Activity Report 2022
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**ACKNOWLEDGEMENT/DISCLOSURE**
2022 – Driving results, Making impact

Making sense of the new learning needs and behaviours is a fundamental principle for navigating the first year after two years of pandemic. We have returned to an in-person congress in the same city as in 2019, edition for which we were intimately familiar with all aspects, from logistics over to estimated attendance and learning expectations.

In 2022, we were aware that the event would need to be downsized, but we had confidence that in-person education would prevail over webinar fatigue. The congress, EFORT’s educational offerings and advocacy for musculoskeletal health have the potential for financial strength and stability. We believe that by sensibly questioning and reevaluating the way we organise things, we can better align with CME/CPD training and meet the needs of surgeons.

Our focus has naturally gravitated towards activities that we believe will produce an immediate impact, and we have intentionally selected topics that will raise the intensity of debates and present a challenge in achieving consensus and common ground.

During the General Assembly Strategy Meeting in Lisbon, national delegates actively discussed “Educational Needs and Engagement with EFORT”, and various topics emerged regarding what the future could hold. For instance, there was a need to find formats that enable experts to share their expertise more widely, as well as a desire to foster the application of specialist knowledge to a generalist’s perspective.

Regulatory science has been discussed on several occasions, and it is clear that navigating the twists and turns of the MDR environment requires coordination, engagement, and resources to establish EFORT as a leading organisation in the field and provide the community and members with greater understanding and clarity.

Even during times of recovery, when efforts were focused on reaffirming “Purpose”, the Board’s actions were guided by the path towards Driving results, Making impact. A number of concrete initiatives were implemented, despite the uncertainty, with the added challenge of an extended decision-making process and limited time to make informed choices on how to best engage and sustain the values that an organisation should embody.

Some of the initiatives that have been undertaken include a special webinar edition on Ukraine’s medical and humanitarian needs, the recognition that even if targets were achieved a re-dimensional congress will require new prerequisites, the development of a curriculum for subspecialty training, and a formal agreement between EFORT and UEMS for the management of the EBOT exam. And while the mid-term review of the CORE-MD program has identified some shortcomings, it has also paved the way for bridging real-world data with clinical trial data for the evaluation of high-risk medical devices.

The 2022 results must be seen in this context. The financial aids received in 2021 were one-time. The activities, as implemented for 2022, even if more modest, allowed for some viability to be restored. The Head Office staff was able to redepoly all of its activities and jobs were preserved.

We anticipate more work ahead of us. An ongoing communication with partners aims to secure earlier commitments, providing more time to realise new and exciting projects. This will help us regain the certainty that reshaping EFORT represents a step forward in the career of a surgeon.

We value your commitment and look forward to continuing to work together towards our shared goals.

Prof. Dr. Li Felländer-Tsai
EFORT President 2021 / 2022

Prof. Dr. Enrique Gómez Barrena
EFORT President 2022 / 2023

Prof. Dr. Rob Nelissen
Secretary General 2022 / 2023
2022 MEMBERS OF THE EXECUTIVE BOARD

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Country</th>
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<tr>
<td>Prof. Dr. Enrique Gómez Barrena</td>
<td>President</td>
<td>Spain</td>
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<tr>
<td>Prof. Dr. Li Felländer-Tsai</td>
<td>Immediate Past President</td>
<td>Sweden</td>
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<tr>
<td>Mr. David Limb</td>
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<td>Prof. Dr. Theofilos Karachalios</td>
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<tr>
<td>Dr. Filipe Lima Santos</td>
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2022 MEMBERS OF THE EXECUTIVE COMMITTEE

Co-opted Members:

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<tr>
<td>Dr. Nanni Allington</td>
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<td>Turkey</td>
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<tr>
<td>Prof. Dr. Karl-Göran Thorngren</td>
<td>Sweden</td>
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<tr>
<td>Prof. Dr. Luigi Zagra</td>
<td>Italy</td>
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### Membership Network

#### National Member Societies

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#### Associate Scientific Members

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<tr>
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#### European Speciality Societies

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<td>ESTES</td>
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<td>European Wrist Arthroscopy Society</td>
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<td>Federation of European Societies for Surgery of the Hand</td>
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EFORT held virtual roundtable discussions in 2022 with national delegates from its member societies. The topics discussed included the impact of the Covid backlog on waiting lists and education, Ukraine and its humanitarian consequences, and the survey of MDR (Medical Devices Regulations) on implants with low volume.

Regarding the first topic, some noteworthy comments included:

- In Portugal, there has been a shift of patients from national to private healthcare, which could potentially cause long-term problems.
- The Netherlands is also experiencing a similar shift towards private clinics, along with a shortage of nurses, resulting in a lengthy backlog due to the lack of staff.
- In the UK, there are currently six million patients on waiting lists, which means that one out of every 11 patients is on a waiting list.
- Overall, in all countries, the backlog is increasing. While healthier patients are being treated, those with multiple conditions remain on waiting lists, which are only growing longer.

During the discussions on the Ukrainian situation, some of the most common queries were regarding the impact on other countries, the provision of humanitarian aid, and how tangible assistance could be provided.

As a result of these discussions, a special edition of the EFORT webinar series was scheduled on 22 May 2022, which was titled “Medical and Humanitarian Disaster: Orthopaedics & Trauma in Ukraine.” This webinar was chaired by Prof. Li Felländer-Tsai (Sweden) and Prof. Stanislav Bondarenko (Ukraine), and surgeon colleagues from Ukraine were invited to report, as witnesses from different fronts, on the worrying situation within the country and the effect on the hospitals and healthcare system.

Felländer-Tsai declared in her introduction “Some things go without saying, but some things need to be said anyhow, such as the bravery of our Ukrainian colleagues. It is a sad hour in European history this extra webinar incorporates the closeness EFORT feels to our Ukrainian colleagues and enshrines the values that EFORT hold dear and that we will not hesitate to defend.”

In her introduction, Felländer-Tsai expressed that while some things are self-evident, others still need to be stated, such as our admiration for the bravery of our Ukrainian colleagues. She went on and declared that it is a somber moment in European History. Through this webinar we all recognise the strong bond that EFORT shares with our Ukrainian colleagues and our unwavering commitment to the values that we hold dear.

Lastly, we conducted two comprehensive surveys among our members:
• National Societies and COVID - Impact on Patients and Orthopaedic Surgeons in Training
What is your feeling about how orthopaedic activity has been recovered after the COVID pandemic, comparing to Internal Medicine and medical specialties in your hospital?

• Impact of MDR on Availability of Orthopaedic and Trauma Medical Devices for your Patients

Our members have shown a strong level of interest in certain areas, especially the high response rate to the MDR survey with over 850 completed responses. This valuable feedback provides insight into the focus of their interests, which we will use to inform future decisions and actions.

The EFORT network, with its membership-based community, is an essential asset for communication, exchange, and benchmarking among European and international fellow surgeons.

The EFORT Fora is another way for members to interact with member societies, and it has been a successful series of sessions since its launch in 2002. The Fora’s goal is to arrange specific EFORT symposia during the annual congresses of member National Societies. In recent years, the EFORT Fora have achieved a high scientific level, providing an excellent exchange between National Societies and EFORT. Consequently, interest in the Fora has increased significantly.

