La cardiomiopatia diabetica

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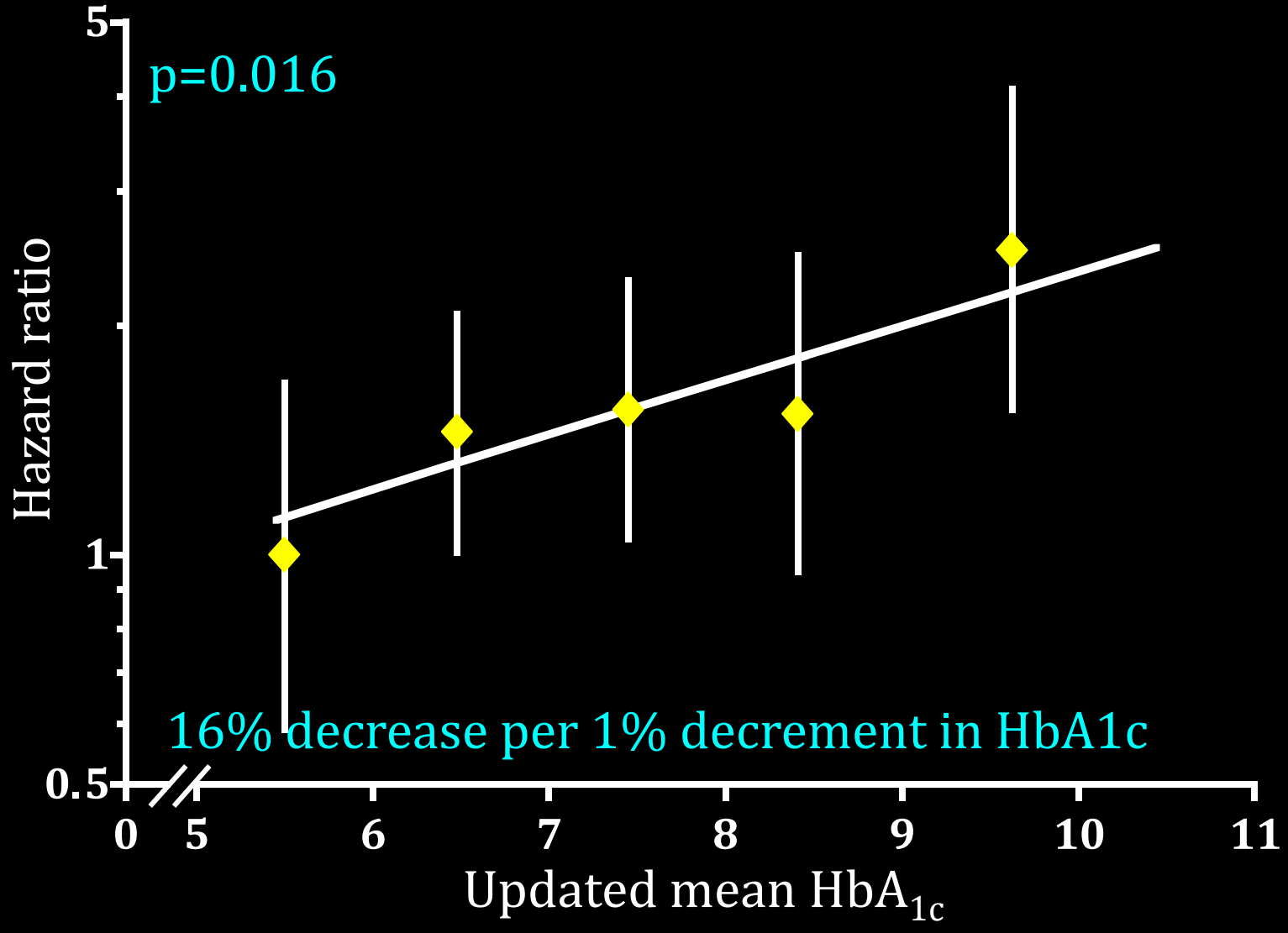
Dpt. di Medicina-Università of Padova.

Heart Failure



UKPDS 35. BMJ 2000; 321: 405-12

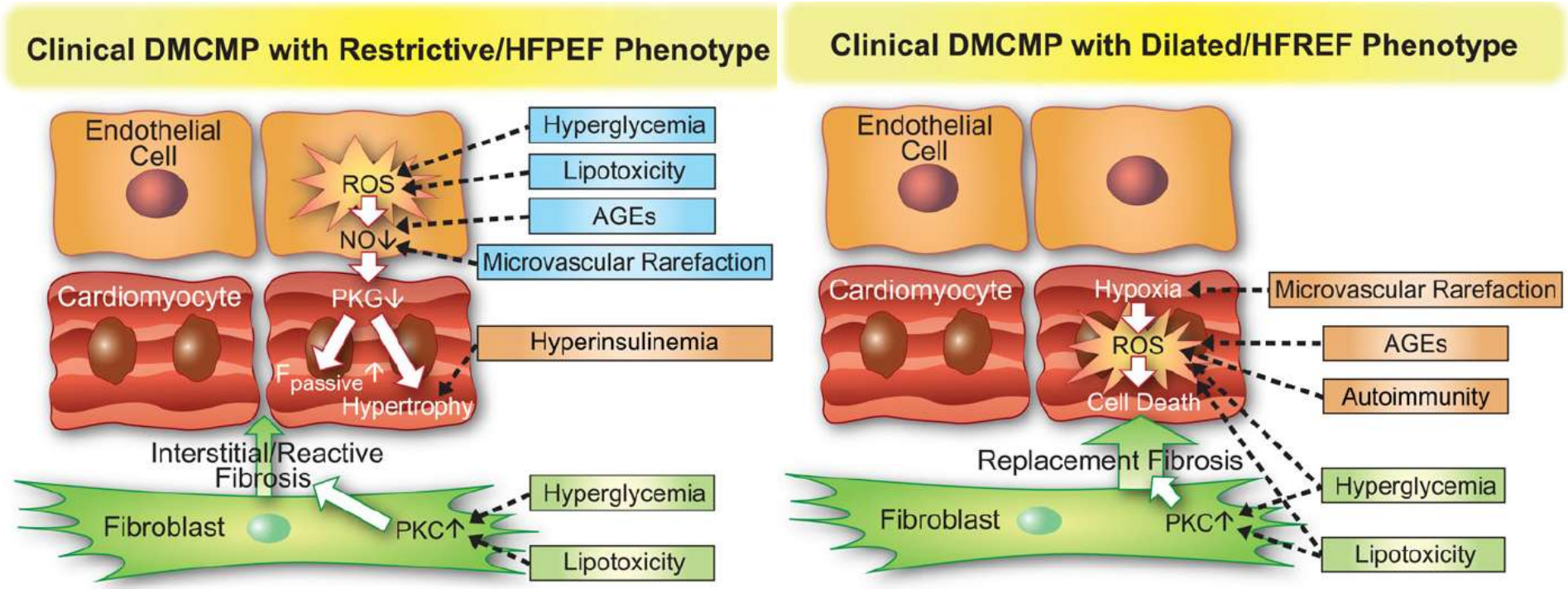
Typical patient suffering of DC is:

