



Registry Data-Revisions

Derek McMinn, MD FRCS

Conflict of Interest

Unpaid Consultant to Smith & Nephew

Birmingham Hip Resurfacing Single Surgeon Series - Derek McMinn

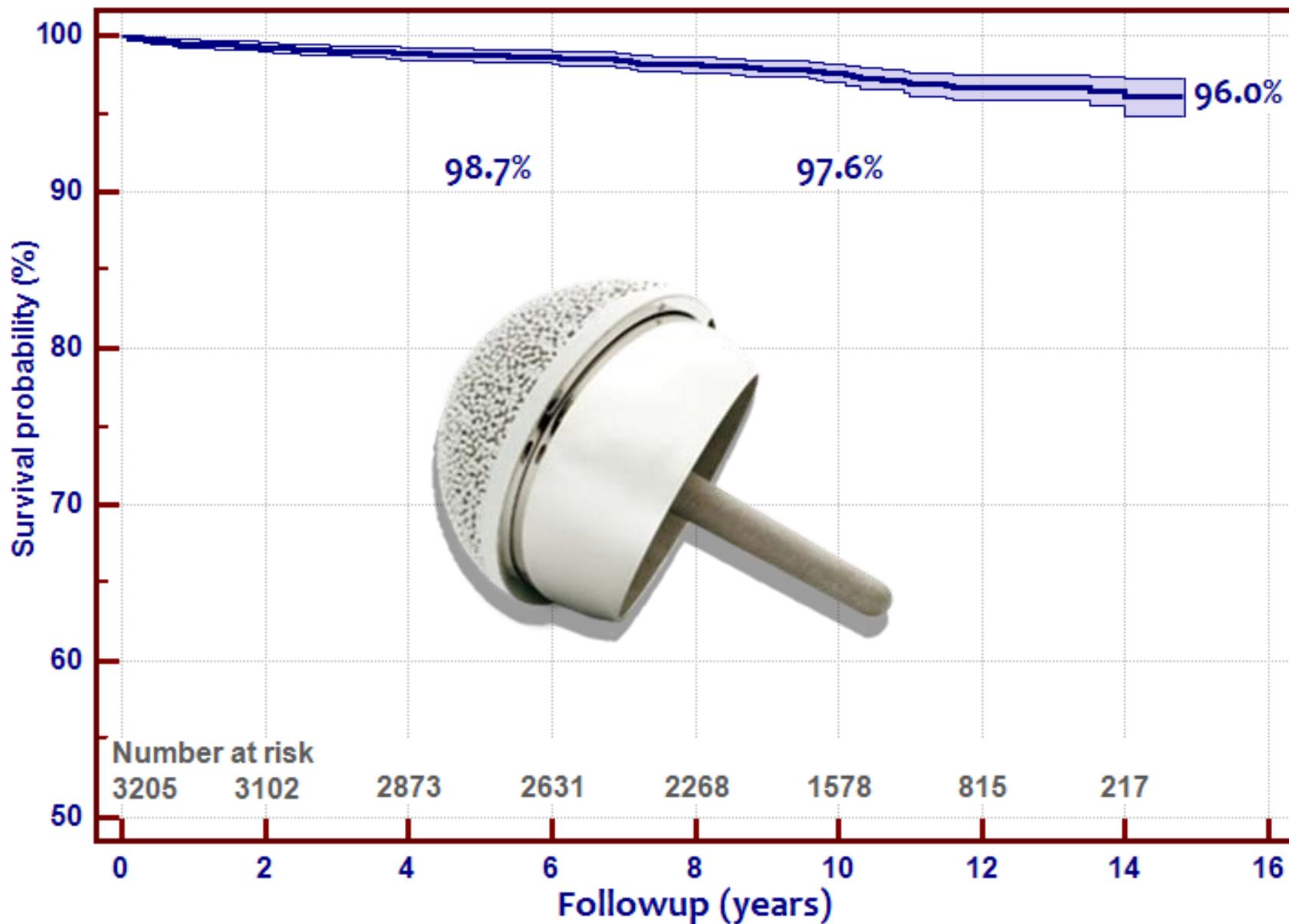
- consecutive series
- all diagnoses and all ages
- 1.5 yr - 14 yr 11 mo follow up
- 3,205 BHRs



Kaplan-Meier Survival Analysis of BHRs

All ages, all diagnoses...

Revision of either component for any reason as the end-point



BHR Revisions 1997 - 2010 [70 / 3205]

◆ Collapse of the Femoral head (26)

▣ Femoral neck fracture (12)

▲ infection (14)

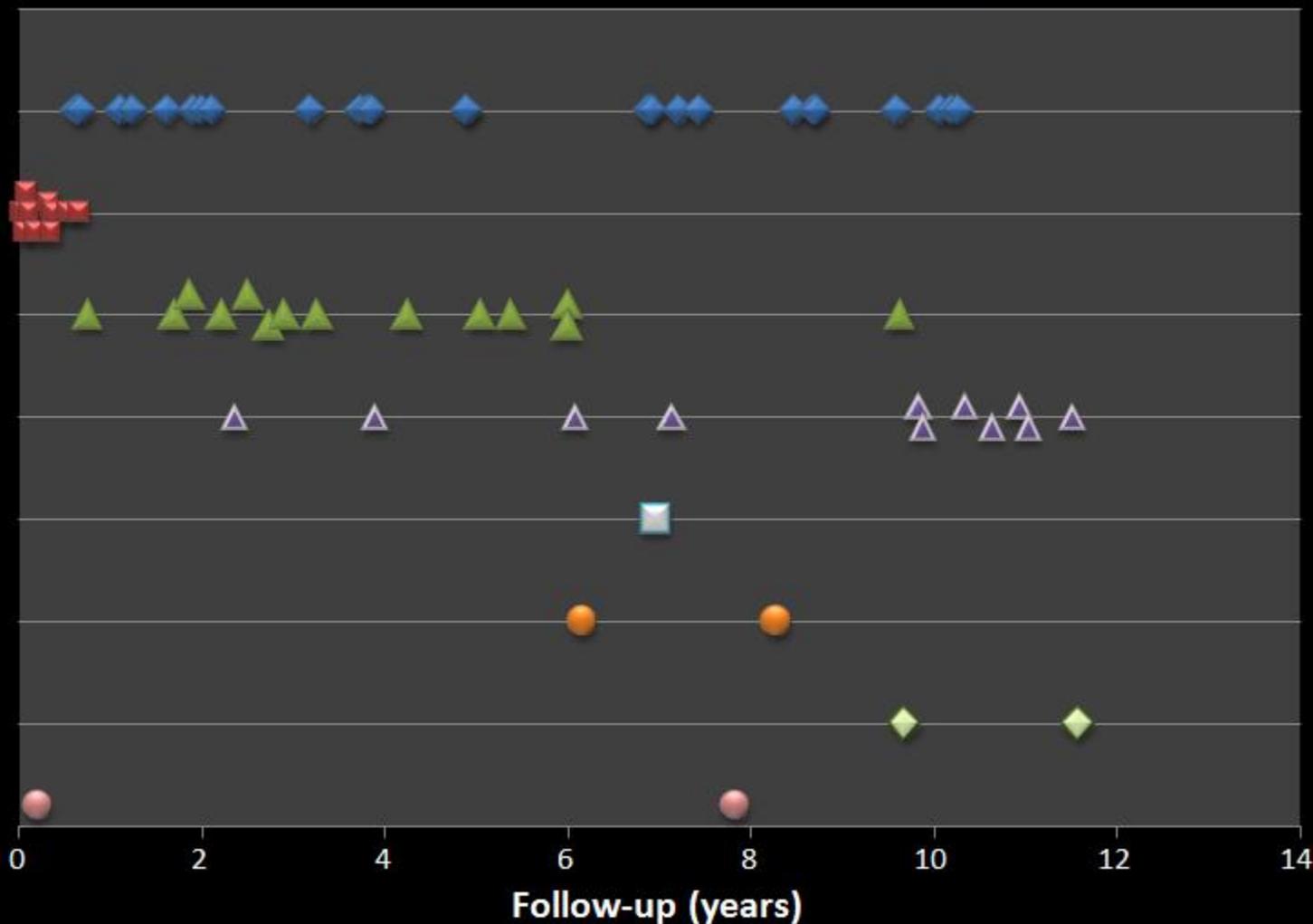
▲ Adverse Reaction to Metal Debris (11)

▣ Osteolysis (1)

● Persistent groin pain, no other findings (2)

◆ Cup Loosening (2)

