

Table S1. Cohen's d effect sizes for baseline parameters comparison between RA-TKA and manual TKA in the patient group.

Parameter	Cohen's d effect size
Age (years)	0.293
BMI (kg/m ²)	0.157
Pre-operative varus (HKA)	0.012

TKA = Total Knee Arthroplasty; RA-TKA = Robotic-Assisted Total Knee Arthroplasty; BMI=Body mass index; HKA=Hip-knee-ankle.

Table S2. Cohen's d effect sizes for pairwise comparison of parameters between RA-TKA subgroups and manual TKA patients.

Parameter	Learning vs proficiency phase	Learning phase vs manual TKA	Proficiency phase vs manual TKA
Age (years)	0.251	0.008	0.226
BMI (kg/m ²)	0.214	0.455	0.113
Pre-operative varus (HKA)	0.206	0.150	0.353
Operative time (minutes)	1.269	1.646	0.324

TKA = Total Knee Arthroplasty; RA-TKA = Robotic-Assisted Total Knee Arthroplasty; BMI=Body mass index; HKA=Hip-knee-ankle.