1. elderly woman suffering from obesity and type 2 DM
2. with a small LV cavity
3. normal LV ejection fraction
4. thick LV walls
5. elevated LV filling pressures
6. Large left atrium.

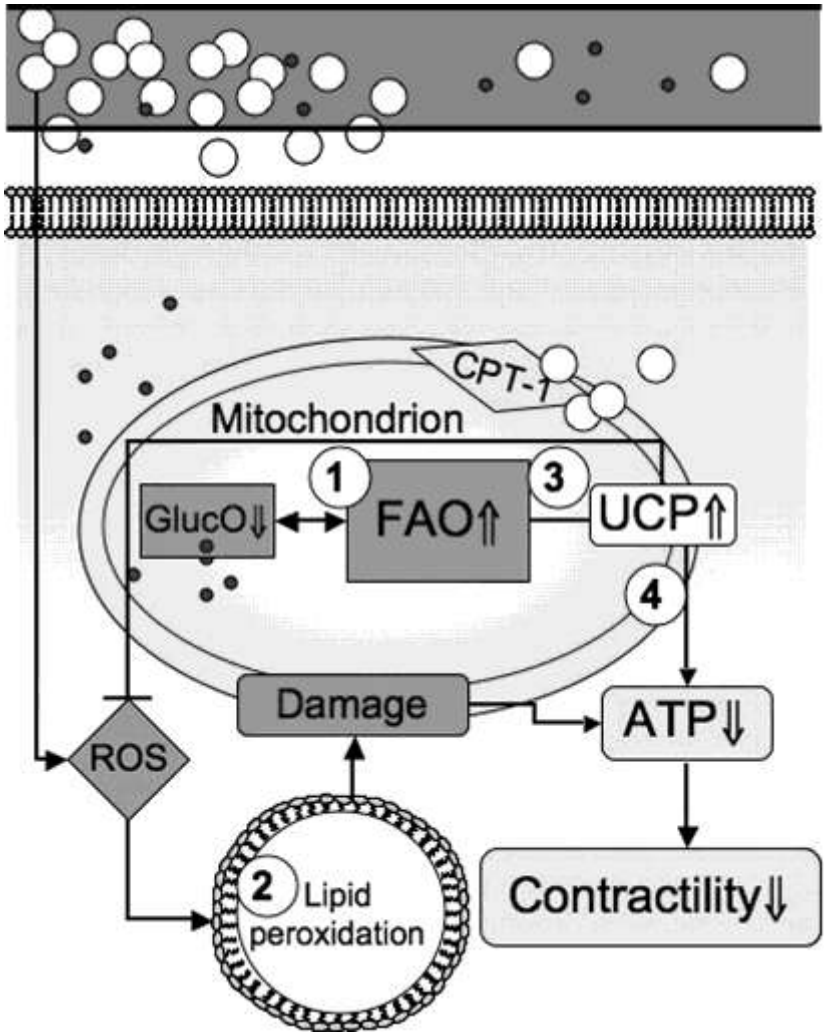
Clinical diabetic cardiomyopathy: a two-faced disease with restrictive and dilated phenotypes

Petar M. Seferović[1] and Walter J. Paulus[2]*

[1]University Medical Center, Belgrade, Serbia; and [2]Institute for Cardiovascular Research VU (ICaR-VU), VU University Medical Center, Van der Boechorststraat 7, 1081 BT Amsterdam, The Netherlands