The EFORT Board expresses its gratitude to the member societies for inviting them to attend various high-level educational meetings and congresses, promoting the best practices in the field.

As previously noted, the conversations that take place within these networks have led to meaningful initiatives, which is particularly valuable in a world where measurable returns are becoming more and more important, also in the not-for-profit sector.

2022 EFORT Fora sessions

• UOTBIH | Sarajevo, Bosnia & Herzegovina | 12 May 2022
  EFORT Forum: Shoulder Pathology

• BOTA | Varna, Bulgaria | 21 May 2022
  EFORT Forum: Surgery in Developmental Dysplasia of the Hip

• PTITR | Warsaw, Poland | 23 September 2022
  EFORT Forum: Shoulder Arthroplasty

• SECOT | Valencia, Spain | 29 September 2022
  EFORT Forum: Patello-Femoral Osteoarthritis

• HAOST | Athens, Greece | 14 October 2022
  EFORT Forum: Distal Radius Fractures

• DGOU | Berlin, Germany | 26 October 2022
  EFORT Forum: Defect Management in Revision Knee Arthroplasty

• TOTBID | Antalya, Turkey | 26 October 2022
  EFORT Forum: Paediatric & Adolescent Knee Injuries

• SPOT | Vilamoura, Portugal | 04 November 2022
  EFORT Forum: ACL injuries in Skeletally Immature Athletes

• SOFCOT | Paris, France | 10 November 2022
  EFORT Forum: Registries – Medical & Scientific Research Requirements for the Clinical Introduction of Orthopaedic Joint Replacement Devices

• SIOT | Rome, Italy | 11 November 2022
  EFORT Forum: The Hip: State of Art in Europe
EFORT ANNUAL CONGRESS 2022, LISBON, PORTUGAL

To reconnect with our audience in person after two years of virtual meetings, we incorporated the elements of the Main Theme into various aspects of the program highlights. This recipe proved successful in bringing everyone together again.

Main Theme

Since 2015, EFORT has introduced a specific Main Theme for each edition of its annual congress, reflected in the scientific programme and serving as the overarching topic for all planned sessions. This carefully selected motto is always aligned with the EFORT mission to improve patient care. In today’s healthcare landscape, the quality of medical care is measured by three main domains: patient safety, clinical effectiveness, and patient experience¹, which is why the 23rd EFORT Congress focused on “Modern Patient Needs – Challenges & Solutions” as its Main Theme.

Progress is synonym of “clinical breakthroughs”, creating new patterns of injury and different impacts on patients. Patients today are referred to as “new survivors” due to the benefits they have received from new treatments and healed from new pathologies. However, amidst all these advancements, it is essential to keep the needs of the patients at the core of every treatment. This is why Prof. Li Felländer-Tsai, former EFORT President, decided to focus on Modern Patient Needs as one of the primary topics.

“Trust and accountability are critical components of modern patient care”, she says. Maintaining high ethical standards in both research and clinical practice is crucial. Despite the increasing emphasis on compliance in scientific societies like EFORT, the principles of medical ethics remain of utmost significance.

Portrait of congress participants in 2022 – Main Regions of Work

The Erwin Morscher Honorary Lecture

The Erwin Morscher Honorary Lecture "The Ultimate Knee Injury. From Sports Venues To The Operating Theater!" was given by Lars Engebretsen MD, PhD from the Oslo University Clinic and Oslo Sports Trauma Research Center, Oslo, Norway.

His session was dedicated to complex knee ligament injuries and the best surgical options to treat them, including resurfacing techniques of cartilage. Engebretsen shared his broad knowledge on severe knee injuries as a pioneer in sports injury prevention research. His work on injury mechanisms and related risk factors has contributed to set many effective prevention measures for numerous sports and common injury types, such as anterior cruciate ligament (ACL) ruptures.

Professor Engebretsen and his several research groups have won different prices around the world on their work on three main fields:
- Knee ligaments together with May Arna Risberg in Oslo, Norway and Robert LaPrade in Minneapolis, MN, United States;
- Prevention of injuries and diseases in sports within the Oslo Sports Trauma Research Center co-chaired with professor Roald Bahr; and,
- Research from the cell to rehabilitation after surgery with the molecular biologists, pathologists, radiologists, physiotherapists and orthopaedic surgeons of the Oslo Cartilage Group.

The Michael Freeman Honorary Lecture

The Michael Freeman Honorary Lecture titled "Disheartening Disparities: Inequitable Access to Trauma and Orthopaedic Care in Malawi" provided a unique opportunity to gain insight into the obstacles facing the promotion of Orthopaedics and Traumatology for women, as well as the need for shared responsibility in advancing the health and wellbeing of children worldwide. The lecture shed light on the inequality in access to trauma and orthopaedic services in low-resource settings, and how it can be addressed.

Doctor Linda Chokotho, Orthopaedic Surgeon and Lecturer at the Malawi University of Science and Technology presented the Michael Freeman Honorary Lecture and outlined the assessment of outcomes and cost-effectiveness of orthopaedic and trauma treatments in low-resource settings.

The incidence of trauma-related mortality and disability among young children is on the rise in low- and middle-income countries. This is due to limited surgical capacity and inadequate hospital infrastructure, skilled personnel, and essential resources, which often result in non-operative treatment of patients. The consequences of common musculoskeletal injuries can be particularly devastating in such cases, leading to long-term disability and associated healthcare costs over a lifetime.

Past and founding president of Women in Surgery Association of Malawi (WinSAM), she also volunteered at Queen Elizabeth Central Hospital, where she established the first Hand Surgery Clinic to improve medical management of hand orthopaedic and trauma conditions. Dr Linda Chokotho holds a Master’s in Public Health degree from University of Cape Town.

EFORT invited Prof. Dr. Heiner Fangerau, Head of Department for the History, Philosophy and Ethics of Medicine at Heinrich-Heine-Universität Düsseldorf, Germany as Guest Speaker for the Opening Ceremony.

Fangerau delivered his presentation on “Food Is The First Thing. Morals Follow On – On The Dilemma Of Being A Good Doctor” which focused on major ethical dilemmas in medicine.

Maintaining medical ethical standards can be more difficult than upholding legal principles, and ethical considerations are frequently overshadowed by the fast pace of business in our economies. However, medical ethics is a fundamental component of medicine and should always be open for discussion. Patients rely on physicians as experts in their field, and trust them to act with integrity. It is crucial to ensure that patients’ needs are considered and that healthcare professionals uphold high moral standards.

Highlighted sessions – providing a cohesive experience for attendees

We wanted attendees to have a more focused and engaging experience by blending the main theme of the conference seamlessly with the content of the highlighted sessions.

Furthermore, the evaluation of the quality of orthopaedics and traumatology care from the patients’ perspective has been established as a guiding principle for the program, with the aim of updating public health policies and improving outcomes.

Responding to the modern patient needs poses a new set of challenges that necessitate advanced and improved skills, as well as interdisciplinary collaboration.

To provide a clear and cohesive message throughout the conference, the EFORT Science Committee has organised several focused sessions, with the hope that attendees will leave the event with a sense of achievement, having acquired valuable insights and knowledge. This is how the committee has implemented its vision.

