

Supplementary Material

10.1302/0301-620X.106B3.BJJ-2023-0844.R1

Table i. Studies on long-term survival of other cementless femoral stems and those of the current study.

Study	Stem	Year	Number of hips	Mean follow-up, yrs	Survivorship at 20 to 25 yrs, %
Belmont et al ¹	AML	2008	223	22	98
Vidalain et al ²	Corail	2011	347	21	97
Corten et al ³	Mallory Head	2011	126	20	99
Streit et al ⁴	CLS Spontorno	2013	354	22	86
McLaughlin and Lee ⁵	Taperloc	2016	145	29	90
Jacquot et al ⁶	Corail	2018	347	27	94
Current study	Osteonics Omnifit HA	2023	165	21	98.4 (20 yrs); 98.1 (25 yrs)

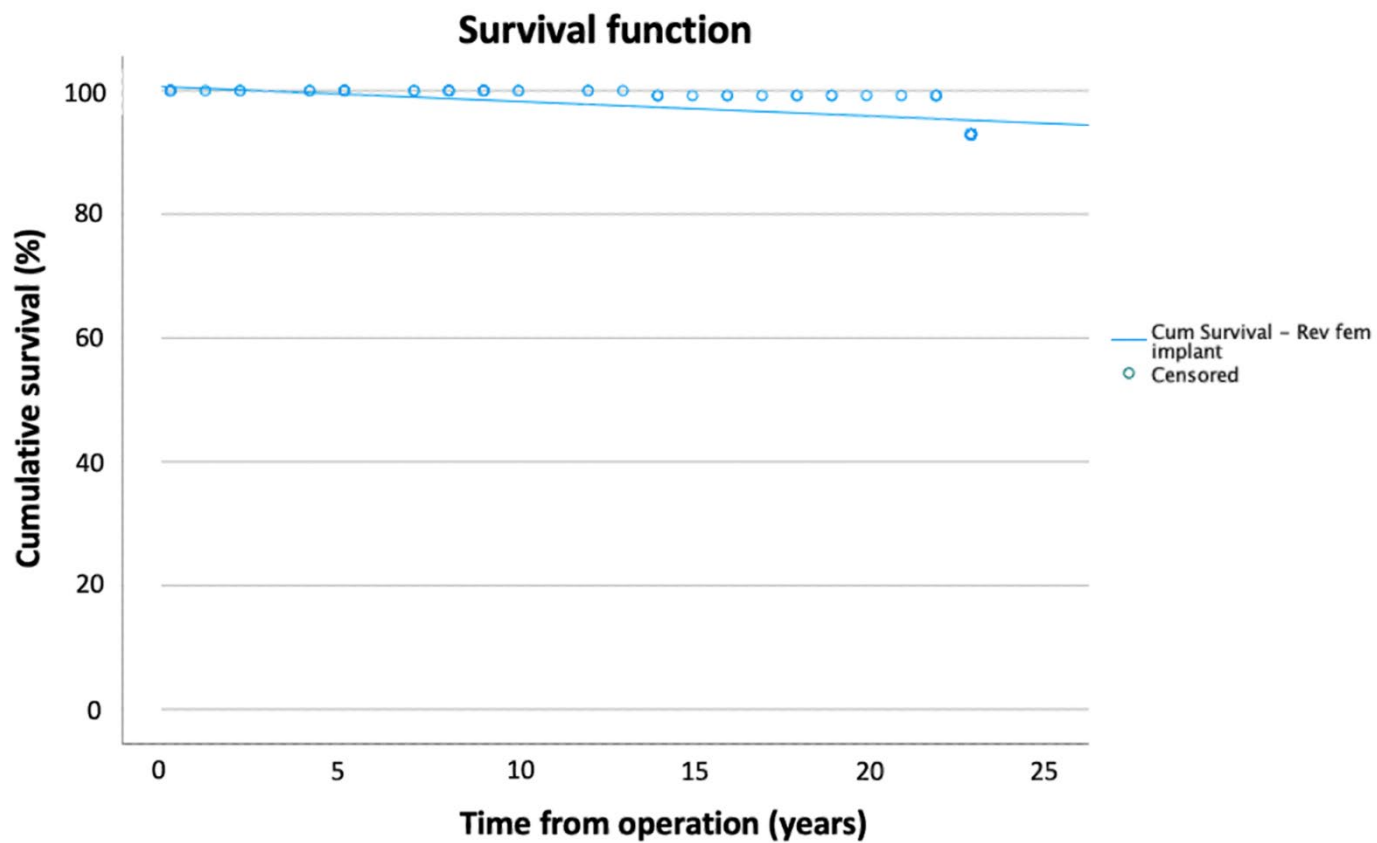


Fig a. Kaplan-Meier survival with femoral revision for any indication as the endpoint. The 20-year survival was 96.0% (95% confidence interval (CI) 92.6% to 99.5%), and 25-year survival was 94.5% (95% CI 89.9% to 99.3%).

