

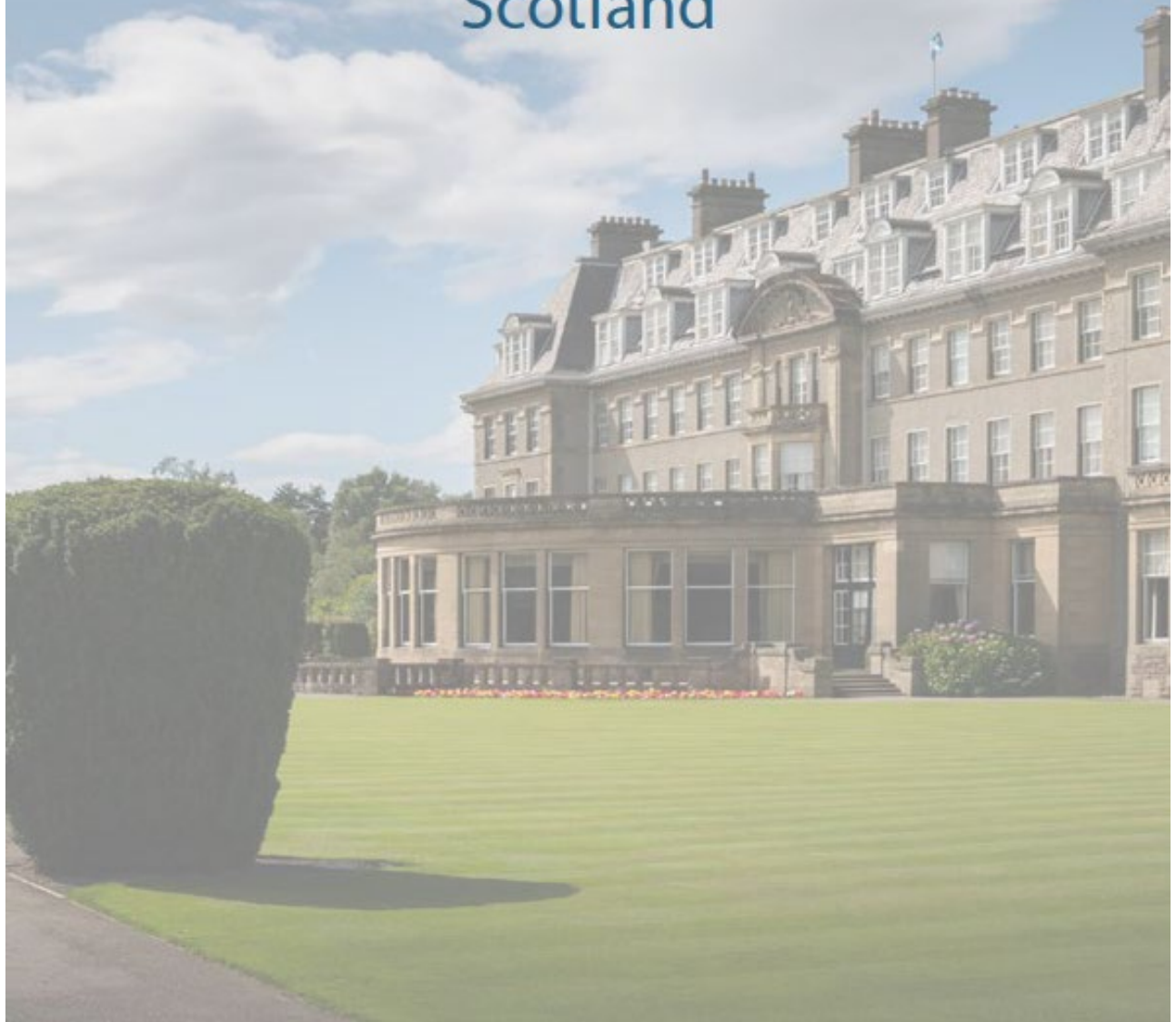


European  
Knee  
Society

**EKS Closed Meeting  
15-17 December 2021  
Courmayeur, Italy**



EKS Closed Meeting  
12-13 May, 2022  
Scotland





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## The European Knee Society Board 2021

