29 NOVEMBRE 2013

Sala Londra

12:00-13:30 Simposio SIGG-SIN

LA NEFROLOGIA IN ETÀ GERIATRICA

Moderatori: Raffaele Antonelli Incalzi (Roma), Giovambattista Capasso (Napoli)

- Nefropatie da mezzo di contrasto: prevenzione
  Dario Leosco (Napoli)
- Nefropatie da farmaci
  Andrea Corsonello (Cosenza)
- Funzione renale ed età e stima della GFR
  Martino Marangella (Torino)
- La dialisi nell'anziano
  Filippo Aucella (San Giovanni Rotondo)

Dr. Filippo Aucella

S. C. di Nefrologia e Dialisi, Ospedale "Casa Sollievo della Sofferenza"

IRCCS San Giovanni Rotondo ***Ospedale certificato ISO 9001:2008***

A remarkable journey!

- 1964:

Prof. Robin Eady and
"the lucky 13!"

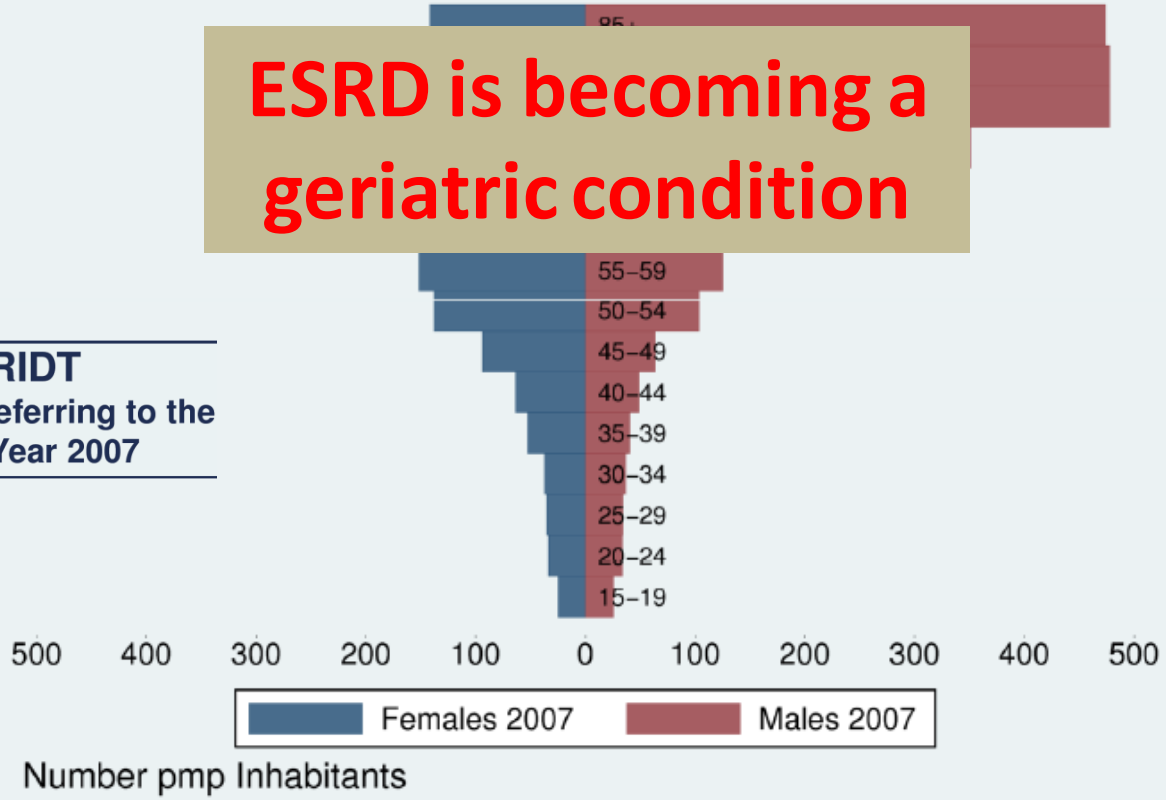
- 2012:

100 and going strong?

ESRD INCIDENCE
by Gender ang Age Categories

ESRD is becoming a geriatric condition

SIN-RIDT
2009 Report Referring to the Calendar Year 2007



50th. Congress of the Italian Society of Nephrology Bologna, October 2009

La Dialisi nell'anziano, domande :

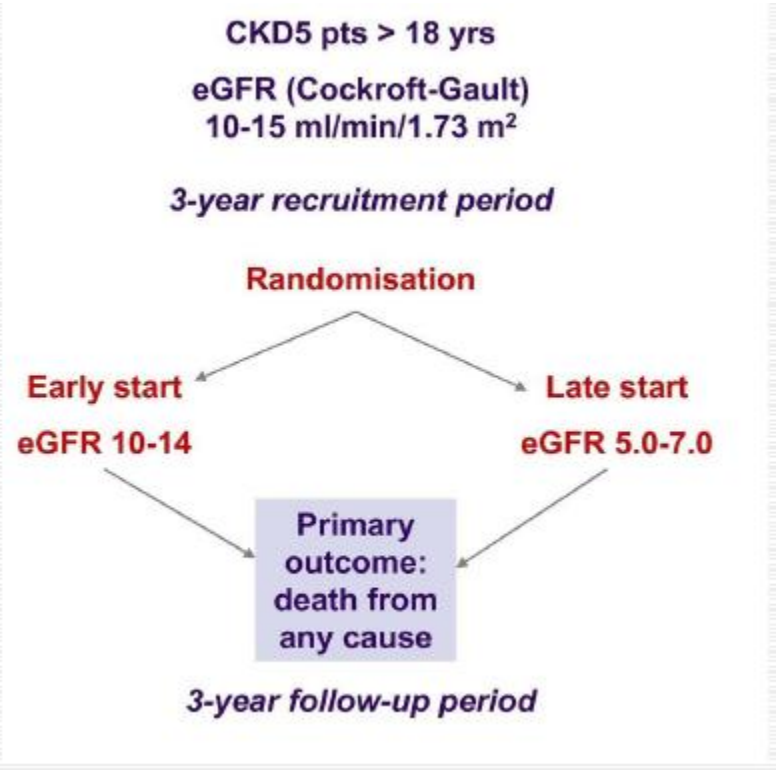
1. **Quando iniziare la dialisi ?**
2. **Come ? Emo- vs peritoneo-dialisi;**
3. **Chi avviare alla dialisi?**
4. **Alternative?**

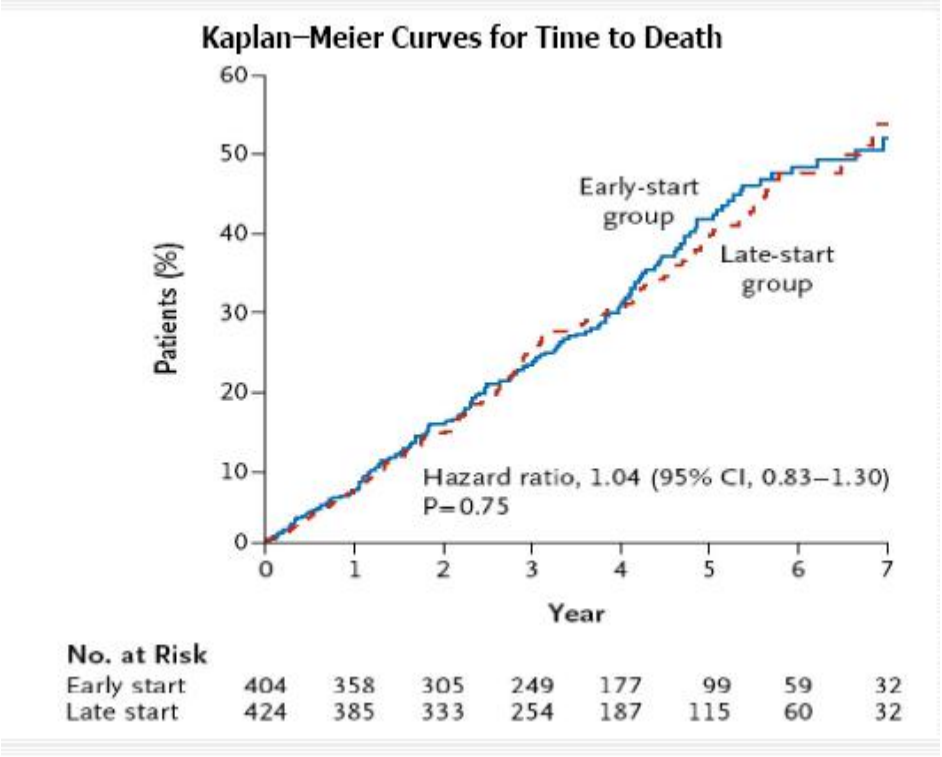
Domande :

1. ***Quando iniziare la dialisi ?***
2. **Come ? Emo- vs peritoneo-dialisi;**
3. **Chi avviare alla dialisi?**
4. **Alternative?**

A Randomized, Controlled Trial of Early versus Late Initiation of Dialysis

Cooper BA et al. N Engl J Med 2010;363:609-19





Efficacy and Safety of a Very-Low-Protein Diet When Postponing Dialysis in the Elderly: A Prospective Randomized Multicenter Controlled Study

Giuliano Brunori, MD,[1] Battista F. Viola, MD,[1] Giovanni Parrinello, PhD,[2] Vincenzo De Biase, MD,[3] Giovanna Como, MD,[4] Vincenzo Franco, MD,[5] Giacomo Garibotto, MD,[6] Roberto Zubani, MD, PhD,[1,7] and Giovanni C. Cancarini, MD[1,7]

