...καλησπέρα σας

ΚΑΛΗ ΧΡΟΝΙΑ!!!

ΣΠΙΝΘΗΡΟΓΡΑΦΗΜΑ ΚΑΡΔΙΑΣ ΚΑΙ ΕΠΑΝΑΙΜΑΤΩΣΗ ΤΟΥ ΜΥΟΚΑΡΔΙΟΥ

Αργύριος Δούμας

Επίκουρος Καθηγητής Πυρηνικής Ιατρικής Α.Π.Θ.

ΙΠΠΟΚΡΑΤΗΣ
EUROMEDICA
ΚΕΝΤΡΟ
ΠΥΡΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ

ΝΟΣΟΚΟΜΕΙΟ
ΠΑΠΑΓΕΩΡΓΙΟΥ

19:00 – 20:30 **ΣΤΡΟΓΓΥΛΟ ΤΡΑΠΕΖΙ**

Νεότερες τεχνικές στην απεικόνιση του μυοκαρδίου και στεφανιαίων αγγείων

Πρόεδρος: **Π. Γκελερής**

3-D ηχωκαρδιογραφία: Ο ρόλος της στην επεμβατική καρδιολογία / **Β. Νινιός**

Σπινθηρογράφημα καρδιάς και επαναιμάτωση του μυοκαρδίου / **Α. Δούμας**

Μυοκαρδιακή βιωσιμότητα και μαγνητική τομογραφία / **Γ. Σπανός**

Η αξονική στεφανιογραφία στη χειρουργηθείσα στεφανιαία νόσο / **Δ. Χουρμούζη**

FDA Safety Changes: Boxed Warning Added to Ultrasound Contrast Agent CME/CE

Clinical Implications

The FDA has changed the safety labeling for perflutren-containing ultrasound contrast agent to indicate that it may uncommonly cause serious cardiopulmonary reactions, anaphylactoid reactions, and even death. Most serious reactions occur within 30 minutes of administration of the agent.

Definity

DEFINITY®
(Perflutren Lipid Microsphere)

WARNING

SERIOUS CARDIOPULMONARY REACTIONS

Serious cardiopulmonary reactions, including fatalities, have occurred uncommonly during or following perflutren-containing microsphere administration [see **WARNINGS AND PRECAUTIONS**]. Most serious reactions occur within 30 minutes of administration.

- Assess all patients for the presence of any condition that precludes DEFINITY® administration [see CONTRAINDICATIONS].
- Always have resuscitation equipment and trained personnel readily available.

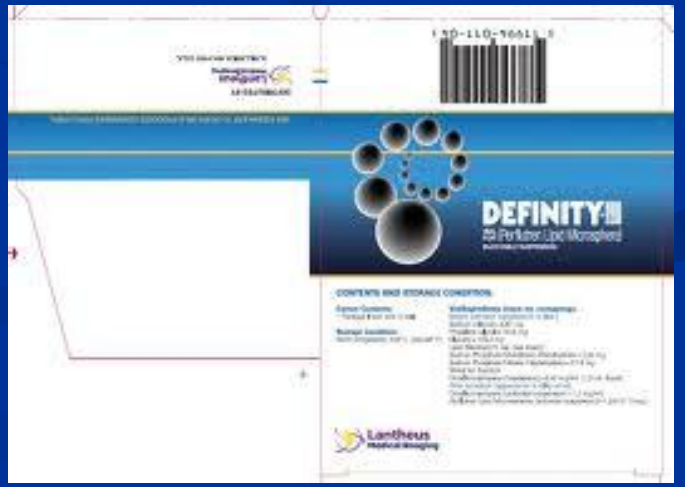
1. ΟΝΟΜΑΣΙΑ ΤΟΥ ΦΑΡΜΑΚΕΥΤΙΚΟΥ ΠΡΟΪΟΝΤΟΣ

Luminity 150 μικρόλιτρα/ml διάλυμα για διασπορά για ένεση ή έγχυση

2. ΠΟΙΟΤΙΚΗ ΚΑΙ ΠΟΣΟΤΙΚΗ ΣΥΝΘΕΣΗ

Κάθε ml περιέχει μέγιστη ποσότητα 6,4 x 10^9 μικροσφαιρίδια λιπιδίων που περιέχουν perflutren, με μέση διάμετρο να κυμαίνεται από 1,1-2,5 μικρόμετρα (μm). Η κατά προσέγγιση ποσότητα αερίου perflutren ανά ml είναι 150 μικρόλιτρα (μl).

Έκδοχο:
Νάτριο 2,679 mg ανά ml



ΑΠΕΙΚΟΝΙΣΗ ΤΗΣ ΣΤΕΦΑΝΙΑΙΑΣ ΝΟΣΟΥ

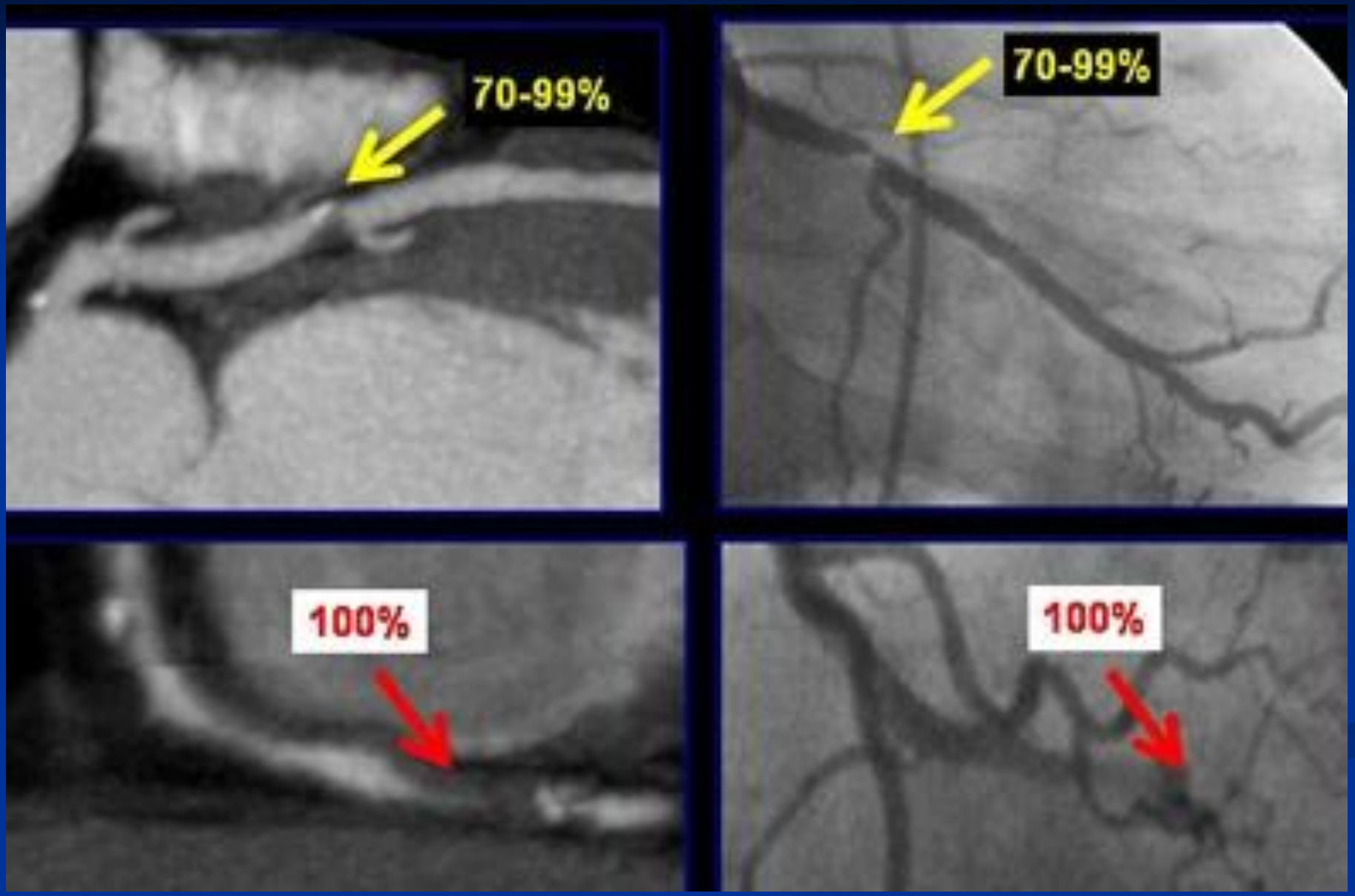
α. Ανατομική

β. Λειτουργική

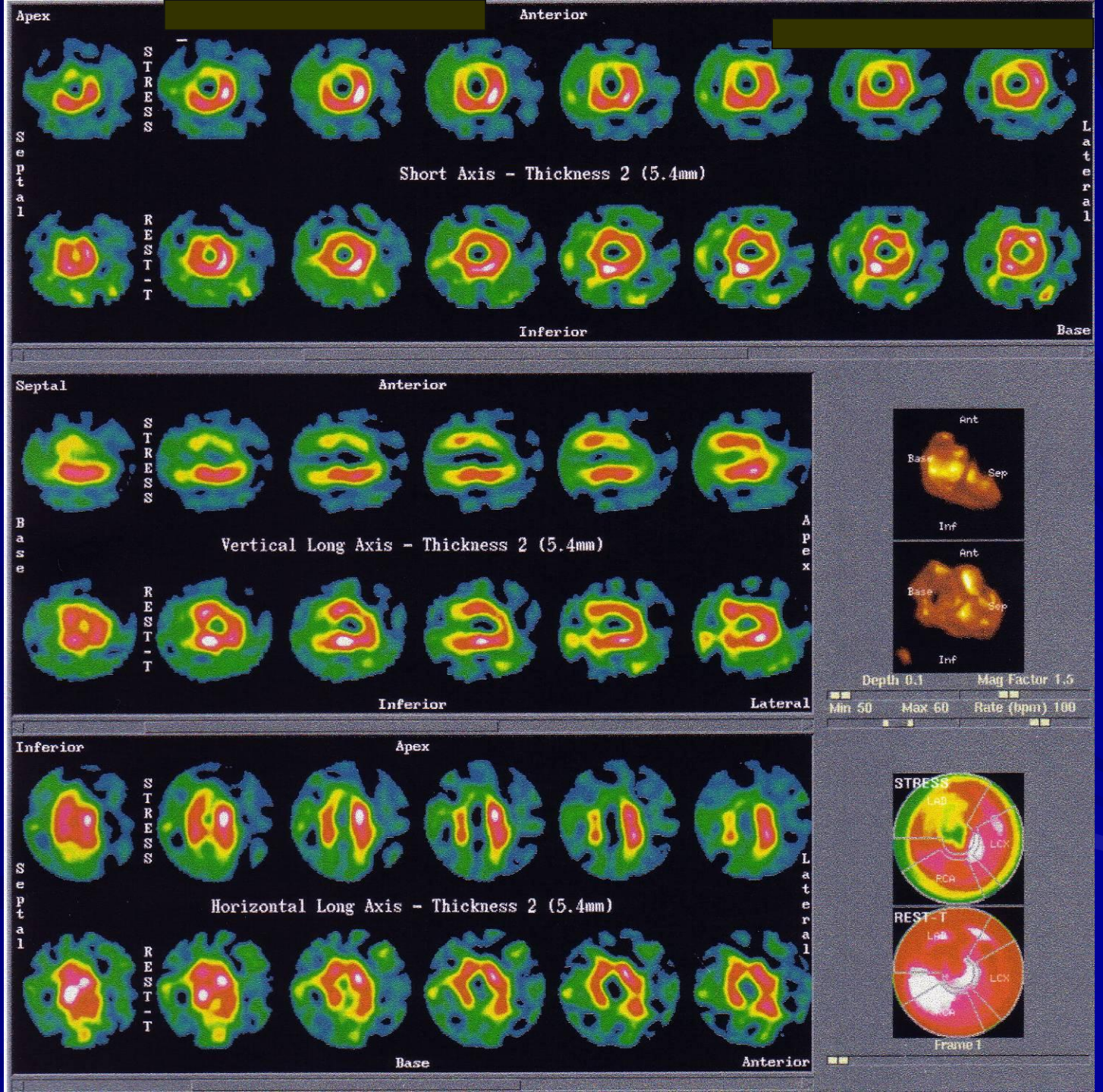
“ΑΥΛΟΛΟΓΙΑ”
(LUMINOLOGY)

CTA

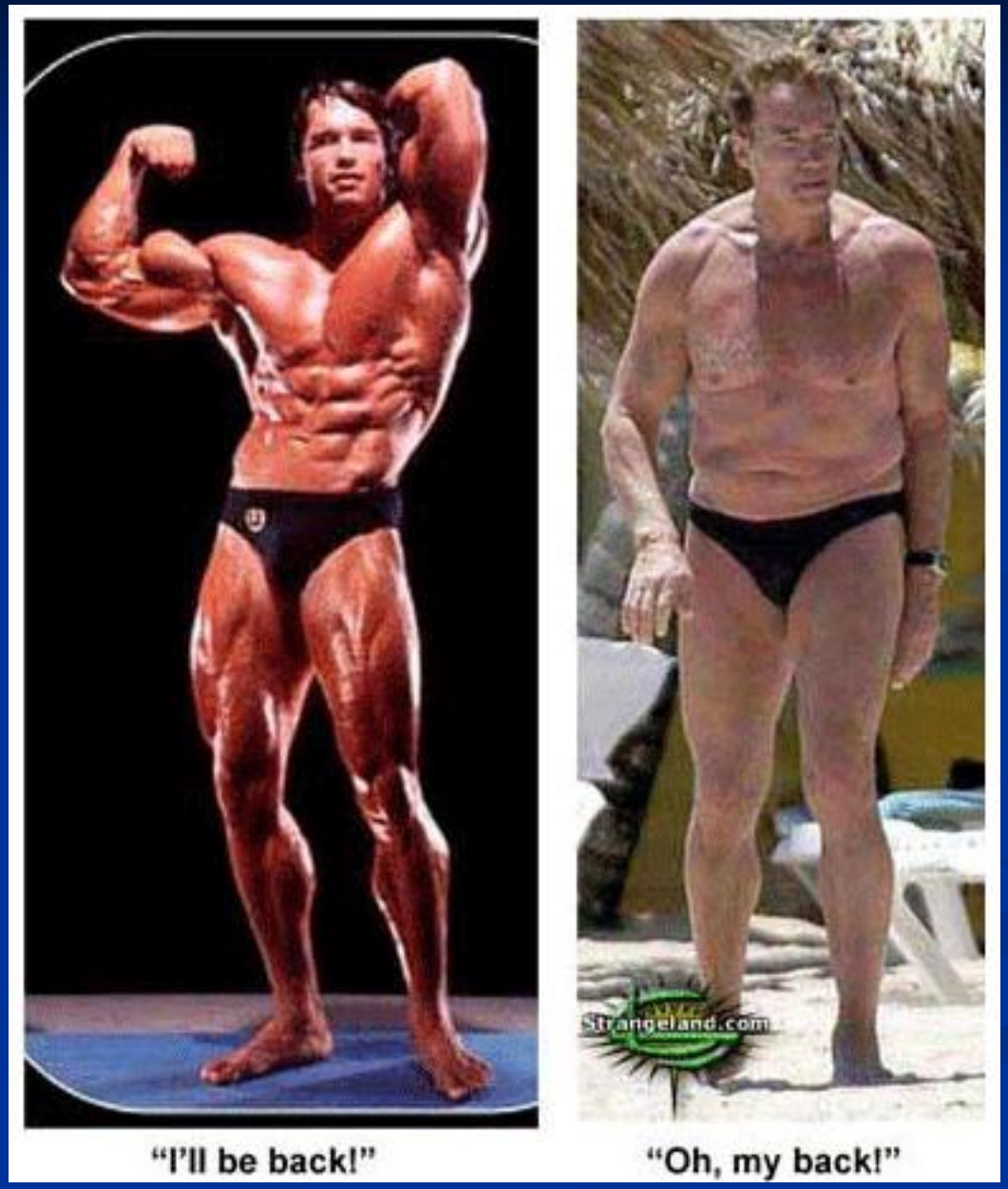
Στεφανιαία αγγειογραφία



Nuclear Medicine = Functional Art


Apex
Anterior
STRESS
REST-T
Septal
Lateral
Short Axis - Thickness 2 (5.4mm)
Inferior
Base
Septal
Anterior
Base
Apex
Vertical Long Axis - Thickness 2 (5.4mm)
Inferior
Lateral
Ant
Base
Sep
Inf
Depth 0.1
Mag Factor 1.5
Min 50
Max 60
Rate (bpm) 100
Inferior
Apex
Septal
Lateral
Horizontal Long Axis - Thickness 2 (5.4mm)
Base
Anterior
STRESS
REST-T
LAD
LCX
RCA
Frame 1

ΠΡΙΝ ΚΑΙ ΜΕΤΑ ΤΗΝ ΕΠΑΝΑΙΜΑΤΩΣΗ



Σε ποιούς θα πρέπει να γίνει σπινθηρογράφημα μετά την επαναιμάτωση;

PTCA **CABG**

J Am Coll Cardiol. 2005 Oct 18;46(8):1587-605.

ACCF/ASNC appropriateness criteria for single-photon emission computed tomography myocardial perfusion imaging (SPECT MPI): a report of the American College of Cardiology Foundation Quality Strategic Directions Committee Appropriateness Criteria Working Group and the American Society of Nuclear Cardiology endorsed by the American Heart Association.