**President:** Gijs van Hellemond

**Vice-President:** David Barrett

**Second Vice-President:** Francesco Benazzo

**Immediate Past- President:** Fabio Catani

**Past-President:** Emmanuel Thienpont

**Treasurer:** Sebastien Parratte

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**Member at Large:** Michel Bonnin

**Member at Large:** Francesco Benazzo

**Chairmen External Relations Committee:** Jan Victor, Chris Dodd, Andrea Baldini

**Chairman Fellowship Committee:** Sebastien Lustig

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## Past-Presidents of the European Knee Society

2013 Ate Wymenga

2014 Jean-Noël Argenson

2015 Johan Bellemans

2016 Jan Victor

2017 Chris Dodd

2018 Andrea Baldini

2019 Emmanuel Thienpont

2020 Fabio Catani



## Welcome address

Dear Colleagues,

Welcome to the European Knee Society Closed Meeting in the beautiful mountains of Courmayeur, Italy.

You will find enclosed the final schedule of all events and accommodation information for the EKS Closed Meeting which will start on Wednesday, 15 December.

The scientific programme will start at 17.00 hrs on Wednesday, 15 December. A free afternoon is scheduled on Thursday, 16 December, followed by the Presidential Dinner.

On Friday, 17 December, the meeting will end at 13.00 hrs, allowing you to further enjoy the snow.

This Closed Meeting will again be an excellent occasion to socialise with your peers during the dinners and various activities.

We wish you a pleasant and instructive stay in Courmayeur!

With our very best regards,

Gijs van Hellemond  
EKS President

Anders Troelsen  
EKS General Secretary

Francesco Benazzo  
Local Organiser



## Wednesday, 15 December

**Morning**      **Arrival of the EKS Members**

16.30            **Registration**

17.00            **EKS Meeting**

17.00            **Session I - Tailored knee arthroplasty**  
*Moderator: Gijs van Hellemond*

17.05            **Effect of hybrid alignment techniques on native coronal alignment and soft tissue balance in Total Knee Arthroplasty**  
*Philip Winnock de Grave*

17.14            **Use of condylar walls as anatomical landmarks for the kinematic alignment of the femoral component in lateral UKA**  
*Charles Riviere*

17.23            **Predicting hip-knee-ankle and femorotibial angles from knee radiographs with deep learning**  
*Gareth Jones*

17.32            **True kinematic alignment is applicable in 44% of patients applying restrictive indication criteria - A retrospective analysis of 111 TKA using robotic assistance**  
*Tilman Callies*

17.41            **Variations in medial, lateral slope and medial proximal tibial angle and their possible impact on arthroplasty**  
*Johannes Beckmann*

17.50            **Custom TKA combined with an approach for custom coronal alignment results in 88% of patients that are either satisfied or very satisfied at 24 months follow-up**  
*Carsten O. Tibesku*

17.59            **Custom TKA enables adequate realignment with minimal ligament release and grants satisfactory outcomes in knees that had prior osteotomies or extra-articular fracture sequelae**  
*Mo Saffarini*



- 18.08 **PCL preservation or sacrifice doesn't influence clinical outcomes and survivorship at short to mid-term follow up of a J-Curve CR – Total Knee Replacement with a Medial Congruent liner**  
*Stefano Rossi/ Francesco Benazzo*
- 18.17 **Session II - New and old “off the shelf” implants**  
**Moderator: David Barrett**
- 18.22 **Primary Total Knee Arthroplasty (TKA) using a Constrained Postero-Stabilized (CPS) insert: short to mid-term follow-up**  
*Stefano Rossi*
- 18.31 **Does Anterior Cruciate Ligament (ACL) retention optimize one - year results of Total Knee Replacement (TKR)? A retrospective matched-paired comparison of bicruciate with posterior retaining (PCR) TKR**  
*Philippe Massin*
- 18.40 **Long-term follow-up of a fixed bearing medial unicompartmental knee arthroplasty**  
*Stefano Rossi/Francesco Benazzo*
- 18.49 **Bilateral simultaneous knee arthroplasty is as safe as a staged knee arthroplasty in a specialized clinic**  
*Robert Hube*
- 20.00 **Welcome Dinner for Active and International Members**