Medical experts are addressing the primary clinical needs of a rapidly growing ageing population in Europe using highly computerised solutions. However, treating patients with computer-assisted applications generates a large amount of data, which must be stored securely and organised properly. Although innovative solutions such as genetics, biomarkers, imaging techniques, and machine learning specialisation have undoubtedly contributed to safer clinical practices, they have also put medical ethics under pressure.

Sessions presented under the spotlighted themes:
2 Patient Expectations Following Primary THA - Cultural, Gender And Age Differences
3 Digital Transformation, Big Data And Artificial Intelligence - Shaping The Future Of O&T
4 Additive Manufacturing Of Future Orthopaedic Biomaterials
6 Code Of Conduct For Research Integrity - Research Misconduct In EFORT
Furthermore, precision-based medicine and the impact of globalization and migration mean that public health policies must be adapted to ensure patient safety and optimal outcomes for state-of-the-art orthopaedic and trauma care. The medical community will also face new types of patients and must be prepared to meet the expectations of these new survivors.

### Congress Factsheet of the 23nd EFORT Annual Congress in Lisbon, Portugal:

- 270 sessions including 939 presenting authors and 303 speakers & moderators.
- 1,657 accepted abstracts:
  - 576 oral Free Paper sessions (5-minutes podium presentations)
  - 360 Poster presentations within Poster Walks (best-rated posters)
  - 721 daily wallpaper Posters
- 3,477 congress attendees
- 95 participating corporate partners
- 7 satellite symposia

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Sessions presented under the spotlighted themes:

7. The Ultimate Knee Injury, From Sports Venues To The Operating Theater!
8. Why Diversity In Orthopaedics And Traumatology Is A Modern Patient Need – Challenges & Solutions
9. Musculoskeletal Oncology Innovations Responding To Modern Patient Needs
The following individuals were awarded:

- **Prof. Klaus-Peter Günther**
  Immediate Past President

- **Prof. Philippe Neyret**
  Past President

- **Lars Engebretsen MD, PhD**
  Erwin Morscher Honorary Lecturer

- **Dr. Linda Chokotho**
  Michael Freeman Honorary Lecturer

### The Jacques Duparc Awards

The 10 best-rated poster abstracts submitted to the EFORT Congress received the Jacques Duparc Award, which includes a grant of EUR 500 and a certificate to acknowledge the work for each of the awarded abstract.

- **HOPE-Trial: Hemiarthroplasty Compared To Total Hip Arthroplasty For Displaced Femoral Neck Fractures In Octogenarians; A 4-Year Follow-Up Of A Randomized Controlled Trial**
  Authors: Pontus Sjöholm, Ghazi Chammout, Paula Kelly-Pettersson, Sebastian Mukka, Olof Sköldenberg

- **How Does The Hip Fossas Cellular Architecture Change With Age And Arthritis?**
  Authors: Bahaeddine Tilouche, Stephanie Farhat, Isabel Horton, Sasha Cansu, Paul Beaule, Daniel Coutu, George Grammatopoulos

- **Detection Of Viable But Non Culturable Bacteria In Sonicate Fluid With Bacteriophages And Quantitative Real-Time Polymerase Chain Reaction**
  Authors: Katja Šuster, Andrej Cör, Valdoltra Orthopaedic Hospital, Ankaran, Slovenia

- **Deregulated Clusterin As A Marker Of Bone Fragility: New Insights Into The Pathophysiology Of Osteoporosis**
  Authors: Virginia Veronica Visconti, Chiara Greggi, Ida Cariati, Beatrice Gasperini, Annalisa Botta, Umberto Tarantino

- **Revision Rates After Total Ankle Replacement: A Comparison Of Clinical Studies And Arthroplasty Registers**
  Authors: Georg Hauer, Reinhard Hofer, Markus Kessler, Jan Lewis, Lukas Leitner, Roman Radl, Andreas Leithner, Patrick Sadoghi

- **Plate Fixation Versus Flexible Intramedullary Nails For Management Of Closed Femoral Shaft Fractures In The Paediatric Population: A Systematic Review And Meta-Analysis Of The Adverse Outcomes**
  Authors: Abhinav Singh, Deborah Eastwood, William Bierrum, Justin Wormald, Gregory Firth

- **The Impact Of Mentoring In Trauma And Orthopaedic Training: A Systematic Review**
  Authors: Joshua Enson, Khalid Malik-Tabassum, Alyssa Faria, Giles Faria, Kathryn Gill, Benedict Rogers

- **Effect Of Transdermal Microneedle Patch With NSAID In Osteoarthritic Knee**
  Authors: Saradej Khuangsirikul, Mongkon Psuttathanawat, Danai Heebthamai, Thanainit Chotanaphuti

- **A High Physical Activity Level After Total Knee Arthroplasty Does Not Increase The Risk Of Revision Surgery A Systematic Review With Meta-Analysis And GRADE**
  Authors: Anke Kornuijt, Paul Kuijer, Rogier Van Drunen, Michiel Siebelt, Ton Lenssen, Walter Van Der Weegen

- **What Can We Learn From The Temporal Changes In Knee Skin Temperature Following Total Knee Arthroplasty? - A Systematic Review And Meta-Analysis**
  Authors: Lilach Gavish, Leonid Kandel, Gurion Rivkin, S David Gertz, Oshri Hoffer
The Free papers Awards
The 40 best-rated free papers, 20 each in orthopaedics and trauma, were given the option of competing for the EFORT Free Paper Award. Among all submitted presentations, the EFORT Award Committee has chosen the winners in each of the two categories.

• GOLD Orthopaedics Abstract
  Physical Therapy Is Not Inferior To Arthroscopic Partial Meniscectomy For Degenerative Meniscal Tears. Conclusions Based On Five-Year Follow-Up Evaluation Of The ESCAPE Study
  Authors: Julia Noorduyn, Victor Van De Graaf, Nienke Willigenburg, Wendy Scholten-Peeters, Michel Coppieters, Rudolf Poolman

• SILVER Orthopaedics Abstract
  Minimization Of Movement Restrictions After Total Hip Arthroplasty Does Not Increase Hip Dislocations. A Before-And-After Study With 10357 Patients.
  Authors: Amanda Klaassen, Jan Willem Musters, Nienke Willigenburg, Rudolf Poolman

• BRONZE Orthopaedics Abstract
  The Effects Of Dexamethasone As An Analgesic Adjuvant To Multimodal Pain Treatment After Total Knee Arthroplasty: The DEX-2-TKA Randomised Clinical Trial
  Authors: Kasper Smidt Gasbjerg, Daniel Høj-Pedersen, Troels Lunn, Peter Lindholm, Niels Anker Pedersen, Henrik Morville Schröder, Martin Lindberg-Larsen, Kasper Hoigaard Thybo, Stig Brorson, Søren Overgaard, Janus Christian Jakobsen, Ole Mathiesen

• GOLD Trauma Abstract
  Detection Of Distal Radial Fractures Using An Open Access Convolutional Neural Network (CNN)
  Authors: Koen Oude Nijhuis, Jasper Prijs, Charlotte Laane, Britt Barvelink, Zhibin Liao, Job Doornberg, Frank Ijpmma, Joost Colaris, Mathieu Wijffels

