


SOCIETÀ ITALIANA DI NEFROLOGIA
SEZ. APULO-LUCANA


OSPEDALE
"CASA SOLLIEVO DELLA SOFFERENZA"
Istituto di Ricovero e Cura a Carattere Scientifico
Opera di San Pio da Pietrelcina

XXXIII
Convegno Interregionale
XXI
Corso di aggiornamento
Interregionale
Personale Infermieristico
e Tecnico di Dialisi

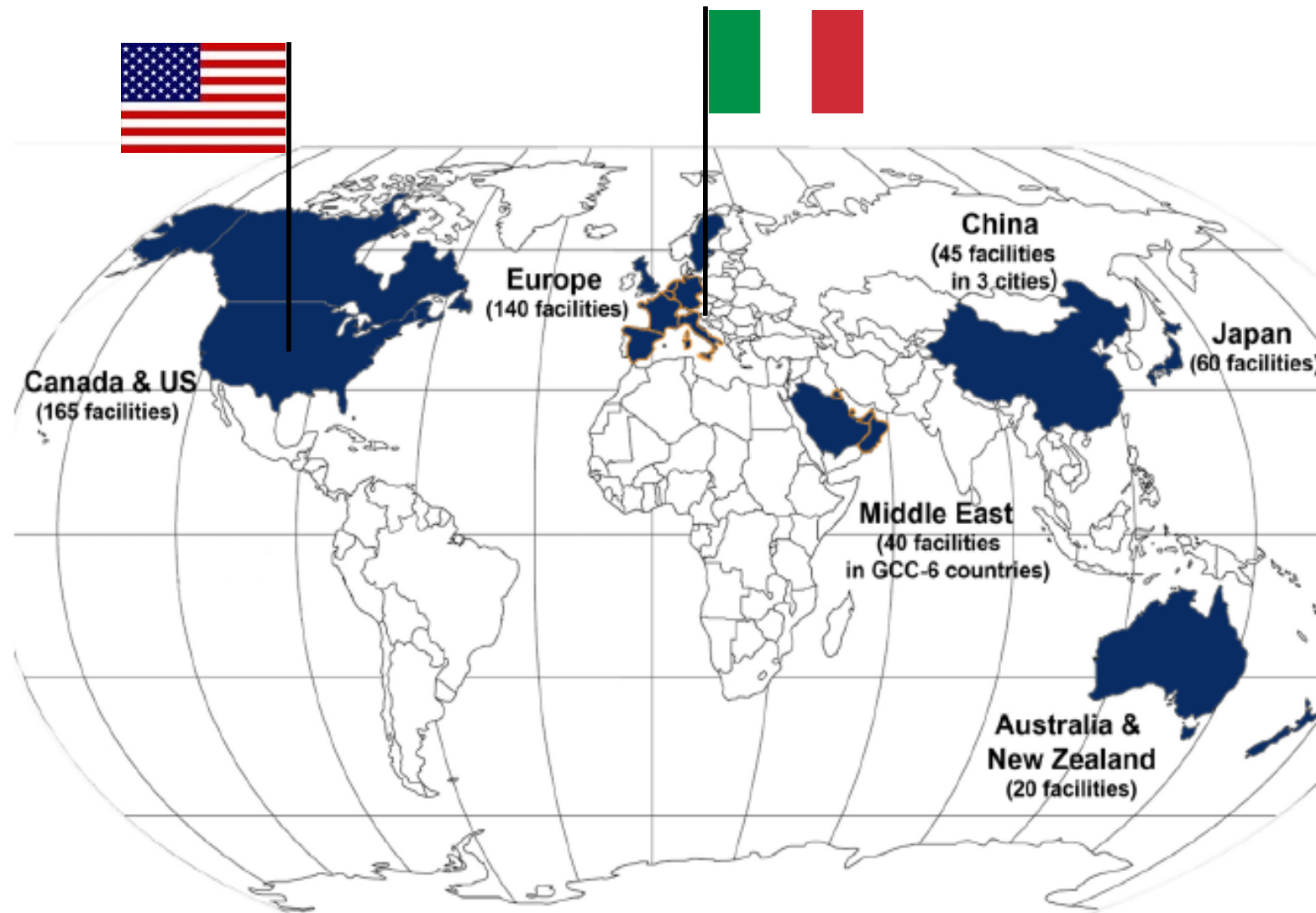
San Giovanni Rotondo (FG)
30 settembre - 1 ottobre 2016
Centro di Spiritualità Padre Pio

Focus su: Accessi Vascolari

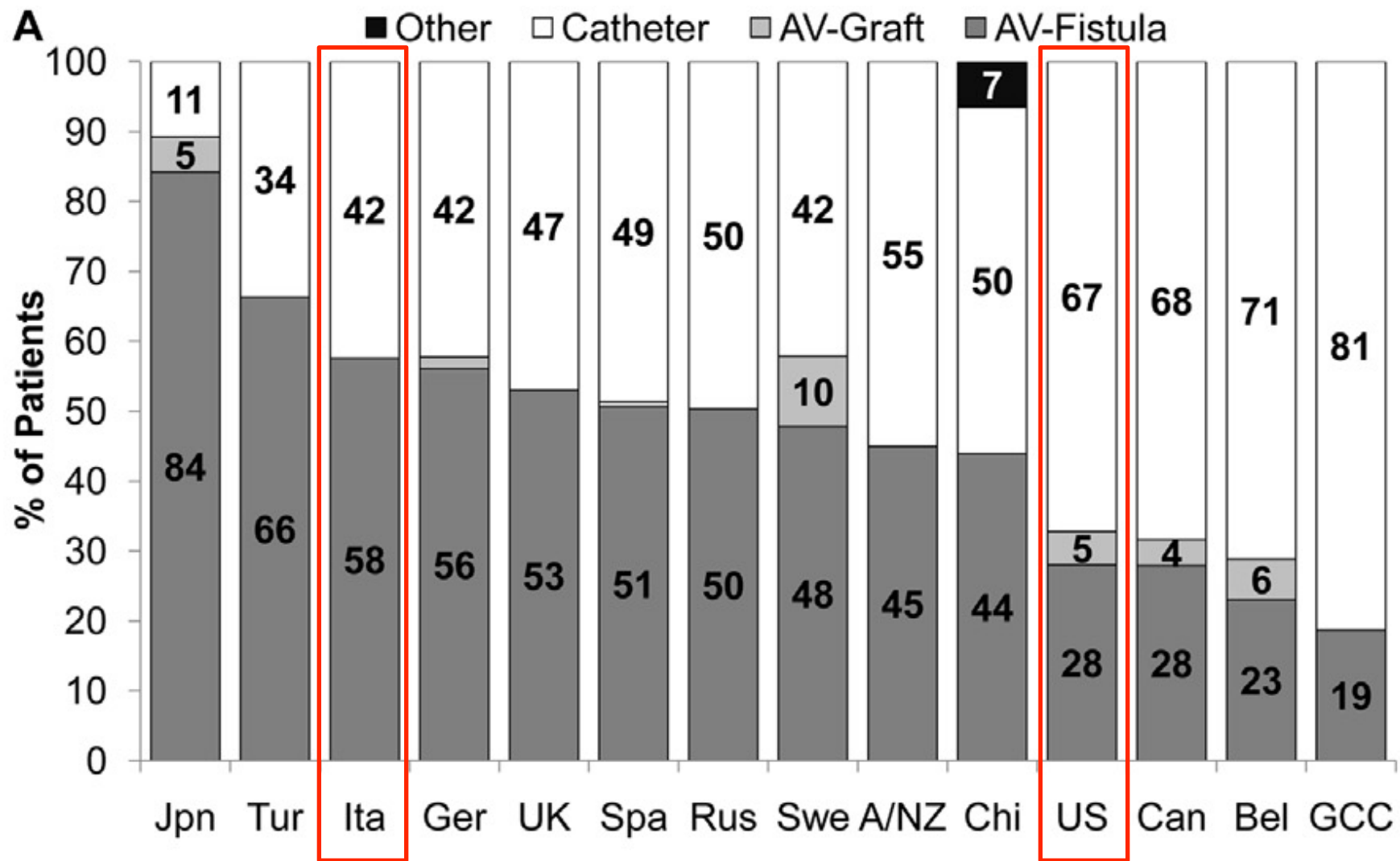
*dr Carlo Lomonte
U.O.C. di Nefrologia e Dialisi
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Acquaviva delle Fonti - Ba*

