

CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE
CONTROVERSIES & UPDATES
IN VASCULAR SURGERY



JANUARY 23-25 2014

MARRIOTT RIVE GAUCHE & CONFERENCE CENTER PARIS, FRANCE

What is the less worst arteriovenous bypass at the upper limb?



Miltos Lazarides
Greece



www.cacvs.org

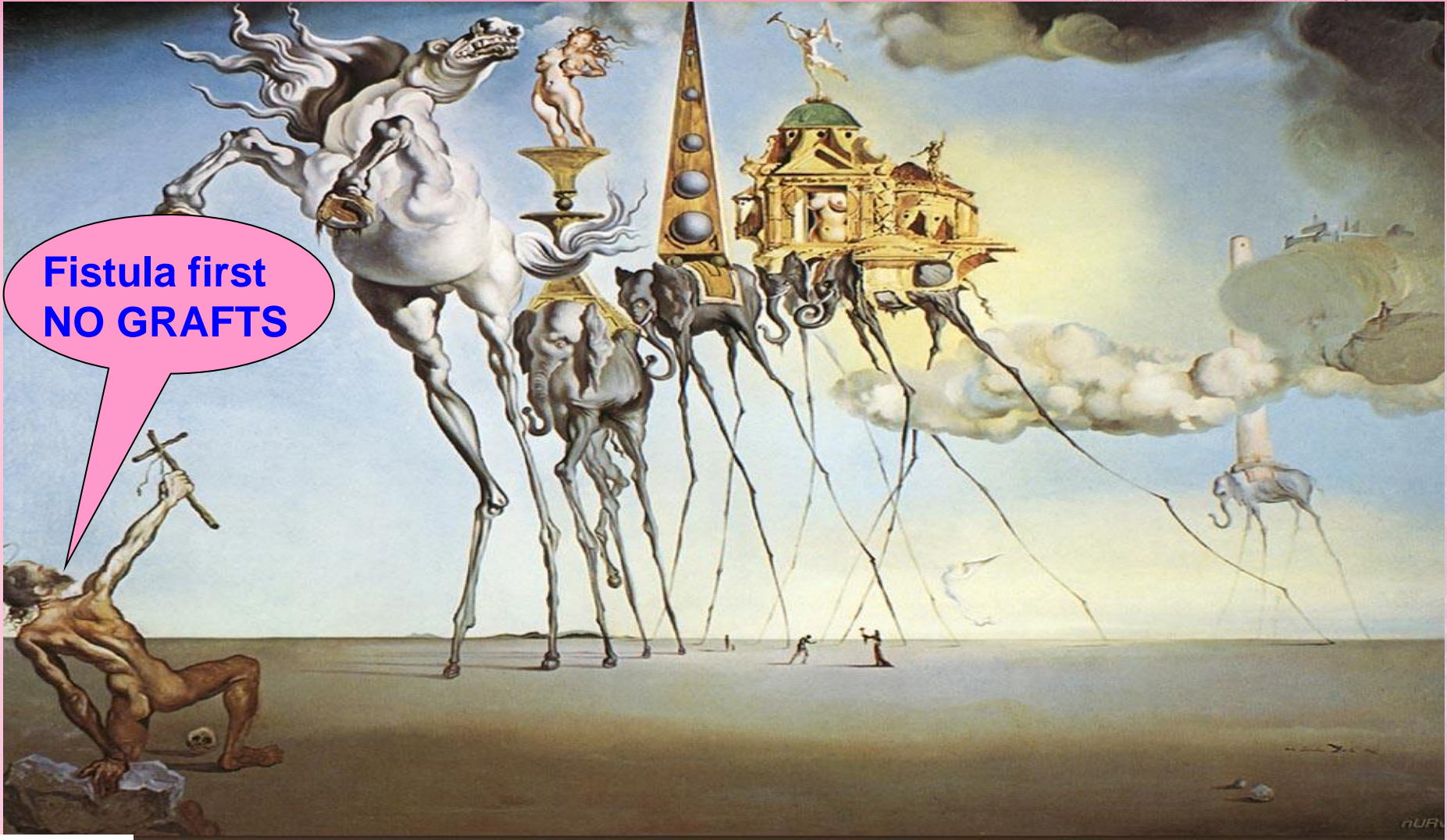
Disclosure

Speaker name: Miltos Lazarides

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- I have the following potential conflicts of interest to report:
 - Consulting
 - Employment in industry
 - Shareholder in a healthcare company
 - Owner of a healthcare company
 - Other(s)
- I do not have any potential conflict of interest





