Free Papers - Breakfast Session

Balancing of total knee arthroplasty by bone cuts achieves accurately balanced soft tissues without the need for soft tissue releases and leaves the limb in natural alignment
P. Firer (South Africa)

Development and validation of a prediction model for pain and functional outcome after total knee arthroplasty using The Dutch Arthroplasty Register (LROI) data
J. Tolk (Netherlands)

Above the knee amputation following septic knee arthroplasty: a 3 years retrospective study in a multi-specialist hospital
S. Manzotti (Italy)

Inverse kinematic alignment - a new individualized and reproducible alignment strategy in TKA
P. Winnock de Grave (Belgium)

Correlation of typical pain patterns with bone tracer uptake in SPECT/CT in patients with pain after total knee arthroplasty
D. Mathis (Switzerland)

Free Papers - Sports Trauma

Chairs:
H. Jones (Portugal)
J. Menetrey (Switzerland)

Superior knee flexor strength at 2 years with all-inside short-graft anterior cruciate ligament reconstruction vs a conventional hamstring technique
P. Kouloumentas (Greece)

Ten year outcomes following hip arthroscopy in adolescent athletes
M. Philippon (United States)

Acute surgical repair of semimembranosus injuries in professional athletes
A. Ayuob (United Kingdom)

Is there any benefit in anterior cruciate ligament reconstruction in patients over 60 years old?
P. Ntagiopoulos (Greece)
Injuries in élite youth soccer: a four year epidemiological study
L. Pulici (Italy)

AFAS Symposia
08:30 - 10:00
AFAS - From Trauma to Arthritis - Where do we stand

Biologics

Chairs:
D. Haverkamp (Netherlands)

- BMAC/PRP - The Case For
- BMAC/PRP - The Case Against
  A. Younger (Canada)
- Scaffold/Hydrogels
  H. Pereira (Portugal)
- Stem Cells
  J. Calder (United Kingdom)

EKA Symposia
08:30 - 10:00
EKA - Current Concept for the Degenerative Knee - Alignment

Imaging modalities and analysis techniques for the measurement of lower limb alignment

Chairs:
E. Gomez Barrena (Spain)
R. Tandogan (Turkey)

- Short-leg films
  D. Guenther (Germany)
- Long leg films
  M. Unal (Turkey)
- Stress-x-ray
  M. Clarius (Germany)
- EOS
  H. Mayr (Germany)
- CT
  J. Verhaar (Netherlands)
- MRI
  G. Demey (France)
- Nucleair type imaging
  L. Sabatini (Italy)
Scientific Programme

ESA Symposia
08:30 - 10:00

**Controversies in massive rotator cuff tears**

**Chairs:**
N. Gomes (Portugal)
L. Kovačić (Slovenia)

- **Massive and irreparable rotator cuff tears: defining the problem**
  K. Beitzel (Germany)

- **Critical shoulder angle: does lateral acromioplasty have a role in preventing re-rupture?**
  G. Nourissat (France)

- **Fatty infiltration and muscle atrophy: what does it mean and what happens after repair**
  M. Hantes (Greece)

- **Biological augmentation in RC repair: scaffolds, PRP and cell therapies**
  C. Rosso (Switzerland)

- **Shoulder injections: options, ultrasound assistance, evidences**
  N. Gomes (Portugal)

- **Nonoperative treatment: the role of rehabilitation**
  M. Aramberri (Spain)

- **Patient's expectation in RCR: what is its role?**
  R. Hackney (United Kingdom)

- **Treatment of massive irreparable cuff tears: decision-making process**
  G. Milano (Italy)

ESMA Symposia
08:30 - 10:00

**Performing Arts and specific injuries. Art in Sport or sport in Art? What can the performing arts learn from sports?**

**Chairs:**
H. Mayr (Germany)
W. Krutsch (Germany)
J. Menetrey (Switzerland)

- **Musicians**
  G. Milano (Italy)

- **Circus**
  M. Carmont (United Kingdom)

- **Dance**
  G.L. Canata (Italy)

- **Horse Performers**
  A. Lukaszensko (Russian Federation)
Scientific Programme

Bull Performers
H. Jones (Portugal)

Discussion

E-Posters
08:30 - 18:00

E-Posters

Posterior ankle arthroscopy for treating os trigonum syndrome; and acute or chronic os trigonum fractures.  
D. Nikolopoulos (Greece)

Ankle arthroscopy combined with hardware removal for chronic pain after ankle fracture  
D. Nikolopoulos (Greece)

Achilles tendon length and function independently associated with ankle joint kinematics during gait  
H. Sigurðsson (Iceland)

A comparative study with novel percutaneous repair and open repair of an acute achilles tendon rupture: novel usage of intraoperative ultrasonography  
S. Hwang (Korea, Republic of)

The augmentation technique for anatomical reduction of shortened lateral ligament complex in modified broström procedure  
K. Ahn (Korea, Republic of)

Satisfaction analysis of Figure 8 (open heel) short leg cast  
K. Ahn (Korea, Republic of)

A prospective study of physiotherapy with pilates machines, following operative treatment of ankle fractures.  
D. Hristova (Bulgaria)

Tillaux fracture in the adult age - review of 3 cases treated with arthroscopic reduction and percutaneous fixation  
F. Machado (Portugal)

Excellent results in the surgical rehabilitation of Hallux Valgus, even in moderate to severe forms of the disease, with a combination of Chevron osteotomy and modified McBride procedure with two and a half years of follow-up  
P. Natsaridis (Greece)

Arthroscopic ankle arthrodesis vs arthroscopic tibio-talo-calcaneal fusion: Outcomes and patient satisfaction  
A. Polyzos (Greece)

Analysis of independent predictors of poor outcomes of chevron osteotomy for hallux valgus: focus on generalized ligamentous laxity and foot width changes
**Scientific Programme**

Cost analysis of outcome differences for staged vs non-staged pes planovalgus foot reconstruction

Can combination of peripheral nerve block and non-opioidal patient controlled analgesia be an effective postoperative pain control method?

Achilles peritendinitis: endoscopic or open tenolysis?

G.L. Canata (Italy)

Prognosis of MACI (matrix-associated autologous chondrocyte implantation) after osteochondral lesions of the talus

Endoscopic treatment for chronic achilles tendon rupture on high demand patients

J. Caetano (Portugal)

Relation between preoperative EMG activity of deltoid and upper trapezius muscle and clinical results in patients treated with reverse shoulder arthroplasty

D. Lee (Korea, Republic of)

Rotator interval reconstruction using the biceps tendon for irreparable cuff tears

A. Van Raebroeckx (Belgium)

Supraspinatus tears and subcoracoid impingement: cause or effect?

Amyotrophic lateral sclerosis as differential diagnosis of muscular atrophy of the shoulder girdle in rotator cuff pathology

Clinical and structural outcomes after superior capsular reconstruction and augmentation for massive rotator cuff tears using the long head biceps tendon as a graft

P.J. Llinas Hernandez (Colombia)

Lesions of the biceps pulley: a prospective study and classification update

Synthetic patch augmentation of irreparable tears of the rotator cuff

R. Hackney (United Kingdom)

Impact of rotator cuff tear size, oxford shoulder scores, surgical and anaesthetic technique on patient pain

Different answering scales used within the Constant-Murley Score are not interchangeable

F. Hollman (Netherlands)

Equivalence between digital and paper-based Western Ontario Rotator Cuff index (WORC): a two-way crossover equivalence trial

Combined massive rotator cuff and recurrent shoulder instability

B. Marjanovic (Slovenia)

The arthroscopic triple-row repair for large rotator cuff tears: functional outcome and repair integrity

Mid-term outcomes of subacromial balloon spacer for the treatment of irreparable rotator cuff tears

E. Brilakis (Greece)
Scientific Programme

The role of blood lipids levels in rotator cuff healing
M. Varga (Slovakia)

Zoledronic acid improves healing of supraspinatus tendon repair in a rodent model
J. Schanda (Austria)

Influence of additional rotator cuff repair compared to rotator cuff debridement after arthroscopic removal of calcific deposit in patients with calcifying tendinitis of the shoulder - Comparison of the clinical and structural results

Functional outcomes 8 years after arthroscopic repair of massive rotator cuff tears

Anterior cable tear patterns in ARCR: Diagnosing the pathoanatomy of anterior cable tears in reparable RCT

Is the subacromial biodegradable spacer “reversible”?

Needle based, arthroscopic, transosseous rotator cuff repair - short term clinical results

Reverse shoulder arthroplasty (RSA) with 3D navigation (GPS surgery) for glenoid components: surgical technique and preliminary results
A. Residori (Italy)

Banana Suture Lasso technique for arthroscopic side-to-side repair of massive rotator cuff tears: clinical, functional and radiographic assessment after a mean of 6 years of follow-up

Does ultrasound in clinic without formal training changes the management of patients with rotator cuff tears?