Sommario

- **Epidemiologia dell'Accesso Vascolare**
- **L'Accesso Vascolare nell'anziano**
- **Le strategie nella batteriemia da CVC**

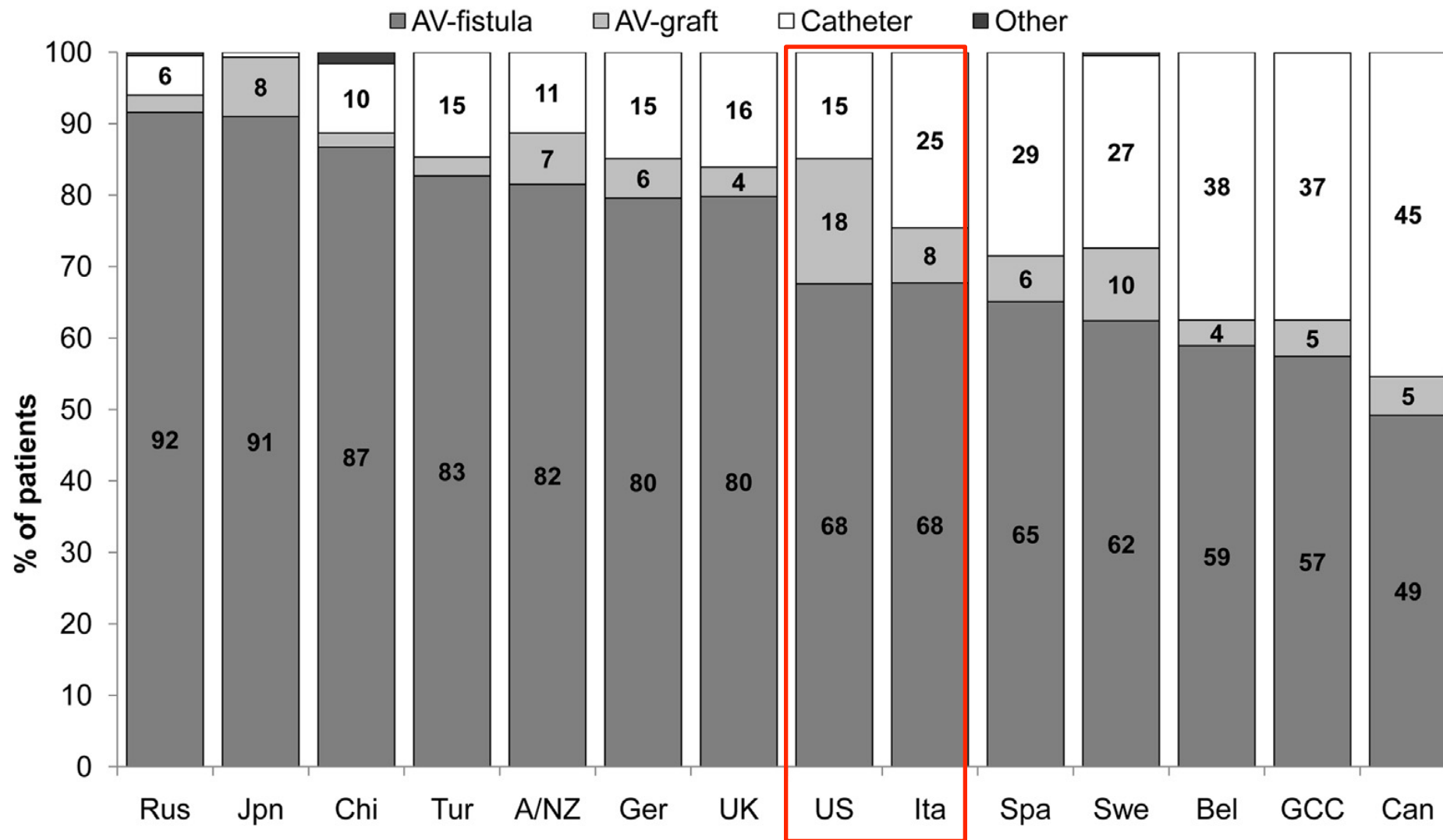


The DOPPS (Dialysis Outcomes and Practice Pattern Study) is a prospective cohort study of hemodialysis practices based on the collection of observational longitudinal data