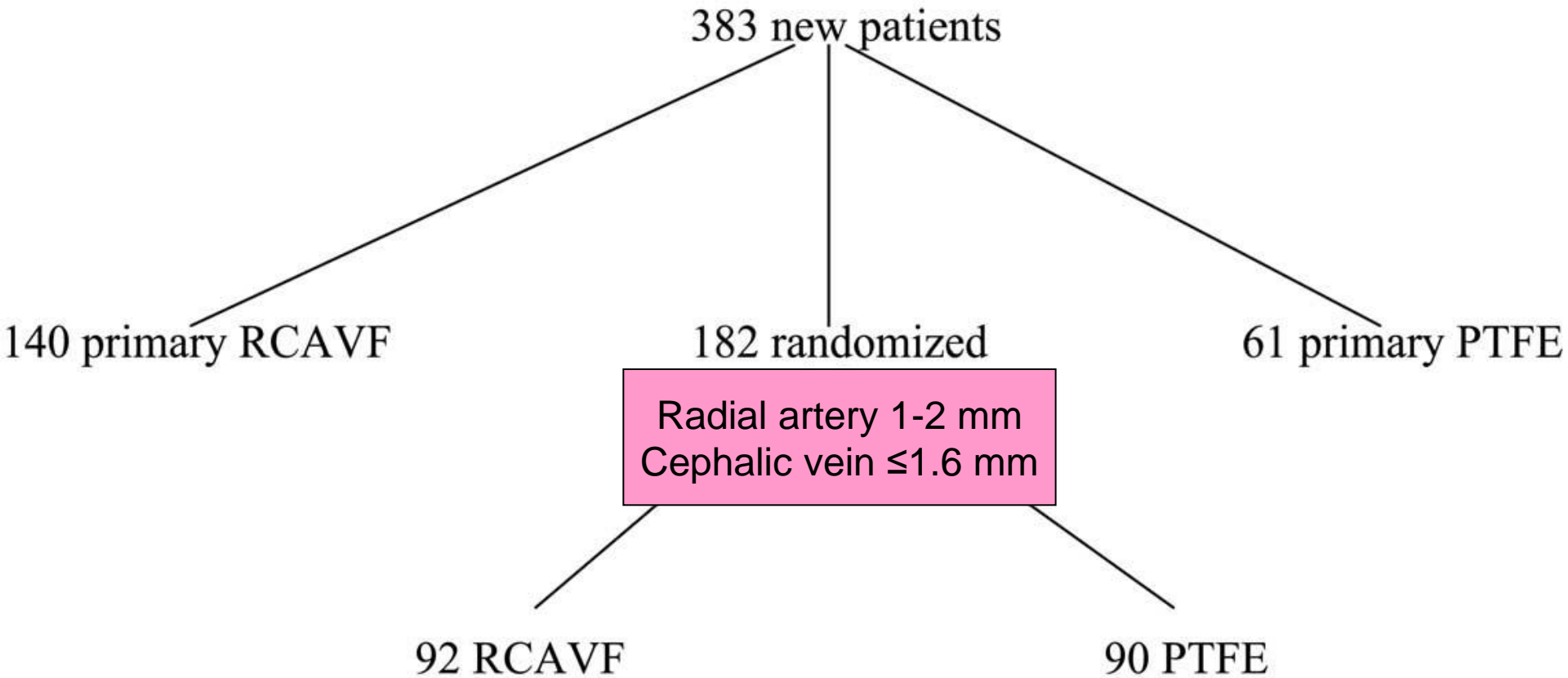
**Fistula first
NO GRAFTS**



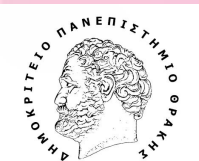
Autogenous radial-cephalic or prosthetic brachial-antecubital forearm loop AVF in patients with compromised vessels? A randomized, multicenter study of the patency of primary hemodialysis access

P. P. G. M. Rooijens, MD,^a J. P. J. Burgmans, MD,^b T. I. Yo, MD, PhD,^a W. C. J. Hop, MD, PhD,^c A. A. E. A. de Smet, MD, PhD,^a M. A. van den Dorpel, MD, PhD,^d W. M. Fritschy, MD, PhD,^e H. G. W. de Groot, MD,^f H. Burger, MD, PhD,^g and J. H. M Tordoir, MD, PhD,^h

