

Technical Advances in Neurosurgery



EANS 2015 Annual Meeting

Madrid, Spain
October 18 – 21, 2015



THE EUROPEAN ASSOCIATION
OF NEUROSURGICAL SOCIETIES

Final Programme



EANS 2015



EANS Individual Members...

Did you know there is a members' lounge with newspapers, computers and complimentary refreshments for your exclusive use?

Find the lounge by the EANS booth

Not an individual member of the EANS?

Join now and be in with the chance to win a year's FREE membership!

- discounts and fast-track registration to EANS events
- discounts for other events and publications
- unlimited access to the EANS Academy
- subscription to *Acta Neurochirurgica*
- eligibility for EANS fellowships and awards
- connect with your peers across the world

Memberships are available from as little as €75

www.eans.org

Free membership terms and conditions: Open to new members only. Payment for the membership must have been received in order to qualify, and must be either via card or cash; bank transfers are excluded. A winner will be drawn each day from those who have signed up for membership. The draw is then reset for the next day. The offer runs from 18-21 October 2015 only.

Technical Advances in Neurosurgery



Final Programme

EANS 2015 Annual Meeting

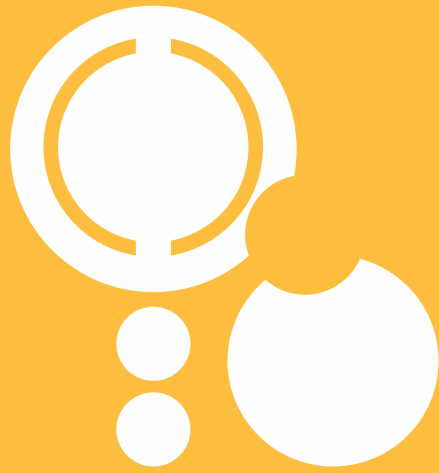


EANS 2015

Madrid, Spain
October 18 – 21, 2015



THE EUROPEAN ASSOCIATION
OF NEUROSURGICAL SOCIETIES



EANS 2015

Technical Advances
in Neurosurgery



www.eans2015.com

Table of Contents

Meeting Information

Programme at a glance	2
Venue Plan	6
Welcome Letter	8
Organising Committees	9
General Information	10
About EANS	12
CME Accreditation	13
EANS 2015 Meeting App	14
Networking Events	15

Scientific Programme

Sunday, October 12	18
Monday, October 13	22
Tuesday, October 14	34
Wednesday, October 15	44
Index of Speakers	48
ePosters	54
Index of ePoster Authors	89

Recognition, Acknowledgements & Industry Support

Acknowledgements	101
Corporate Symposia	160
Exhibition Floorplan	106
List of Exhibitors	108
Exhibitor and Sponsor Company Profiles	109





Programme at a glance

Sunday, October 18	Auditorium
13:00 - 15:30	FLANC Session
15:30 - 16:00	Coffee Break
16:00 - 19:30	WFNS Session
19:35 - 21:05	Opening Ceremony
21:05 - 22:30	Opening Reception in the Exhibition Area

Thematic reference

Vascular

Spine

Neuro-Oncology

Functional

Monday, October 19	Auditorium	Castilla	Hidalgo	Jardín	Neptuno
08:00 - 09:00					Breakfast seminar on MIS
09:05 - 11:05	Plenary Session – Technical Advances in Spine Neurosurgery				
11:05 - 11:35	Coffee Break				
11:35 - 12:35	Intraoperative Imaging	AVMs	Trigeminal neuralgia	Spine	
12:40 - 13:40	Metastases	Minimally Invasive Therapies	Hydrocephalus	Skull Base	
13:40 - 13:55	Lunch Break				
13:55 - 14:55		Corporate Parallel Lunch Symposium	Corporate Parallel Lunch Symposium	Corporate Parallel Lunch Symposium	Lunch seminar on Skull Base
14:55 - 16:25	Plenary Session – Technical Advances in Pediatric Neurosurgery				
16:25 - 16:55	Coffee Break				
16:55 - 17:55	Plasticity/Awake Surgery	TBI	Sellar and Para-Sellar	Vascular/ Miscellaneous	
18:00 - 19:00	Adult Deformities	Aneurysms	Movement disorders	Preoperative Planning	
19:05 - 20:05		Corporate Evening Symposium			Evening seminar on Neurotrauma

Skull base	Neurotrauma	Ethics	Pediatrics
------------	-------------	--------	------------

Tuesday, October 20	Auditorium	Castilla	Hidalgo	Galería	Neptuno
08:00 - 09:00					Breakfast seminar on AVMs
09:05 - 11:05	Plenary Session – Technical Advances in Vascular Neurosurgery				
11:05 - 11:35	Coffee Break				
11:35 - 12:35	CPA – Cerebello-Pontine Angle	Revascularization	Psychiatric Surgery		
12:40 - 13:40	Special Session: Experience in Neurosurgery	Acute Ischaemia	Spine Tumours		
13:40 - 15:55	Lunch Break				
13:55 - 14:55		Corporate Parallel Lunch Symposium	Corporate Parallel Lunch Symposium		Lunch seminar on Aneurysms
14:55 - 16:25	Plenary Session – Technical Advances in Functional Neurosurgery				
16:25 - 16:55	Coffee Break				
16:55 - 17:55	Temporal Apex	Spinal Cord	Immunotherapy & complementary therapies	Ethics	
18:00 - 19:00	Degenerative	Intraoperative markers	Epilepsy		
19:05 - 20:05					Evening seminar Acoustic Neuromas
20:30 - 22:30	Networking Event @ La Pesquera				

Thematic reference

Vascular	Spine	Neuro-Oncology	Functional
----------	-------	----------------	------------

Wednesday, October 21	Auditorium
08:00 - 09:00	Morning Symposium
09:05 - 11:10	Plenary Session – Technical Advances in Neuro-Oncology
11:10 - 11:40	Coffee Break
11:40 - 12:45	Closing Plenary Session & Official Inauguration & Award Ceremony