Aim: ***to evaluate if a supplemented very low protein diet:***

- allows to postpone the start of dialysis

- does not induce malnutrition

- is safe

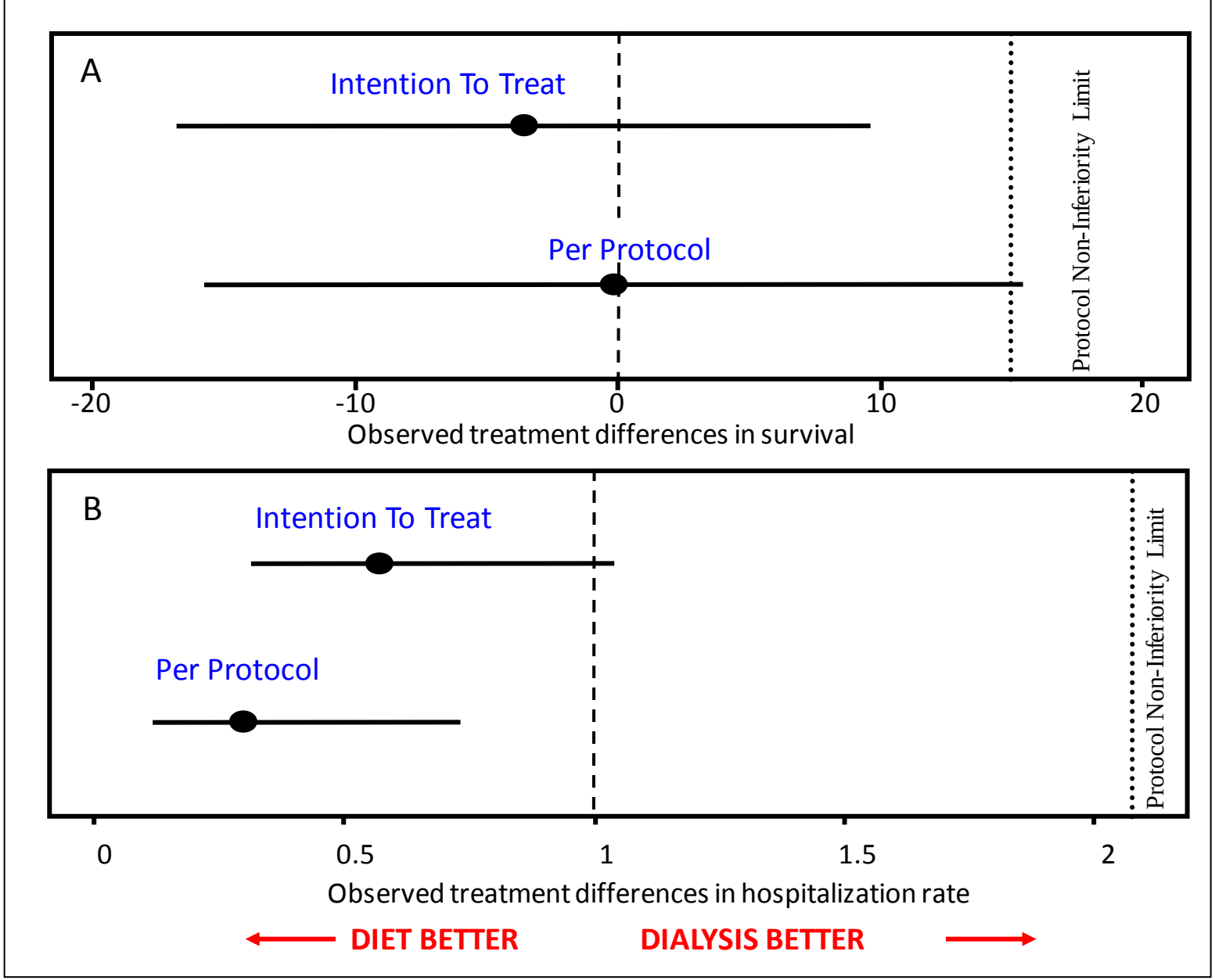
Inclusion criteria:
- **Patients older ≥70 years**
- **RRF*: 5 - 7 ml/min**

* = [mean of (CrCl+UreaCl)/2]

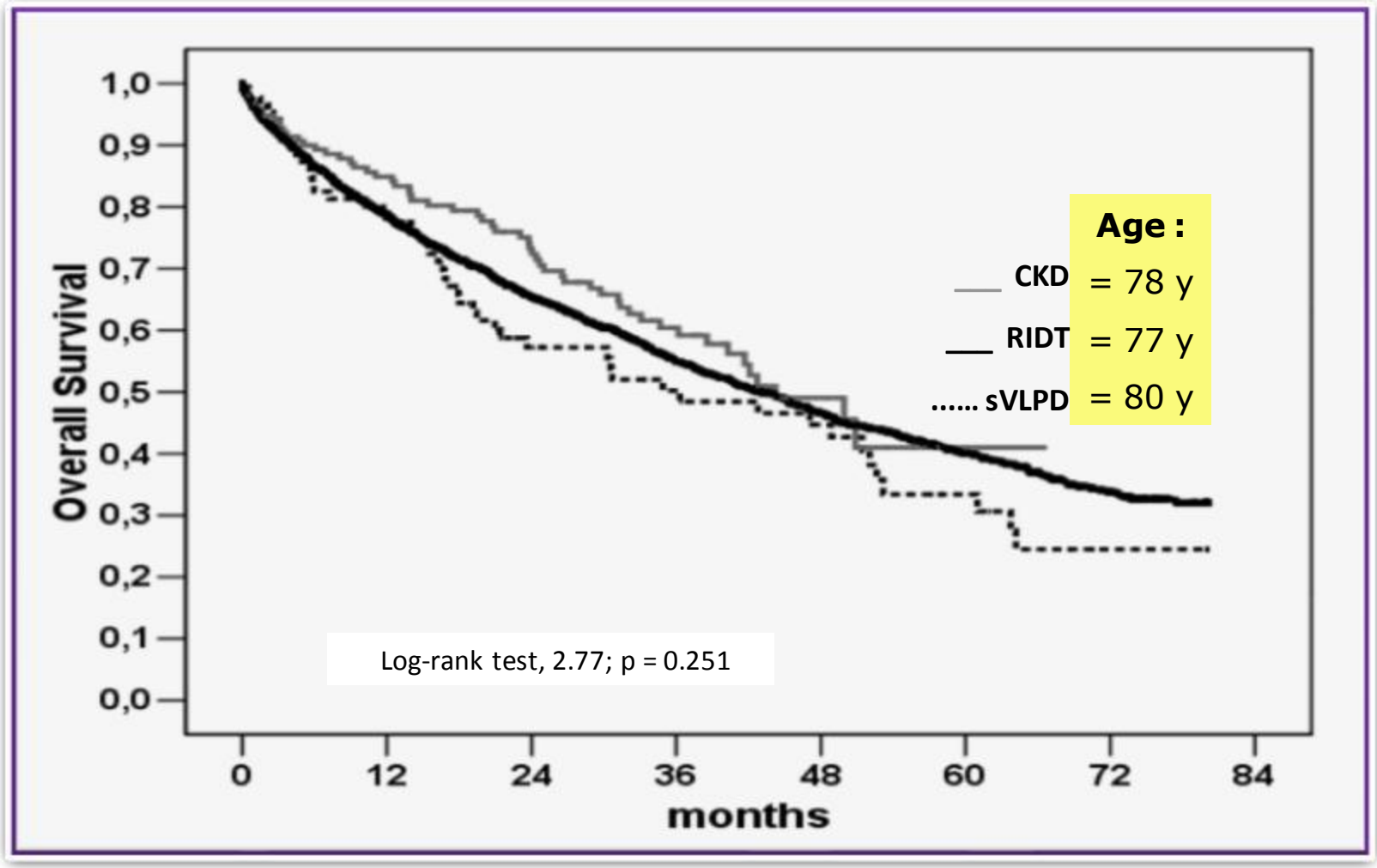
Exclusion criteria:
- **Diabetics,** - **HIV infection**
- **acute life-threatening disease**
- **liver failure**

Maiorca R, et al. J Nephrol 2000 ;13 :267-270

Brunori G, et al. Am J Kidney Dis 2007; 49: 569-580


A
Intention To Treat
Per Protocol
Protocol Non-Inferiority Limit
-20
-10
0
10
20
Observed treatment differences in survival
B
Intention To Treat
Per Protocol
Protocol Non-Inferiority Limit
0
0.5
1
1.5
2
Observed treatment differences in hospitalization rate
DIET BETTER
DIALYSIS BETTER

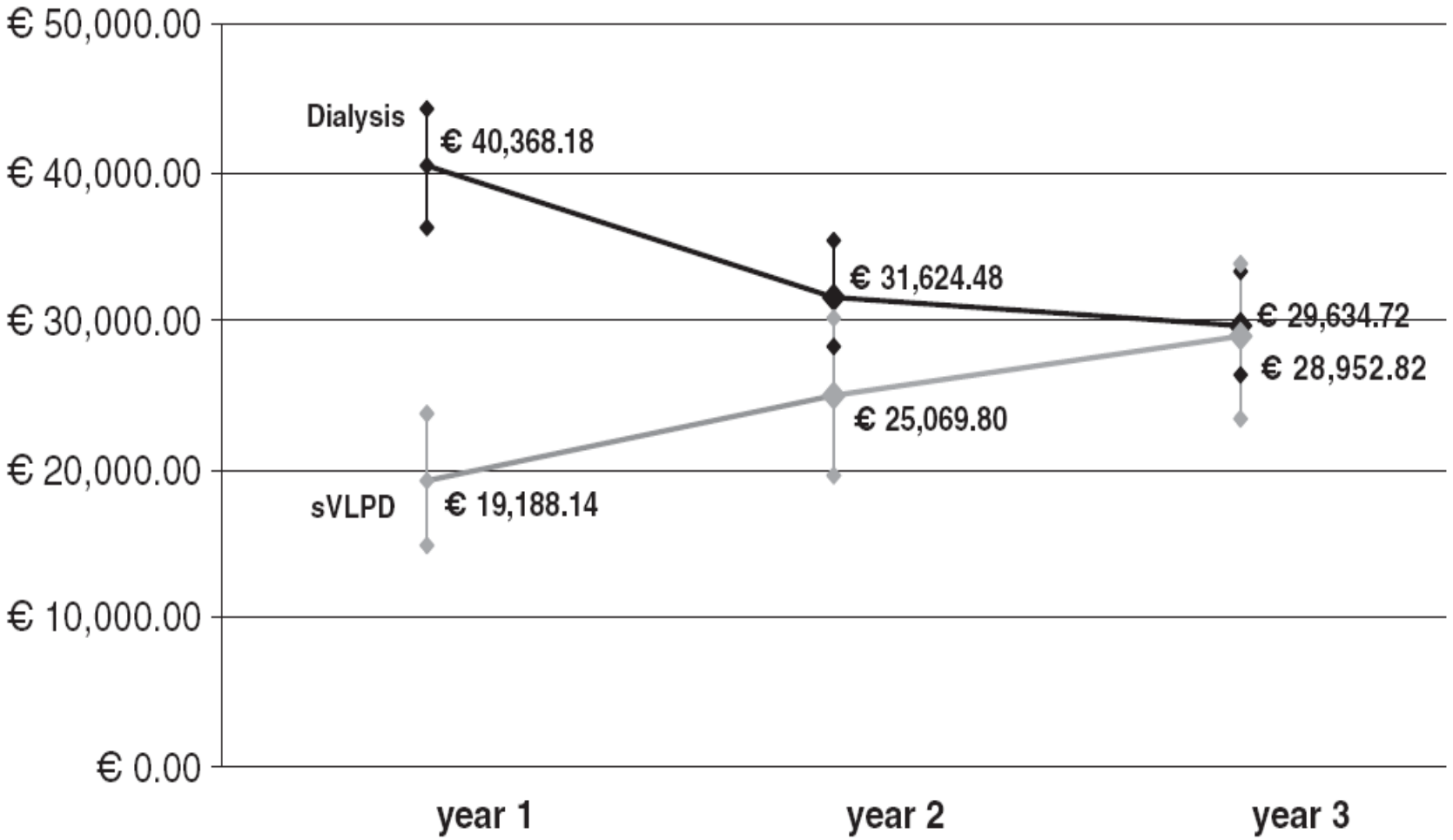
sVLPD in aging CKD and survival during RRT



V. Bellizzi et al. *ICRNM 26 May* Lausanne 2010, poster n° **G14**

DODE Study: costi dieta vs dialisi

Scalone L et al, NDT 2010; 25:907-13



Domande :

1. **Quando iniziare la dialisi ?**
2. ***Come ? Emo- vs peritoneo-dialisi;***
3. **Chi avviare alla dialisi?**
4. **Alternative?**

Types of Dialysis: Advantages

HD

-No family burden

-No input from patient

-Social encounter (?)