Table 7. Risk Assessment: Post-Revascularization (PCI or CABG)

Indication		Appropriateness Criteria (Median Score)
	Symptomatic	
41.	• Evaluation of chest pain syndrome	A (8.0)
	Asymptomatic	
42.	• Asymptomatic prior to previous revascularization • Less than 5 years after CABG	U (6.0)
43.	• Symptomatic prior to previous revascularization • Less than 5 years after CABG	U (4.5)
44.	• Asymptomatic prior to previous revascularization • Greater than or equal to 5 years after CABG	A (7.5)
45.	• Symptomatic prior to previous revascularization • Greater than or equal to 5 years after CABG	A (7.5)
46.	• Asymptomatic prior to previous revascularization • Less than 1 year after PCI	U* (6.5)
47.	• Symptomatic prior to previous revascularization • Less than 1 year after PCI	I (3.0)
48.	• Asymptomatic prior to previous revascularization • Greater than or equal to 2 years after PCI	U* (6.5)
49.	• Symptomatic prior to previous revascularization • Greater than or equal to 2 years after PCI	U (5.5)

*Median scores of 3.5 and 6.5 are rounded to the middle (Uncertain). Note: I (Inappropriate), U (Uncertain), and A (Appropriate).

Table 8. Assessment of Viability/Ischemia

Indication		Appropriateness Criteria (Median Score)
	Ischemic Cardiomyopathy Assessment of Viability/Ischemia (Includes SPECT Imaging for Wall Motion and Ventricular Function)	
50.	• Known CAD on catheterization • Patient eligible for revascularization	A (8.5)

Note: I (Inappropriate), U (Uncertain), and A (Appropriate).

- Εκτίμηση στηθαγχικού άλγους ανεξάρτητα χρόνου επέμβασης
- Πάνω από 5 χρόνια μετά το CABG

- Σε ποιούς θα πρέπει να γίνει έρευνα για βιωσιμότητα;

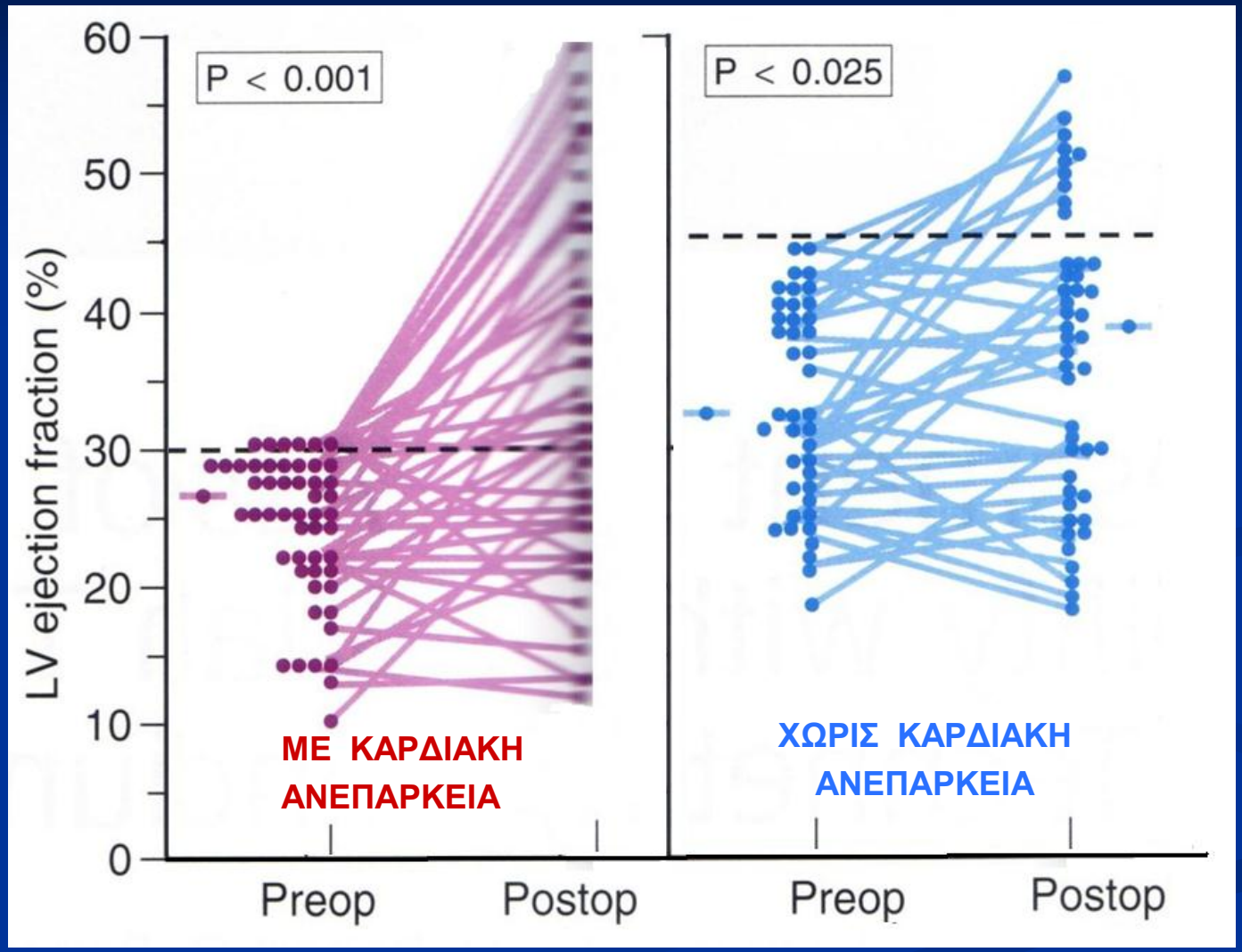
- ΚΑΡΔΙΑΚΗ ΑΝΕΠΑΡΚΕΙΑ:

  Περίπου 5.000.000 ασθενείς στις ΗΠΑ, με 400.000 νέες περιπτώσεις τον χρόνο

- Σε >70% των ασθενών με καρδιακή ανεπάρκεια υπεύθυνη είναι η στεφανιαία νόσος.

- <u>Μετά από επέμβαση:</u> Το 40% των ασθενών βελτιώνει το LVEF.

ΒΕΛΤΙΩΣΗ ΤΟΥ LVEF ΜΕΤΑ ΤΗΝ ΕΠΑΝΑΙΜΑΤΩΣΗ

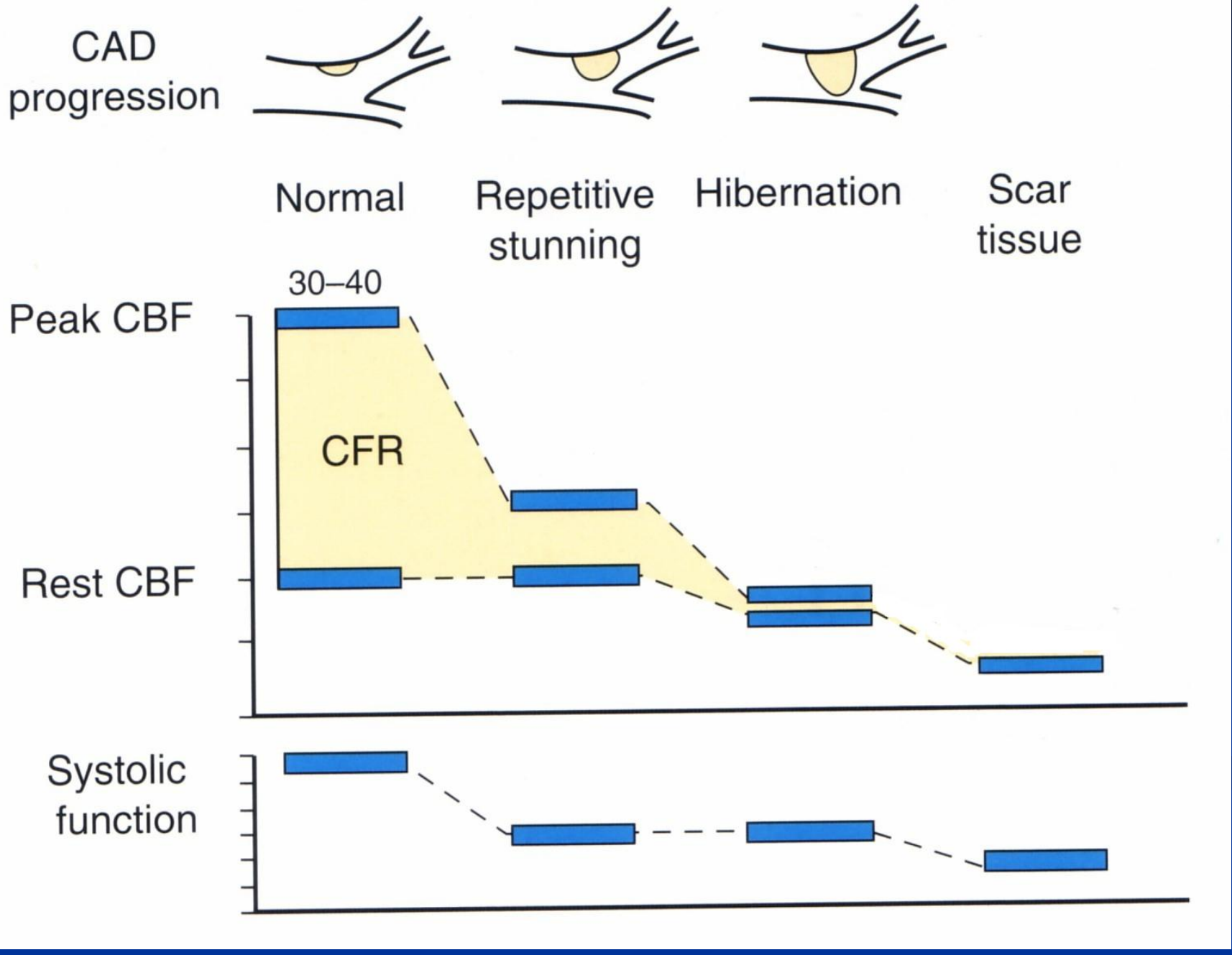


Novac B. J Nucl Cardiol 2003;10:34-45

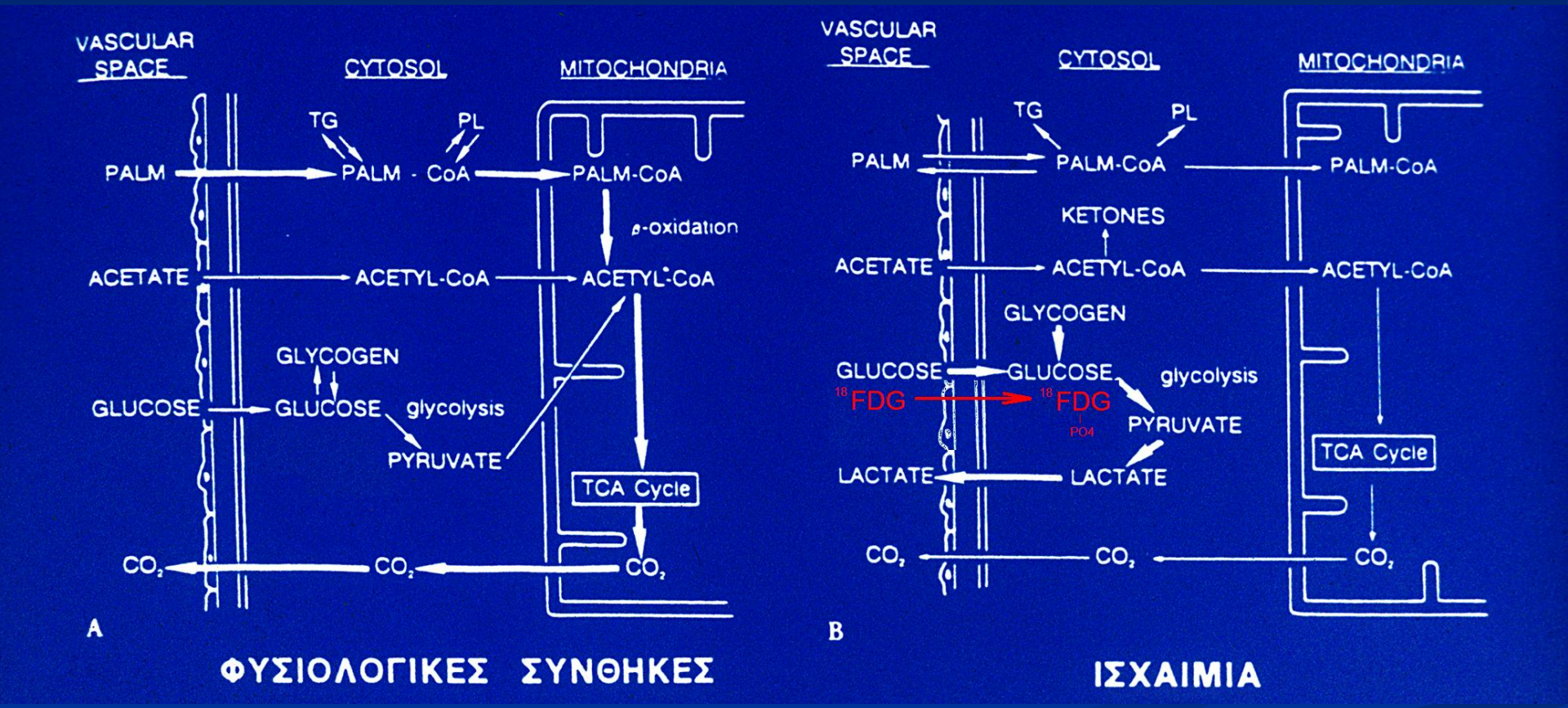
ΟΡΙΣΜΟΣ ΒΙΩΣΙΜΟΥ ΜΥΟΚΑΡΔΙΟΥ

- Το ακινητικό μυοκάρδιο που θα αποκτήσει λειτουργικότητα μετά από επαναιμάτωση.

- Χειμερία νάρκη (Hibernation): Παθολογική συσταλτικότης, λόγω χρονίως μειωμένης παροχής O2.
- Αποπληξία (Stunning): Παθολογική συσταλτικότης, λόγω βραχείας διακοπής παροχής O2. Η αιματική ροή παραμένει φυσιολογική ή ελαφρώς μειωμένη.
- Repetitive stunning: Επανειλημμένα επεισόδια αποπληξίας προκαλούν τελικά χρόνια καρδιακή υπολειτουργία


CAD progression
Normal
Repetitive stunning
Hibernation
Scar tissue
30–40
Peak CBF
CFR
Rest CBF
Systolic function

ΠΟΙΟ ΕΙΝΑΙ ΤΟ ΙΔΑΝΙΚΟ ΡΑΔΙΟΦΑΡΜΑΚΟ;;



Η ΓΛΥΚΟΖΗ !!!

