

ISAR congress 1-3 June 2019 Leiden



Friday Evening, 31 May 2019

17:30 – 19:00

Reception offered by Mayor and city council of Leiden,
Location Town Hall Leiden “De Burgerzaal” address Stadhuisplein 1, Leiden



Town Hall Leiden

Saturday, 1 June 2019

7:00 - 8:00 Registration Stadsgehoorzaal, Breestraat 60, Leiden

8:00 - 8:15 Welcome: Liz Paxton and Rob Nelissen

8:15 - 10:00 Methodology & Statistics Session

Moderators: Liza van Steenbergen & Heather Prentice

Predictive Analytics

8.15-8.40 Artificial Intelligence: opportunities and limits: Berend Stoel

8.40-8.55 Development predictive algorithm with machine learning: Bart Geerts

9.00-9.35 Biostatistics (immortal time-bias, survival, competing risk): Marta Fiocco

9.35-10.00 Data Visualisation workshop: Nicole Pratt



Venue: Stadsgehoorzaal

10:00 - 10:30 Break & Poster Walk
Theme Hip & Knee posters 18, 38, 7, 72, 78, 109, 111 (2 min each)
moderators Wim Schreurs & Marieke Ostendorf

10:30 - 11:25 Methodology papers (7 min and 2 min discussion)
 Moderators: Liza van Steenbergen & Liz Paxton

No 62	Predicting 90-day readmissions with machine learning following TJA.	Mark Alan Fontana, Catherine H. MacLean, Stephen Lyman	Fontana
No 49	Predicting patient-specific mortality after hip or knee replacement: An algorithm developed using the National Joint Registry and independently validated using the Norwegian Arthroplasty Register.	Lea Trela-Larsen, Christoffer Bartz-Johannessen, Adrian Sayers, Parham Aram, Eugene McCloskey, Visakan Kadirkamanathan, Ashley Blom, Stein Atle Lie, Ove Furnes, J Mark Wilkinson	Wilkinson
No 79	Pseudo-individual-level patient data analysis meta-analysis of Kaplan-Meier curves: Applications for arthroplasty registries.	Adrian Sayers	Sayers
No 102	Using restricted cubic splines to demonstrate a change in practice using data from the AOANJRR.	Michelle Lorimer, Stephen Graves, Richard de Steiger, Peter Lewis, Ian Harris	Lorimer
No 31	Enhancing joint replacement outcomes through registry linkage with national health administrative data in Australia.	Katherine Duszynski, Stephen E Graves, Nicole Pratt, Maria Inacio, Richard de Steiger, Ian Harris, Ilana Ackerman, Louisa Jorm, Michelle Lorimer	Pratt
No 40	Risk adjusted Cumulative Sum Charts as a Quality Improvement Toolkit to Monitor Early Revisions with Monte-Carlo Simulation and Application to Michigan Arthroplasty Registry Data.	Thomas (Huiyong) Zheng, Richard E. Hughes, Brian R. Hallstrom, Rochelle Igrisan	Zheng

11:25 - 11:45 ISAR Current and Future State: Liz Paxton/ISAR Working group chairs

11:45 - 12:10 IPL demonstration: Paul Haisman

12:10 - 13:00 Lunch

13:00 - 14:35 Knees: Surgical techniques and Implant designs (7 min and 2 min discussion)
Moderators: Otto Robertsson & Rob Nelissen