Skull base

Neurotrauma

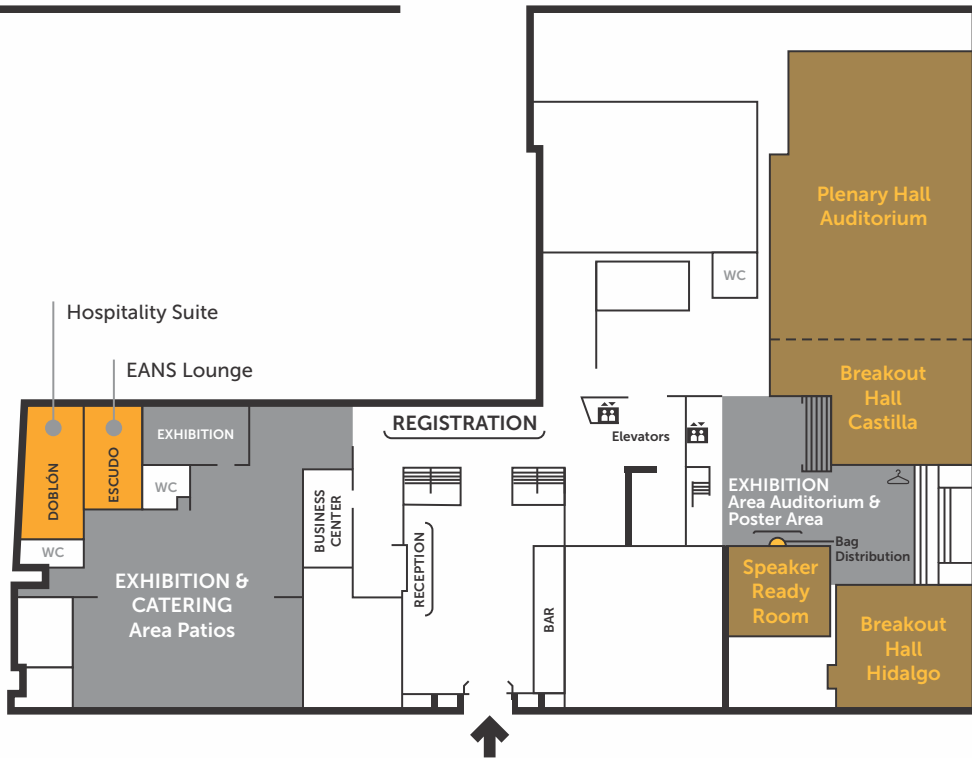
Ethics

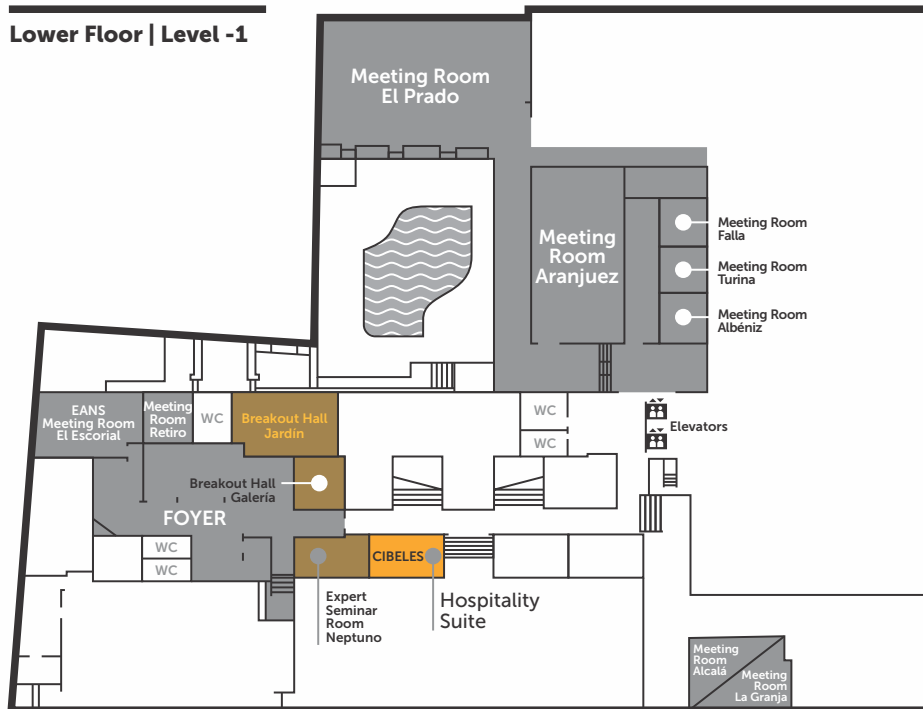
Pediatrics



Venue Plan

Lobby Floor | Level 0





Welcome Letter

We would like to extend our personal thanks to you for choosing to join us here in Madrid for **EANS 2015**. We are delighted at the number and diversity of participants, and look forward to meeting many of you during the next few days.

The theme of this year's **EANS Annual Meeting** is **Technical Advances in Neurosurgery** and as you will see, the comprehensive programme features many leaders in their respective fields. Quite simply, there's no better meeting this year than **EANS 2015** for those who want to learn more about the remarkable developments at the forefront of neurosurgery today. Both the plenary and parallel sessions include revolutionary techniques and groundbreaking work, whilst the morning and evening Meet the Experts sessions offer the opportunity of personal discussion with some of our specialty's foremost names.

We are proud not only of the scientific and networking programme which we have put together, but also of Madrid itself, our capital and the second largest city in the European Union. You'll love our fantastic food and wine, the splendour of world-renowned attractions such as the Palacio Real and Museo del Prado, as well as the warm welcome of the Madrileños themselves – your stay here is sure to be a memorable one.

We look forward to seeing you soon.
J&J



Juan A. Barcia, Spain

A handwritten signature in black ink, appearing to read 'Juan A. Barcia'.

Meeting Chairman



Jesus Lafuente, Spain

A handwritten signature in black ink, appearing to read 'Jesus Lafuente'.