PD

-Carried at home

-Easy access

-Anemia less severe

-Safe for patients withCV disease

-No need for transport to hospital

Cassidy MJ, Sims RJ: Dialysis in the elderly. New possibilities, new problems. *Minerva Urol Nephrol* 2004; 56: 305-17

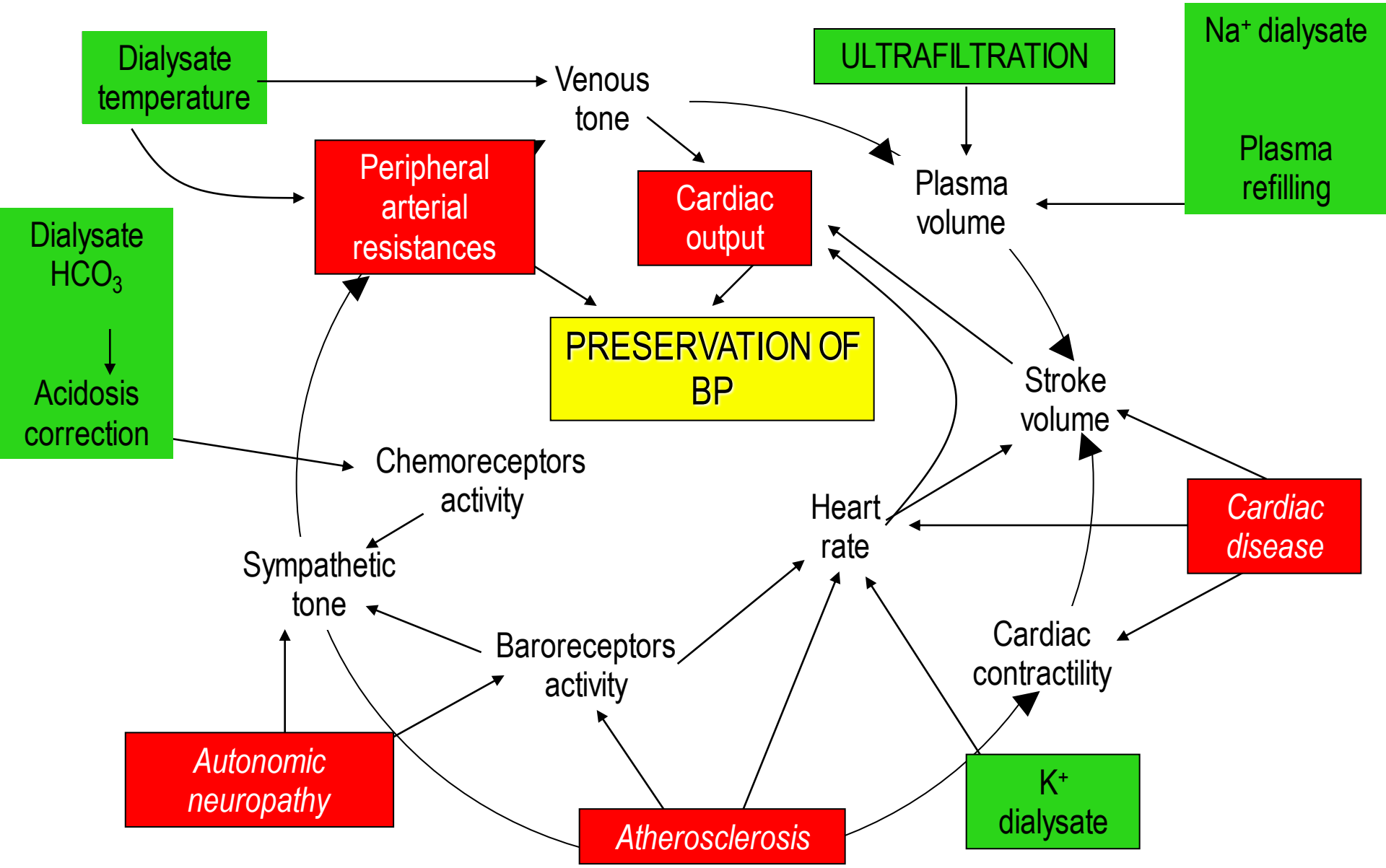
Types of Dialysis: Disadvantages

HD	PD
CV instability	Access
Access difficulties	Peritoneal infections
Sepsis	Difficult for patients with impaired mobility *
Intradialytic problems	Reduced dexterity *
Repeat visits to hospital	Huge burden to family *
Hospital transport	
Lengthy waits	

* For APD

Cassidy MJ, Sims RJ: Dialysis in the elderly. New possibilities, new problems. *Minerva Urol Nephrol* 2004; 56: 305-17

FACTORS INTERFERING WITH CV CONTROL DURING HEMODIALYSIS



Dialysis-related hypotension in the elderly

- Dialysis hypotension in 20-30% of dialysis treatments
- Frequency increases with age
- Frequency sudden and profound
- Loss of mentation,consciousness, seizures
- Often no prodrome (sweating,tachycardia,apprehension)
- Can occur with minimal extracellular fluid loss
- More difficult to reverse in the elderly than in the young
- In elderly not benign

Advantage of PD over HD in the Elderly

- Preservation of RRF
- Continuous treatment
- Cardiovascular stability
- Less restricted diet (?)
- No need for vascular access
- No need for frequent hospital visits
- Travelling – holidays
- Independence – CCPD
- Patient's choice

(Ho-dac-Panekeet et al: NDT. 2006, S2, II60)

Domande :

1. Quando iniziare la dialisi ?
2. Come ? Emo- vs peritoneo-dialisi;
3. ***Chi avviare alla dialisi?***
4. Alternative?

ARTICOLI ORIGINALI

Dialisi sempre e per tutti: è sempre nel reale interesse di tutti i pazienti?

Francesco Locatelli

Dipartimento di Nefrologia e Dialisi, Ospedale Alessandro Manzoni, Lecco

…l'opzione dialisi non deve sempre essere considerata obbligatoria per tutti i pazienti, ma deve essere attentamente valutata, considerando non solo le comorbidità coesistenti ma anche, quando possibile, l'opinione del paziente e la sua percezione della qualità di vita. Di fatto vi sono aspetti complessi, medici, psicologici e sociali che debbono essere attentamente considerati, cercando di coinvolgere nella decisione tutte le figure professionali che si stanno prendendo cura del paziente.

Mini-Review

Dialysis in Late Life: Benefit or Burden

Sarbjit V. Jassal*† and Diane Watson*
University of Toronto, Toronto, Ontario, Canada

Clin J Am Soc Nephrol 4: 2008–2012, 2009

Elderly patients who are on dialysis seem to have a higher burden of age-related problems, or "geriatric syndromes," such as frailty, falls, and cognitive impairment.

There is also emerging evidence that dialysis initiation may be associated with accelerated rates of functional and/or cognitive decline.

Thus, appropriate medical training is required for individuals who care for complex older dialysis patients.

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Functional Status of Elderly Adults before and after Initiation of Dialysis

Manjula Kurella Tamura, M.D., M.P.H., Kenneth E. Covinsky, M.D., M.P.H., Glenn M. Chertow, M.D., M.P.H., Kristine Yaffe, M.D., C. Seth Landefeld, M.D., and Charles E. McCulloch, Ph.D.

BACKGROUND

It is unclear whether functional status before dialysis is maintained after the initiation of this therapy in elderly patients with end-stage renal disease (ESRD).

CONCLUSIONS

Among nursing home residents with ESRD, the initiation of dialysis is associated with a substantial and sustained decline in functional status.

