

Aortic endografting with iliac side branch devices - lessons learned from the largest international registry (pELVIS)

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Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

- Consulting/Grants: Medtronic, Cook, Gore, Boston, Cardinal, Biotronik
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

- I do not have any potential conflict of interest



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University of Leipzig
San Camillo Forlanini Hospital
University of Perugia
University of Rome Tor Vergata
University of Florence
University of Hamburg
University of Lille Chru

- **814** patients
- **910** iliac branched devices
- January **2005**-April **2017**



Strengths of the registry

- Large experience: Greatest patient collective in the literature
- Long experience: Follow up duration up to 10 years
- Inclusion of challenging morphology of the iliac vessels treated (CIA, EIA, IIA)
- Experience with different bridging stent grafts, with relining stents and their total length

How safe is the procedure?

30-day morbidity	8.8%
30-day mortality	0.5%
Total follow-up mortality	13.7%
IBD related follow-up mortality	1.0%

Is the use of IBDs effective?

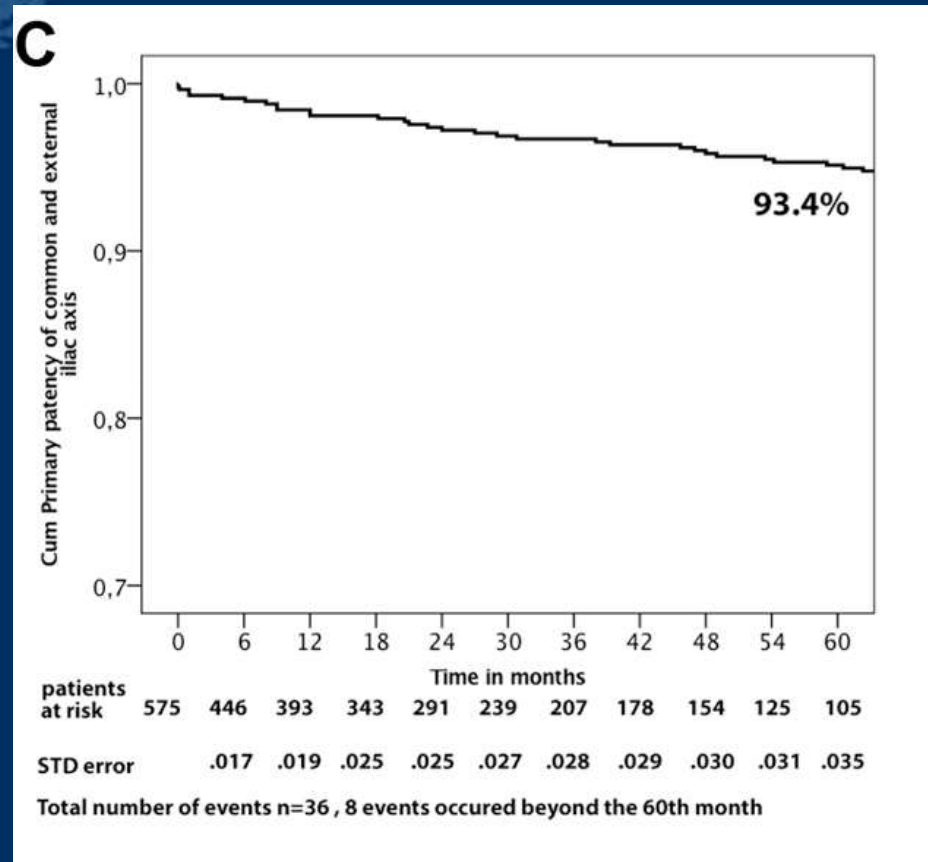
Postop reduction of the aneurysm diameter

Aortic	41 ± 15		<.001
Right common iliac	29 ± 10		<.001
Right Internal iliac	12 ± 7		<.001
Left common iliac	27 ± 10		<.001
Left internal iliac	13 ± 9		<.001

What is the rate of type I EL?