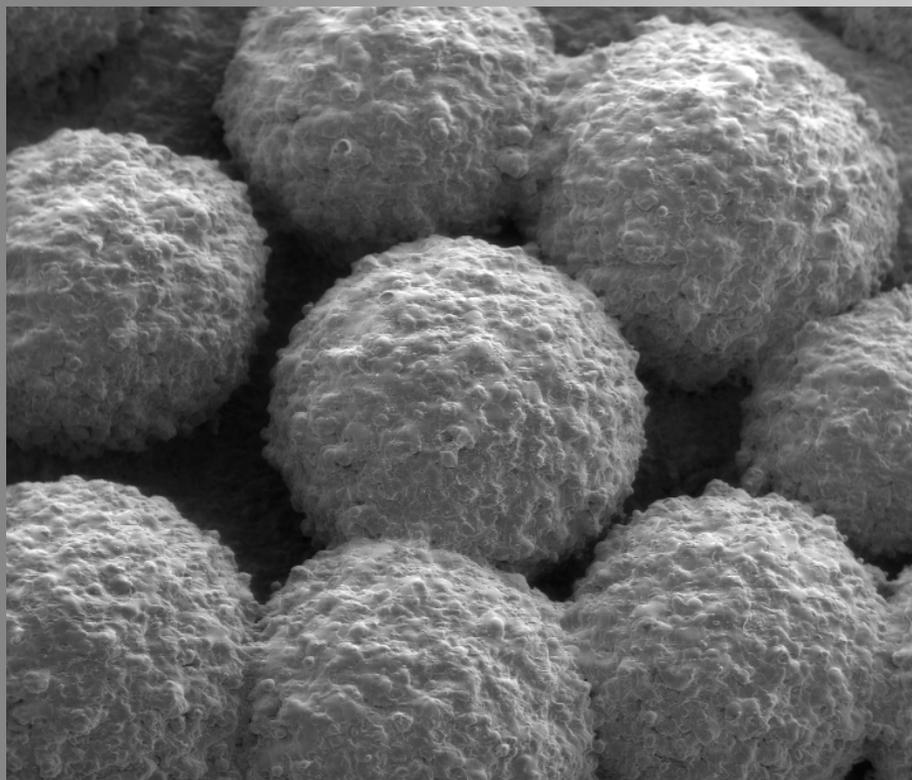
● Dislocation (2)



TOTAL 70

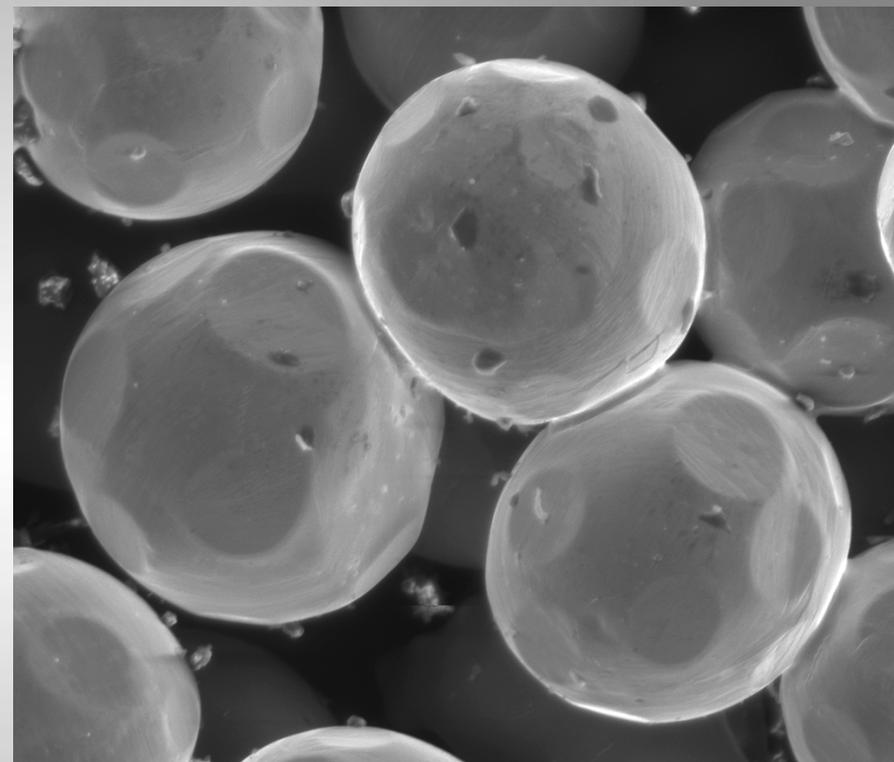
SEM Images

BHR – Cast CoCr Beads



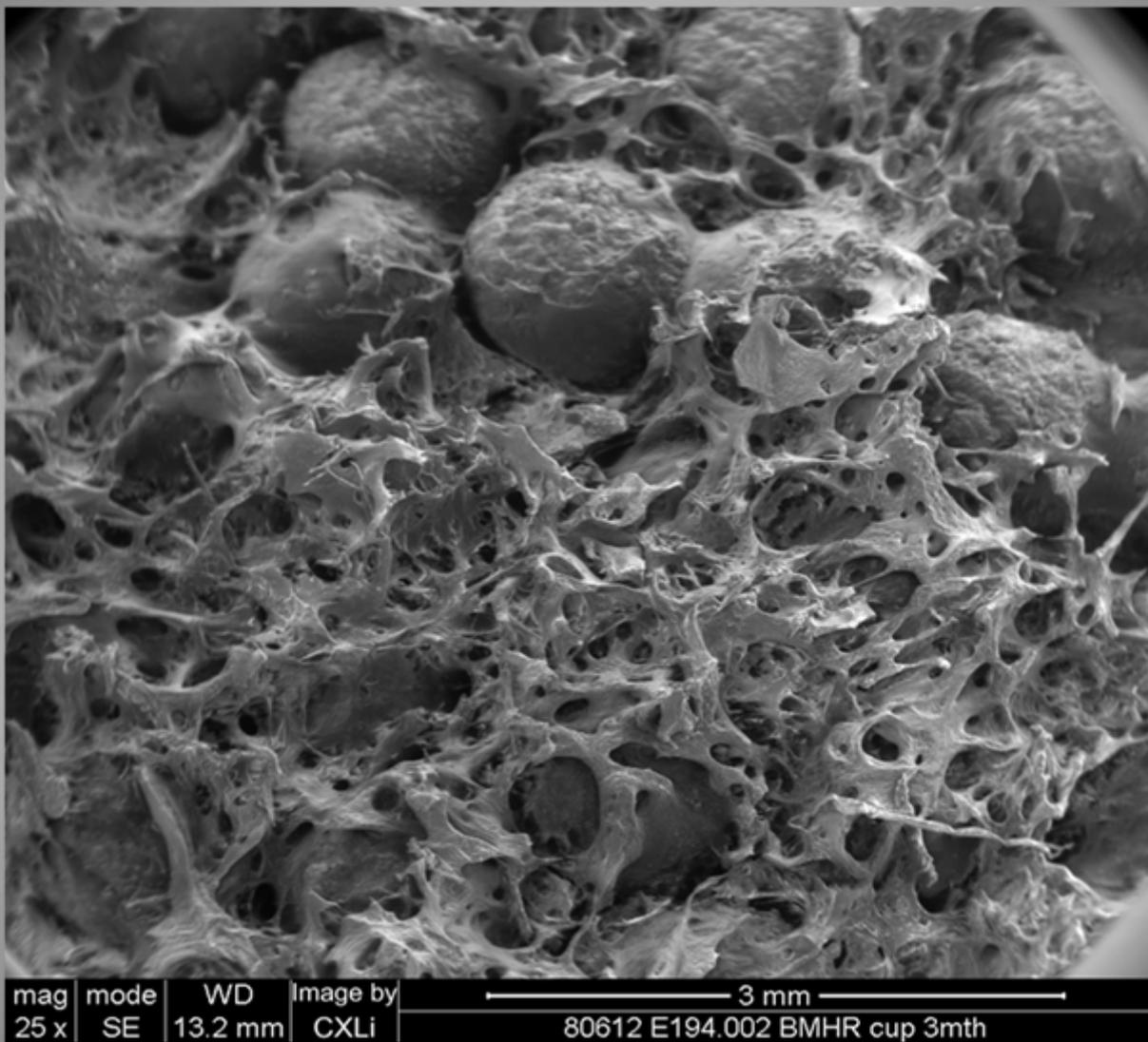
mode	WD	mag	Image by	1 mm
SE	11.2 mm	50 x	CXLi	
				80116 HA SNC 51694

Sintered Titanium Beads



mode	WD	mag	Image by	400 μm
SE	18.1 mm	200 x	CXLi	
				91008 Anthology stem fixation surface

SEM Images – BHR Bony Ingrowth



BHR Revisions to Modular Head THR, Retaining Acetabular Cup

24 Revisions from Aug 2001 - Nov 2011

Reason for Revision	
Collapsed Femoral Head	14
Fractured NOF	8
AVN	2

Average time to revision - 2.7 years (0.1 - 6.9 years)

Average FU duration - 7 years (0.1 - 10.3 years)

Oxford Score (n = 18)