Massive irreparable rotator cuff tears treated with the subacromial spacer: clinical outcomes in a cases-series at minimum 1 year-follow-up
P. Carnero Martín de Soto (Spain)

Rotator cuff bursal side tear after calcium deposit removal: Should we suture it or not?
N. Magnitskaya (Russian Federation)

3D kinematic analysis of the scapulothoracic motion using inertial sensors in healthy subjects and patients with rotator cuff tears
C. Yiannakopoulos (Greece)

Superior capsular reconstruction restores the normal capsular kinematics in abduction
C. Yiannakopoulos (Greece)

Extracellular matrix homeostasis of torn supraspinatus tendon edge is compatible with surgical strategy of rotator cuff repair

A systematic review and meta-analysis on the clinical efficacy of kinesiotaping in shoulder disorders

Patient-reported outcomes of arthroscopic superior capsule reconstruction for irreparable rotator cuff tears
J. Holz (Germany)
A multimodal approach to rotator cuff tears: pain, satisfaction and functional outcomes of rotator cuff repair with bovine bioinductive patch
K. Plancher (United States)

Use of an electrocautery device during shoulder arthroscopy- is it really safe?
A. Pokorny-Olsen (Austria)

Neuropathic pain and disability treatment in patients with complex regional pain syndrome developed after fractures of the distal radius
V. Kotiuk (Ukraine)

Clinical data evaluation after matrix-associated autologous chondrocyte transplantation: a retrospective study
H. Binder (Austria)

Surgical treatment of iliopsoas muscle tendinopathy in sportsmen
V. Kotiuk (Ukraine)

The potential complication of a central patellar portal technique for arthroscopic anterior cruciate ligament reconstruction
K. Goto (Japan)

Return to sport rate of team handball players after arthroscopic labral repair
P. Attila (Hungary)

Bicondylar tibial plateau fractures: a retrospective review of 64 cases

The effect of suturing techniques on distal graft diameters in anatomic double-bundle anterior cruciate ligament reconstruction
T. Arakawa (Japan)

Knee infection following anterior cruciate ligament reconstruction
A. Ivkovic (Croatia)

Comprehensive exercise therapy in management of musculoskeletal disorders
F. Torkan (Iran, Islamic Republic of)

Bipolar bone loss in patients with traumatic anterior shoulder instability: effectiveness of glenoid bone graft augmentation alone
N. Iizawa (Japan)

Differential approach to arthroscopic treatment of acetabular labrum injuries
V. Kotiuk (Ukraine)

Does early anterior cruciate ligament reconstruction prevent further meniscal damage? Secondary analysis of a randomized controlled trial
B. Snoeker (Sweden)

High-grade pre-operative Patellar J sign leads to post-operative residual patellar laxity after medial patellofemoral ligament reconstruction and related procedures
Z. Xue (China)
**Scientific Programme**

**Is a grafted tendon flattened at the tunnel aperture after anatomical flat anterior cruciate ligament reconstruction using hamstring autograft?**
M. Hayashi (Japan)

**Systematic review and appraisal of clinical practice guidelines for sports-related concussion**
S. Dayton (United States)

**Arthroscopic assisted tibial plafond fracture fixation and bone graft: surgical technique**
D. Marsland (United Kingdom)

**Does bone loss accompany soft tissue based posterior shoulder instability? A retrospective MRI study**
Ö. Orhan (Turkey)

**Distal radius epiphysitis in a young gymnast: Review of the literature based on a case study**
J.L. Patiño (Spain)

**A RCT using a novel tibial marrow aspirate approach for managing subchondral bone edema in knee osteoarthritis**

**Personalized back rx exercise for treating discogenic axial low back pain: a prospective pilot study**

**A case report of a complicated distal biceps tendon rupture in a senior recreational athlete**
L. Rips (Estonia)

**Compartment syndromes after lower limb trauma- educational challenge for orthopaedic surgeons**
C. Patru (Romania)

**Prevalence of bony changes associated with FAI in the hips of elite volleyball players**

**Differential diagnoses of lateral elbow pain. Diagnostic and therapeutic algorithms**
C. Koukos (Germany)

**Forgotten Joint Score - 12 after ACL reconstruction and factors related to high score**
M. Alsubaie (Saudi Arabia)

**The multiple ligament injured knee: When is primary repair an option?**

**Less joint awareness following arthroscopic primary repair versus reconstruction of the anterior cruciate ligament**

**No difference in outcomes of arthroscopic SLAP IIb repair vs. SLAP with rotator cuff repair**
S. de Groot (United States)

**Movement quality assessments during the one leg countermovement jump test in youth soccer players**
G. Scinicarelli (Germany)
Scientific Programme

Evaluation of the myofascial chain and functional movement tests in patients after anterior cruciate ligament reconstruction
M. Bialy (Poland)

The effect of tight medial patellofemoral ligament fixation
K. Nakamura (Japan)

Early outcomes of repair of bucket handle meniscal tears using a novel inside-out technique.
N. Gokhale (United Kingdom)

Outcomes of autograft ACL reconstruction in the over 50’s - a minimum 2 year follow up study
R.R. Thakrar (United Kingdom)

Functional outcomes following PCL reconstruction surgery using an all-inside approach with graft reinforcement
R.R. Thakrar (United Kingdom)

Outcome evaluation of arthroscopic anterior cruciate ligament repair using reinforced tape: a two-year follow-up

Introduction of the Trauma Triage Clinic at a district general hospital: Safety and efficacy during the first year of implementation
N. Madhusudan (United Kingdom)

Anterior cruciate ligament injury mechanisms in recreational skiing, are they different from competitive alpine skiing? A video analysis
D. Garcia-German (Spain)

A 3D surface imaging method to assess the weight-bearing foot arch deformation
A.-L. Ménard (Canada)

Changes in femoral bony morphology seen on MRI over three years in youth asymptomatic hockey players
K. Briggs (United States)

Rehabilitation program in adolescent athletes with spondylolysis
M. Peña García (Spain)

Posterior cruciate ligament repair with suture tape augmentation: Minimum 2-year patient-reported outcome measures

The multiligament knee injury: Results of early surgical treatment
A.P. Gupta (India)

Vail hip sports test as a measure of functional strength

The influence of the femoral condyle sagittal curvature on ACL rupture

The influence of sex hormones on anterior cruciate ligament rupture. Female study

Is shortening of displaced mid-shaft clavicle fractures associated with inferior clinical outcomes following non-operative management? A systematic review
Percutaneous repair of Achilles tendon rupture under ultrasound surveillance - new intraoperative visualization approach with two years follow up

Primary repair of the ACL using the Suture Tape Augmentation technique: a case series with 2-year follow-up
C. Heusdens (Belgium)

Just peripheral compartment hip arthroscopy is enough for selected patients with FAI syndrome
V. Uçan (Turkey)

Postoperative results on computer assisted planning and navigation of femoral head reduction osteotomies in severe perthes deformities
F.A. Casari (Switzerland)

Ultrastructural assessment of the anterolateral ligament
A. Redler (Italy)

Morphology of ATFL rupture based on ultrasound imaging

Musculotendinous injuries of the proximal biceps femoris: a prospective study of 64 patients with treated surgically
A. Ayuob (United Kingdom)

Surgical management of chronic incomplete avulsion injuries of the proximal hamstrings
A. Ayuob (United Kingdom)

Short-term outcomes of arthroscopic bone block technique for the management of recurrent anterior shoulder instability
G. Avramidis (Greece)

All arthroscopic treatment of glenoid rim fractures
G. Avramidis (Greece)

How we manage post-rupture Achilles tendinopathy - a retrospective study
R. Prejbeanu (Romania)

Clinical assessment and management in acute dislocations of the knee (camadok) - current treatment philosophies in the United Kingdom
R. Aujla (United Kingdom)

Os fabella Syndrome in a professional swimmer
R. Lopez-Vidriero Tejedor (Spain)

Rotator interval closure associated to Bankart repair provides good functional outcomes and low complication rates as treatment of shoulder instability in absence of significant glenoid bone-loss
P. Carnero Martín de Soto (Spain)

Arthroscopic treatment of terrible triad of the elbow
E. Guerra (Italy)

Failure rates and functional outcomes of allograft and autograft bone-patellar tendon-bone (BPTB) anterior cruciate ligament reconstruction in patients < 30 years old
K. Plancher (United States)
Predicting failure rates of autograft/allograft single-bundle transtibial anterior cruciate ligament reconstruction: a simple 3D CT radiographic evaluation for the anatomic footprint
K. Plancher (United States)

Return to play and failure rates in a modified arthroscopic Bankart repair in collision & contact athletes
K. Plancher (United States)

Cam morphology and labral tears in asymptomatic international level weightlifters

Conservative treatment for injuries of the medial collateral ligament using platelet rich plasma (PRP) and high intensity laser (HIL)
I. Vassilev (Bulgaria)

Clinical tests for the diagnosis of Hoffa’s fat pad syndrome associated within frapatellar plica
T. Totlis (Greece)

Bi-columnar plating for management of peri-prosthetic distal femur fractures following TKR
A. Lakdawala (United Kingdom)