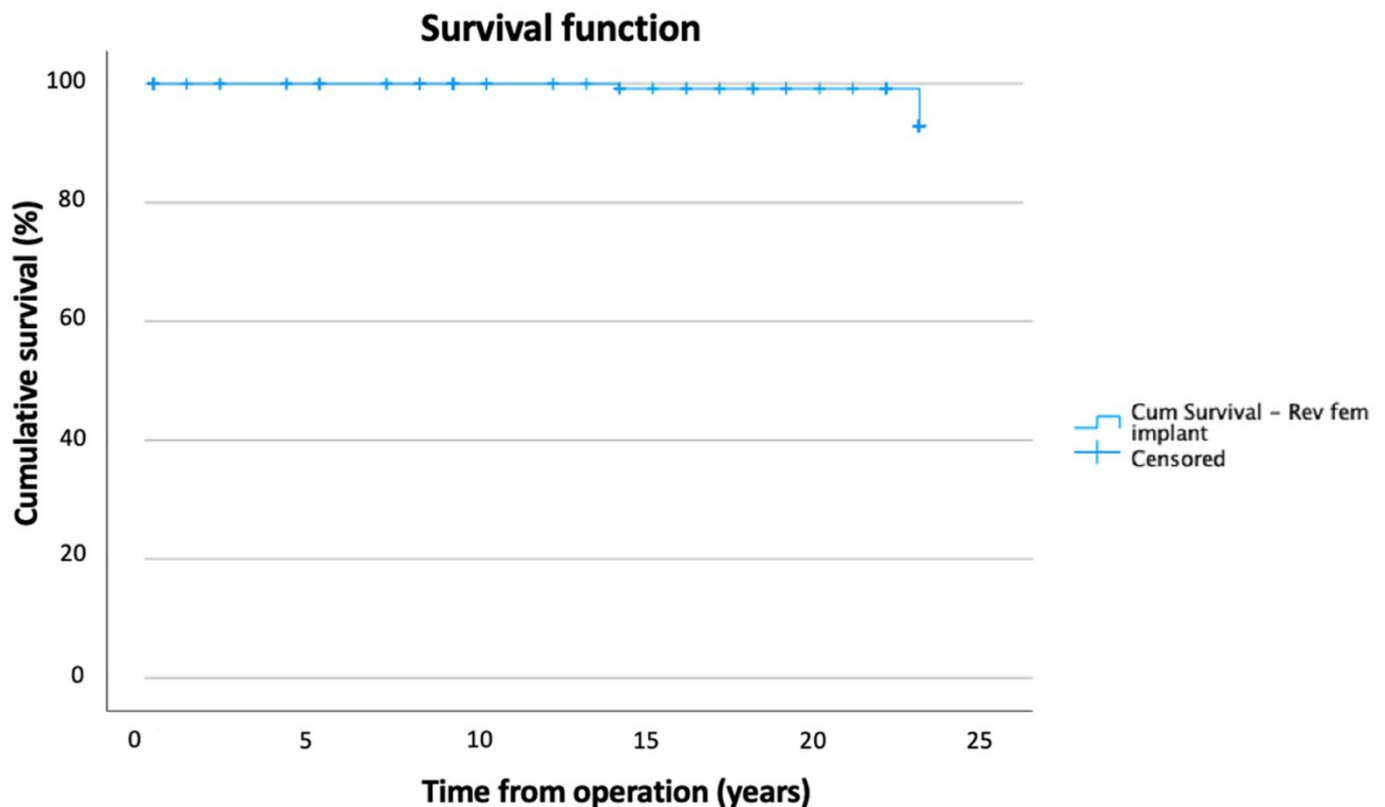


Fig b. Kaplan-Meier survival with femoral revision for aseptic loosening as the endpoint. The 20-year survival was 98.4% (95% confidence interval (CI) 96.2% to 100%), and 25-year survival was 98.1% (95% CI 95.7% to 99.6%).

References

1. Belmont PJ, Powers CC, Beykirch SE, Hopper RH, Engh CA, Engh CA. Results of the anatomic medullary locking total hip arthroplasty at a minimum of twenty years. A concise follow-up of previous reports. *J Bone Joint Surg Am.* 2008;90-A(7):1524–1530.
2. Vidalain J-P. Twenty-year results of the cementless Corail stem. *Int Orthop.* 2011;35(2):189–194.
3. Corten K, Bourne RB, Charron KD, Au K, Rorabeck CH. What works best, a cemented or cementless primary total hip arthroplasty?: minimum 17-year followup of a randomized controlled trial. *Clin Orthop Relat Res.* 2011;469(1):209–217.
4. Streit MR, Merle C, Clarius M, Aldinger PR. Late peri-prosthetic femoral fracture as a major mode of failure in uncemented primary hip replacement. *J Bone Joint Surg Br.* 2011;93-B(2):178–183.
5. McLaughlin JR, Lee KR. Total hip arthroplasty with an uncemented tapered femoral component in patients younger than 50 years of age: a minimum 20-year follow-up study. *J Arthroplasty.* 2016;31(6):1275–1278.
6. Jacquot L, Bonnin MP, Machenaud A, Chouteau J, Saffarini M, Vidalain J-P. Clinical and radiographic outcomes at 25-30 years of a hip stem fully coated with hydroxylapatite. *J Arthroplasty.* 2018;33(2):482–490.