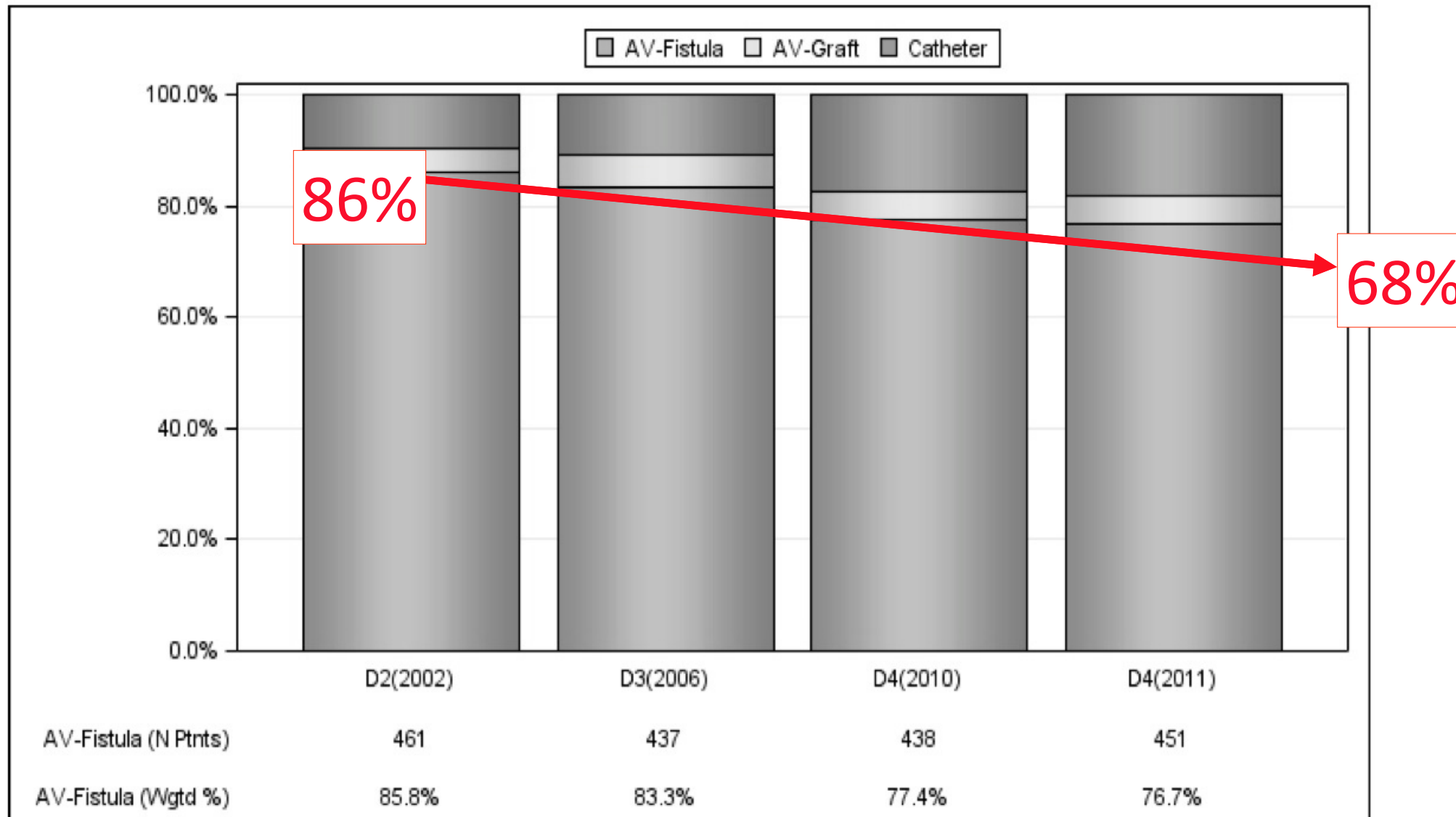


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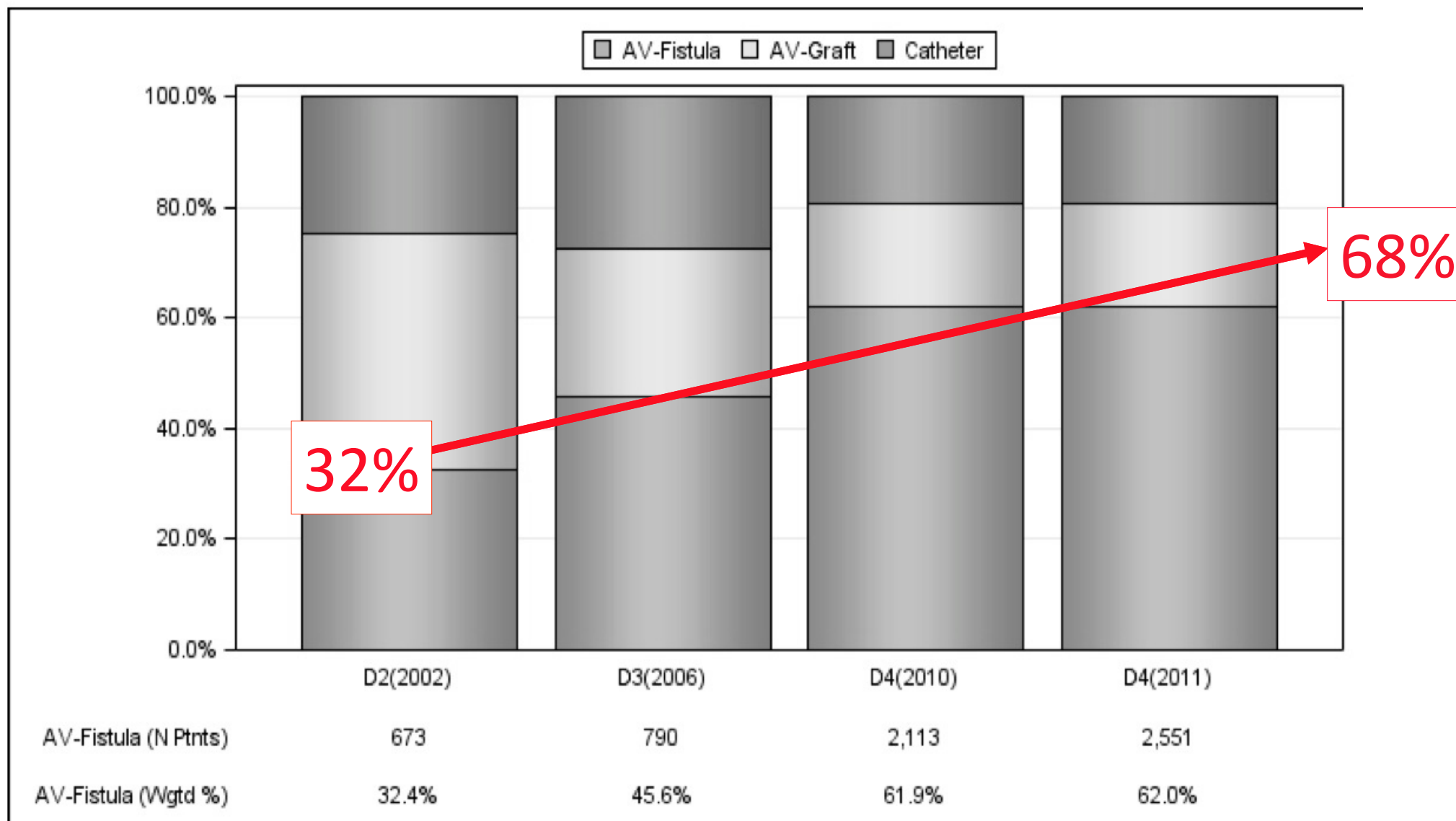
Vascular access in use, by DOPPS country



DOPPS Italy: Vascular access in use at cross-section, by cross-section



DOPPS US: Vascular access in use at cross-section, by cross-section



Interventional nephrology: a new area of competency in nephrology

- **Organization** (The American Society of Diagnostic and Interventional Nephrology – ASDIN, was established on October 2000)
- **Need** (dysfunctional access was a major cause of patient morbidity and mortality)
- **Interest** (nephrologists have been trained to address all of the dialysis patient's problems. The exception was VA)

Academic Interventional Nephrology: A Model for Training, Research, and Patient Care

- *There is a substantial need for the establishment of Academic Dialysis Access Centers (ADACs)*
 - *These centers would be essential for transforming IN into a distinct discipline within nephrology similar to transplant nephrology*
-

...e in Italia?



