Australia, in partnership with the Qatar Foundation.

The aim of this multidisciplinary meeting is to provide an update on the latest developments in the field and specifically address the distinct challenges and opportunities offered by metabolic/diabetes surgery to populations and health care systems in Asia and Australia-New Zealand. The intent is also to engage regional leaders in taking appropriate and timely actions and craft an agenda of health policy initiatives and interdisciplinary research collaborations.

We welcome you to this exciting scientific meeting and look forward to working together toward innovative solutions for diabetes care and research.
Can we recognize a cure when we see one?

Recently, the American Diabetes Association asked an international panel of experts how to define cure of diabetes. A position statement was published in Diabetes Care on February 2009 with criteria for the definition of remis-cure of diabetes. *Buse et al (Diabetes Care, 2009; 32(11):2133-5)

Is BMI an appropriate criterion for patients selection?

In March 2007 the Diabetes Surgery Summit (DSS) was held in Rome in the same venue of this workshop with the aim to develop recommendations for the use and study of diabetes surgery. The DSS acknowledged the lack of scientific evidence in support for a specific BMI cut-off as a criteria for selection of surgical candidates and recommended that indication for surgery should not be based on BMI alone.

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**GUEST EXPERTS**

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PAUL ZIMMET (AUSTRALIA)
Director Emeritus & Director International Research, Baker ID Heart and Diabetes Institute, Melbourne, Australia
WORKSHOP PROGRAM

Monday, February 6, 2012
8:00am – 6:00pm

8:00-8.15am: Welcome
- Professor Chorh Chuan Tan, President, National University of Singapore, Deputy Chairperson, Agency for Science, Technology & Research, Singapore
- Professor Judith Swan, Executive Director, Singapore Institute for Clinical Sciences
- Professor Paul Zimmet Director Emeritus & Director International Research, Baker IDI Heart and Diabetes Institute, Melbourne, Australia

INTRODUCTION
8.15-8.30am: The Well Cornell Medical College-DSC International Educational Program and the Asian Workshop on Metabolic Surgery
- Francesco Rubino – Director, Diabetes Surgery Center WCMC/ NYU; Associate Prof of Surgery and Chief, Section for GI Metabolic Surgery

8.30-8.45am: The “Diabesity” Epidemic: Regional and Global Research Initiatives of the Qatar Foundation
- Abdelali Haoudi (Qatar Foundation)

BARIATRIC/METABOLIC SURGERY IN ASIA
9.45-10.00am: Current Utilization of Bariatric/Metabolic Surgery in Asia
- P. Chowbey (India)

EPIDEMIOLOGY, PATHOPHYSIOLOGY
9.45-10.00am: Epidemic of Diabetes and Obesity in Asia
- 8:45-9:00am - A global overview: P. Zimmet (Australia)
- 9:00-9:15am: The Asian perspective - T. E. Shyong (Singapore)

9:15-9:30am: Pathophysiology of Type 2 Diabetes
- J. Chan (Hong Kong)

9:30-9.45am: Current Medical Therapies of T2DM: Overview
- H. Lebovitz (USA)

MECHANISMS OF SURGICAL CONTROL OF DIABETES
Chairpersons: P. Schauer (USA), A. Shabbir (Singapore)
10:00-10:20am: Overview of surgical anatomy of bariatric/metabolic surgery
- A. Pomp (USA)

10:20-10:40am: The GI tract and the physiologic regulation of appetite, satiety, and body weight and glucose regulation
- D. Cummings (USA)

10:40-11:00am: Discussion

11:00-11:30am: Coffee break

11:30-11:50am: The effect of Bariatric/Operations on Insulin Secretion, Sensitivity and Gut hormones
- G. Mingrone (Italy)

11:50-12:10pm: The effect of Bariatric/Metabolic Operations on Taste, Food choices and Energy Expenditure
- C. le Roux (UK)

12:10-12:30pm: Discussion

12:30-1:30pm: Lunch and Posters

PROCEDURE-SPECIFIC MECHANISMS OF ACTION
Chairpersons: J. Dixon (Australia), J. Funder (Australia)
1:30-1:50pm: Mechanisms of action of Gastric Bypass and other Procedures
- L. Kaplan (USA)

1:50-2:10pm: Weight-Independent mechanisms of diabetes control: weighing the evidence
- D. Cummings (USA)

2:10-2:25pm: Mechanisms of Action of Sleeve Gastrectomy, RY-Gastric Bypass and Duodenal-Jejunal Bypass: Defining the role of Gastric vs Intestinal Mechanisms
- F. Rubino (USA)

2:25-3:10pm: PANEL: “Implications of Mechanistic Research: From Bench to Bedside”
- Panelists: R. Cohen (Brazil), D. Cummings (USA), C. le Roux (UK), J. Proietto (Australia), L. Kaplan (USA), I. Noor (Malaysia), G. Mingrone (Italy)

3:10-3:30pm: Coffee Break

CLINICAL OUTCOMES OF BARIATRIC/METABOLIC SURGERY: Weight Loss, Diabetes and Metabolic Control in Patients with BMI above and below 35
Chairpersons: C. le Roux (UK), J. Proietto (Australia)
3:30-3:50pm: Bariatric Surgery and Weight Control: Overview
- J. Dixon (Australia)

3:50-4:10pm: Bariatric Surgery and Diabetes Control and efficacy of various procedures
- P. Schauer (USA)

4:10-4.30pm: GI surgery for type 2 diabetes in Asian patients with BMI <35
- W. J. Lee (Taiwan)

4:30-4:45pm: Endoluminal and other novel devices
- L. Kaplan (USA)

4:45-5:00pm: Bariatric intervention with pacing/GI electric stimulation
- H. Lebovitz (USA)