Local anaesthetic infiltration (LIA) technique in anterior cruciate ligaments (ACL) reconstructions

Prospective parallel randomised controlled trial on non-inferiority of individual femoral valgus cut angle to fixed resection angle of 7 degrees in total knee arthroplasty
S. Zadoroznij (Latvia)

Comparable results of lateral unicompartmental knee replacement for posttraumatic osteoarthritis and for primary osteoarthritis
M. Marullo (Italy)

Uniplane medial opening wedge high tibial osteotomy relative to a biplane osteotomy can reduce the incidence of lateral-hinge fracture
B.S. Kyung (Korea, Republic of)

Uniplanar medial opening-wedge high tibial osteotomy can reduce the increase of posterior tibial slope more than biplanar high tibial osteotomy can
B.S. Kyung (Korea, Republic of)

Epidemiology and deformity analysis of 53 patients submitted to osteotomy around the knee and the importance of an osteotomy planning tool in the decision making process
L. Reina Fernandes (Portugal)

Affordance-based alignment methods during an ACL reconstruction
W. Kim (Peru)

Intra-operative administration of combined platelet rich fibrin (PRF) and tranexamic acid spray further reduces total blood loss after primary total knee arthroplasty compared to standard of care: a prospective, randomized, controlled trial
R. Tandogan (Turkey)
Scientific Programme

Posterior translation of the femur in anterior cruciate ligament mucoid degeneration & ganglion cysts – an observational study

TKA after HTO and extraarticular deformities
B. Violante (Italy)

Autologous adipose-derived stem cells in early knee osteoarthritis: identification of a subpopulation with greater response
M. Vasso (Italy)

Unicompartmental knee arthroplasty: modes of failure and conversion to total knee arthroplasty
M. Vasso (Italy)

Analysis of safety and effectiveness of a wireless telerehabilitation system in the Primary Total Knee Arthroplasty immediate postoperative period
S. Prat-Fabregat (Spain)

Achieving a balanced total knee by controlling the component position using robotics and intra-operative sensor technology without soft tissue release
J. Bardou-Jacquet (France)

Septic knee arthritis following joint injections: myth or reality? 16 years retrospective study in a multi-specialist hospital
S. Manzotti (Italy)

Deep vein thrombosis prevention with gradual compression stockinette following rapid recovery total knee arthroplasty: a case series

Does the difference between templated and intraoperatively achieved posterior tibial slope affect the patient satisfaction after unicompartmental knee replacement? - a pilot study
J. Serdar (Croatia)

Functional knee phenotypes - a novel classification for the lower limb alignment based on the native alignment in young non-osteoarthritic patients
S. Hess (Switzerland)

Variability of functional knee phenotypes in osteoarthritic knees shows that a more personalized approach in TKA is needed
L. Moser (Switzerland)

Current TKA alignment concepts do not aim to achieve the native coronal alignment of a patient
L. Moser (Switzerland)

Current TKA alignment concepts change the coronal alignment of OA patients
S. Hess (Switzerland)

Carboplasty - A novel stem cell approach for managing subchondral bone edema in knee osteoarthritis

Third generation medially-congruent TKA better reproduce knee kinematics when compared to posterior-stabilized designs
P. Indelli (United States)
Joint line descends and patellar height ascends in posterior cruciate retaining or sacrificing total knee arthroplasty with the same clinical outcomes

Where is the optimal starting point in medial open wedge high tibial osteotomy? - 3D tibia model finite element study

Tivanium posterior-stabilized (PS) total knee arthroplasty (TKA) for nickel intolerance
G.L. Canata (Italy)

Primary total stabizer knee arthroplasty: clinical and radiographic outcomes at short-mid-term follow-up
M. Giuntoli (Italy)

Distal femoral osteotomy in patient with valgus knee due to hereditary multiple osteochondromas
P. Amaro (Portugal)

Outcome of TKA after post-traumatic degenerative OA-A clinical and radiological study

Stiffness of the knee after TKA

Evaluation of functional stability in patients after total knee arthroplasty: bi-cruciate stabilised versus cruciate retaining implants - a preliminary comparative study
M. Bialy (Poland)

Experience of using arthroscopy with gunshot penetrating injuries of the knee joint
Y. Klapchuk (Ukraine)

Chiba osteotomy - indication and technique
U. Kuwashima (Japan)

Medial closing wedge HTO for correction of a post-traumatic deformity
S. Moura de Carvalho (Portugal)

Combined anterior cruciate ligament reconstruction with knee alignment osteotomy - results up to 5 years
R.R. Thakrar (United Kingdom)

Does total meniscectomy affect the patellofemoral joint compartment?

Knee kinematics after cruciate retaining highly congruent mobile bearing total knee arthroplasty: an in vivo dynamic RSA study
G.M. Marcheggiani Muccioli (Italy)

Kinematical analysis of a medial stabilized total knee arthroplasty during sit to stand and lunge: an in vivo dynamic RSA study
G.M. Marcheggiani Muccioli (Italy)

The distance between tibial tubercle and trochlear groove correlates with lower limb axial alignment

Is there a role for synthetic ligaments in the reconstruction of patellar tendon chronic rupture after TKA? Our experience with LARS ligament and surgical technique
M. Giuntoli (Italy)
The necessity for simultaneous bilateral total knee arthroplasty: a neglected point in patients with severe deformity
R. Ganji (Iran, Islamic Republic of)

A novel approach to the lower limb axial alignment analysis: a computed tomography study

Conventional Cutting guides reliability during Total Knee Replacement in coronal plane. A retrospective Study
J. Leal-Blanquet (Spain)

The effect of preoperative adjustment in planning to account for an elevated joint line convergence angle on the accuracy of periarticular knee osteotomies - a pilot study
R.R. Thakrar (United Kingdom)

Correlation between the tibial cutting guide/jig and tibial resections in total knee arthroplasty: a prospective study

The non-articular half of the patella bears most of the bone load in overstuffed patellae after cruciate-retaining total knee arthroplasty

New posterior-stabilized rotating-platform TKA design partially restores normal knee kinematic both during activity of daily living and high demanding motor task
G.M. Marcheggiani Muccioli (Italy)

Treatment of neglected patellar tendon rupture using LARS ligament: A case series
K. Veravalli (United Kingdom)

A radiographic re-analysis of varus and valgus knees treated with osteotomies for unicompartimental degeneration and related subjective outcomes after “wrong” metaphyseal corrections
A. Cochetti (Italy)

Role of medial open wedge high tibial osteotomy for medial compartment osteoarthritis (OA) knee with varus deformity
A.P. Gupta (India)

The real role of local injection of transamin acid in total knee replacement surgery using or not a drainage system (Redon). The benefits and queries about using it
P. Natsaridis (Greece)

Medial unicompartmental knee arthroplasty: Correcting to neutral might be the wrong answer?
K. Plancher (United States)

Midterm (10 year average) results of ACI deficient knees following non mobile UKA: Can we achieve high survivorship and excellent outcomes?
K. Plancher (United States)

Midterm outcomes of patellofemoral matrix associated chondrocyte implantation - are they as good as femoral condyle outcomes?
E. Matthews (United Kingdom)

Natural course of Baker’s cysts in a total knee arthroplasty population
S. Kopf (Germany)
Scientific Programme

Gait assessment of the patients after total knee arthroplasty using multi-radius versus gradually reducing radius femoral component designs during sit-to-stand movement and stair descent

Posterior stabilized design of a new generation total knee arthroplasty shows wider medial pivoting compared to the cruciate retaining design during chair raising
G.M. Marcheggiani Muccioli (Italy)

Patellar denervation is not useful in total knee arthroplasty with patellar resurfacing
P. Hinarejos (Spain)

Early results of OPTYLINE nail for medial open wedge osteotomy
C. Shaw (United Kingdom)

Comparison of all-polyethylene and metal-backed tibial components in total knee replacement (TKA)
G.L. Canata (Italy)

A new software to detect and measure the gait with a smartphone in the sock
F. Conteduca (Italy)

Knee alignment in failed high tibial osteotomy does not influence functional outcomes after revision total knee arthroplasty
J. Chen (Singapore)

PSI loses accuracy as preoperative malalignment increases
V.J. León-Muñoz (Spain)

Influence of femoral joint obliquity in TKA
J.F. Sánchez-Soler (Spain)

Effect of different tibial cuts on femorotibial knee kinematics in TKA in the constitutional varus knee
M. Faschingbauer (Germany)

Tibio-fibular angle: a new landmark for coronal alignment?
S. Perelli (Spain)

Simultaneous bilateral knee arthroplasty: functional outcomes and complications in 22 cases. A prospective single-centre study
B. Gosnik (Slovenia)

Effectiveness of therapeutic electromyographic biofeedback for the treatment of orthopedic knee pathologies: a systematic review

Anemia, decompensated diabetes and poor functional situation, act as independent factors of worse outcomes in total knee arthroplasties