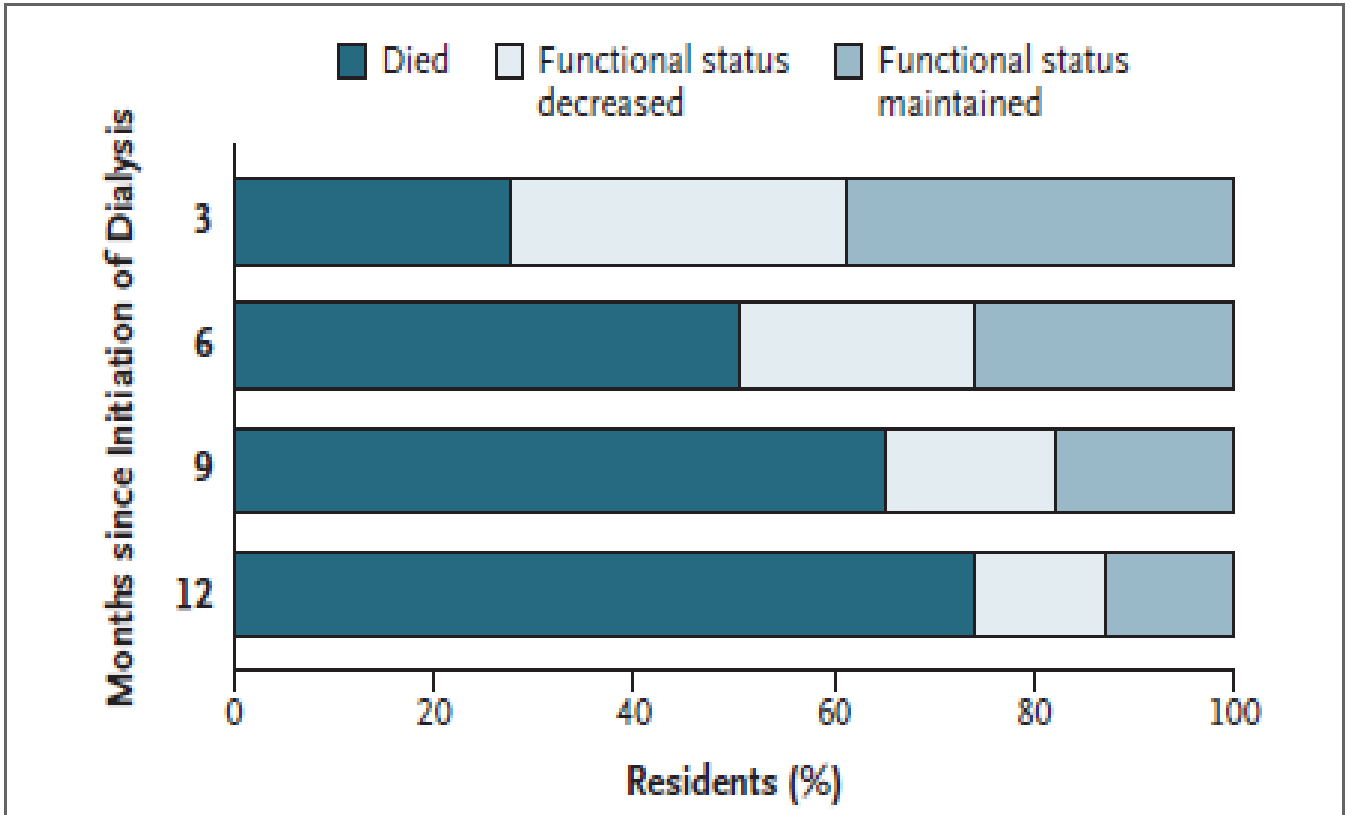
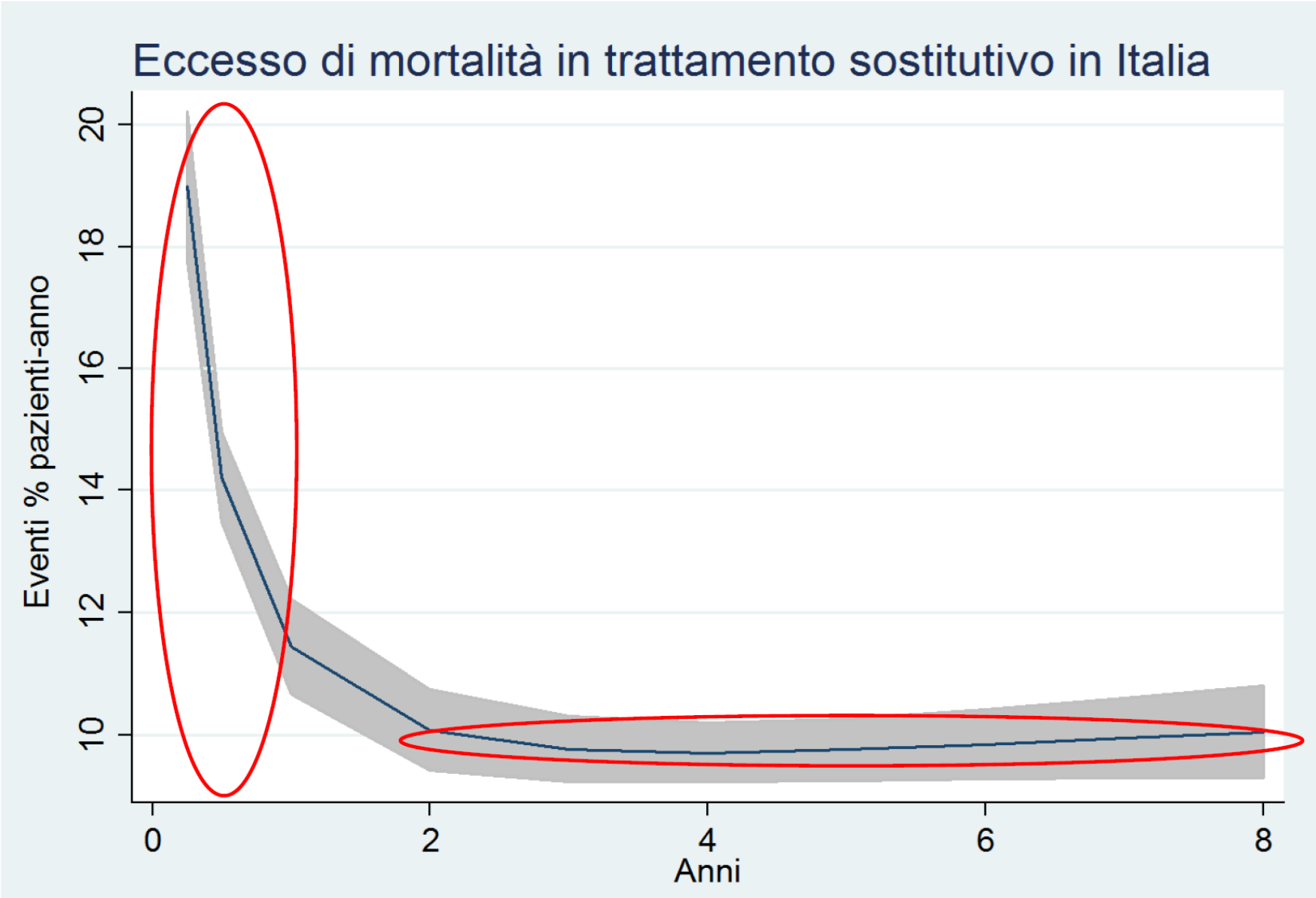
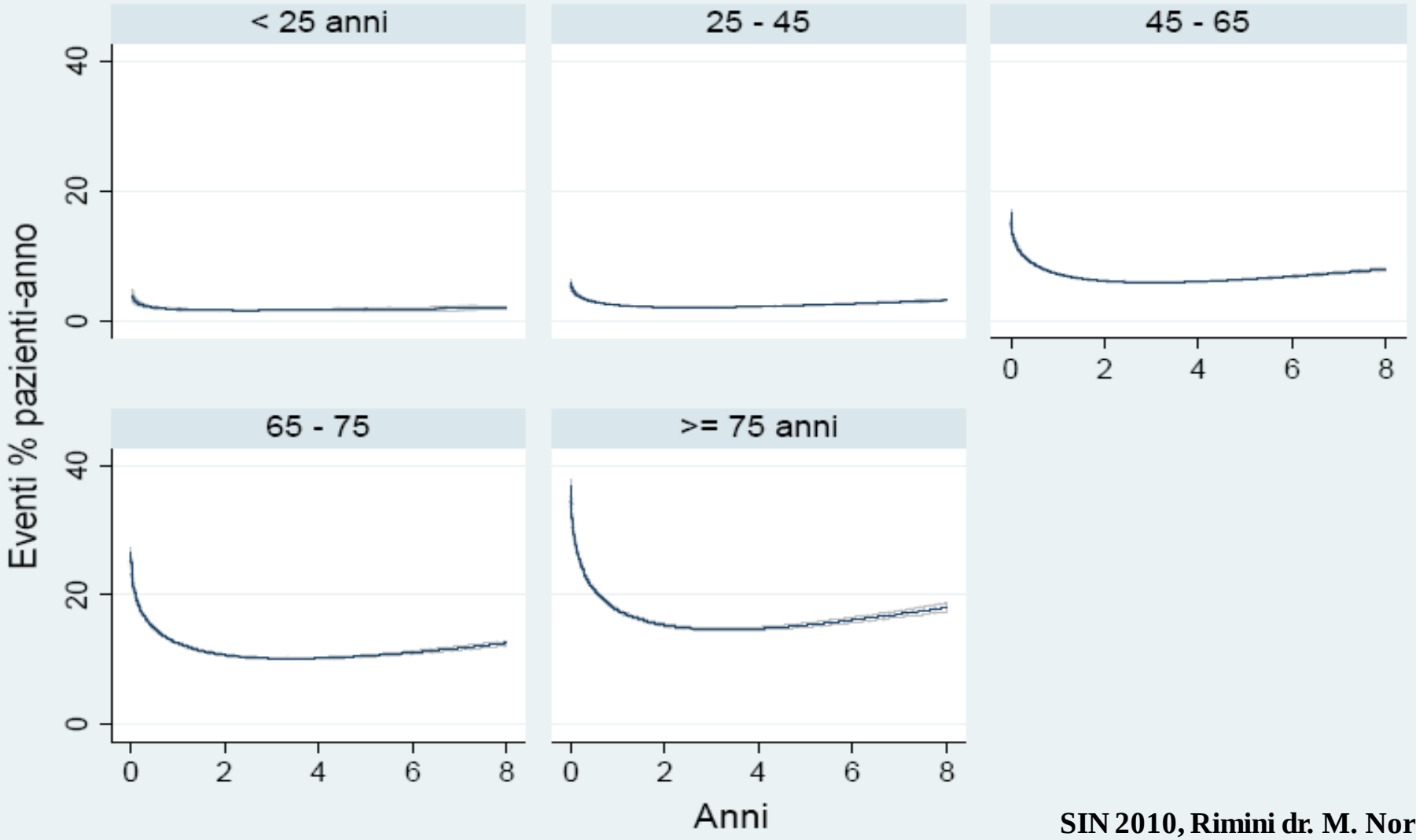


Figure 2. Change in Functional Status after Initiation of Dialysis.