<i>Follow-up Endoleaks</i>	n	%
TOTAL TYPE I	39	4.8
Non IBD Proximal aortic Ia	15	1.8
and/or contralateral Ib	7	0.8
IBD RELATED TYPE I	17	2.1
Ia from common iliac	3	0.4
Ib from internal iliac	12	1.5
Ia (aortic) & Ib internal	1	0.1
Ib from ipsilateral external	1	0.1

Primary patency of the iliac artery



Risk factors for complications?

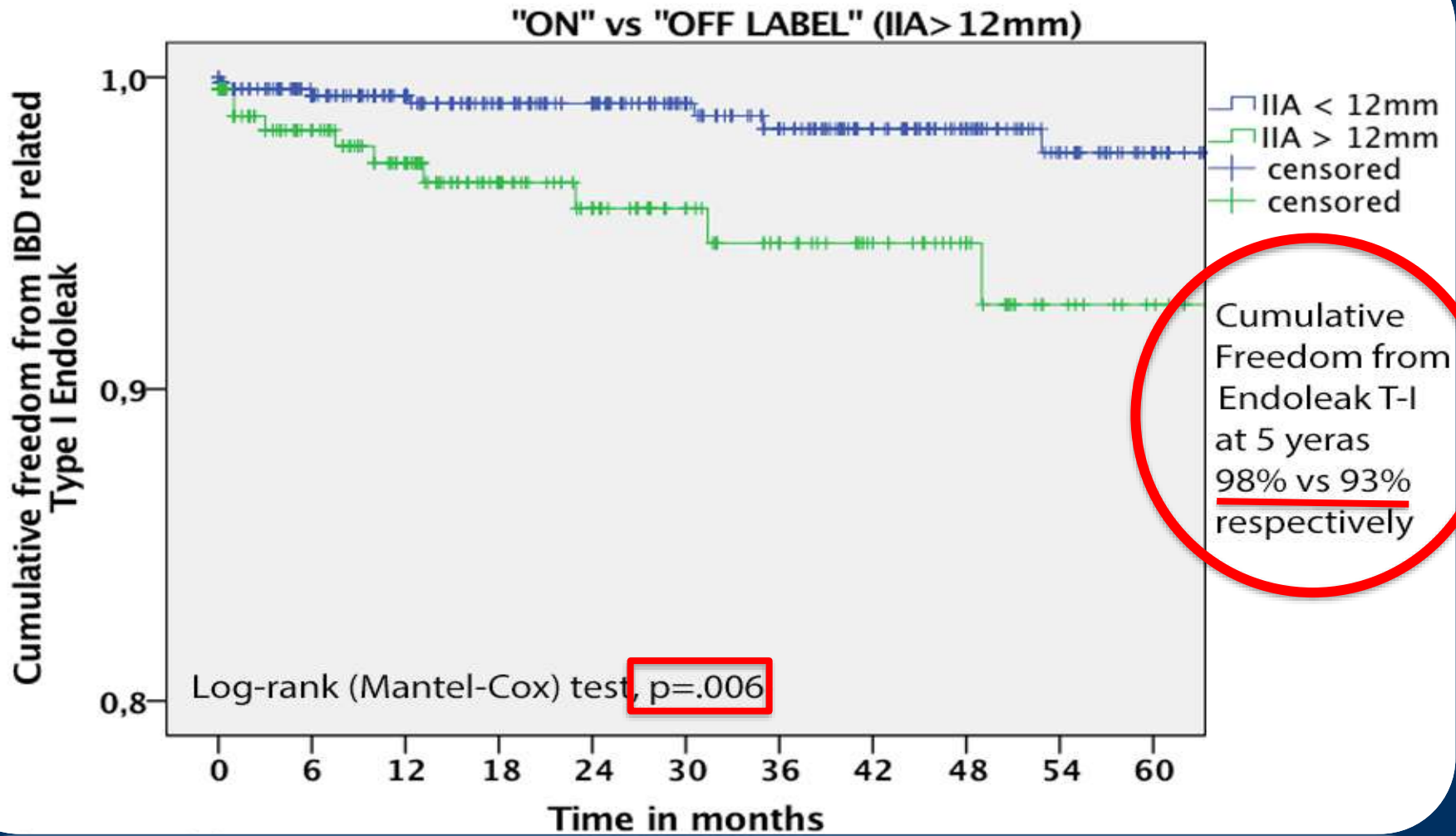
910 deployed IBDs



