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## A.1. Search strategy used for literature search

**Pubmed**

("1996/01/01"[PDAT] : "2016/12/31"[PDAT]) AND (("posteromedial"[All Fields] OR "posterolateral"[All Fields] OR "medial"[All Fields] OR "lateral"[All Fields] OR "varus"[All Fields] OR "valgus"[All Fields] OR "anterior"[All Fields] OR "posterior"[All Fields] AND ("structures"[All Fields] OR "ligament"[All Fields]) AND ("in vitro techniques"[MeSH Terms] OR ("vitro"[All Fields] AND "techniques"[All Fields]) OR "in vitro techniques"[All Fields] OR "vitro"[All Fields] OR "in vitro"[All Fields]) AND ("knee"[MeSH Terms] OR "knee"[All Fields] OR "knee joint"[MeSH Terms] OR ("knee"[All Fields] AND "joint"[All Fields]) OR "knee joint"[All Fields])) OR ("cadaveric"[All Fields] AND "knee"[All Fields] AND "ligament"[All Fields] AND "biomechanical"[All Fields])) OR ("in vitro"[All Fields] AND "laxity"[All Fields] AND ("ligaments"[MeSH Terms] OR "ligaments"[All Fields] OR "ligament"[All Fields]) AND "knee"[All Fields])

**Web of Science**

PY=(1996-2016) AND TI=(posteromedial OR posterolateral OR medial OR lateral OR varus OR valgus OR anterior OR posterior) AND TI=(structures OR Ligament) AND TI=(vitro OR in-vitro OR biomechanica OR cadaveric) AND TI=(knee OR knee joint) OR TI=(laxity and knee)

**A.2:** Mean values and standard deviations (SD) of the stability values derived by the meta-analysis with regard to the flexion angle. One column showing values of all data and data of most often used testing method.

**Anterior Translation**

| | All Data | | 134 N, RTD | |
|---|---|---|---|---|
| **Flexion Angle [Deg]** | **Mean Tranlsation [mm]** | **SD [mm]** | **Mean Tranlsation [mm]** | **SD [mm]** |
| **0** | 4.31 | 1.45 | 4.48 | 1.47 |
| **15** | 6.52 | 2.13 | 7.01 | 2.30 |
| **30** | 7.38 | 2.28 | 8.28 | 2.52 |
| **60** | 6.54 | 2.28 | 7.48 | 2.49 |
| **90** | 5.79 | 2.22 | 6.55 | 2.60 |

**Posterior Translation**

| | All Data | | 134 N, RTD | |
|---|---|---|---|---|
| **Flexion Angle [Deg]** | **Mean Tranlsation [mm]** | **SD [mm]** | **Mean Tranlsation [mm]** | **SD [mm]** |
| **0** | 5.51 | 1.46 | 6.35 | 1.73 |
| **15** | 5.57 | 1.44 | 6.18 | 1.36 |
| **30** | 5.99 | 1.71 | 6.25 | 2.17 |
| **60** | 4.74 | 1.58 | 5.04 | 1.96 |
| **90** | 5.01 | 1.62 | 5.49 | 1.97 |

**Varus Rotation**

| | All Data | | 10 Nm, RTD | |
|---|---|---|---|---|
| **Flexion Angle [Deg]** | **Mean Rotation [Deg]** | **SD [Deg]** | **Mean Rotation [Deg]** | **SD [Deg]** |
| **0** | 2.49 | 1.05 | 2.38 | 0.86 |
| **30** | 4.30 | 1.26 | 3.70 | 1.34 |
| **60** | 4.53 | 1.33 | 4.66 | 1.34 |
| **90** | 4.92 | 1.33 | 4.72 | 1.38 |

**Valgus Rotation**

| | All Data | | 10 Nm, RTD | |
|---|---|---|---|---|
| **Flexion Angle [Deg]** | **Mean Rotation [Deg]** | **SD [Deg]** | **Mean Rotation [Deg]** | **SD [Deg]** |
| **0** | 3.00 | 0.65 | 3.38 | 0.65 |
| **30** | 5.45 | 1.80 | 5.13 | 1.97 |
| **60** | 6.96 | 2.96 | 6.65 | 3.37 |
| **90** | 6.67 | 2.45 | 6.43 | 3.17 |

**Internal Rotation**

| | All Data | | 5 Nm, RTD | |
|---|---|---|---|---|
| **Flexion Angle [Deg]** | **Mean Rotation [Deg]** | **SD [Deg]** | **Mean Rotation [Deg]** | **SD [Deg]** |
| **0** | 10.98 | 3.36 | 11.12 | 4.50 |
| **30** | 18.27 | 5.46 | 18.50 | 6.08 |
| **60** | 19.39 | 5.88 | 20.44 | 6.66 |
| **90** | 18.09 | 5.86 | 18.08 | 6.37 |

**nal Ro**

| | All Data | 5 Nm, RTD |
|---|---|---|

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| Flexion Angle [Deg] | Mean Rotation [Deg] | SD [Deg] | Mean Rotation [Deg] | SD [Deg] |
|---|---|---|---|---|
| **0** | 11.66 | 4.30 | 12.00 | 4.35 |
| **30** | 17.00 | 4.93 | 16.04 | 5.22 |
| **60** | 17.63 | 5.69 | 18.45 | 5.99 |
| **90** | 17.84 | 5.71 | 18.28 | 5.97 |

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