Dati di 9/17 regioni RIDT, 2000-2008, 35000 soggetti **SIN 2010, Rimini dr. M. Nordio**

Eccesso di mortalità predetto per età



SIN 2010, Rimini dr. M. Nordio

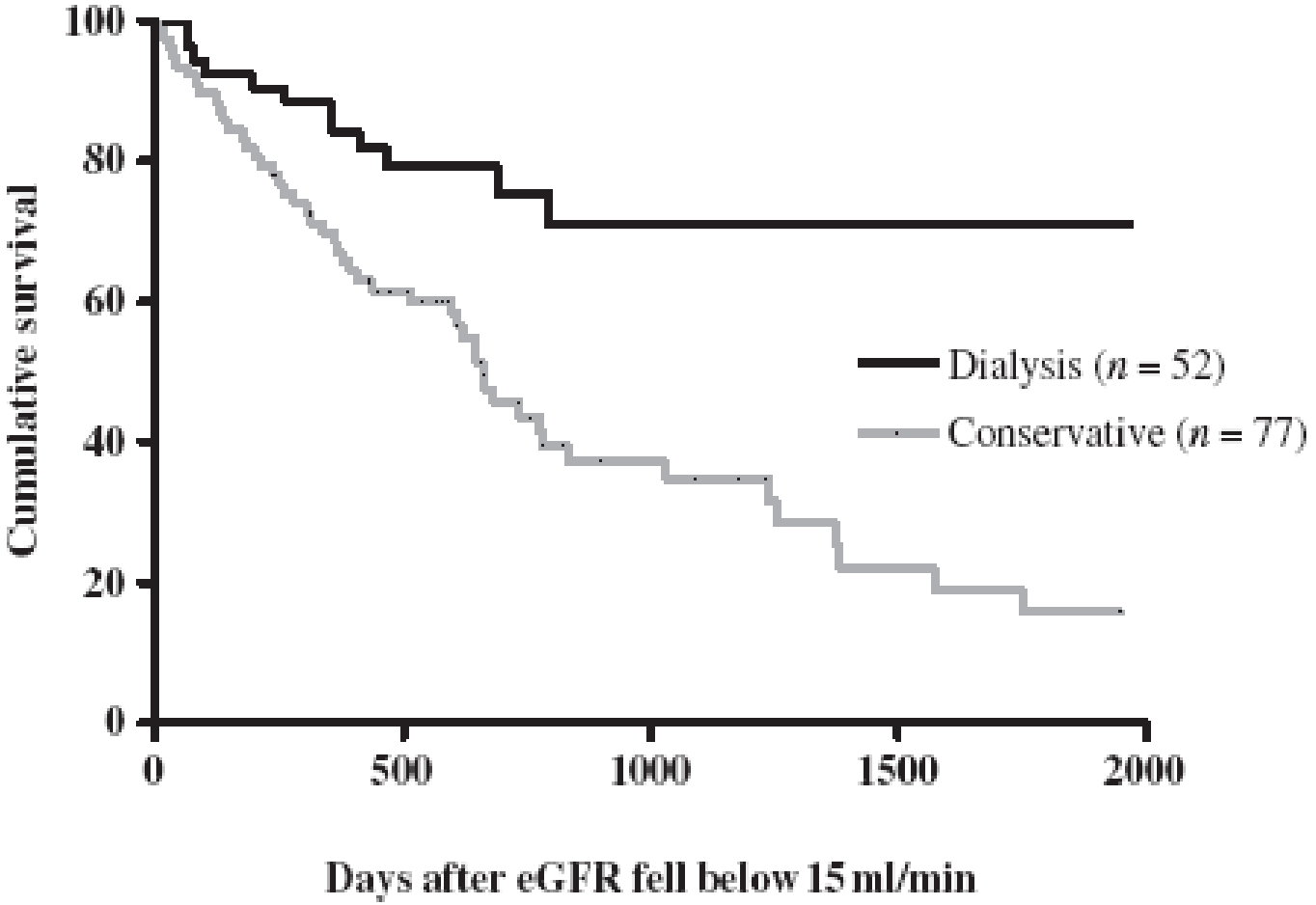
Dialysis or not? A comparative survival study of patients over 75 years with chronic kidney disease stage 5

