

## Search strategy

Initial search:

regular references - total d.d. 9-5-2019: 400 erfs, from:

- PubMed: 293 [Label 1-293]
- Embase: 303, of which 41 unique [Label 294-348]
- Web of Science: 256, of which 57 unique [Label 349-409]
- COCHRANE Library: 17, of which 6 unique [Label 410-415]
- Emcare: 192, of which 3 unique [Label 428-437]
- \*missing RefID/Labels are hand deleted double refs

Meeting abstract refs- totaal d.d. 9-5-2019: 43 refs, from:

- Embase: 43 [Label 1-43]
- Web of Science: 1, of which 0 unique
- COCHRANE Library: 2, of which 0 unique

-> EndNote-XML-exports 1

Search Updated on 19-2-2021:

regular references - total: 495 refs, 95 new, from:

- PubMed: 347, of which 53 new&unique
- Embase: 345, of which 18 new&unique
- Web of Science: 309, of which 21 new&unique
- COCHRANE Library: 17, of which 2 new&unique
- Emcare: 245, of which 1 new&unique

Meeting abstract refs- totaal 48 refs, of which 5 new, from:

- Embase: 48 of which 5 new&unique
- Web of Science: 1, of which 0 new&unique
- COCHRANE Library: 2, of which 0 new&unique

-> EndNote-XML-exports 2

Systematic review

**Custom-made 3D printed acetabular components in revision total hip arthroplasty**

- Revision hip arthroplasty
- Paprosky 2C, 3A, 3B, AAOS type 3, 4 acetabular defects
- Custom designed cage/implant
- Machined or 3D titanium printed

Keywords:

**acetabular deficiency**

custom triflange

revision total hip arthroplasty,  
revision hip arthroplasty  
severe acetabular defect,  
Paprosky IIIB, Paprosky IIIA, Paprosky IIC,  
**bone loss,**  
custom triflange acetabular component,  
Custom Acetabular Cage,  
**Revision THA,**  
**Severe Bone Defects,**  
**AAOS type III, AAOS type IV, ...**

Not found refs:

29783895 and 30467646

The use of an Ossis custom 3D-printed tri-flanged acetabular implant for major bone loss:  
minimum 2-year follow-up  
Author David C Kieser  
URL <https://doi.org/10.1177/1120700018760817>  
Volume 28 Issue 6 Pages 668-674  
HIP International

Three-dimension-printed custom-made prosthetic reconstructions: from  
revision surgery to oncologic reconstructions  
Author Andrea Angelini  
URL <https://doi.org/10.1007/s00264-018-4232-0>  
Volume 43 Issue 1 Pages 123-132  
International Orthopaedics

Databases:

### **PubMed**

<http://www.ncbi.nlm.nih.gov/pubmed?otool=leiden>

twofold strategy:

((("Arthroplasty, Replacement, Hip"[Mesh] OR "Hip Prosthesis Implantation"[tw] OR "Hip Prosthesis Implantations"[tw] OR "Hip Replacement Arthroplasty"[tw] OR "Hip Replacement Arthroplasties"[tw] OR "Hip Arthroplasty"[tw] OR "Hip Arthroplasties"[tw] OR "Hip Prosthesis"[Mesh] OR "Hip Prosthesis"[tw] OR "Hip Prostheses"[tw] OR "hip surgery"[tw] OR "Hip/surgery"[mesh] OR "Total Hip"[tw] OR "Total Hip Replacements"[tw] OR "Total Hip Replacement"[tw] OR "THA"[tw] OR "THR"[tw] OR ("Arthroplasty"[Mesh] OR "Prosthesis"[tw] OR "Prostheses"[tw] OR "Replacement"[tw] OR "reconstruction"[tw] OR reconstruct\*[tw] OR "triflange"[tw] OR triflang\*[tw]) AND ("Hip"[tw] OR "Hips"[tw]))) AND ("revision"[tw] OR revisi\*[tw] OR reviz\*[tw] OR "Reoperation"[Mesh] OR "Reoperation"[tw] OR "Reoperation"[tw] OR Reoperat\*[tw] OR "Re-operation"[tw] OR Re-operat\*[tw] OR "Prosthesis Failure"[mesh] OR "Arthroplasty, Replacement, Hip/adverse effects"[Mesh] OR "Hip Prosthesis/adverse effects"[Mesh] OR "failure"[tw] OR failure\*[tw] OR "failed"[tw] OR "AAOS "[tw] OR "acetabular defect"[tw] OR "acetabular defects"[tw] OR "acetabular deficiency"[tw] OR