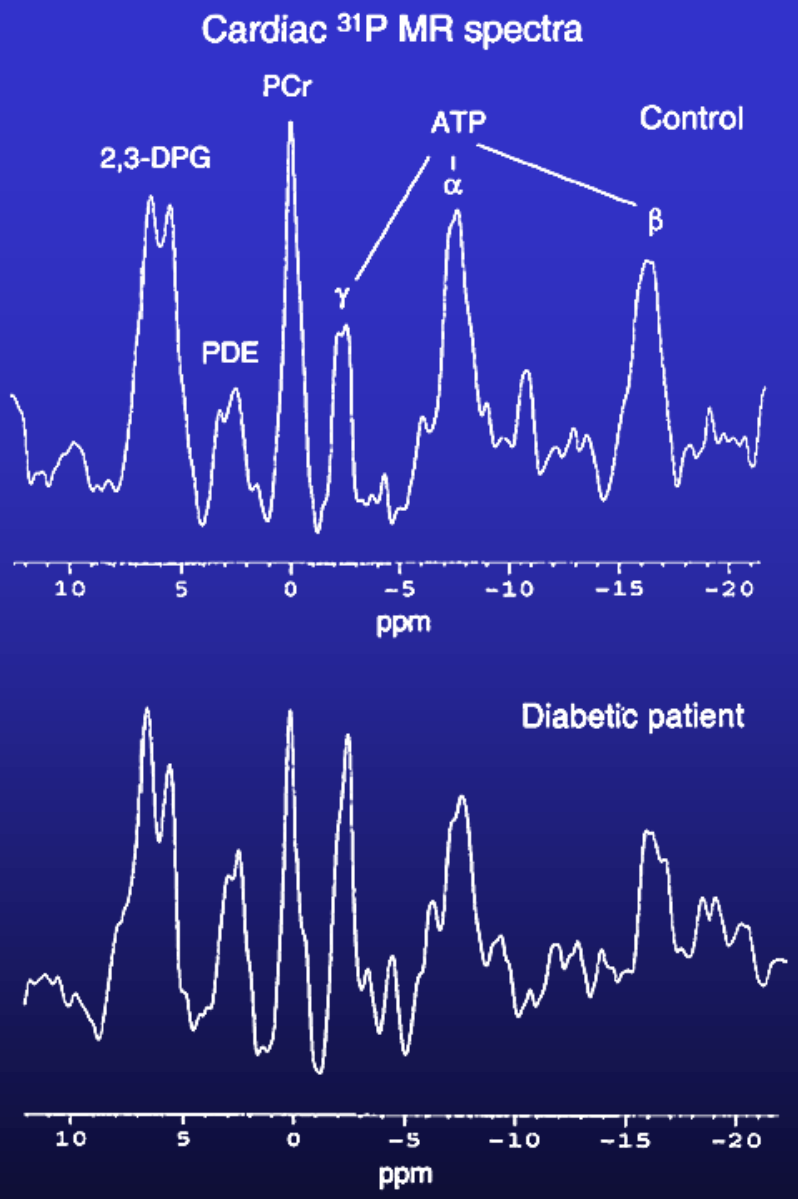


Mechanisms involved in decreasing cardiac energetics.