• SILVER Trauma Abstract
  Physiotherapist-Supervised Exercises Compared To Unsupervised Home-Based Exercises After Non-Operatively Treated Proximal Humerus Fracture In Older Adults: A Multicentre Randomized Controlled Trial
  Authors: Helle Kvistgaard Østergaard, Antti P Launonen, Marianne Toft Vestermark, Tone Fjalestad, Bakir O. Sumrein, Kaj Verner Dissing, Tone Wagle, Kaia Beck Engebretsen, Minna K. Laitinen, Ville M. Mattila, Inger Mechelenburg

• BRONZE Trauma Abstract
  Traumatic Brain Injury Leads To Deteriorated Bone Structure Through Increased Adrenergic Signaling
  Authors: Denise Jahn, Ellen Otto, Paul Köhli, Jessika Appelt, Adibehe Rahmani, Georg Duda, Johannes Keller, Serafeim Tsiotilonis
EFORT Open Reviews, THE EFORT JOURNAL

EFORT Open Reviews is an open-access journal that specialises in publishing high-quality instructional review articles across the entire field of Orthopaedics and Traumatology. The journal publishes peer-reviewed articles from international experts, summarising current knowledge and practice in Orthopaedics and Traumatology with the aim of providing systematic coverage of the field. EFORT Open Reviews is an authoritative resource for educating trainees and supports practicing orthopaedic surgeons by keeping them informed on the latest clinical and scientific advances.

Its impact factor is currently 4.755, which indicates its influence and importance within the field of Orthopaedics and Traumatology. It’s also worth noting that the journal is ranked 9th out of 86 journals in the Orthopaedics surgery and Traumatology category, which is a very respectable position. This suggests that the journal is highly regarded by researchers and clinicians in the field, and that it continues to publish high-quality articles that are influential in the O&T community.

In 2022, the journal received 135 submissions, which is a slight increase on the previous year but down slightly in 2020. On average, the journal received 30 submissions per quarter, which is an increase compared to pre-pandemic years.

Of the submissions received in 2022, the journal accepted 76 papers. This puts the journal on track for its publication goals. In terms of article processing charges (APCs), the journal waived relatively few APC charges in the previous year. The journal has a rejection rate of around 30%, which is not unusual for academic journals. While it is always disappointing to reject papers, this rate is in line with the expectations of the editorial team, and it ensures that the articles published in the journal are of the highest possible quality.

The most read papers are typically those that describe a particular topic, with only one systematic review appearing in the top 10 list. It seems that people who are interested in O&T articles are looking for quick solutions to problems and summaries of treatments.

The journal may want to consider focusing on publishing papers that are concise and offer practical solutions to common problems in the field. This approach may help the journal to attract a wider audience and increase its impact, particularly among younger academics who are more likely to seek out quick and accessible summaries of research findings.

—Prof. Pierre Hoffmeyer, Editor-in-Chief, EFORT Open Reviews (EOR)
Congress & Education

Click on the image to find out

Submissions – by year

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<th>Year</th>
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Views

Top 3 EOR articles by EFORT social media channel

1. Treatment algorithm in Vancouver B2 periprosthetic hip fractures: osteosynthesis vs revision arthroplasty
   - Reach: 14K

2. Latrogenic transfer metatarsalgia after hallux valgus surgery: a comprehensive treatment algorithm
   - Reach: 4K

3. Ankle osteoarthritis: comprehensive review and treatment algorithm proposal
   - Reach: 3.2K

4. Fifth metatarsal fractures: an update on management, complications, and outcomes
   - Reach: 2.6K

5. Pelvic osteotomies: in his dysplasia: why, when and how?
   - Reach: 6K

6. The effect of vitamin D supplementation on outcomes following total hip or knee arthroplasty surgery
   - Reach: 2.5K

7. Periarticular metal hypersensitivity complications of hip bearings containing cobalt-chromium
   - Reach: 16.5K

8. Current concepts in hip- spine relationships: making them practical for total hip arthroplasty
   - Reach: 9.9K

9. Cementation in total hip arthroplasty: history, principles, and technique
   - Reach: 6.1K

Activity Report 2022 17
e-SCIENCE

EFORT e-Science offers scientific content from past EFORT Annual Congresses and eLearning material
After the success of the EFORT pilot webinars, the Board granted approval to move forward with a regular live broadcast.

EFORT Webinars

EFORT 2022 provided the O&I Community with 10 webinars which are available for replay on https://www.efort.org/webinars

- **Relevance of Metal Carcinogenicity for Orthopaedics: Controversies & Concerns | Monday 31 January 2022**
  
  **Learning objectives:**
  - To inform Orthopaedic Surgeons about the classification of cobalt as carcinogen on EU level and potential consequences for surgeons and manufacturers;
  - To summarise current knowledge on the carcinogenic potential of metal particles released from arthroplasty implants;
  - To announce related activities within the “EFORT Implant, Patient and Staff Safety Initiative (IPSSI)” directed towards this issue.

- **Total Ankle Replacement: Enhancing Indications and Outcomes | Monday 28 February 2022**
  
  **Learning objectives:**
  - Establishing clear indications to choose between Replacement and Fusion in end-stage ankle arthritis;
  - Accurate evaluation of the associated changes in ankle arthritis and concomitant pathologies that require simultaneous approach during the primary procedure;
  - Awareness and correct approach to the post-operative complications that occur intra and post-operatively.

- **Distal Femur Fractures: Reconstruct or Replace? | Monday 28 March 2022**
  
  **Learning objectives:**
  - Indications and advantages with replacement;
  - Indications and advantages with reconstruction;
  - Case based learning and evidence for best treatment.
Recent Aspects of Diagnosis and Treatment of PJI | Monday 25 April 2022

Learning objectives:
- Participants understand different methods of diagnostics PJI, value of each of them will be given short history and overview of studies and use of bacteriophages;
- The preliminary use of bacteriophages in PJI to be presented.

Medical and Humanitarian Disaster: Orthopaedics & Trauma in Ukraine | Monday 16 May 2022

Learning objectives:
- To better understand the needs and challenges of the medical community and in particular orthopaedic and traumatology surgeons;
- To learn about daily medical care in hospitals/in the field and how to treat war injuries;
- Daily medical care, ongoing treatments, planning & delays of elective surgeries / Impact of population movements;
- Needs of Orthopaedic Education for Ukrainian surgeons now and in the future;
- Identifying areas & developing practical initiatives in order to assist the members of the National Society of Ukraine.

Alignment Goals in Total Knee Arthroplasty | Monday 30 May 2022

Learning objectives:
- Understand the three main options described for aligning prosthetic components;
- Gain insight into the surgical techniques involved in achieving different prosthetic alignment goals;
- Appreciate the differences in the ultimate component positioning and soft tissue tensions produced by the different strategies.

EFORT/ESTES Joint Webinar: Floating Hip | Monday 13 June 2022

Learning objectives:
- To better understand the pathology of a "floating-hip" injury;
- To learn more about appropriate diagnostics and treatment principles;
- To identify specific treatment scenarios and to know how to evaluate treatment results.
e-SCIENCE

**Cartilage Repair: Where we are | Monday 26 September 2022**

*Learning objectives:*
- To better understand the pathology of a “floating-hip” injury;
- To learn more about appropriate diagnostics and treatment principles;
- To identify specific treatment scenarios and to know how to evaluate treatment results.