Mean - 16

Median - 13

Min - 12

Max - 34

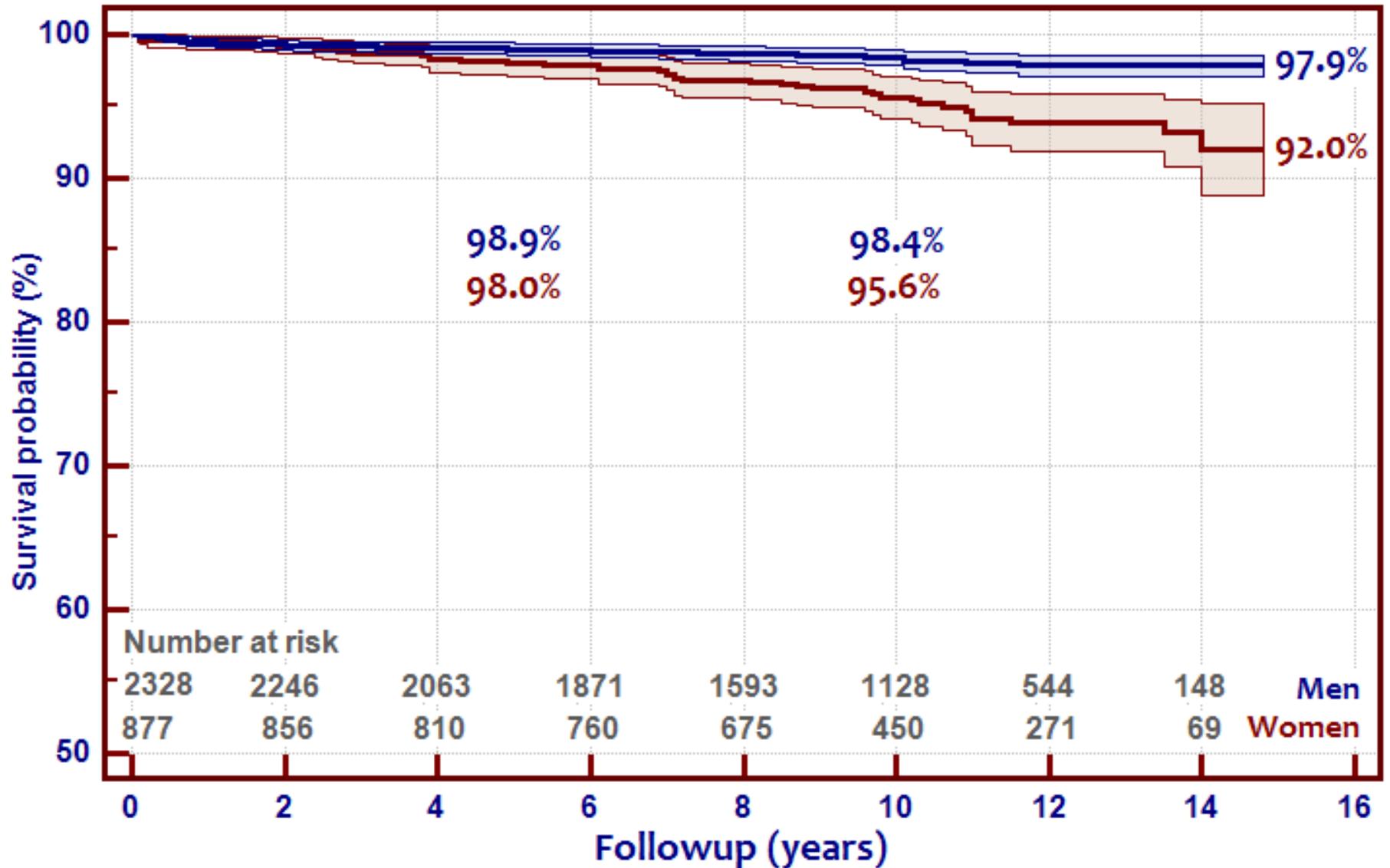
(SLE & poly arthritis)

Re-Revisions - None

Kaplan-Meier Survival Analysis of BHRs

All ages, all diagnoses...

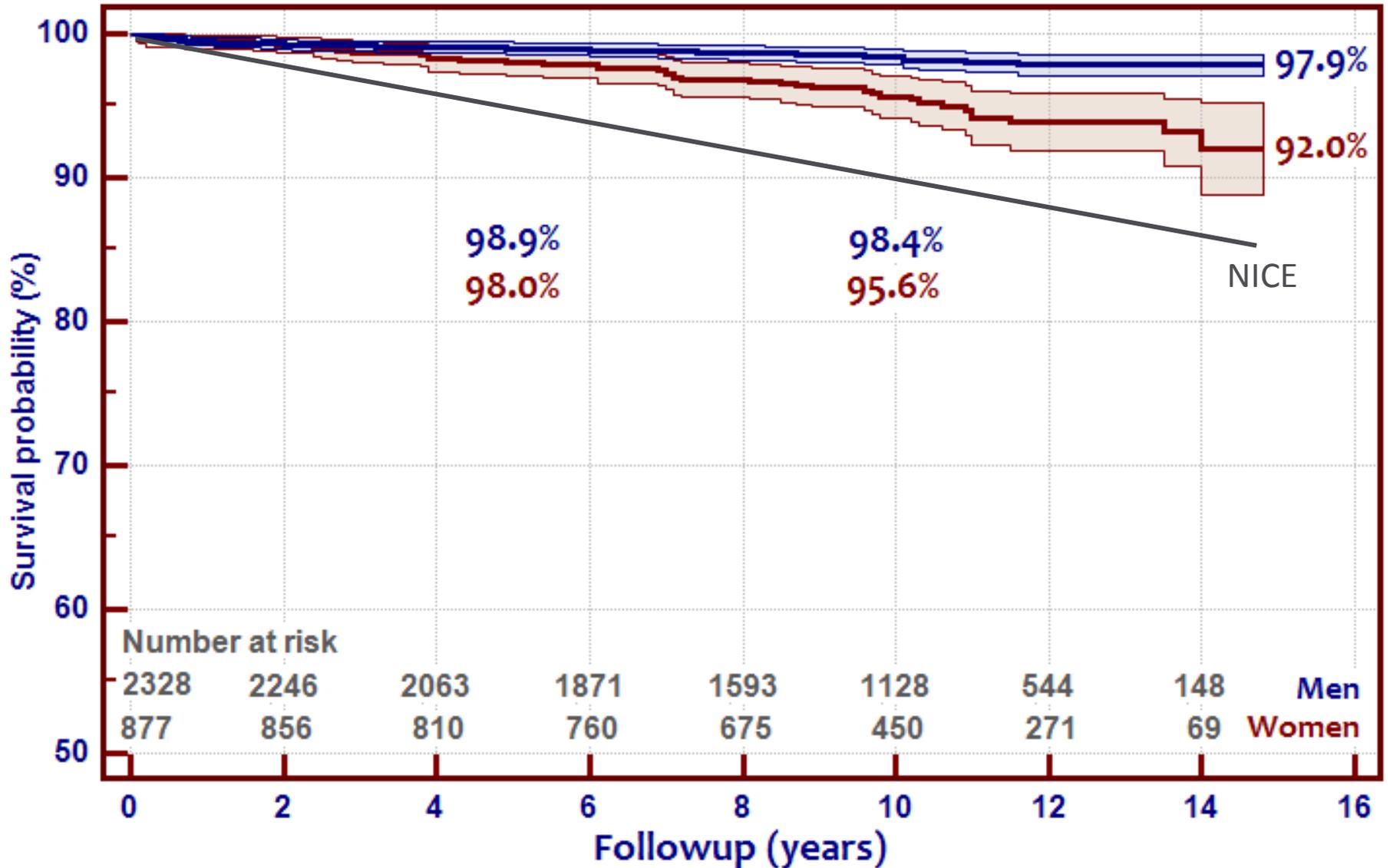
Revision of either component for any reason as the end-point



Kaplan-Meier Survival Analysis of BHRs

All ages, all diagnoses...