"acetabular deficiencies"[tw] OR "acetabulum defect"[tw] OR "acetabulum defects"[tw] OR "acetabulum deficiency"[tw] OR "acetabulum deficiencies"[tw] OR "Paprosky"[tw] OR Paprosky\*[tw] OR "Bone Defects"[tw] OR "bone defect"[tw] OR "pelvic defect"[tw] OR "pelvic defects"[tw] OR "pelvis defect"[tw] OR "pelvis defects"[tw] OR "bone loss"[tw] OR "Osteolysis"[mesh] OR "Osteolysis"[tw]) AND ("custom"[tw] OR "custom-made"[tw] OR "custommade"[tw] OR custom-mad\*[tw] OR custommad\*[tw] OR "customized"[tw] OR "customised"[tw] OR "custom design"[tw] OR custom design\*[tw] OR "customization"[tw] OR "customisation"[tw] OR "custom triflange"[tw] OR "personalized"[tw] OR "personalised"[tw] OR "patient specific"[tw] OR patientspecif\*[tw] OR "Precision Medicine"[Mesh] OR "osis"[tw] OR "implant cast"[tiab] OR "implantcast"[tiab] OR "materialise"[tiab]) AND ("Acetabulum"[Mesh] OR "Acetabulum"[tw] OR acetabul\*[tw] OR "acetabular"[tw] OR acetabular\*[tw] OR "acetabular component"[tw] OR "acetabular components"[tw])) **OR** (("Arthroplasty, Replacement, Hip"[mesh] OR "Hip Prosthesis Implantation"[tw] OR "Hip Prosthesis Implantations"[tw] OR "Hip Replacement Arthroplasty"[tw] OR "Hip Replacement Arthroplasties"[tw] OR "Hip Arthroplasty"[tw] OR "Hip Arthroplasties"[tw] OR "Hip Prosthesis"[mesh] OR "Hip Prosthesis"[tw] OR "Hip Prostheses"[tw] OR "Total Hip"[tw] OR "Total Hip Replacements"[tw] OR "Total Hip Replacement"[tw] OR "THA"[tw] OR "THR"[tw] OR (("Arthroplasty"[mesh] OR "Prosthesis"[tw] OR "Prostheses"[tw] OR "Replacement"[tw] OR "reconstruction"[tw] OR reconstruct\*[tw] OR "triflange"[tw] OR triflang\*[tw]) AND ("Hip"[tw] OR "Hips"[tw]))) AND ("revision"[tw] OR revisi\*[tw] OR reviz\*[tw] OR "Reoperation"[mesh] OR "Reoperation"[tw] OR "Reoperation"[tw] OR Reoperat\*[tw] OR "Re-operation"[tw] OR Re-operat\*[tw] OR "Prosthesis Failure"[mesh] OR "Arthroplasty, Replacement, Hip/adverse effects"[mesh] OR "Hip Prosthesis/adverse effects"[mesh] OR "failure"[tw] OR failure\*[tw] OR "failed"[tw] OR "AAOS "[tw] OR "acetabular defect"[tw] OR "acetabular defects"[tw] OR "acetabular deficiency"[tw] OR "acetabular deficiencies"[tw] OR "acetabulum defect"[tw] OR "acetabulum defects"[tw] OR "acetabulum deficiency"[tw] OR "acetabulum deficiencies"[tw] OR "Paprosky"[tw] OR Paprosky\*[tw] OR "Bone Defects"[tw] OR "bone defect"[tw] OR "pelvic defect"[tw] OR "pelvic defects"[tw] OR "pelvis defect"[tw] OR "pelvis defects"[tw] OR "bone loss"[tw] OR "Osteolysis"[mesh] OR "Osteolysis"[tw]) AND ("custom"[ti] OR "custom-made"[ti] OR "custommade"[ti] OR custom-mad\*[ti] OR custommad\*[ti] OR "customized"[ti] OR "customised"[ti] OR "custom design"[ti] OR custom design\*[ti] OR "customization"[ti] OR "customisation"[ti] OR "custom triflange"[ti] OR "personalized"[ti] OR "personalised"[ti] OR "patient specific"[ti] OR patientspecif\*[ti] OR "Precision Medicine"[majr] OR "osis"[tw] OR "implant cast"[ti] OR "implantcast"[ti] OR "materialise"[ti]))))