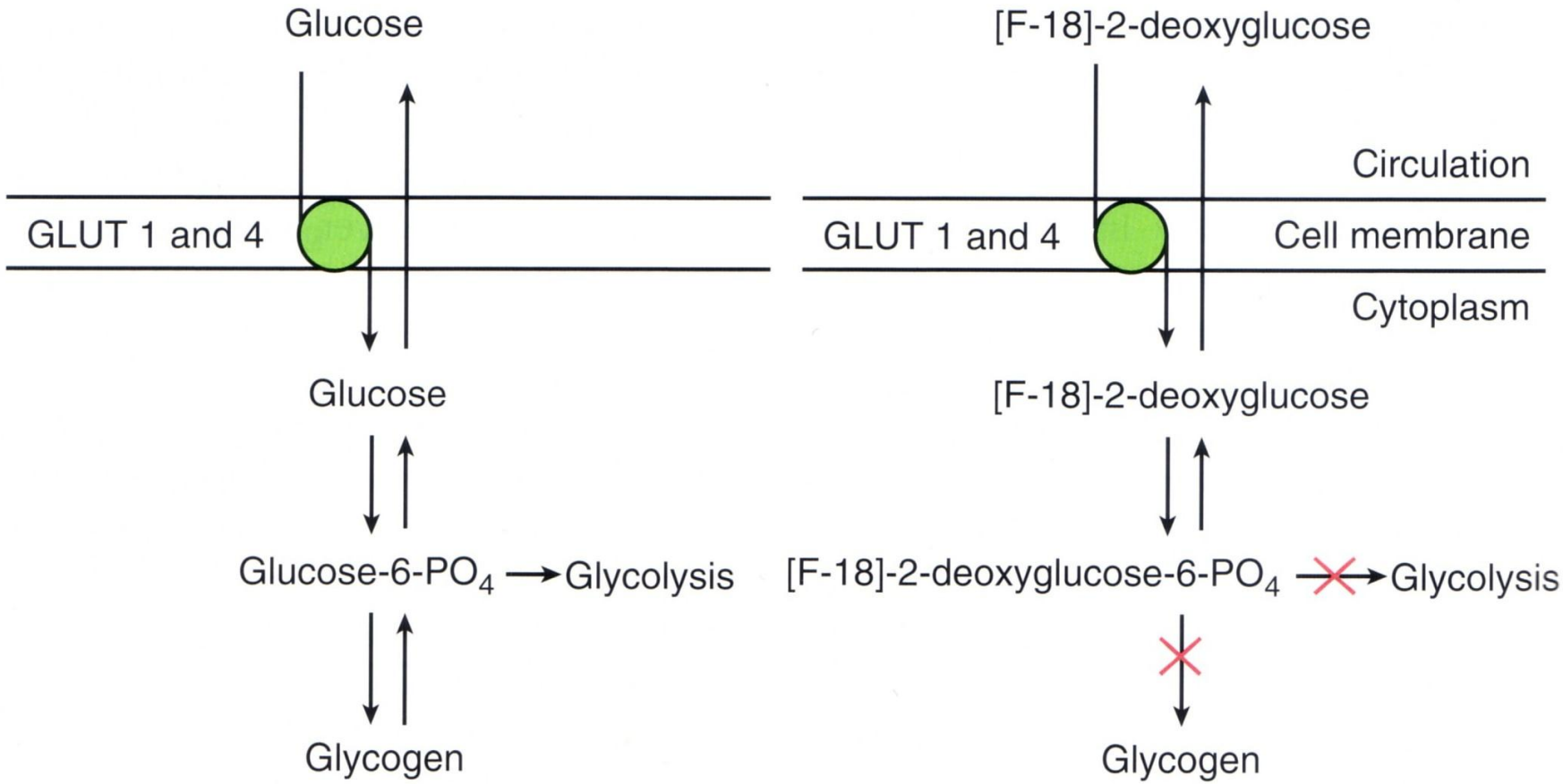
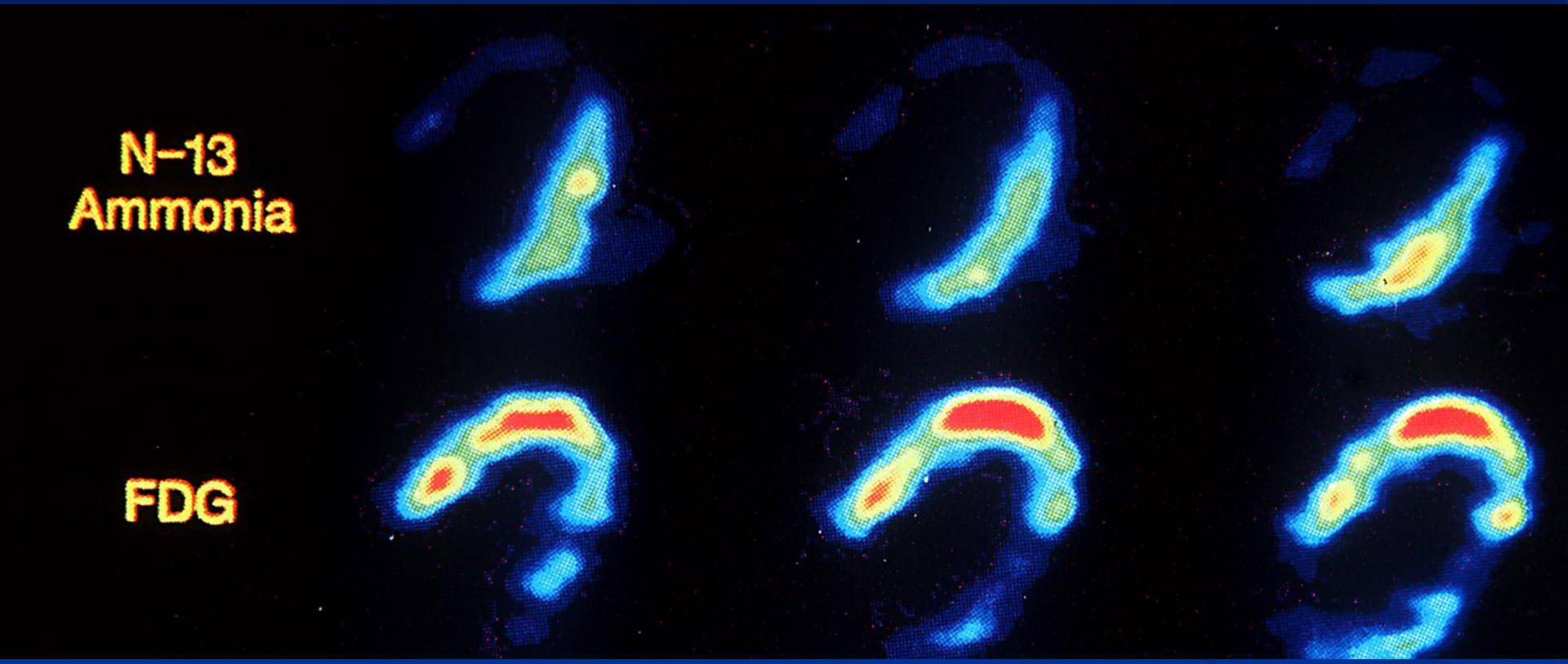
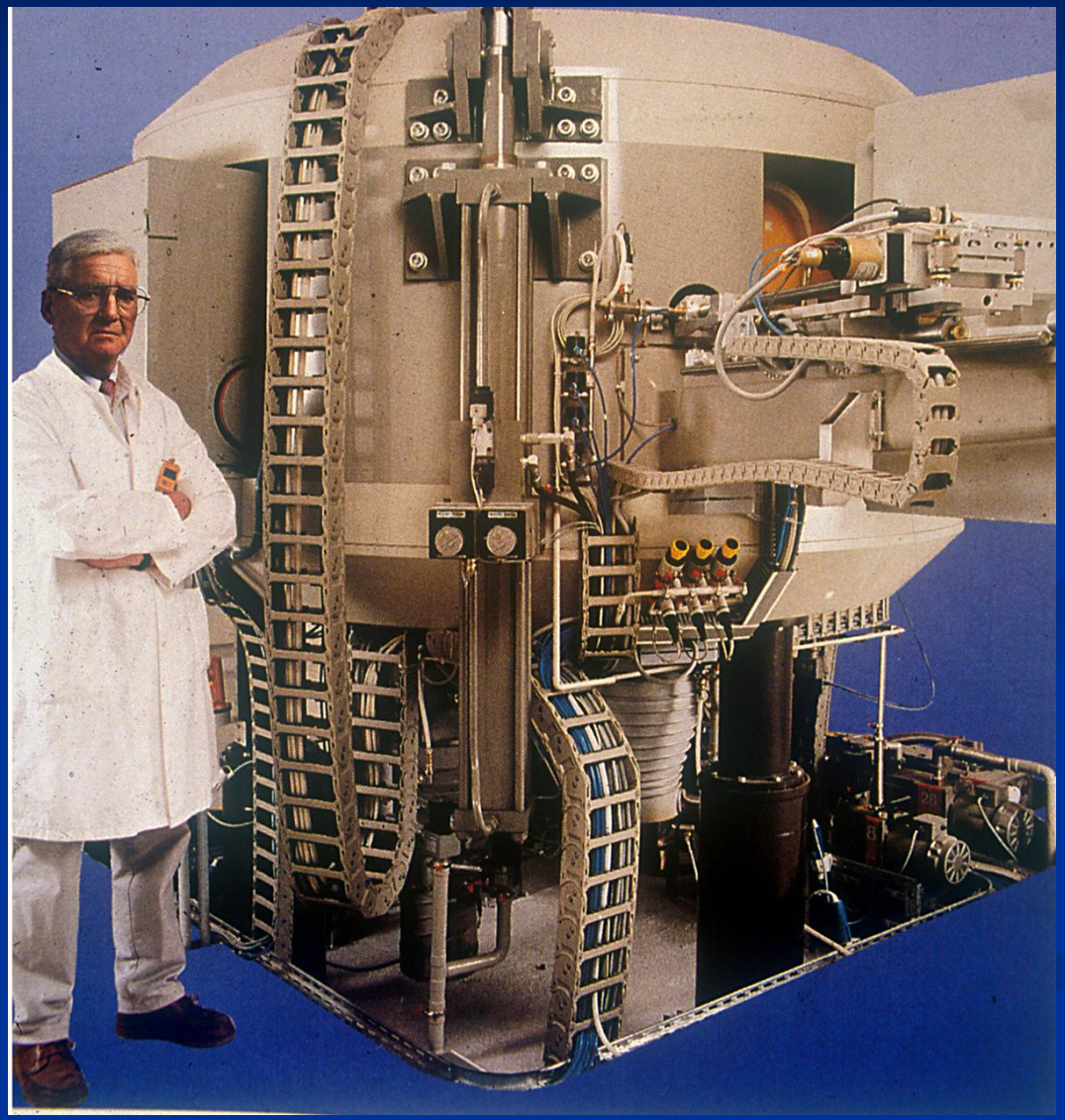


Figure 33.3 Metabolic fate of fluorine-18–deoxyglucose as a marker of exogenous glucose utilization.

FDG



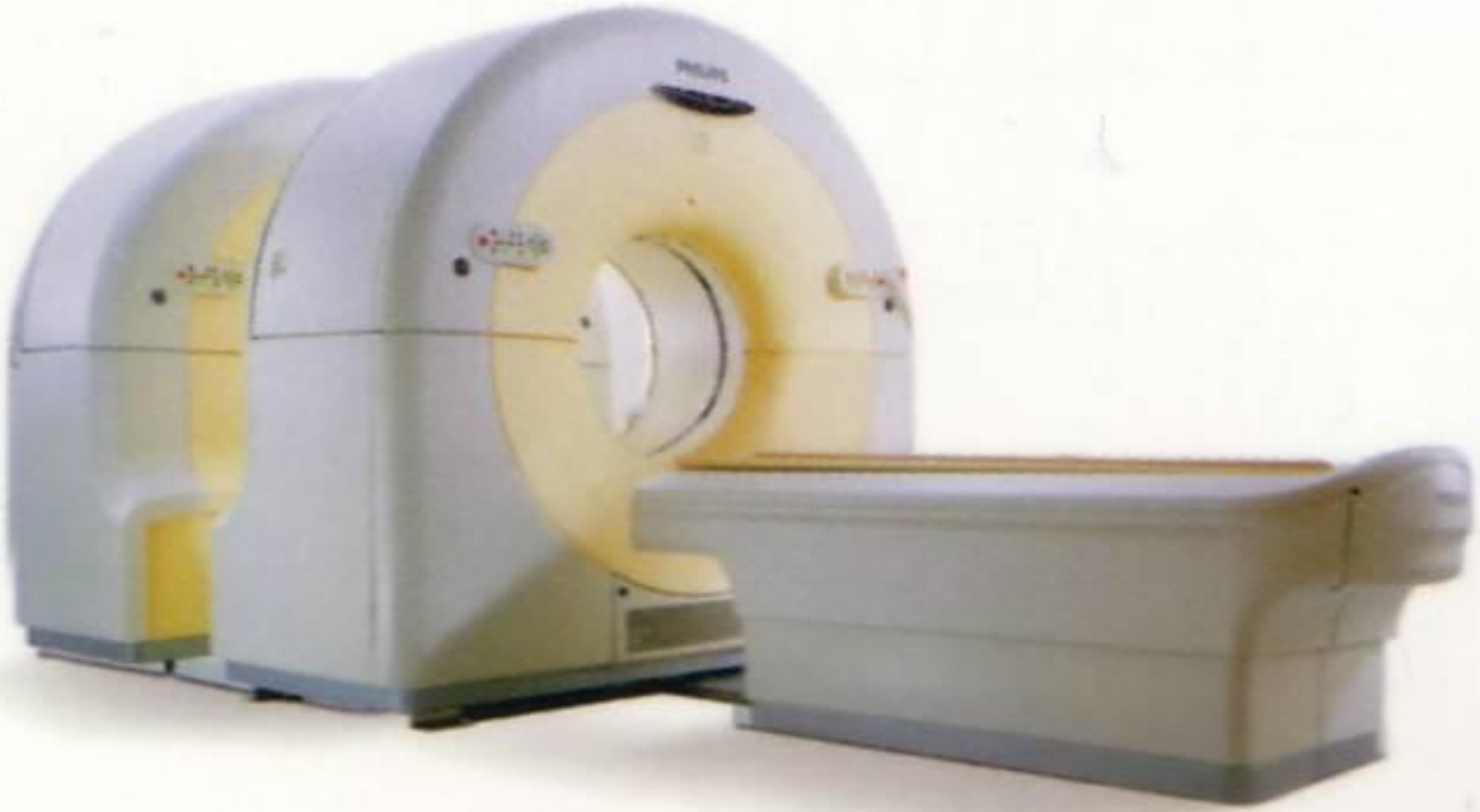
ΚΥΚΛΟΤΡΟΝΙΟ



Baby cyclotron

PET Compound Production System

The Easy Supply of all PET Compounds



ΚΟΣΤΟΣ

- Εξέτασης: 1.600 Ευρώ
- Κάμερας : 2.000.000 Ευρώ
- Κυκλοτρονίου : 1.000.000 Ευρώ
- Δόσης FDG : 700 Ευρώ

Myocardial Viability

Siebelink et al (JACC 2001) demonstrated no difference in cardiac event free survival between PET and sestaMIBI SPECT determination of patient management in a prospective randomized trial.

J. Am. Coll. Cardiol. 2001;37;81-88

No Difference in Cardiac Event-Free Survival Between Positron Emission Tomography-Guided and Single-Photon Emission Computed Tomography-Guided Patient Management

A Prospective, Randomized Comparison of Patients With Suspicion of Jeopardized Myocardium

Hans-Marc J. Siebelink, MD*, Paul K. Blanksma, MD, PHD,* Harry J. G. M. Crijns, MD, PHD,* Jeroen J. Bax, MD, PHD,† Ad J. van Boven, MD, PHD,* Tsjerk Kingma, MSC,‡ D. Albertus Piers, MD, PHD,§ Jan Pruim, MD, PHD,‖ Piet L. Jager, MD, PHD,§ Willem Vaalburg, PHD,‖ Ernst E. van der Wall, MD, PHD, FACC†

Groningen and Leiden, The Netherlands

J Am Coll Cardiol. 2001 Jan;37(1):81-8.

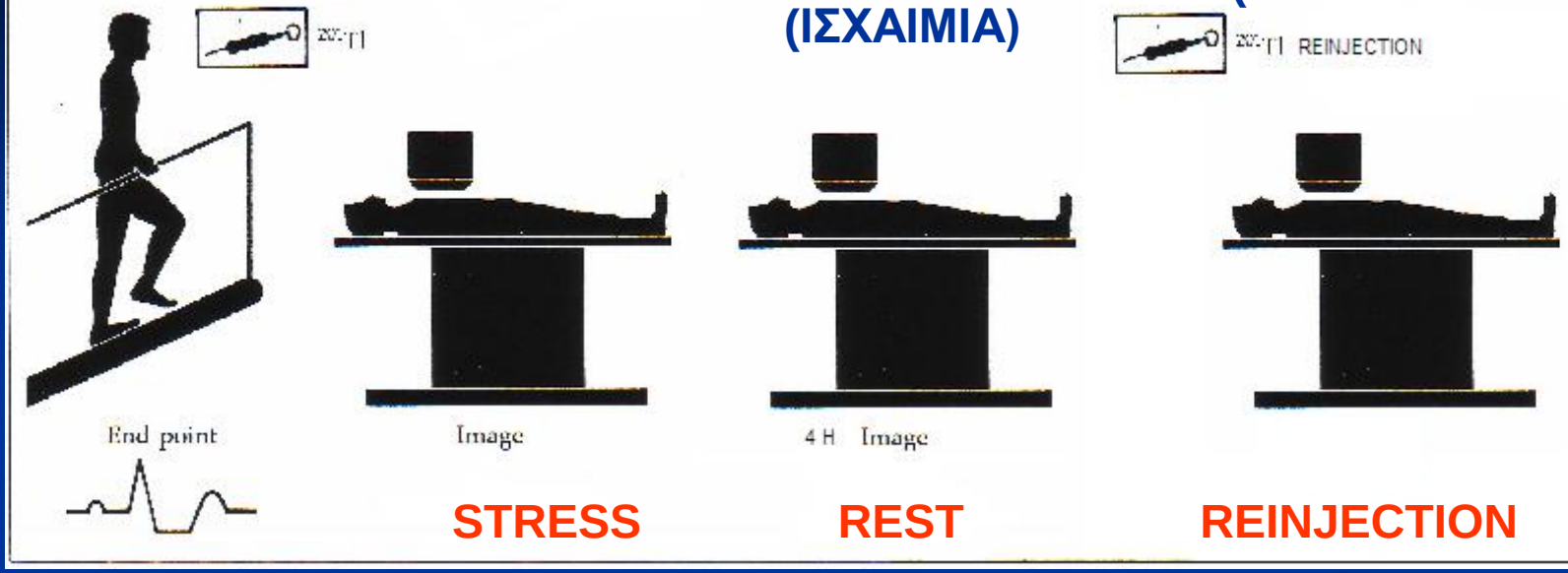
CONCLUSIONS : No difference in patient management or cardiac event-free survival was demonstrated between management based on 13N-ammonia/18FDG PET and that based on stress/rest 99mTc-sestamibi SPECT imaging. Both techniques may be used for management of patients considered for revascularization with suspicion of jeopardized myocardium.