Revision of either component for any reason as the end-point

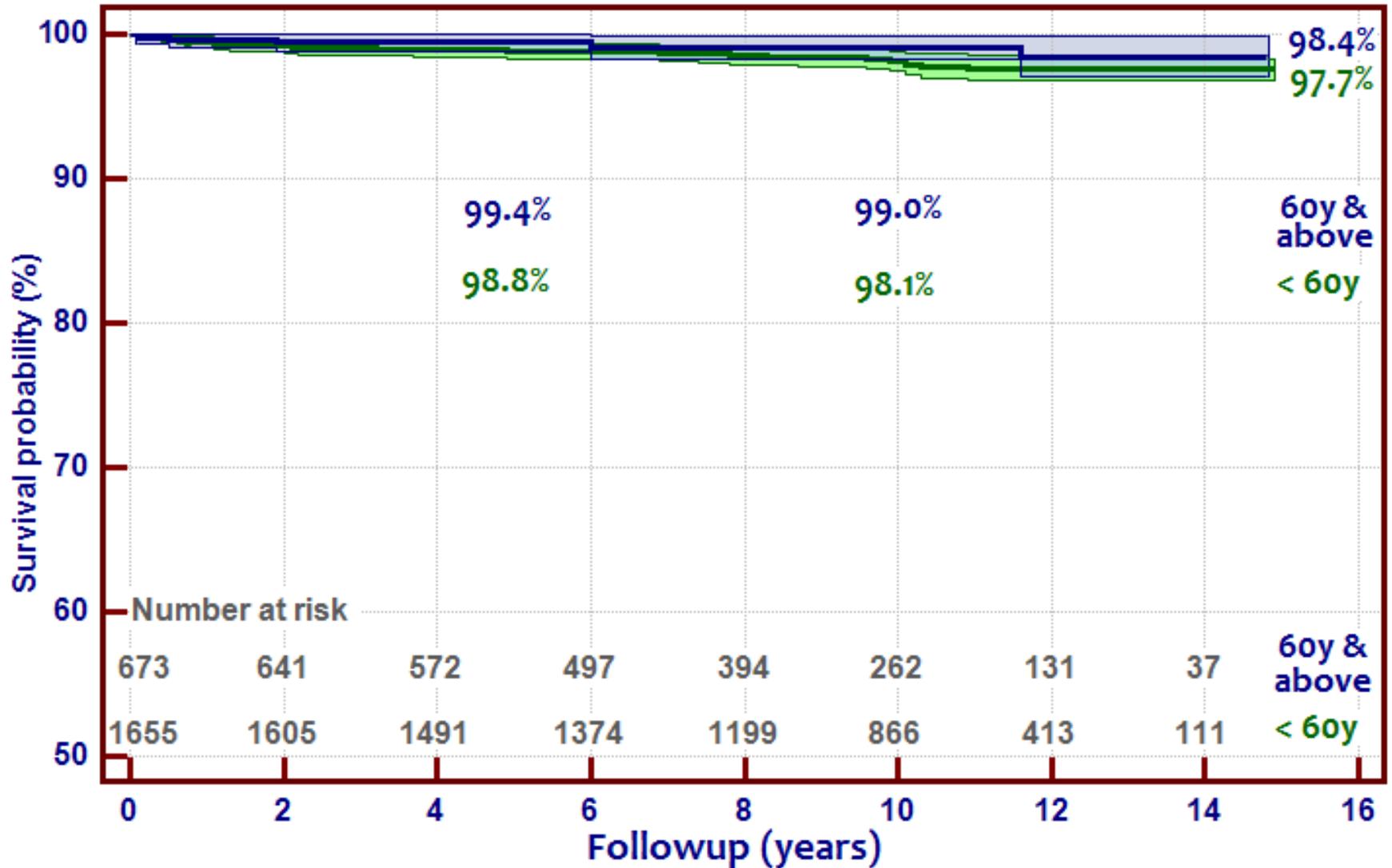


Kaplan-Meier Survival Analysis of BHRs

All ages, all diagnoses...

Revision of either component for any reason as the end-point

MEN

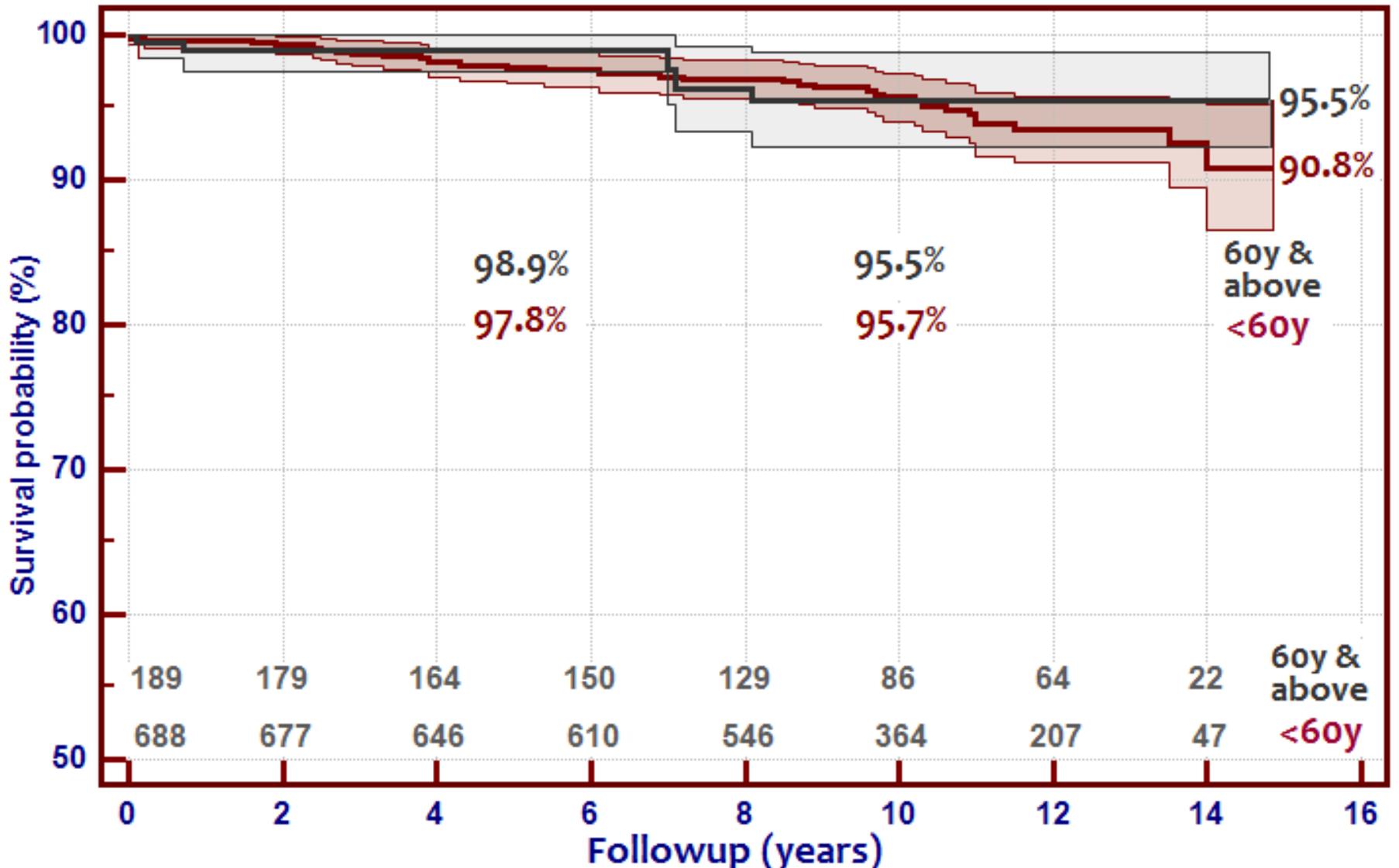


Kaplan-Meier Survival Analysis of BHRs

All ages, all diagnoses...

