

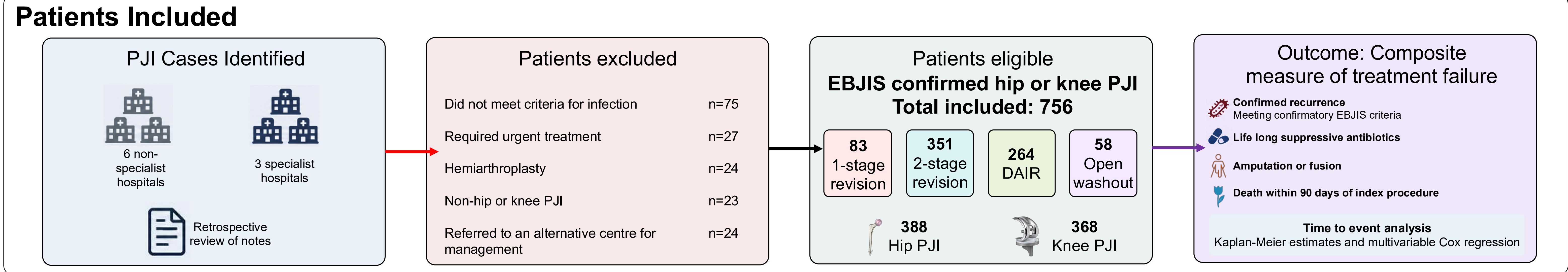
Outcome of Surgical Strategies for Prosthetic Joint Infection (PJI), stratified by JS-BACH Classification and Joint Involved; a multi-national evaluation in 756 patients

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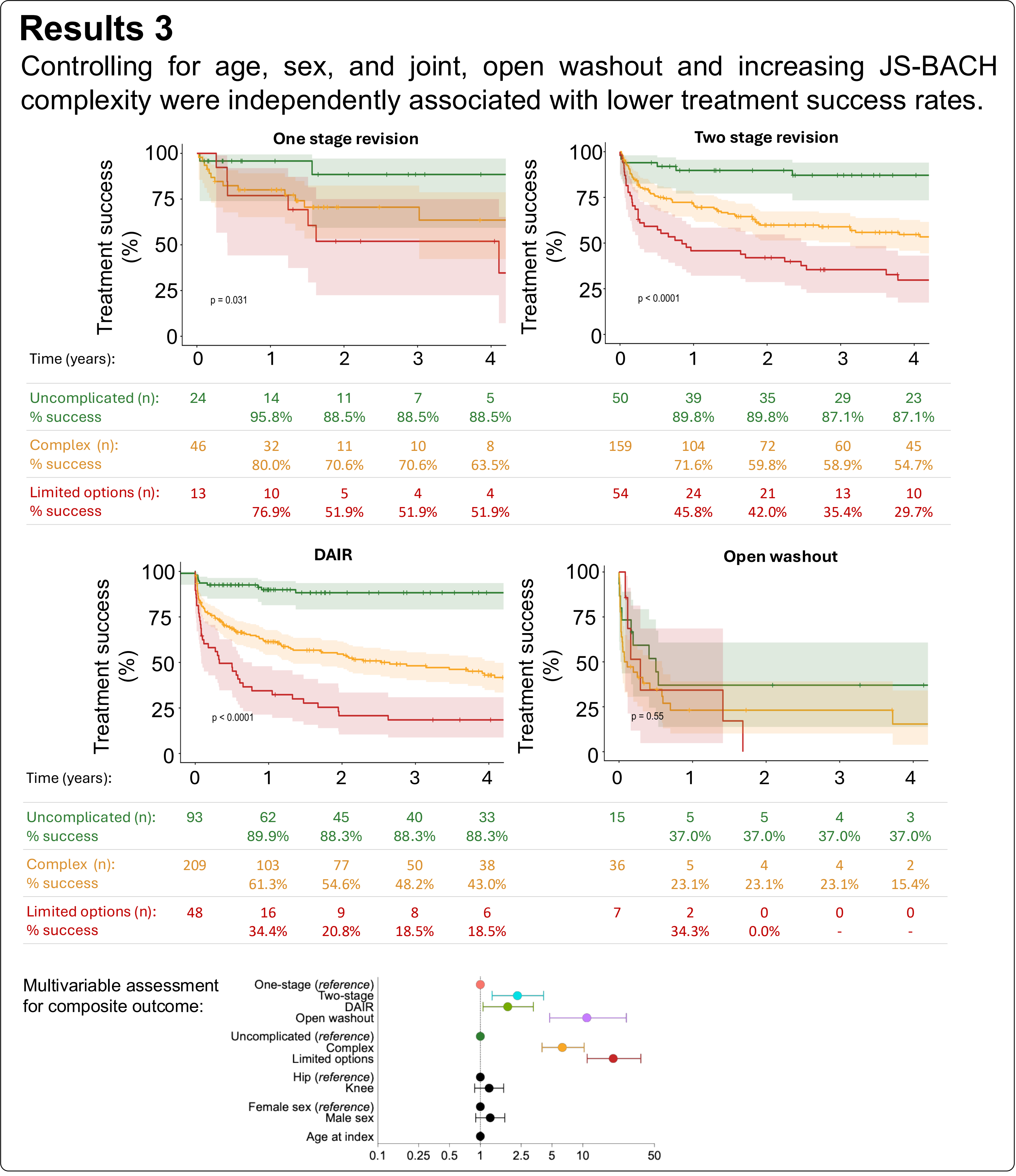
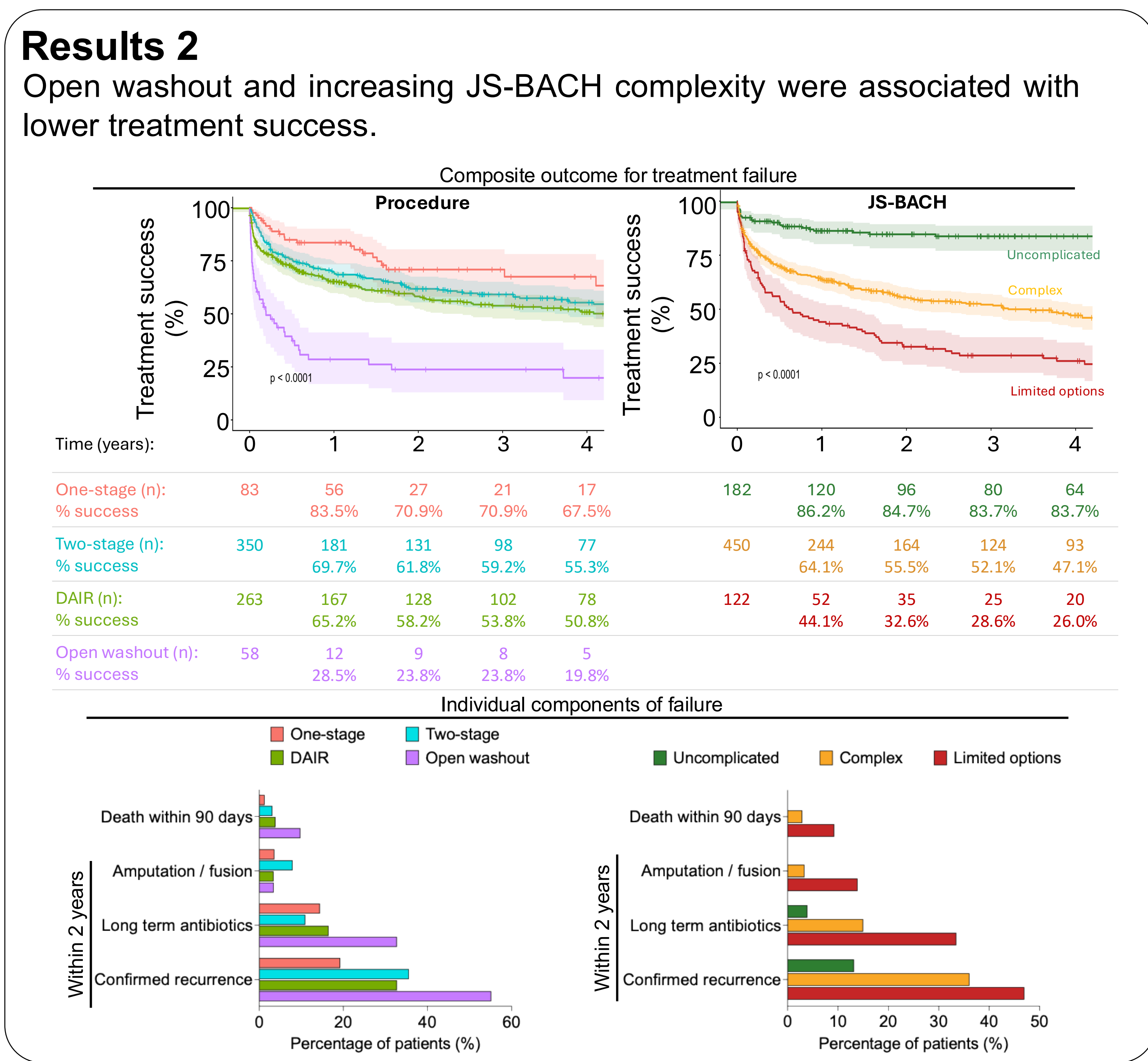
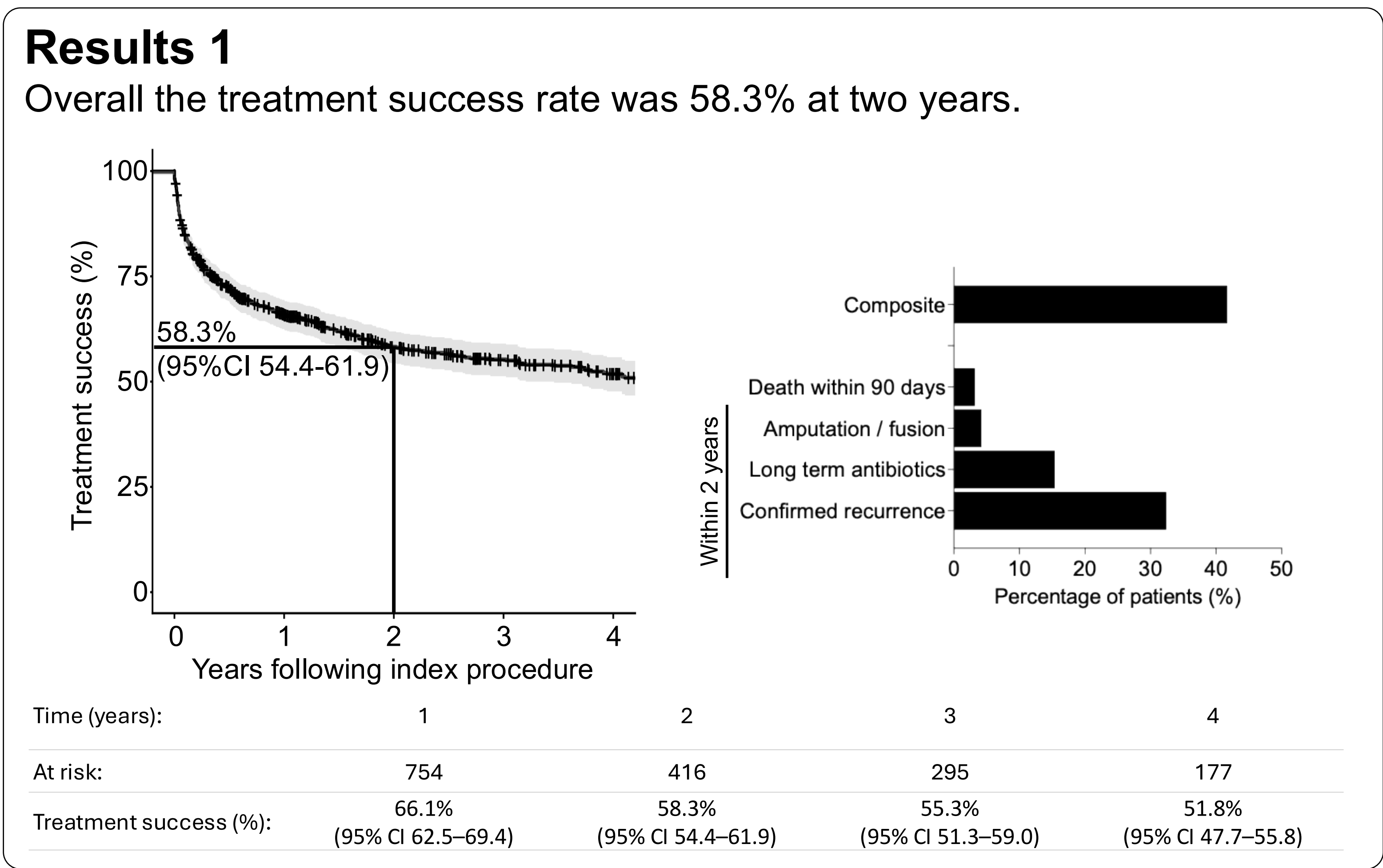
Introduction

Treatment outcomes following surgery for prosthetic joint infection (PJI) vary, but the relative importance of surgical