Fliss E. M. M
Fiona E. Har

[1]Department of
and St Helier U
of Renal Medici
London, UK

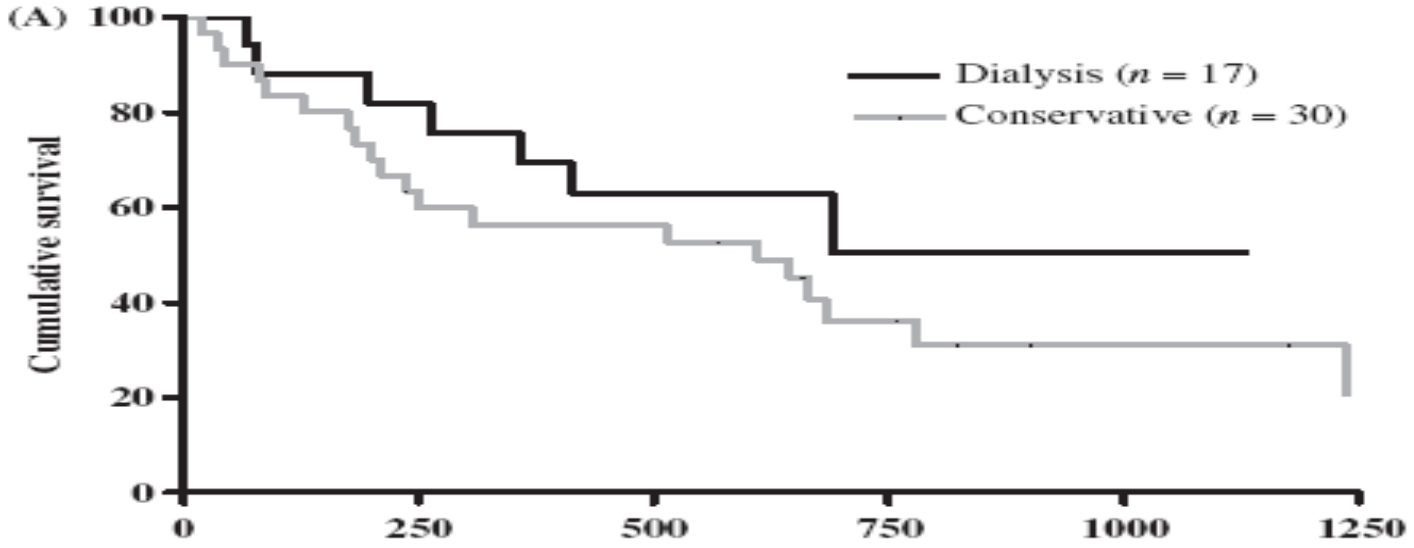
and

psom
Division
Hospital,



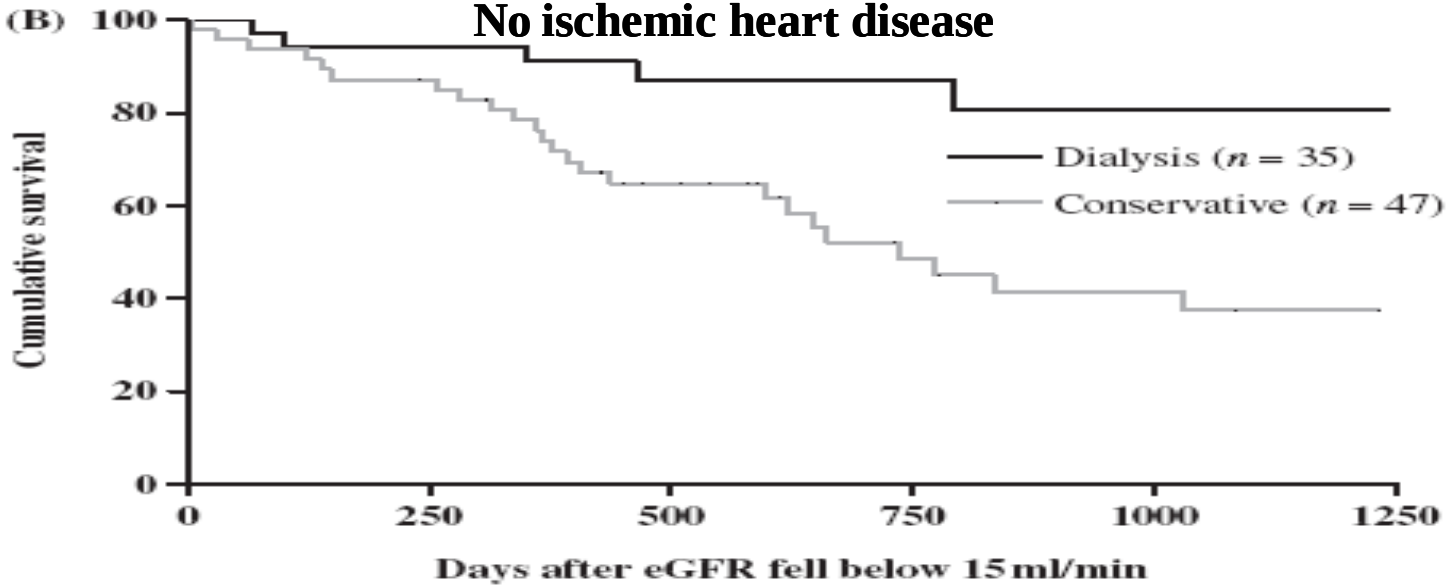
p<0.001

Ischemic heart disease



p<0.27

No ischemic heart disease



p<0.0001

Advance Access published November 22, 2010

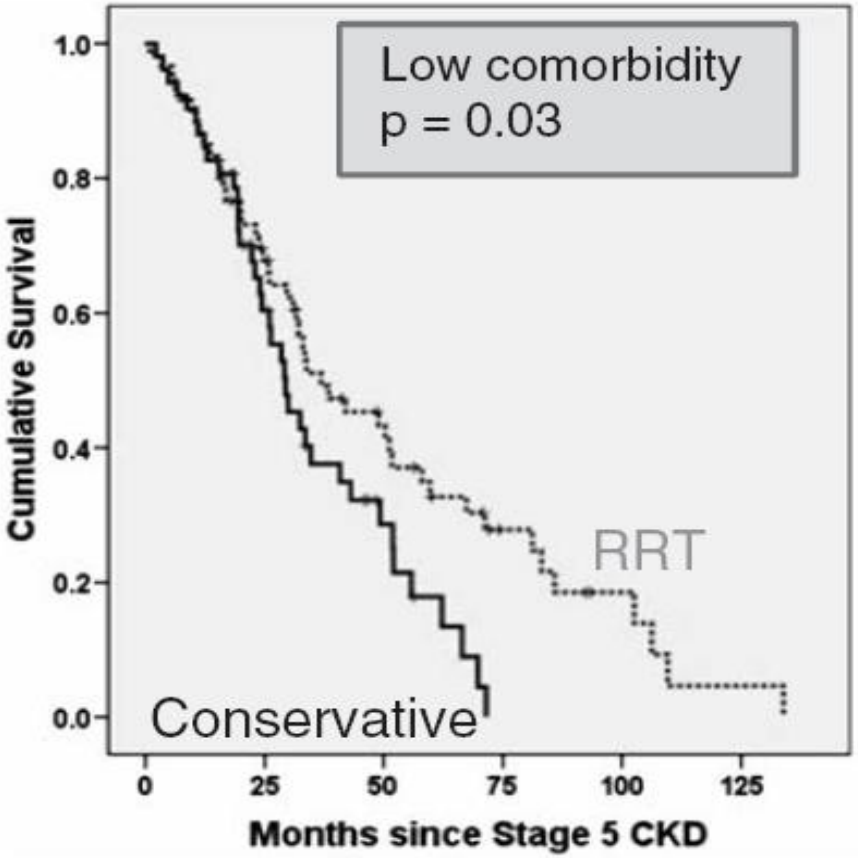
NDT
Nephrology Dialysis Transplantation

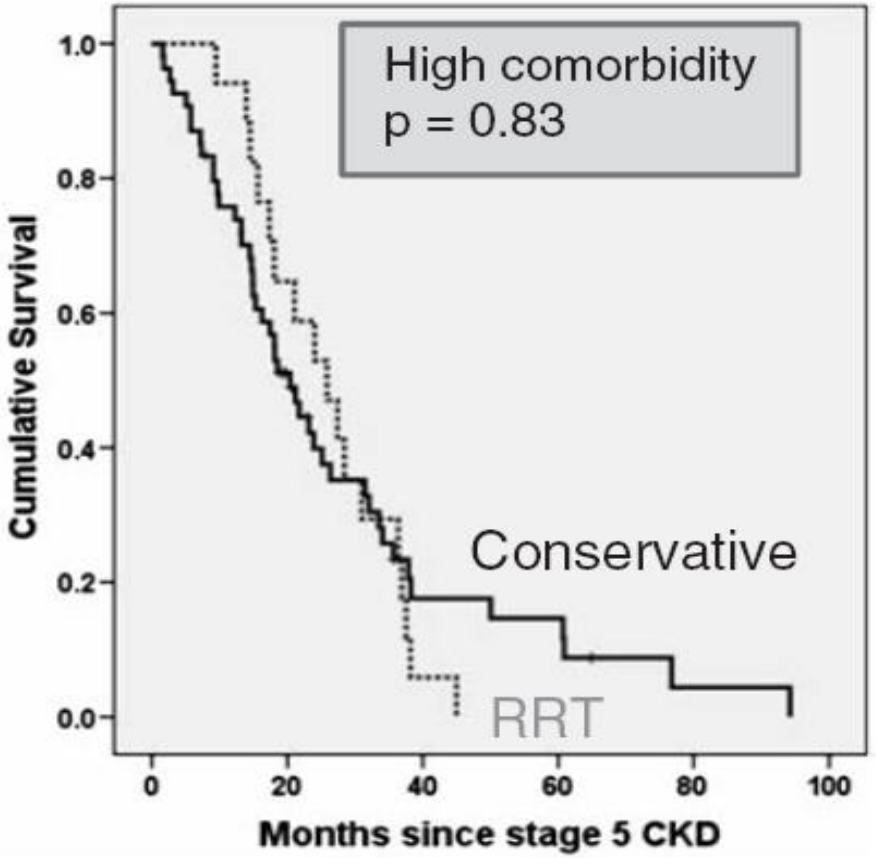
Original Article

Survival of elderly patients with stage 5 CKD: comparison of conservative management and renal replacement therapy

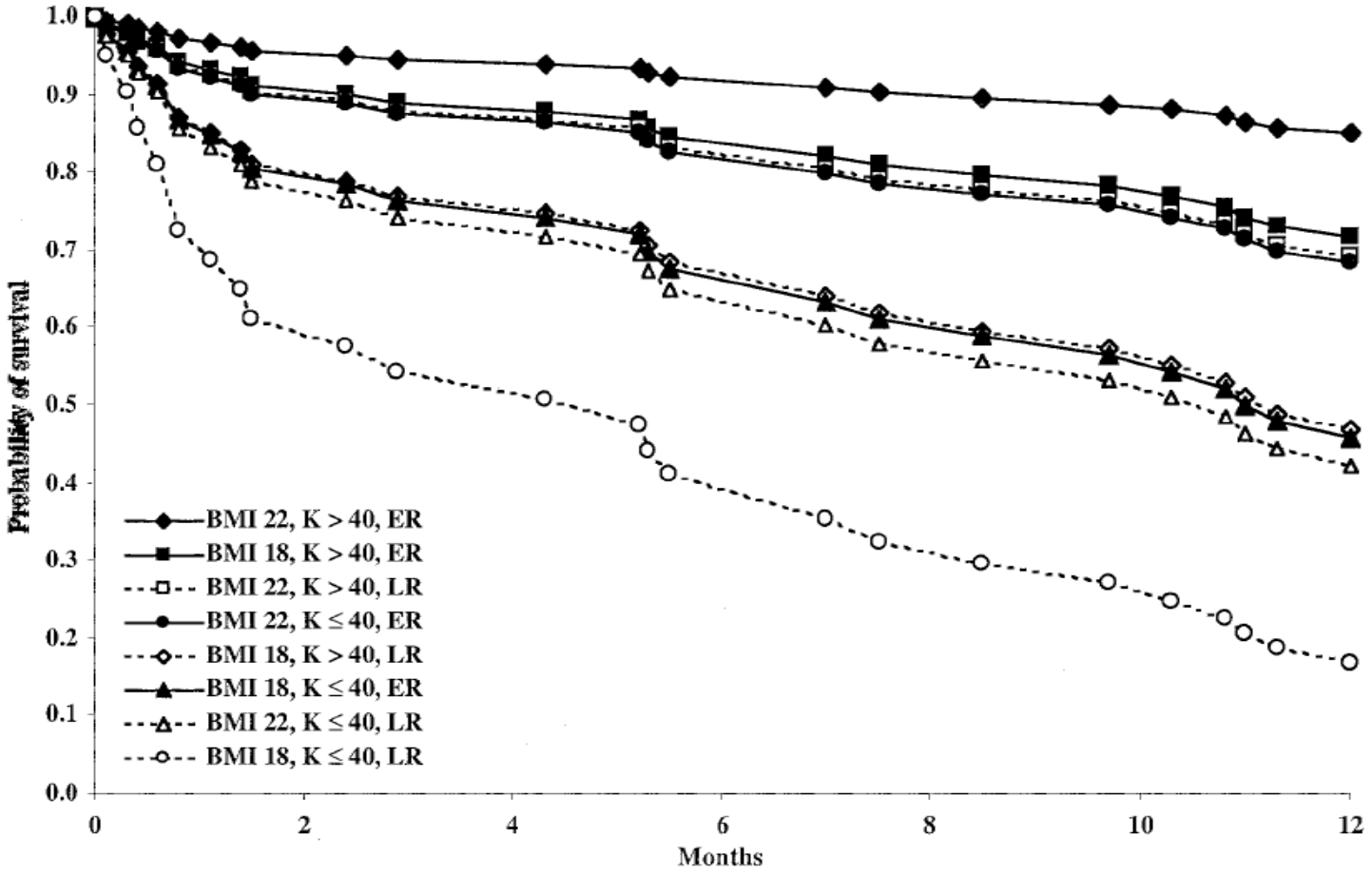
Shahid M. Chandna, Maria Da Silva-Gane, Catherine Marshall, Paul Warwicker, Roger N. Greenwood and Ken Farrington

4





Octogenarians Reaching End-Stage Renal Disease: Cohort Study of Decision-Making and Clinical Outcomes



Six-month prognostic risk score in patients ≥75 years who initiate dialysis.

Nephrol Dial Transplant 24: 1553–1561, 2009

Risk Factors	Points
Total dependence for transfers	3
BMI <18.5 kg/m²	2
Peripheral vascular disease stage 3 or 4	2
Congestive heart failure stage 3 or 4	2
Severe behavioral disorder	2
Unplanned dialysis initiation	2
Active malignancy	1
Diabetes mellitus	1
Dysrhythmia	1

Total Score	6-Month Mortality Rate
0	8%
1	8-10%
2	14-17%
3-4	21-26%
5-6	33-35%
7-8	50-51%
≥9	62-70%

Intramural Research Program
National Institute on Aging
National Institutes of Health

Development and Validation of a Multidimensional Prognostic Index

Pilotto, Rejuvenation Res 2008; 11: 151-61

- Activities of Daily Living (ADL)	6	items
- Instrumental Activities of Daily Living (IADL)	8	items
- Short Portable Mental Status Questionnaire (SPMSQ)	10	items
- Mini-Nutritional Assessment (MNA)	18	items
- Exton-Smith Scale	5	items
- Cumulative Illness Rating Scale_comorbility (CIRS)	14	items
- Number of drugs	1	
- Social index	1	
TOTAL	63	items

M. P. I.

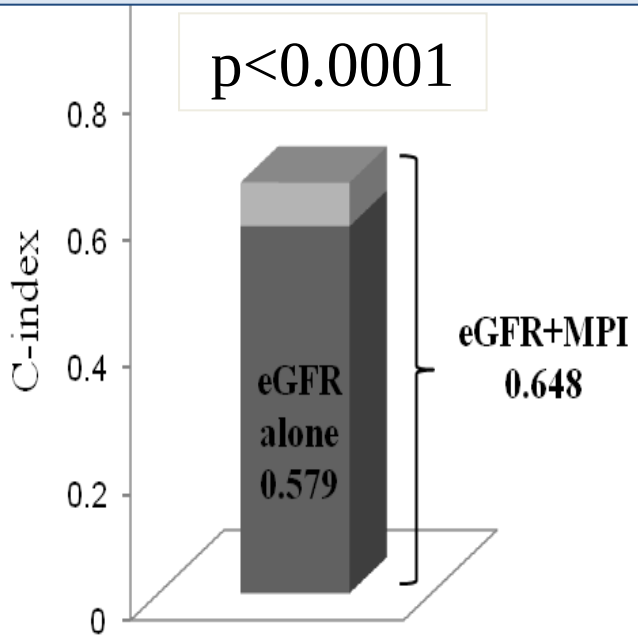
	Mild	Moderate	Severe
SCORE	0.18±0.09	0.48±0.09	0.77±0.08
RANGE	0.00-0.33	0.34-0.66	0.67-1.0

Addition of the Multidimensional Prognostic Index to the Estimated Glomerular Filtration Rate Improves Prediction of Long-Term All-Cause Mortality in Older Patients with Chronic Kidney Disease