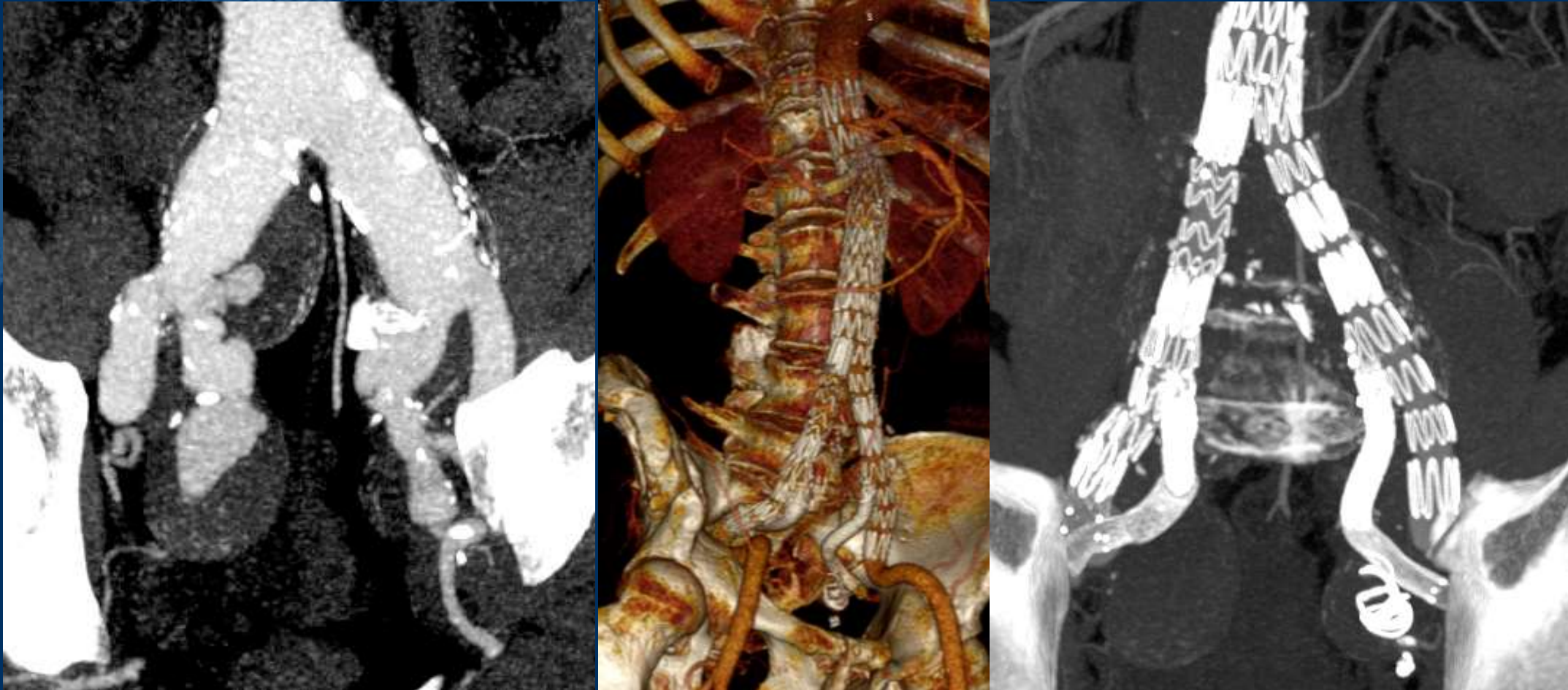
315 (34.6%) for hypogastric aneurysms



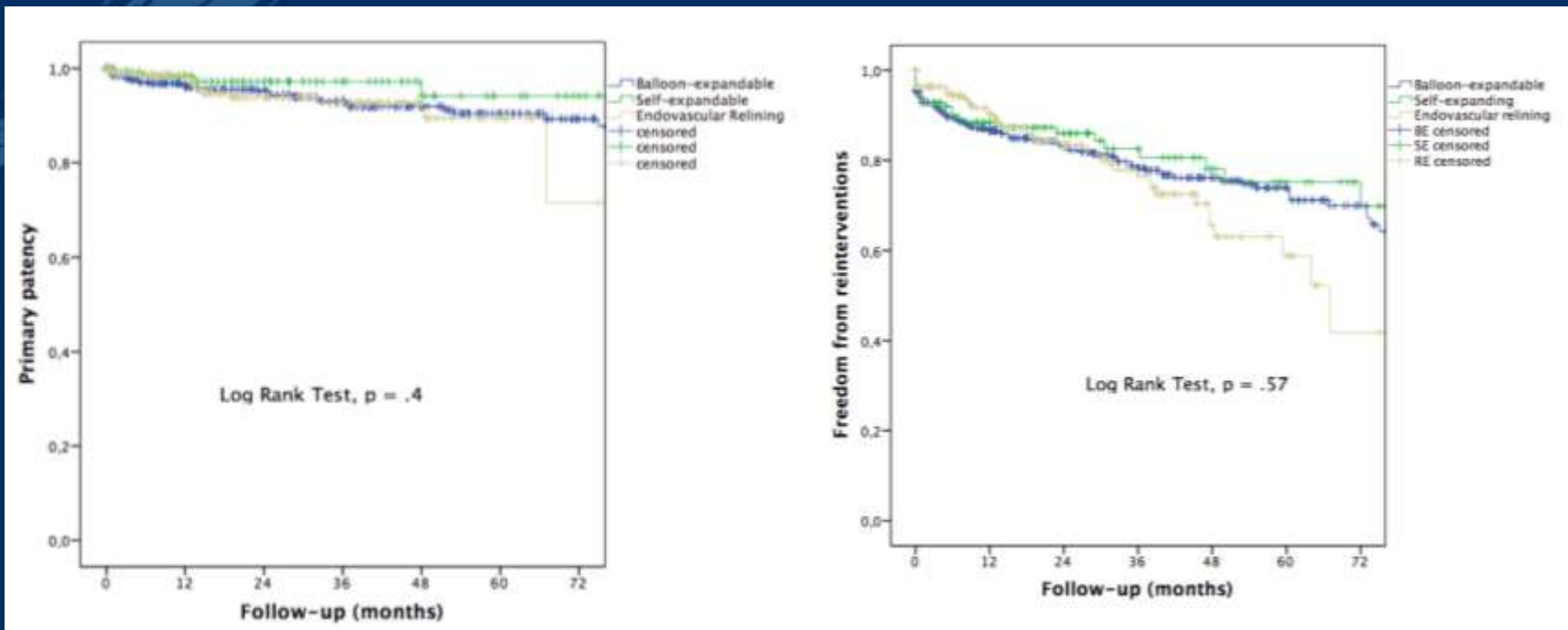
Freedom from type I endoleak



Juxtarenal aortoiliac aneurysm