

Supplementary Table 1: Search strategy for individual databases

| Number | Name of the database | Search strategy | Number of articles |
|--------|----------------------|--|--------------------|
| 1 | PubMed | (pelvic[Title/Abstract] OR spinopelvic[Title/Abstract] OR spino pelvic[Title/Abstract] OR pelvic inclin*[Title/Abstract] OR pelvic tilt[Title/Abstract] OR pelvic incidence[Title/Abstract]OR sagittal pelvic[Title/Abstract] OR lumbar lordosis[Title/Abstract] OR sacral slope[Title/Abstract]) AND (knee arthroplasty OR "Arthroplasty, Replacement, Knee"[Mesh] OR knee replacement) | 205 |
| 2 | EMBASE | (pelvic:ti,ab,kw OR spinopelvic:ti,ab,kw OR 'spino pelvic':ti,ab,kw OR 'pelvic inclin*':ti,ab,kw OR 'pelvic tilt':ti,ab,kw OR 'pelvic inclination':ti,ab,kw OR 'sagittal pelvic':ti,ab,kw OR 'lumbar lordosis':ti,ab,kw OR 'sacral slope':ti,ab,kw) AND ('knee arthroplasty':ti,ab,kw OR 'knee replacement':ti,ab,kw) | 124 |
| 3 | Scopus | (TITLE-ABS-KEY (pelvic OR spinopelvic OR spino AND pelvic OR pelvic AND inclin* OR pelvic AND incidence OR pelvic AND tilt OR sagittal AND pelvic OR lumbar AND lordosis OR sacral AND slope)) AND (TITLE-ABS-KEY (knee AND arthroplasty OR knee AND replacement)) | 13 |

Supplementary Table 2 Risk of bias of the included studies using ROBINS-I

| Ref. | Bias due to confounding | Bias in selection of participants into the study | Bias in classification of interventions | Bias due to deviations from intended interventions | Bias due to missing data | Bias in measurement of outcomes | Bias in selection of the reported result | Overall bias |
|-------------------------------|-------------------------|--|---|--|--------------------------|---------------------------------|--|--------------|
| Kim <i>et al</i> [13] | Moderate | Low | Low | No information | Low | Moderate | Low | Moderate |
| Kitagawa <i>et al</i> [10] | Moderate | Low | Low | No information | Low | Moderate | Low | Moderate |
| Batibay <i>et al</i> [8] | Moderate | Low | Low | No information | Low | Moderate | Low | Moderate |
| Han <i>et al</i> [12] | Moderate | Low | Low | No information | Low | Moderate | Low | Moderate |
| Shichman <i>et al</i> [9] | Moderate | Low | Low | No information | Low | Moderate | Low | Moderate |
| Puthiyapura <i>et al</i> [11] | Moderate | Low | Low | No information | Low | Moderate | Low | Moderate |