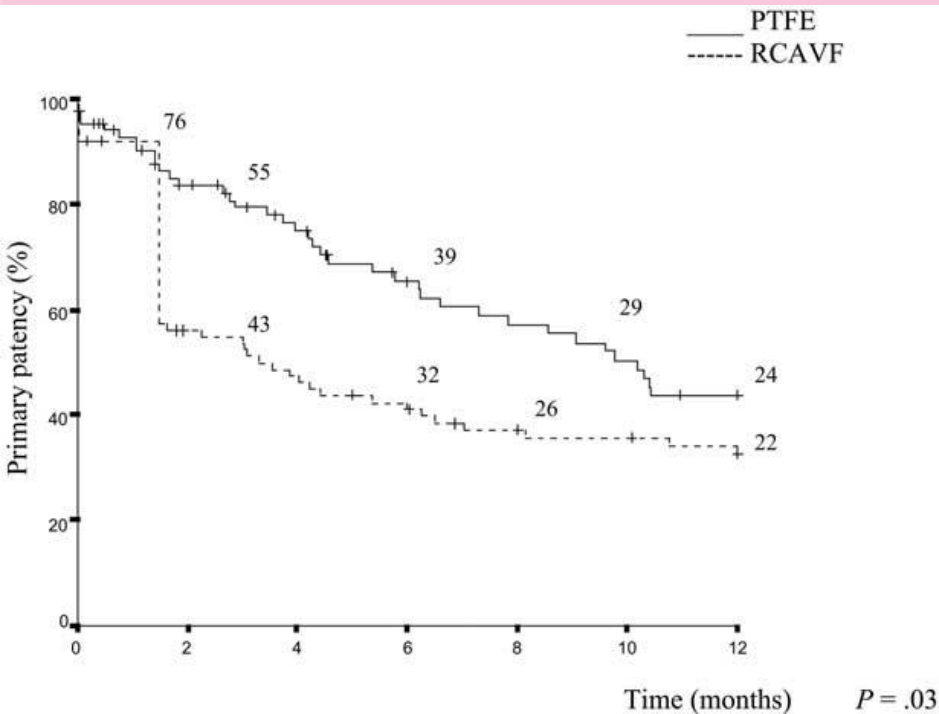




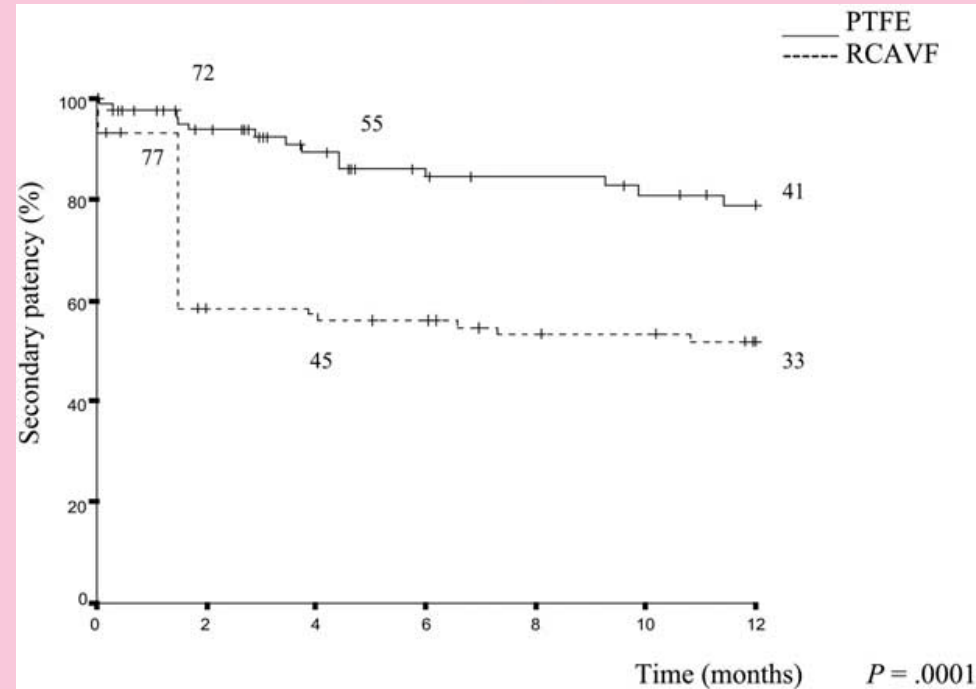
Rooijens et al, J Vasc Surg 2005



Primary patency



Secondary patency



Rooijens et al, J Vasc Surg 2005

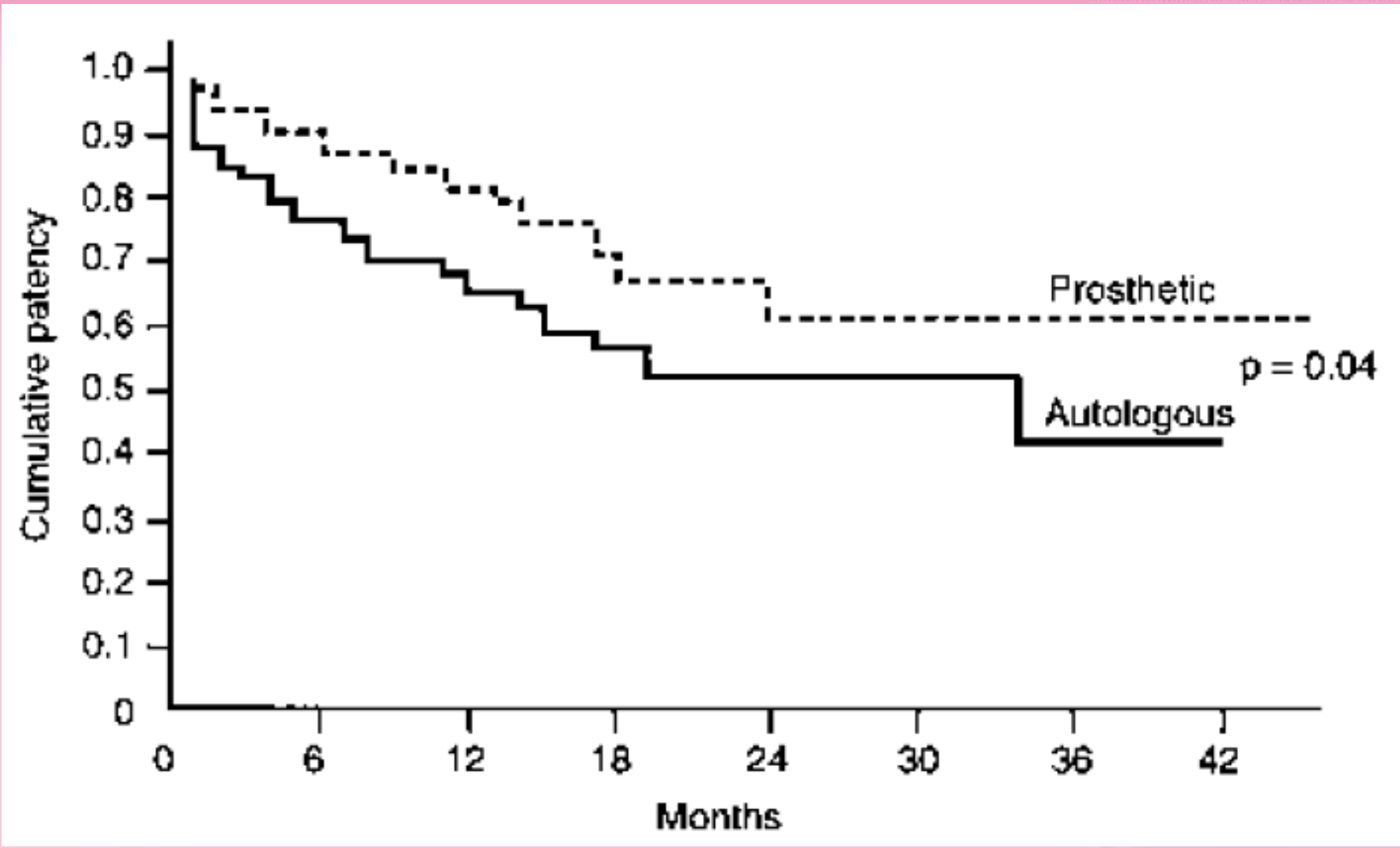




Patency of Autologous and Prosthetic Arteriovenous Fistulas in Elderly Patients

Demetrios N. Staramos,^{1,2} Miltos K. Lazarides,^{1,2} Vasilios D. Tzilalis,¹ Costas S. Ekonomou,¹
Costas E. Simopoulos² and John N. Dayantas¹