involving the hypogastric arteries on both sides



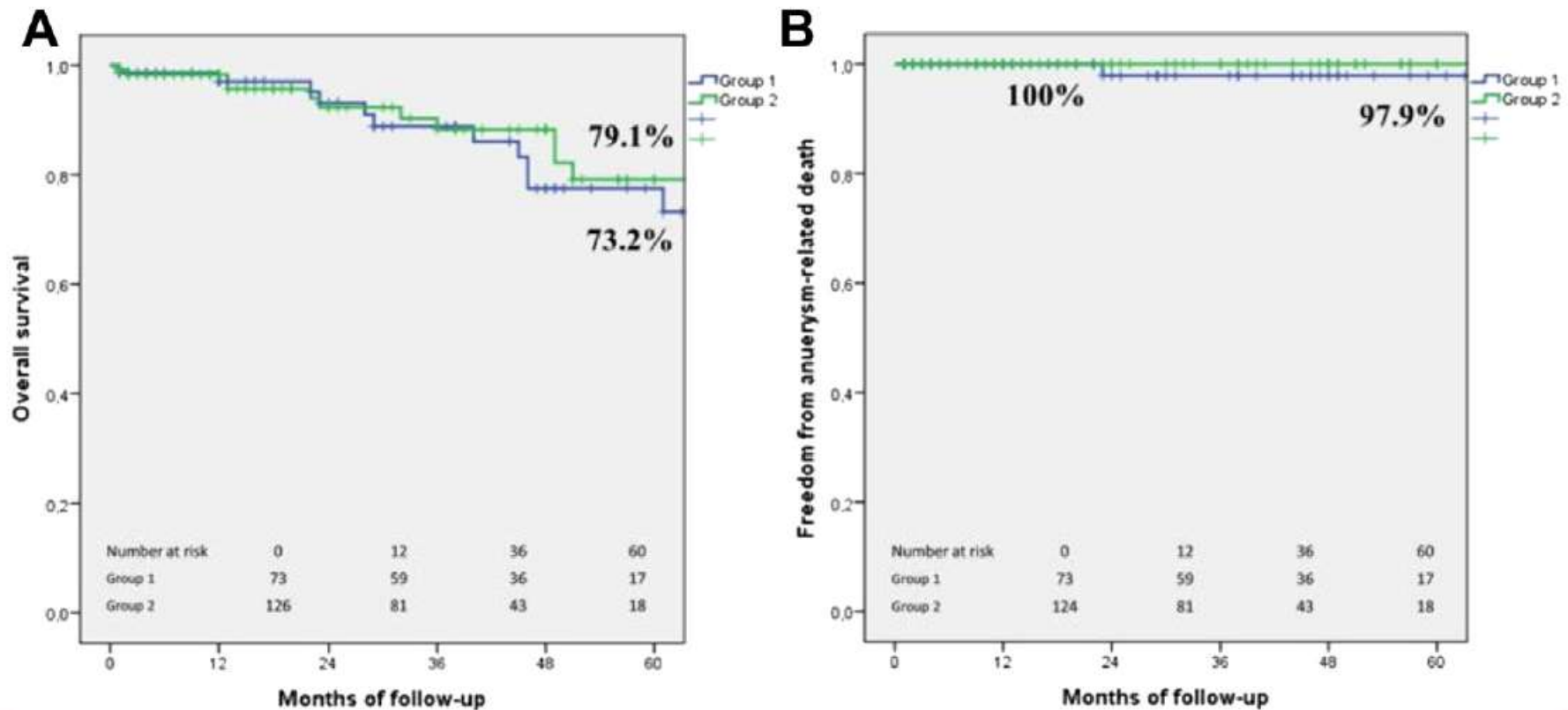
No difference in primary patency or reintervention between balloon expandable and self expanding stents