·THE GOLD STANDARD·

ΠΡΩΤΟΚΟΛΛΑ

(ΙΣΧΑΙΜΙΑ)

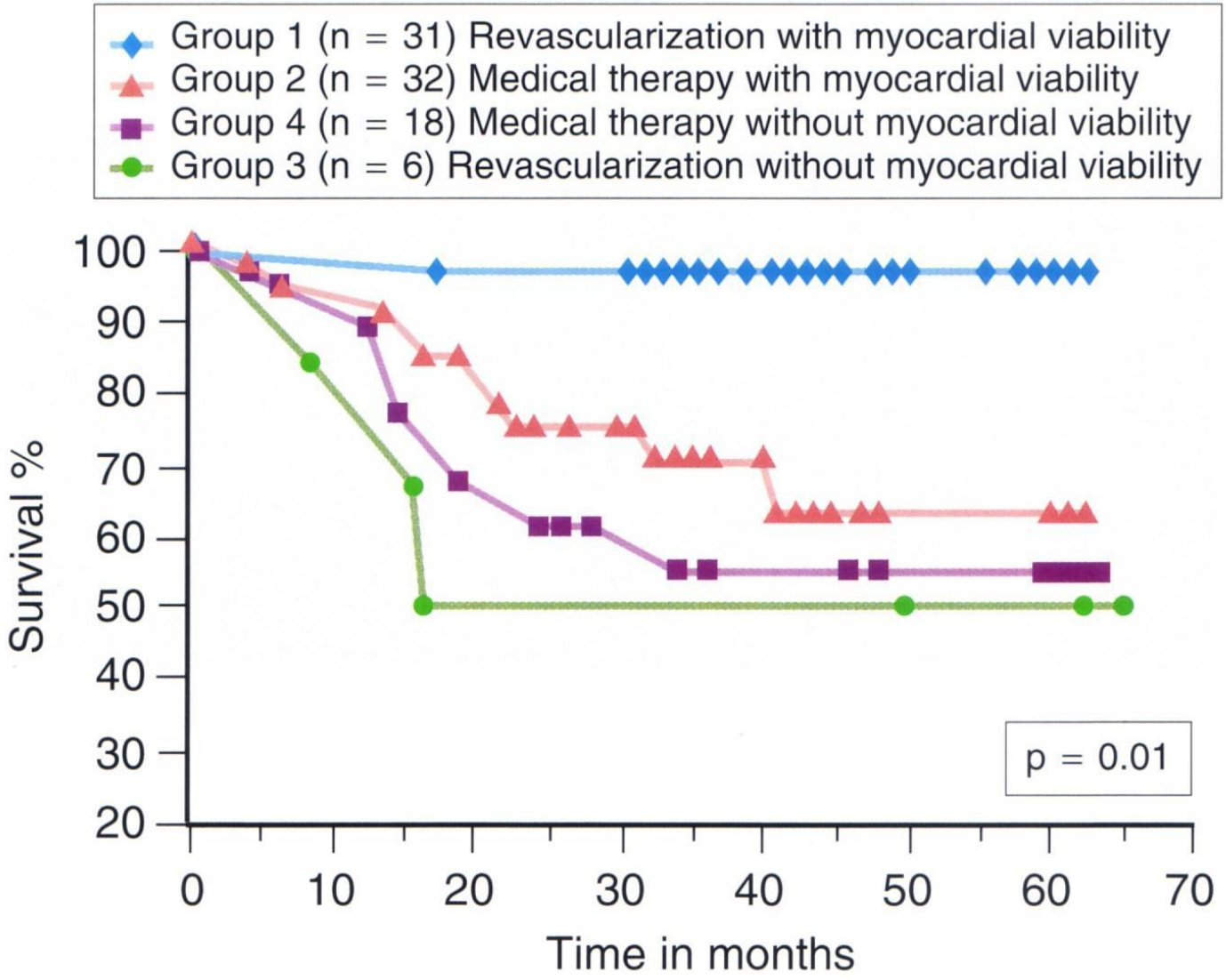
(ΒΙΩΣΙΜΟΤΗΤΑ)



STRESS REST REINJECTION

REST REDISTRIBUTION

- Γιατί πρέπει να γίνεται ο έλεγχος του βιώσιμου μυοκαρδίου;



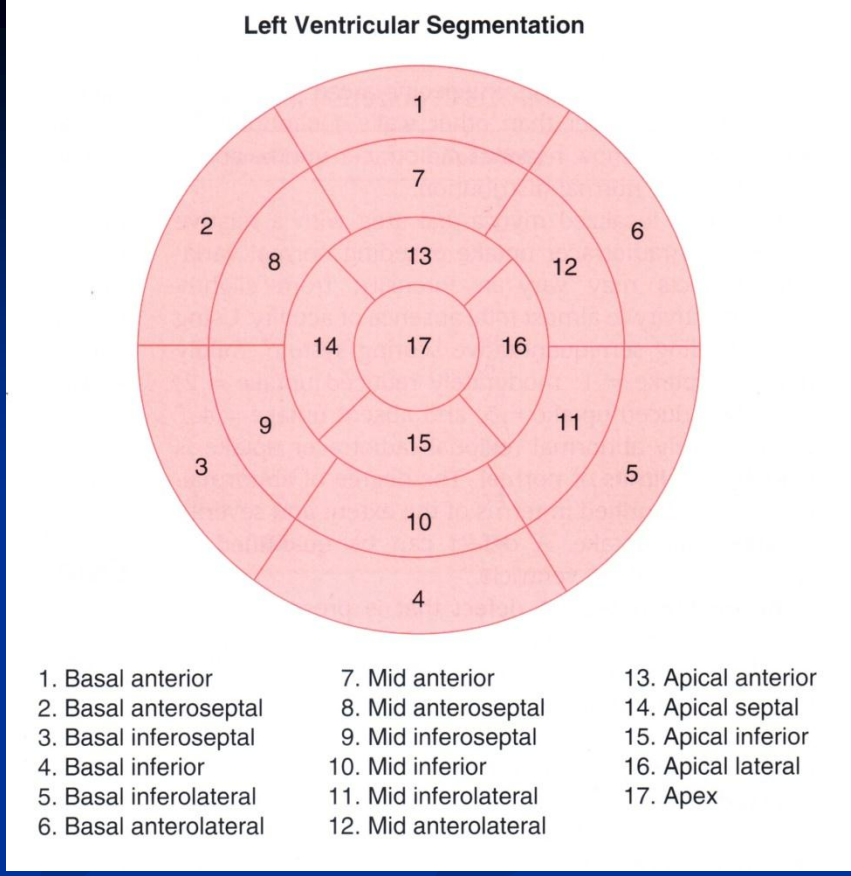
Survival in congestive heart failure with and without revascularization, based on myocardial viability by dobutamine stress echocardiography.

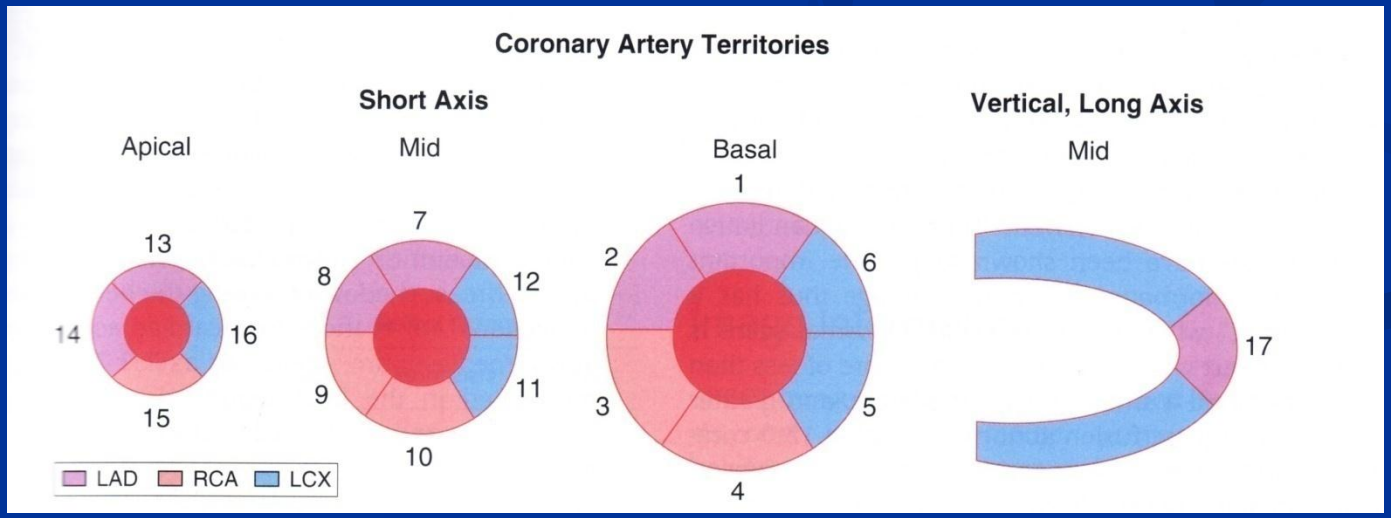
Novac B. J Nucl Cardiol 2003;10:34-45

- Πόσο βιώσιμο μυοκάρδιο πρέπει να υπάρχει;

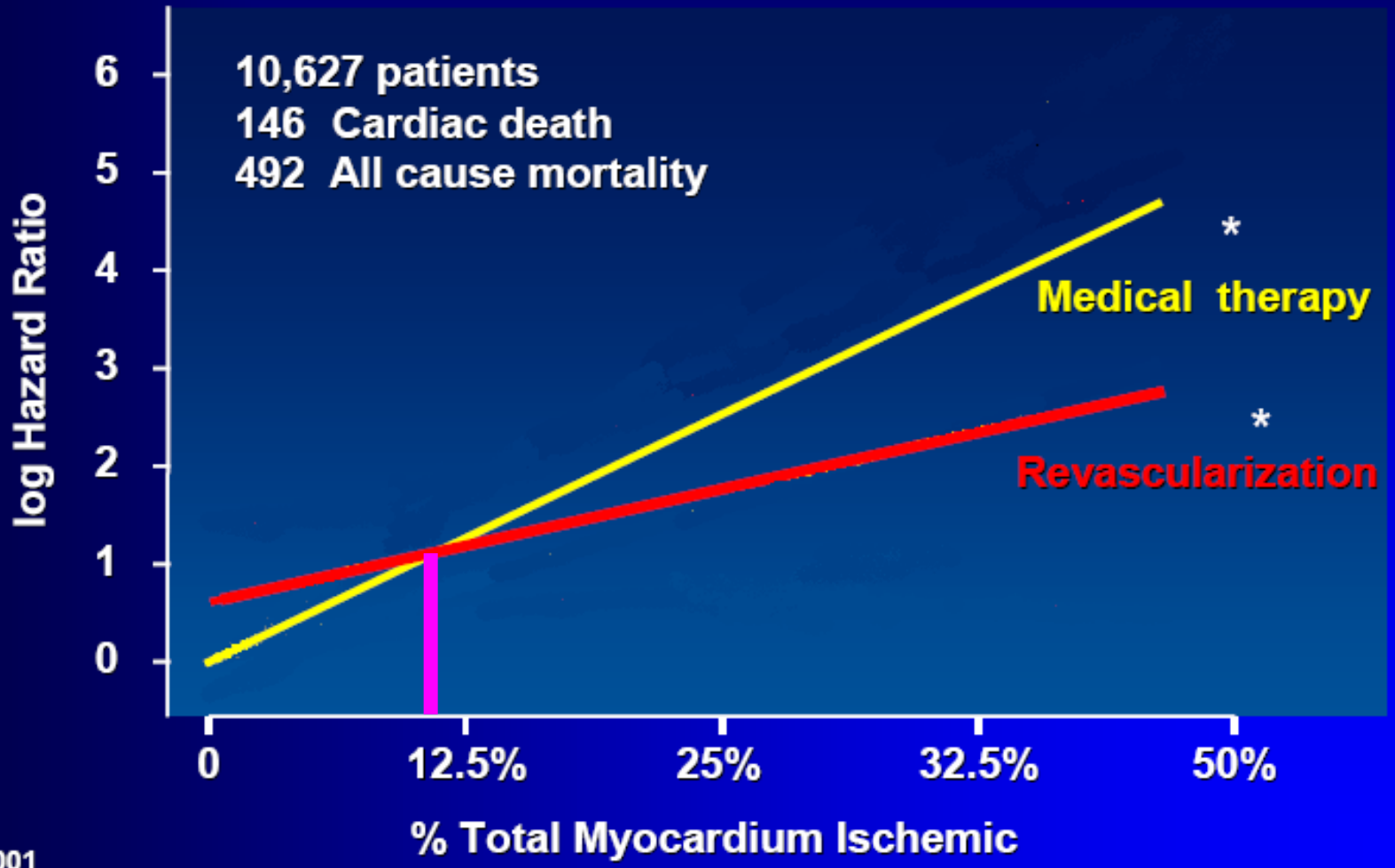
- >7 τμήματα (40% της μυοκ. μάζας) -> αύξηση του EF
- 3-7 τμήματα (17-40%)->βελτίωση της επιβίωσης
- <3 τμήματα-> καμία μεταβολή

Ragosta M Circulation 2003





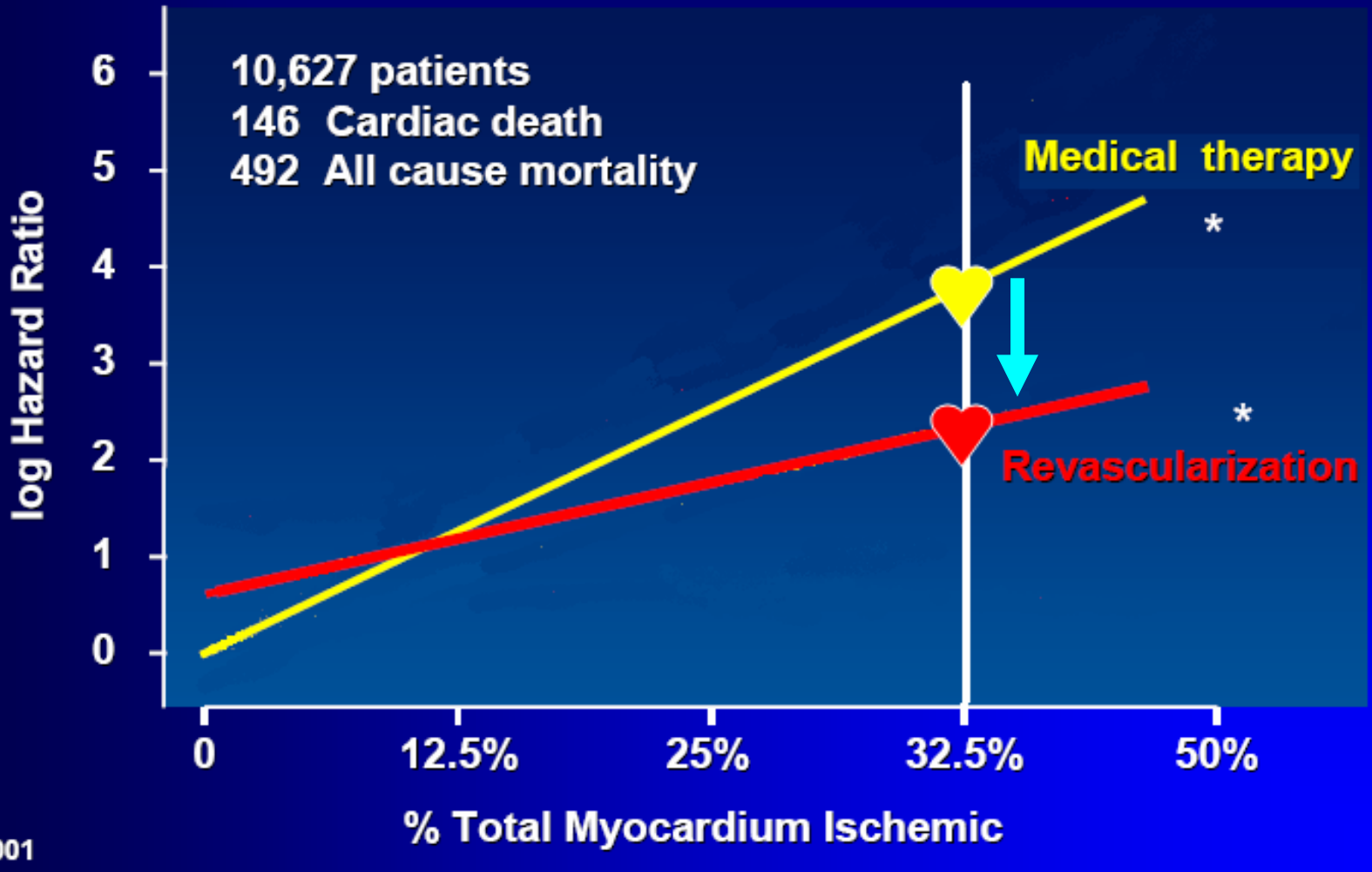
Risk of Cardiac Death and Inducible Ischemia Role of Post-SPECT Therapy



*P<0.001

Hachamovitch R, et al. *Circulation.* 2003;2900-2907.