Stamos et al, Eur J Surg 2000





In-Depth Review

Dialysis Fistula or Graft: The Role for Randomized Clinical Trials

Michael Allon* and Charmaine E. Lok† J Am Soc Nephrol 2010

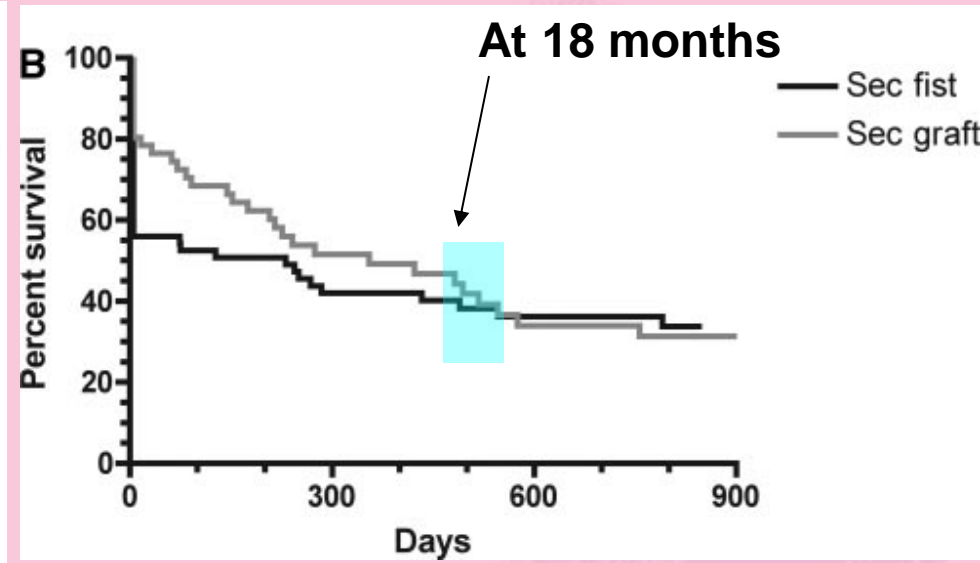
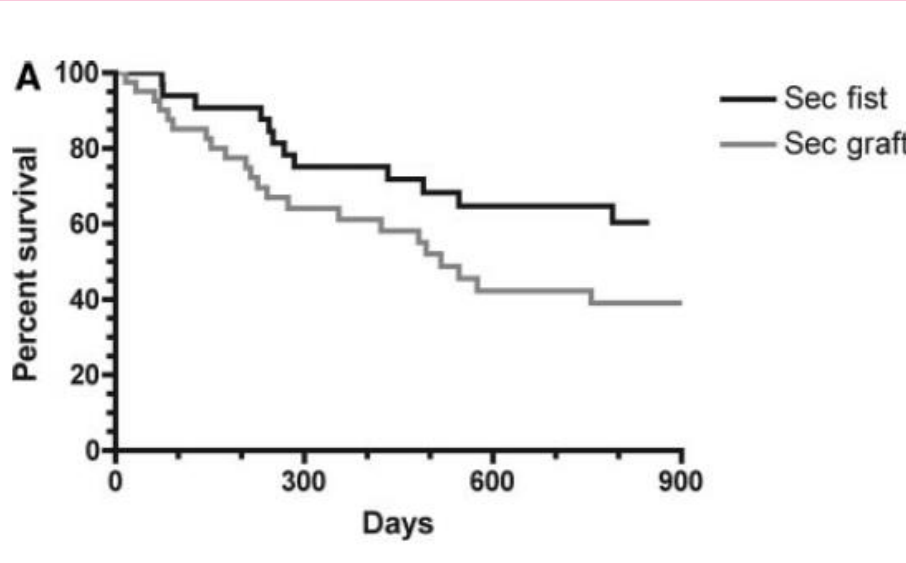
The optimal initial choice for permanent arteriovenous hemodialysis access

Michael D. Sgroi, MD,^{a,b} Madhukar S. Patel, MD,^{a,b} Samuel E. Wilson, MD,^{a,b} William C. Jennings, MD,^c John Blebea, MD,^c and Thomas S. Huber, MD, PhD,^d *Orange, Calif; Long Beach, Calif; Tulsa, Okla; and Gainesville, Fla*
J Vasc Surg 2013

“Fistula first” is
certainly not for
everyone



Access patency excluding (A) and including (B) primary failures



Allon M, Clin J Am Soc Nephrol 2010





Arteriovenous fistulae vs. arteriovenous grafts: a retrospective review of 1,700 consecutive vascular access cases