Meeting Chairman



EANS 2015
Technical Advances
in Neurosurgery

Organising Committees

Meeting Chairmen

Juan A. Barcia, Jesus Lafuente

Organising Committee

José Hinojosa
Luis Ley
Francisco González Llanos
Avelino Parajón
Rosario González Rodrigálvarez
Kita Sallabanda
Cristina Torres
Rebeca Pérez-Alfayate

EANS Board of Officers

President

Vladimír Beneš, *Czech Republic*

Secretary and President Elect

André Grotenhuis, *The Netherlands*

Treasurer

Andras Büki, *Hungary*

Chair of the Training Committee

Nejat Akalan, *Turkey*

Past President

Johannes Schramm, *Germany*

Vice Presidents

Toomas Asser, *Estonia*
Jannick Brennum, *Denmark*
Shlomi Constantini, *Israel*
Domenico D'Avella, *Italy*
Peter Hutchinson, *United Kingdom*

Non voting Members

President of UEMS Section of
Neurosurgery

Johannes van Loon, *Belgium*

Editor in Chief of Acta

Tiit Mathiesen, *Sweden*

Executive Director

Susie Hide, *United Kingdom*

General Information

Congress Venue

Hotel Meliá Castilla
Capitán Haya 43
28020 Madrid
Spain
Tel: +34 91 5675000
www.melia.com

Registration

Sunday, October 18	10:00 – 21:00
Monday, October 19	07:00 – 20:00
Tuesday, October 20	07:30 – 20:00
Wednesday, October 21	07:30 – 13:00

Participants Badge

Upon registration, you will receive your name badge. You are kindly requested to wear your badge during all Meeting sessions and events

WiFi

Free WiFi will be available at the Meeting. Please be aware that public WiFi capacity is always limited to Meeting App access and email and web browsing activity.



WiFi Access

Network: Melia Castilla
Username: MELIA
Password: CASTILLA1

Refreshments

Coffee and lunch will be served in the Exhibition Area Patios at the times indicated in the Scientific Programme.

Exhibition Opening Times

The Exhibitions in the Exhibition Areas Auditorium and Patios will be open as follows:

Sunday, October 18	20:00 – 22:30
Monday, October 19	09:00 – 19:00
Tuesday, October 20	09:00 – 19:00
Wednesday, October 21	09:00 – 12:45

Speaker Ready Room

The Speaker Ready Room where speakers can upload their presentations will be open as follows:

Sunday, October 18	10:00 – 21:00
Monday, October 19	07:30 – 20:00
Tuesday, October 20	07:30 – 20:00
Wednesday, October 21	07:30 – 13:00

Abstracts

All Meeting abstracts are available on the Meeting App.

Meeting Newspaper

A Meeting Newspaper will be distributed on every day of the Meeting.

E-Poster Area

The E-Poster Exhibition is located in the Exhibition Area Auditorium and will be available throughout the Meeting.

Recognition, acknowledgements and industry support

In accordance with compliance regulations, Industry supporting the congress will be acknowledged separately from the Scientific Programme. Industry information will appear at the back of the book, under the section RECOGNITION, ACKNOWLEDGEMENTS AND INDUSTRY SUPPORT.

Photography and recording privileges

No photographs, video recording or audio recording may be permitted in the scientific sessions at this Meeting unless otherwise authorised by the Scientific Committee or the Meeting Chairmen.

Safety and Security

Please do not leave any bags or suitcases unattended at any time, whether inside or outside the session halls.

Certificate of Attendance

The Certificate of Attendance is available on Wednesday October 21, 2015 at the registration desk or after the Meeting upon request via email to eans2015@aimgroup.eu

Smoking Policy

Participants are kindly requested to refrain from smoking inside the Meeting Venue.

Emergency Telephone Numbers

Firefighters: 080 or 112
Police: 091 or 112
Ambulance/Emergency: 061 or 112

Guest Attendance Policy

All event activities (including educational sessions, meal functions, exhibit hall, etc.) are exclusively reserved for registered attendees. Non-registered guests (including children, family members, colleagues, etc.) are not allowed in any of the event areas. Badges provided at registration are required for entrance into all functions and will be strictly enforced.

Meeting Secretariat



AIM Group International

Mariannengasse 32
1090 Vienna
Austria
Onsite Telephone number:
+34 91 567 8282

About EANS

The European Association of Neurosurgical Societies (EANS) is a fast-developing independent association, both of European neurosurgical societies and of individual neurosurgeons from all over the world.

Our objective is to enable our members to enhance the care they deliver to their patients by facilitating the exchange of scientific information at the highest level. In pursuit of this goal, we arrange a wide range of meetings, symposia and educational courses. A growing number of fellowship and observership opportunities are also available to our members, along with a comprehensive online library of neurosurgical material via the EANS Academy.



THE EUROPEAN ASSOCIATION
OF NEUROSURGICAL SOCIETIES

www.eans.org

CME Accreditation

The 'EANS 2015 Annual Meeting, Technical Advances in Neurosurgery' is accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. The EACCME is an institution of the European Union of Medical Specialists (UEMS), www.uems.net

The 'EANS 2015 Annual Meeting, Technical Advances in Neurosurgery' is designated for a maximum of (or 'for up to') 18 hours of European external CME credits. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Through an agreement between the European Union of Medical Specialists and the American Medical Association, physicians may convert EACCME credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME credit to AMA credit can be found at www.ama-assn.org/go/internationalcme

Live educational activities, occurring outside of Canada, recognized by the UEMS-EACCME for ECMEC credits are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada.

Receive your UEMS-EACCME Certificate

To receive your UEMS-EACCME Certificate please fill in and submit a Feedback Form directly on-site at the EANS 2015 Annual Meeting. Feedback forms will be included in your registration package, which you will receive at the registration desk. Please note that feedback forms cannot be distributed after the Meeting. Please take notice that your UEMS-EACCME certificate can be issued only, if you submit your feedback form at the on-site registration desk.

Industry Support disclosure

This event is supported, in part, by funding from industry. All support is managed in strict accordance with UEMS-EACCME accreditation criteria and standards for commercial support. Appropriate acknowledgement of all supporting organisations is made in the programme guide, on the event website, and with signage during the event.

EANS 2015 Meeting App

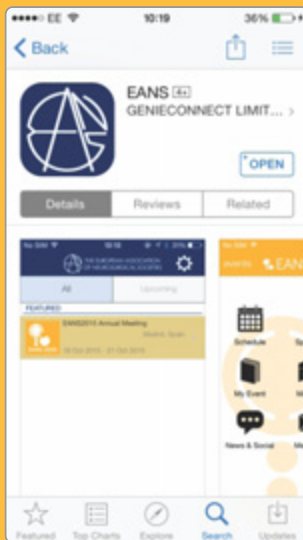
The app contains the full programme of the meeting with a scheduling function, so you are able to build your own planner of the presentations you want to attend. You'll also find a full list of the speakers so you can read up on those presenting well in advance, as well as information about all the exhibitors, enabling you to get the most out of your time in the exhibition hall.