Patient-specific high-tibial osteotomy cutting-guide: a learning curve analysis
M. Ollivier (France)

Tibial slope measure depends on ethnicity, gender and lower-limb alignment
M. Ollivier (France)
 Scientifi c Programme

 Early functional outcomes of lateral meniscal allograft transplantation from meniscus preserved from total knee arthroplasty
T. Goyal (India)

 Patellofemoral arthrosis does not negatively effect outcomes following unicompartmental arthroplasty
K. Plancher (United States)

 Preliminary radiological results as well as conversion rate in the analysis of onlay patella-femoral joint replacement

Coffee Break - Hot Topic Debates - Exhibition Floor

ESSKA-AFAS summary of ICCRA consensus on the treatment of paediatric talar OCLs - best treatments and future technologies

Chairs:
C.N. van Dijk (Netherlands)
J. Calder (United Kingdom)

Terminology and Summary
E. Hurley (Ireland)

Paediatric Cartilage Lesions
Scientific Programme

Tibial plafond OCL
C. van Bergen (United Kingdom)

EKA Symposia
10:45 - 12:15
EKA - Current Concept for the Degenerative Knee - Alignment

Anatomical versus mechanical versus kinematic versus individualised alignment in TKA

Chairs:
P. Hinarejos (Spain)
M.T. Hirschmann (Switzerland)

Phenotype
M.T. Hirschmann (Switzerland)

Anatomical alignment
M. Ollivier (France)

Mechanical alignment
E. Gomez Barrena (Spain)

Kinematic alignment
P. Indelli (United States)

Individualised alignment
M. Arnold (Switzerland)

ESA Symposia
10:45 - 12:45
ESA - Massive Rotator Cuff Tears

Re-live

Chairs:
E. Antonogiannakis (Greece)
M. Karahan (Turkey)

Partial repair
G. Samitier (Spain)

Patch graft augmentation
C. Charousset (France)

Superior capsule reconstruction
A. Imhoff (Germany)

Biceps autograft
J. Barth (France)

Tendon transfer for posterosuperior cuff: LD
F. Martetschlager (Germany)

Tendon transfer for posterosuperior cuff: LT
E. Calvo (Spain)
Scientific Programme

**Tendon transfer for anterosuperior cuff: PM**
J. Kany (France)

**Tendon transfer for anterosuperior cuff: LD**
V. Jermolajevas (Lithuania)

**Subacromial spacer**
L. Kovačić (Slovenia)

**Reverse shoulder arthroplasty**
B. Toussaint (France)

ESMA Symposia
10:45 - 12:15

**ESMA - Sport Injuries - New Concepts!**

**Tendon injuries. What did we learn until now? Classification, Prevention and return to play**

**Chairs:**
J. Huylebroek (Belgium)
J. Ardèvol (Spain)

- **Tendon structure, composition and behavior through sports life?**
  P. Papadopoulos (Greece)

- **Tendinopathy: tendinitis and tendinoses. What changes? Classification! Is there a consensus?**
  B. Pijenburg (Netherlands)

- **Ultrasound imaging and conservative treatment follow up**
  B. Klos (Netherlands)

- **Surgery principles and results**
  A. Korolev (Russian Federation)

- **Rehabilitation and return to sports but, mostly, prevention! What could we do to avoid tendon injury?**
  G. Felmet (Germany)

**Discussion**

AFAS Free Papers
11:45 - 12:45

**AFAS - From Trauma to Arthritis - Where do we stand**

**Free Papers**

**Chairs:**
N.M. Nasef (Egypt)

- **Return to sports after first MTPJ Arthrodesis in elite athletes**
  D. Maor (United Kingdom)
Scientific Programme

11:50 - 11:55
Stress fractures of the medial malleolus in the professional soccer player treated with open reduction & internal fixation with arthroscopic spur debridement

11:55 - 12:00
Arthroscopic deltoid repair for acute internal ankle instability
J. Caetano (Portugal)

12:00 - 12:05
Prevalence of intra-articular lesions in acute ankle fractures and predisposing factors for cartilage and ligament injury: A pilot prospective study
S.H. Lee (Korea, Republic of)

12:05 - 12:10
Early return to playing professional football following fixation of 5th metatarsal stress fractures may lead to delayed union but does not increase the risk of long-term non-union
D. Marsland (United Kingdom)

Break/Hot Topic Debates
12:15 - 13:45
EKA - Current Concept for the Degenerative Knee - Alignment

Lunch Break - Hot Topic Debates Exhibition Floor

Break/Hot Topic Debates
12:15 - 13:45
ESMA - Sport Injuries - New Concepts!

Lunch Break - Hot Topic Debates Exhibition Floor

Break/Hot Topic Debates
12:15 - 14:15
Patio

Lunch Break - Hot Topic Debates Exhibition Floor

Break/Hot Topic Debates
12:45 - 14:15
AFAS - From Trauma to Arthritis - Where do we stand

Lunch Break - Hot Topic Debates Exhibition Floor

Break/Hot Topic Debates
12:45 - 14:15
ESA - Massive Rotator Cuff Tears

Lunch Break - Hot Topic Debates Exhibition Floor
Update HTO - The optimal alignment per indication and operative technique

Chairs:
M. Dawson (United Kingdom)
S. Schröter (Germany)

Which alignment should we target for medial compartment OA?
M. Dawson (United Kingdom)

Which alignment should we target for varus/valgus deformity and planned ankle?
S. Schröter (Germany)

Which alignment in sagittal and coronal plane in case of planned ACL or PCL reconstruction?
D. Pape (Luxembourg)

Combined procedures: ACL and HTO
K. Slynarski (Poland)

New jigs for HTO and patient specific saw guides
M. Ollivier (France)

Double level osteotomy and joint-line orientation
K. Kley (Germany)

Is there still a place for lateral closed wedge HTO
E. Servien (France)

Chiba Osteotomy - Indication and technique
U. Kuwashima (Japan)

Patella height after open wedge HTO - depending on surgical technique?
B. Ambrozic (Slovenia)

Muscle injuries: What did we learn until now? Classification, Prevention and return to play

Chairs:
I. Kaywan (Germany)
A. Pereira de Castro (Portugal)

Injury Mechanism and Diagnosis
I. Guillén (Spain)

How to identify? Is there an optimal classification?
R. Pruna (Spain)

How to treat? Different conservative approaches and results
F. Della Villa (Italy)
**Scientific Programme**

**Muscle Surgery! When and why?**
J. Puigdellivol (Spain)

**Return to sports? Which criteria?**
G. Rodas (Spain)

**Prevention strategies! Does it work?**
T. Patt (Netherlands)

**Re-injury! Who is responsible for it?**
T. Fernandez Jaen (Spain)

**Discussion**

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**AFAS Symposia**
14:15 - 15:00
**AFAS - From Trauma to Arthritis - Where do we stand**

**ESSKA-AFAS summary of ICCRA consensus on the treatment of paediatric talar OCLs - best treatments and future technologies**

**Chairs:**
S. Guillo (France)
J. Calder (United Kingdom)

- **OCL with ankle instability**
  C. Pearce (United Kingdom)

- **Early ankle arthritis treatment**
  A. Younger (Canada)

**Discussion & Cases**

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**ESA Free Oral Presentations**
14:15 - 15:45
**ESA - Massive Rotator Cuff Tears**

**Free Oral Presentations**

**Chairs:**
F. Martetschlager (Germany)
C. Rosso (Switzerland)

- **Natural history of degenerative rotator cuff tears - clinical and ultrasound evaluation of 164 shoulders with a follow-up of 10 years**
  H. Fonte (Portugal)  
  14:15 - 14:20

- **Accuracy of ultrasonography and magnetic resonance imaging in the diagnosis of rotator cuff tears - A comparative observational study**
  P. Seyed-Safi (United Kingdom)  
  14:20 - 14:25

- **Biomechanical comparison of three anchor concepts for rotator cuff repair in standardized physiological and osteoporotic bone**
  C. Rosso (Switzerland)  
  14:25 - 14:30
Scientific Programme

Comparison of clinical and structural outcomes by subscapularis tendon status in massive rotator cuff tear  
S.H. Kweon (Korea, Republic of)  
14:30 - 14:35

Discussion  
14:35 - 14:45

Clinical and radiological outcomes of large and massive rotator cuff tears treated with arthroscopic augmented rotator cuff repairs using extracellular matrix patch  
A. Narvani (United Kingdom)  
14:45 - 14:50

Bridging allograft reconstruction is superior to maximal repair for the treatment of chronic massive rotator cuff tears - a prospective randomized controlled trial  
14:50 - 14:55

Clinical and radiological outcomes of large and massive rotator cuff tears treated with arthroscopic augmented rotator cuff repairs using extracellular matrix patch  
A. Narvani (United Kingdom)  
14:45 - 14:50

Bridging allograft reconstruction is superior to maximal repair for the treatment of chronic massive rotator cuff tears - a prospective randomized controlled trial  
14:50 - 14:55