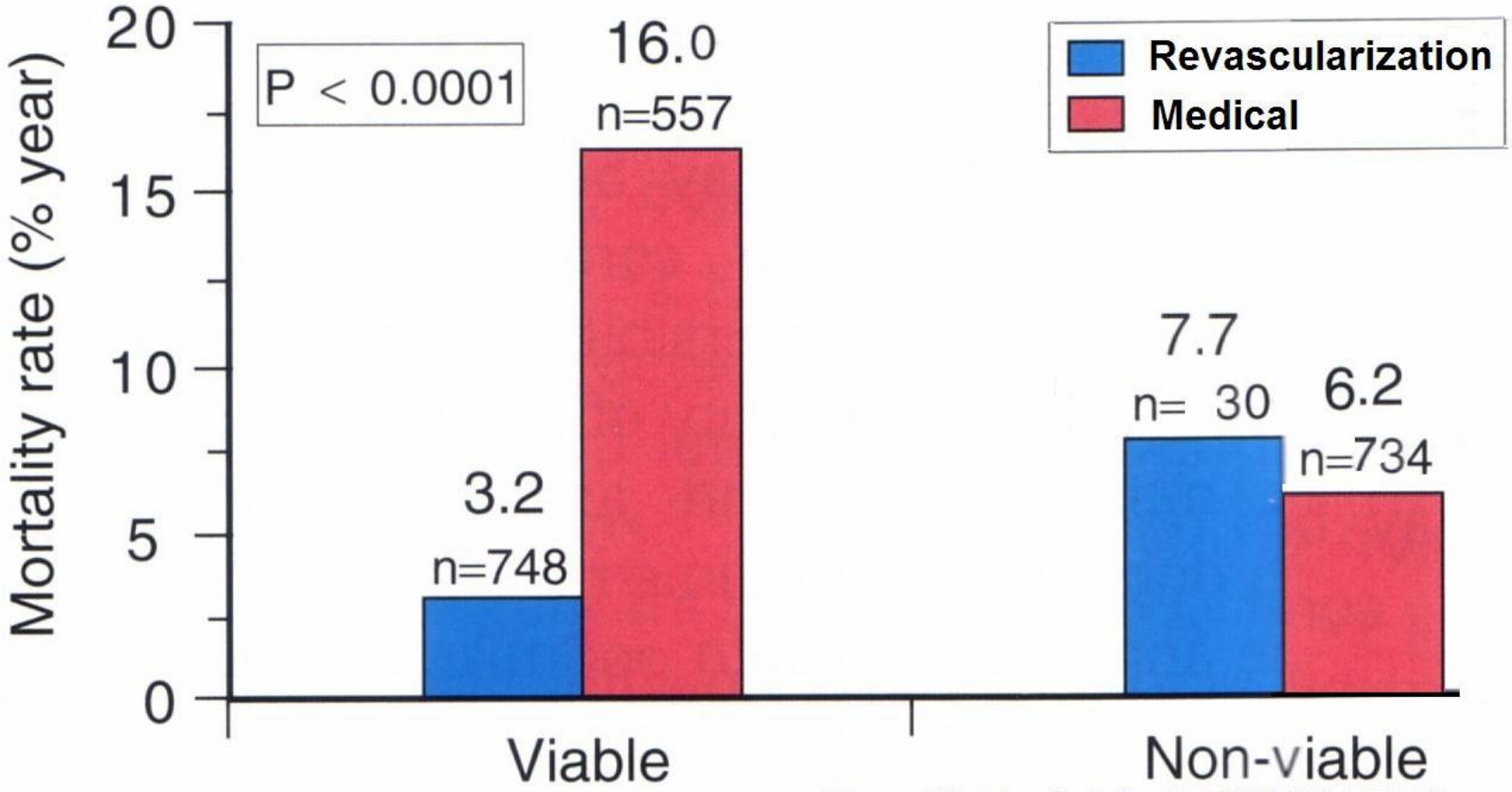
Risk of Cardiac Death and Inducible Ischemia Role of Post-SPECT Therapy



*$P<0.001$

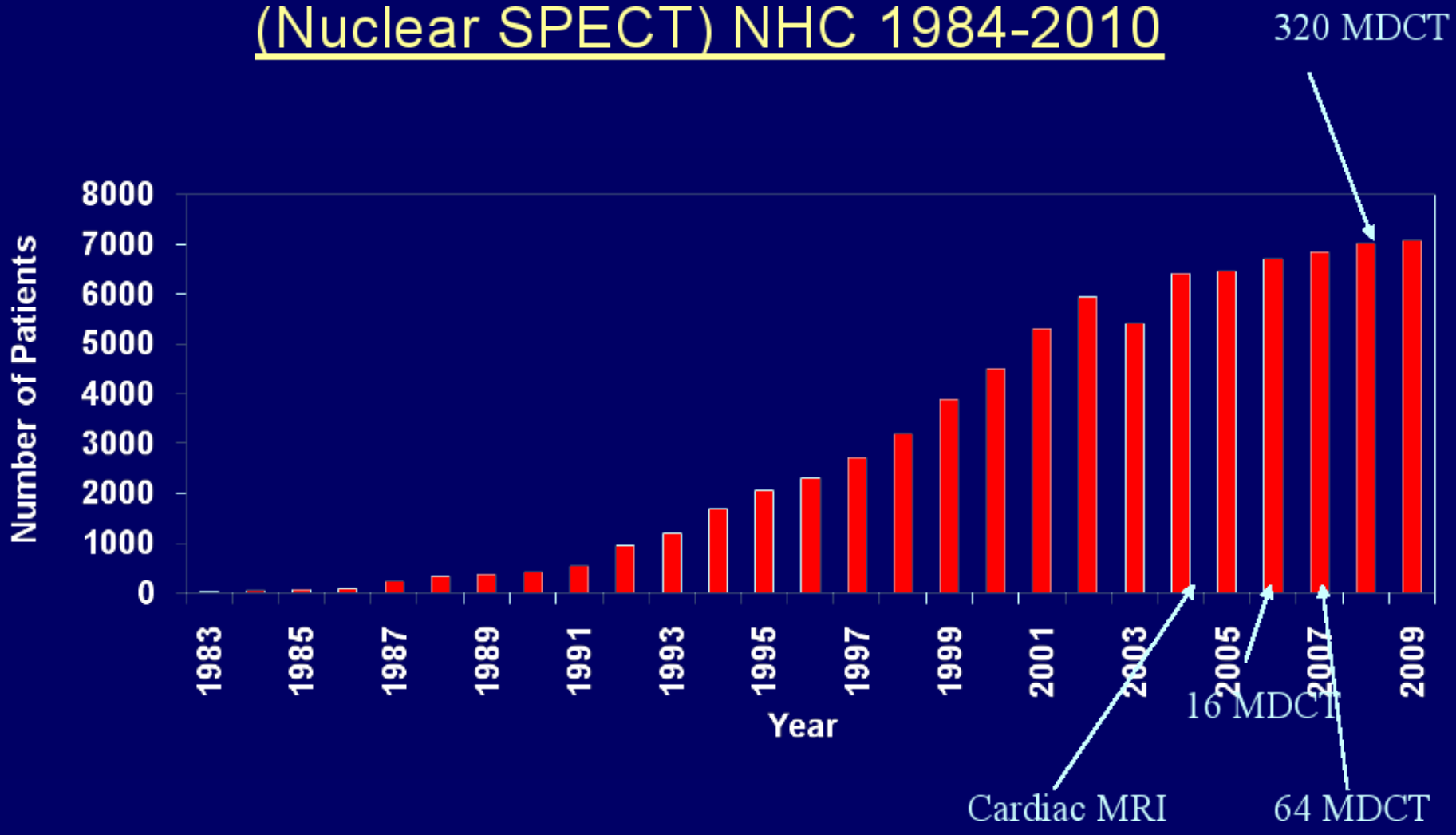
Hachamovitch R, et al. *Circulation.* 2003;2900-2907.

- Γιατί δεν τους χειρουργούμε όλους;



Allman KC J Am Coll Cardiol 2003;239:1151-58

Stress Myocardial Perfusion Imaging (Nuclear SPECT) NHC 1984-2010

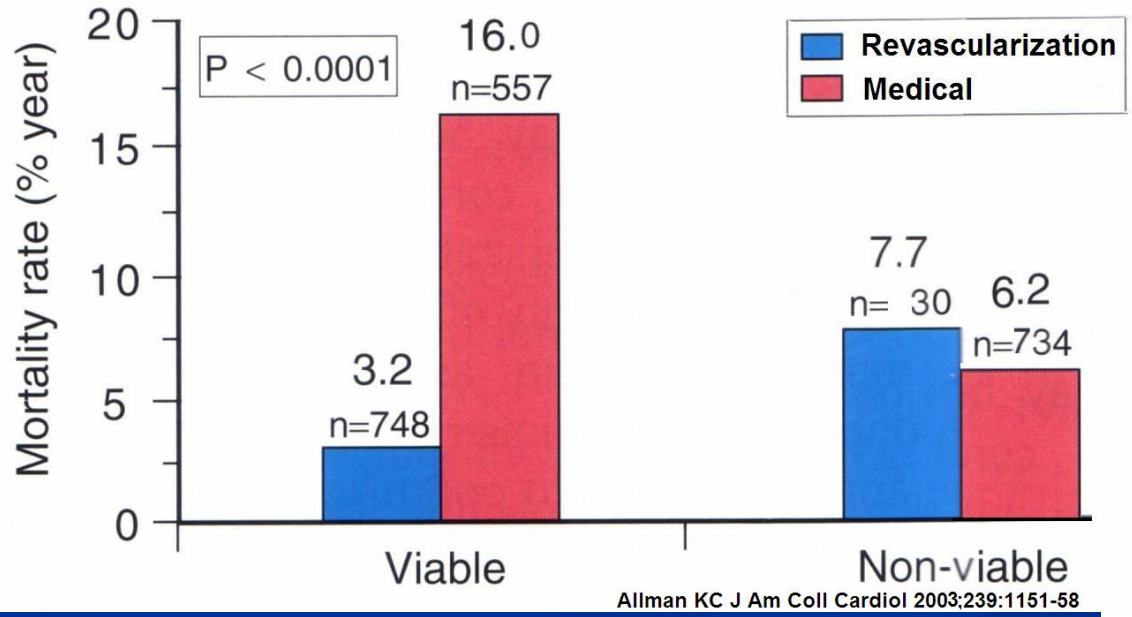


http://humanhealth.iaea.org

Myocardial Viability Testing and Impact of Revascularization on Prognosis in Patients With Coronary Artery Disease and Left Ventricular Dysfunction: A Meta-Analysis

Kevin C. Allman, MB, BS, FRACP, FACC,* Leslee J. Shaw, PHD,† Rory Hachamovitch, MD, FACC,† James E. Udelson, MD, FACC‡

Concord, Australia; Atlanta, Georgia; and Boston, Massachusetts



Allman KC J Am Coll Cardiol 2003;239:1151-58

JACC Vol. 39, No. 7, 2002
April 3, 2002:1151–8

EDITORIAL COMMENT

Myocardial Viability and Prognosis in Patients With Ischemic Left Ventricular Dysfunction*

Robert O. Bonow, MD, FACC
Chicago, Illinois


Dr Robert O Bonow

JACC Vol. 39, No. 7, 2002
April 3, 2002:1159–62

Taken together, these results of the Allman et al. meta-analysis (20) represent powerful arguments in favor of noninvasive evaluation of myocardial viability to identify the most appropriate candidates for myocardial revascularization among patients with CAD and LV dysfunction.

Αλλά….

Need for prospective randomized trials. Clearly, a large prospective, randomized, controlled clinical trial is necessary to fully address the role of revascularization in the management of patients with ischemic cardiomyopathy who do not have angina, as well as the role of viability testing in the decision-making process. One such randomized trial, Surgical Treatment for Ischemic Heart Failure (STICH), which is sponsored by the National Heart, Lung and Blood Institute, will begin enrolling patients in 2002. It will be over six years before the results of STICH are available, however, and in the interim physicians caring for patients with CAD and LV dysfunction must continue to base management decisions on the available data. These data, as summarized by Allman et al. (20), strongly suggest that the differentiation of viable from nonviable myocardium is a relevant diagnostic issue in patients being considered for medical therapy versus myocardial revascularization. While

JACC Vol. 39, No. 7, 2002
April 3, 2002:1159–62

American Heart Association
Learn and Live

Circulation

Contemporary Reviews in Cardiovascular Medicine

Stunning, Hibernation, and Assessment of Myocardial Viability

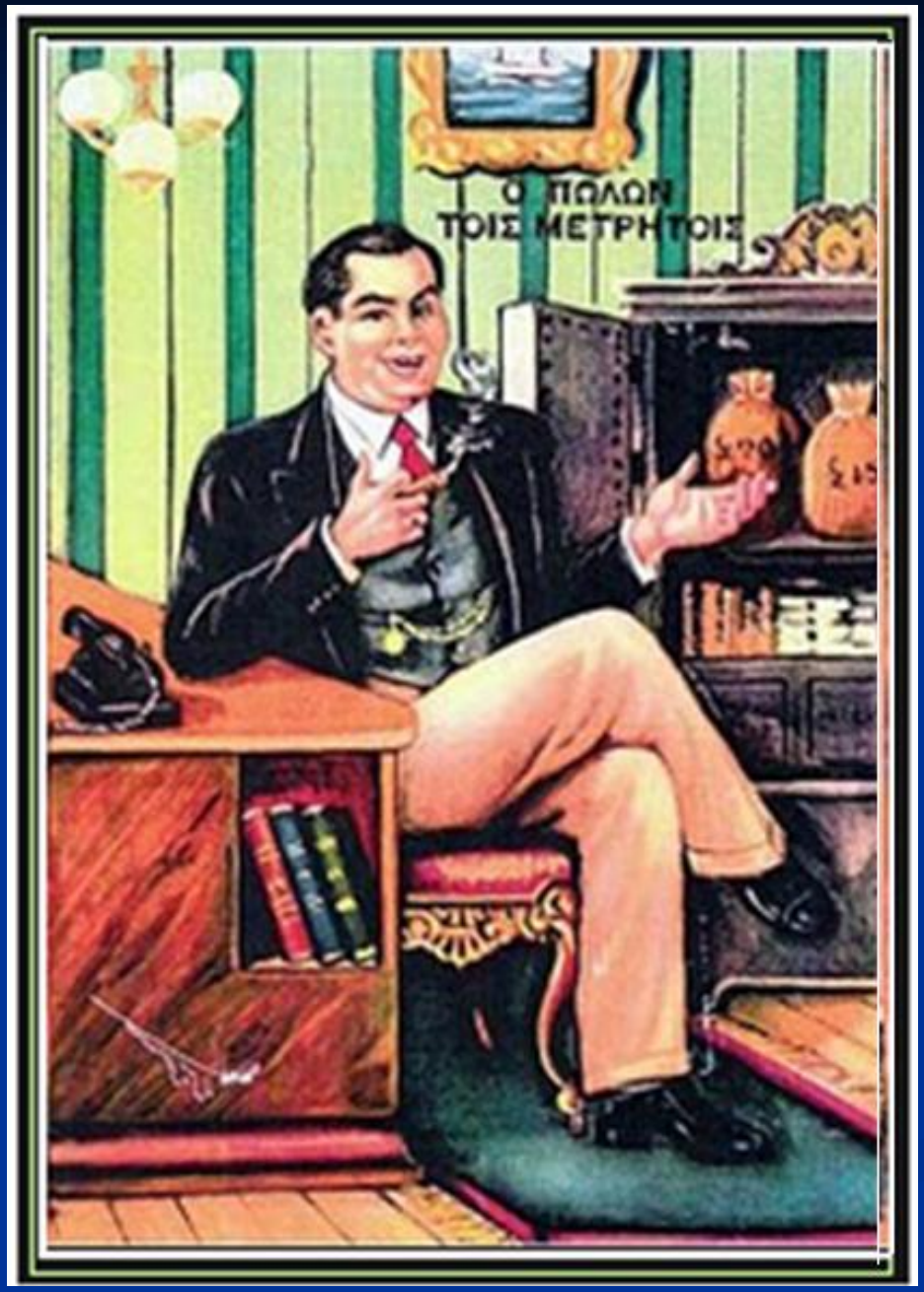
Paolo G. Camici, MD, FESC, FRCP; Sanjay Kumak Prasad, MD, MRCP; Ornella E. Rimoldi, MD

From the Medical Research Council Clinical Sciences Centre and National Heart and Lung Institute, Imperial College School of Medicine, London, UK (P.G.C., S.K.P., O.E.R.), and Cardiovascular Research Institute, Department of Medicine, New York Medical College, Valhalla (O.E.R.).

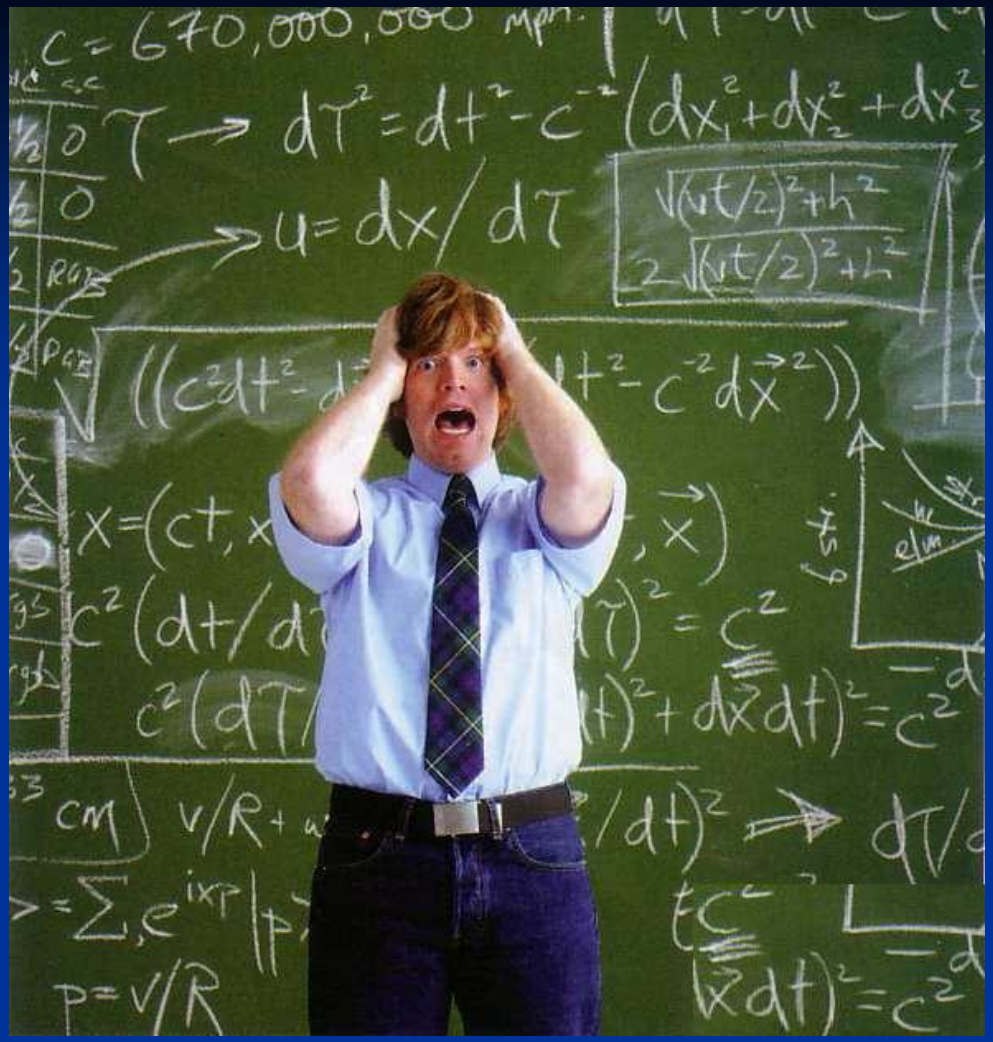
Conclusions

Several powerful imaging techniques can be used clinically to identify viable tissue (and to distinguish it from scar) within dysfunctional LV segments subtended by diseased coronary arteries. This information can be used to stratify patients more effectively and to guide their subsequent treatment. Although we still lack data from ad hoc randomized trials to prove this point unequivocally, a great number of studies in thousands of cases have provided compelling evidence that revascularization of dysfunctional but viable myocardium may lead to reverse LV remodeling and confer prognostic benefits in patients with postischemic heart failure.