Al Presidente della Società Italiana di Nefrologia
Prof. Claudio Ponticelli

Gruppo di Studio degli Accessi Vascolari 2000

In data odierna, in occasione di una riunione convocata per valutare l'interesse esistente sulla tematica degli accessi vascolari in dialisi, un gruppo di componenti della Società Italiana di Nefrologia ha espresso l'intenzione di fondare un gruppo di studio nell'ambito della SIN.

Le finalità di questo gruppo di studio saranno:

- Promuovere indagini conoscitive della realtà italiana sul problema degli accessi vascolari in dialisi, tramite questionari e indagini epidemiologiche. In particolare è intenzione del gruppo di studio fondare e far crescere un registro degli accessi vascolari
- Per la natura interdisciplinare dell'argomento, favorire la comunicazione e la collaborazione tra i componenti del gruppo e altri specialisti (chirurghi vascolari, radiologi interventisti, anestesisti, ecc.) interessati al problema, con il fine di migliorare la qualità dell'assistenza al paziente dializzato.
- Promuovere la formazione e il perfezionamento dei nefrologi e del personale infermieristico nella creazione e gestione di tutti i tipi di accesso vascolare.

La presente lettera rappresenta una richiesta formale di fondazione del "Gruppo di studio accessi vascolari in dialisi".

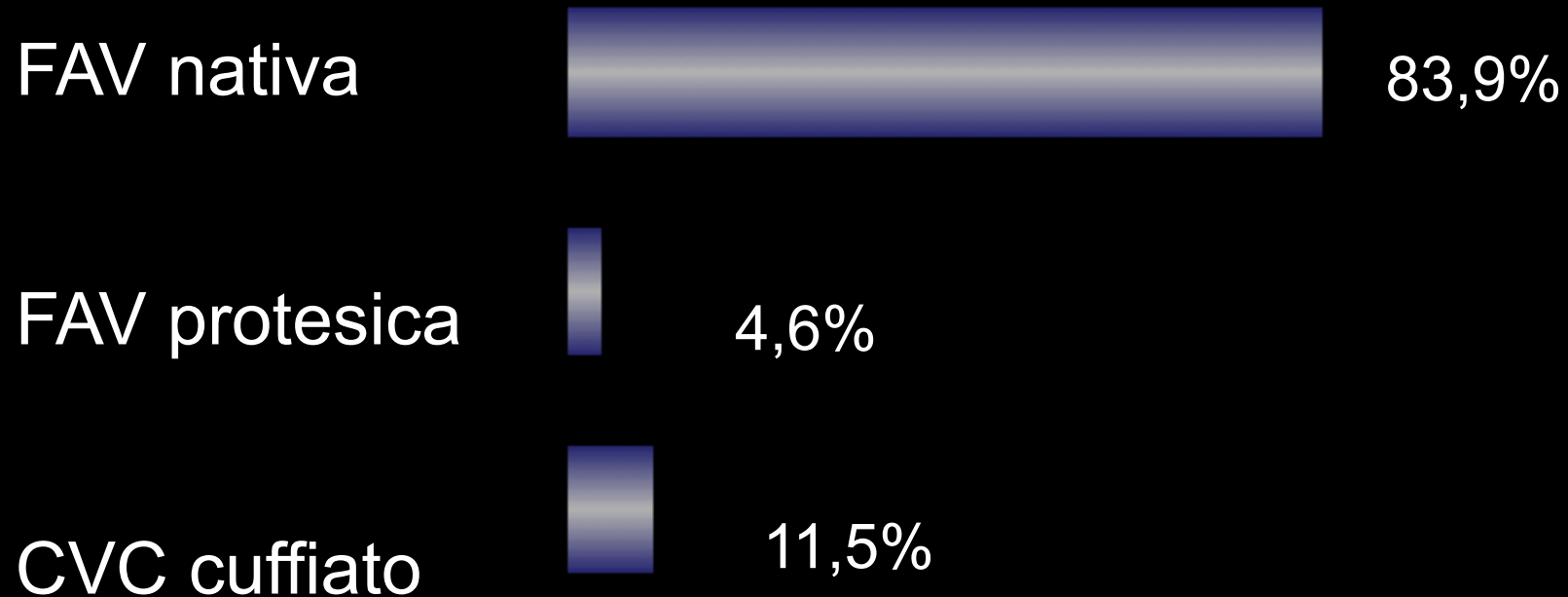
Seguono nomi e firme dei soci che propongono la formazione del gruppo.

Eventuali comunicazioni possono essere temporaneamente indirizzate a:

Dr. Franco Galli – Pavia – Tel 0382-592971 – e-mail fgalli@fsm.it

LIMIDO <i>Luigi Limido</i>	BONUCCI DECENZIO <i>Decenzio Bonucci</i>
CRISTOFORI LUCCANO <i>Luccano Cristofori</i>	TAGLIAFERRI MARCO <i>Mario Tagliaferri</i>
GALLI FRANCO <i>Franco Galli</i>	CECERE PASQUALENA <i>Pasquale Cerece</i>
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CASSANI DANIELA <i>Daniela Cassani</i>	CALONGI GIANCARLO <i>Giancarlo Calongi</i>
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FOSCO CAVATORTA <i>Fosco Cavatorta</i>	MAURIZIO GALLIENI <i>Maurizio Galli</i>