Short-term outcome after arthroscopic rotator cuff revision, augmented with an autologous fibrin scaffold and bone marrow cells from the proximal humerus  
A. Voss (Germany)  
14:55 - 15:00

Patient selection for biodegradable subacromial spacer implantation  
J. Merkac (Slovenia)  
15:00 - 15:05

Discussion  
15:05 - 15:15

Does arthroscopic superior capsular reconstruction keep its promises - an Austrian short-term prospective clinical and radiological analysis and comparison to debridement and partial repair in irreparable rotator cuff tears  
P. Heuberer (Austria)  
15:15 - 15:20

Clinical and MRI outcomes after arthroscopic superior capsule reconstruction with human dermal allograft for irreparable posterosuperior rotator cuff tears: a minimum two year follow up  
L. Lacheta (United States)  
15:20 - 15:25

Preoperative prediction of the graft size used in Superior Capsular Reconstruction using MRI  
C. Yiannakopoulos (Greece)  
15:25 - 15:30

Bone density in massive rotator cuff tears and possible implications in superior capsular reconstruction  
A. Boutsiadis (Greece)  
15:30 - 15:35

Discussion  
15:35 - 15:45

AFAS Free Papers  
15:00 - 15:45

Free Papers  

Distal tibial osteotomy for varus ankle arthritis: a systematic review  
R. Aujla (United Kingdom)  
15:00 - 15:05
Scientific Programme

7a results of the first 100 cases of a totally new designed total ankle arthroplasty with main focus on universal use in all kinds of deformity, balancing and increasing ROM
E. Orthner (Austria)

15:10 - 15:15
Ossoscopy of OCD lesions, stage 2-3, 6 a follow up of 24 cases
E. Orthner (Austria)

15:15 - 15:20
Comparison of different treatment methods in patients with chronic ankle instability
P. Cisowski (Poland)

15:20 - 15:25
The "all-inside" arthroscopic Broström-Gould procedure with anterior talofibular ligament repair and additional retinaculum augmentation: a prospective study of 30 consecutive patients
S.H. Lee (Korea, Republic of)

EKA Free Papers
15:15 - 15:45
EKA - Current Concept for the Degenerative Knee - Alignment

Free Papers

Chairs:
B. Violante (Italy)

Computer Assistes Femoral and Tibial Rotations in TKR
P. Beaufils (France)

Comparison of patient-specific instrumentation versus a conventional technique in medial opening-wedge high tibial osteotomy
P. Verdonk (Belgium)

Tibial Condylar Valgus Osteotomy (TCVO): an intra-articular osteotomy for severe varus deformities: rationale and short term results
M. Chaudhary (India)

Does nanohydroxapatite promote bone healing in open wedge high tibial osteotomy? A long term CT study
F. Conteduca (Italy)

Patient specific mini-metal implants. The future of cartilage repair for the right patient?
J. Holz (Germany)

Break/Hot Topic Debates
15:45 - 16:30
AFAS - From Trauma to Arthritis - Where do we stand

Coffee Break - Hot Topic Debates - Exhibition Floor
SciEntific PrograMMe

BreaK/Hot Topic Debates
15:45 - 16:30  EKA - Current Concept for the Degenerative Knee - Alignment

Coffee Break - Hot Topic Debates - Exhibition Floor

BreaK/Hot Topic Debates
15:45 - 16:30  ESA - Massive Rotator Cuff Tears

Coffee Break - Hot Topic Debates - Exhibition Floor

BreaK/Hot Topic Debates
15:45 - 16:30  ESMA - Sport Injuries - New Concepts!

Coffee Break - Hot Topic Debates - Exhibition Floor

AFAS Symposia
16:30 - 18:00  AFAS - From Trauma to Arthritis - Where do we stand

Syndemsosis Injuries

Chairs:
C. Pearce (United Kingdom)
A. Kynsburg (Austria)

Optimising diagnosis
J. Calder (United Kingdom)

Management of the acute injury
C. Pearce (United Kingdom)

Management of the chronic injury
A. Younger (Canada)

How to deal with the deltoid injury
D. Haverkamp (Netherlands)

Discussion & cases

EKA Symposia
16:30 - 18:00  EKA - Current Concept for the Degenerative Knee - Alignment

Safe zones for alignment of femoral, tibial and patellar components in TKA

Chairs:
R. Becker (Germany)
P. Indelli (United States)

Jointline obliquity

Coronal femur
J. Leal-Blanquet (Spain)
Scientific Programme

Saggital femur
P. Verdonk (Belgium)

Rotational femur
O. Kessler (Switzerland)

Coronal tibia
P. Hinarejos (Spain)

Saggital tibia
D. Deehan (United Kingdom)

Rotational tibia
A. Schiavone Panni (Italy)

Alignment of patella
F. Giron (Italy)

ESA Case Discussion
16:30 - 18:00

Case Discussion

Chairs:
R. Brzóska (Poland)
G. Milano (Italy)

Case 1 - Traumatic rotator cuff tear with shoulder stiffness
C. Maia Dias (Portugal)

Case 2 - Failure of rotator cuff repair
R. Hackney (United Kingdom)

Case 3 - Combined massive rotator cuff and recurrent shoulder instability
B. Marjanovic (Slovenia)

Case 4 - Reverse arthroplasty VS other options
P. Gleyze (France)

Case 5 - Massive RCT and patient specific rehabilitation in sportsmen
E. Taverna (Italy)

Case 6 - Revision arthroscopic RCT repair
A. Calvo (Spain)

ESMA Symposia
16:30 - 18:00

ESMA - Sport Injuries - New Concepts!

Recover and improve performance devise. Myth or reality?

Chairs:
E. Lopez-Vidriero (Spain)
M. Rahu (Estonia)
Scientific Programme

Water and Low temperatures therapy (Cryotherapy)
A. Sola (Spain)

Biomarkers and Metabolomics in sports. What do we know about?
L. Serratosa (Spain)

Neuromuscular stimulation devices
Á. Basas (Spain)

Oxygen Therapy: why hiperbaric chambers? why hipobaric chamber?
L. Laver (United Kingdom)

Supplements : what really works?

Sleep, recovery and performance
T. Meyer (Germany)

GPS devises
A. Mendez-Villanueva (Qatar)
ESMA Free Papers
08:00 - 09:00
ESMA - Sport Injuries - New Concepts!

Free Papers - Sports Trauma /Sports Medicine/Prevention

Chairs:
H. Mayr (Germany)
W. Krutsch (Germany)

Sports medicine issues in women
F. Torkan (Iran, Islamic Republic of)

Comparison of clinical outcomes between different femoral tunnel positions after anterior cruciate ligament reconstruction surgery
A. Keshavarz (Iran, Islamic Republic of)

Sensor-based lower limb kinematics in young football players: new frontiers of injury prevention
S. Zaffagnini (Italy)

Surgical management of distal hamstring non-avulsion T-junction tears
A. Ayuob (United Kingdom)

Diagnosis and surgical treatment of popliteal artery entrapment syndrome in elite athletes
R. Lopez-Vidriero Tejedor (Spain)

EKA Free Papers
08:30 - 09:30
EKA - Current Concept for the Degenerative Knee - Alignment

Free Papers

Chairs:
D. Guenther (Germany)
N. Kort (Netherlands)

Mid term functional and radiological outcomes are comparable between patient specific instrumentation surgery versus conventional total knee arthroplasty
J. Lim (Singapore)

A new standard for the safe introduction of orthopaedic implants: Beyond compliance, the unity knee
E. Matthews (United Kingdom)

Biofilm different adhesion to silver and tin coated surfaces
F. Conteduca (Italy)

Does the tibial cut affect patellofemoral knee kinematics and pressure distribution in total knee arthroplasty with constitutional varus-alignment?
M. Faschingbauer (Germany)
Scientific Programme

Long term outcome of total knee arthroplasty in young patients with rheumatoid arthritis
H. Vora (United Kingdom)

The learning curve and alignment assessment of an image-free handheld robot in tka: the first patient series in Europe
P. Bollars (Belgium)

E-Posters
08:30 - 12:00

E-Posters

Posterior ankle arthroscopy for treating os trigonum syndrome; and acute or chronic os trigonum fractures.
D. Nikolopoulos (Greece)

Ankle arthroscopy combined with hardware removal for chronic pain after ankle fracture
D. Nikolopoulos (Greece)

Achilles tendon length and function independently associated with ankle joint kinematics during gait
H. Sigurðsson (Iceland)

A comparative study with novel percutaneous repair and open repair of an acute achilles tendon rupture: novel usage of intraoperative ultrasonography
S. Hwang (Korea, Republic of)

The augmentation technique for anatomical reduction of shortened lateral ligament complex in modified broström procedure
K. Ahn (Korea, Republic of)

Satisfaction analysis of Figure 8 (open heel) short leg cast
K. Ahn (Korea, Republic of)

A prospective study of physiotherapy with pilates machines, following operative treatment of ankle fractures.
D. Hristova (Bulgaria)

Tillaux fracture in the adult age - review of 3 cases treated with arthroscopic reduction and percutaneous fixation
F. Machado (Portugal)

Excellent results in the surgical rehabilitation of Hallux Valgus, even in moderate to severe forms of the disease, with a combination of Chevron osteotomy and modified McBride procedure with two and a half years of follow-up
P. Natsaridis (Greece)

Arthroscopic ankle arthrodesis vs arthroscopic tibia-talo-calcaneal fusion: Outcomes and patient satisfaction
A. Polyzos (Greece)
Analysis of independent predictors of poor outcomes of chevron osteotomy for hallux valgus: focus on generalized ligamentous laxity and foot width changes

Cost analysis of outcome differences for staged vs non-staged pes planovalgus foot reconstruction

Can combination of peripheral nerve block and non-opioidal patient controlled analgesia be an effective postoperative pain control method?