Circulation.
2008;117:103-114



ΜΕΧΡΙ ΤΟ 2010



-Occluded Artery Study
(OAT)

The Heart Failure Revascularization Trial
(HEART)

- The Surgical Treatment of Ischemic Hearty Failure
(STICH)

2011

Το έτος των μελετών βιωσιμότητας…

ClinicalTrials.gov
A service of the U.S. National Institutes of Health

Comparison of Surgical and Medical Treatment for Congestive Heart Failure and Coronary Artery Disease (STICH)

Τα αποτελέσματα ήταν αντίθετα από ότι περιμέναμε!!!

ΒΙΩΣΙΜΟΤΗΤΑ ΚΑΙ ΕΠΑΝΑΙΜΑΤΩΣΗ

OAT (Occluded Artery Trial) Study

Original Articles

Interventional Cardiology

Circulation. 2011;124:2320-2328

Long-Term Effects of Percutaneous Coronary Intervention of the Totally Occluded Infarct-Related Artery in the Subacute Phase After Myocardial Infarction

Judith S. Hochman, MD; Harmony R. Reynolds, MD; Vladimir Džavík, MD MD; Christopher E. Buller, MD; Witold Ruzyllo, MD; Zygmunt P. Sadowski, MD; Aldo P. Maggioni, MD; Antonio C. Carvalho, MD; James M. Rankin, MD; Harvey D. White, MD; Suzanne Goldberg, RN, MSN; Sandra A. Forman, MA; Daniel B. Mark, MD, MPH; Gervasio A. Lamas, MD for the Occluded Artery Trial Investigators

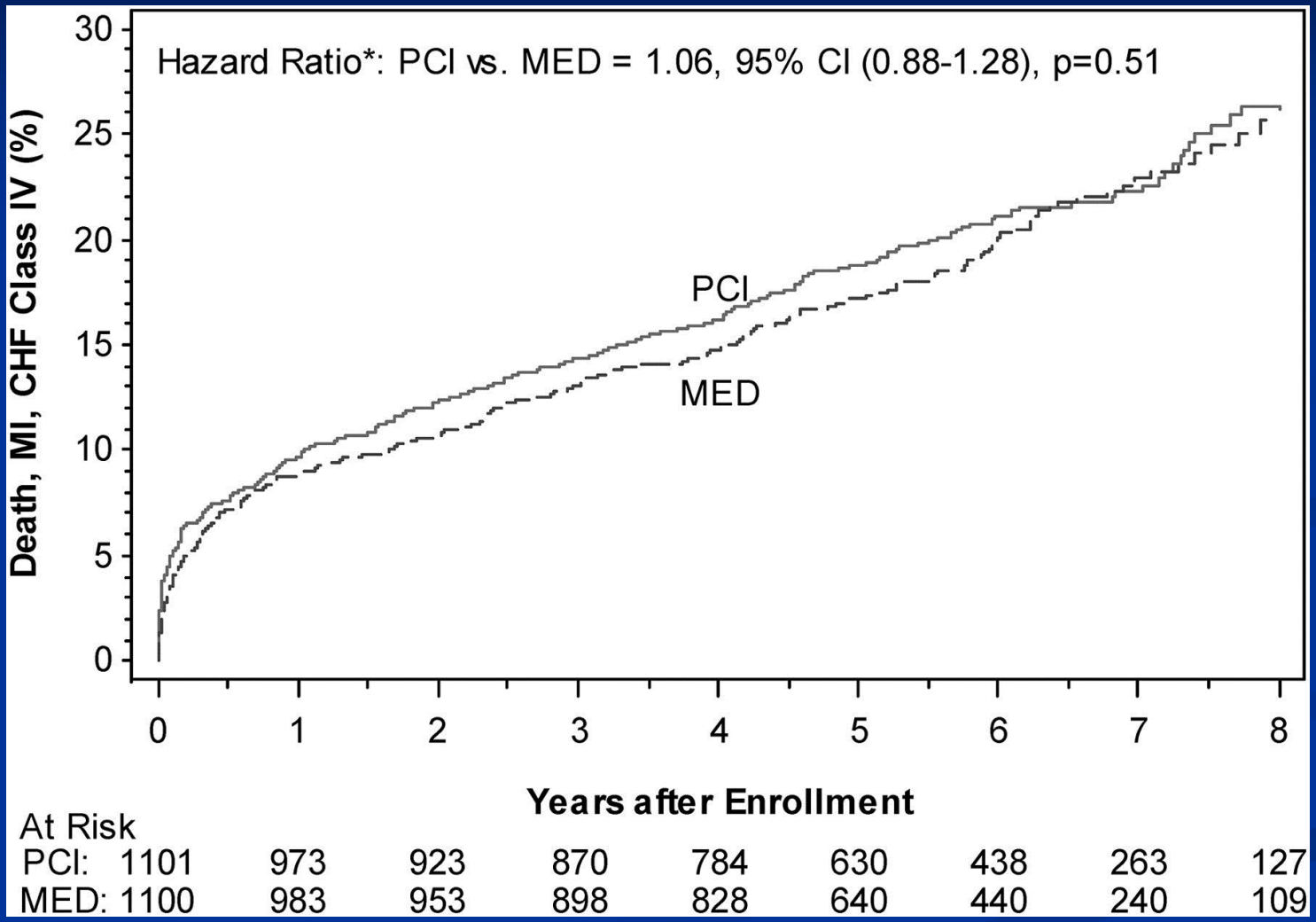
Cardiovascular Clinical Research Center, Leon Charney Division of Cardiology, New York University School of Medicine

Conclusions—Extended follow-up of the OAT cohort provides robust evidence for no reduction of long-term rates of clinical events after routine PCI in stable patients with a totally occluded infarct-related artery and without severe inducible ischemia in the subacute phase after myocardial infarction.

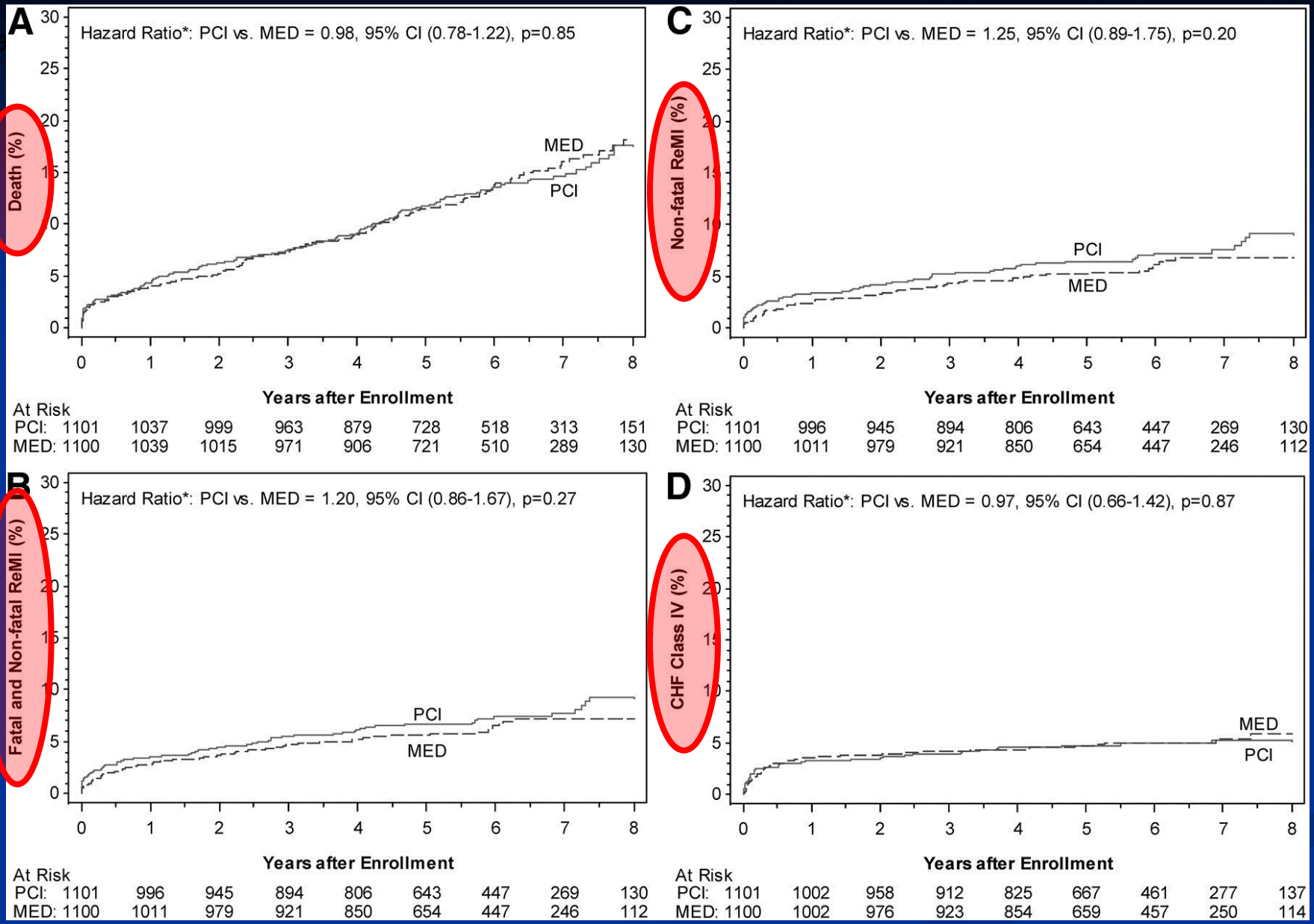
Ασθενείς χωρίς ισχαιμία (κλινικά) μετά από έμφραγμα, έχουν την ίδια επιβίωση, είτε αντιμετωπιστούν συντηρητικά είτε με αγγειοπλαστική.

American Heart Association
Learn and Live

Kaplan-Meier curves for the primary end point according to intention-to-treat analysis.



Hochman J S et al. Circulation 2011;124:2320-2328



Hochman J S et al. Circulation 2011;124:2320-2328

American Heart Association
Learn and Live

OAT-NUC Study

AHJ American Heart Journal

Clinical Investigation

The Occluded Artery Trial (OAT) Viability Ancillary Study (OAT-NUC): Influence of infarct zone viability on left ventricular remodeling after percutaneous coronary intervention versus optimal medical therapy alone

James E. Udelson MD[a], Camille A. Pearte MD, MPH[b], Carey D. Kimmelstiel MD[a], Mariusz Kruk MD[e], Joseph A. Kufera MA[c], Sandra A. Forman MA[d], Anna Teresinska MD[e], Bartosz Bychowiec MD[f], Jose Antonio Marin-Neto MD[g], Thomas Höchtl MD[h], Eric A. Cohen MD[i], Paulo Caramori MD, PhD[j], Benita Busz-Papiez MD[k], Christopher Adlbrecht MD, MBA[l], Zygmunt P. Sadowski MD[e], Witold Ruzyllo MD[e], Debra J. Kinan RT(N)[a], Gervasio A. Lamas MD[m], Judith S. Hochman MD[b]

Hence, the data from the OAT-NUC study suggest that in the contemporary era of comprehensive postinfarction medical therapy, IZ viability does not influence LV remodeling nor the remodeling response to PCI, as opposed to medical therapy alone. The data also suggest that residual IZ viability fails to identify a subgroup of clinically stable post-MI patients with total occlusion of the IRA who will accrue a remodeling benefit over a 1-year observation as a consequence of revascularization during the subacute phase of MI.

American Heart Journal
Volume 161, Issue 3, March 2011, Pages 611-621

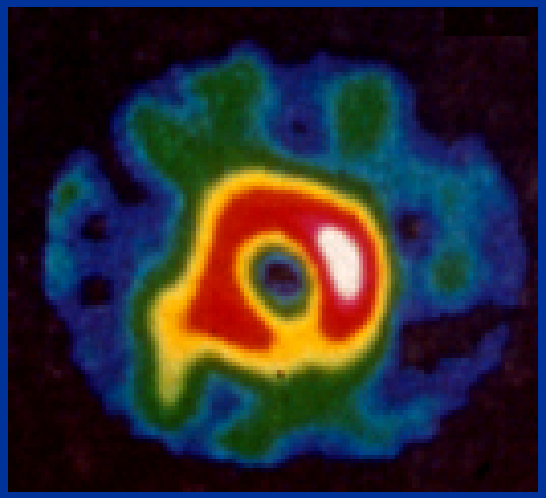
OAT-NUC Study

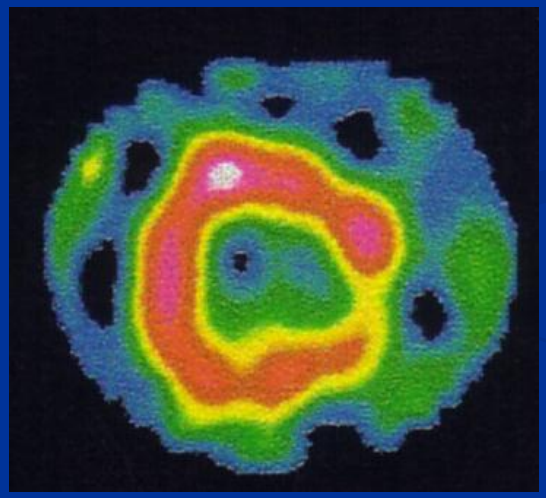
Ασθενείς με βιώσιμο μυοκάρδιο μετά από έμφραγμα, εμφανίζουν σε ένα έτος το ίδιο remodeling της αρ. κοιλίας, είτε αντιμετωπιστούν συντηρητικά είτε με αγγειοπλαστική.

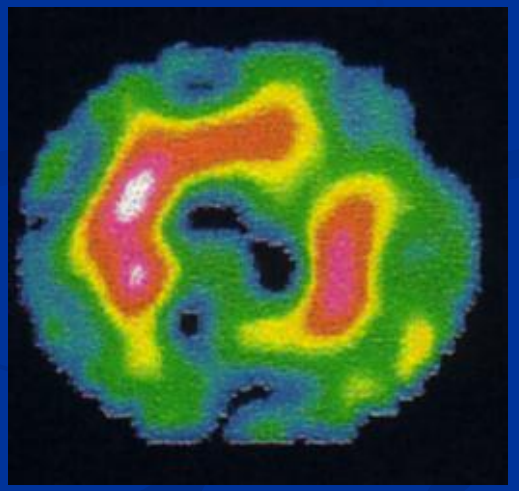
Ασθενείς με βιώσιμο μυοκάρδιο μετά από έμφραγμα, εμφανίζουν σε ένα έτος αυξηση του LVEF, είτε αντιμετωπιστούν συντηρητικά είτε με αγγειοπλαστική.

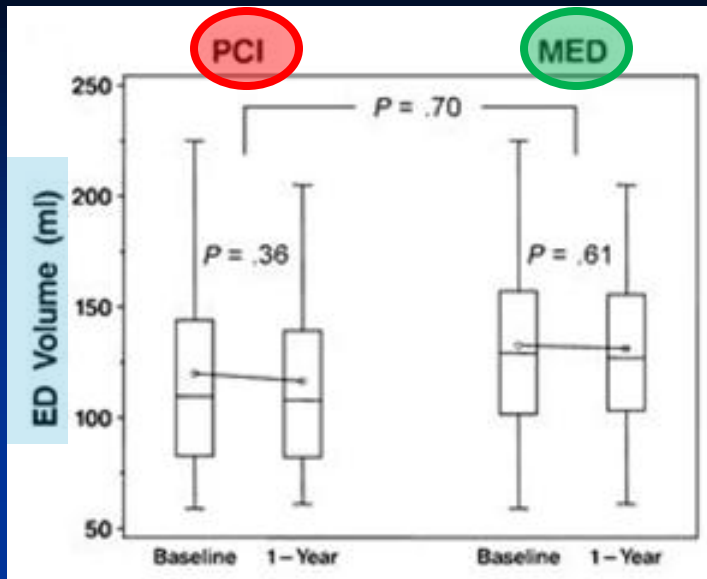
AHJ
American Heart Journal
American Heart Journal
Volume 161, Issue 3, March 2011, Pages 611-621

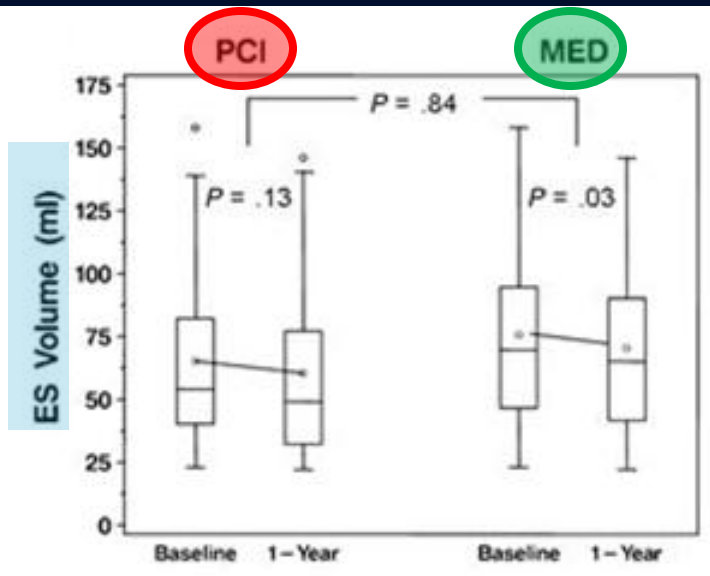
remodeling...