Accessi vascolari prevalenti

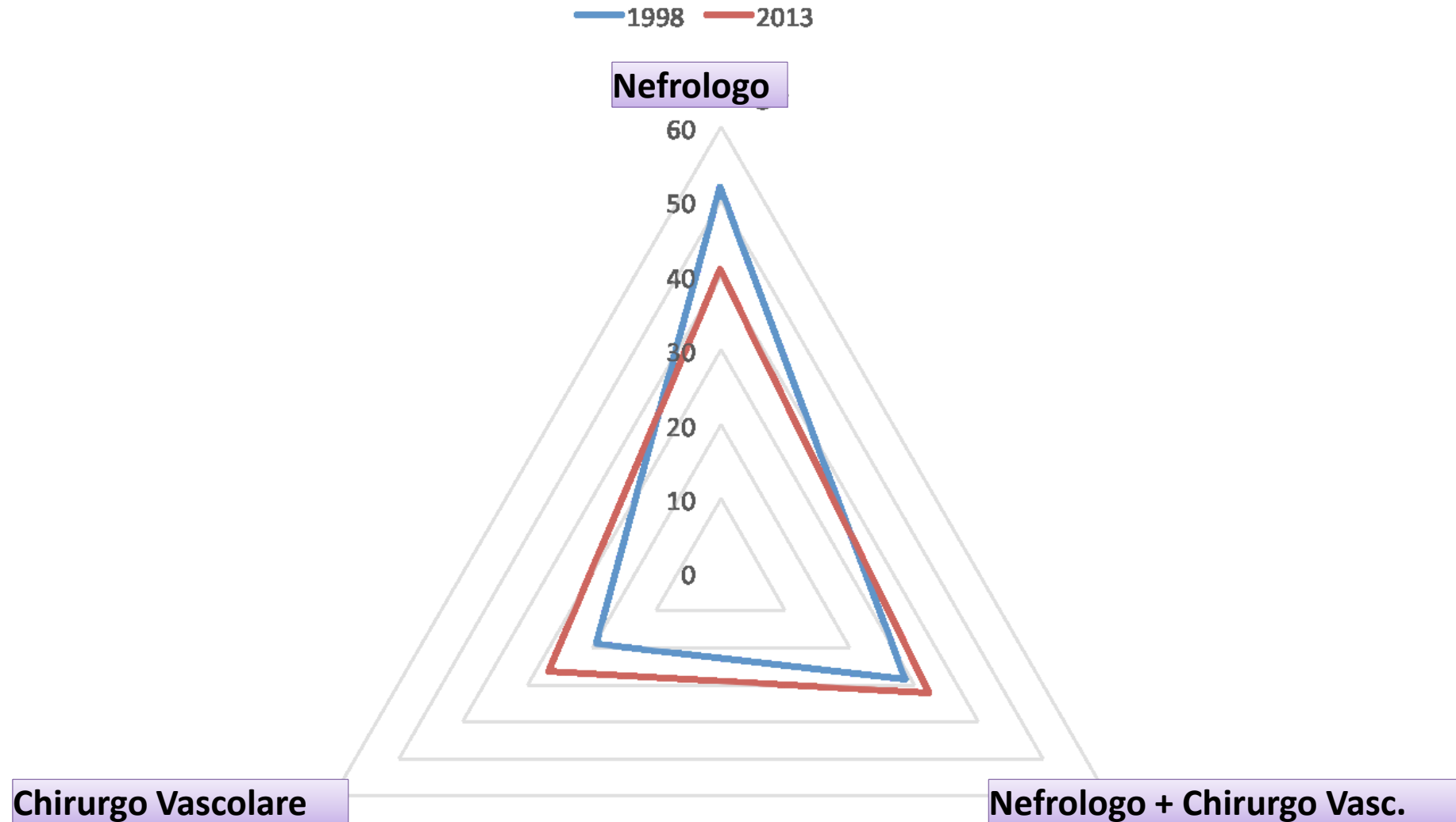


Censimento SIN 2004

Vascular access scenario in Italy: evolution and comparison by two surveys (1998-2013)

		1998	2013
CVC at first dialysis	< 20 %	52.4	32.6 ↓
	20-40%	22	27.5
	> 40%	25.2	39.8 ↑
Interventional Radiology	< 10 procedures/year	88.3	73.7
	> 10 procedures/year	11.7	26.3

Il rapporto con il Chirurgo Vascolare



Courtesy by Decenzio Bonucchi

A new educational project

- » The Vascular Access Working Group of the Italian Society of Nephrology
- » Sant'Anna School of Advanced Studies - Pisa



Clin Kidney J (2015) 0: 1–4
doi: 10.1093/ckj/sfv022

CKJ Review

Preoperative assessment and planning of haemodialysis vascular access

Carlo Lomonte and Carlo Basile



Three steps in order to increase the pool of eligible patients can be individualized:

1) **process of care**, which includes three fundamental items:

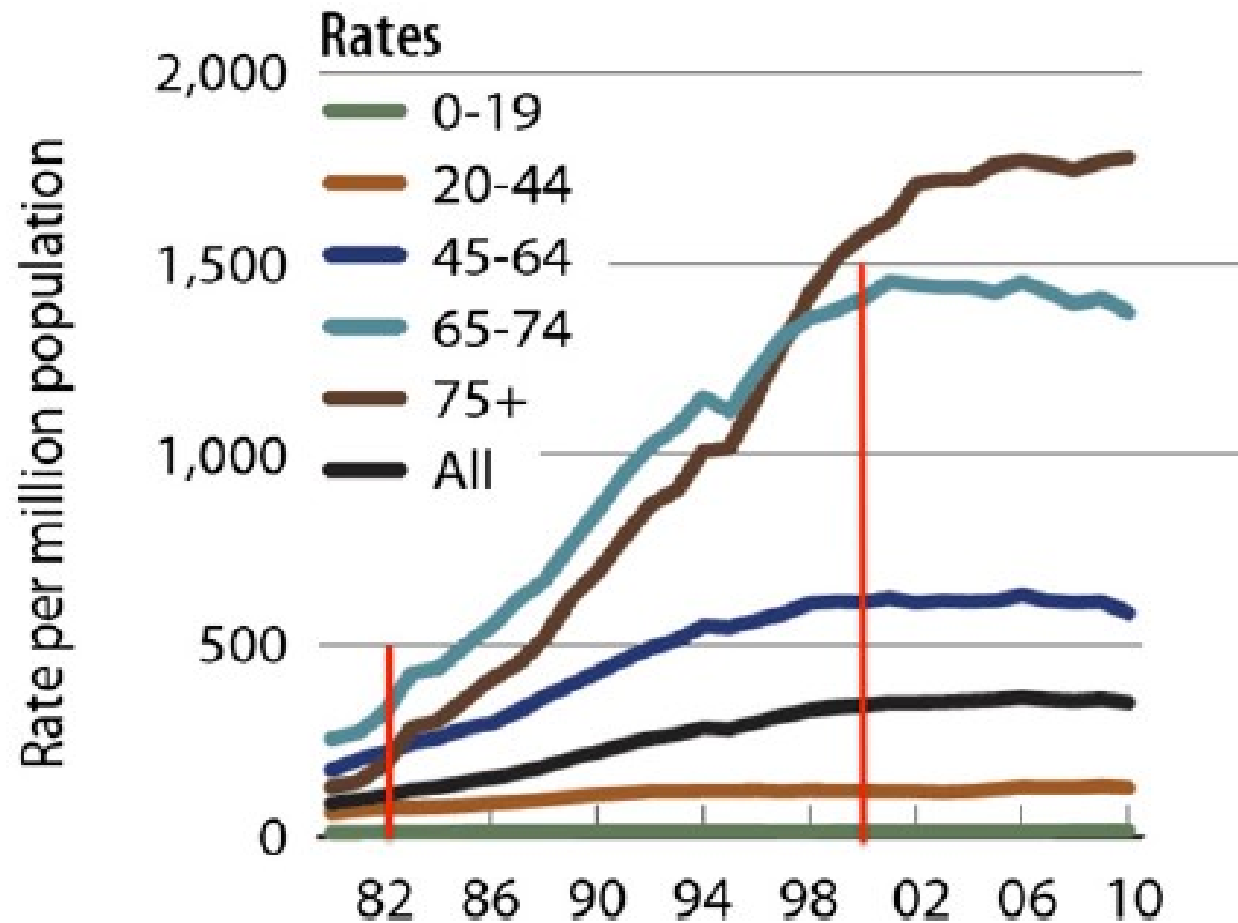
- the VA team
- early VA education
- timely VA surgical referral