No 65	Long term registry results of the patello-femoral joint in TKJR.	Peter Devane, John McKie, Chris Frampton	Devane
No 66	Isolated patellofemoral replacement - A "Good" Operation?	Peter Devane, John McKie, Chris Frampton.	Devane
No 36	Radiostereometric analysis and registries - 1.850.000 total knee replacements with ten-year follow-up.	Shaho Hasan, Rob G.H.H. Nelissen, Bart L. Kaptein, Bart G. Pijls	Hasan
No 12	Comparable mid-term revision rate for primary cementless and cemented total knee arthroplasty - A national registry study.	Quispel CR, Duivenvoorden T, Beekhuizen SR, De Ridder R, Verburg H, Van Steenbergen LN	Quispel
No 73	Does eliminating tourniquet use in total knee arthroplasty affect outcomes?	Alexa Clement, Ann-Marie Surette, John Keggi, Robert Kennon, Jonathan Abrams, Sivasenthil Arumugam, Smitha Vellanky, Sanjay Sinha, Michael Cremins	Cremins
No 87	The new Oxford unicompartmental knee replacement. Results from The Norwegian Arthroplasty Register 2012-2017.	Øystein Skåden, Ove Furnes O Stein Håkon Lygre, Mona Badawy, Øystein Gøthesen	Skåden
No 60	Primary constrained and hinged total knee arthroplasty – short and mid-term revision risk compared to unconstrained total knee arthroplasty - A report on 401 cases from the Norwegian Arthroplasty Register.	Badawy M, Fenstad AM, and Furnes O	Fenstad
No 29	The early outcome of total knee replacement using image derived instrumentation.	Peter Lewis, Stephen E Graves, Richard de Steiger, Ian Harris, William Donnelly, Michelle Lorimer, Alana Cuthbert, Yi Peng, Alesha Hatton	Lewis
No 17	Higher risk of loosening for a pegged as compared to a stemmed tibia baseplate.	Otto Robertsson, Martin Sundberg, Annette W-Dahl, Erdem Aras Sezgin, Lars Lidgren	Robertsson
No 94	Medial pivot compared to minimally stabilized design in total knee replacement - A report from the Australian and Norwegian joint replacement registries, 2005-2017.	Frank Øhrn, Øystein Gøthesen, Stein Håkon Lygre, Stephan Maximillian Røhrl, Peter Lewis, Ove Furnes	Øhrn

14:35 - 15:05 Break & Poster Walk

Theme Ankle & Shoulder posters 8, 19, 58, 2, 27, 46, 56 (2 min each)
moderators Wim Schreurs & Marieke Ostendorf

15:05 - 16:30 Risk factors Paper Session (7 min and 2 min discussion)

Moderators: Mark Wilkinson & Ron Navarro

No 113/114 combined	Risk of revision and mortality following primary total hip/Knee arthroplasty for osteoarthritis in patients aged >80 years.	Stephen E Graves, Richard de Steiger, Peter Lewis, Ian Harris, William Donnelly, Michelle Lorimer, Alana Cuthbert, Yi Peng, Alesha Hatton	Graves
No 101	Risk factors for persistent and new chronic opioid use after hip fracture surgery: A Danish registry 2005-2016.	Nina M. Edwards, Claus Varnum, Søren Overgaard, Alma B. Pedersen	Edwards
No 115	Patient risk factors of total hip arthroplasty revision in patients with osteoarthritis.	Elizabeth Paxton, Guy Cafri, Michelle Lorimer, Johan Kärrholm, Stephen Graves, Henrik Malchau, Bob Namba, Ola Rolfson	Paxton
No 84/92 combined	Safety following same-day total knee/Hip arthroplasty in patients with an American Society of Anesthesiologists Classification of ≥ 3 .	Nithin C. Reddy, Wei Wang, Heather A. Prentice, Elizabeth W. Paxton, Abraham G. Lin, Ronald A. Navarro	Prentice
No 37	Effect of growing population and obesity on primary total knee arthroplasty rates in Sweden.	Anders Overgaard, Peder Frederiksen, Otto Robertsson, Annette W-Dahl	Overgaard
No 71	Does a history of mental health disorders affect outcomes of total hip arthroplasty? A seventeen-year, propensity-score matched analysis from regional registry.	Vincent Galea, Yhan Emid Colon Iban, Pakdee Rojanasopondist, Lina Holm Ingelsrud, Charles Bragdon, Henrik Malchau, Anders Troelsen	Bragdon
No 39	Influence of smoking status on risk of revision after primary total hip arthroplasty is bearing-dependent.	Amanda Gonzalez, Guido Garavaglia, Robin Peter, Pierre Hoffmeyer, Didier Hannouche, Anne Lübbecke	Lübbecke Wolf
No 4/5 combined	Association of race/ethnicity and total knee/Hip arthroplasty outcomes in a universally insured population.	Kanu Okike, Priscilla H. Chan, Heather A. Prentice, Ronald A. Navarro, Adrian D Hinman, Elizabeth W. Paxton	Hinman
No 10	Reoperation after elective Total Hip Replacement. Do reoperations influence the relative survival and is the relative survival diagnosis-specific?	Peter Cnudde, Erik Bülow, Szilard Nemes, Yosef Tyson, Maziar Mohaddes, Ola Rolfson	Cnudde