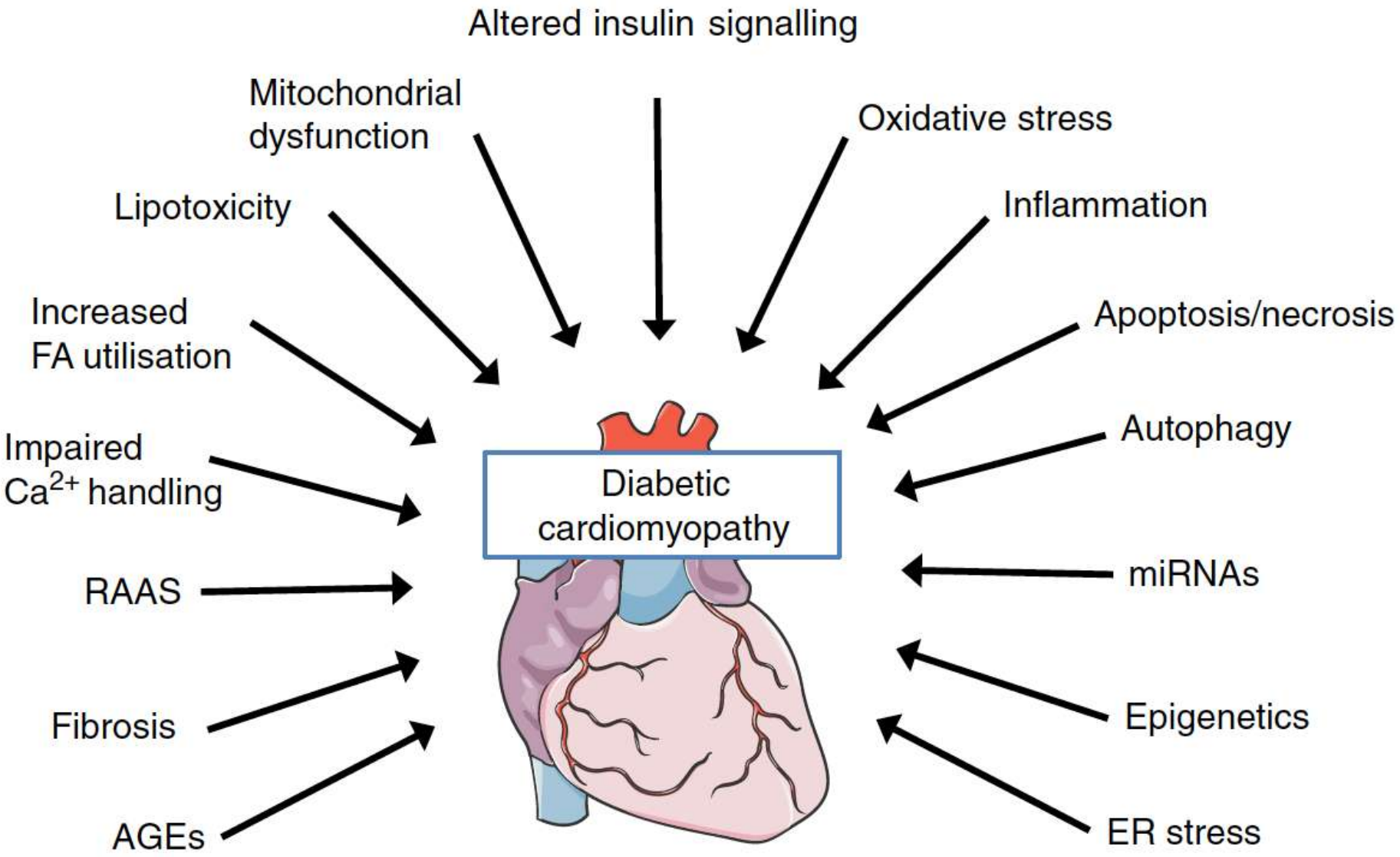


van de Weijer T et al. Cardiovasc Res 2011;92:10-18

Cardiovascular Research

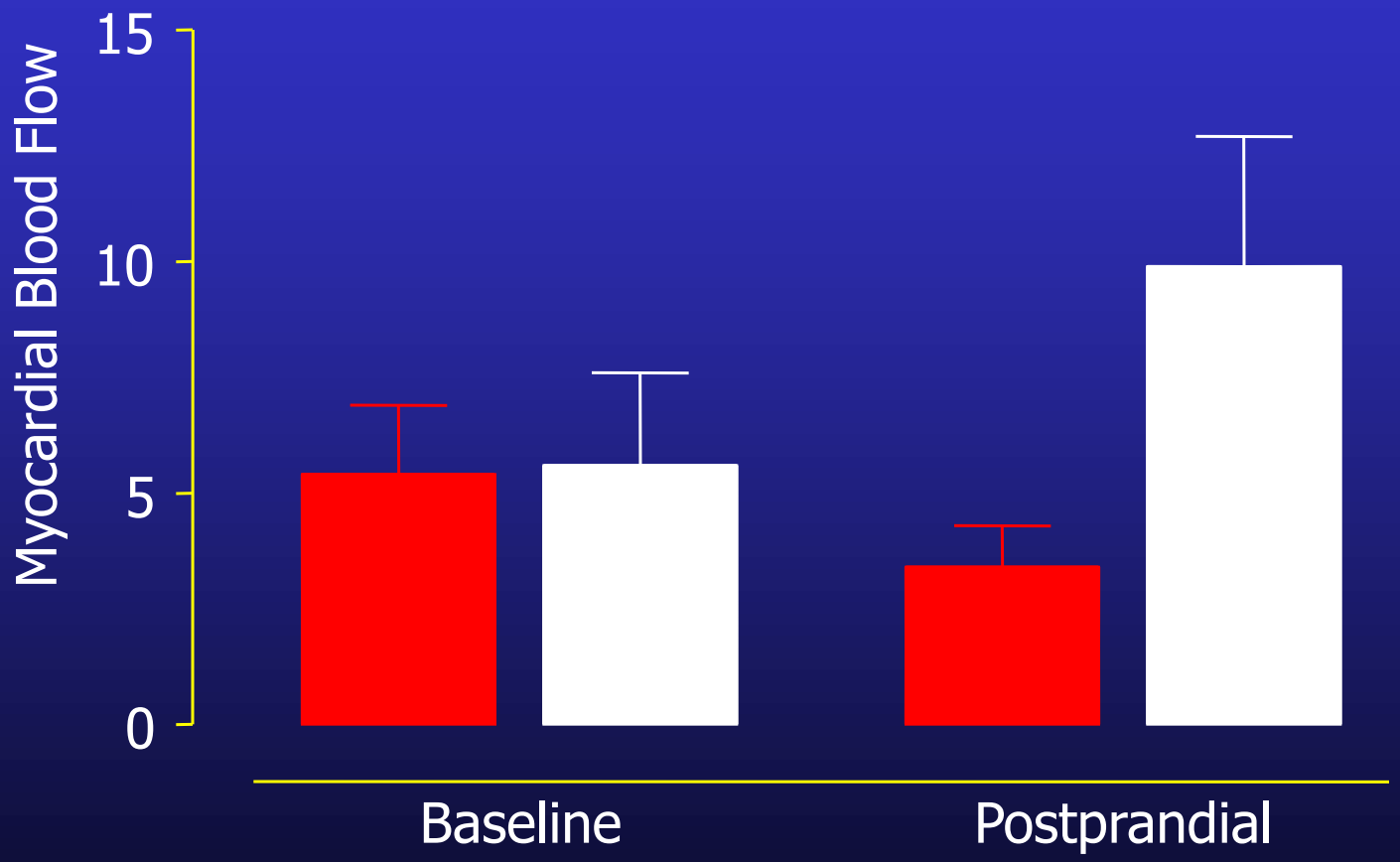


Scheuermann-Freestone et al., Circulation 2003



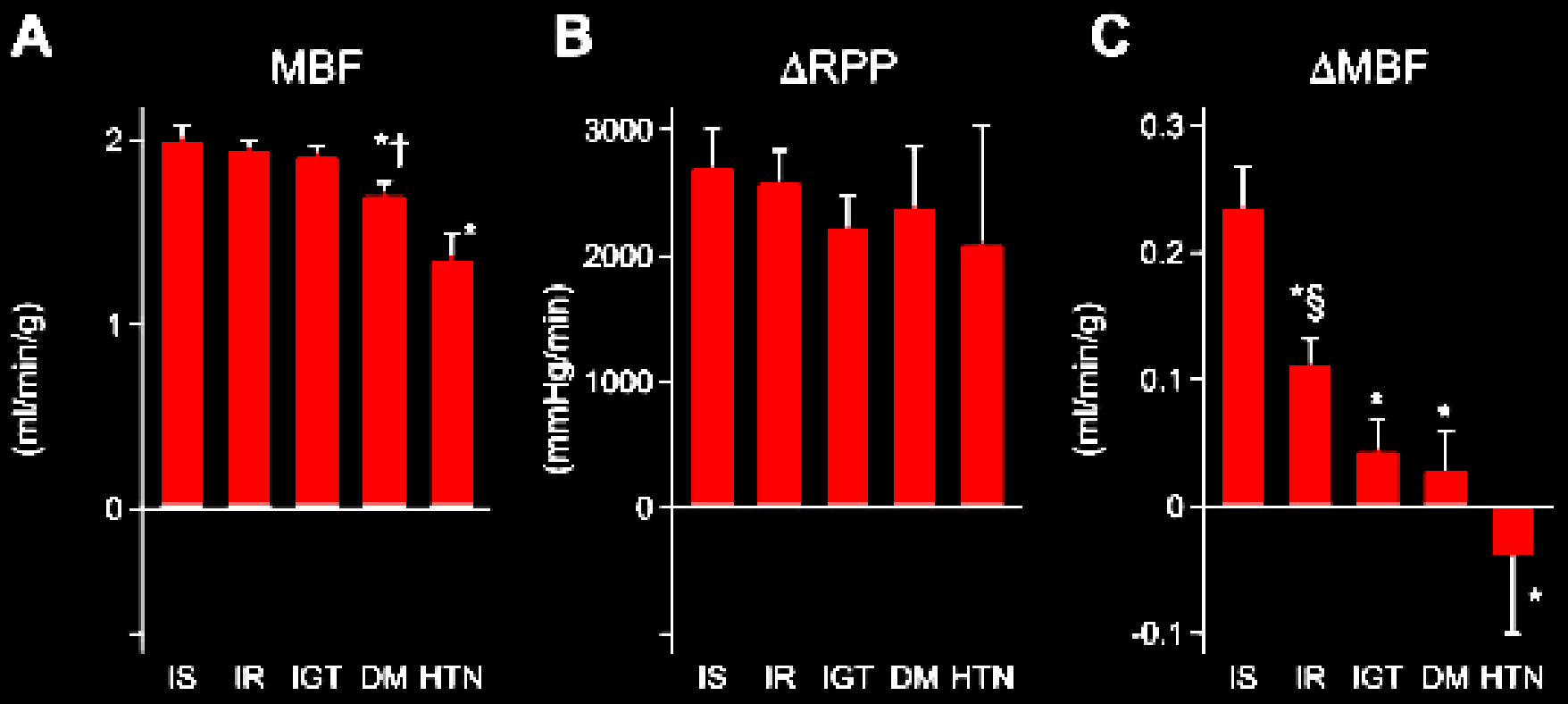
Abel et al. 2014

Postprandial Myocardial Perfusion is Impaired in Type 2 Diabetic Patients



