Review title and basic details	
Review title	**Peroneus longus tendon with or without peroneus brevis tenodesis for primary anterior cruciate ligament reconstruction surgery: A systematic review and meta-analysis**.
Condition or domain being studied	Knee and ankle outcome measures after primary anterior cruciate ligament reconstruction surgery using peroneus longus tendon autograft.
Rationale for the review	A systematic review and meta-analysis of studies reporting outcomes using the peroneus longus tendon for ACLR —- whether single-arm syntheses or comparison between two methods of harvesting is not available in current literature. Results of this study will add significant value to the knowledge surrounding available graft options for ACLR surgery.
Original language title	English
Review objectives	Are the knee function outcomes of peroneus longus tendon autograft comparable to those of other graft options? Do the ankle function outcomes outweigh the donor-site morbidity and adverse events that arise from other graft harvesting locations? How does peroneus longus tendon harvesting with and without peroneus brevis tenodesis affect knee and ankle outcomes?
Keywords	anterior cruciate ligament reconstruction, ACLR, peroneus longus, PLT, fibularis longus, FLT, autograft
Searching and screening	
Searches	PubMed/MEDLINE, Embase, Web of Science, Scopus, Cochrane Library
Study design	Systematic review and meta-analysis of randomized clinical trials, prospective cohort studies, retrospective cohort studies, case-control studies, and case series. Level of evidence (IV)
Eligibility criteria	
Population	Skeletally-mature adult patients defined as ≥ 18 years old.
Intervention(s) or exposure(s)	Peroneus longus tendon (PLT) graft harvest with or without distal attachment to peroneus brevis tendon (PLBT).
Comparator(s) or control(s)	Covariates include mean follow-up duration (months), gender (male, female), and age (years).
Outcomes to be analysed	
Main outcomes	International Knee Documentation Committee (IKDC) Subjective Knee Form, Lysholm Knee Scoring Scale, Foot and Ankle Disability Index (FADI), American Orthopaedic Foot and Ankle Society (AOFAS) Ankle Hindfoot Scale
Additional outcomes	Graft failure (clinical, rupture).
Data collection process	
Data extraction (selection and coding)	A standardized data collection form will be created, piloted, and used for data extraction by two independent reviewers and inter-rater reliability will be calculated using Cohen's κ and ICC co-efficients.
Risk of bias (quality) assessment	Randomized clinical trials (RCTs) will be assessed using Cochrane's revised RoB 2 tool and observational studies (prospective and retrospective cohort studies, case-control studies, and case series will be assessed using the MINORS criteria.
Planned data synthesis	
Strategy for data synthesis	Extracted outcome data will be transformed into standardized continuous (i.e., sample size, mean, standard deviation) and dichotomous (i.e., sample size, event) data and synthesized using meta-analysis of random effects into pooled means and prevalences. Within study means will undergo inverse-variance weighted and DerSimonian-Laird methods and proportions will undergo inverse logit transformation and restricted maximum likelihood (REML) methods for pooled estimate and standard errors, respectively.
Analysis of subgroups or subsets	Subgroup analysis between PLT and PLBT will be performed to compare the effects of distal attachment during graft harvesting. Meta-regression analysis will be performed to control for the covariates (follow-up duration, mean age of participants, and gender) to determine whether the results are better explained by other predictors than variation in graft harvesting technique.
Review affiliation, funding and peer review	
Review team members	Dong Woon Kim, MD Shayden Bernas Konrad Malinowski, MD, PhD
Review affiliation	Jagiellonian University Medical College, Kraków, Poland Artromedical Orthopedic Clinic, Bełchatów, Poland
Funding source	N/A
Named contact	Dong Woon Kim (d.kim@student.uj.edu.pl)
Timeline of the review	
Review timeline	Started: 2025-10-12
Date of first submission to PROSPERO	2025-10-16
Date of registration in PROSPERO	
Current review stage	
Publication of review results	Review results will be published for public access after acceptance for publication.
Stage of the review at this submission	**Review stage** **Started** **Completed** Screening search results against inclusion criteria Data synthesis Pilot work Data extraction or receipt of IP Formal searching/study identification Risk of bias/quality assessment
Review status	
Additional information	
Review conflict of interest	None.
Country	Poland