16:30 - 17:00 Periprosthetic fracture session (7 min and 2 min discussion)

Moderators: Richard de Steiger & Wim Schreurs

- Dutch results Wim Schreurs
- Australian results Richard de Steiger
- Swedish results Georgios Chatziagorou

No 50/51 Combined	Burden of intraoperative periprosthetic hip fractures during total hip arthroplasty: A direct and propensity score matched analysis.	Jack Mantel, Mollie Vanderkarr, Matthew Putnam, Jill Ruppenkamp, Joshua Bridgens, Chantal E Holy, Abhishek S Chitnis	Chitnis
No 89	Short stems result in lower revision rates for periprosthetic fractures and infections compared to straight stems.	Jessica Bettführ, Peter Münger, Adrian Spörri	Bettführ

18:00 - 20:00 Drinks at Boerhaave Museum (*medical science*) including visit Museum



Address: Lange Sint Agnietenstraat 10, Leiden

Sunday, 2 June 2019



Venue: Stadsgehoorzaal

7:30 - 8:00 Registration *Stadsgehoorzaal, Breestraat 60, Leiden*

8:00 - 9:00 International Signal detection

Moderators: Liz Paxton & Richard de Steiger

- MARCQI Brian Hallstrom
- KP Liz Paxton
- Netherlands Geke Denissen
- Australia Richard de Steiger
- UK Tim Wilton
- Manufacturer Robert Neher

Panel Discussion

9:00 - 10:45 Regulatory environment & implant benchmarking

Moderators: Rob Nelissen & Steve Graves



9.00-9.30 Keynote: Paul Piscoi, Scientific Policy Officer EC
Implication of the MDR on new and old orthopaedic implants

9.35-10.45 Implant benchmarking: the future of Registries?

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|------------------------------------------------|----------------|
| ○ Quality for patients NORE EFORT perspective | Rob Nelissen |
| ○ Implant assessment ODEP experience | Keith Tucker |
| ○ ISAR Benchmarking recommendations | Steve Graves |
| ○ MDR impact assessment for manufactures | Luca Orlandini |
| ○ Global Benchmarking effect for manufacturers | Paul Voorhorst |

Panel discussion

10:45 - 11:15 Break & Poster Walk

Theme General Aspects Registries posters 48, 52, 59, 68 (2 min each)

moderators Rob Nelissen & Geke Denissen

11:15 - 12:20 Surgeon and hospital outlier detection (7 min and 2 min discussion)

Moderators: Brian Hallstrom & Tim Wilton

	Surgeon assessment: Experience NJR.	Tim Wilton	Tim Wilton
No 110	Effect of Hospital Size and Teaching Affiliation on Revision and Migration Rates Reported in the American Joint Replacement Registry for Total Hip Arthroplasty.	Richard Illgen, David G. Lewallen, Heena Jaffri, Dena S. Weitzman, Kevin Bozic, Peter Shores	Illgen
No 21	Variation in performance between hospitals after total hip arthroplasty: Can we detect outliers sooner?	Peter van Schie, Leti van Bedegom-Vos, Liza N van Steenbergen, Rob GHH Nelissen, Perla J Marang-van de Mheen	Marang-van de Mheen
No 22	Incisions or decisions? Are “better than expected” surgical outcomes a centre effect or secondary to implant decisions? National Joint Registry for England, Wales, Northern Ireland and Isle of Man (NJR).	Jonathan Thomas Evans, Ashley William Blom, Andrew John Timperley, Matthew James Wilson, Adrian Sayers, Michael Richard Whitehouse	Evans
No 90	Influence of institutional experience on revision rate of Total Hip- and Knee Arthroplasty in the German Arthroplasty Registry (EPRD).	Steinbrück Arnd, Grimberg Alexander, Melsheimer Oliver, Jansson Volkmar	Steinbrück
No 69	Combining funnel plots and risk adjusted cumulative sum charts in surgeon reporting and decision making.	Brian R. Hallstrom, Huiyong (Thomas) Zheng, Rochelle Igrisan, Mark Cowen, Richard E. Hughes	Hallstrom
No 20	Variation in revision rate after total hip and knee arthroplasty in the Netherlands. Can we direct quality improvement initiatives?	Peter van Schie, Liza N van Steenbergen, Leti van Bedegom-Vos, Rob GHH Nelissen, Perla J Marang-van de Mheen	Marang-van de Mheen