2) **preoperative evaluation**

3) **surgical strategy**

Vascular Access Morbidity and Mortality: Trends of the Last Decade

Charmaine E. Lok* and Robert Foley†



Annual Report of ERA-EDTA Registry 2012



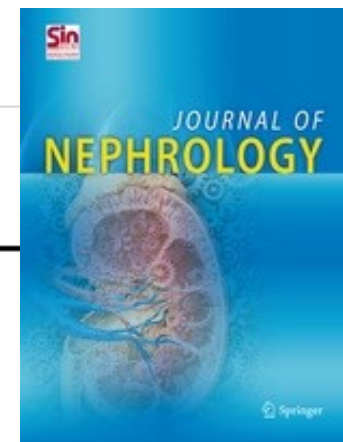
- 65-74 years = 22%
- >75 years = 20%

Renal replacement therapy in Europe (2015) a summary of the 2012 ERA-EDTA Registry Annual Report. Clin Kidney J 8(3):248–261

J Nephrol

DOI 10.1007/s40620-016-0263-z

REVIEW



The vascular access in the elderly: a position statement of the Vascular Access Working Group of the Italian Society of Nephrology

Carlo Lomonte¹ · Giacomo Forneris² · Maurizio Gallieni³ · Luigi Tazza⁴ · Mario Meola^{5,6} · Massimo Lodi⁷ · Massimo Senatore⁸ · Walter Morale⁹ · Monica Spina¹⁰ · Marcello Napoli¹¹ · Decenzio Bonucchi¹² · Franco Galli¹³

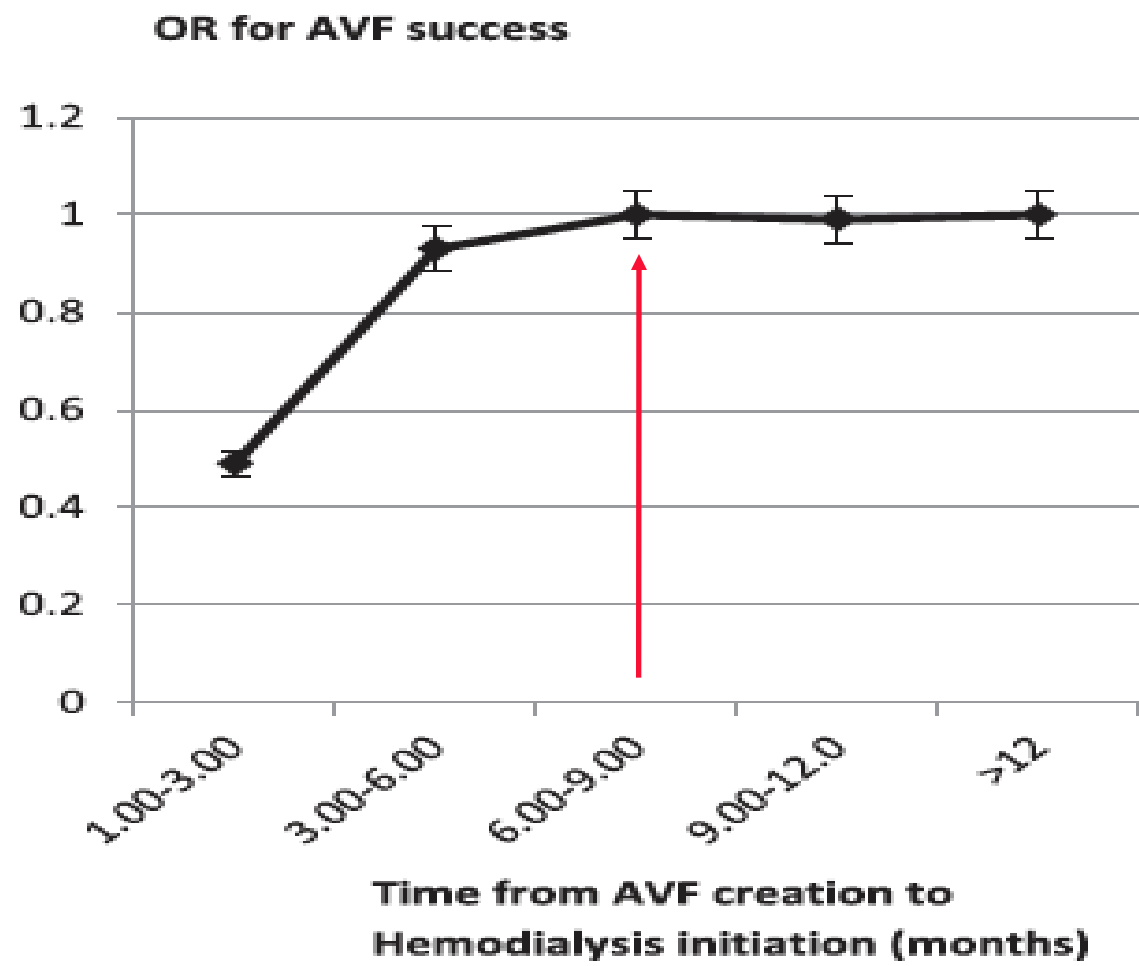
Received: 24 October 2015 / Accepted: 4 January 2016

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Timely VA placement in the elderly

- 1) Older patients lose renal function at slower rates than younger ones (Vachharajani, CJASN 2011)**
- 2) The elderly patients may be more likely to die before benefiting from an AVF (Hod, JASN 2015)**
- 3) The elderly patients should be referred later to reduce the risk of creating an AVF that is never used (Gomes, JASN 2013)**

Arteriovenous Fistula Placement in the Elderly: When Is the Optimal Time?