Achilles peritendinitis: endoscopic or open tenolysis?
G.L. Canata (Italy)

Prognosis of MACI (matrix-associated autologous chondrocyte implantation) after osteochondral lesions of the talus

Endoscopic treatment for chronic achilles tendon rupture on high demand patients
J. Caetano (Portugal)

Relation between preoperative EMG activity of deltoid and upper trapezius muscle and clinical results in patients treated with reverse shoulder arthroplasty
D. Lee (Korea, Republic of)

Rotator interval reconstruction using the biceps tendon for irreparable cuff tears
A. Van Raebroeckx (Belgium)

Supraspinatus tears and subcoracoid impingement: cause or effect?

Amyotrophic lateral sclerosis as differential diagnosis of muscular atrophy of the shoulder girdle in rotator cuff pathology

Clinical and structural outcomes after superior capsular reconstruction and augmentation for massive rotator cuff tears using the long head biceps tendon as a graft
P.J. Llinas Hernandez (Colombia)

Lesions of the biceps pulley: a prospective study and classification update

Synthetic patch augmentation of irreparable tears of the rotator cuff
R. Hackney (United Kingdom)

Impact of rotator cuff tear size, oxford shoulder scores, surgical and anaesthetic technique on patient pain

Different answering scales used within the Constant-Murley Score are not interchangeable
F. Hollman (Netherlands)

Equivalence between digital and paper-based Western Ontario Rotator Cuff index (WORC): a two-way crossover equivalence trial

Combined massive rotator cuff and recurrent shoulder instability

The arthroscopic triple-row repair for large rotator cuff tears: functional outcome and repair integrity
Mid-term outcomes of subacromial balloon spacer for the treatment of irreparable rotator cuff tears
E. Brilakis (Greece)

The role of blood lipids levels in rotator cuff healing
M. Varga (Slovakia)

Zoledronic acid improves healing of supraspinatus tendon repair in a rodent model
J. Schanda (Austria)

Influence of additional rotator cuff repair compared to rotator cuff debridement after arthroscopic removal of calcific deposit in patients with calcifying tendonitis of the shoulder - Comparison of the clinical and structural results

Functional outcomes 8 years after arthroscopic repair of massive rotator cuff tears

Anterior cable tear patterns in ARCR: Diagnosing the pathoanatomy of anterior cable tears in reparable RCT

Is the subacromial biodegradable spacer “reversible”?

Needle based, arthroscopic, transosseous rotator cuff repair - short term clinical results

Reverse shoulder arthroplasty (RSA) with 3D navigation (GPS surgery) for glenoid components: surgical technique and preliminary results
A. Residori (Italy)

Banana Suture Lasso technique for arthroscopic side-to-side repair of massive rotator cuff tears: clinical, functional and radiographic assessment after a mean of 6 years of follow-up

Does ultrasound in clinic without formal training changes the management of patients with rotator cuff tears?

Massive irreparable rotator cuff tears treated with the subacromial spacer: clinical outcomes in a cases-series at minimum 1 year-follow-up
P. Carnero Martín de Soto (Spain)

Rotator cuff bursal side tear after calcium deposit removal: Should we suture it or not?
N. Magnitskaya (Russian Federation)

3D kinematic analysis of the scapulothoracic motion using inertial sensors in healthy subjects and patients with rotator cuff tears
C. Yiannakopoulos (Greece)

Superior capsular reconstruction restores the normal capsular kinematics in abduction
C. Yiannakopoulos (Greece)

Extracellular matrix homeostasis of torn supraspinatus tendon edge is compatible with surgical strategy of rotator cuff repair

A systematic review and meta-analysis on the clinical efficacy of kinesiotaping in shoulder disorders
Scientific Programme

Patient-reported outcomes of arthroscopic superior capsule reconstruction for irreparable rotator cuff tears
J. Holz (Germany)

A multimodal approach to rotator cuff tears: pain, satisfaction and functional outcomes of rotator cuff repair with bovine bioinductive patch
K. Plancher (United States)

Use of an electrocautery device during shoulder arthroscopy- is it really safe?

Neuropathic pain and disability treatment in patients with complex regional pain syndrome developed after fractures of the distal radius
V. Kotiuk (Ukraine)

Clinical data evaluation after matrix-associated autologous chondrocyte transplantation: a retrospective study
H. Binder (Austria)

Surgical treatment of iliopsoas muscle tendinopathy in sportsmen
V. Kotiuk (Ukraine)

The potential complication of a central patellar portal technique for arthroscopic anterior cruciate ligament reconstruction
K. Goto (Japan)

Return to sport rate of team handball players after arthroscopic labral repair
P. Attila (Hungary)

Bicondylar tibial plateau fractures: a retrospective review of 64 cases
T. Arakawa (Japan)

Knee infection following anterior cruciate ligament reconstruction
A. Ivkovic (Croatia)

Comprehensive exercise therapy in management of musculoskeletal disorders
F. Torkan (Iran, Islamic Republic of)

Bipolar bone loss in patients with traumatic anterior shoulder instability: effectiveness of glenoid bone graft augmentation alone
N. Iizawa (Japan)

Differential approach to arthroscopic treatment of acetabular labrum injuries
V. Kotiuk (Ukraine)

Does early anterior cruciate ligament reconstruction prevent further meniscal damage? Secondary analysis of a randomized controlled trial
B. Snoeker (Sweden)

High-grade pre-operative Patellar J sign leads to post-operative residual patellar laxity after medial patellofemoral ligament reconstruction and related procedures
Z. Xue (China)
**Is a grafted tendon flattened at the tunnel aperture after anatomical flat anterior cruciate ligament reconstruction using hamstring autograft?**
M. Hayashi (Japan)

**Systematic review and appraisal of clinical practice guidelines for sports-related concussion**
S. Dayton (United States)

**Arthroscopic assisted tibial plafond fracture fixation and bone graft: surgical technique**
D. Marsland (United Kingdom)

**Does bone loss accompany soft tissue based posterior shoulder instability? A retrospective MRI study**
Ö. Orhan (Turkey)

**Distal radius epiphysitis in a young gymnast: Review of the literature based on a case study**
J.L. Patiño (Spain)

**A RCT using a novel tibial marrow aspirate approach for managing subchondral bone edema in knee osteoarthritis**

**Personalized back rx exercise for treating discogenic axial low back pain: a prospective pilot study**

**A case report of a complicated distal biceps tendon rupture in a senior recreational athlete**
L. Rips (Estonia)

**Compartment syndromes after lower limb trauma: educational challenge for orthopaedic surgeons**

**Prevalence of bony changes associated with FAI in the hips of elite volleyball players**

**Differential diagnoses of lateral elbow pain. Diagnostic and therapeutic algorithms**
C. Koukos (Germany)

**Forgotten Joint Score - 12 after ACL reconstruction and factors related to high score**
M. Alsubaie (Saudi Arabia)

**The multiple ligament injured knee: When is primary repair an option?**

**Less joint awareness following arthroscopic primary repair versus reconstruction of the anterior cruciate ligament**

**No difference in outcomes of arthroscopic SLAP IIb repair vs. SLAP with rotator cuff repair**
S. de Groot (United States)

**Movement quality assessments during the one leg countermovement jump test in youth soccer players**
G. Scinicarelli (Germany)

**Evaluation of the myofascial chain and functional movement tests in patients after anterior cruciate ligament reconstruction**
M. Bialy (Poland)
Scientific Programme

The effect of tight medial patellofemoral ligament fixation
K. Nakamura (Japan)

Early outcomes of repair of bucket handle meniscal tears using a novel inside-out technique.
N. Gokhale (United Kingdom)

Outcomes of autograft ACL reconstruction in the over 50’s - a minimum 2 year follow up study
R.R. Thakrar (United Kingdom)

Functional outcomes following PCL reconstruction surgery using an all-inside approach with graft reinforcement
R.R. Thakrar (United Kingdom)

Outcome evaluation of arthroscopic anterior cruciate ligament repair using reinforced tape: a two-year follow-up

Introduction of the Trauma Triage Clinic at a district general hospital: Safety and efficacy during the first year of implementation
N. Madhusudan (United Kingdom)