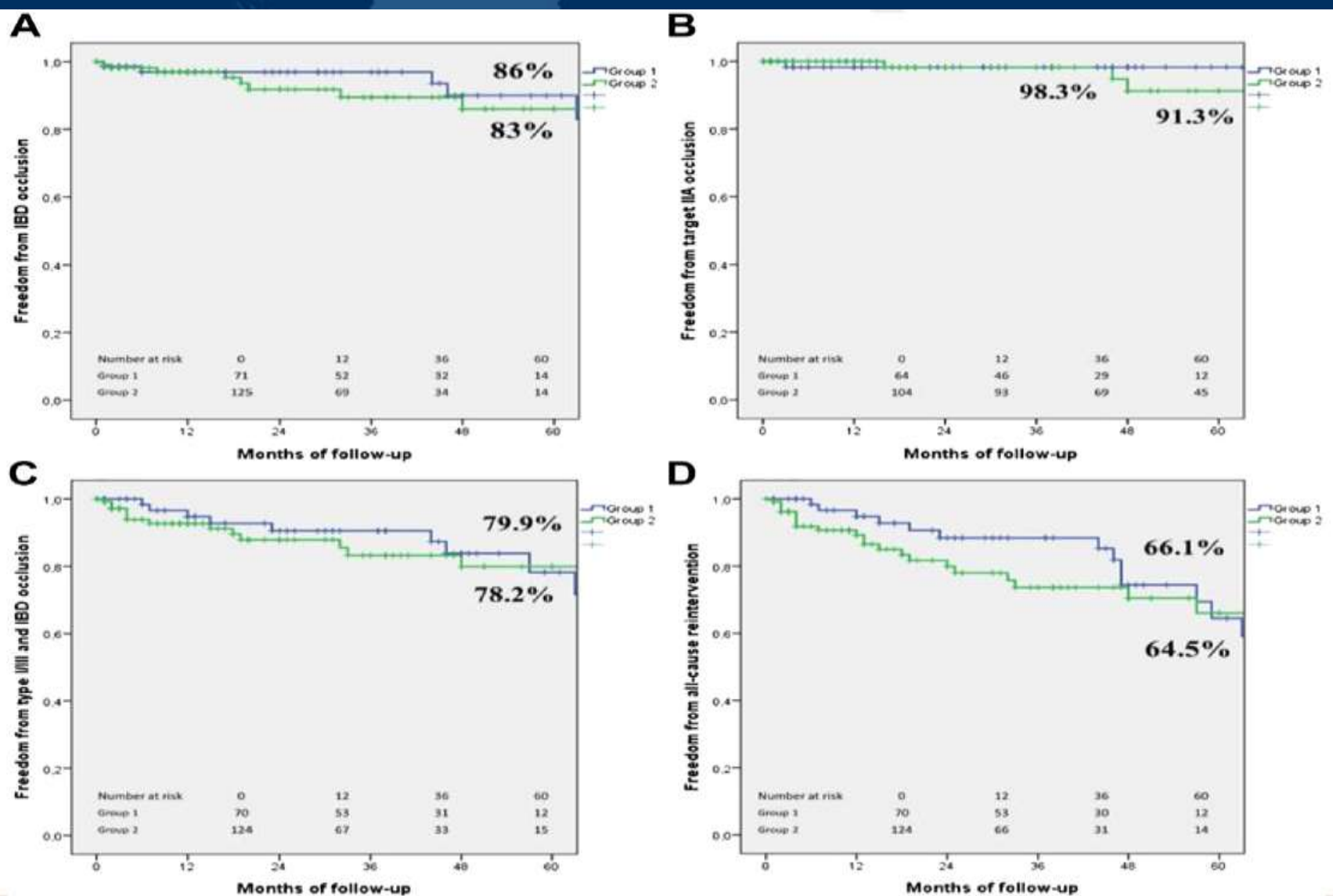


Isolated CIA treated with IBD alone (N:91)
or with an aortic bifurcated device (N:140)



Survival (A) and Freedom from aneurysm-related deaths (B) without any difference





Freedom from occlusion, from type III EL,
from reinterventions similar

Suggestion: IBD can be used alone for the management of isolated CIAs meeting specific anatomic criteria

Results of the multicenter (pELVIS) registry for isolated common iliac aneurysms treated by the iliac branch device

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-Conclusions-

- Use of IBD for aorto-iliac aneurysms is safe, feasible and less invasive
- It is a durable repair
- We recommend the use of IBD in patients with hostile abdomen and when distal sealing of an endograft makes it necessary





homepage: www.gefaesschirurgie-muenster.de

Thank you!



St. Franziskushospital Münster