**Orthopaedic Paediatrics Clinical Examination & Evaluation Part1: The Lower Extremity | Monday 31 October 2022**

*Learning objectives:*
- Experience sharing on the best way to perform clinical examination of children;
- To detect and evaluate the typical and more rare conditions in the lower extremities in children.

**Neck of Femur Fracture in The Young Adult | Monday 28 November 2022**

*Learning objectives:*
- To provide a diagnostic algorithm and guidance to decision-making;
- To define the parameters of an acceptable reduction and describe different methods to achieve this;
- To explore the indications and technical aspects of a hip replacement for a young patient with a femoral neck fracture.

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**EFORT Webinars 2022 – Registered attendees**

**EFORT Webinars 2022 – Replays / post event views**
EFORT Industry Collaborative Webinars (ICWs)

We proudly launched the Industry Collaborative Webinars (ICW), an immersive platform where companies have the opportunity to showcase programmes, benefiting from targeted exposure within the EFORT network. With ICW, we strive to foster a collaborative environment where both parties join forces to offer a comprehensive and multidimensional training and education experience for orthopaedic and traumatology surgeons. This partnership model opens up pathways to diverse alternatives that cater to the unique and varied needs of medical professionals. Industry Collaborative Webinars replays are available for 3 months after the event on https://www.efort.org/icw.

- **Spaceflex Family: Innovation For The Treatment Of Two-Stage Revision** | Tuesday 18 January 2022 – in collaboration with G21

  **Learning objectives:**
  - Review on the current literature about the two-stage revision for the treatment of periprosthetic joint infection;
  - Presentation and discussion of complex cases of periprosthetic joint infection treated with antibiotic loaded cement spacer;
  - Prevention of mechanical spacer-associated complication related to the interval period of the two-stage revision;
  - Focus on cement mechanical properties and antibiotic elution.

- **Rethinking Postop Recovery: Novel Techniques To Manage Soft Tissue & Closed Incisions In TKA Patients** | Tuesday 08 February 2022 – in collaboration with 3M

  **Learning objectives:**
  - Ground-breaking innovation in incision management;
  - High risk incision management in patients with multiple comorbidities;
  - Peer to peer case study sharing and RCT highlighting improved post op recovery.

- **Money, Time & Radiation Reduction in IM Nails: Innovative Solution Regarding Distal Locking** | Tuesday 15 February 2022 – in collaboration with Sanatmetal

  **Learning objectives:**
  - To deepen the knowledge of different distal locking techniques and highlights as well as the advantages and disadvantages of each;
  - To introduce the magnetic targeting system and the distal hand targeting devices which provide a new innovative surgical technique;
  - To emphasise that thanks to this unique technique not only a reduction in radiation exposure of the OR team is possible but also a decrease of the OR time and costs.
Short Stems: A New Paradigm | Tuesday 08 March 2022 – in collaboration with Groupe Lépine

Learning objectives:
- Design rationale of the stem;
- Surgical technique tricks depending on approaches and femur morphotypes;
- Clinical results after almost 10 years in France and Colombia.

Intra-Articular Injection: Factors To Consider | Tuesday 15 March 2022 – in collaboration with LG Chem

Learning objectives:
- Review on the currently available hyaluronic acid treatment options;
- Evidence on safety and efficacy of cross-linked hyaluronic acid;
- Deep dive on intra-articular injection techniques.

Robotics In Knee Arthroplasty: Analysis Of The Experience | Tuesday 12 April 2022
- in collaboration with Smith+Nephew

Learning objectives:
- Analyse the preliminary results;
- Discuss about alignment philosophy and personalised implant position;
- Discuss about preliminary results on extended indication of UKA Revision with Robotic.

How 3D Printing Can Support The Management Of Difficult Cases | Tuesday 19 April 2022
- in collaboration with LimaCorporate

Learning objectives:
- To explain how to approach and manage complex hip revision cases;
- To provide guidelines on glenoid bone defect management, when standard portfolio is not sufficient to cover the case;
- To share surgeons’ clinical experiences on using customised components.
Knee Navigation And Kinematic Alignment | Tuesday 10 May 2022
– in collaboration with AMPLITUDE

Learning objectives:
- Understand the different concepts of alignment in TKA;
- Know their advantages and limitations;
- Complete a comprehensive literature review.

Return To Sports After Patella Luxation | Tuesday 17 May 2022
– in collaboration with Bauerfeind AG

Learning objectives:
- What kind of surgery at the right time;
- How to manage a professional athlete in therapy;
- What assessments to use for return to sports and why.

3D Printing In Cementless Total Knee Replacement | Tuesday 13 September 2022
– in collaboration with LimaCorporate

Learning objectives:
- To explain patient selection and indications for a cementless total knee replacement;
- To present new technologies in cementless total knee replacement;
- To share surgeons' clinical experiences.

Strategies For HA Injection Therapy For Knee OA Patients | Tuesday 20 September 2022
– in collaboration with LG Chem

Learning objectives:
- Review on the currently available hyaluronic acid treatment options;
- Evidence on safety and efficacy of cross-linked hyaluronic acid;
- Deep dive on intra-articular injection techniques.
Preservation Instead of Replacement: ACL Preservation after Rupture – Clinical Evidence for Patient and Surgeon | Tuesday 11 October 2022 – in collaboration with Mathys

Learning objectives:
- Practical application, patients, and patient selection;
- Indications and limitations;
- Learnings from clinical data.

Cal-Cemex® Bone Void Filler: A Winning Combination of Mechanical Strength and Biology | Tuesday 18 October 2022 – in collaboration with Tecres

Learning objectives:
- Focus on the use of a particular bone void filler;
- To spread the potential of the innovative combination of known materials.

The Isoelastic RM Cup: More than 40 Years of Clinical Experience | Tuesday 15 November 2022 – in collaboration with Mathys

Learning objectives:
- Concept of the isoelastic RM monobloc cup;
- Indications of RM cup in primary and revision surgery;
- Technical aspects of implanting the RM Cup.

How I use Registry Data in my Practice | Tuesday 13 December 2022 – in collaboration with AMPLITUDE

Learning objectives:
- Understand the data in the registry;
- Know how the surgeon can use the data for his practice;
- Learn how data can influence implant selection.
EFORT ICW 2022 – Registered attendees

EDIC, 39, 55, 115, 34, 75, 126, 50, 63, 69, 319

2022 total
1,440 registered

EFORT ICW 2022 – Replays / post event views

EDIC, 39, 55, 115, 34, 75, 126, 50, 63, 69, 319

2022 total
7,268 replay views

Disclaimer: EFORT strives to consolidate its status as leader for unbiased science with regards to the Continuous Medical Education and Continuous Professional Development of health care professionals in the fields of orthopaedics and traumatology. EFORT believes that partnership with the business community and other third-party commercial providers can have a beneficial impact on European and ultimately global health promotion with respect to reducing the burden of illness and complications arising from orthopaedic and trauma related disease and injury. It also recognises the significant resources that the private sector and others can bring to EFORT to support achievements of the EFORT mission and thus contribute towards the welfare of the European orthopaedic and traumatology community.
CURRICULUM FOR SUBSPECIALITY TRAINING IN TRAUMA AND ORTHOPAEDIC SURGERY

An introduction into the general requirements common to all subspecialties

In 2015 the curriculum for basic training in trauma and orthopaedic surgery produced by EFORT and the specialty societies was accepted by UEMS Central and published as a joint document between EFORT and UEMS, assisted by the Specialty Societies.