5:05-6:00pm: Novel GI Surgical Operations for Diabetes (DJSG, Ileal Interposition)
- R. Cohen (Brazil)

5:10-6:00pm: Discussion: Conventional operations, Novel Procedures and GI-Based Devices: Current and future role of Interventional Therapies for the treatment of Diabetes in Asia-Pacific populations

Guest Experts: Questions/Comments:
- C. K. Huang (Taiwan), G. Collier (Australia), S. Shah (India), S. Ugale (India), P. Gentileschi (Italy) T. K. Wei (Singapore)

6:00pm: Day 1 concluded
FEBRUARY 6th-7th, 2012

WORKSHOP PROGRAM, DAY 2

Tuesday, February 7th, 2012
8:30am – 5:00pm

METABOLIC SURGERY: WEIGHING RISKS and BENEFITS
Chairpersons: L. Kaplan (USA), J. Funder (Australia)
9:00-9:20am: BMI should not be used as a sole criterion for indication to Metabolic Surgery
• Against the motion: J. Dixon (Australia)
• For the motion: F. Rubino (USA)
9:20-9:50am: PANEL 1: “If not BMI, What criteria should be used to define surgical indication?”
• Panelists: Harold Lebovitz (USA), T.E. Shyong (Singapore), J. Proietto (Australia), G. Alberti (UK), J. Linong (China), J. Chan (Hong Kong), I. Noor (Malaysia)

• Panelists: J. Dixon (Australia), H. Frydenberg (Australia), P. Schauer (USA), D. Lomanto (Singapore), A. Shabbir (Singapore), S. Pasupathy (Singapore), M. Lakdawala (India)
10:20-10:50am: PANEL 3: Metabolic surgery in Patients with BMI < 35: Choice of Procedure
• Panelists: David Cummings (USA), J. Funder (Australia), J. Chan (Hong Kong), R. Cohen (Brazil), W.J. Lee (Taiwan), M. Lakdawala (India)
10:50-11:00am: Metabolic Surgery for Diabetes in Asia: Questions/Comments by
• Guest Experts S. Shah (India), S. Ugale (India), G. Collier (Australia), P. Clifton (Australia), C.K. Huang (Taiwan)
11:00-11:20am: Coffee Break

METABOLIC SURGERY FOR DIABETES: THE ROLE OF THE ENDOCRINOLOGIST – before and after surgery
Chairpersons: P. Zimmet (Australia), J. Linong (China)
11:50-12:30pm: PANEL: Composition of the Multidisciplinary Team, Preoperative Work-up and Postoperative Management of Diabetic Patients
• Panelists: C. Le Roux (UK), J. Funder (Australia), R. Cohen (Brazil), S.C. Lim (Singapore), L. Kaplan (USA), G. Mingrone (Italy), D. Cummings (USA)
12:30-1:30pm: Lunch break and posters

COST-EFFECTIVENESS OF DIABETES SURGERY/PUBLIC HEALTH PERSPECTIVE IN ASIAN COUNTRIES
Chairpersons: M. Lakdawala (India), S.C. Lim (Singapore)
1:30-1:50pm: Cost effectiveness of bariatric surgery in diabetes – A global and Asian perspective
• E. Finkelstein (Singapore)
• Panelists: J. Funder (Australia), E. Finkelstein (Singapore/USA), G. Alberti (UK), T.E. Shyong (Singapore), P. Chowbey (India), K.S. Chia (Singapore)
2:25-2:45pm: The IDF Position Statement and guidelines in diabetes surgery
• G. Alberti (UK)
RECOMMENDATIONS/GUIDELINES IN DIABETES SURGERY
Chairpersons: P. Zimmet (Australia), K.S. Chia (Singapore)
2:45-3:20pm: PANEL: “Improving Access to Surgical Care: The Role of Asian Professional Organizations and Government Agencies”
• Panelists: L. Kaplan (USA), M. Lakdawala (India), J. Linong (China), D. Lomanto (Singapore), I. Noor (Malaysia), J. Proietto (Australia), K. Kasama (Japan)
3:20-3:40pm: Coffee Break
TAKE HOME MESSAGES: RISING STANDARDS OF SURGICAL TREATMENT OF DIABETES IN THE ASIA-PACIFIC REGION
Chairpersons: D. Lomanto (Singapore), P. Chowbey (India)
4:30-5:40pm: APMBSS Endorsed Session: Consensus-Development Panel for the Establishment of Criteria for Diabetes Surgery Centers of Excellence in Asia
4:30-4:55pm: Introduction: W.J. Lee (Taiwan)
4:35-4:45pm: Presentation of Draft Document: K. Kasama (Japan)
4:45-5:15pm: Expert Panel Discussion:
• M. Lakdawala (India), S. Pasupathy (Singapore), W.J. Lee (Taiwan), H. Frydenberg (Australia), P. Schauer (USA), J. Linong (China), P. Clifton (Australia), F. Rubino (USA), J. Funder (Australia), I. Noor (Malaysia), P. Zimmet (Australia)
5:15-5:30pm: Comments/Input by Guest Experts and Audience
5:30-5:40pm: Summary/Proposal of Consensus Document
5:40pm: Adjourn
ACCOMMODATIONS

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Welcome to Singapore

Can GI surgery solve a metabolic problem?

The recognition of the many positive metabolic effects of gastrointestinal operations and of their neuroendocrine mechanisms provide a rationale for a conceptual shift. Unlike "bariatric (=weight loss) surgery", the modern concept of "metabolic surgery" implies an effort to resolve or improve metabolic conditions (i.e. diabetes, hypertension, obesity, dyslipidemia) rather than only focusing on weight loss per se.
This Asia-Pacific Workshop on Metabolic Surgery for Type 2 Diabetes is sponsored by:

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