12:20 - 13:15

Lunch

13:15 – 15:05

Hip Papers (7 min and 2 min discussion)

I Implants & Technique

II Revision surgery

Moderators: Ove Furnes & Richard de Steiger

I. Implants & Techniques

No 1	Lower midterm cup re-revision rate for dual mobility cups compared to unipolar cups. Report of 17,870 revision cases in the Dutch Arthroplasty Register (2007 - 2016).	Esther M. Bloemheugel, Bart A. Swierstra, Liza N. van Steenbergen	Bloemheugel
No 106	Fracture of ceramic bearings in primary total hip arthroplasty. A study of 44 cases from a national arthroplasty register with up to 20 years follow-up.	Hallan Geir, Fenstad Anne Marie, Furnes Ove	Furnes
No 53	Implant survival of 11,391 Continuum cups in primary total hip arthroplasty based on data from the Finnish Arthroplasty Register.	Hemmilä M, Karvonen M, Laaksonen I, Matilainen M, Eskelinen A, Haapakoski J, Puhto A-P, Kettunen J, Manninen M, Mäkelä KT	Hemmilä
No 93	Acetabular screw fixation does not provide additional protection against shell revision in a contemporary cohort.	Dhiren S. Sheth, Guy Cafri, Elizabeth W. Paxton, Robert S. Namba	Prentice
No 67	Type of THJR should be matched to patient age. Evidence from the NZ Joint Registry.	Peter Devane, John McKie, Chris Frampton	Devane
No 13	Cementing does not increase the immediate post-operative risk of death after total hip arthroplasty or hemiarthroplasty.	Elina Ekman, Inari Laaksonen, Kari Isotalo, Antti Liukas, Tero Vahlberg, Keijo Mäkelä	Mäkelä
No 108	Hip arthroplasty trends by region as reported to the American Joint Replacement Registry.	Antonia F. Chen, Heena Jaffri, Dena S. Weitzman, Kevin J. Bozic, Peter Shores	Bozic
No 117	Influence of implant characteristics on survival of a cemented stem.	Raéd Itayem, Johan Kärrholm, Maziar Mohaddes, Ola Rolfson	Rolfson
No 14	Second is better! Large similarities between unilateral and second two-stage bilateral total hip arthroplasty for 70,694 patients with osteoarthritis.	Erik Bülow, Szilard Nemes, Ola Rolfson	Bülow

Hip Papers cont. II. Revisions

No 15	Outcome of revision hip arthroplasty hip in patients younger than 55 years; An analysis of 2,316 revision procedures in the Dutch Arthroplasty Register.	Martijn F.L. Kuijpers, Gerjon Hannink, Liza N. van Steenbergen, B. Willem Schreurs	Kuijpers
No 30	Revision total hip replacement for leg length inequality: A registry analysis.	Peter Lewis, David Campbell, Stephen E Graves, Richard de Steiger, Ian Harris, William Donnelly, Michelle Lorimer, Alana Cuthbert, Yi Peng, Alesha Hatton	Lewis
No 35	Revision of total hip arthroplasty for the diagnosis of metal related pathology in patients with nonmetal/metal bearings.	Richard de Steiger, Roger Bingham, Stephen Graves, Peter L Lewis, Ian Harris, Cynthia K Turner, Michelle Lorimer, Alana Cuthbert, Andrea Peng	de Steiger

15:05 - 15:35 Break & Poster Walk

Theme General Aspects Registries posters 77, 88, 91, 100, 118 (each 2 min)

moderators Rob Nelissen & Geke Denissen

15:35 – 16:30 Infection Papers (7 min and 2 min discussion)