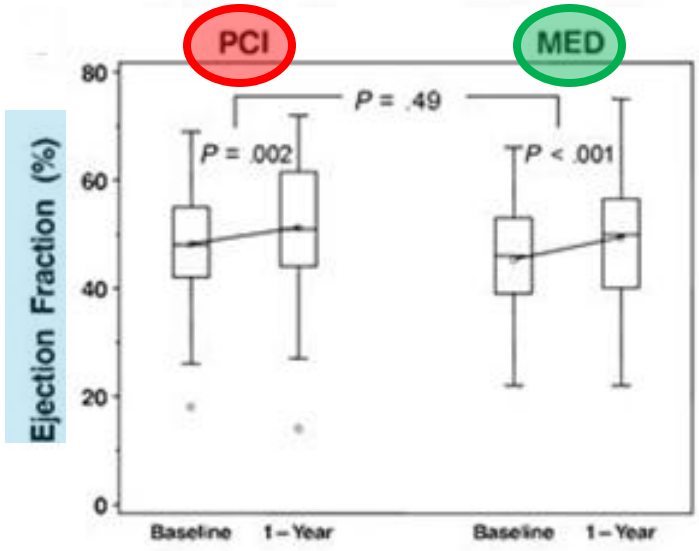












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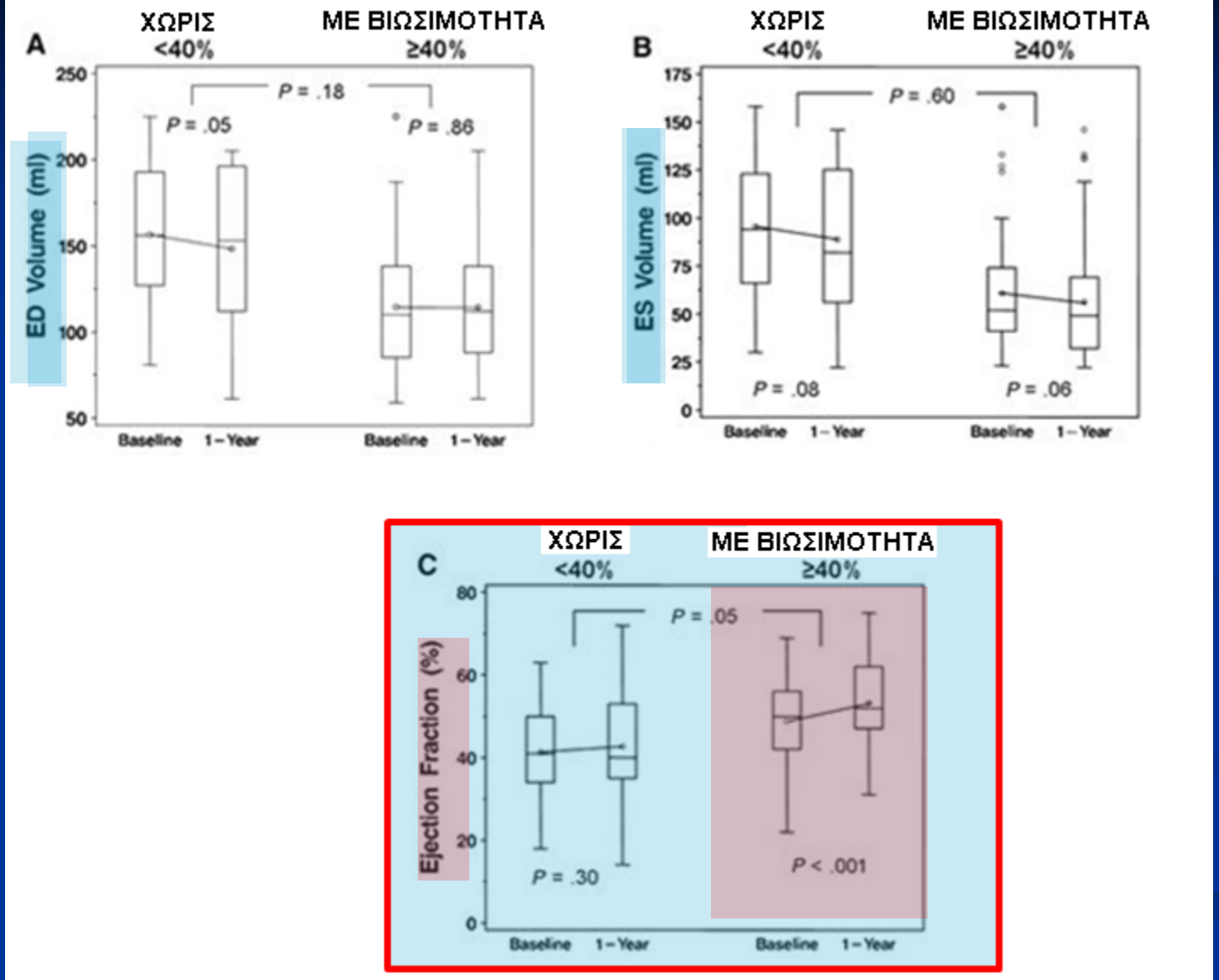

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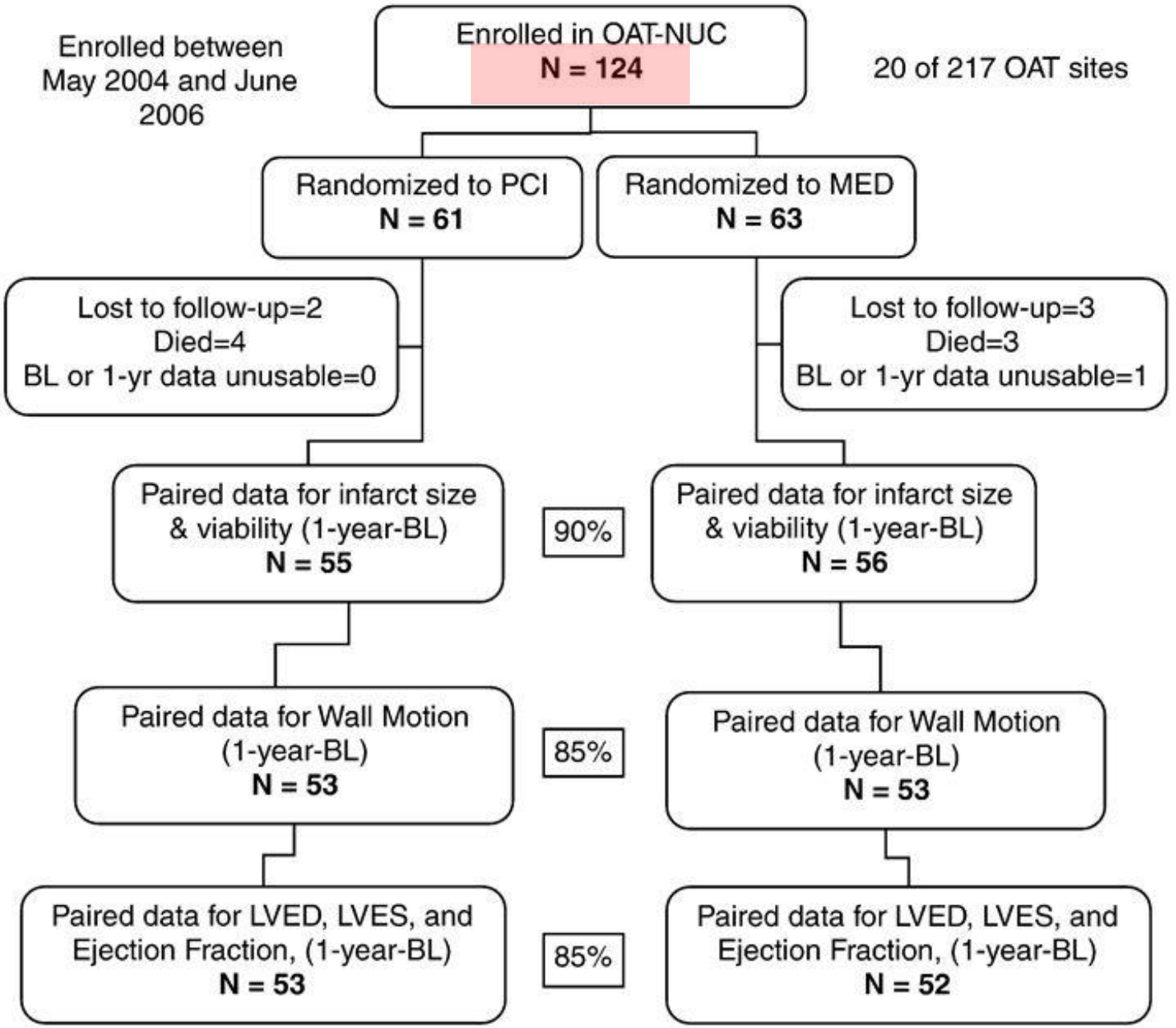

American Heart Journal
Volume 161, Issue 3, March 2011, Pages 611-621

European Journal of Heart Failure
2011;13;227-33

The Heart Failure Revascularisation Trial (HEART)

John G.F. Cleland[1,*], Melanie Calvert[2], Nick Freemantle[2], Yvonne Arrow[1], Stephen G. Ball[3], Robert S. Bonser[4], Sudipta Chattopadhyay[1], Michael S. Norell[5], Dudley J. Pennell[6] and Roxy Senior[7]

Conclusion A conservative management strategy may not be inferior to one of coronary arteriography with the intent to revascularize in patients with heart failure, LV systolic dysfunction, and extensive myocardial viability. However, this study was underpowered and, further, larger trials are required to settle this issue.

Σε ασθενείς με καρδιακή ανεπάρκεια και βιώσιμο μυοκάρδιο επιβίωση στα 5,5 χρόνια ήταν η ίδια, είτε αντιμετωπίστηκαν επεμβατικά είτε συντηρητικά.

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Myocardial Viability and Survival in Ischemic Left Ventricular Dysfunction

Robert O. Bonow, M.D., Gerald Maurer, M.D., Kerry L. Lee, Ph.D., Thomas A. Holly, M.D., Philip F. Binkley, M.D., Patrice Desvigne-Nickens, M.D., Jaroslaw Drozdz, M.D., Ph.D., Pedro S. Farsky, M.D., Arthur M. Feldman, M.D., Torsten Doenst, M.D., Ph.D., Robert E. Michler, M.D., Daniel S. Berman, M.D., Jose C. Nicolau, M.D., Ph.D., Patricia A. Pellikka, M.D., Krzysztof Wrobel, M.D., Nasri Alotti, M.D., Ph.D., Federico M. Asch, M.D., Liliana E. Favaloro, M.D., Lilin She, Ph.D., Eric J. Velazquez, M.D., Robert H. Jones, M.D., and Julio A. Panza, M.D., for the STICH Trial Investigators

N Engl J Med 2011; 364:1617-1625 | April 28, 2011

CONCLUSIONS

The presence of viable myocardium was associated with a greater likelihood of survival in patients with coronary artery disease and left ventricular dysfunction, but this relationship was not significant after adjustment for other baseline variables. The assessment of myocardial viability did not identify patients with a differential survival benefit from CABG, as compared with medical therapy alone. (Funded by the National Heart, Lung, and Blood Institute; STICH ClinicalTrials.gov number, NCT00023595.)

ClinicalTrials.gov
A service of the U.S. National Institutes of Health

Comparison of Surgical and Medical Treatment for Congestive Heart Failure and Coronary Artery Disease (STICH)

Μελετήθηκαν 1.212 ασθενείς για 5,1 χρόνια

601 υποβλήθηκαν σε έλεγχο βιωσιμότητας με SPECT, ή Dobutamine Echo

487 (81%) είχαν βιώσιμο μυοκάρδιο

114 (19%) δεν είχαν βιώσιμο μυοκάρδιο

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Η επιβίωση παρέμεινε η ίδια, τόσο στην ομάδα του CABG+Rx όσο και στην ομάδα της συντηρητικής αντιμετώπισης (μόνο Rx), ασχέτως της ύπαρξης βιώσιμου μυοκαρδίου

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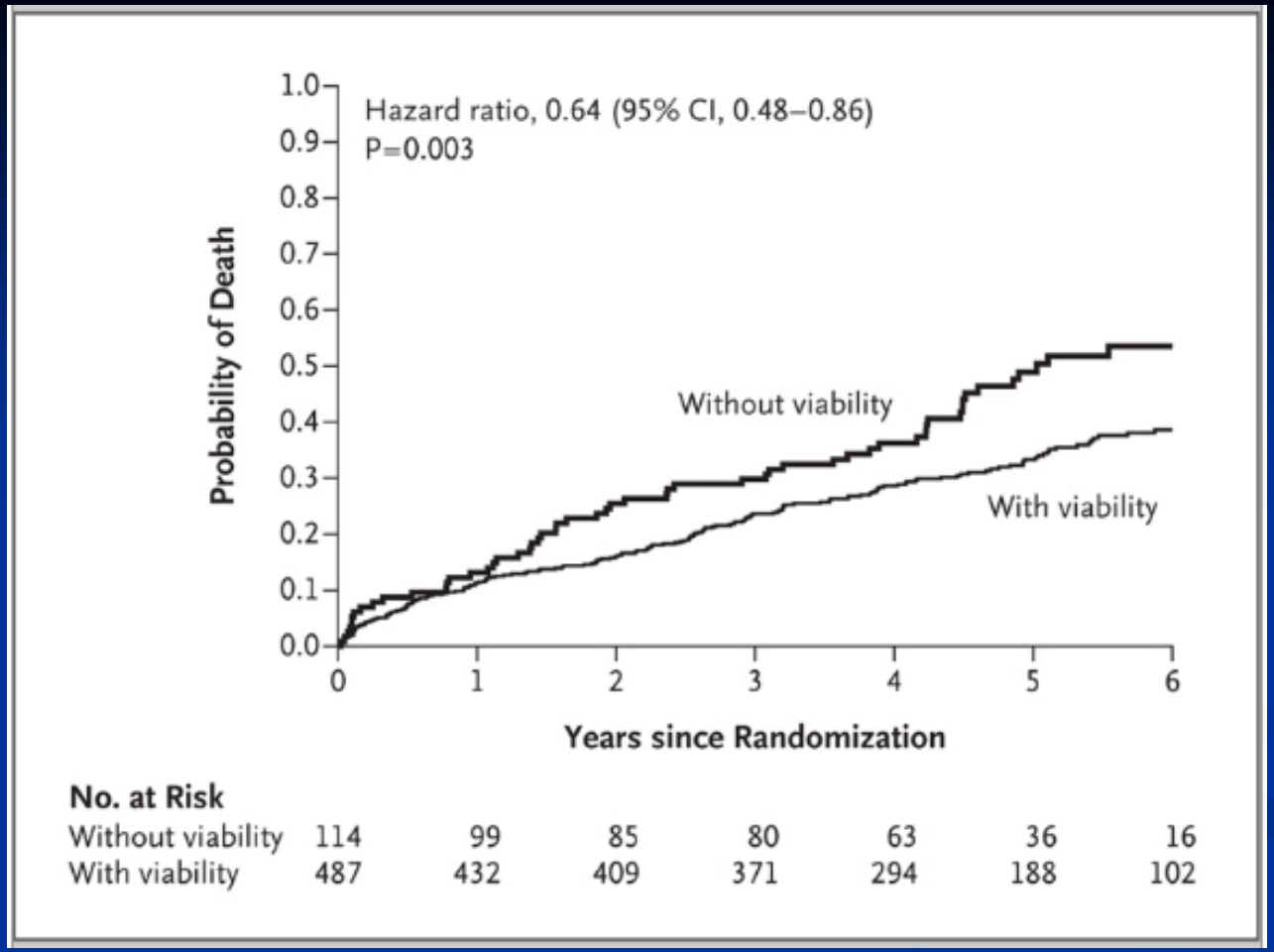
Σε μονοπαραγοντική (Univariate) ανάλυση:
Η ύπαρξη βιώσιμου μυοκαρδίου αποτελεί τον σημαντικότερο παράγοντα επιβίωσης.