## Embase

<http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=main&MODE=ovid&D=oemezd>

((exp "Hip Arthroplasty"/ OR "Hip Prosthesis Implantation".mp OR "Hip Prosthesis Implantations".mp OR "Hip Replacement Arthroplasty".mp OR "Hip Replacement Arthroplasties".mp OR "Hip Arthroplasty".mp OR "Hip Arthroplasties".mp OR exp "Hip Prosthesis"/ OR "Hip Prosthesis".mp OR "Hip Prostheses".mp OR "hip surgery".mp OR exp "Hip"/su OR exp "Total Hip Prosthesis"/ OR "Total Hip".mp OR "Total Hip Replacements".mp OR "Total Hip Replacement".mp OR "THA".mp OR "THR".mp OR ((exp "Arthroplasty"/ OR "Prosthesis".mp OR "Prostheses".mp OR "Replacement".mp OR

"reconstruction".mp OR reconstruct\*.mp OR "triflange".mp OR triflang\*.mp) AND ("Hip".mp OR "Hips".mp))) AND ("revision".mp OR revisi\*.mp OR reviz\*.mp OR "Reoperation"/ OR "Reoperation".mp OR "Reoperation".mp OR Reoperat\*.mp OR "Re-operation".mp OR Re-operat\*.mp OR exp "Prosthesis Complication"/ OR "failure".mp OR failure\*.mp OR "failed".mp OR "AAOS ".mp OR "acetabular defect".mp OR "acetabular defects".mp OR "acetabular deficiency".mp OR "acetabular deficiencies".mp OR "acetabulum defect".mp OR "acetabulum defects".mp OR "acetabulum deficiency".mp OR "acetabulum deficiencies".mp OR "Paprosky".mp OR Paprosky\*.mp OR "Bone Defects".mp OR "bone defect".mp OR "pelvic defect".mp OR "pelvic defects".mp OR "pelvis defect".mp OR "pelvis defects".mp OR "bone loss".mp OR exp "Osteolysis"/ OR "Osteolysis".mp OR exp "Hip Arthroplasty"/ae OR exp "Hip Prosthesis"/ae OR "Total Hip Prosthesis"/ae) AND ("custom".mp OR "custom-made".mp OR "custommade".mp OR custom-mad\*.mp OR custommad\*.mp OR "customized".mp OR "customised".mp OR "custom design".mp OR custom design\*.mp OR "customization".mp OR "customisation".mp OR "custom triflange".mp OR "personalized".mp OR "personalised".mp OR "patient specific".mp OR patientspecif\*.mp OR "personalized medicine"/ OR "ossis".mp OR "implant cast".ti,ab OR "implantcast".ti,ab OR "materialise".ti,ab) AND (exp "Acetabulum"/ OR "Acetabulum".mp OR acetabul\*.mp OR "acetabular".mp OR acetabular\*.mp OR "acetabular component".mp OR "acetabular components".mp)) **OR** ((exp "Hip Arthroplasty"/ OR "Hip Prosthesis Implantation".mp OR "Hip Prosthesis Implantations".mp OR "Hip Replacement Arthroplasty".mp OR "Hip Replacement Arthroplasties".mp OR "Hip Arthroplasty".mp OR "Hip Arthroplasties".mp OR exp "Hip Prosthesis"/ OR exp "Total Hip Prosthesis"/ OR "Hip Prosthesis".mp OR "Hip Prostheses".mp OR "Total Hip".mp OR "Total Hip Replacements".mp OR "Total Hip Replacement".mp OR "THA".mp OR "THR".mp OR ((exp "Arthroplasty"/ OR "Prosthesis".mp OR "Prostheses".mp OR "Replacement".mp OR "reconstruction".mp OR reconstruct\*.mp OR "triflange".mp OR triflang\*.mp) AND ("Hip".mp OR "Hips".mp))) AND ("revision".mp OR revisi\*.mp OR reviz\*.mp OR "Reoperation"/ OR "Reoperation".mp OR "Reoperation".mp OR Reoperat\*.mp OR "Re-operation".mp OR Re-operat\*.mp OR exp "Prosthesis Complication"/ OR "failure".mp OR failure\*.mp OR "failed".mp OR "AAOS ".mp OR "acetabular defect".mp OR "acetabular defects".mp OR "acetabular deficiency".mp OR "acetabular deficiencies".mp OR "acetabulum defect".mp OR "acetabulum defects".mp OR "acetabulum deficiency".mp OR "acetabulum deficiencies".mp OR "Paprosky".mp OR Paprosky\*.mp OR "Bone Defects".mp OR "bone defect".mp OR "pelvic defect".mp OR "pelvic defects".mp OR "pelvis defect".mp OR "pelvis defects".mp OR "bone loss".mp OR exp "Osteolysis"/ OR "Osteolysis".mp OR exp "Hip Arthroplasty"/ae OR exp "Hip Prosthesis"/ae OR "Total Hip Prosthesis"/ae) AND ("custom".ti OR "custom-made".ti OR "custommade".ti OR custom-mad\*.ti OR custommad\*.ti OR "customized".ti OR "customised".ti OR "custom design".ti OR custom design\*.ti OR "customization".ti OR "customisation".ti OR "custom triflange".ti OR "personalized".ti OR "personalised".ti OR "patient specific".ti OR patientspecif\*.ti OR "Personalized Medicine"/ OR "ossis".mp OR "implant cast".ti OR "implantcast".ti OR "materialise".ti)))