Moderators: Ola Rolfson & Steve Graves

No 63	Antibiotic Loaded Bone Cement (ALBC) in Prevention of Periprosthetic Joint Infections (PJI) in Primary Total Knee Arthroplasty (TKA) in Norway	Tesfaye H. Leta, Stein Håkon L. Lygre, Anne Marie Fenstad, Marianne Westberg, Tina S. Wik, Gunnar Knutsen, Jan-Erik Gjertsen, Håvard Dale, Geir Hallan, Gro S. Dyrhovden, Ove Furnes	Leta
No 6	Commercially prepared antibiotic loaded bone cement in primary total knee arthroplasty associated with reduced infection risk in patients with diabetes.	Robert S. Namba, Guy Cafri, Heather A. Prentice, Elizabeth W. Paxton, Adrian D. Hinman, Matthew P. Kelly	Kelly
No 26	Inadequate evaluation and management of suspected infections after TKA surgery. A report from the Lithuanian Arthroplasty Register	Egle Terteliene, Kazimieras Grigaitis, Otto Robertsson, Justinas Stucinskas, Sarunas Tarasevicius, Narunas Porvaneckas, Algirdas Venalis	Tarasevicius
No 107	Mortality and re-operation following one-stage and two-stage surgery for the	Erik Lenguerrand, Michael R Whitehouse, Martyn Porter, Ashley W Blom	Whitehouse

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	management of infected primary hip replacement in England and Wales		
No 81	Where are the majority of periprosthetic joint infections managed? Outcome data from the American Joint Replacement Registry.	Dena S. Weitzman, Vignesh Alamanda, Susan Odum, Peter B. Shores, Bryan D. Springer, Kevin J. Bozic	Bozic
No 41	Does ceramic-coating in primary total knee arthroplasty prevent the risk of revision due to early periprosthetic joint infection?	Grimberg Alexander, Melsheimer Oliver, Grupp Thomas, Jansson Volkmar, Steinbrück Arnd	Grimberg
No 95	No difference in 1-year re-revision rate after debridement antibiotics and implant retention (DAIR) by timing of DAIR procedure for total hip and knee arthroplasty based on Dutch registry data.	B. van der Ende, P.K. Bos, M. Reijman, P.D. Croughs, L. van Steenberghe, J.A.N. Verhaar, J. van Oldenrijk	Van der Ende

16:45 – 18:00 **ISAR Business Meeting (General Assembly)**

18:30h **Dinner: Museum of Antiquities (RMO) & visit to Museum**
 Address: Rapenburg 28, Leiden



Monday, 3 June 2019

7:30 - 8:00 Registration *Stadsgehoorzaal, Breestraat 60, Leiden*

8:00 – 8:45 Review of theme-based papers:

Moderators: Ola Rolfson & Heather Prentice

- No 61: Does preoperative delay affect mortality and risk of reoperations for hip fracture patients? 73,557 patients of the Norwegian Register. Sunniva Leer-Salvesen, et al.
- No 33: Does knee prosthesis survivorship improve with implant design change? Peter Lewis, et al.
- No 82: Achievement of meaningful improvement of patient-reported outcome measures for primary total hip and knee arthroplasties. Kevin J. Bozic, et al.

8:45 - 10:15 Parallel sessions: Shoulders/Hip Fracture

Parallel session Shoulders (7 min and 2 min discussion)

Moderators: Ron Navarro & Marieke Ostendorf

No 34	Surgeon volume and its association with revision rates in total shoulder arthroplasty: Australian Registry.	Jamie Sutherland Brown, Robert J Gordon, Andrea Peng, Richard Page, Kelly A Macgroarty	Sutherland Brown
No 99	Hemi versus reverse shoulder arthroplasty in proximal humeral fractures.	Yilmaz Demir, Abhishek Anand, Björn Salomonsson	Demir
No 28	Revision of hemistemmed shoulder replacement versus total reverse shoulder replacement for humeral fractures: Australian Registry.	Richard Page, Owain Critchley, Gregory Bain, Fraser Taylor, Andrew McLean, Stephen Graves, Michelle Lorimer	Page
No 96	Rotator cuff status in relation to outcome shoulder arthroplasty for osteoarthritis. An analysis from the Swedish Registry.	Kristofer Hallberg, Ivan Dahlbäck, Björn Salomonsson	Salomonsson
No 45	Application of a new framework for component classification and construct validation within a national shoulder registry.	Richard Craig, Adrian Sayers, Jonathan Rees	Craig
No 55	Total- and hemi shoulder arthroplasty in patients with glenohumeral osteoarthritis -	Erica Domeij Arverud, Aysha Sharif, Björn Salomonsson	Domeij Arverud
No 104	Outcome of revision arthroplasty of known primary total shoulder arthroplasties: Australian registry	David R J Gill, Richard Page, Stephen E Graves, Sophia Rainbird, Alesha Hatton	Page
No 70	Retention of modular shoulder stems in revision to reverse shoulders, Dutch registry.	Luuk M.A. Theelen, Ben Mory, Anneke Spekenbrink-Spooren, Loes Janssen, Lambers Heerspink	Spekenbrink-Spooren
No 97	Reverse shoulder arthroplasty compared to hemiarthroplasty, in cuff tear arthropathy, Swedish registry.	Kristofer Hallberg, Daniel Söderberg, Björn Salomonsson	Salomonsson
No 16	Effect of race/ethnicity on shoulder arthroplasty outcomes in a universally insured population.	Ivan A. Garcia, Priscilla H. Chan, Heather A. Prentice, Elizabeth W. Paxton, Mark T. Dillon, Ronald A. Navarro	Navarro