Scognamiglio et al. Circulation, 2005

Microvascular Reactivity according to different glucose tolerance states



Prior et al. Circulation 2005

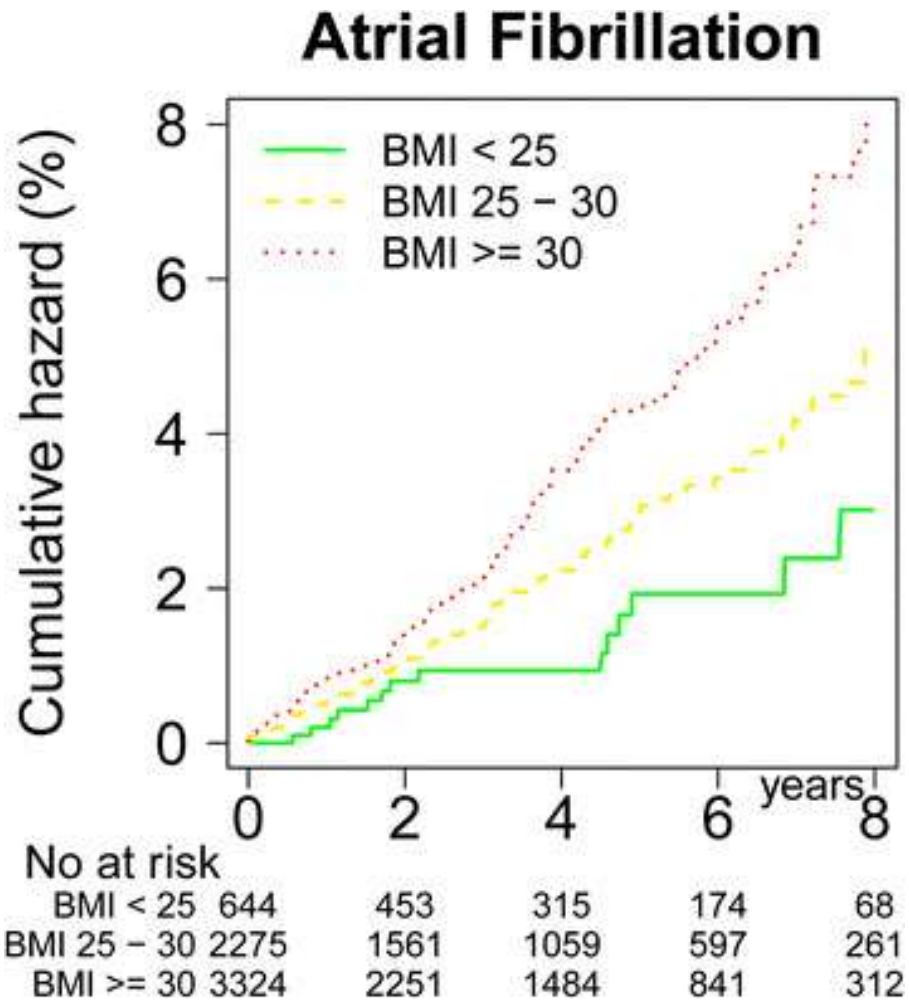
Grundvold et al. Cardiovascular Diabetology (2015) 14:5
DOI 10.1186/s12933-014-0170-3