**Web of Science**

<http://isiknowledge.com/wos>

((ts=("Hip Arthroplasty" OR "Hip Prosthesis Implantation" OR "Hip Prosthesis  
 Implantations" OR "Hip Replacement Arthroplasty" OR "Hip Replacement Arthroplasties"  
 OR "Hip Arthroplasty" OR "Hip Arthroplasties" OR "Hip Prosthesis" OR "Hip Prosthesis"  
 OR "Hip Prostheses" OR "hip surgery" OR "Total Hip Prosthesis" OR "Total Hip" OR "Total  
 Hip Replacements" OR "Total Hip Replacement" OR "THA" OR "THR" OR (("Arthroplasty"  
 OR "Prosthesis" OR "Prostheses" OR "Replacement" OR "reconstruction" OR reconstruct\*  
 OR "triflange" OR triflang\*) AND ("Hip" OR "Hips")))) AND ts=("revision" OR revisi\* OR  
 reviz\* OR "Reoperation" OR "Reoperation" OR "Reoperation" OR Reoperat\* OR  
 "Re-operation" OR Re-operat\* OR "Prosthesis Complication" OR "failure" OR  
 failure\* OR "failed" OR "AAOS" OR "acetabular defect" OR "acetabular defects"  
 OR "acetabular deficiency" OR "acetabular deficiencies" OR "acetabulum defect" OR  
 "acetabulum defects" OR "acetabulum deficiency" OR "acetabulum deficiencies" OR  
 "Paprosky" OR Paprosky\* OR "Bone Defects" OR "bone defect" OR "pelvic defect"  
 OR "pelvic defects" OR "pelvis defect" OR "pelvis defects" OR "bone loss" OR  
 "Osteolysis" OR "Osteolysis") AND ts=("custom" OR "custom-made" OR "custommade"  
 OR custom-mad\* OR custommad\* OR "customized" OR "customised" OR "custom design"  
 OR custom design\* OR "customization" OR "customisation" OR "custom triflange" OR  
 "personalized" OR "personalised" OR "patient specific" OR patientspecif\* OR "personalized  
 medicine" OR "ossis" OR "implant cast" OR "implantcast" OR "materialise") AND  
 ts=("Acetabulum" OR "Acetabulum" OR acetabul\* OR "acetabular" OR acetabular\* OR  
 "acetabular component" OR "acetabular components")) OR (ts=("Hip Arthroplasty" OR  
 "Hip Prosthesis Implantation" OR "Hip Prosthesis Implantations" OR "Hip Replacement  
 Arthroplasty" OR "Hip Replacement Arthroplasties" OR "Hip Arthroplasty" OR "Hip  
 Arthroplasties" OR "Hip Prosthesis" OR "Total Hip Prosthesis" OR "Hip Prosthesis" OR "Hip  
 Prostheses" OR "Total Hip" OR "Total Hip Replacements" OR "Total Hip Replacement" OR  
 "THA" OR "THR" OR (("Arthroplasty" OR "Prosthesis" OR "Prostheses" OR "Replacement"  
 OR "reconstruction" OR reconstruct\* OR "triflange" OR triflang\*) AND ("Hip" OR "Hips"))))  
 AND ts=("revision" OR revisi\* OR reviz\* OR "Reoperation" OR "Reoperation" OR  
 "Reoperation" OR Reoperat\* OR "Re-operation" OR Re-operat\* OR "Prosthesis  
 Complication" OR "failure" OR failure\* OR "failed" OR "AAOS" OR "acetabular  
 defect" OR "acetabular defects" OR "acetabular deficiency" OR "acetabular  
 deficiencies" OR "acetabulum defect" OR "acetabulum defects" OR "acetabulum  
 deficiency" OR "acetabulum deficiencies" OR "Paprosky" OR Paprosky\* OR "Bone  
 Defects" OR "bone defect" OR "pelvic defect" OR "pelvic defects" OR "pelvis defect"  
 OR "pelvis defects" OR "bone loss" OR "Osteolysis" OR "Osteolysis") AND  
 ti=("custom" OR "custom-made" OR "custommade" OR custom-mad\* OR custommad\* OR  
 "customized" OR "customised" OR "custom design" OR custom design\* OR "customization"  
 OR "customisation" OR "custom triflange" OR "personalized" OR "personalised" OR "patient  
 specific" OR patientspecif\* OR "Personalized Medicine" OR "ossis" OR "implant cast" OR  
 "implantcast" OR "materialise"))))

## Cochrane

<http://www.cochranelibrary.com/>

(((("Hip Arthroplasty" OR "Hip Prosthesis Implantation" OR "Hip Prosthesis Implantations"  
 OR "Hip Replacement Arthroplasty" OR "Hip Replacement Arthroplasties" OR "Hip  
 Arthroplasty" OR "Hip Arthroplasties" OR "Hip Prosthesis" OR "Hip Prosthesis" OR "Hip  
 Prostheses" OR "hip surgery" OR "Total Hip Prosthesis" OR "Total Hip" OR "Total Hip  
 Replacements" OR "Total Hip Replacement" OR "THA" OR "THR" OR ("Arthroplasty" OR