This document describes the minimum requirements for training in Trauma and Orthopaedic Surgery in Europe. Its aim is to set out the requirements for training a workforce that is capable of running a general orthopaedic clinic and an on-call take, managing the common conditions and identifying those that need specialist care. These are the requirements for a mobile workforce. At the end of this period of training European Certification is awarded and the surgeon is recognised as a ‘Specialist’ by the European Commission but is a ‘Generalist’ in the eyes of the profession. Most then undergo further training in one or more of the subspecialty areas of trauma and orthopaedics either through obtaining formal fellowship posts or informally with the specialists in the hospitals where they work.

Subsequently, in 2017, UEMS produced a document on the training requirements in Orthopaedic and Trauma Surgery which expanded on many elements of the curriculum (rather than the syllabus within the curriculum) with discussion of standards for training centres, trainers, accreditation etc, again focused on training programmes producing individuals with a broad training, ready to enter a general type of practice or move on to specialist training.

The logical next step is of course, to develop a similar document to guide specialist training and to ensure that those claiming specialist status can demonstrate that the training they have received has met an acceptable set of standards. This is a prerequisite for a mobile workforce that can safely deliver the care that patients are entitled to expect. Like the curriculum for training in the Generality of Trauma and Orthopaedic Surgery, this curriculum is not intended to replace Unit, National or Specialty Society Curricula that have been developed to an equivalent standard but rather to set out the minimum standards across Europe for use in those units or countries where guidance does not currently exist.

It recognised that even within our currently recognised subspecialties (which Politicians and Patients generally do not recognise) we have further subspecialisation and not every subspecialist has identical competencies to each other, but work in networks and share complex cases. Furthermore, some specialist groups, such as infection and oncology, cross anatomically defined specialty groups and subspecialty training may be ‘modular’ in that a specialist may train in e.g. hip or knee surgery and infection, spinal surgery and oncology etc. Some specialist groups interface between specialties outside trauma and orthopaedics, such as Infection once more, Hand surgery (Plastic Surgery) and Spinal Surgery (Neurosurgery). This document is therefore deliberately not complex and detailed but rather provides an outline of structure that allows specialist training to be seen to be equivalent, whichever path the individual has taken. It also therefore allows flexibility in application, as in many hospitals orthopaedic surgeons may practice generally but maintain a special interest in one or more areas of practice, taking...
on more complex cases though still requiring links with more specialist centres and colleagues in order to discuss and refer the most difficult cases.

This curriculum therefore is flexible enough to adapt to many types of career pathway but still sets a standard of professional practice that can be achieved and maintained by association with EFORT and the National and European Specialty Societies.

This skeleton curriculum follows the basic structure of the core curriculum but identifies the essential areas where knowledge, skills and competencies in practice have to be developed beyond the requirements of the core curriculum. The same areas are revisited but the expectations are much higher. The generalist has to identify complex cases that require specialist input but the specialist has to be able to deal with these cases. Often cases can be unique or require the input of more than one specialist, so the identification of the limits of one’s training and abilities, and the willingness to work within teams and networks is equally as important as it is for the generalist.

Together with the EFORT Specialty Societies Standing Committee, this specialised curriculum constitutes an ongoing piece of work and EFORT acknowledges the dedication put into this project to make education and training in Orthopaedics and Traumatology more sustainable, efficient and of high quality, to be able to synthesise the minimum standards for medical specialist practice in Europe. The aim is to create a programme that not only meets the needs of current learners but also can be sustained by promoting social and environmental responsibility, and can adapt to changing needs and circumstances over time.
EBOT, THE EUROPEAN EXAM

EBOT Examination: Formalising Two Decades of Recognition

Over the past two decades, the EBOT examination has gained significant recognition and has become increasingly popular.

As a result, the demand for examiners, examiner training, and logistical support has increased. The exam consists of both, written and oral components in English, but it has also gained acceptance among national societies and is offered in Spanish for the oral section in collaboration with SECOT, the Spanish society.

Other countries, such as France and Belgium, have also expressed interest in offering the exam in French for the oral part. In fact, this European certification was included in French regulations as part of article 59 for the organisation of the third cycle of medical studies.

When EFORT and UEMS began discussing the European exam, they placed particular emphasis on promoting and facilitating activities in this area.

In March 2022, the two parties formalised their collaboration and entered into a cooperation agreement in which financial liability was equally shared. However, the administration and organisation of the EBOT exam and all associated activities will continue to be the responsibility of EFORT.

The collaboration aims to ensure that the EBOT examination adheres to the guidelines set by the Council for European Medical Specialist Assessments of the European Union of Medical Specialists (UEMS-CESMA) and the EFORT education policy. It includes multiple areas of focus such as the development and format of the exam, maintenance of good practices during exam conduct, record keeping of results and outcome monitoring, promotion of the examination, and continuous development and review to ensure quality assurance. The initiative also aims to provide examiners with the necessary training and guidance to conduct the exam effectively while safeguarding the intellectual property rights related to the exam content.

Under the new agreement, the EBOT Exam is administered by an Examination Board, which consists of at least four and no more than ten voting members. Half of the Examination Board is appointed by UEMS, while the other half is appointed by EFORT, with at least one member representing EFORT from its Education Committee.

Members of the Examination Board have experience with the EBOT examination, either through previous work as an examiner, participation in the writing committee, or any other European CME-related activity on a national or supranational level.

The exam is open to certified specialists from Europe, trainees in their final year of training in a recognised European training program, as well as non-EU citizens who work in an EU country or a country affiliated to UEMS (Norway, Switzerland, UK).

Next dates:
- Section I, the written part will take place on 06 June 2023.
- Section II, the oral part will be organised in Brussels, Belgium on 07 and 08 October 2023.

Factsheet EBOT Exams 2022:
- Interim exam: 31 March 2022, 848 candidates from 15 European countries
- Written exam: 29 June 2022, 96 candidates
- Oral exam: 01 & 02 October 2022, 101 candidates for the English part in Lisbon and 31 for the Spanish part in Madrid

Current EBOT Examination Board Members:
- Prof. Dr. Jorge Mineiro
  Chair of the EBOT Examination representing UEMS
- Prof. Dr. Enrique Gómez Barrena
  Vice-Chair of the EBOT Examination and Chair of the Spanish EBOT Exam
  EFORT President, representing EFORT
- Dr. Nannin Allington
  UEMS President Orthopaedic Section and EBOT Examiner, representing UEMS
- Prof. Dr. Li Felländer-Tsai
  EFORT Immediate Past President
  EBOT Examiner and UEMS National Delegate for Sweden, representing UEMS
- Prof. Dr. Stefan Nehrer
  Chair EFORT Education Committee and EBOT Examiner representing EFORT
- Prof. Dr. Önder Aydingöz
  EFORT Past President and EBOT Examiner representing EFORT
"The injuries and musculoskeletal diseases [...] will continue to increase. The drivers of that increase include ageing of the population, obesity and decreasing activity levels."
—The Editors of the White Book

THE EFORT WHITE BOOK

The EFORT White Book “Orthopaedics and Traumatology in Europe” is the new landmark publication and a comprehensive reference on current conditions of musculoskeletal health and future needs, which can be used to facilitate decision making in our scientific societies as well as in European health politics.