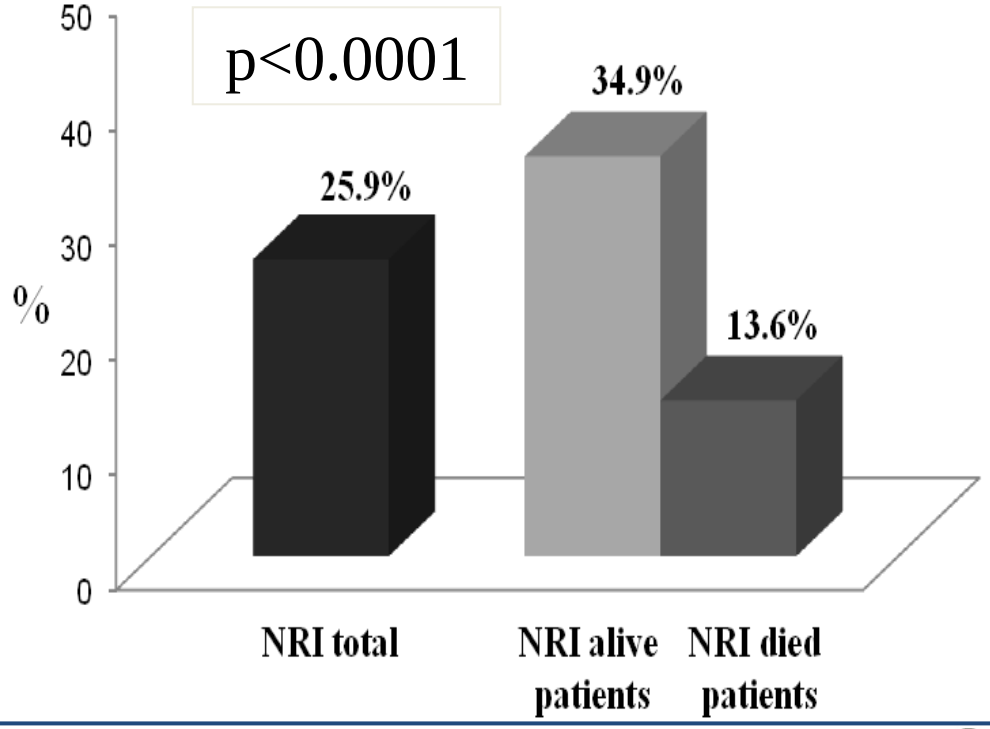
1198 pts, M=44.5%, mean age=80.5 6.8, e-GFR<60 ml/min/1.73m^2, follow-up 2.1 yrs

Pilotto, Aucella et al. Rejuvenation Res 2012, 15: 82-88

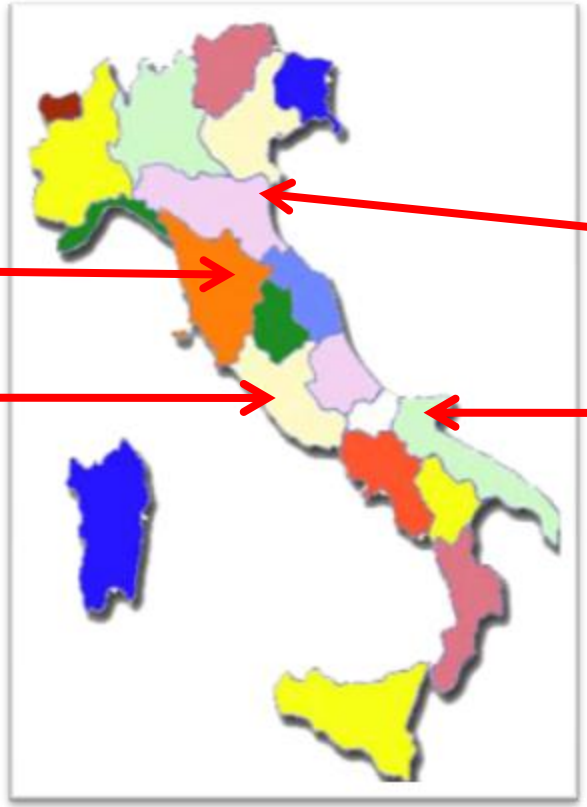
Survival C-index by adding MPI to eGFR to predict mortality



Net Reclassification Improvement (NRI) by adding MPI to e-GFR



Multidimensional Prognostic Index (MPI) in older hemodialysis patients: A multicenter observational study



Prato

UO Nefrologia e Dialisi (M. Amato)

Roma

UO Nefrologia e Dialisi (GE Russo)

Padova

UO Nefrologia 2^ e Dialisi (A. Naso)

UO Geriatria (A. Pilotto)

San Giovanni Rotondo

UO Nefrologia e Dialisi (F.Aucella)

U O Geriatria (A. Greco)

309 patients, M=193 (62.5%) mean age = 76.4 6.5years, range = 60-98 years

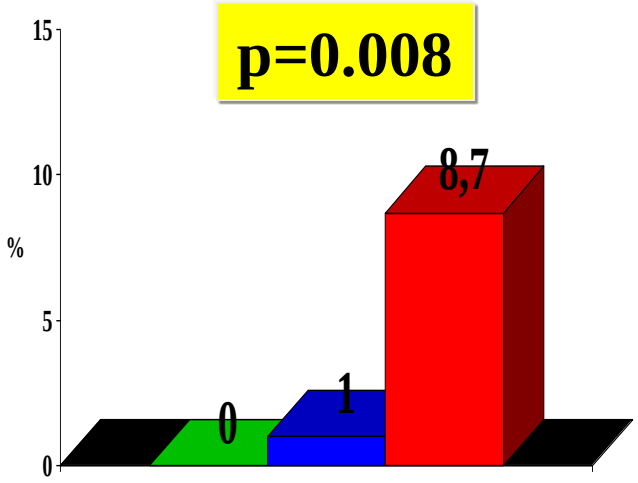
MPI in older hemodialysis patients

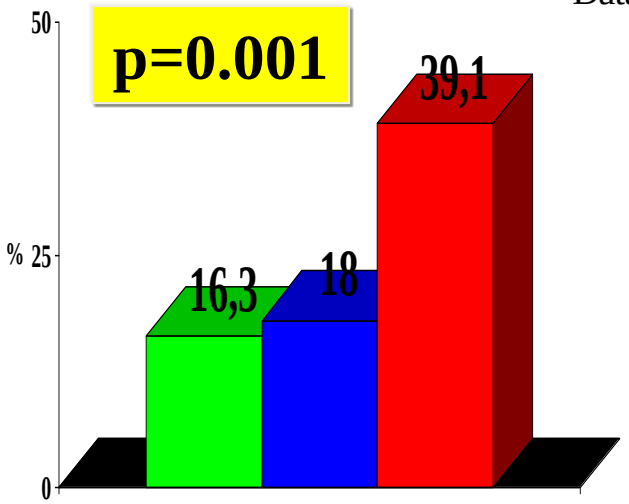
166 patients, mean age=76.5 6.9, range=60-96 years

MPI 1= 43; MPI 2 = 100; MPI 3 = 23

Follow-up:	30 days	2 years
ROC curve:	0.81 (0.76-1.00)	0.66 (0.55-0.76)

Data on file, 2013



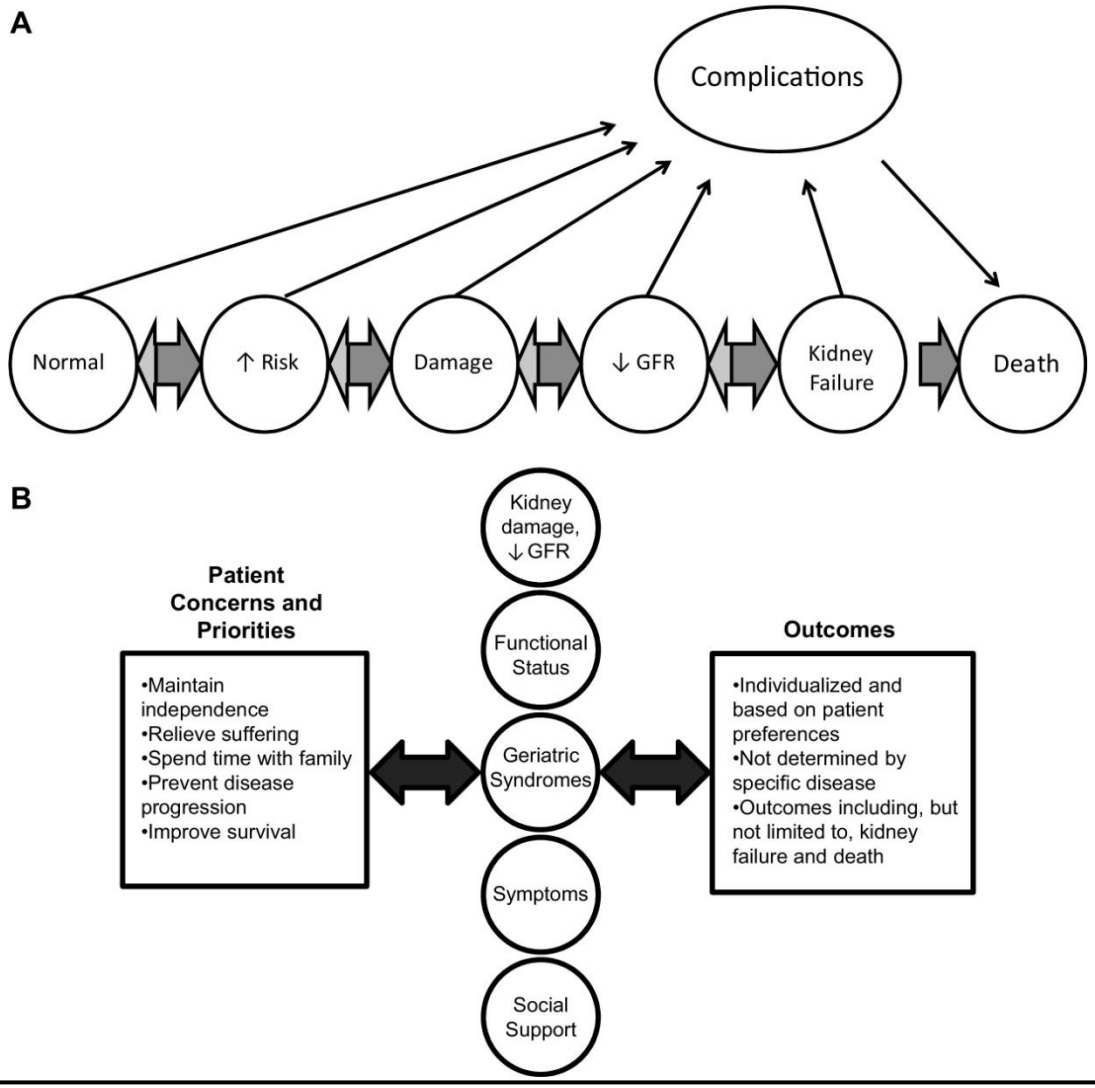


Domande :

1. Quando iniziare la dialisi ?
2. Come ? Emo- vs peritoneo-dialisi;
3. Chi avviare alla dialisi?
4. ***Alternative?***

Managing Older Adults With CKD: Individualized Versus Disease-Based Approaches

American Journal of Kidney Diseases February 2012



Mini-Review

Dialysis in Late Life: Benefit or Burden

Sarbjit V. Jassal*† and Diane Watson*
University of Toronto, Toronto, Ontario, Canada

Clin J Am Soc Nephrol 4: 2008–2012, 2009

Nonaggressive Renal Care and End-of-Life Care

The term "nonaggressive renal care" has been deliberately chosen in preference to conservative care. It is critical that not starting or withdrawal from dialysis not be viewed as "withdrawal of care" or passive care. Rather, nonaggressive renal care is an intensive approach that prioritizes comfort. Active care is given for all physical symptoms and emotional and spiritual needs akin to the palliative cancer literature. Specific training for doctors regarding management of pain, depression, and renal-specific symptoms (*e.g.*, myoclonic jerks, fluid accumulation, itching) is needed.