CARDIO VASCULAR DIABETOLOGY

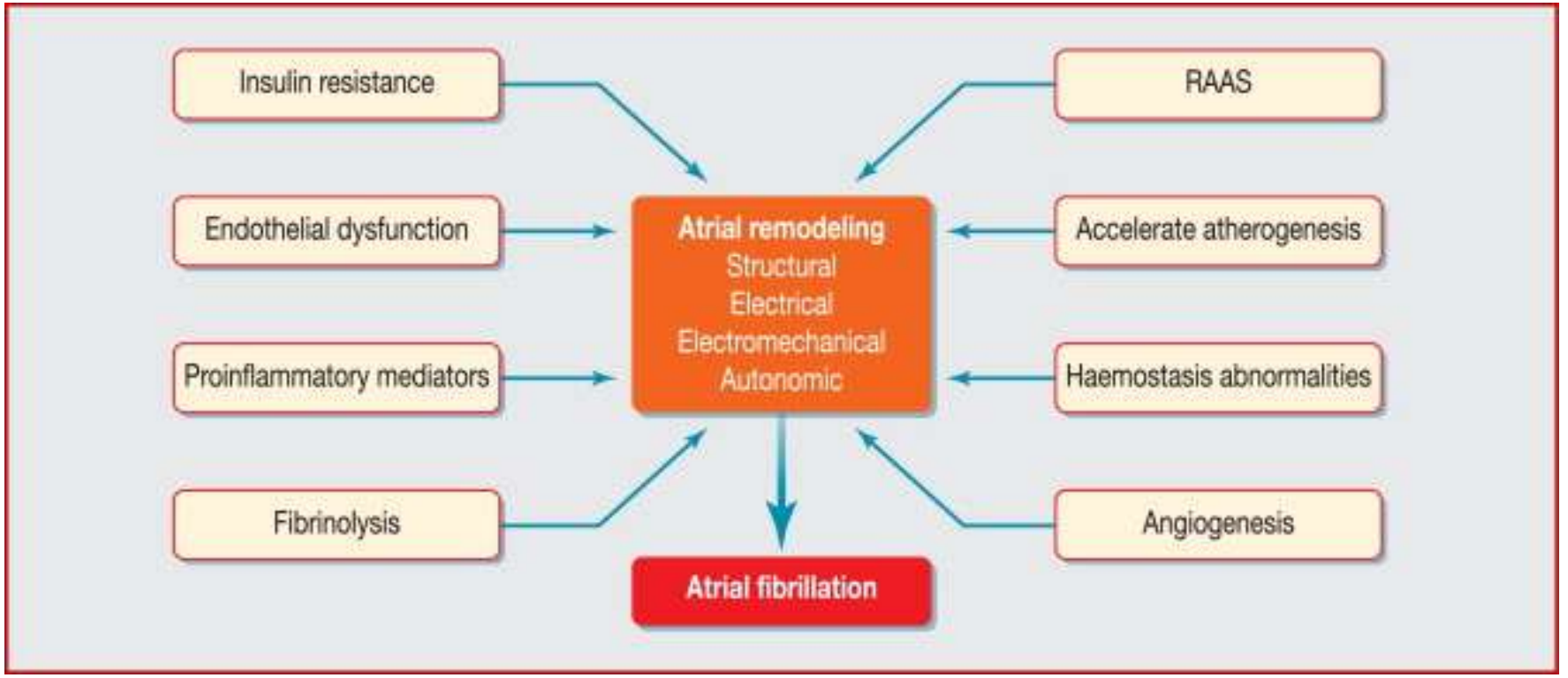
ORIGINAL INVESTIGATION Open Access

Body weight and risk of atrial fibrillation in 7,169 patients with newly diagnosed type 2 diabetes; an observational study

Irene Grundvold[1*], Johan Bodegard[2], Peter M Nilsson[3], Bodil Svennblad[4], Gunnar Johansson[5], Carl Johan Östgren[6] and Johan Sundström[4,7]



Type 2 diabetes mellitus and atrial fibrillation: From mechanisms to clinical practice



Archives of Cardiovascular Diseases, Volume 108, Issue 4, 2015, 269 - 276

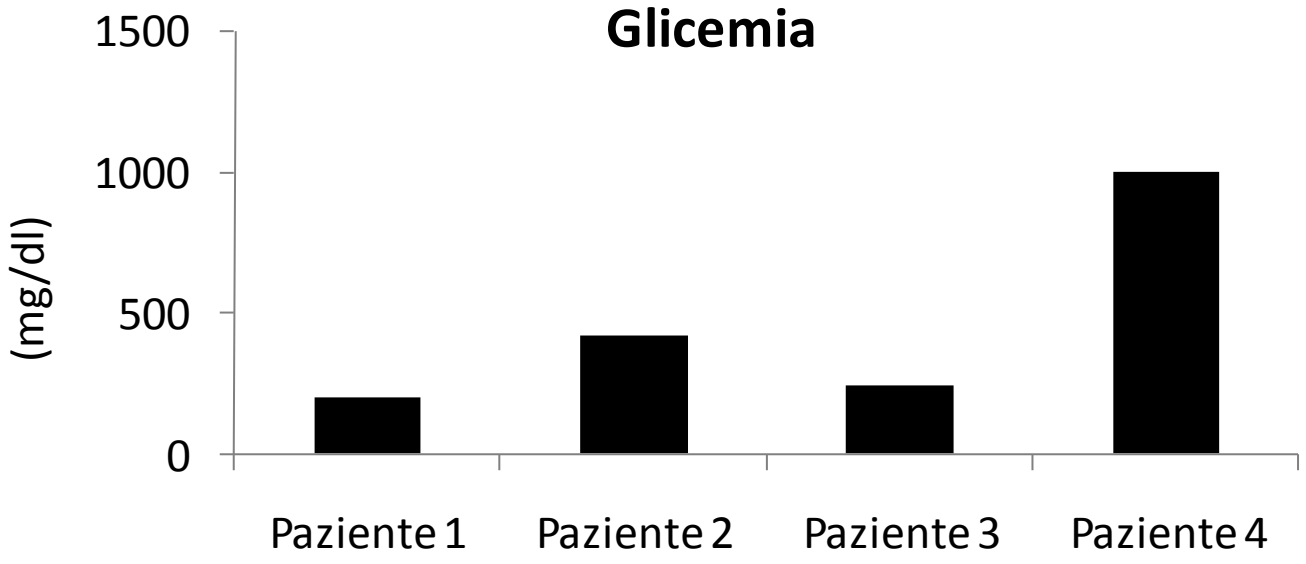
New Type of Cardiomyopathy Associated with Diabetic Glomerulosclerosis

SHIRLEY RUBLER, MD, FACC
JOEL DLUGASH, MD
YUSUF ZIYA YUCEOGLU, MD, FACC
TARIK KUMRAL, MD
ARTHUR WHITLEY BRANWOOD, MD
ARTHUR GRISHMAN, MD, FACC