Other key features include a news feed, so you don't miss anything from the meeting as it happens, and a messaging function to keep in touch with colleagues and friends who are also attending.

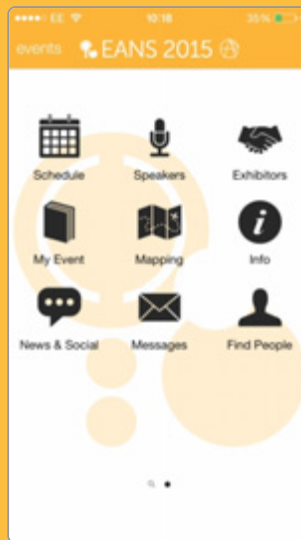


Scan to get the
EANS Meeting App

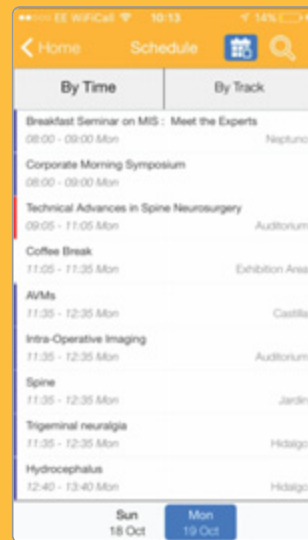
The EANS 2015 App in the App Store



The EANS 2015 App Main Screen



The EANS 2015 App Timetable



Networking Events

Opening Ceremony and Welcome Reception

Sunday October 18, 2015 from 21:05-22:30, Hall Auditorium, Meliã Castilla

All registered participants are invited to attend the Opening Ceremony and Welcome Reception. To see the programme of the Opening Ceremony please go to page 20.

Networking Dinner

Tuesday October 20, 2015 at 20:30, La Pesquera, Calle del Ferial, 5, 28011 Madrid

This event, which will be attended by the Meeting Speakers, the Scientific Committee and the EANS Board, is the perfect occasion for exchange and to explore your field of work. It will be hosted at the restaurant La Pesquera in Madrid.

Transportation will be provided from the Meeting Venue, the hotel Meliã Castilla to the restaurant and back. Buses will depart from the Main Entrance of the hotel at 20:00.

Should you have not acquired your ticket for the Networking Event yet you can buy it at the registration desk until **18:00 on Tuesday 20, 2015 – subject to availability!**

– **Ticket price: €100 (standard fee) / €70 (reduced fee)**



Scan to view map!

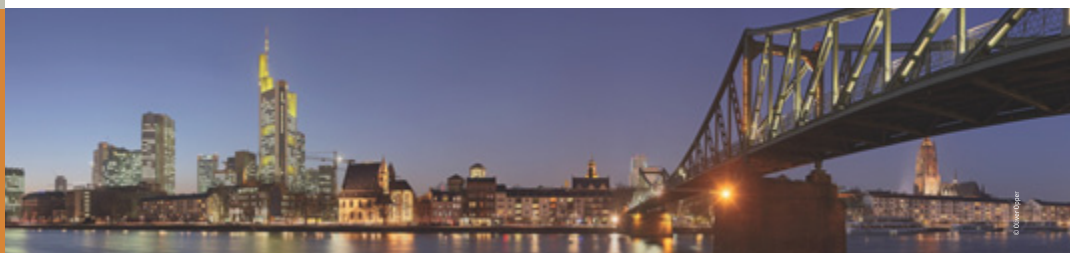
67. JAHRESTAGUNG

DER DEUTSCHEN GESELLSCHAFT FÜR NEUROCHIRURGIE (DGNC)

1. JOINT MEETING

MIT DER KOREANISCHEN GESELLSCHAFT FÜR NEUROCHIRURGIE (KNS)

12.-15. JUNI 2016, FRANKFURT AM MAIN



TAGUNGSPRÄSIDENT | CONGRESS PRESIDENT

Prof. Dr. med. Volker Seifert
Direktor der Klinik und Poliklinik für Neurochirurgie
Universitätsklinikum Frankfurt
Goethe-Universität
Schleusenweg 2-16
60528 Frankfurt am Main
T +49 (0) 69 6301-5295
F +49 (0) 69 6301-6322
E v.seifert@em.uni-frankfurt.de

TAGUNGSEKRETÄRE | CONGRESS SECRETARIES

Prof. Dr. med. Christian Senft
T +49 (0) 69 6301-4561
F +49 (0) 69 6301-4839
E c.senft@med.uni-frankfurt.de

PD Dr. med. Thomas Freiman
T +49 (0) 69 6301-7382
F +49 (0) 69 6301-4839
E freiman@med.uni-frankfurt.de

PD Dr. med. Lutz Weise
T +49 (0) 69 6301-5467
F +49 (0) 69 6301-4839
E lutz.weise@med.uni-frankfurt.de

Klinik und Poliklinik für Neurochirurgie
Universitätsklinikum Frankfurt
Goethe-Universität
Schleusenweg 2-16
60528 Frankfurt am Main

TAGUNGSSORT | CONGRESS VENUE

Congress Center Messe Frankfurt
Ludwig-Erhard-Anlage 1
60327 Frankfurt am Main
www.congressfrankfurt.de

KONGRESSORGANISATION | CONGRESS ORGANIZER

Porstmann Kongresse GmbH (PCO)
Alte Jakobstr. 76
10179 Berlin
T +49 (0) 30 284499-0
F +49 (0) 30 284499-11
E dgnc2016@porstmann-kongresse.de
www.porstmann-kongresse.de

www.dgnc.de/2016

67th ANNUAL MEETING

OF THE GERMAN SOCIETY OF NEUROSURGERY (DGNC)

1st JOINT MEETING

WITH THE KOREAN NEUROSURGICAL SOCIETY (KNS)

JUNE 12-15, 2016, FRANKFURT AM MAIN, GERMANY

Abstract submission open:

October 19, 2015 – November 29, 2015

THEMEN

- I Cerebrale Aneurysmen und Subarachnoidalblutung
- II Neuroonkologie: Konzepte und Innovationen
- III Der alternde Patient in der Wirbelsäulen Chirurgie
- IV Multimodale Bildgebung und Neurophysiologie
- V Craniale Meningeome: Herausforderungen – Grenzen – Lösungen
- VI Freie Themen

TOPICS

- I Cerebral aneurysms and subarachnoid hemorrhage
- II Neurooncology: current concepts and innovations
- III The ageing patient in spine surgery
- IV Multimodal imaging and neurophysiology
- V Intracranial meningiomas: challenges – limits – solutions
- VI Free topics



DGNC

Deutsche Gesellschaft
für Neurochirurgie

67. JAHRESTAGUNG 2016
12.-15. JUNI, FRANKFURT



Scientific Programme
Sunday, October 18



Scientific Programme

Sunday, October 18

Presentation No

13:00 - 15:30	Auditorium
FLANC SYMPOSIUM Chairs: M. A. Arraez (Spain), E. Urculo (Spain)	1
13:00 – 13:15 Aneurysms in elderly E. Spagnuolo (Uruguay)	2
13:15 – 13:30 Low grade gliomas in eloquent areas: New concepts, same results? C. Yampolsky (Argentina)	3
13:30 – 13:45 Glioblastomas in elderly: New frontiers J. M. Rotta (Brasil)	4
13:45 – 14:00 Facial hemispasm: Treatment and 20 years personal experience R. Revuelta-Gutierrez (Mexico)	5
14:00 – 14:15 Petroclival tumors: When petrosal approaches are really necessary J. A. Landeiro (Brasil)	6
14:15 – 14:30 Percutaneous nucleotomy T. Perilla (Colombia)	7
14:30 – 14:45 Anterior cervical foraminotomy for foraminal estenosis M. Baabor (Chile)	8
14:45 – 15:00 Brain tumors in the 1st year of life S. Portillo (Argentina)	9
15:00 – 15:15 Middle cerebral artery aneurysms R. I. Burgos (Colombia)	10
15:15 – 15:30 Complication avoidance in paraclinoid aneurysm surgery J. Mura (Chile)	11
15:30 – 16:00	Exhibition Areas
COFFEE BREAK	

16:00 – 19:30		Auditorium
WFNS SYMPOSIUM		
Chairs: R. González Rodrigálvarez (Spain), E. Spagnuolo (Uruguay)		12
16:00 – 16:16	New strategies in bypass surgery R. Tanikawa (Japan)	13
16:16 – 16:32	Anterior skull base meningiomas: Is there any role for the endoscopic approach? F. Gentili (Canada)	14
16:32 – 17:48	Brain stem tumours: Are there new strategies? M. A. Arraez (Spain)	15
17:48 – 17:04	Flow based technique for bypass in aneurysm surgery S. Amin-Hanjani (USA)	16
17:04 – 17:20	Epilepsy surgery: Present and future treatments and technologies D. P. Adelson (USA)	17
17:20 – 17:36	Endonasal endoscopic surgery for skull base lesions: Where are we on Scott's Parabola? J. Morcos (USA)	18
17:36 – 17:52	New trends in management of intramedullary tumours R. González Rodrigálvarez (Spain)	19
17:52 – 18:10	The paramedian supracerebellar-transtentorial selective amygdalohippocampectomy U. Türe (Turkey)	20
18:10 – 18:26	Management of giant and complex aneurysm Y.-K. Tu (Taiwan)	21
18:26 – 18:42	Interaction between technology and epilepsy surgery K. Schaller (Switzerland)	22
18:42 – 18:58	Modern management of ventricular tumors: Open approaches and stereotactic radiosurgery E. M. Kasper (USA)	23
18:58 – 19:14	The auditory midbrain implant – a new approach for hearing restoration in neural deafness A. Samii (Germany)	24
19:14 – 19:19	Introduction of the WFNS President Elect by the current WFNS President Y.-K. Tu (Taiwan)	25
19:20-19:30	Adress to WNFS by the WFNS President elect F. Servadei (Italy)	26

19:35 – 21:05	Auditorium
OPENING CEREMONY	
Presenter: J. Lafuente (Spain)	27
Honorary Guests: C. Ruíz Ocaña (President of SENEC), V. Calatayud, M. Manrique	
Welcome from the EANS Meeting Co-Chairman	28
J. Lafuente (Spain)	
Welcome from the EANS Meeting Co-Chairman	29
J. A. Barcia (Spain)	
Welcome from the EANS President	30
V. Beneš (Czech Republic)	
Welcome from the Representative of the City of Madrid	
Introduction to Javier de Felipe	31
J. A. Barcia (Spain)	
Cajal and the butterflies of the soul: Brain plasticity and mental processes	32
J. de Felipe (Spain)	

21:05 – 22:30	Exhibition Area
----------------------	------------------------

OPENING RECEPTION



Scientific Programme
Monday, October 19



Scientific Programme

Monday, October 19

Presentation No

08:00 – 09:00		Neptuno
BREAKFAST SEMINAR ON MIS (Limited Places available) With: B. Meyer (Germany), A. Parajón (Spain), D. Refai (USA)		33
09:05 – 11:05		Auditorium
PLENARY SESSION: TECHNICAL ADVANCES IN SPINE NEUROSURGERY Chairs: J. Lafuente (Spain), A. Parajón (Spain)		34
09:05 – 09:25	Current strategies in adult spine deformity M. Balsano (Italy)	35
09:26 – 09:46	Cervical kyphosis A. Casey (United Kingdom)	36
09:47 – 10:07	Current robotic technologies in spine surgery D. Refai (USA)	37
10:08 – 10:28	A multicenter prospective randomized controlled clinical trial to evaluate the effectiveness and safety of a percutaneous interspinous device versus standalone decompressive surgery in degenerative lumbar spinal stenosis with neurogenic intermittent claudication B. Meyer (Germany)	38
10:29 – 10:49	Is radiosurgery safe and therapeutic in spinal AVMs? A. Muacevic (Germany)	39
10:50 – 10:57	S498 Post traumatic stress disorder symptoms following elective spine surgery. Is surgery really the reason? E. Shiban, Y. Shiban, J. Lehmborg, F. Bruckbauer, J. Thiel, U. Hoffmann, F. Ringel, A. Mühlberger, B. Meyer	40
10:58 – 11:05	S791 Variation in surgical indication for degenerative spinal disorders: A four-nation survey B. Debono, B. Guiot, L. Alvarez Galovitch, S.-O. Eicker, F. Ringel	41
11:05 – 11:35		Exhibition Areas
COFFEE BREAK, ePOSTER VIEWING, VISIT THE EXHIBITION		