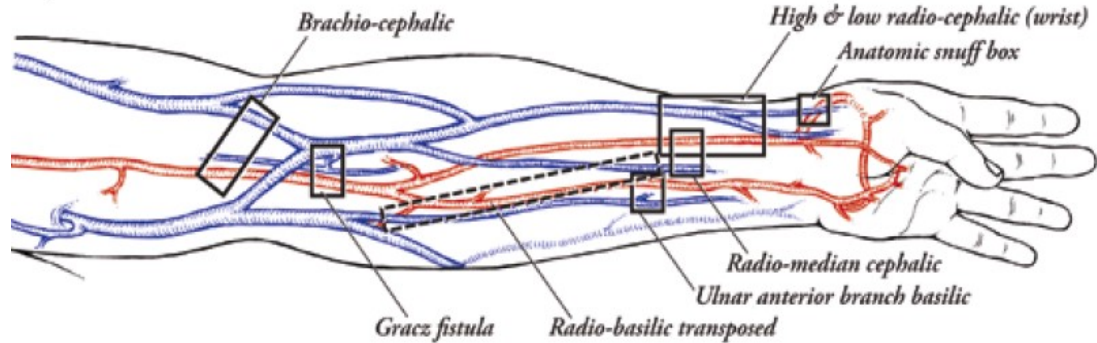


VA in elderly patients: recent findings

- There is currently no general consensus as to the best dialysis VA for elderly patients with ESRD
- The creation and use of a VA in elderly patients requires the complex integration of patients, biological and surgical factors because the VA type might be a key factor influencing their survival



Surgical strategy in elderly patients



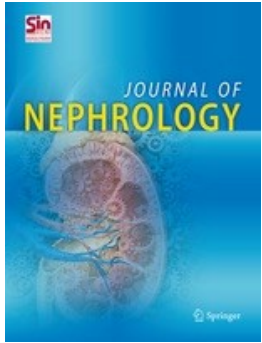
Primary failure

- A recent meta-analysis reported a primary failure rate (defined as non usable AVF for dialysis up to 6 months post creation) of 23 % (Al-Jaishi, AJKD 2014)
- AVF failure increases by 1% for every year above the age of 67 years (Hod, Hemodial Int 2014)
- Patients over 65 years have a fistula failure rate double that of younger patients (Lok, JASN 2006)



An Italian perspective

- AVF still remains the dialysis access with highest prevalence also in older patients, with an excellent survival rate (Venturelli et al JN 2013; Pirozzi et al JVA 2014)
- In Italy, among patients with > 4 months pre-ESRD care prior to starting chronic HD, 71% had AVF (DOPPS)



Key messages

1. Renal replacement therapy in the elderly raises several issues.
2. The VA planning in the elderly is different from that in younger patients: elderly could be referred later to reduce the risk of creating an AVF that is never used.
3. The elderly with limited life expectancy may be less likely to benefit from an AVF first approach.
4. The patient's preference for the type of VA should be taken into account.
5. We advice to adopt an individualized approach, regardless of age.



Optimizing vascular access in the elderly: words we use affect patient care

To provide an optimal VA option in elderly people a semantic paradigm shift has been recently suggested: it should address comorbidity as the main subject line, and then age becomes one of the many covariates, instead of an independent risk factor for mortality

Davidson and Gallieni, JVA 2015



Finding the right hemodialysis vascular access in the elderly: a patient-centered approach

Mariana Murea, John Burkart

Department of Internal Medicine-Section on Nephrology, Wake Forest University Baptist Medical Center, Winston-Salem, North Carolina - USA

ABSTRACT

Vascular access preparation in the elderly with advanced kidney disease needs a nuanced approach. Recent studies indicate that age, along with comorbidity, modify the outcomes associated with the type of access placed or used for hemodialysis (HD). Options ranging from permanent vascular access (arteriovenous fistula [AVF] or graft [AVG]) to tunneled central venous catheter (TCVC) or conservative medical care must be weighed on an individual basis and reassessed longitudinally. The potential benefits derived from AVF compared with AVG and TCVC are not always seen in this population. Herein, we review the literature concerning patient and vascular access outcomes in the elderly with advanced kidney disease or on HD. A multidimensional approach that takes into consideration the burden of comorbid diseases, functional status and patient-reported views on quality of life ought to be incorporated in the process of vascular access planning in the elderly.

New Insights into Dialysis Vascular Access: What Is the Optimal Vascular Access Type and Timing of Access Creation in CKD and Dialysis Patients?