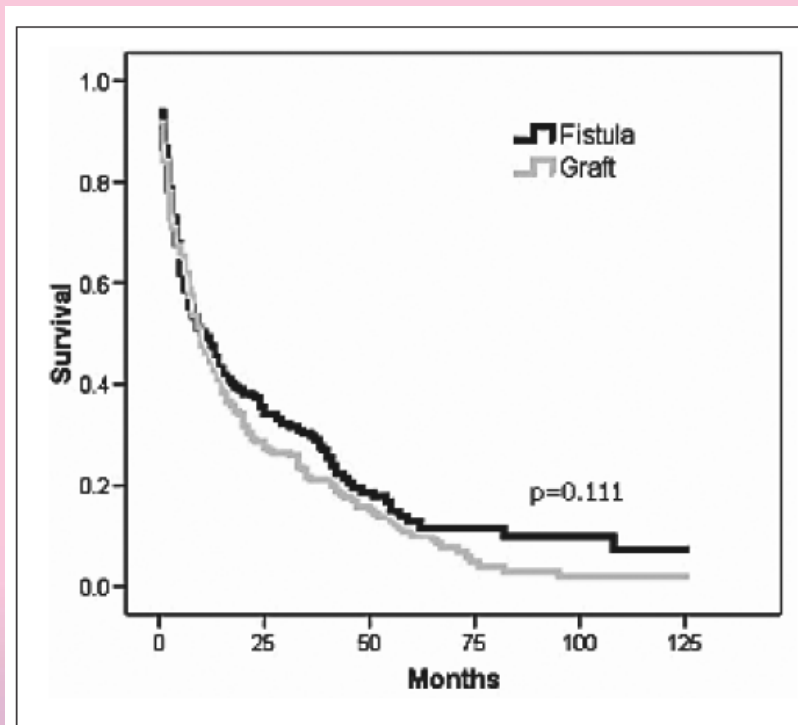
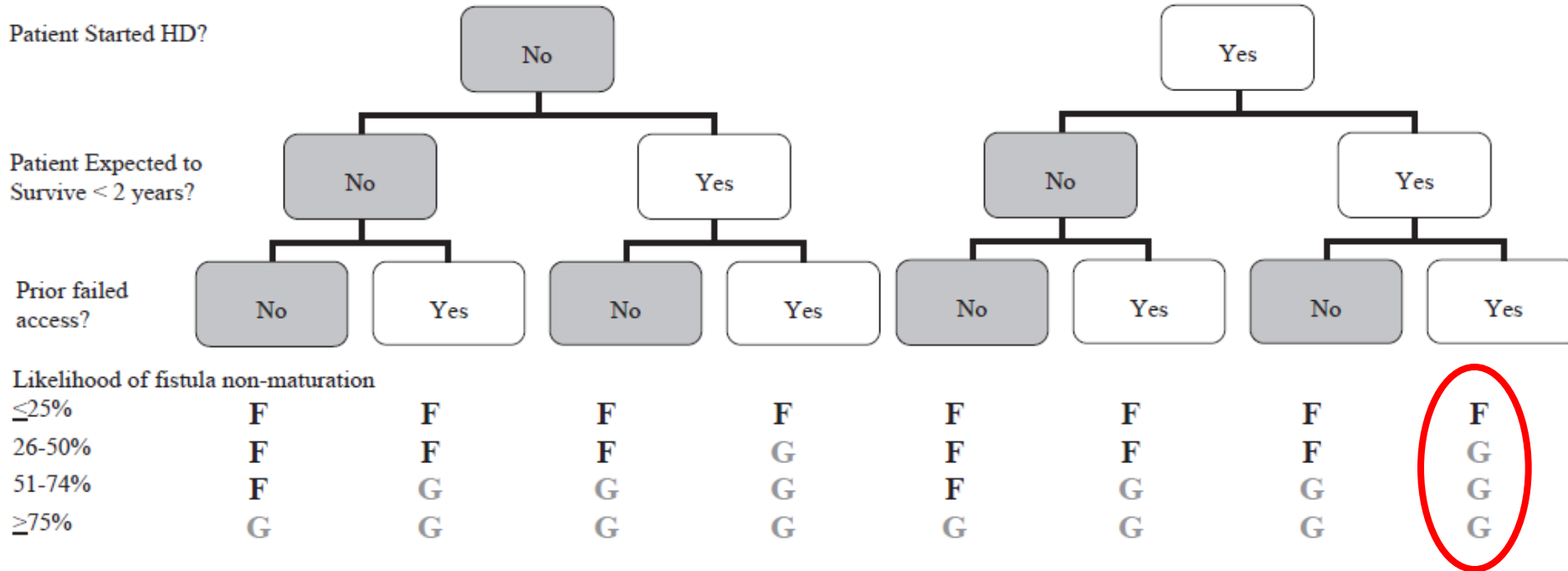


Fig. 1 - Overall patencies of fistulae and grafts.



Grafts vs. AV Fistulae

WHEN SHOULD A PATIENT RECEIVE AN AVG RATHER THAN A FISTULA?



A working AVG is better to an immature AVF with prolonged catheter dependence



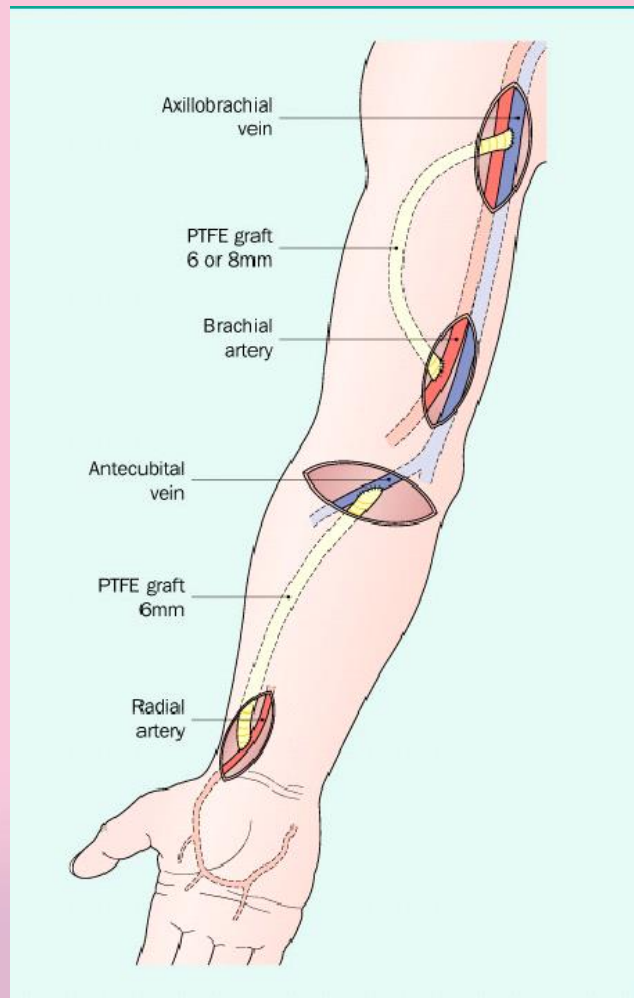
Lee & Allon, Semin Dial 2013



**Autogenous AVF are the
best first choice access
BUT NOT FOR ALL!**



What is the ~~less worst~~ *AVG* more beneficial *AVG* configuration



Patency of various AVG configurations

First Author	Location	Study Design	n	Primary Patency (%)		Secondary Patency (%)		Infection (%)	Steal
				1 year	2 years	1 year	2 years		
Lenz ⁷	FA-L	Prospective	56	49	38	92	59	2	?
Rizzuti ⁸	FA-L	Retrospective	111	—	—	80	70	10	
Rizzuti ⁸	FA-S	Retrospective	68	—	—	70	47	—	
Bosman ⁹	FA	Retrospective	67	40	—	63	—	13	
Steed ¹⁰	UA	Retrospective	20	84	67	—	—	10	
Stamos ¹¹	UA	Retrospective	64	—	—	80	64	—	
Coburn ¹²	UA	Retrospective	47	70	49	87	64	16	8
Matsuura ¹³	UA	Retrospective	68	68	46	78	51	10	
Cull ¹⁴	T	Retrospective	116	34	19	68	54	41	
Khadra ¹⁵	T	Retrospective	74	—	—	74	63	16	3
Bhandari ¹⁶	T	Retrospective	49	—	—	85	82	35	
Vega ¹⁷	BJ	Retrospective	51	57	43	74	63	2	
McCann ¹⁸	AA, AJ	Retrospective	40	63	43	85	68	3	