Its overall aim is to provide information that will inform strategies to reduce the burden of musculoskeletal disorders and trauma on society.

This first edition was launched during the EFORT Annual Congress in Lisbon 2022. The goal is to provide a summary of the most reliable data regarding the extent of musculoskeletal disorders and the existing resources and systems for managing them. In addition, we asked the contributors to provide an overview on musculoskeletal education and the landscape of orthopaedic and trauma research. To master future challenges it is not only necessary to devote appropriate resources during daily clinical care, but also to ensure sufficient training of future health care providers and to select the most effective therapeutic strategies.

The injuries and musculoskeletal diseases that orthopaedic and trauma surgeons treat every day will continue to increase enormously in the coming years. The drivers of that increase include ageing of the population, obesity and decreasing activity levels. The outcome of treatments administered has a significantly positive influence on the quality of life.

This initiative is also intended to contribute to the United Nations “Decade of Healthy Ageing” (2021-2030).

This first edition shall summarise the best available data to quantify the burden of musculoskeletal disorders, as well as the currently available infrastructure for its management.

The Editors would like to thank the contributors to this White Book

Editors:
J.A.N. Verhaar, P. Kjærsgaard-Andersen, D. Limb, K-P Günther, Th. Karachalios

The EFORT White book is indexed in PubMed and available for free download at https://www.efort.org/whitebook2022
THE CORE–MD PROJECT: MID-TERM REVIEW (M1 – M18)

CORE–MD (Coordinating Research and Evidence for Medical Devices) is a Coordination and Support Action that is led by two major medical professional associations in Europe (the European Society of Cardiology – ESC, and the European Federation of National Associations of Orthopaedics and Traumatology – EFORT). It is unique in bringing together medical experts from universities and clinical societies with colleagues from national regulatory agencies of EU member states, notified bodies, health technology assessment agencies, patients’ organisations, and national institutes of public health, all to consider how best to evaluate high-risk medical devices that are implanted into patients.

The consortium strongly endorses the principles that regulatory standards for approving medical devices should be developed according to scientific and clinical evidence, and be proportionate to the balance between effectiveness and risk. Existing EU guidance (MEDDEV 2.7/1 revision 4) that relates to requirements for the EU Medical Device Directives has not yet been revised to take account of the Medical Devices Regulation (EU 2017/745) (MDR). Furthermore, it describes general principles without recommending specific study designs for individual device types. Thus CORE–MD is designed to support regulatory science in the EU by advising competent authorities on developing guidance for particular methodologies that are appropriate for the clinical evaluation of high-risk medical devices.

The overall objective of CORE–MD is to review and recommend methodologies for the improved clinical investigation and evaluation of high-risk medical devices, thereby translating the best available expert knowledge into advice for EU regulatory guidance and specifications and building expertise in regulatory science in the clinical community. The consortium has four main objectives, each addressed in a related work package.

CORE–MD structure

- **Work Package 1 - Understanding methods used to generate clinical evidence for high-risk medical devices**
  - Objective 1: To perform a systematic review of the methodologies of clinical investigations that have been used to evaluate high-risk cardiovascular, orthopaedic and diabetic medical devices, identifying problems and ranking study designs for their quality and appropriateness.

- **Work Package 2 - Strengthening clinical evidence for high-risk medical devices: new methods for generating clinical evidence**
  - Objective 2: To review and recommend alternative designs of clinical studies that can be used to provide high-quality clinical evidence for new high-risk medical devices.

- **Work Package 3 - Extracting maximal value from medical device registries and real-world evidence**
  - Objective 3: To review and develop methods for aggregating clinical data from registries and other real-world sources across the life-cycle of high-risk medical devices.

- **Work Package 4 - Networking and community building: Engaging with stakeholders**
  - Objective 4: To foster exchanges and develop networking between academic centres and across medical
specialties with notified bodies, regulators, manufacturers, health technology assessment bodies, and patients, so that they can share experience and best practices and augment collective scientific expertise for the evaluation of high-risk medical devices within the EU.

- Work Package 5 – Project Management
- Work Package 6 – Ethics requirements

Following the submission of the CORE-MD periodic report submitted in November 2022, it has been fully accepted by the European Commission. Below you will find a summary of the comments on the report of the project review. Members of the CORE-MD consortium thank the experts for their detailed consideration and review of our project and for their generally positive comments and helpful recommendations.

We have noted and considered the proposals made by the experts, in the following areas:

- **Presentation of deliverables:**
  We have proposed that each task in CORE-MD will summarise its work on a single page with infographics, that will be prominent on our website. Also, as already foreseen in the Description of Action (DoA), each task will arrange a webinar, which will be recorded and available for review later, off-line.
  The CORE-MD website is now being updated regularly. The existing communication and dissemination plan is being strengthened with key performance indicators and it is now being reviewed and revised regularly, with more frequent reports on intermediate achievements being added to the website and with more frequent posting of messages on social media (including LinkedIn).

- **Artificial intelligence in medical devices:**
  We note the useful statements about the related task T2.3, and we plan to engage with more experts for review of its recommendations on the clinical evaluation of artificial intelligence medical devices, and at that stage more colleagues from industry will be able to comment.

- **Tangible outputs:**
  We note the recommendations for practical outputs from the project and intend to pursue these as much as possible within the limitations of a three-year project. The consortium will recommend criteria for evaluation of high-risk medical devices, but it will not be able to provide more information from additional reviews of the current operation of the approval processes within the European Union.

- **Dissemination:**
  Increased dissemination to stakeholders of the outputs from the CORE-MD project is a major goal for the second half of the duration of the work. The principal intended recipients are EU medical device regulators, notified bodies, and clinicians.
  The first CORE-MD webinar is being held on 30 January 2023, and it will be followed by a monthly webinar thereafter until the end of the project.
EFORT Today has now entered its second year of operation. The official newsletter regularly provides the latest updates on Orthopaedics and Traumatology (O&T) through dedicated scientific sections.

Additionally, readers can expect focus articles on specific topics and engagement tools, such as surveys, eLearning, eScience, and selected video material. These are designed to encourage and promote readers’ engagement with the content and to facilitate their learning in specific areas of interest related to orthopaedics and traumatology.

The newsletter also offers a preview of articles to be published in EOR, the EFORT Open Reviews Journal.

Overall, the added value of EFORT Today lies in its ability to provide a comprehensive and engaging source of information for those interested in orthopaedics and traumatology in Europe and beyond, and in facilitating collaboration and knowledge-sharing among healthcare professionals.

As our knowledge and understanding of different fields has deepened, so too has the style and content of articles seeking to advance knowledge and awareness. Moreover, as articles have gained increased recognition for their relevance in diverse fields, the relevance and impact of articles have also expanded, contributing to broader interdisciplinary conversations and collaborations.

The newsletter is brought to readership twice a month on a monthly basis, and issues can be accessed freely by subscribing or consulting at www.efort.org/newsletter.