"Prosthesis" OR "Prostheses" OR "Replacement" OR "reconstruction" OR reconstruct\* OR "triflange" OR triflang\*) AND ("Hip" OR "Hips")) AND ("revision" OR revisi\* OR reviz\* OR "Reoperation" OR "Reoperation" OR "Reoperation" OR Reoperat\* OR "Re-operation" OR Re-operat\* OR "Prosthesis Complication" OR "failure" OR failure\* OR "failed" OR "AAOS" OR "acetabular defect" OR "acetabular defects" OR "acetabular deficiency" OR "acetabular deficiencies" OR "acetabulum defect" OR "acetabulum defects" OR "acetabulum deficiency" OR "acetabulum deficiencies" OR "Paprosky" OR Paprosky\* OR "Bone Defects" OR "bone defect" OR "pelvic defect" OR "pelvic defects" OR "pelvis defect" OR "pelvis defects" OR "bone loss" OR "Osteolysis" OR "Osteolysis") AND ("custom" OR "custom-made" OR "custommade" OR custom-mad\* OR custommad\* OR "customized" OR "customised" OR "custom design" OR custom design\* OR "customization" OR "customisation" OR "custom triflange" OR "personalized" OR "personalised" OR "patient specific" OR patientspecif\* OR "personalized medicine" OR "ossis" OR "implant cast" OR "implantcast" OR "materialise") AND ("Acetabulum" OR "Acetabulum" OR acetabul\* OR "acetabular" OR acetabular\* OR "acetabular component" OR "acetabular components")):ti,ab,kw **OR** ("Hip Arthroplasty" OR "Hip Prosthesis Implantation" OR "Hip Prosthesis Implantations" OR "Hip Replacement Arthroplasty" OR "Hip Replacement Arthroplasties" OR "Hip Arthroplasty" OR "Hip Arthroplasties" OR "Hip Prosthesis" OR "Total Hip Prosthesis" OR "Hip Prosthesis" OR "Hip Prostheses" OR "Total Hip" OR "Total Hip Replacements" OR "Total Hip Replacement" OR "THA" OR "THR" OR ("Arthroplasty" OR "Prosthesis" OR "Prostheses" OR "Replacement" OR "reconstruction" OR reconstruct\* OR "triflange" OR triflang\*) AND ("Hip" OR "Hips")):ti,ab,kw AND ("revision" OR revisi\* OR reviz\* OR "Reoperation" OR "Reoperation" OR "Reoperation" OR Reoperat\* OR "Re-operation" OR Re-operat\* OR "Prosthesis Complication" OR "failure" OR failure\* OR "failed" OR "AAOS" OR "acetabular defect" OR "acetabular defects" OR "acetabular deficiency" OR "acetabular deficiencies" OR "acetabulum defect" OR "acetabulum defects" OR "acetabulum deficiency" OR "acetabulum deficiencies" OR "Paprosky" OR Paprosky\* OR "Bone Defects" OR "bone defect" OR "pelvic defect" OR "pelvic defects" OR "pelvis defect" OR "pelvis defects" OR "bone loss" OR "Osteolysis" OR "Osteolysis"):ti,ab,kw AND ("custom" OR "custom-made" OR "custommade" OR custom-mad\* OR custommad\* OR "customized" OR "customised" OR "custom design" OR custom design\* OR "customization" OR "customisation" OR "custom triflange" OR "personalized" OR "personalised" OR "patient specific" OR patientspecif\* OR "Personalized Medicine" OR "ossis" OR "implant cast" OR "implantcast" OR "materialise"):ti))

## **Emcare**

<http://ovidsp.ovid.com/ovidweb.cgi?T=JS&NEWS=n&CSC=Y&PAGE=main&D=emcr>

((exp "Hip Arthroplasty"/ OR "Hip Prosthesis Implantation".mp OR "Hip Prosthesis Implantations".mp OR "Hip Replacement Arthroplasty".mp OR "Hip Replacement Arthroplasties".mp OR "Hip Arthroplasty".mp OR "Hip Arthroplasties".mp OR exp "Hip Prosthesis"/ OR "Hip Prosthesis".mp OR "Hip Prostheses".mp OR "hip surgery".mp OR exp "Total Hip Prosthesis"/ OR "Total Hip".mp OR "Total Hip Replacements".mp OR "Total Hip Replacement".mp OR "THA".mp OR "THR".mp OR ((exp "Arthroplasty"/ OR "Prosthesis".mp OR "Prostheses".mp OR "Replacement".mp OR "reconstruction".mp OR reconstruct\*.mp OR "triflange".mp OR triflang\*.mp) AND ("Hip".mp OR "Hips".mp))) AND ("revision".mp OR revisi\*.mp OR reviz\*.mp OR "Reoperation"/ OR "Reoperation".mp OR "Reoperation".mp OR Reoperat\*.mp OR "Re-operation".mp