Parallel session Hip Fracture & Arthroplasty trends (7 min and 2 min discussion)

Moderators: Wim Schreurs & Eric Bohm

No 83	Trends in hemiarthroplasty fixation preference by hospital size, teaching affiliation reported to the American Joint Replacement Registry.	David G. Lewallen, Dena S. Weitzman, Heena Jaffri, Kevin J Bozic	Lewallen
No 42	Cemented or uncemented hemiarthroplasty for femoral neck fracture? Mortality, reoperations, patient reported outcome in 30,178 cases of the Norwegian Register	Torbjørn B Kristensen, Målfrid Kristoffersen, Eva Dybvik, Håvard Dale, Lars Birger Engesæter, Ove Furnes, Jan-Erik Gjertsen	Kristensen
No 64	Effect of fixation on revision risk for hemiarthroplasty for acute hip fractures in Canada.	Carolyn Sandoval, Alina Dragan, Julia Di Bella, Nicole de Guia, Greg Webster, Michael Dunbar, Eric Bohm	De Guia
No 11	Does surgical approach influence the outcomes following total hip arthroplasty performed for displaced intracapsular hip fractures? An analysis from the NJR	Gulraj S Matharu, Andrew Judge, Kevin Deere, Ashley W Blom, Mike R Reed, Michael R Whitehouse	Whitehouse
No 9	Is there a weekend effect after hip fracture surgery at Norwegian hospitals? Results from 74,410 patients in the Norwegian Hip Fracture Register.	Andrea Boutera, Eva Dybvik, Jan-Erik Gjertsen	Boutera
No 105	Projections of total hip replacement in the Netherlands from 2016 to 2030: Predictions using demographic data and an asymptotic regression model.	M Ostendorf, S Nemes, L N Steenbergen, T Gosens	Ostendorf
No 85	Partners Arthroplasty Registry: Development and current findings.	Isabella Florissi, Vincent Galea, Vincent, Pakdee Rojanasopondist, Nicholas Sauder, Iban Colon, E Yhan , Henrik Malchau, Charles Bradgon	Florissi

10:15 - 10:45 Break & Poster Walk

Theme PROMS posters 3, 74, 75, 76 (each 2 min)

moderators Geke Denissen & Rob Nelissen

10:45 - 11:35 International Registry Collaborations Session (7 min and 2 min discussion)

Moderators: Ove Furnes & Anne Lübbecke

No 23	How long does a knee replacement last? A systematic review and meta-analysis of case-series and national registry reports with greater than 15 years follow-up.	Jonathan Thomas Evans, Robert William Walker, Jonathan Peter Evans, Ashley William Blom, Adrian Sayers, Michael Richard Whitehouse	Evans
No 25	International variation and influence on mortality of ASA class: Data from an international consortium of total hip arthroplasty registries.	Alan Silman, Rory Ferguson, Christophe Combescure, Stephen Graves, Keijo Makela, Liz Paxton, Guy Cafri, Chris Frampton, Gary Hooper, Ove Furnes, Anne Marie Fenstad, Anne Garland, Anneke Spekenbrink-Spooren, Mark Wilkinson, Anne Lübbecke, Ola Rolfson	Ferguson
No 103	Patellofemoral arthroplasty: a multi-registry analysis.	Francois Tudor, Peter Lewis, Michelle Lorimer, John McKie, Eric Boehm, Julia di Bella, Otto Robertsson, Keijo Makela, Ove Furnes, Christoffe Bartz-Johannsen, Rob Nelissen, Liza N Van Steenbergen, Don Fithian, Elizabeth Paxton	Lewis
No 57	Total hip arthroplasties in Dutch Arthroplasty Register (LROI) and the Nordic Arthroplasty Register Association (NARA)	LN van Steenbergen, KT Mäkelä, J Kärrholm, O Rolfson, S Overgaard, ON Furnes, AB Pedersen, A Eskelinen, G Hallan, BW Schreurs, RGHH Nelissen	Steenbergen
No 116	Predictors of Total Hip Arthroplasty Revision in Sweden, the US, and Australia.	Elizabeth Paxton, Guy Cafri, Erik Bülow, Michelle Lorimer, Johan Kärrholm, Stephen Graves, Henrik Malchau, Bob Namba, Ola Rolfson	Paxton