Abbreviations: AA, axillary-axillary; AJ, axillary-internal jugular; BJ, brachial-jugular; FA-L, forearm loop; FA-S, forearm straight; T, thigh UA; upper arm.

Huber TS, J Vasc Surg 2003



J Vasc Access 2012; 13 (3): 279-285

DOI: 10.5301/jva.5000056

POSITION PAPER

Indications for vascular grafts as hemodialysis access: consensus from experience in Italy

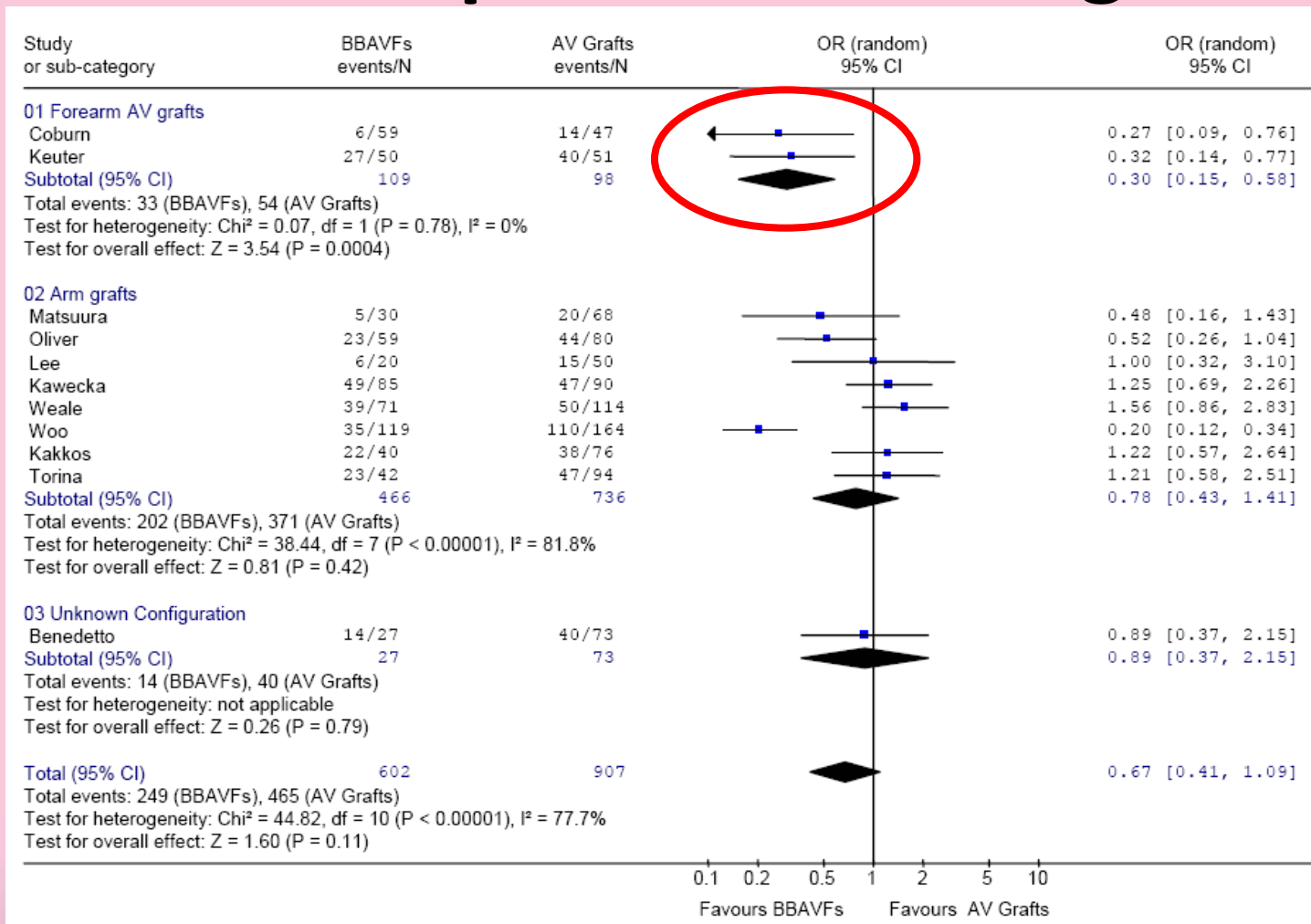
TABLE III - STATEMENTS OVER WHICH SUFFICIENT CONSENSUS HAS NOT BEEN ACHIEVED

	Consensus percentage	Disagreement rate
STATEMENT 3. Use of an AV graft in obese patients.	0.72	0.14
STATEMENT 4. Use of an AV graft to reduce the risk of distal ischemia because of steal syndrome when a proximal AVF is indicated.	0.60	0.31
STATEMENT 5. Creation of a forearm loop graft before performing the basilic vein transposition in a brachial-basilic AVF.	0.75	0.22