## Thursday, 16 December

### 08.00 - 13.00 EKS Meeting

- 08.00      **Session III - Robotic Surgery**  
Moderator: Francesco Benazzo
- 08.05      **Evaluation of post-operative outcome with wearable sensors following robotic-assisted and conventional knee arthroplasty**  
*Faseeh Zaidi*
- 08.14      **Impact of the diaphyseal femoral deformity on the lower limb alignment in osteoarthritic varus knees**  
*Sébastien Parratte*
- 08.23      **Inflammatory response in robotic Total Knee Arthroplasty versus conventional Jig-based and the correlation with early functional outcomes: A pilot randomised controlled trial**  
*Fares Haddad*
- 08.32      **Flattening the learning curve with robotic assisted knee arthroplasty**  
*Antonio Klasan*
- 08.41      **10 year outcomes of robotic assisted medial unicompartmentals**  
*Martin Roche*
- 08.50      **Is use of tourniquet associated to increased risk of venous thromboembolism after fast-track Total Knee Arthroplasty? A prospective multicentre cohort study of 16,267 procedures**  
*Kirill Gromov*
- 08.59      **Equal bony resection of distal and posterior femur will lead to flexion/extension gap inequality in robot-assisted cruciate-retaining TKA**  
*Hannes Vermue*





- 09.08 **Session IV - Patient's factors influencing outcomes**  
Moderator: Anders Troelsen
- 09.13 **Robotic assisted lateral unicompartmental knee survivorship and outcomes with minimal 2 year follow up**  
*Martin Roche*
- 09.22 **Genetic associations of knee osteoarthritis vary with the need for surgical treatment: insights from 2 large-scale genome-wide meta-analyses**  
*Anders Troelsen*
- 09.31 **COVID-19 disruptions to postoperative care did not negatively affect elective primary Total Knee Arthroplasty (TKA) outcomes**  
*Alejandro Gonzalez Della Valle*
- 09.40 **Femoral size and shape can improve bone fit and clinical outcomes in Total Knee Arthroplasty: Results of a prospective matched controlled study**  
*Jean-Noel Argenson*
- 09.49 **High tibial osteotomy in young patients with constitutional deformity is an efficient strategy before a Total Knee Arthroplasty: A long-term comparative study**  
*Sébastien Lustig*
- 09.58 **Is synovectomy necessary in Total Knee Arthroplasty with rheumatoid arthritis?**  
*Philippe Hernigou*
- 10.07 **Considerable inter-individual variability of tibial geometric ratios renders bone-implant mismatch unavoidable using off-the-shelf Total Knee Arthroplasty: A systematic review and meta-analysis**  
*Mo Saffarini*
- 10.16 **Patients with a high daily activity level tend to have lower Forgotten Joint Scores after knee replacement compared to sedentary patients**  
*Tilman Callies*
- 10.25 **Coffee Break**



- 11.00      **Session V - The panorama of failures**  
Moderator: Emmanuel Thienpont and Fabio Catani
- 11.05      **Comparison of different strategies in revision arthroplasty of the knee with severe bone loss: A systematic review and meta-analysis of clinical outcomes**  
*Jan Victor*
- 11.14      **DAIR: The management of choice in infected UKA**  
*David Barrett*
- 11.23      **Appearance and evolution of radiolucent lines in primary Total Knee Arthroplasty**  
*Emmanuel Thienpont*
- 11.32      **Simultaneous Total Knee Arthroplasty and opening wedge high tibial osteotomy versus ligament release in knees with large tibial varus deformity (15 degrees to 25 degrees)**  
*Philippe Hernigou*
- 11.41      **First automatic and end-to-end analysis of knee prosthesis X-ray images using artificial intelligence**  
*Michel Bonnin*
- 11.50      **A comparative study of antibiotic resistance in periprosthetic joint infection (PJI) after Total Knee Arthroplasty between two orthopaedic centres**  
*Thomas Heyse*
- 11.59      **The use of augmented antibiotic-loaded articulated spacers in periprosthetic knee infections in patients with massive bone defects**  
*Ivan De Martino*
- 12.08      **Early results of bi-cruciate retaining implants**  
*Alessio Biazzo*