11:35 - 12:05 Debate - Regional Registries vs. National Registries: Which is Best?

Regional Registries are better

Ron Navarro

National Registries are better

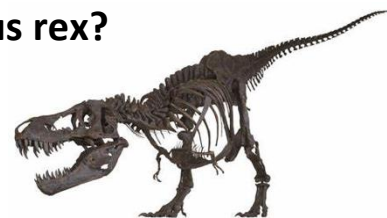
Richard Page

12.05 – 12.45

Keynote:

Anne Schulp, paleontologist:

Bone pathologies in Tyrannosaurus rex?



12:45 – 13:30

Lunch

13:30 - 14:55 PROMS Session (7 min and 2 min discussion)

Moderators: Eric Bohm & Ola Rolfson

No 24	Trajectories of patient reported outcome after unilateral primary total knee arthroplasty.	Jeroen C. van Egmond, Brechtje Hesselting, Marijke Melles, Stephan B.W. Vehmeijer, Liza N. van Steenbergen, Nina M.C. Mathijssen, Jarry T. Porsius	van Egmond
No 43	Outcome prediction for total knee arthroplasty patients. <i>Development and validation of a prediction model for pain and functional outcome after total knee arthroplasty using Dutch Register (LROI)</i>	J.J. Tolk, J.H. Waarsing, R.P.A. Janssen, L.N. van Steenbergen, S.M.A. Bierma-Zeinstra, M. Reijman	Tolk
No 32	The PROMs pilot project: A registry strategy for roll out.	Grace O'Donohue, Stephen E Graves, Richard De Steiger, Peter Lewis, Ian Harris, Michelle Lorimer	Graves
No 54	Feasibility of collecting multiple patient-reported outcome measures alongside the Dutch Arthroplasty Register.	C. Tilbury, D.A.J.M. Latijnhouwers, H.H. Kaptijn, R.G.H.H. Nelissen, M.G.J. Gademan, T.P.M. Vliet Vlieland on behalf of the LOAS studygroup	Latijnhouwers
No 86	Advancing international Patient-Reported Outcome Measures (PROMs) reporting for hip and knee arthroplasty among OECD countries.	Sunita Karmakar-Hore, Greg Webster, Nicole de Guia, Julia M Di Bella, Eric Bohm, Niek Klazinga, Luke Slawomirski, Michael A Kallen	De Guia
No 80	Analysis of change in patient-reported outcome measures with floor and ceiling effects using the multi-level Tobit model: The association of body mass index and change in Oxford Hip Score. Findings NJR	Adrian Sayers, Michael R Whitehouse, Andrew Judge, Alexander MacGregor, Ashley W Blom, Yoav Ben-Shlomo	Sayers
No 119	Is there a preferred one-year outcome measure for US primary total hip arthroplasty?	Patricia Franklin, Hua Zheng, Wenyun Yang, David Ayers	Ayers
No 98	Patient outcome after proximal humeral fracture treated with arthroplasty, dependency on timing of treatment – Analysis Swedish Registry.	Yilmaz Demir, Linda Boström, Björn Salomonsson	Demir
No 44	The need for pre-operative outcome scores for prediction and case-mix adjustment models in shoulder arthroplasty.	Richard Craig, Gary Collins, Amar Rangan, Adrian Sayers, Jonathan Rees	Craig

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14:55 - 15:25 **PROMS Panel Discussion -**
Moderators: Eric Bohm & Ola Rolfson

15:25h **Wrap up and awards: Liz Paxton & Rob Nelissen**

