

Appendix

Full Search Strategy

PubMed: “arthroplasty, replacement, knee”[MeSH Terms] OR (“arthroplasty”[All Fields] AND “replacement”[All Fields] AND “knee”[All Fields]) OR “knee replacement arthroplasty”[All Fields] OR (“total”[All Fields] AND “knee”[All Fields] AND “arthroplasty”[All Fields]) OR “total knee arthroplasty”[All Fields] AND ((patient-specific [Title/Abstract]) OR (custom-fit [Title/Abstract]) OR (patient-matched [Title/Abstract]) or (custom-made guides [Title/Abstract])) AND (“2010/12/31”[Date - Publication]: “2015/12/31”[Date - Publication]).

Embase: (‘knee’ or ‘knee’/exp or knee) and [2011-2015]/py or (‘total knee arthroplasty’/exp or ‘total knee arthroplasty’ and [2011-2016]/py) and (‘patient-specific’ or ‘custom-fit’ or ‘patient-matched’ or ‘custom-made’).

Fig. E-1

Ratio of relative risk of tibial malalignment in the coronal plane.

Fig. E-2

Ratio of relative risk of tibial malalignment in the sagittal plane.

Fig. E-3

Ratio of relative risk of femoral malalignment in the coronal plane.

Fig. E-4

Ratio of relative risk of femoral malalignment in the sagittal plane.

Fig. E-5

Ratio of relative risk of femoral malalignment in the axial plane.

Fig. E-6

Difference in tourniquet time between patient-specific instrumentation (PSI) and standard instrumentation.

Fig. E-7

Ratio of relative risk of transfusion.

Fig. E-8

Difference in knee score between patient-specific instrumentation (PSI) and standard instrumentation.

Fig. E-9

Difference in function score between patient-specific instrumentation (PSI) and standard instrumentation.

Fig. E-10

Funnel plot of publication bias for mechanical axis malalignment, with pseudo 95% confidence limits.

Fig. E-11

Funnel plot of publication bias for operative time, with pseudo 95% confidence limits.

Fig. E-12

Funnel plot of publication bias for blood loss, with pseudo 95% confidence limits.