Tazza L et al



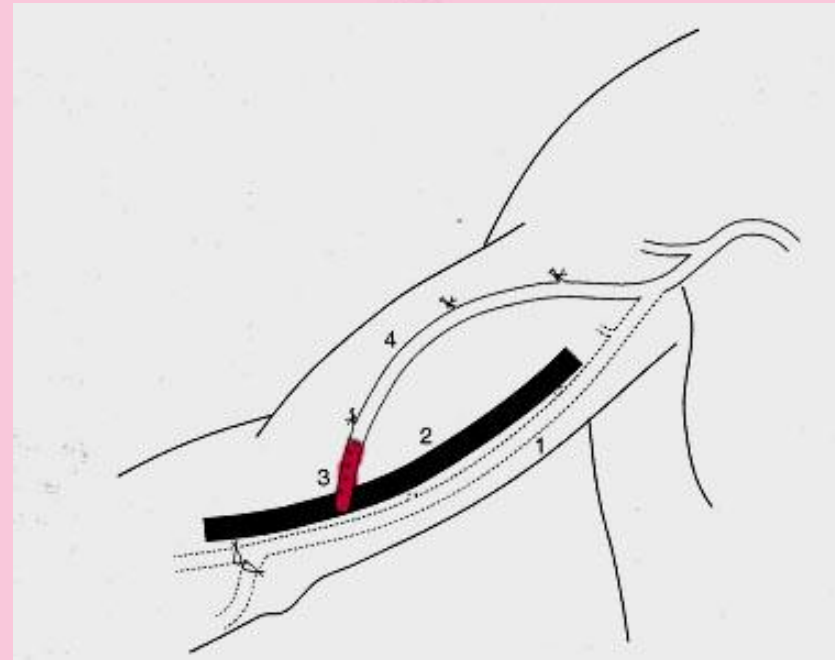
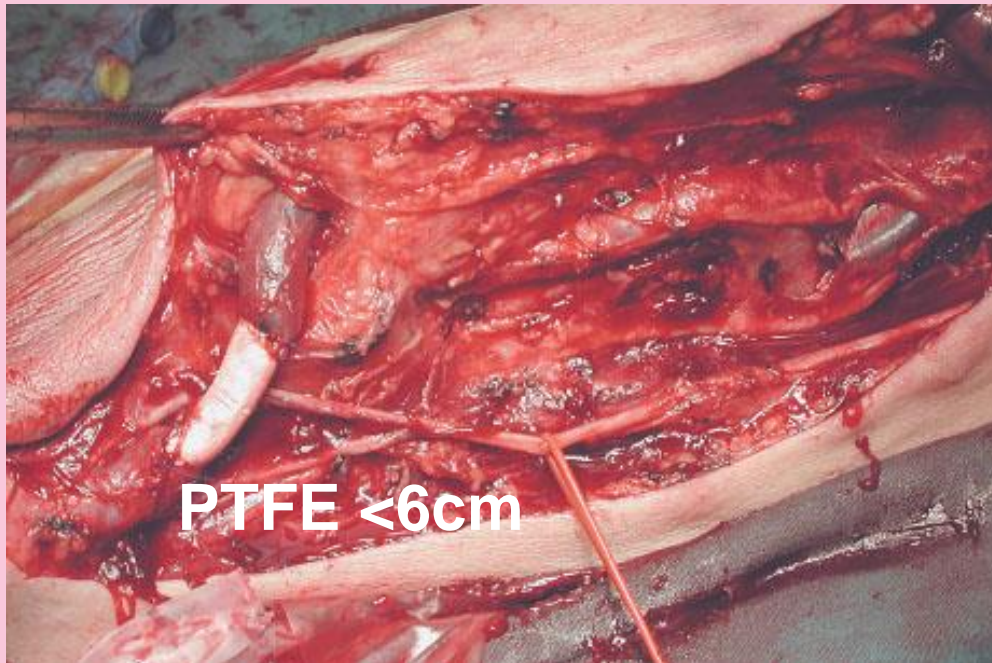
Basilic transposition vs. AV grafts



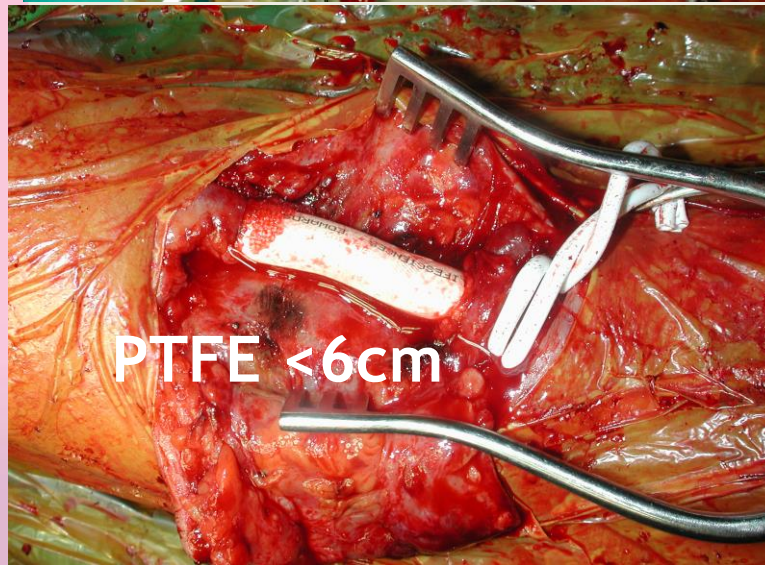
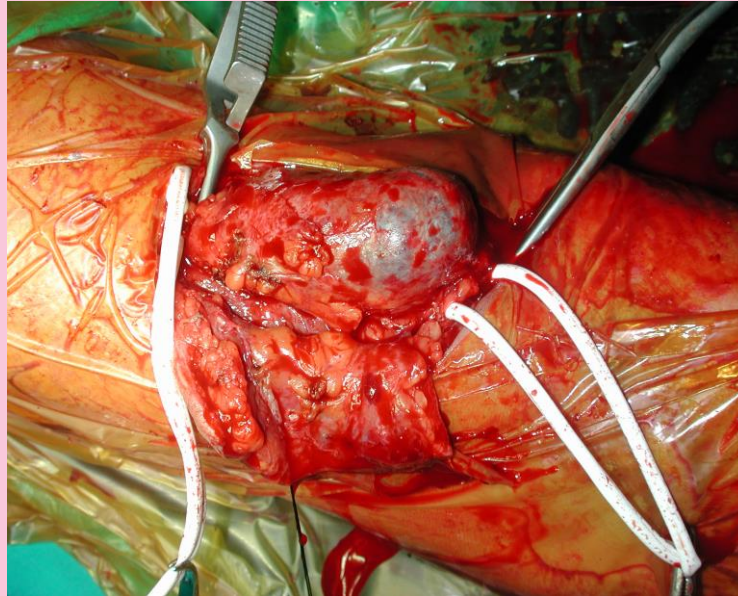
Lazarides M, Eur J Vasc Endovasc Surg 2008