Karen Woo* and Charmaine E. Lok†

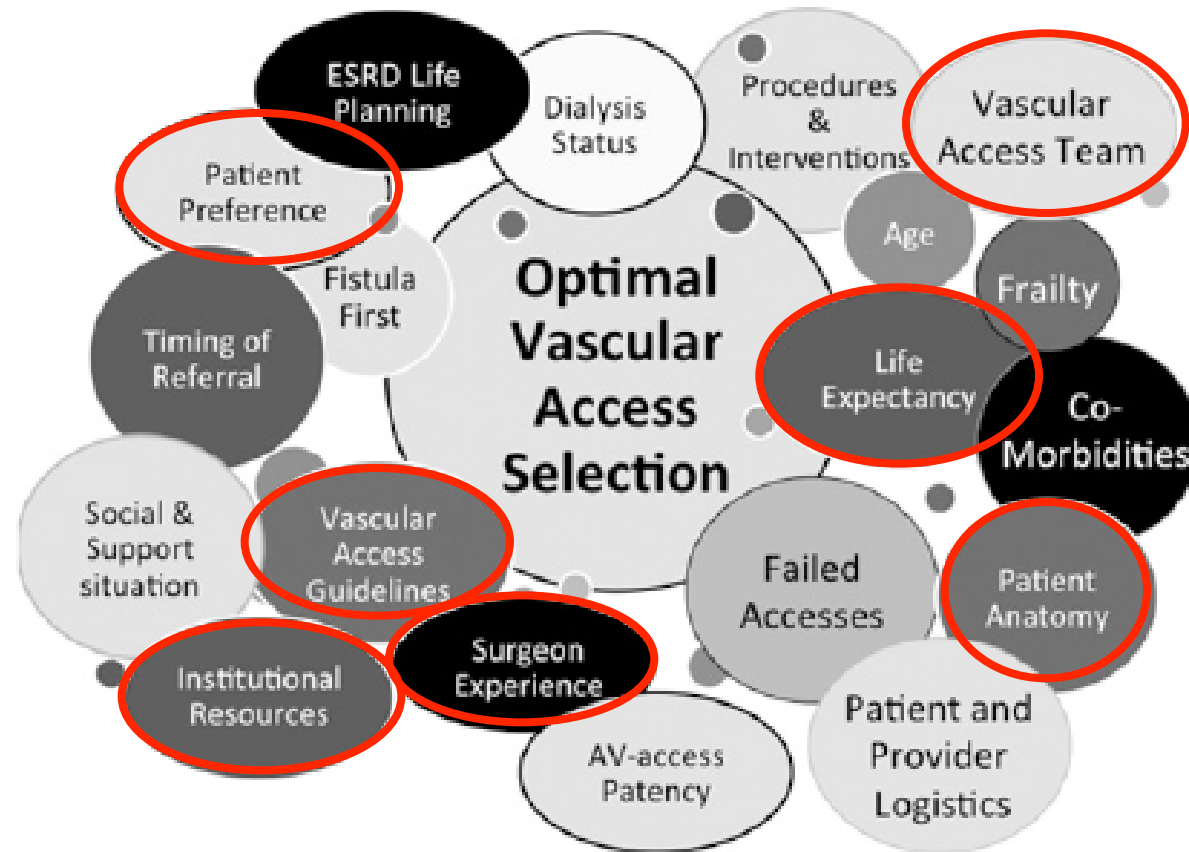


Figure 1. | Considerations for achieving the right vascular access at the right time for the right patient. AV, arteriovenous.

Management of Hemodialysis Catheter-Related Bacteremia

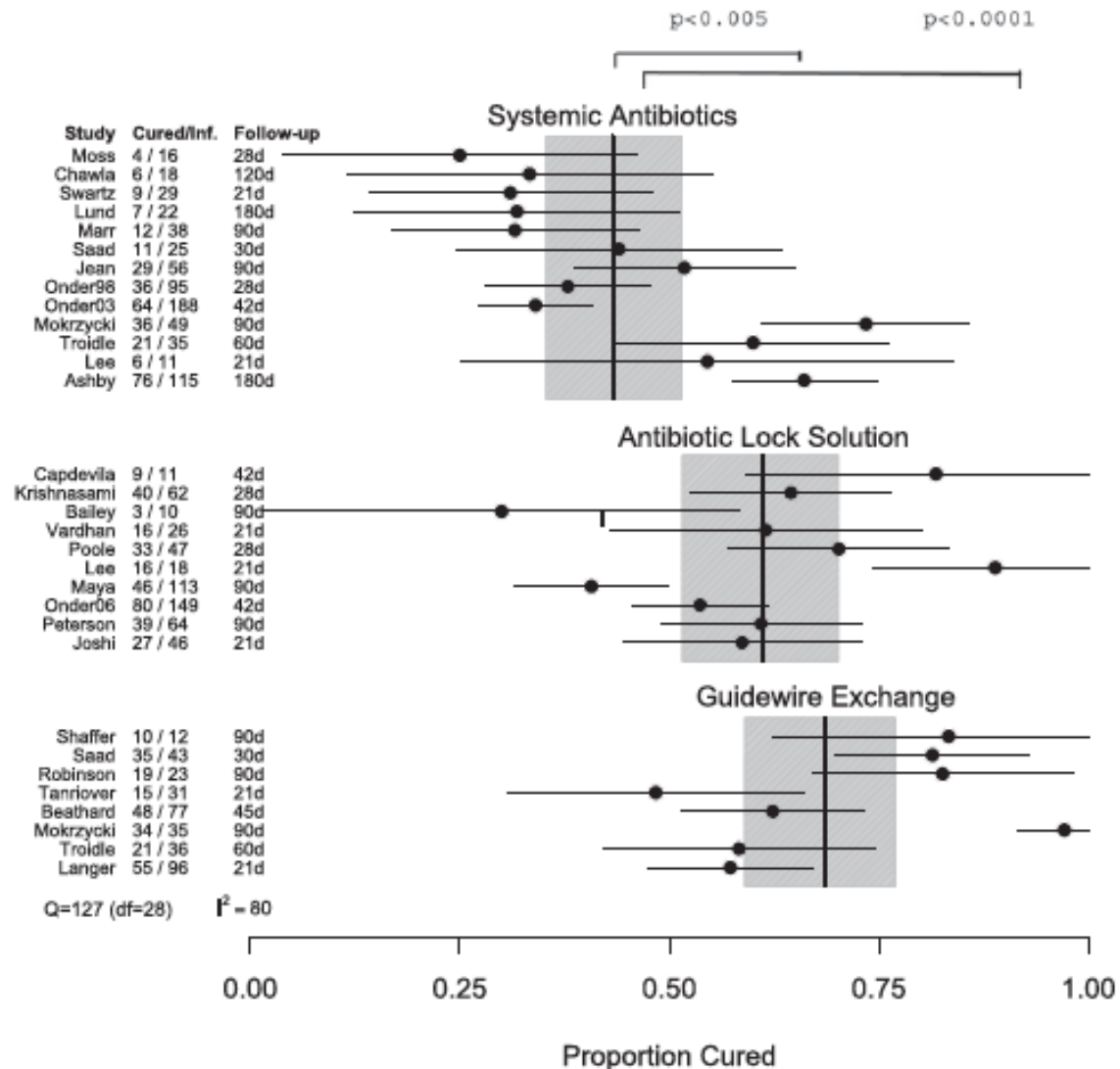
A - Management options for the **hemodynamically stable** patient with CRB with a **goal for access site salvage** include:

1. Systemic antibiotics alone
2. Use of an antibiotic lock solution
3. Guidewire exchange of the catheter

B - Patients who are **septic, are hemodynamically unstable**, or have an exit site/tunnel infection:

1. Removal of the infected catheter and delayed placement of a new catheter

Systematic Review and Meta-Analysis on Management of Hemodialysis Catheter-Related Bacteremia



Cure proportions were highest for coagulase-negative staphylococci followed by gram-negative rods and *Staphylococcus aureus*

Among *S. aureus* infections, guidewire exchange led to a higher cure proportion than systemic antibiotics or antibiotic lock solution

Tunneled hemodialysis CRB should be treated with either guidewire exchange or antibiotic lock solution

Strategies to improve patient outcomes should include:

- Catheter salvage** may be a reasonable initial strategy in hemodialysis patients with CRB, especially if an alternative insertion sites are not available.
- Monitoring of microbiological profile** is necessary to guide timely administration of appropriate empiric antibiotics.
- **Empiric vancomycin** therapy provide broad-spectrum coverage of Gram-Positive, including MRSA. Cefazolin, or a third-generation cephalosporin should be also considered, depend on local sensitivity pattern.
- In *S.aureus* infections, **guidewire exchange** led to a higher cure proportion than systemic antibiotics or antibiotic lock solution.

Thank you for your attention

Use dorsal veins



Maurizio Cattelan's middle finger 2010,
Milan, financial district