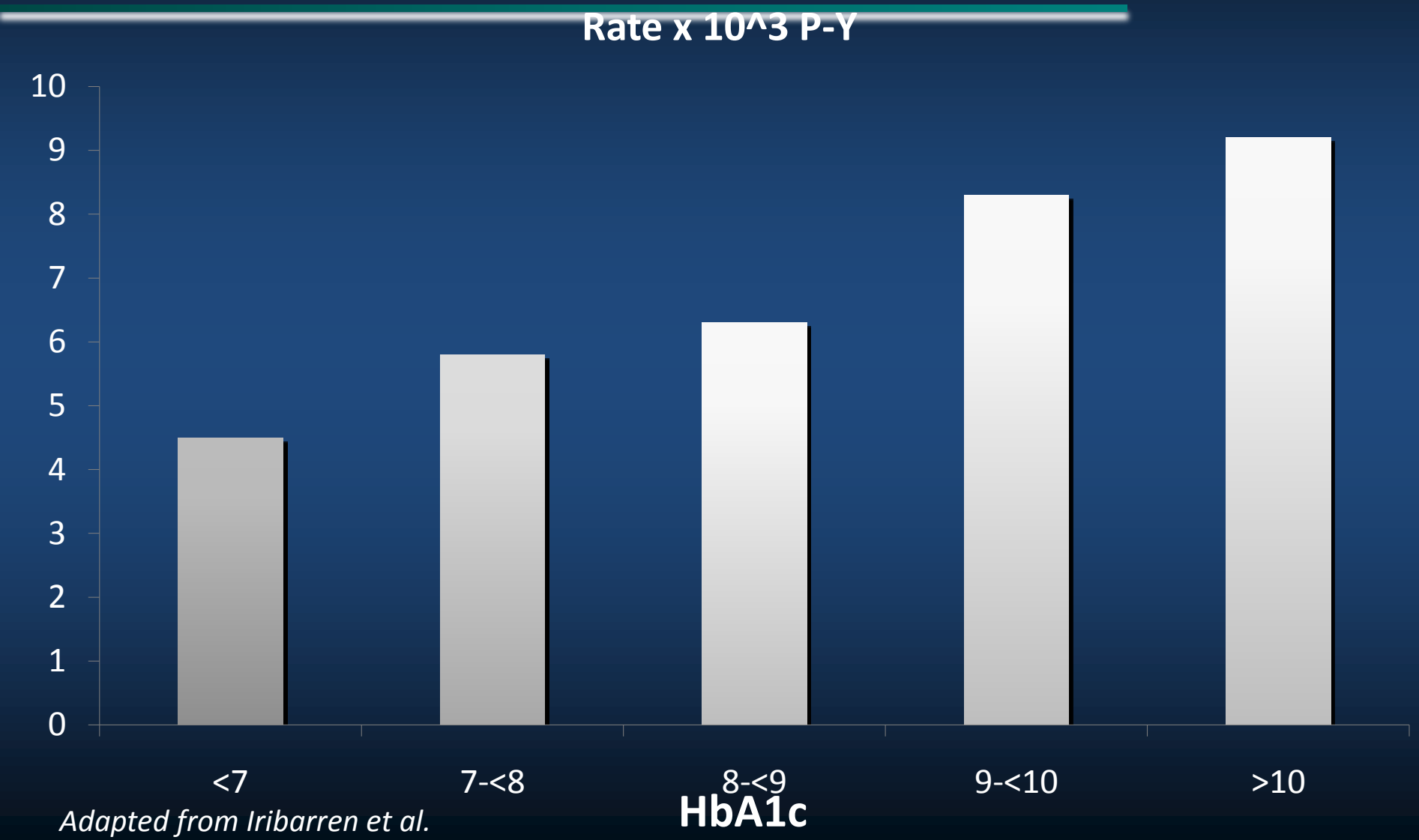
New York, New York

The postmortem findings and clinical records of 27 patients with proved diabetic glomerulosclerosis were examined and reviewed for evidence of primary myocardial disease. Twenty-three cases were excluded because of complicating conditions such as hypertension, significant obstruction of the major coronary arteries or valvular disease. Four patients demonstrated cardiomegaly and congestive heart failure of no known cause.

The autopsy findings consisted of left ventricular hypertrophy and,

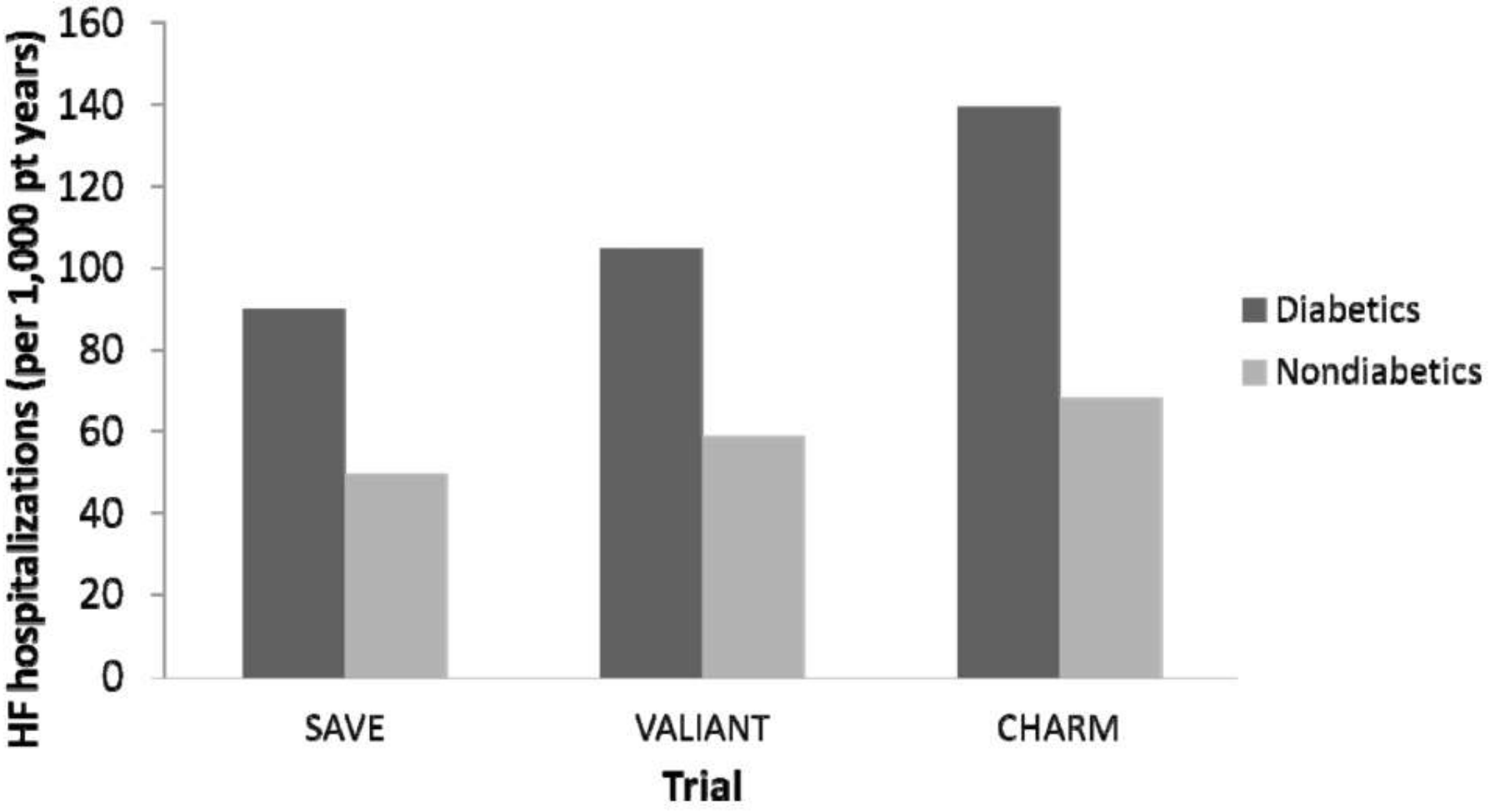


Glycemic Control and Heart Failure Among Adult Patients With Diabetes



Adapted from Iribarren et al.