Revision of either component for any reason as the end-point

WOMEN

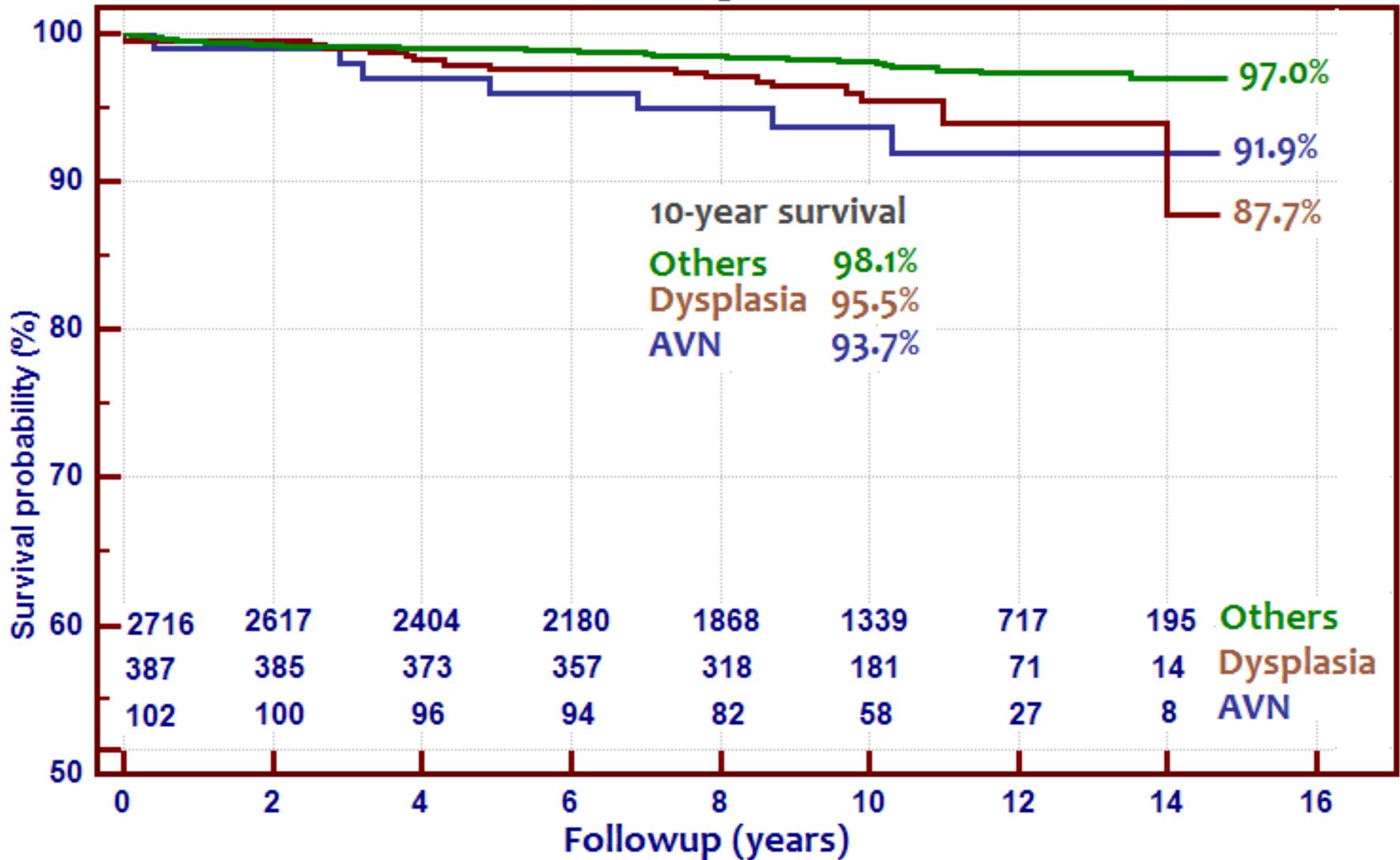


Kaplan-Meier Survival Analysis of BHRs

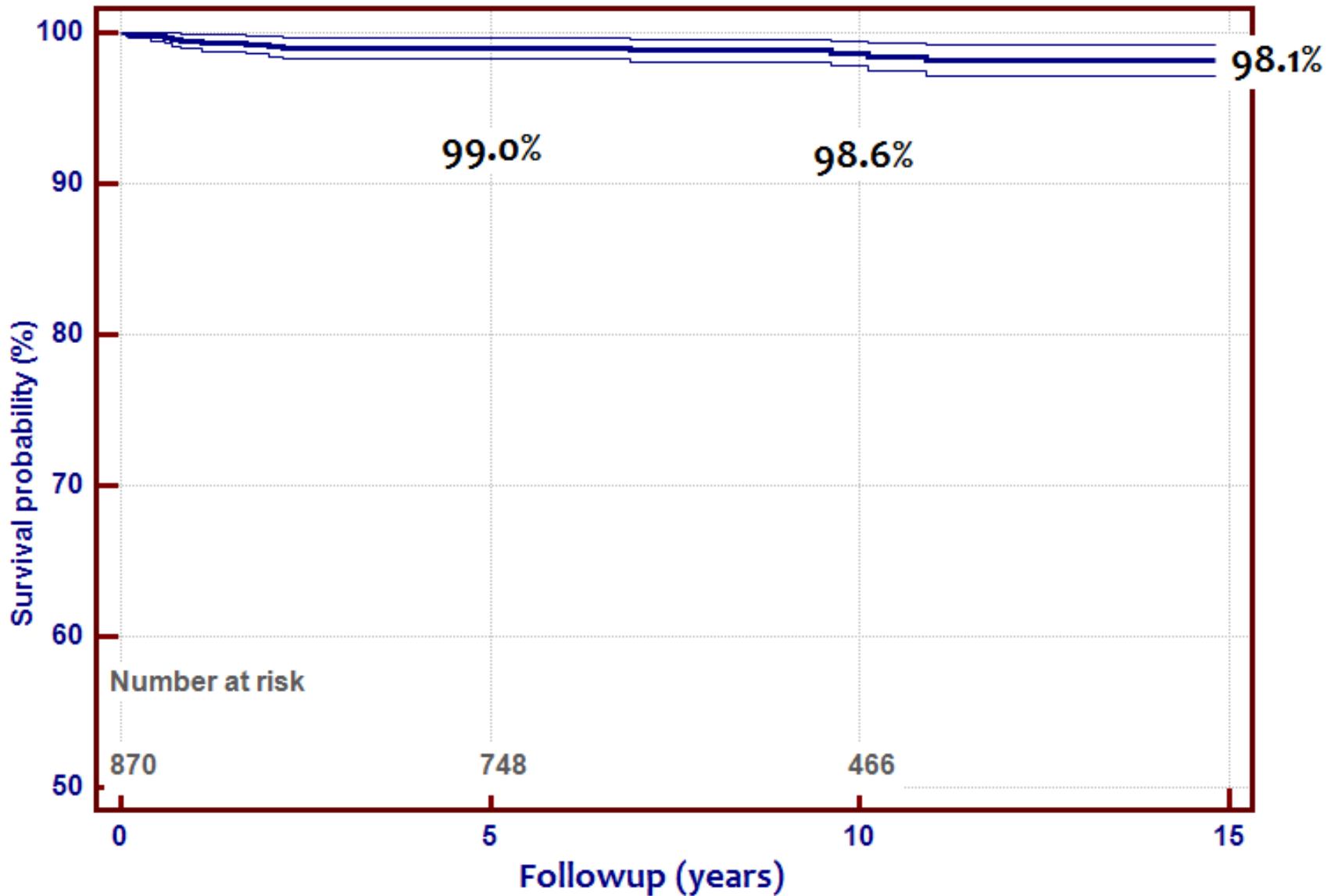
All ages, all diagnoses...

Revision of either component for any reason as the end-point

Different Diagnoses



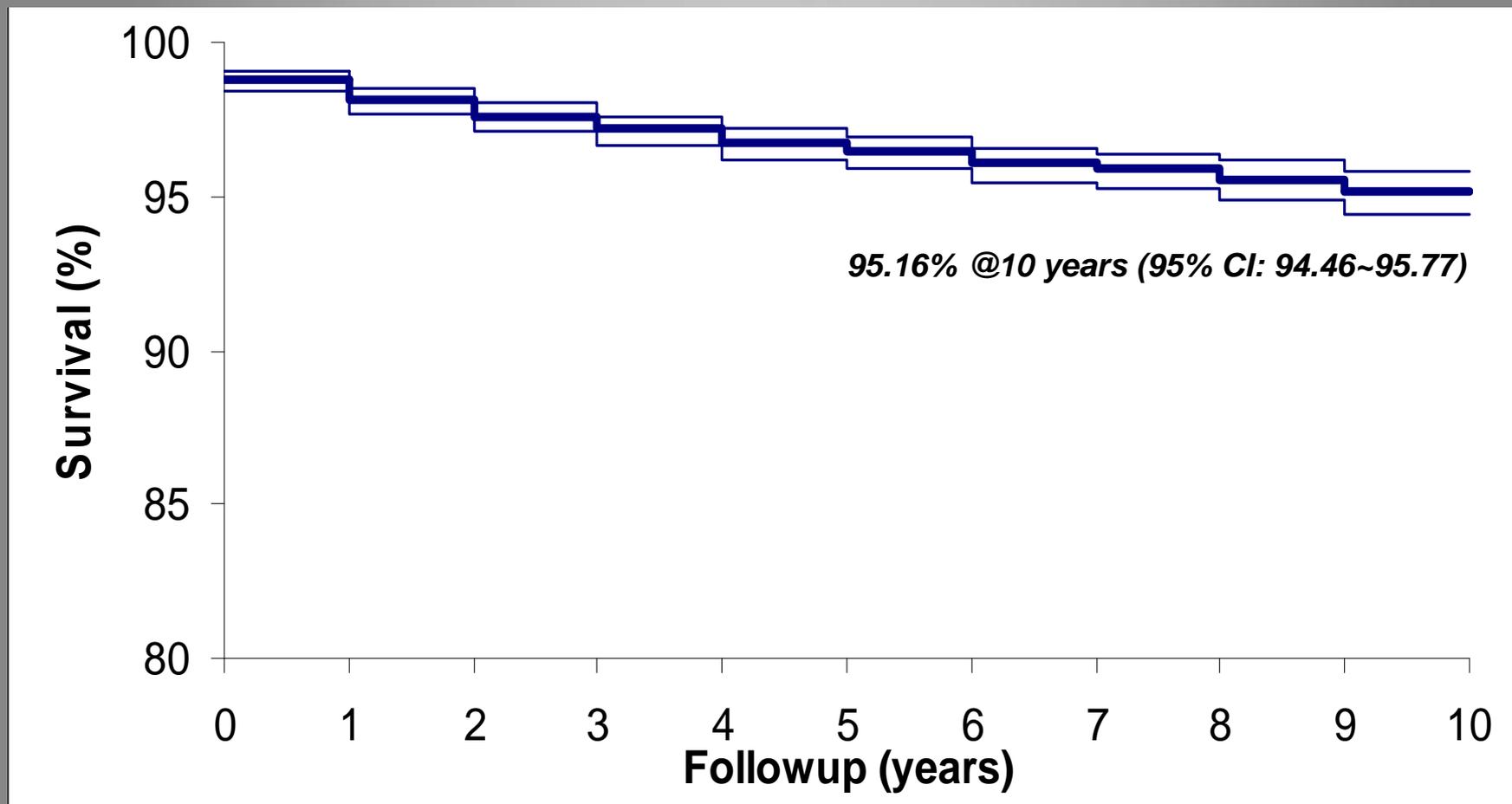
Survivorship of BHRs in men under the age of 55 years with osteoarthritis



