Appendix 5 – Summary of studies reporting TEA in miscellaneous indications

Study	Study Design	Population	Intervention (s)	Follow up	Outcome	Results
Ernstbrunner et al. 2018 [40] N=13	Retrospect ive consecutiv e cohort study	Mean age 55 (39-76) 78% Type A and 22% type B haemophilia	Coonrad-Morrey (Zimmer, Warsaw, IN, USA)	109 months (60-144)	ROM MEPS Complications Revision	Mean flexion arc 71° to 81° Mean MEPS 64 +/- 16 to 89 +/- 11 62% Complications; 15.4% infection, 15.4% ulnar nerve neuropathy, 15.4% polyethylene wear, 7.7% compartment syndrome, 7.7% aseptic loosening
						38% revisions; 15.4% infection, 15.4% polyethylene wear, 7.7% aseptic loosening Survivorship 92% and 42% at 5 and 10 years
Schoch et al. 2017 [76] N =18	Prospectiv e case series	Mean age 68 (51-85) 62% female Primary OA	78% Coonrad- Morrey 17% Latitude	Mean FU 8.9 years (2- 20 years)	ROM MEPS Complications Revision Survival	Mean flexion arc 87° to 105° MEPS 38% excellent, 15% good, 46% fair 50% Complications 11% revision; 5.5% infection and 5.5% periprosthetic fracture 10 year Implant survival 89.4%
Casadei et al. 2016 [41] N =47	Retrospect ive case series	Mean age 40 (9-86) Primary or metastatic tumor	25 modular prosthesis and 22 standard prosthesis Standard prosthesis 86% Coonrad-Morrey and Latitude 14%	35 months	MEPS MSTS Complications Revision	Mean MEP 84% MSTS scores 22/30 29% Complications; 25% nerve injury, 4% infections 4.2% Revision; 2.1% infection, 2.1% cement extrusion
Vochteloo et al. 2015 [42] N=4	Retrospect ive case series	Mean age 58 (54-63) 50% female 50% type A haemophilia, 50% von Willebrand disease	Coonrad-Morrey (zimmer, Warsaw, IN, USA), n=3 Discovery Elbow System (DES; Biomet Orthopedics, Warsaw, IN), n=1	63.3 months (31-89)	ROM MEPS Revision	Mean flexion arc 70° to 97.5°  Mean MEPS 40 to 91.5  0% Revisions
Athwal et al. 2005 [43]	Retrospect ive case series	Mean age 66 (38 to 83) 43% female	Coonrad-Morrey (Zimmer, Warsaw, IN, USA)	30 months (1 to 192)	ROM MEPS Complications	Mean flexion arc 48° to 92° Mean MEPS 22 (5 to 45) to 75 (55 to 95) 35% Complications; 25% nerve injury, 5% ulna

N=21			Revision	split fracture, 5% CRPS
	Primary or			20% Revision rate; 10% non-union, 5% ulna
	metastatic			fracture, 5% above elbow amputation
	tumor			

RA – rheumatoid arthritis, ROM – range of motion, QuickDASH - Quick Disabilities of the Arm, Shoulder and Hand Score, MEPS – Mayo Elbow Performance score, DASH - Disabilities of the Arm, Shoulder and Hand Score, HO – heterotopic ossification, ASES – American Shoulder Elbow Society score, OES – Oxford Elbow Score, MSTS – Musculoskeletal Tumor Society Scoring.