Heart failure hospitalizations in Diabetics vs. Non diabetics



Intensive glycemic control has no impact on the risk of heart failure in type 2 diabetic patients: evidence from a 37,229 patient meta-analysis (Castagno et al.)

Table III. Number of events and HF event rates per 1,000 person-years between more intensive versus less intensive glucose-lowering regimens across randomized controlled trials included in the meta-analysis

	More intensive treatment		Less intensive treatment	
Study name	No. of events/no. of patients at risk (%)	Event rates per 1000 person-years	No. of events/no. of patients at risk (%)	Event rates per 1000 person-years
VA-CSDM Feasibility trial	4/75 (5.3)	23.2	1/78 (1.3)	5.6
UKPDS	91/3071 (3.0)	2.9	36/1138 (3.2)	3.1
ADVANCE	220/5571 (3.9)	7.9	231/5569 (4.1)	8.3
PROactive	209/2605 (8.0)	27.7	153/2633 (5.8)	20.0
ACCORD	152/5128 (3.0)	8.5	124/5123 (2.4)	6.9
VADT	76/892 (8.5)	15.2	82/899 (9.1)	16.3
RECORD	61/2220 (2.7)	5.0	29/2227 (1.3)	2.4
Overall	813/19562 (4.2)	8.0	656/17667 (3.7)	8.0

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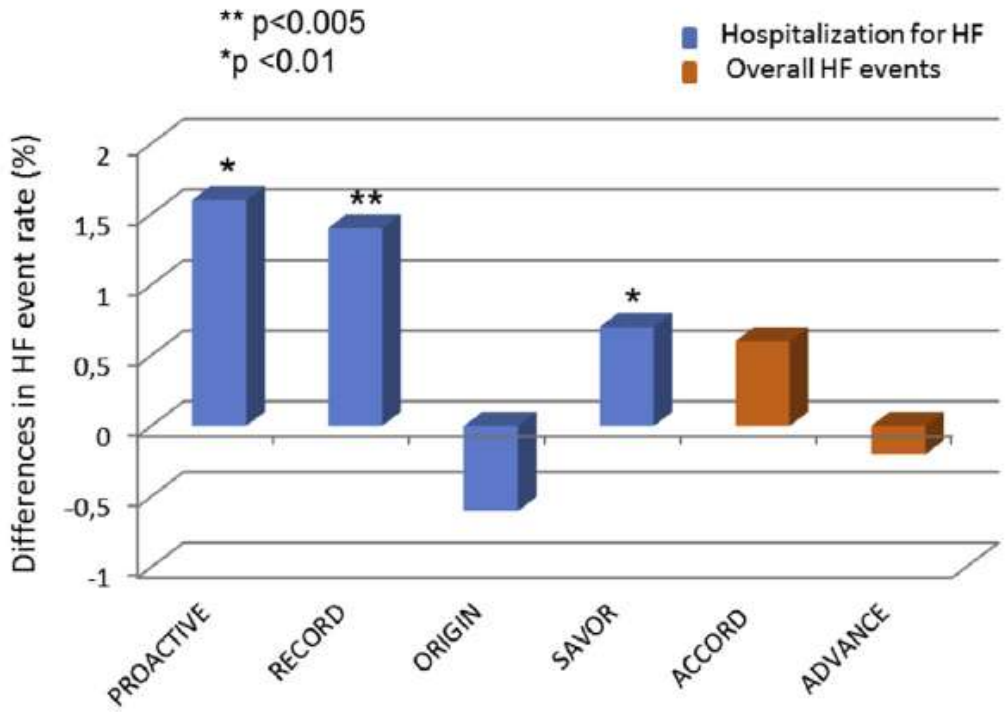
STATE-OF-THE-ART PAPER

Impact of Diabetes on Epidemiology, Treatment, and Outcomes of Patients With Heart Failure

Alessandra Dei Cas, MD, PhD,* Sadiya S. Khan, MD,† Javed Butler, MD, MPH,‡ Robert J. Mentz, MD,§ Robert O. Bonow, MD, MS,‖ Angelo Avogaro, MD, PhD,¶ Diethelm Tschoepe, MD,# Wolfram Doehner, MD, PhD,** Stephen J. Greene, MD,‖ Michele Senni, MD,†† Mihai Gheorghiade, MD,‖ Gregg C. Fonarow, MD‡‡

FIGURE 4 Heart Failure Rates in Diabetes Clinical Trials



	GFR > 50 ml/min	GFR 50-30 ml/min	GFR <30 ml/min
NO CHD	1. Metformina 2. SU 3. Pioglitazone 4. AG-I 5. DPP4-I 6. GLP-1 RA 7. Insulina	1. Metformina (cautela) 2. Gliclazide 3. Pioglitazone 4. AG-I 5. DPP4-I 6. GLP-1 RA 7. Insulina	1. Pioglitazone 2. DPP4-I (dose !) 3. Lina 4. Insulina
CHD	1. Metformina 2. Gliclazide 3. Pioglitazone 4. AG-I 5. DPP4-I 6. GLP-1 RA 7. Insulina	1. Metformina (cautela) 2. Gliclazide 3. Pioglitazone 4. AG-I 5. DPP4-I 6. GLP-1 RA 7. Insulina	1. Pioglitazone 2. Lina 3. DPP4-I (dose) 4. Insulina
HEART FAILURE	1. Metformina 2. Gliclazide 3. DPP4-I (cautela) 4. AG-I 5. GLP-1 RA 6. Insulina	1. Gliclazide 2. AG-I 3. DPP4-I (cautela e dose) 4. GLP-1 RA 5. Insulina	1. Insulina