Oswestry Outcome Centre

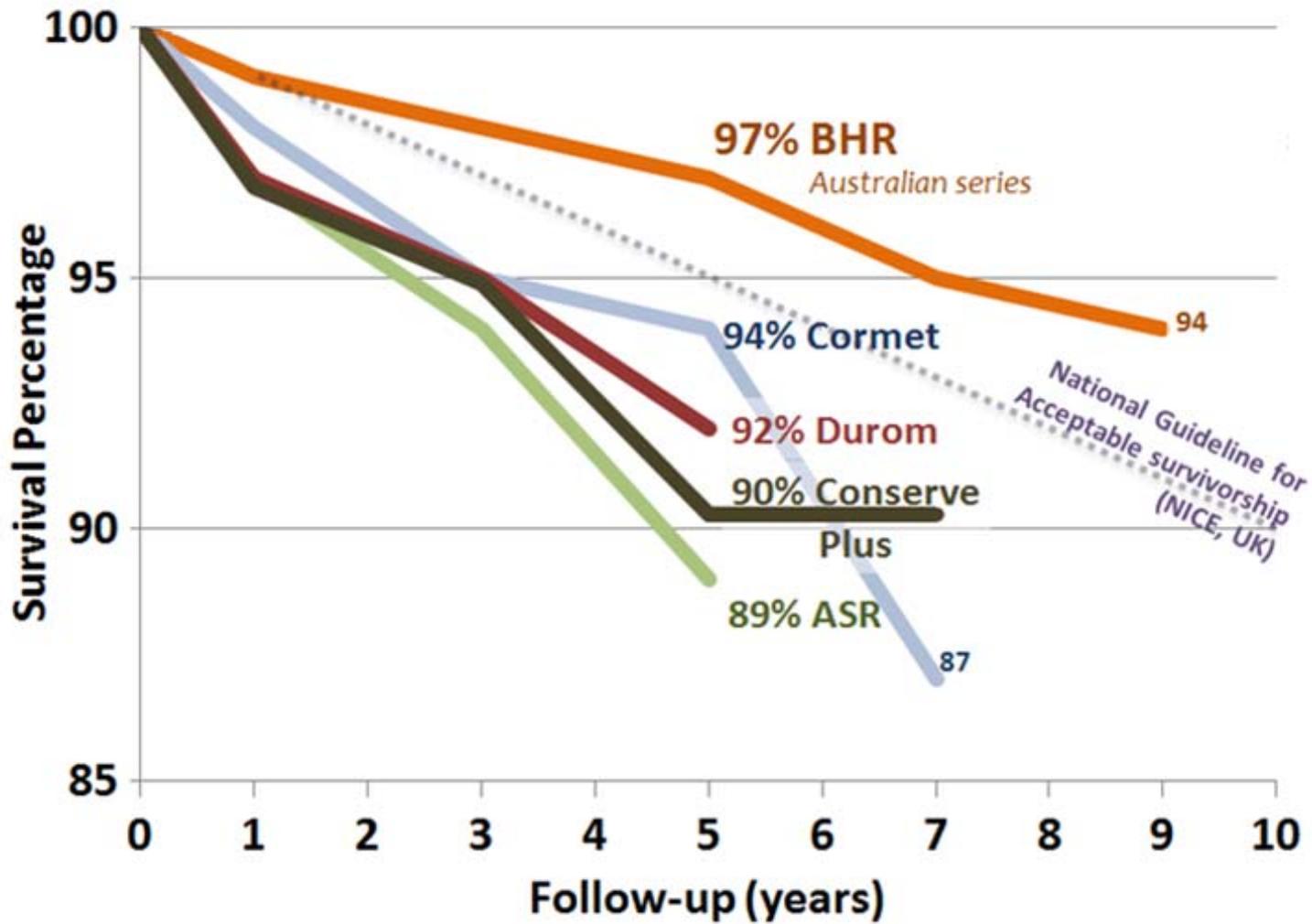
BHR survival at minimum 10 years at 25th May 2012

141 Surgeons, 44 Countries, 3,418 hips

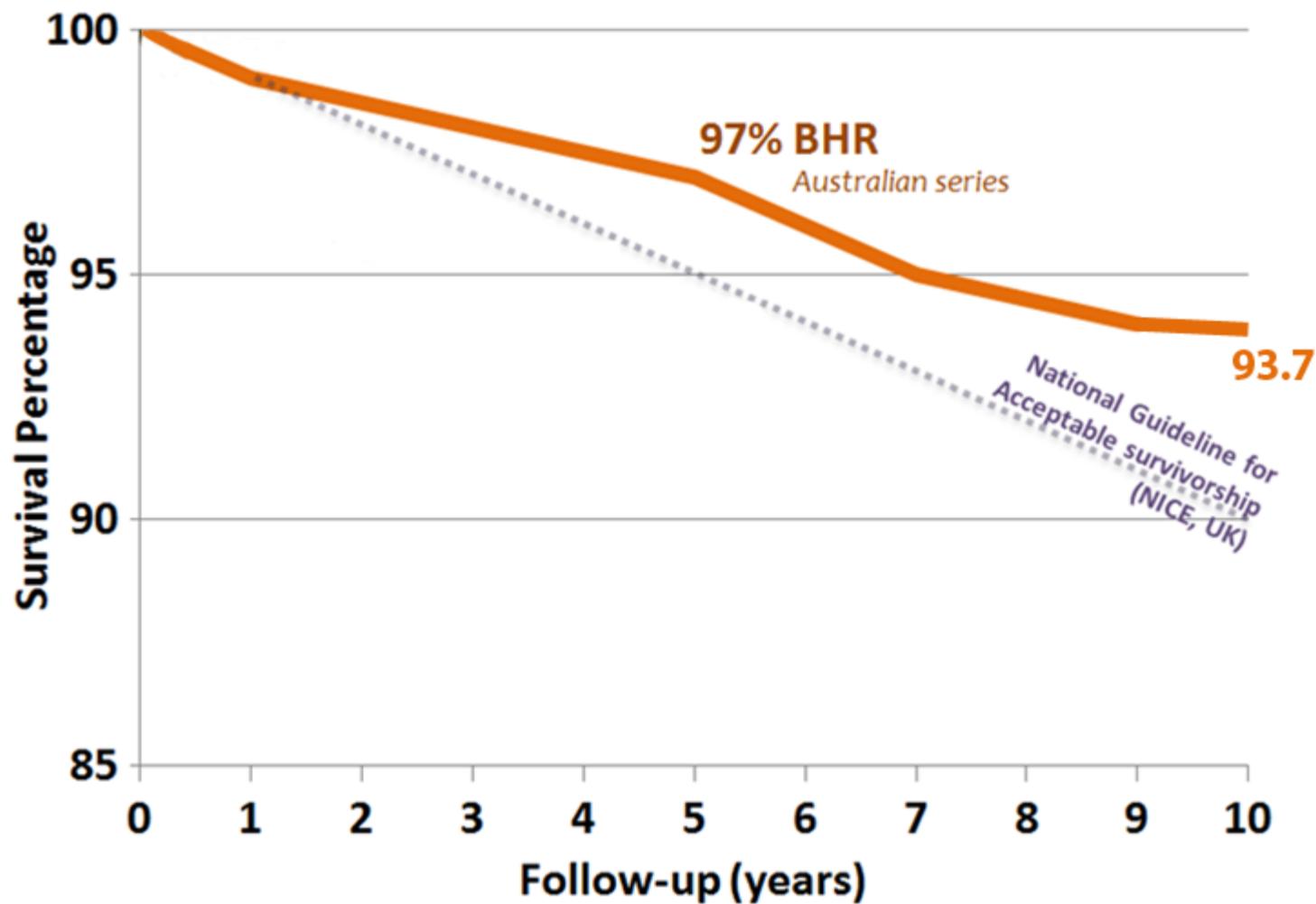


Khan M, Kuiper JH, Edwards D, Robinson E, Richardson JB.
 Birmingham hip arthroplasty: five to eight years of prospective
 multicenter results. J Arthroplasty. 2009 Oct;24(7):1044-50