strategy and underlying case complexity remains uncertain. JS-BACH provides a structured classification of PJI complexity, incorporating features which have been shown to influence treatment outcome. We evaluated clinical outcome of surgical strategies related to JS-BACH classification in a multi-national cohort of 756 patients with hip or knee PJI.



Patient and procedural information

	Overall n = 756	Uncomplicated n = 183	Complex n = 451	Limited options n = 122
Age, years (mean, SD)	70.5 (12.4)	67.8 (11.8)	71.9 (11.0)	69.0 (16.6)
Sex				
Female	365 (48.3%)	76 (41.5%)	229 (50.8%)	60 (49.2%)
Male	391 (51.7%)	107 (58.5%)	222 (49.2%)	62 (50.8%)
Joint				
Hip	388 (51.3%)	100 (54.6%)	210 (46.6%)	78 (63.9%)
Knee	368 (48.7%)	83 (45.4%)	241 (53.4%)	44 (36.1%)
Procedure performed				
One-stage revision	83 (11.0%)	24 (13.1%)	46 (10.2%)	13 (10.7%)
DAIR	351 (46.4%)	94 (51.4%)	209 (46.3%)	48 (39.3%)
Two-stage revision	264 (34.9%)	50 (27.3%)	160 (35.5%)	54 (44.3%)
Open washout	58 (7.7%)	15 (8.2%)	36 (8.0%)	7 (5.7%)
Hospital type				
Non_specialist	324 (42.9%)	91 (49.7%)	200 (44.3%)	33 (27.0%)
Specialist	432 (57.1%)	92 (50.3%)	251 (55.7%)	89 (73.0%)
Final follow-up, years (mean,SD)	3.2 (2.8)	3.4 (2.8)	3.2 (2.8)	3.2 (2.9)



- ### Summary
- Overall treatment success was 58.2% at 2 years.
 - Increasing JS-BACH complexity was independently associated with poorer treatment success after adjustment for procedure, age, sex and joint.
 - Open washout was associated with particularly poor outcomes and should be avoided as a definitive treatment strategy for PJI.