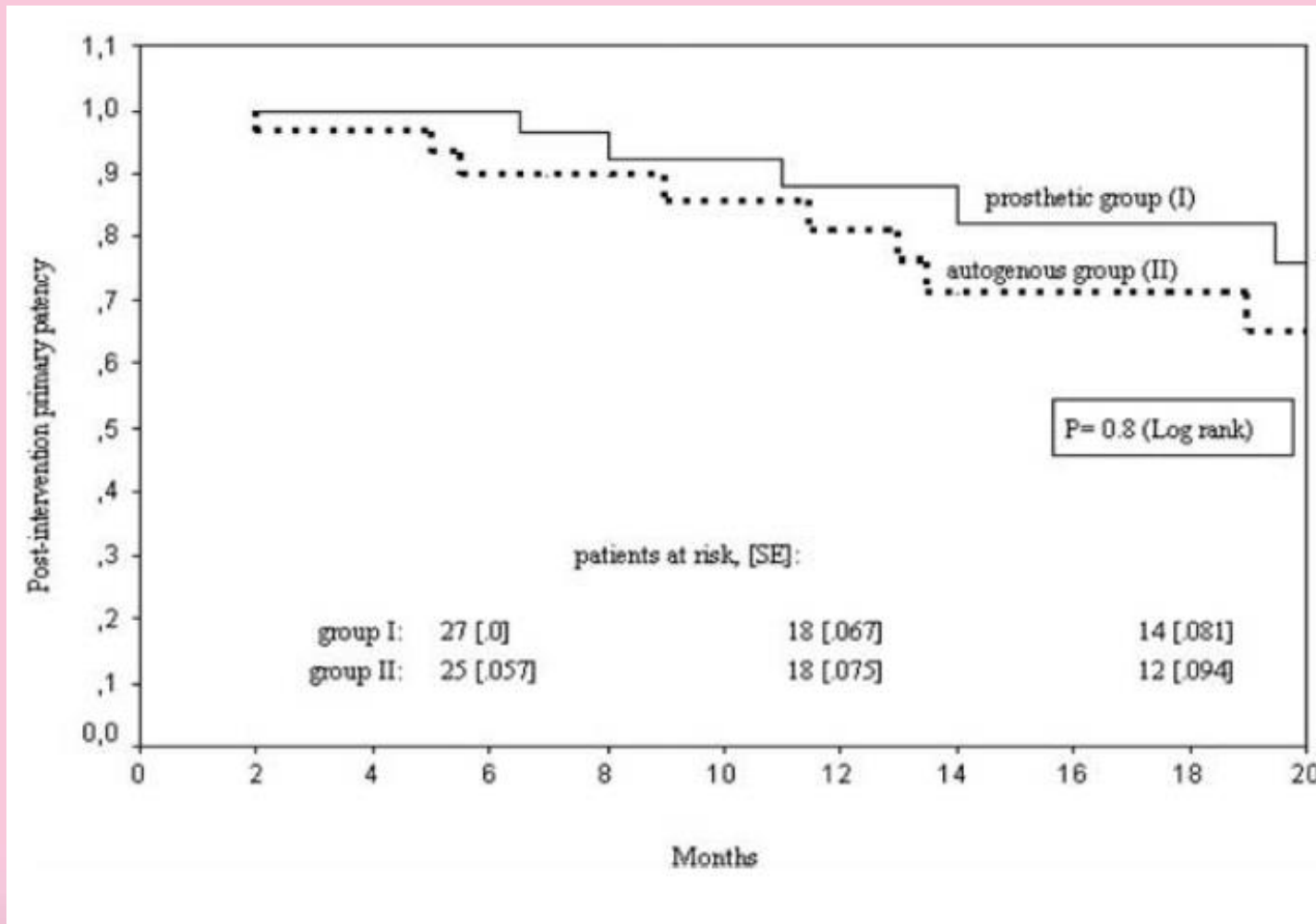
BBAVF transposition (redo)



Interposition graft



Patency of repairs using <6 cm PTFE segments



Georgiadis GS, *J Vasc Surg* 2005



J Vasc Access 2012; 13 (3): 279-285

POSITION PAPER

DOI: 10.5301/jva.5000056

Indications for vascular grafts as hemodialysis access: consensus from experience in Italy

TABLE II - STATEMENTS OVER WHICH CONSENSUS HAS BEEN REACHED (=>90%)

	Consensus percentage	Disagreement rate
STATEMENT 1. Generally, the AV graft is the second best choice when a native AVF cannot be created.	0.97	0
STATEMENT 2. Use of AV graft because of the absence of superficial veins.	0.96	0
STATEMENT 6. Use of a vascular graft to repair a native AVF (arteriovenous bridge graft).	0.96	0

Tazza L et al



Conclusions I

- AVF and grafts are both useful in providing vascular access
- For elderly patients with life expectancy <18 months graft is an attractive option



Conclusions II

- **Brachial-axillary AV grafts can still be created after failure of all autogenous AVFs, representing a last upper limb option**
- **Use of short PTFE segments in redo procedures avoids further consumption of the venous capital**

**Le mieux est l'ennemi
du bien***

***Better is the enemy
of good enough***



Voltaire 1694-1778