Maximal Nondialytic Conservative Management

It is **intensive CKD approach** is undertaken in a multidisciplinary clinic staffed by dietitians, social workers, and other support personnel.

Patients receive the same care as they do in earlier CKD stages, with **emphasis on supportive, symptomatic care.**

Conservative care in Europe—nephrologists' experience with the decision not to start renal replacement therapy

Nephrol Dial Transplant (2013) 0: 1–9

Conclusions.

1. **Nephrologists estimated conservative care was provided to up to 15% of their patients in 2009.**
2. **The presence of severe clinical conditions, vascular dementia and a low physical functional status are important factors in the decision taking not to start RRT.**
3. **Patient preference was considered as a very important factor, confirming the importance of extensive patient education and shared decision-making.**

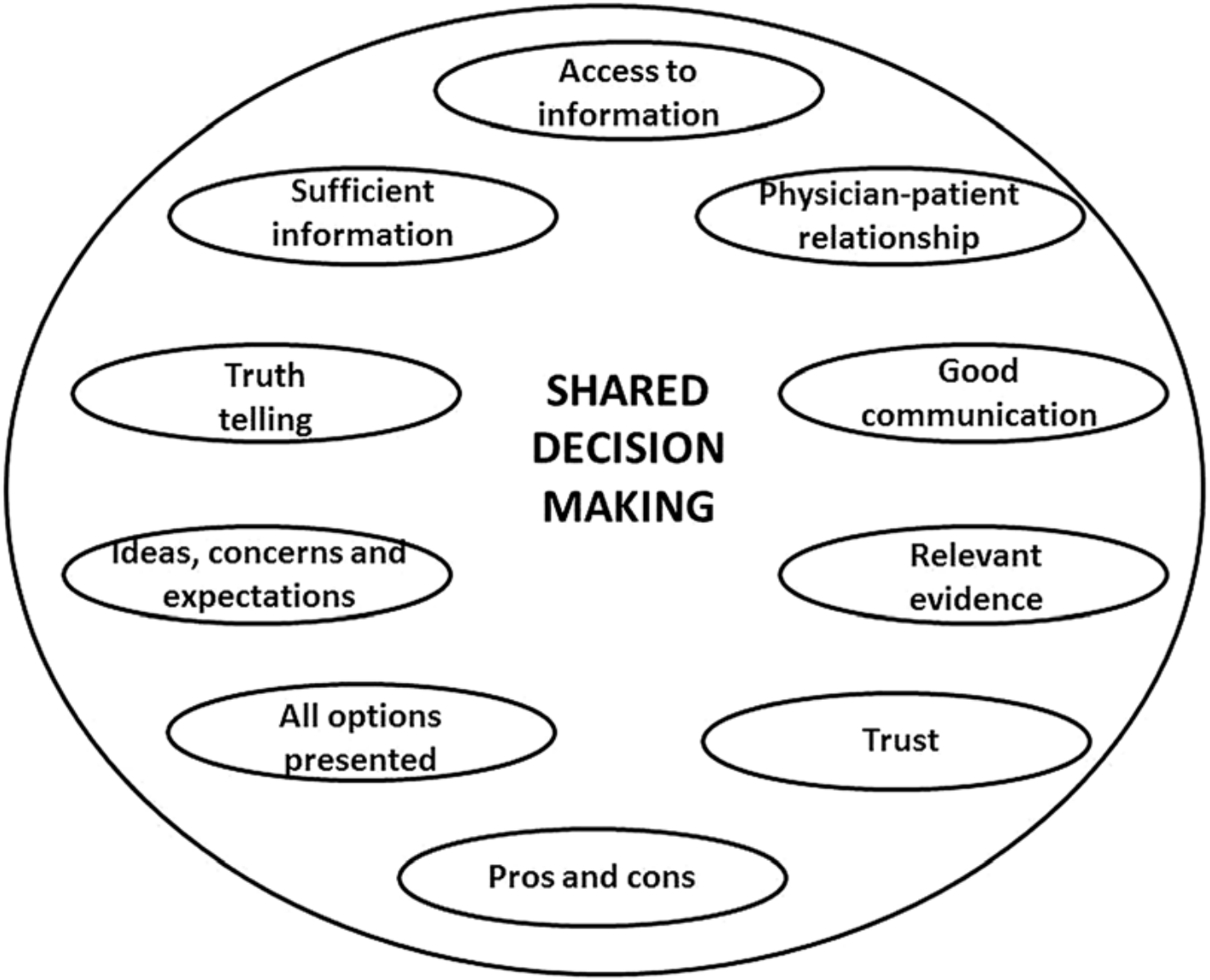
Quali sono le ragioni per cui alcuni Centri offrono cure palliative ai pazienti con ESRD?

Lichodziejewska-Niemierko M, JN 2008; 21 (suppl 13)

- Limitata sopravvivenza
- Invecchiamento della popolazione
- Elevato numero di pazienti disabili con comorbidità
- Ospedalizzazioni lunghe e frequenti
- Sintomatologia complessa: dolore, astenia, depressione…
- Cattiva qualità di vita
- Problemi di rinuncia o sospensione della dialisi
- Necessità di cure terminali per il paziente o i familiari

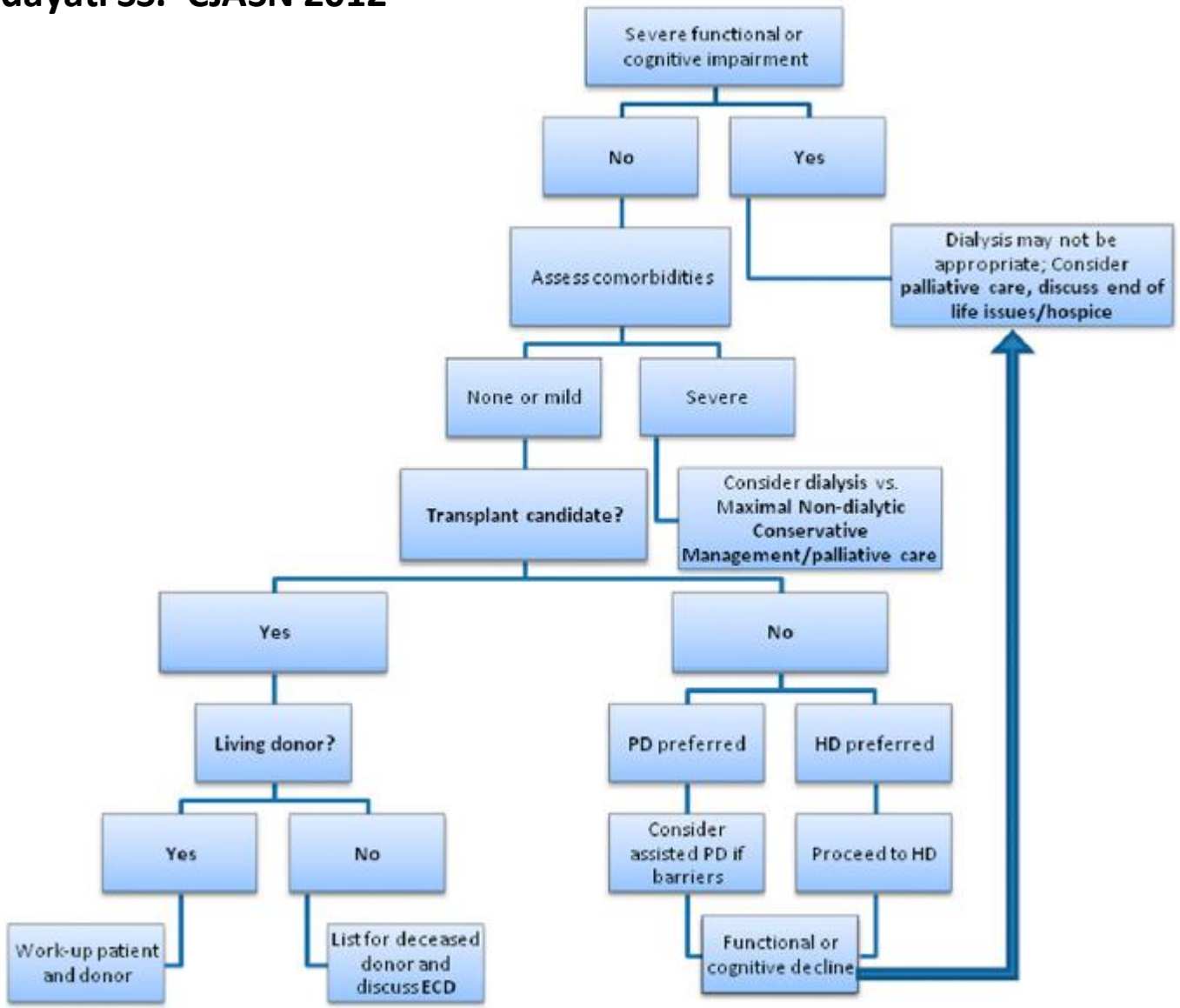
Dialysis or conservative care for frail older patients: ethics of shared decision-making

Nephrol Dial Transplant (2013) 0: 1–6



Approach to the elderly patients with ESRD

Berger JR, Hedayati SS. CJASN 2012



La Dialisi nell'anziano: messaggi !

1. Può essere posposta nei soggetti con compliance alla dieta;
2. La scelta della metodica (PD/HD) va condivisa con il paziente fornendogli adeguati strumenti per la decisione;
3. L'opportunità di iniziare il trattamento va ponderata alla luce della prognosi (VMD geriatrica o MPI in particolare);
4. Nel soggetto anziano con bassa comorbidità, il trattamento dialitico è la scelta privilegiata;
5. Nel soggetto ad alta comorbidità il "conservative management" e/o le cure palliative possono essere indicate per privilegiare il benessere e la qualità di vita del paziente;
6. Implementare un percorso di decisione condivisa.