11:35 – 12:35		Auditorium
PARALLEL SESSION: INTRA-OPERATIVE IMAGING Chairs: I. Pomposo Gaztelu (Spain), F. Rascón (Spain)		42
11:35 – 11:50	Value of intraoperative MR in the removal of brain gliomas C. Senft (Germany)	43
11:50 – 12:05	B-mode and contrast-enhanced ultrasound (iCEUS): An essential tool for a bona fide real-time, image-guided brain tumour resection F. DiMeco (Italy)	44
12:05 – 12:20	Advances in navigation techniques for cranial neurosurgery S. Wolfsberger (Austria)	45
12:20 – 12:27	S230 Prospective study of continuous dynamic mapping of the corticospinal tract during surgery of motor eloquent intraaxial brain tumors K. Seidel, J. Beck, P. Schucht, A. Raabe	46
12:28 – 12:35	S905 Intraoperative 3D-ultrasound versus neuronavigation during awake resections of eloquently localized low-grade gliomas: Is there an impact on the extent of resection? A. Šteňo, V. Holly, P. Mendel, V. Belan, M. Fabian, G. Timárová, L. Petříčková, J. Šurkala, J. Šteňo	47
11:35 – 12:35		Castilla
PARALLEL SESSION: AVMs Chairs: J. Diamantopoulos (Spain), F. González Llanos (Spain)		48
11:35 – 11:50	Advances in Brain AVM surgery, integration of hybride suite, awake craniotomy and beyond A. Dehdashti (USA)	49
11:50 – 12:05	Intraoperative management of cerebral vascular malformations in eloquent areas A. Gabarrós (Spain)	50
12:05 – 12:20	Surgery versus radiosurgery in AVM management A. Horcajadas (Spain)	51
12:20 – 12:27	S29 Trends in readmission of subarachnoid haemorrhage patients into neurocritical care: A 5-year study J.C.M. Low, J. Welbourne, P.C. Whitfield	52
12:28 – 12:35	S1040 Building a brain arteriovenous malformation surgery practice in the ARUBA era: Early career experience with 32 case I. Radovanovic	53

11:35 – 12:35		Hidalgo
PARALLEL SESSION: TRIGEMINAL NEURALGIA		
Chairs: R. García Leal (Spain), F. Robaina (Spain)		54
11:35 – 11:50	The role of brainstem evoked potential (BAEP) in microvascular decompression for trigeminal neuralgia (TGN), hemifacial spasm (HS) and glossopharyngeal neuralgia J. O. Farah (United Kingdom)	55
11:50 – 12:05	Structural brain imaging of pain: Lessons learned from trigeminal neuralgia M. Hodaie (Canada)	56
12:05 – 12:20	Trigeminal neuralgia and radiosurgery, current concepts and long term results R. Martinez Alvarez (Spain)	57
12:20 – 12:27	S834 Dedicated linear accelerator radiosurgery for trigeminal neuralgia: A single-center experience in 280 patients with an anterior target B. Debono, I. Latorzeff, J.-A. Lotterie, P.-Y. Borius, P. Duthil, J.-C. Sol, J. Sabatier, Y. Lazorthes	58
12:28 – 12:35	S852 Comparison of long term efficacy of microvascular decompression, thermocoagulation and balloon compression in idiopathic trigeminal neuralgia A. EL Ouahabi	59
11:35 – 12:35		Jardín
PARALLEL SESSION: SPINE		
Chairs: C. Botella-Asuncion (Spain), J. Undabeitia (Spain)		60
11:35 – 11:42	S171 The use of bone cement to minimise interbody device subsidence R.M. Hall, A.M. Liddle, V. Borse, J. Timothy, D. Skrzypiec, J. Jacob, C. Persson, H. Engqvist, N. Kapur	61
11:42 – 11:49	S197 Management of the adjacent segment disease with extralateral interbody fusion (XLIF) A. Peiró García, I. Domínguez Esteban, J. Alía Benítez, J. Rey Del Castillo, M. Noriega Bastos, R. Luque Pérez	62
11:49 – 11:56	S332 Effects of dynamic stabilization on motion and sagittal alignment on the cervical spine G. Matgé	63
11:57 – 12:04	S833 Long-term outcomes of PEEK vs titanium expandable cages following corpectomy J.F. Hamilton, J.V. Boddu	64
12:05 – 12:12	S254 Lateral versus anterior lumbar interbody fusion: Outcomes from a prospective multi-center study K. Kim, R. Den Haese, C. Hill, B. Streng, A. de Moura, A. Kranenburg, M. Dennis, A. Cappuccino, T. Thaiyananthan, P. Arnold, P. Passias, C. Ferry, K. Martin, C. Moore, S. Martineck, B. Bejin	65

12:13 – 12:20	S847 PEEK in pyogenic spinal infection. A single center experience with 36 cases E. Shiban, I. Janssen, J. Rainer, M. Stoffel, F. Ringel, B. Meyer	66
12:21 – 12:28	S932 Is size of the annular rupture a risk for early recurrent lumbar disc hernia? E. Ozek, O. Baskan, R. Sari, M. Onoz, I. Elmaci	67
12:28 – 12:35	S1043 C2 odontoid process fractures in the elderly: Observations on the natural history of non-operative management N. Stavrinou, H. Shekhar, A. Daud, P. Statham, A.K. Demetriades	68

