

Table 2

a: Factor of changing in FRA

adjusted R²: 0.492 p value: <0.001

	Univariate regression analysis		Multivariate regression analysis			
	Correlation coefficient	p value	β	standardized β	95% CI	p value
Age (years old)	0.331	0.002	0.324	0.348	0.148; 0.500	<0.001
sex	0.096	0.210				
BMI (kg/m ²)	0.136	0.125	0.352	0.139	-0.108; 0.813	0.131
Pre-operative ROM (internal rotation) (°)	0.095	0.212				
Pre-operative ROM (external rotation) (°)	-0.091	0.222				
Preoperative knee extensor strength (N)	-0.049	0.340				
Leg lengthening (mm)	-0.251	0.016	-0.122	-0.072	-0.439; 0.194	0.443
Leg lateralization (mm)	0.451	<0.001	0.285	0.158	-0.069; 0.639	0.113
Change in pelvic tilt (°)	-0.131	0.135	-0.299	-0.088	-0.903; 0.305	0.326
Change in femoral anteversion(°)	-0.127	0.141	-0.016	-0.018	-0.173; 0.140	0.837
Preoperative FRA	-0.556	<0.001	-0.427	-0.548	-0.578; -0.275	<0.001

FRA, femoral rotational angel; BMI, body mass index; ROM, range of motion.

b: Factor of postoperative FRA (Multiple regression analysis)

adjusted R²: 0.577 p value: 0.001

	Univariate regression analysis		Multivariate regression analysis			
	Correlation coefficient	p value	β	standardized β	95% CI	p value
Age (years old)	0.470	<0.001	0.353	0.343	0.179; 0.526	<0.001
sex	0.011	0.462				
BMI (kg/m ²)	0.289	0.007	0.394	0.140	-0.047; 0.834	0.079
Pre-operative ROM (internal rotation) (°)	-0.180	0.063	-0.104	-0.111	-0.256; 0.048	0.177
Pre-operative ROM (external rotation) (°)	0.017	0.442				
Preoperative knee extensor strength (N)	0.007	0.476				
Leg lengthening (mm)	-0.177	0.067	-0.182	-0.097	-0.499; 0.135	0.256
Leg lateralization (mm)	-0.043	0.360				
Change in pelvic tilt (°)	0.014	0.452				
Change in femoral anteversion(°)	0.162	0.086	-0.037	-0.038	-0.193; 0.118	0.633
Preoperative FRA	0.659	<0.001	0.496	0.576	0.354; 0.638	<0.001

FRA, femoral rotational angel; BMI, body mass index; ROM, range of motion.