- 12.17      **Session VI - Rules and perspectives with new Medical Device Regulation**  
Moderator: Fabio Catani
- 12.22      **Sexual dimorphism and racial diversity renders bone-implant mismatch inevitable after off-the-shelf Total Knee Arthroplasty – A systematic review and meta-analysis**  
*Mo Saffarini*
- 12.31      **Simultaneous bilateral Total Knee Arthroplasty in patients over 70: Are there factors that can influence safety and clinical outcome?**  
*Claudio Zorzi*

**Free afternoon for activities**

- 16.00      **EKS Board Meeting**
- 18.00      **EKS General Assembly (Active and International Members only)**
- 20.00      **Presidential Dinner**



## Friday, 17 December

08.00 - 13.00      **Delphi Consensus meeting**

08.00 - 10.30      **Delphi Consensus 1<sup>st</sup> part**

Please find below the full list of research questions which have been assigned to our International Expert Delegates based on their extensive experience, their published expertise and utmost interest.

<b>1. What is the tailored alignment that we are pursuing in modern TKA with the fast progression of robotic assisted surgery?</b>		<i>Group Coordinator</i> <b><u>Price A.</u></b>
<b>A</b>	<b>Soft tissue release does still have a role in the knee balancing with robotic assisted technique?</b>	<b><i>Catani F.</i></b> <b><i>Rossi S.M.P.</i></b>
<b>B</b>	<b>Do the Kinematic Alignment (KA) technique and its variants (restricted and inverse KA) be indicated for everyone, or are there existing contra-indications?</b>	<b><i>Riviere C.</i></b> <b><i>Winnock de Grave P.</i></b>
<b>2. How far can we go with the external rotation of the femoral component in modern TKA?</b>		<i>Group Coordinator</i> <b><u>Innocenti B.</u></b>
<b>A</b>	<b>Do we have proper landmark or method for correct tibia rotational alignment in TKA?</b> <b><i>I- What should be the correct target for correct rotational tibial alignment?</i></b> <b><i>II- Is the tibia tubercle a reliable landmark or should we use the TEA of the femur for rotational alignment?</i></b> <b><i>III- Can rotational tibia alignment be improved by using CAS (navigation, PSI or robotics)</i></b>	<b><i>Hofmann S.</i></b> <b><i>Ollivier M.</i></b>
<b>B</b>	<b>Do we have proper landmarks or methods for correct femur rotational alignment</b> <b><i>I- What should be the correct targets for correct rotational femoral alignment?</i></b> <b><i>II- Is there consensus or evidence that one technique/philosophy is superior to the other in terms of reaching the target?</i></b> <b><i>III- Can rotational femur alignment be improved by using CAS (navigation, PSI or robotics)?</i></b>	<b><i>Tsiridis E.</i></b> <b><i>Tecame A.</i></b>



<b>3. Development of new materials in modern TKA</b>		<i>Group Coordinator</i> <b><u>Porteous A</u></b>
<b>A</b>	<b>Is cementless TKA gaining revival interest with new high porosity metals?</b>	<b><i>Gromov K. De Martino I.</i></b>
<b>B</b>	<b>When will 3-D printed TKA implants be available for daily practice? Will they decrease the percentage of dissatisfied patients?</b>	<b><i>Beckmann J. Berger P.</i></b>
<b>C</b>	<b>Will 3-D ultrasound or other techniques substitute CT scan for the 3-D anatomy reconstruction in preoperative templating in robotic TKA?</b>	<b><i>Rosso F.</i></b>
<b>D</b>	<b>Vit-E poly does provide a substantial improvement in wear debris and subsequent osteolysis?</b>	<b><i>Heyse T. Skovgaard Nielsen C.</i></b>