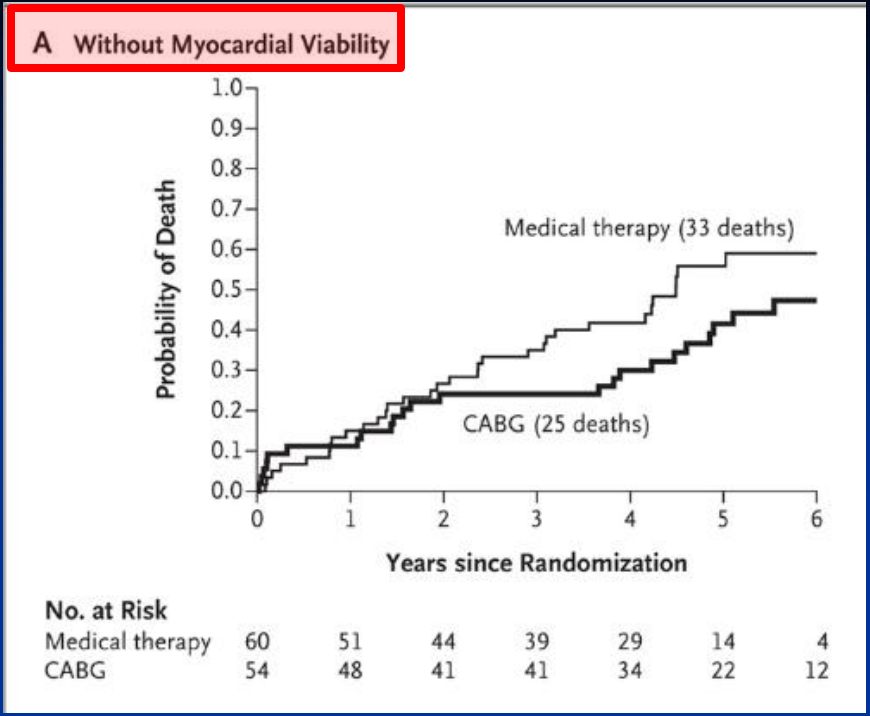
Σε μονοπαραγοντική (Univariate) ανάλυση:
Η ύπαρξη βιώσιμου μυοκαρδίου αποτελεί τον σημαντικότερο παράγοντα νοσηλείας.

Σε πολυπαραγοντική (multivariate) ανάλυση:
ΚΑΜΙΑ ΔΙΑΦΟΡΑ!!!



Kaplan–Meier Analysis of the Probability of Death, According to Myocardial Viability Status.

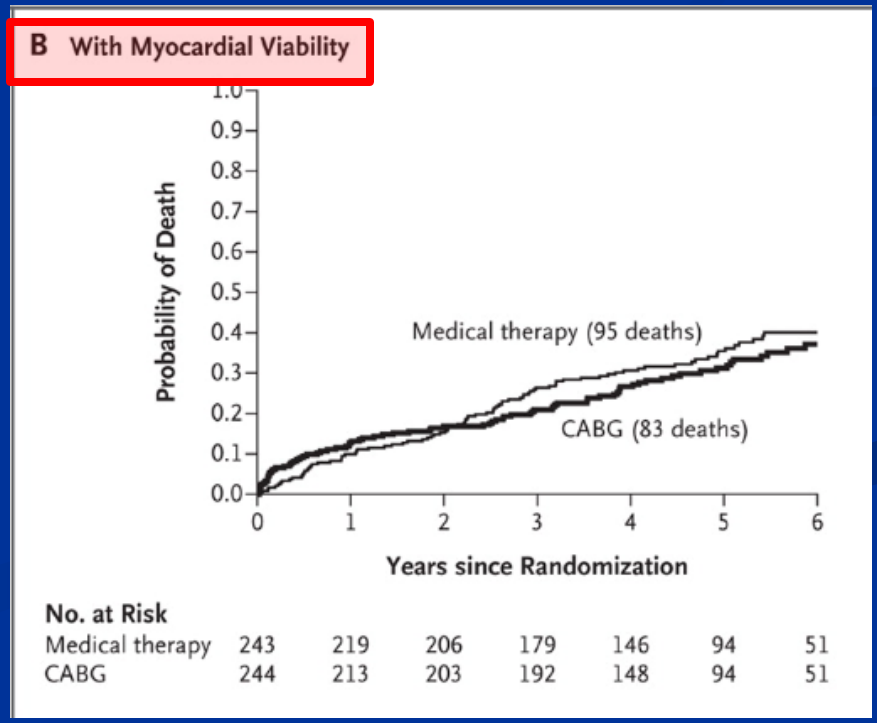
The comparison that is shown has not been adjusted for other prognostic baseline variables. After adjustment for such variables on multivariable analysis, the between-group difference was not significant (P=0.21).



Kaplan–Meier Analysis of the Probability of Death According to Myocardial-Viability Status and Treatment.

At 5 years in the intention-to-treat analysis, the rates of death for patients without myocardial viability were 41.5% in the group assigned to undergo coronary-artery bypass grafting (CABG) and 55.8% in the group assigned to receive medical therapy (Panel A).

Among patients with myocardial viability, the respective rates were 31.2% and 35.4% (Panel B).



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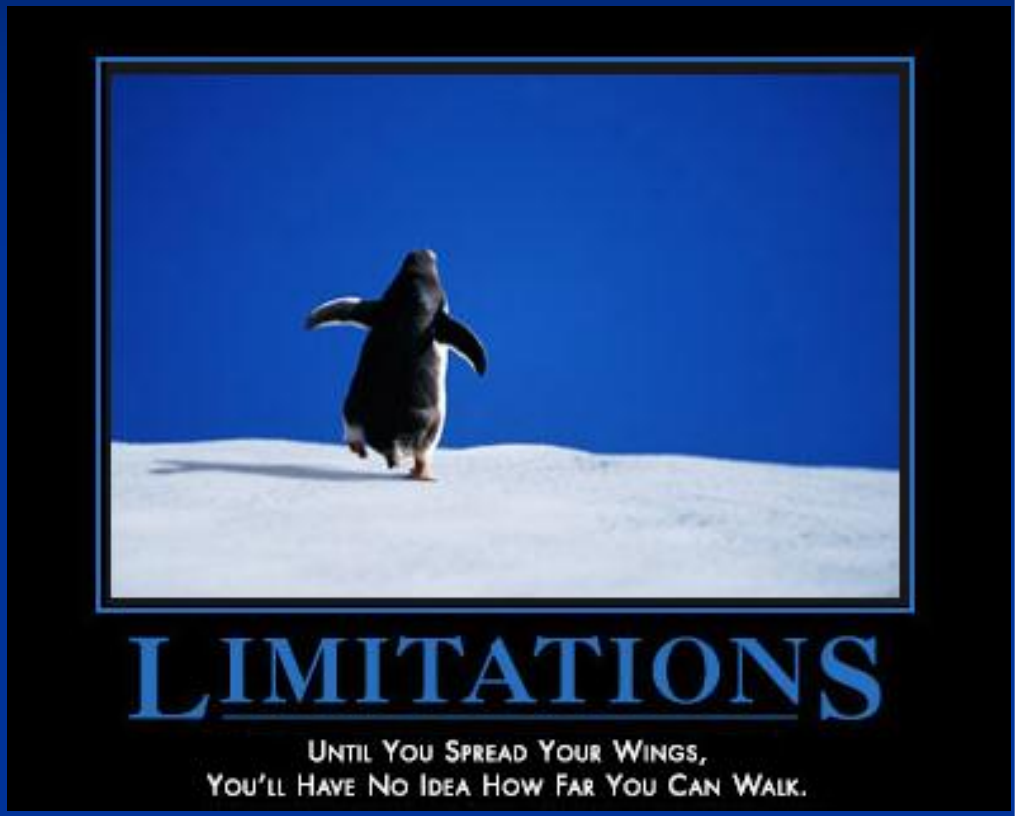
Comparison of Surgical and Medical Treatment for Congestive Heart Failure and Coronary Artery Disease (STICH)



1. Δεν έγινε έλεγχος βιωσιμότητας σε όλους (αυτοί που ελέγχθηκαν ήταν οι πιο επιβαρυμένοι).

2. Στις προηγούμενες μελέτες το μέσο LVEF ήταν υψηλότερο.

3. Δεν χρησιμοποιήθηκε PET

ClinicalTrials.gov
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Comparison of Surgical and Medical Treatment for Congestive Heart Failure and Coronary Artery Disease (STICH)

Οι ασθενείς με βιώσιμο μυοκάρδιο:

α. Ήταν νεώτεροι

β. Είχαν υποστεί λιγότερα εμφράγματα

γ. Είχαν μεγαλύτερο LVEF

δ. Είχαν μικρότερο τελοδιαστολικό και τελοσυστολικό δείκτη (EDVI&ESVI)

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Comparison of Surgical and Medical Treatment for Congestive Heart Failure and Coronary Artery Disease (STICH)

Συμπερασματικά…

Με βάση τη STICH, σε ασθενείς με καρδιακή ανεπάρκεια, η εκτίμηση της βιωσιμότητας δεν αποτελεί προαπαιτούμενο παράγοντα χειρουργικής αντιμετώπισης, καθόσον δεν διαχωρίζει αυτούς που θα έχουν μεγαλύτερη επιβίωση εάν χειρουργηθούν, ή εάν παραμείνουν υπό φαρμακευτική αγωγή.


Dr Robert O Bonow

Journal of Nuclear Cardiology
November/December 2011

EDITORIAL POINT OF VIEW

Myocardial viability testing: Still viable after stich?

Robert O. Bonow, MD,[a] and Thomas A. Holly, MD[b]

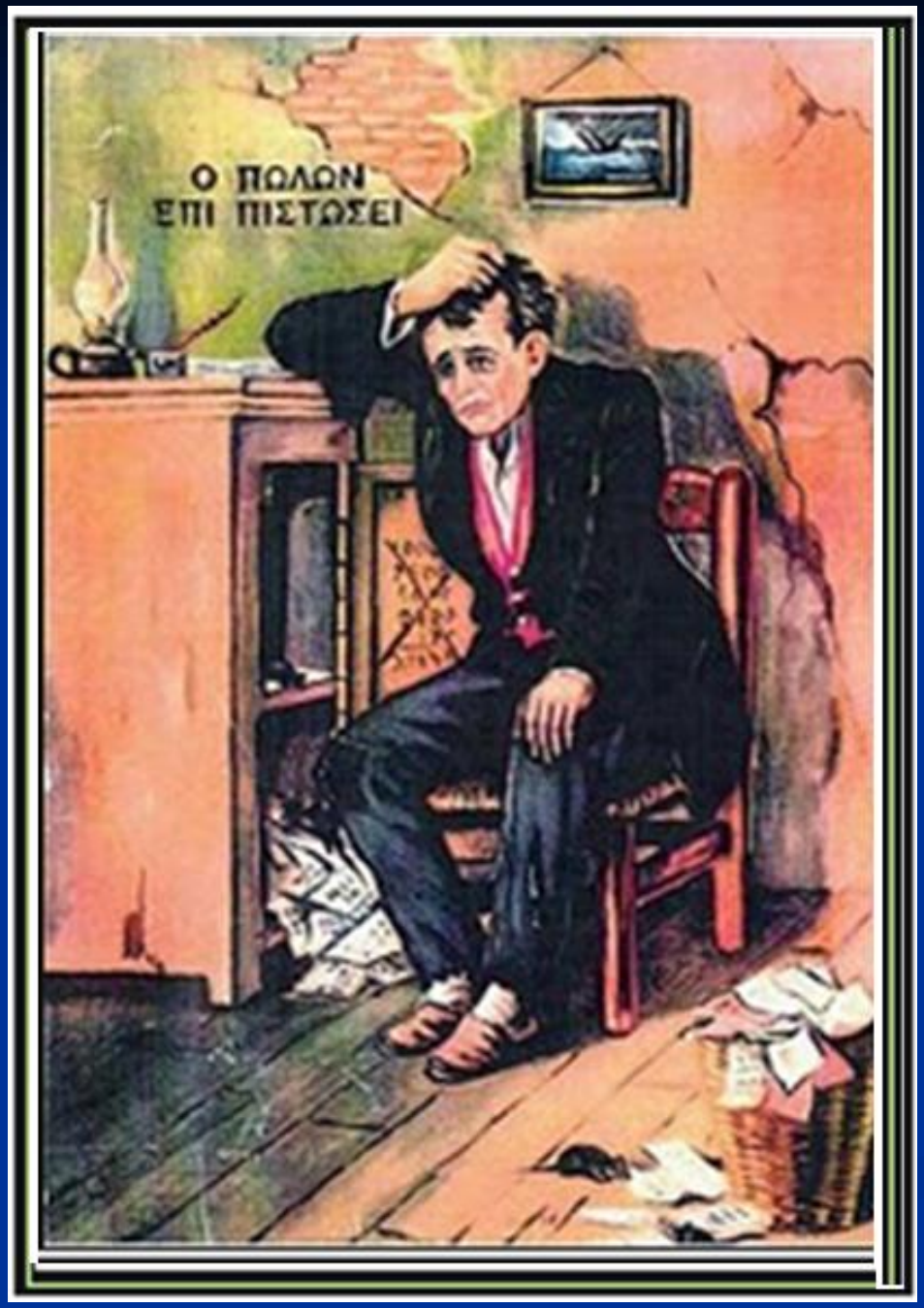
J Nucl Cardiol 2011;18:991–4.

ClinicalTrials.gov
A service of the U.S. National Institutes of Health

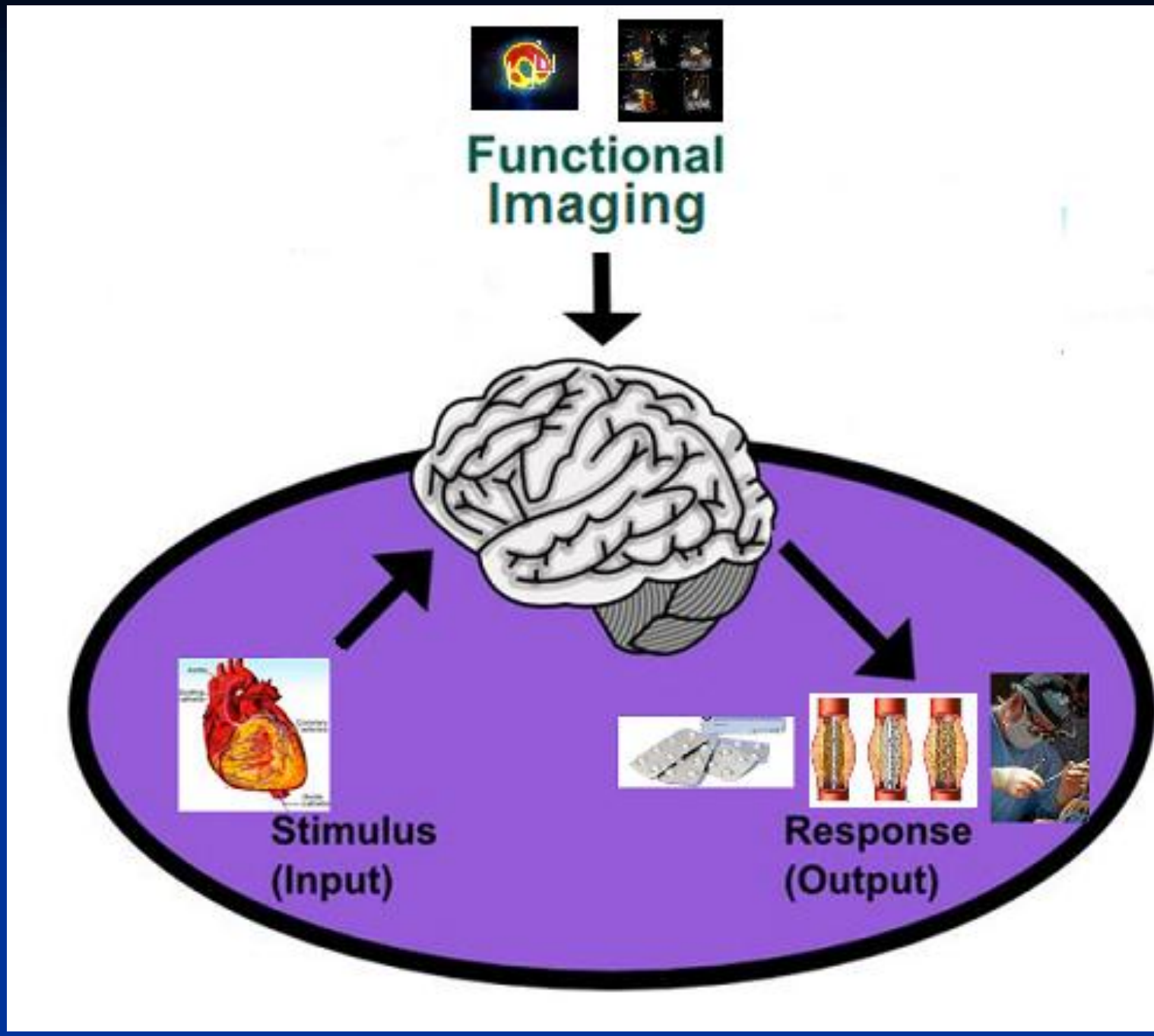
Comparison of Surgical and Medical Treatment for Congestive Heart Failure and Coronary Artery Disease (STICH)

Συμπερασματικά…

Ο έλεγχος της βιωσιμότητας θα πρέπει να περιοριστεί μόνο στους ασθενείς στους οποίους η απόφαση για την αντιμετώπιση απαιτεί και επιπλέον πληροφορίες (μεγάλη ηλικία, άλλες νόσοι, ιδιαιτερότητα στην ανατομία των στεφανιαίων αγγείων κλπ)



ΜΕΤΑ ΤΟ 2011


Functional
Imaging
Stimulus
(Input)
Response
(Output)

Σας ευχαριστώ πολύ....