12:40 – 13:40 **Auditorium**

PARALLEL SESSION: METASTASES		
Chairs: V. García Marín (Spain), M. Petrela (Spain)		69
12:40 – 12:55	Microsurgery of brain metastasis – state of the art and future concepts J. C. Tonn (Germany)	70
12:55 – 13:10	The treatment of metastatic brain disease: The case for radiotherapy E. Lopez (Spain)	71
13:10 – 13:25	Radiosurgery of Brain Metastases: Why the Paradigms are Changing and How it Affects Neurosurgery B. Lippitz (Germany)	72
13:25 – 13:32	S1006 Correlation between tumor volume and volume of the peritumoral edema in cerebral metastases M. Bauer, J. Kerschbaumer, C.F. Freyschlag, C. Thomé	73
13:33 – 13:40	S233 Confocal laser endomicroscopic (CLE) characterization and differentiation of neuronal metastatic cancer originating from the lung, prostate and mamma C. Charalampaki, M. Javed, S. Daali, A. Igressa, H.-J. Heiroth, J. Schlegel, F. Weber	74

12:40 – 13:40 **Castilla**

PARALLEL SESSION: MINIMALLY INVASIVE THERAPIES		
Chairs: M. L. Gandía González (Spain), N. Samprón (Spain)		75
12:40 – 12:50	Full endoscopic spine surgery: A new paradigm? M. Casimiro (Portugal)	76
12:51 – 13:01	Complementing MISS and navigation. Helpful or unnecessary? C. Thomé (Austria)	77
13:02 – 13:12	MISS TLIF improving fusion rates A. Parajón (Spain)	78

13:13 – 13:23	MI approaches for thoracic discs J. Duff (Switzerland)	79
13:25 – 13:32	S979 The benefits of minimally invasive posterior lumbar interbody fusion in degenerative lumbar spondylolisthesis M. Vorsic, G. bunc, J. Ravnik	80
13:33 – 13:40	S993 Minimally invasive decompression vs open laminectomy for central lumbar spinal stenosis – a pragmatic comparative effectiveness study S. Gulati, U.S. Nerland, A.S. Jakola, O. Solheim, Ø. Nygaard, C. Weber, V. Rao, G. Lønne, Ø. Salvesen, S.M. Carlsen, T.K. Solberg	81
12:40 – 13:40		Hidalgo
PARALLEL SESSION: HYDROCEPHALUS Chairs: J. Hinojosa (Spain), X. Márquez (Spain)		82
12:40 – 12:50	Expermintal surgery for intrauterine myelomeningocele M. Zerah (France)	83
12:52 – 13:02	Change of ventricular volume in response to treatment in hydrocephalic children S. Sgouros (Greece)	84
13:04 – 13:14	Differences between ICP in adults and children with particulate focus on postural ICP regulation M. Juhler (Denmark)	85
13:16 – 13:23	S972 Endoscopic resection of clival chordoma: our experience and review of literature N. Shimony, A. Abargil, L. Gonen, N. Margalit	86
13:24 – 13:31	S392 Endoscopic management of non-shunt-related intra- and peri-ventricular cystic lesions W.A. Azab	87
13:33 – 13:40	S845 Image guidance improves the accuracy of external ventricular drain tip position in patients with small ventricles A. Shtaya, J. Roach, A. Sadek, J. Hempenstall, D. Bulters	88
12:40 – 13:40		Jardín
PARALLEL SESSION: SKULL BASE Chairs: R. García Leal (Spain), F. Muñoz Hernández (Spain)		89
12:40 – 12:47	S247 Prospective, cohort study evaluating the outcomes of percutaneous balloon compression in the management of secondary trigeminal neuralgia in multiple sclerosis A.M. Alvarez-Pinzon, A. Wolf, M. Sanchez Gonzalez, J.E. Valerio-Pascua	90

12:47 – 12:54	S405 Multi-modality neuro-imaging of the cavernous sinus & cranial nerves (a radiological & microsurgical study) C. Gavin	91
12:54 – 13:01	S434 Surgical technique for recurrent trigeminal neuralgia: REZ (root entry zone) clearance method H. Kasuya, C. Yoshimura, Y. Takahashi, M. Inazuka, S. Tani	92
13:02 – 13:09	S694 Endoscopic endonasal treatment of pituitary adenomas invading the cavernous sinus D. Mazzatenta, M. Zoli, R. Bonfatti, A. Valluzzi, E. Pasquini, C. Sturiale, G. Frank	93
13:10 – 13:17	S774 Internal carotid artery rupture management during transsphenoidal endoscopic surgery T.P. van Doormaal, A. van der Zwan, P. Depauw	94
13:18 – 13:25	S908 Freehand dynamic endoscopic lateral orbital approach to the cavernous sinus. Anatomic study L. Laleva, M. de Notaris, T. Spiriev, A. Di Somma, E. d'Avella, A. Prats-Galino, G. Catapano	95
13:26 – 13:33	S997 Cavernous sinus tumors. Endoscopic endonasal possibilities. Endoscopy and minimally invasive neurosurgery O. Palamar	96
13:33 – 13:40	S92 Intra-operative navigated angio-sonography for skull base tumor surgery F. Prada, M. Del Bene, C. Casali, F. Legnani, A. Saladino, A. Perin, I.G. Vetrano, L. Mattei, A. Moiraghi, C. Richetta, M. Saini, F. DiMeco	97

13:40 – 14:55 **Exhibition Areas**

LUNCH BREAK, ePOSTER VIEWING, VISIT THE EXHIBITION

13:55 – 14:55 **Neptuno**

LUNCH SEMINAR ON SKULL BASE (Limited Places available)
With: A. Grotenhuis (The Netherlands), J. Mura (Chile), J. A. Simal (Spain) 98