OR Re-operat\*.mp OR exp "Prosthesis Complication"/ OR "failure".mp OR failure\*.mp OR "failed".mp OR "AAOS ".mp OR "acetabular defect".mp OR "acetabular defects".mp OR "acetabular deficiency".mp OR "acetabular deficiencies".mp OR "acetabulum defect".mp OR "acetabulum defects".mp OR "acetabulum deficiency".mp OR "acetabulum deficiencies".mp OR "Paprosky".mp OR Paprosky\*.mp OR "Bone Defects".mp OR "bone defect".mp OR "pelvic defect".mp OR "pelvic defects".mp OR "pelvis defect".mp OR "pelvis defects".mp OR "bone loss".mp OR exp "Osteolysis"/ OR "Osteolysis".mp) AND ("custom".mp OR "custom-made".mp OR "custommade".mp OR custom-mad\*.mp OR custommad\*.mp OR "customized".mp OR "customised".mp OR "custom design".mp OR custom design\*.mp OR "customization".mp OR "customisation".mp OR "custom triflange".mp OR "personalized".mp OR "personalised".mp OR "patient specific".mp OR patientspecif\*.mp OR "personalized medicine"/ OR "ossis".mp OR "implant cast".ti,ab OR "implantcast".ti,ab OR "materialise".ti,ab) AND (exp "Acetabulum"/ OR "Acetabulum".mp OR acetabul\*.mp OR "acetabular".mp OR acetabular\*.mp OR "acetabular component".mp OR "acetabular components".mp)) OR ((exp "Hip Arthroplasty"/ OR "Hip Prosthesis Implantation".mp OR "Hip Prosthesis Implantations".mp OR "Hip Replacement Arthroplasty".mp OR "Hip Replacement Arthroplasties".mp OR "Hip Arthroplasty".mp OR "Hip Arthroplasties".mp OR exp "Hip Prosthesis"/ OR exp "Total Hip Prosthesis"/ OR "Hip Prosthesis".mp OR "Hip Prostheses".mp OR "Total Hip".mp OR "Total Hip Replacements".mp OR "Total Hip Replacement".mp OR "THA".mp OR "THR".mp OR ((exp "Arthroplasty"/ OR "Prosthesis".mp OR "Prostheses".mp OR "Replacement".mp OR "reconstruction".mp OR reconstruct\*.mp OR "triflange".mp OR triflang\*.mp) AND ("Hip".mp OR "Hips".mp))) AND ("revision".mp OR revisi\*.mp OR reviz\*.mp OR "Reoperation"/ OR "Reoperation".mp OR "Reoperation".mp OR Reoperat\*.mp OR "Re-operation".mp OR Re-operat\*.mp OR exp "Prosthesis Complication"/ OR "failure".mp OR failure\*.mp OR "failed".mp OR "AAOS ".mp OR "acetabular defect".mp OR "acetabular defects".mp OR "acetabular deficiency".mp OR "acetabular deficiencies".mp OR "acetabulum defect".mp OR "acetabulum defects".mp OR "acetabulum deficiency".mp OR "acetabulum deficiencies".mp OR "Paprosky".mp OR Paprosky\*.mp OR "Bone Defects".mp OR "bone defect".mp OR "pelvic defect".mp OR "pelvic defects".mp OR "pelvis defect".mp OR "pelvis defects".mp OR "bone loss".mp OR exp "Osteolysis"/ OR "Osteolysis".mp) AND ("custom".ti OR "custom-made".ti OR "custommade".ti OR custom-mad\*.ti OR custommad\*.ti OR "customized".ti OR "customised".ti OR "custom design".ti OR custom design\*.ti OR "customization".ti OR "customisation".ti OR "custom triflange".ti OR "personalized".ti OR "personalised".ti OR "patient specific".ti OR patientspecif\*.ti OR "Personalized Medicine"/ OR "ossis".mp OR "implant cast".ti OR "implantcast".ti OR "materialise".ti)))