Special thanks also to EFORT team member Ms. Axelle Devun Riva, Corporate Communication Officer, who manages all aspects of digital promotion, content and graphic design for EFORT’s digital news channels.
WEBSITE

**EFORT Websphere at a glance** (as of 31 December 2022):
- 1,293,157 visits in 2022
- Top five visited pages:
  - Main homepage [www.efort.org](http://www.efort.org) (31.4%)
  - Lisbon 2022 homepage [https://congress.efort.org](https://congress.efort.org) (24.8%)
  - Orthopaedic Event Calendar [https://www.efort.org/orthopaedic-event-calendar](https://www.efort.org/orthopaedic-event-calendar) (17.7%)
  - Vienna 2023 homepage [https://congress.efort.org](https://congress.efort.org) (15.4%)
  - EFORT webinars [https://www.efort.org/webinars](https://www.efort.org/webinars) (10.6%)

Unique visitors – geographical repartition (in %)

- **Europe**: 53.2%
- **Latin America**: 6.4%
- **Asia**: 17.1%
- **MENA**: 10.1%
- **Africa**: 3%
- **North America**: 9%
- **Oceania**: 1.2%

Unique visitors (in volume)

- Vienna 2017: 243,462
- Barcelona 2018: 235,627
- Lisbon 2019: 290,331
- Vienna + VEC 2020: 309,401
- VEC 2021: 174,226
- Lisbon 2022: 163,777

Length of visits (in minutes)

Visits by age (in %)

- 18-24: 17.9%
- 25-34: 27.2%
- 35-44: 21.4%
- 45-54: 16.2%
- 55-64: 10%
- 65+: 7.4%

Visits by gender (in %)

- Male: 56.4%
- Female: 43.6%
EFORT has ensured the continuity of its social media presence and the constant growth of its Twitter, Facebook, Instagram, LinkedIn and Youtube channels up to a regular posting.

EFORT’s social media news strategy reflects the development of EFORT products and programmes (EFORT Open Reviews, EFORT Congress, Webinars, Fellowships...). Posting still respects a fair balance between purely scientific content and messages on educational activities of a more promotional and marketing nature.

**2021–2022 Social media channels overview**

- **EFORT**
  - **Followers**
    - Twitter: 6K followers (+576 from 5.4K)
    - Facebook: 5.7K followers (+630 from 5.1K)
    - Instagram: 5.4K followers (+1.2K from 4.2K)
    - LinkedIn: 9.8K followers (+1.7K from 8K)
  - **Engagements**
    - Twitter: 1.29K subscribers (+100 from 1.19K)
    - Facebook: 1.1K engagements (+511 from 619)
    - Instagram: 6.1K engagements (+31 from 6.1K)
    - LinkedIn: 3.5K engagements (+1.1K from 2.4K)
  - **Videos views**
    - 182.3K views (+9.1K from 182.3K)
  - **Time views**
    - 8,441H time spent watching since account creation (+385H)

- **Inbound message by sentiment**
  - Positive
  - Neutral
  - Negative

- Engagement: sum of reactions, comments and shares received by content associated with EFORT channel (for the selected timeframe).
- Inbound messages by sentiment: sum of inbound messages received by EFORT (comments, posts by others and private messages). Does not include comments from the author of the post.
2022 Social media channels: Top 3 posts by Engagement Rate
2022 saw a welcome return to the physical congress environment - despite the inevitable challenges of ensuring delegate, staff and partner safety in the post-covid world where the impact and effects of the pandemic were still very fresh in the memory. As with the previous year, EFORT were extremely fortunate to have had continued support from partners, both new and old, that recognised and supported ongoing education, science and learning and demonstrated this with their presence in Lisbon through exhibition, satellite symposium or sponsorship. Many of these partners also supported us though the expanded and creative range of virtual educational activities of the EEPP (EFORT Educational Partnership Programme).

Thank you therefore to each and every one of these partners for not only their support, but also their enthusiasm and participation in either traditional and/or new ways of disseminating education whilst respecting compliance. Together we can provide stronger solutions.

### EFORT Educational Partnership Programme (EEPP) supporters 2022 > 2023

2023 List of companies having confirmed an EEPP educational activity in 2022 (for 2022/23) - including EFORT Industry Corporate Webinars (ICW’s):

- 3M; Aerobiotix; Amplitude; Bauerfeind; Cepheid; G21; Kuros Bioscience; Lepine; LG Chem; Lifenet Health; Lima Corporate; Mathys Ltd Bettlach; Nanjing Fito Medical; Orthofix; Sanatmetal; SI–Bone; Smith & Nephew; Tecres Spa.

### Exhibitors:

- 3M; Adler Ortho Spa; Aerobiotix Inc; Albomed GmbH; Aptissens; Arthur Salgado SA; Astrolabe Medical; Aygun Surgical instruments Co Inc; B Braun Aesculap; Bauerfeind AG; Becton Dickinson (BD); Bioceramed; Biomerieux; Biotech Healthcare Pvt Ltd; BMT Baps Biyo Maizerne San Tic AS; The Bone & Joint Journal; BPB Medica; Bricon GmbH; Canwell Medical Co Ltd; Cardinal Health; Ceramed SA; Chm sp z.o.o; Condor MedTech GmbH; Covision Medical Technologies; Curvebeam LLC; De Souther Medical Ltd; Delphios Implants; DePuy Synthes; Dial Medicali Srl; DIZG; Dot GmbH; Double Medical Technology Inc; EBJJIS; EFFORT Open Reviews; EHS; EORS; Exactech International Operation AG; FORTE; G21; Griffin Editore; Gruppo Bioimpianti SRL; Hangzhou Rejoin Mastin Medical Device Co Ltd; Hangzhou Singlecan; Heraeus Medical GmbH; Hofer Medical; Implantcast GmbH; Inbiome BV; Intrauma SpA; iWALKfree Inc; JP Brothers Medical Publishers Pvt Ltd; Journal of Bone and Joint Surgery; Koenigsee Implantate GmbH; Kuros Bioscience; Lifenet Health; Lima Corporate S.p.a; LSM Med Srl; Marquardt Medizintechnik GmbH; Mathys Ltd Bettlach; Maxoeus; MDT Int'l SA; Medacta International SA; Medevision; Medi GmbH & Co KG; Medicalax; Merete GmbH; Micropo; Scientific Coorporatie LIA; Mindray; MTF Biologics; Newclop Technologies; Novabone Products LLC; Orthofix; Orthoheal (JC) PVT Ltd; Ortolog Medikal San ve Tic Ltd; Pacina Bioscience; Permedica SpA; REV-MED,Inc.; Sanatmetal Ltd; Sawbones Europe AB; SBM SAS; Shanghai Beijin Electric Instrument & Device Co Ltd; SICOT; Siemens Healthineers; SPOT; Surgical CO SAU; Symbios Orthopédie SA; Synimed; Tecres Spa; Teknimed; Total Healthcare Innovation GmbH; Tipmed Medical Device Manufacturing Company; VSY Biotechnology GmbH; Wisepress; Zheim Imaging GmbH; Zimmer Biomet.

### Satellite symposia:

- 3M; Becton Dickinson; Cardinal Health; Lépine; Siemens & Zimmer Biomet.

### Surgical Skills workshops:

- Exactech

### EFORT Bioskills workshops:

- De Puy Synthes; Smith & Nephew Orthopaedics AG

### Corporate Partnerships and/or Fellowship Programmes

1. Medacta International
2. Smith & Nephew
3. Stryker