Anterior cruciate ligament injury mechanisms in recreational skiing, are they different from competitive alpine skiing? A video analysis
D. Garcia-German (Spain)

A 3D surface imaging method to assess the weight-bearing foot arch deformation
A.-L. Ménard (Canada)

Changes in femoral bony morphology seen on MRI over three years in youth asymptomatic hockey players
K. Briggs (United States)

Rehabilitation program in adolescent athletes with spondylolysis
M. Peña García (Spain)

Posterior cruciate ligament repair with suture tape augmentation: Minimum 2-year patient-reported outcome measures

The multiligament knee injury: Results of early surgical treatment
A.P. Gupta (India)

Vail hip sports test as a measure of functional strength

The influence of the femoral condyle sagittal curvature on ACL rupture

The influence of sex hormones on anterior cruciate ligament rupture. Female study

Is shortening of displaced mid-shaft clavicle fractures associated with inferior clinical outcomes following non-operative management? A systematic review

Percutaneous repair of Achilles tendon rupture under ultrasound surveillance - new intraoperative visualization approach with two years follow up

Primary repair of the ACL using the Suture Tape Augmentation technique: a case series with 2-year follow-up
Just peripheral compartment hip arthroscopy is enough for selected patients with FAI syndrome
V. Uçan (Turkey)

Postoperative results on computer assisted planning and navigation of femoral head reduction osteotomies in severe perthes deformities
F.A. Casari (Switzerland)

Ultrastructural assessment of the anterolateral ligament
A. Redler (Italy)

Morphology of ATFL rupture based on ultrasound imaging

Musculotendinous injuries of the proximal biceps femoris: a prospective study of 64 patients with treated surgically
A. Ayuob (United Kingdom)

Surgical management of chronic incomplete avulsion injuries of the proximal hamstrings
A. Ayuob (United Kingdom)

Short-term outcomes of arthroscopic bone block technique for the management of recurrent anterior shoulder instability
G. Avramidis (Greece)

All arthroscopic treatment of glenoid rim fractures
G. Avramidis (Greece)

How we manage post-rupture Achilles tendinopathy - a retrospective study
R. Prejbeanu (Romania)

Clinical assessment and management in acute dislocations of the knee (camadok) - current treatment philosophies in the United Kingdom

Os fabella Syndrome in a professional swimmer
R. Lopez-Vidriero Tejedor (Spain)

Rotator interval closure associated to Bankart repair provides good functional outcomes and low complication rates as treatment of shoulder instability in absence of significant glenoid bone-loss
P. Carnero Martín de Soto (Spain)

Arthroscopic treatment of terrible triad of the elbow
E. Guerra (Italy)

Failure rates and functional outcomes of allograft and autograft bone-patellar tendon-bone (BPTB) anterior cruciate ligament reconstruction in patients < 30 years old
K. Plancher (United States)

Predicting failure rates of autograft/allograft single-bundle transtibial anterior cruciate ligament reconstruction: a simple 3D CT radiographic evaluation for the anatomic footprint
K. Plancher (United States)

Return to play and failure rates in a modified arthroscopic Bankart repair in collision & contact athletes
K. Plancher (United States)
Cam morphology and labral tears in asymptomatic international level weightlifters

Conservative treatment for injuries of the medial collateral ligament using platelet rich plasma (PRP) and high intensity laser (HIL)
I. Vassilev (Bulgaria)

Clinical tests for the diagnosis of Hoffa’s fat pad syndrome associated within frapatellar plica
T. Totlis (Greece)

Bi-columnar plating for management of peri-prosthetic distal femur fractures following TKR
A. Lakdawala (United Kingdom)

Local anaesthetic infiltration (LIA) technique in anterior cruciate ligaments (ACL) reconstructions

Prospective parallel randomised controlled trial on non-inferiority of individual femoral valgus cut angle to fixed resection angle of 7 degrees in total knee arthroplasty
S. Zadoroznijs (Latvia)

Comparable results of lateral unicompartmental knee replacement for posttraumatic osteoarthritis and for primary osteoarthritis
M. Marullo (Italy)

Uniplane medial opening wedge high tibial osteotomy relative to a biplane osteotomy can reduce the incidence of lateral-hinge fracture
B.S. Kyung (Korea, Republic of)

Uniplanar medial opening-wedge high tibial osteotomy can reduce the increase of posterior tibial slope more than biplanar high tibial osteotomy can
B.S. Kyung (Korea, Republic of)

Epidemiology and deformity analysis of 53 patients submitted to osteotomy around the knee and the importance of an osteotomy planning tool in the decision making process
L. Reina Fernandes (Portugal)

Affordance-based alignment methods during an ACL reconstruction
W. Kim (Peru)

Intra-operative administration of combined platelet rich fibrin (PRF) and tranexamic acid spray further reduces total blood loss after primary total knee arthroplasty compared to standard of care: a prospective, randomized, controlled trial
R. Tandogan (Turkey)

Posterior translation of the femur in anterior cruciate ligament mucoid degeneration & ganglion cysts - an observational study

TKA after HTO and extraarticular deformities
B. Violante (Italy)

Autologous adipose-derived stem cells in early knee osteoarthritis: identification of a subpopulation with greater response
M. Vasso (Italy)
Scientific Programme

Unicompartmental knee arthroplasty: modes of failure and conversion to total knee arthroplasty
M. Vasso (Italy)

Analysis of safety and effectiveness of a wireless telerehabilitation system in the Primary Total Knee Arthroplasty immediate postoperative period
S. Prat-Fabregat (Spain)

Achieving a balanced total knee by controlling the component position using robotics and intra-operative sensor technology without soft tissue release
J. Bardou-Jacquet (France)

Septic knee arthritis following joint injections: myth or reality? 16 years retrospective study in a multi-specialist hospital

Deep vein thrombosis prevention with gradual compression stockinette following rapid recovery total knee arthroplasty: a case series

Does the difference between templated and intraoperatively achieved posterior tibial slope affect the patient satisfaction after unicompartmental knee replacement? - a pilot study
J. Serdar (Croatia)

Functional knee phenotypes - a novel classification for the lower limb alignment based on the native alignment in young non-osteoarthritic patients
S. Hess (Switzerland)

Variability of functional knee phenotypes in osteoarthritic knees shows that a more personalized approach in TKA is needed
L. Moser (Switzerland)

Current TKA alignment concepts do not aim to achieve the native coronal alignment of a patient
L. Moser (Switzerland)

Current TKA alignment concepts change the coronal alignment of OA patients
S. Hess (Switzerland)

Carboplasty - A novel stem cell approach for managing subchondral bone edema in knee osteoarthritis

Third generation medially-congruent TKA better reproduce knee kinematics when compared to posterior-stabilized designs
P. Indelli (United States)

Joint line descends and patellar height ascends in posterior cruciate retaining or sacrificing total knee arthroplasty with the same clinical outcomes

Where is the optimal starting point in medial open wedge high tibial osteotomy? - 3D tibia model finite element study

Tivanium posterior-stabilized (PS) total knee arthroplasty (TKA) for nickel intolerance
G.L. Canata (Italy)
Primary total stabilizer knee arthroplasty: clinical and radiographic outcomes at short-mid-term follow-up
M. Giuntoli (Italy)

Distal femoral osteotomy in patient with valgus knee due to hereditary multiple osteochondromas
P. Amaro (Portugal)

Outcome of TKA after post-traumatic degenerative OA-A clinical and radiological study

Stiffness of the knee after TKA

Evaluation of functional stability in patients after total knee arthroplasty: bi-cruciate stabilised versus cruciate retaining implants - a preliminary comparative study
M. Bialy (Poland)

Experience of using arthroscopy with gunshot penetrating injuries of the knee joint
Y. Klapchuk (Ukraine)

Chiba osteotomy - indication and technique
U. Kuwashima (Japan)

Medial closing wedge HTO for correction of a post-traumatic deformity
S. Moura de Carvalho (Portugal)

Combined anterior cruciate ligament reconstruction with knee alignment osteotomy - results up to 5 years
R.R. Thakrar (United Kingdom)

Does total meniscectomy affect the patellofemoral joint compartment?