<b>4. The impact of robotic surgery in modern TKA</b>		<i>Group Coordinator</i> <b><u>Haddad F.</u></b>
<b>A</b>	<b>Can we compare the results of different robotic systems with different degree of autonomy? And how much do we know about unbiased results?</b>	<b><i>Parratte S. Colombelli A.</i></b>
<b>B</b>	<b>Can the robotic software help the surgeon to predict the functional outcomes based on the intraoperative planning and on the evaluated balancing?</b>	<b><i>Lustig S. Luyckx T.</i></b>

10.30 – 11.00 [Coffee Break](#)



<b>5. Telemedicine-rehabilitation in the adult reconstructive surgery perspective</b>		<i>Group Coordinator</i> <b><u>Vandenneucker H.</u></b>
<b>A</b>	<b>Will telemedicine rehabilitation substitute the inpatient physiotherapy while providing non-inferior results?</b>	<b>Stuyts B.</b> <b>Biazzo A.</b>
<b>B</b>	<b>Will home physiotherapy reduce the incidence of early infections compared with inpatient clinic rehabilitation?</b>	<b>Fuchs-Winkelmann S.</b> <b>Faschingbauer M.</b>
<b>C</b>	<b>Telemedicine follow-up controls will impact the early outcomes of TKA while providing a closer control of the patients by the surgeon?</b>	<b>Tibesku C.</b> <b>Phillips J.</b>

<b>6. Bidirectional barbed sutures (BBSs) are safe, time saving, and give comparable results to traditional sutures when used in primary TKA?</b>		<i>Group Coordinator</i> <b><u>Pietsch M.</u></b>
<b>A</b>	<b>Bidirectional barbed sutures (BBSs) are safe, time saving, and give comparable results to traditional sutures when used in primary TKA?</b>	<b>Cerciello S.</b> <b>Smeets K.</b> <b>Bistolfi A.</b> <b>Balato G.</b>

<b>7. Bicompartamental knee arthroplasty instead of TKA in case of patellofemoral osteoarthritis (PFOA).</b>		<i>Group Coordinator</i> <b><u>Argenson J.N.</u></b>
<b>A</b>	<b>Is bicompartamental knee arthroplasty (BKA) a viable alternative to Total Knee Arthroplasty (TKA) in selected patients with combined patellofemoral and tibiofemoral OA?</b>	<b>London N.</b> <b>Lunebourg A.</b> <b>Campi S.</b>
<b>B</b>	<b>When PFA is indicated in patients with medial UKA and progression of patellofemoral OA?</b>	<b>Barrett D.</b> <b>Jones G.</b> <b>Von Knoch F.</b>

<b>8. The patella in Total Knee Arthroplasty: to resurface or not?</b>		<i>Group Coordinator</i> <b><u>Thienpont E.</u></b>
<b>A</b>	<b>Guidelines for the 3 surgical approaches: always resurface, never resurface, selectively resurface?</b>	<b>Hube R.</b> <b>Jackson W.</b> <b>Van de Groes S.</b>



<b>9. Arthrofibrosis after TKA, what else?</b>		<i>Group Coordinator</i> <b><u>van Hellemond G.</u></b>
<b>A</b>	<b>Revision TKA after arthrofibrosis, how to prevent recurrency?</b>	<b><i>Hernigou P.</i></b> <b><i>Lamberti A.</i></b>
<b>B</b>	<b>Which are the patients at higher risk of developing arthrofibrosis after TKA? How to prevent it.</b>	<b><i>Baldini A.</i></b> <b><i>Smolders J.</i></b>

<b>10. Fixation in Revision TKA</b>		<i>Group Coordinator</i> <b><u>Victor J.</u></b>
<b>A</b>	<b>Is Zonal Fixation still a valid dogma?</b>	<b><i>Rossi R.</i></b> <b><i>Lindberg-Larsen M.</i></b> <b><i>Liddle A.</i></b>
<b>B</b>	<b>Is the technique of fully cemented short or mid-length stems the winning one in terms of fixation?</b>	<b><i>Chapman-sheath P.</i></b> <b><i>Saffarini M.</i></b> <b><i>Petrillo S.</i></b>

11.00 - 13.00      **Delphi consensus 2<sup>nd</sup> part**

**Free afternoon, extended stay or departure of EKS Members**