Data from the Australian Register 2010



Data from the Australian Register 2011



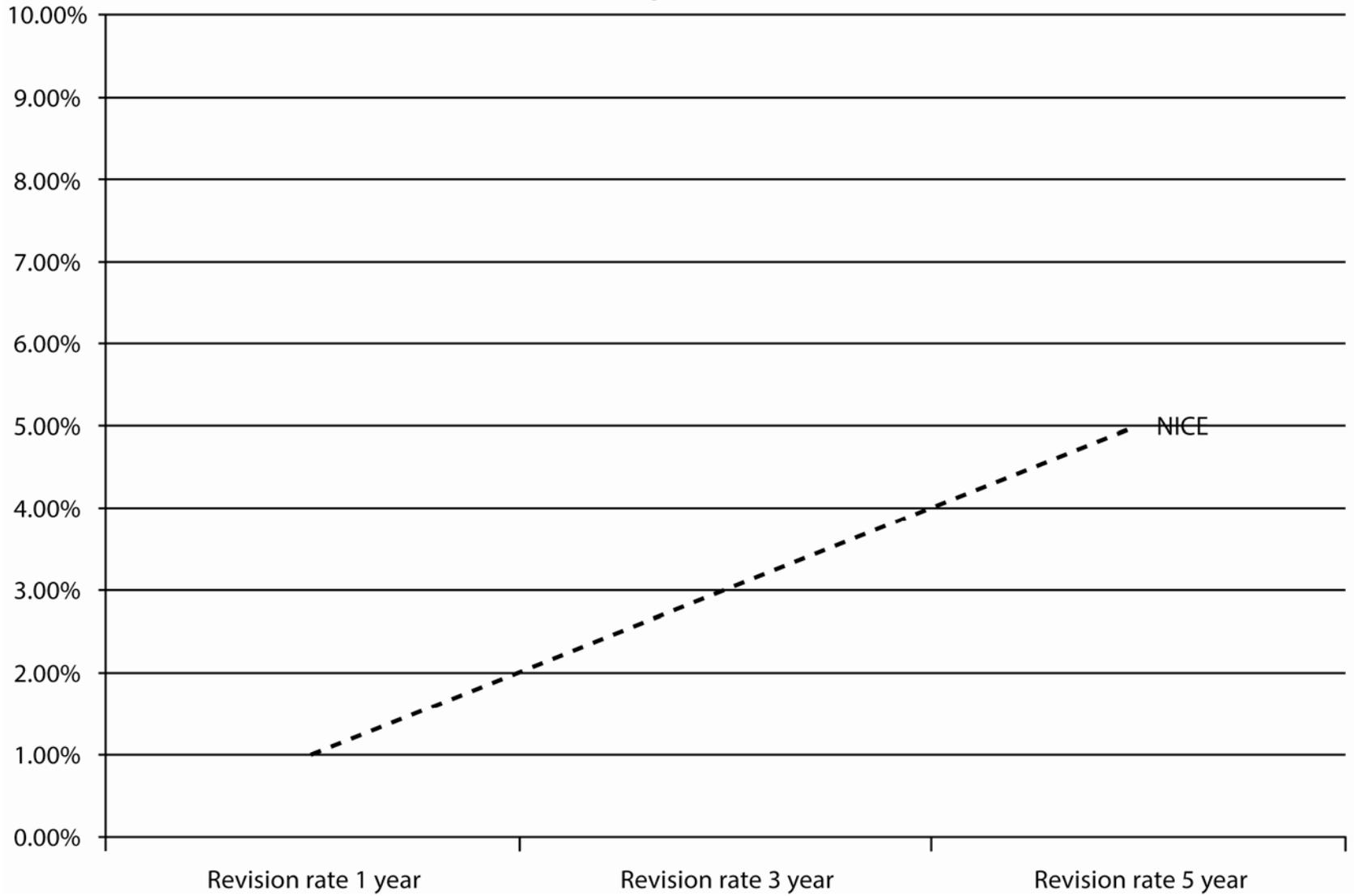
England & Wales NJR

Table 3.23 Revision rates (excluding for infection) for main hip resurfacing brands (95% confidence intervals).

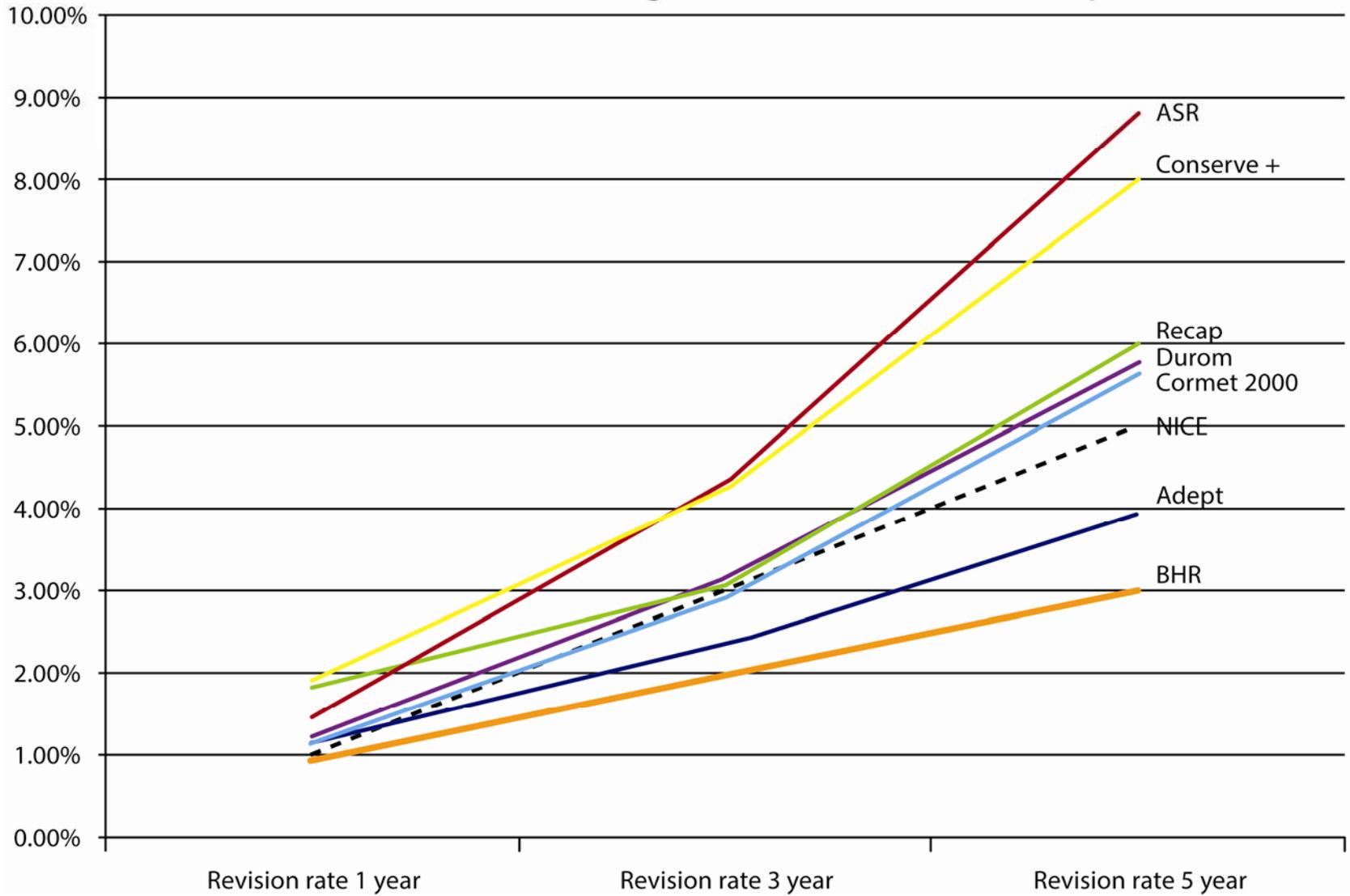
Resurfacing brand	Number of patients	Revision rate at 1 year	Revision rate at 3 years	Revision rate at 5 years
Adept Resurfacing	3,355	1.19% (0.87%-1.64%)	2.36% (1.82%-3.05%)	3.93% (2.93%-5.27%)
ASR Resurfacing	3,153	1.46% (1.10%-1.96%)	4.34% (3.63%-5.18%)	8.84% (7.56%-10.34%)
BHR Resurfacing	17,366	0.96% (0.82%-1.12%)	2.01% (1.80%-2.25%)	3.00% (2.70%-3.33%)
Conserve Plus	1,247	1.91% (1.27%-2.87%)	4.29% (3.21%-5.75%)	7.99% (5.91%-10.83%)
Cormet 2000	3,844	1.16% (0.87%-1.56%)	2.94% (2.41%-3.59%)	5.64% (4.70%-6.77%)
Durom Resurfacing	1,726	1.23% (0.80%-1.89%)	3.15% (2.37%-4.19%)	5.78% (4.36%-7.66%)
Recap Resurfacing	1,563	1.85% (1.28%-2.68%)	3.09% (2.25%-4.26%)	5.98% (3.79%-9.45%)
Other resurfacing	1,925	0.89% (0.54%-1.45%)	2.59% (1.86%-3.60%)	3.35% (2.42%-4.65%)
All resurfacing	34,179	1.14% (1.03%-1.26%)	2.60% (2.42%-2.80%)	4.36% (4.07%-4.66%)

All brands have > 1,000 procedures. Believe the results.