Knee kinematics after cruciate retaining highly congruent mobile bearing total knee arthroplasty: an in vivo dynamic RSA study
G.M. Marcheggiani Muccioli (Italy)

Kinematical analysis of a medial stabilized total knee arthroplasty during sit to stand and lunge: an in vivo dynamic RSA study
G.M. Marcheggiani Muccioli (Italy)

The distance between tibial tubercle and trochlear groove correlates with lower limb axial alignment

Is there a role for synthetic ligaments in the reconstruction of patellar tendon chronic rupture after TKA? Our experience with LARS ligament and surgical technique
M. Giuntoli (Italy)

The necessity for simultaneous bilateral total knee arthroplasty: a neglected point in patients with severe deformity
R. Ganji (Iran, Islamic Republic of)

A novel approach to the lower limb axial alignment analysis: a computed tomography study
Conventional Cutting guides reliability during Total Knee Replacement in coronal plane. A retrospective Study
J. Leal-Blanquet (Spain)

The effect of preoperative adjustment in planning to account for an elevated joint line convergence angle on the accuracy of periarticular knee osteotomies - a pilot study
R.R. Thakrar (United Kingdom)

Correlation between the tibial cutting guide/jig and tibial resections in total knee arthroplasty: a prospective study
The non-articular half of the patella bears most of the bone load in overstuffed patellae after cruciate-retaining total knee arthroplasty
New posterior-stabilized rotating-platform TKA design partially restores normal knee kinematic both during activity of daily living and high demanding motor task
G.M. Marcheggiani Muccioli (Italy)

Treatment of neglected patellar tendon rupture using LARS ligament: A case series
K. Veravalli (United Kingdom)

A radiographic re-analysis of varus and valgus knees treated with osteotomies for unicompartimental degeneration and related subjective outcomes after "wrong" metaphyseal corrections
A. Cochetti (Italy)

Role of medial open wedge high tibial osteotomy for medial compartment osteoarthritis (OA) knee with varus deformity
A.P. Gupta (India)

The real role of local injection of transamin acid in total knee replacement surgery using or not a drainage system (Redon). The benefits and queries about using it
P. Natsaridis (Greece)

Medial unicompartmental knee arthroplasty: Correcting to neutral might be the wrong answer?
K. Plancher (United States)

Midterm (10 year average) results of ACI deficient knees following non mobile UKA: Can we achieve high survivorship and excellent outcomes?
K. Plancher (United States)

Midterm outcomes of patellofemoral matrix associated chondrocyte implantation - are they as good as femoral condyle outcomes?
E. Matthews (United Kingdom)

Natural course of Baker's cysts in a total knee arthroplasty population
S. Kopf (Germany)

Gait assessment of the patients after total knee arthroplasty using multi-radius versus gradually reducing radius femoral component designs during sit-to-stand movement and stair descent
Scientific Programme

Posterior stabilized design of a new generation total knee arthroplasty shows wider medial pivoting compared to the cruciate retaining design during chair raising
G.M. Marcheggiani Muccioli (Italy)

Patellar denervation is not useful in total knee arthroplasty with patellar resurfacing
P. Hinarejos (Spain)

Early results of OPTYLINE nail for medial open wedge osteotomy
C. Shaw (United Kingdom)

Comparison of all-polyethylene and metal-backed tibial components in total knee replacement (TKA)
G.L. Canata (Italy)

A new software to detect and measure the gait with a smartphone in the sock
F. Conteduca (Italy)

Knee alignment in failed high tibial osteotomy does not influence functional outcomes after revision total knee arthroplasty
J. Chen (Singapore)

PSI loses accuracy as preoperative malalignment increases
V.J. León-Muñoz (Spain)

Influence of femoral joint obliquity in TKA
J.F. Sánchez-Soler (Spain)

Effect of different tibial cuts on femorotibial knee kinematics in TKA in the constitutional varus knee
M. Faschingbauer (Germany)

Tibio-fibular angle: a new landmark for coronal alignment?
S. Perelli (Spain)

Simultaneous bilateral knee arthroplasty: functional outcomes and complications in 22 cases. A prospective single-centre study
B. Gosnik (Slovenia)

Effectiveness of therapeutic electromyographic biofeedback for the treatment of orthopedic knee pathologies: a systematic review

Anemia, decompensated diabetes and poor functional situation, act as independent factors of worse outcomes in total knee arthroplasties

Patient-specific high-tibial osteotomy cutting-guide: a learning curve analysis
M. Ollivier (France)

Tibial slope measure depends on ethnicity, gender and lower-limb alignment
M. Ollivier (France)

Early functional outcomes of lateral meniscal allograft transplantation from meniscus preserved from total knee arthroplasty
T. Goyal (India)
Scientific Programme

Patellofemoral arthrosis does not negatively effect outcomes following unicompartmental arthroplasty
K. Plancher (United States)

Preliminary radiological results as well as conversion rate in the analysis of onlay patella-femoral joint replacement

AFAS Symposia
09:00 - 10:00
AFAS - From Trauma to Arthritis - Where do we stand

Optimal treatment of end stage arthritis in the young and active population

Chairs:
A. Younger (Canada)
J. Calder (United Kingdom)

Calc or tibial osteomies, which work?
A. Younger (Canada)

Is fusion career ending?
H. Pereira (Portugal)

Is replacement an option?
A. Kynsburg (Austria)

Discussion

ESA Symposia
09:15 - 10:45
ESA - Massive Rotator Cuff Tears

Complications and failures

Chairs:
B. Toussaint (France)
K. Beitzel (Germany)

RC Tear arthropathy and pseudoparalysis: where are the limits for repair?
E. Antonogiannakis (Greece)

Avoiding risks with tendon transfers
R. Brzóska (Poland)

Management of bone loss in rotator cuff tear arthropathy
G. Milano (Italy)

Work-up and management of infection in shoulder arthroplasty
R. Claro (Portugal)

Biomechanics of failure of reverse shoulder arthroplasty
M. Karahan (Turkey)
**Scientific Programme**

**Techniques for revision of reverse shoulder arthroplasty: humeral component**
J. Kany (France)

**Techniques for revision of reverse shoulder arthroplasty: glenoid component**
P. Heuberer (Austria)

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**ESMA Symposia**
09:15 - 09:30

**ESMA - Highlight Lecture**

**Football evolution. What changed to protect the player?**
M. D’Hooghe (Belgium)

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**EKA Symposia**
09:30 - 10:45

**How can we ensure the correct alignment in the digital era?**

**Chairs:**
N. Kort (Netherlands)
G. Meermans (Netherlands)

- **Importance of pre-op planning 2 D**
P. Erasmus (South Africa)
- **Importance of pre-op planning 3 D**
H. Behrend (Switzerland)
- **Pressure sensors**
M. Engl (Germany)
- **CAS**
J.Y. Jenny (France)
- **Customised Knee Arthroplasty**
R. Becker (Germany)
- **I-pod navigation**
M. Denti (Italy)
- **PSI**
C. Tibesku (Germany)
- **Robotics**
M. Liebensteiner (Austria)
- **Role of the human orthopedic surgeon**
N. Kort (Netherlands)
ESMA Round Table
09:30 - 10:45

Athlete injury! From the field ...to the field Retired players, what changes?

Chairs:
H. Jones (Portugal)
H. Herrero (Portugal)
S. Della Villa (Italy)

Athlete injury! From the field ...to the field Retired players, what changes?
L. Figo (Portugal)
M. D’Hooghe (Belgium)
O. L. Celada (Spain)
A. Maestro (Spain)
R. Pereira (Portugal)

AFAS Free Papers
10:00 - 10:45

Free papers

Chairs:
N.M. Nasef (Egypt)

Posterior arthroscopic ankle release in patients with symptomatic restriction of ankle dorsiflexion secondary to posterior hinge impingement (PHI) - a consecutive, prospective case series.
B. Hickey (United Kingdom)

Endoscopic FHL transfer for acute Achilles tendon rupture: A hybrid model of treatment
A. Polyzos (Greece)

Autologous osteochondral transplantation for large osteochondral lesions of the talus produces excellent outcomes in an athletic population
A. Ramasamy (United Kingdom)

Shoe-wear score: total ankle replacement vs fusion

Abstract: neurological injury following metalwork removal for Lisfranc joint injury
D. Maor (United Kingdom)

Break
10:45 - 11:15

Spanish Breakfast
Scientific Programme

Break
10:45 - 11:15
EKA - Current Concept for the Degenerative Knee - Alignment

Spanish Breakfast Break

Break
10:45 - 11:15
ESA - Massive Rotator Cuff Tears

Spanish Breakfast Break

Break
10:45 - 11:15
ESMA - Sport Injuries - New Concepts!

Spanish Breakfast Break

Other Session
11:15 - 12:00
AFAS - From Trauma to Arthritis - Where do we stand

Sharing the "Take Home Messages" of each Section

Other Session
11:15 - 12:00
EKA - Current Concept for the Degenerative Knee - Alignment

Sharing the "Take Home Messages" of each Section

Other Session
11:15 - 12:00
ESA - Massive Rotator Cuff Tears

Sharing the "Take Home Messages" of each Section

Other Session
11:15 - 12:00
ESMA - Sport Injuries - New Concepts!

Sharing the "Take Home Messages" of each Section

AFAS Section Meeting
12:00 - 13:00
AFAS - From Trauma to Arthritis - Where do we stand

AFAS - Section Members Meeting
Scientific Programme

EKA Section Meeting
12:00 - 13:00
EKA - Current Concept for the Degenerative Knee - Alignment

EKA - Section Members Meeting

ESA Section Meeting
12:00 - 13:00
ESA - Massive Rotator Cuff Tears

ESA - Section Members Meeting

ESMA Section Meeting
12:00 - 13:00
ESMA - Sport Injuries - New Concepts!

ESMA - Section Members Meeting