Revision Rates of Resurfacing Brands - NJR 8th Annual Report

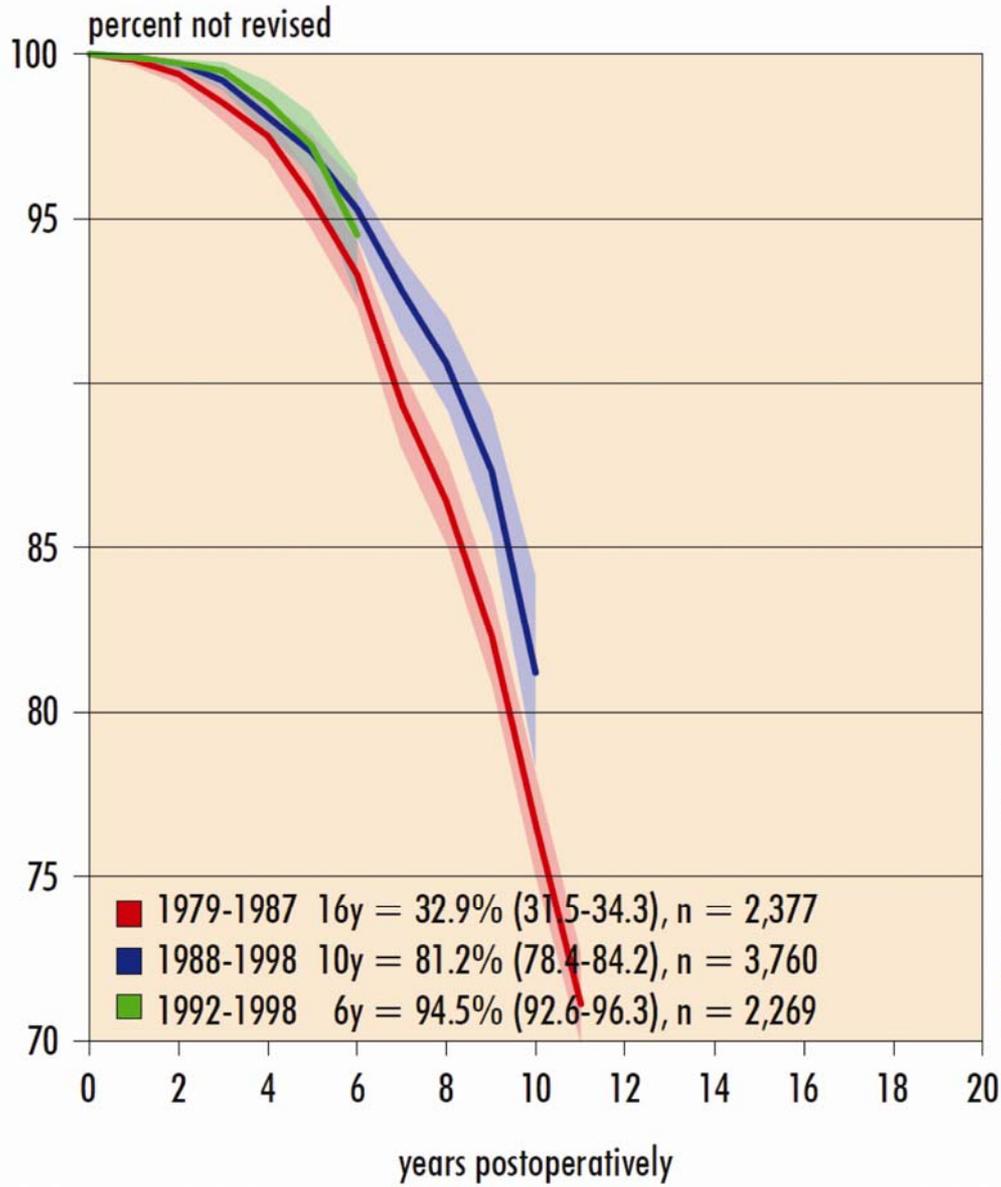


Revision Rates of Resurfacing Brands - NJR 8th Annual Report



Osteoarthritis

Male Patients Younger than 55

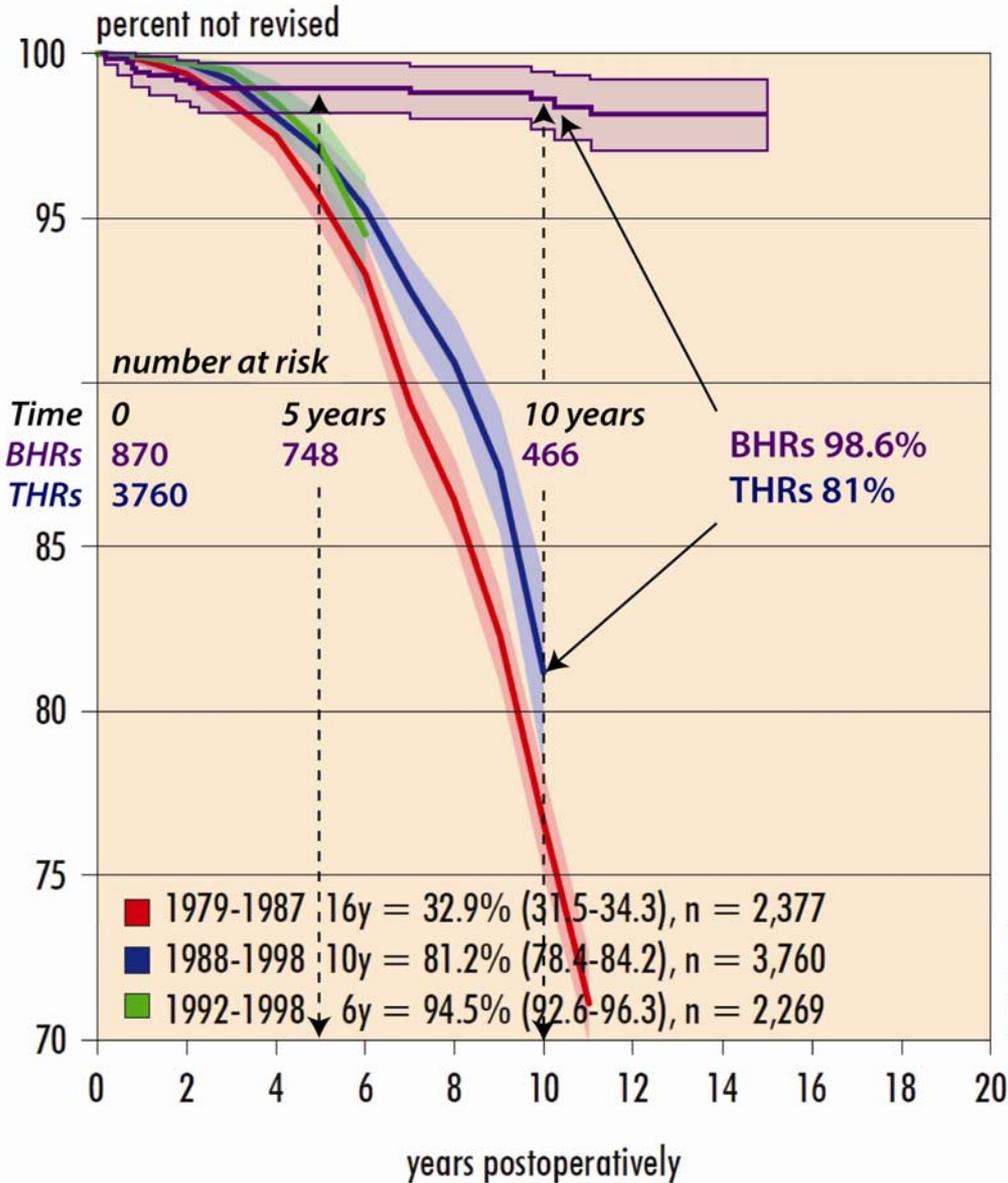


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Swedish Hip Register
THR Data

Osteoarthritis

Male Patients Younger than 55



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Derek McMinn's BHR
Results
VS
Swedish Hip Register
THR Data

THANK YOU