13:55 – 14:55 **Jardín**

CORPORATE LUNCH SYMPOSIUM

13:55 – 14:55 **Castilla**

CORPORATE LUNCH SYMPOSIUM

13:55 – 14:55 **Hidalgo**

CORPORATE LUNCH SYMPOSIUM

14:55 – 16:25		Auditorium
PLENARY SESSION: TECHNICAL ADVANCES IN PEDIATRIC NEUROSURGERY		
Chairs: J. Hinojosa (Spain), F. Villarejo (Spain)		99
14:55 – 15:15	Paediatric traumatic brain injury D.P. Adelson (USA)	100
15:16 – 15:36	Intraoperative MRI and tumour resection C. Malucci (United Kingdom)	101
15:37 – 15:57	Neuroendoscopy for hydrocephalus and for infants: First results of the IIHS S. Constantini (Israel)	102
15:58 – 16:18	Endoscopic third ventriculostomy (ETV) for the treatment of shunt malfunction N. Akalan (Turkey)	103
16:18 – 16:25	S495 Endoscopic surgery for pineal region lesions M. Gangemi	104
16:25 – 16:55		Exhibition Areas
COFFEE BREAK, ePOSTER VIEWING, VISIT THE EXHIBITION		
16:55 – 17:55		Auditorium
PARALLEL SESSION: PLASTICITY/AWAKE SURGERY		
Chairs: J. AVECILLAS (Spain), S. G. ROBLES (Spain)		105
16:55 – 17:10	Supratentorial gliomas in eloquent areas: Can we predict extent of resection and functional outcome? G. Spina (Italy)	106
17:10 – 17:25	Tailored motor mapping: Strategies and clinical impact L. Bello (Italy)	107
17:25 – 17:40	Comparing anatomy with high tech in radical glioma surgery in developing countries? R. I. Burgos (Colombia)	108
17:40 – 17:47	S590 Hemispheric language dominance measured by rTMS and postoperative course of language function in brain tumor patients S. Ille, N. Kulchytska, R. Wittig, E. Beurskens, F. Ringel, P. Vajkoczy, B. Meyer, T. Picht, S.M. Krieg	109
17:48 – 17:55	S684 The role of surgery in patients with recurrent low grade gliomas K. Gousias, V. Keil, S. Ridwan, J. Schramm, M. Simon	110

16:55 – 17:55		Castilla
PARALLEL SESSION: TBI		
Chairs: A. Lagare (Spain), D. Manzano-Lopez Gonzalez (Spain)		111
16:55 – 17:05	Sport concussion, management and legal implications A. Belli (United Kingdom)	112
17:07 – 17:17	Global collaboration and data sharing in TBI: The example of CENTER-TBI A. Maas (Belgium)	113
17:19 – 17:29	Biomarkers of TBI: The glorious past and the bright future A. Büki (Hungary)	114
17:31 – 17:41	Oligodendrocytes and their progenitors – neglected cells in traumatic brain injury research? Implications for white matter dysfunction and repair post-injury N. Marklund (Sweden)	115
17:41 – 17:48	S835 Revisiting the micro-structure of bridging veins for modeling acute subdural hematoma and improving prevention G.U. Musigazi, E. Verbeken, B. Depreitere	116
17:48 – 17:55	S644 Rotterdam score, ICP, CPP, S-100B, NSE levels and their association with decompressive craniectomy in traumatic brain injury L. Bobinski, M. Olivecrona, L.-O. Koskinen	117
16:55 – 17:55		Hidalgo
PARALLEL SESSION: SELLAR AND PARA-SELLAR		
Chairs: J. Fernández Alén (Spain), P. Goetz (United Kingdom)		118
16:55 – 17:10	Sellar meningiomas removed through and expanded endoscopic endonasal approach A. Paluzzi (United Kingdom)	119
17:10 – 17:25	Craniofacial resections of skull base sarcomas T. Meling (Norway)	120
17:25 – 17:40	Pituitary adenoms with reference to parasellar growth E. Knosp (Austria)	121
17:40 – 17:47	S695 What is changing in craniopharyngiomas surgery? D. Mazzatenta, M. Zoli, R. Bonfatti, A. Valluzzi, E. Pasquini, C. Sturiale, G. Frank	122
17:48 – 17:55	S450 Magnetic resonance imaging as predictor of functional outcome in craniopharyngiomas P. Mortini, F. Gagliardi, M. Bailo, A. Spina, A. Parlangei, A. Falini, M. Losa	123

16:55 – 17:55		Jardín
PARALLEL SESSION: VASCULAR/MISCELLANEOUS		
Chairs: C. J. Dominguez (Spain), A. Lagare (Spain)		124
16:55 – 17:02	S291 The efficacy of perfusion MRI for evaluation of CVR in patients with moyamoya disease T. Kawano, Y. Ohmori, Y. Kaku, D. Muta, T. Nakagawa, T. Amadatsu, D. Kasamo, J. Kuratsu	125
17:02 – 17:09	S308 Computed tomography angiography spot sign as a volume dependent predictor for outcome for patients with intracerebral hemorrhage and aneurysmal subarachnoid hemorrhage J.-K. Burkhardt, M.C. Neidert, M.N. Stienen, D. Schöni, C. Fung, M. Röthlisberger, M. Corniola, D. Bervini, R. Maduri, D. Valsecchi, S. Tok, B. Schatlo, K. Schaller, O. Bozinov, L. Regli, Swiss SOS study group	126
17:09 – 17:16	S502 Elderly patients with aneurysmal subarachnoid hemorrhage: A french collaborative multicenter randomized trial F. Proust S. Bracard, L. Thines, G. Penchet, E. Gimber, P. Lereste, J. Sedat, M. Lonjon, C. Cao, E. Ricolfi, K. Mourier, H. El Hajj, J. Bergé, S. Boucebci, T. Civit, J.Y. Gauvrit, X. Morandi, T. Gaberel, P. Courthéoux, E. Emery, I. Pelissou, F. Turjman, N. Aghakani, P. David, P. Lasjaunias, B. Irthum, J. Gabrillargues, A. Coste, H. Cebula, X. Leclerc, R. Billond Grand, O. Langlois, J.P. Lejeune	127
17:17 – 17:24	S1033 A pedagogic virtual simulator of intracranial aneurysm clipping L. Thines, E. Coevoet, J. Dequidt, T. Galloy, C. Duriez	128
17:25 – 17:32	S960 Outcome of patients treated with a decompressive craniectomy (DC) after aneurysmal subarachnoid hemorrhage (aSAH) A. El Rahal, Y. El Hassani, K. Schaller, P. Bijlenga	129
17:33 – 17:40	S549 Correlation between Optic Nerve Sheath Diameter on CT and Intracranial Pressure in Traumatic Brain Injury: Retrospective Analysis of 354 scans at a London Trauma Centre S.G. Amarasinghe, K. Ordidge, A.S. Chauhan, H.J. Marcus, B. Jones, M.H. Wilson	130
17:41 – 17:48	S591 Synergistic effects of dual intermittent stimulation of the caudate and nucleus accumbens on learning C.-S. Kwon, S. Abdel-Aziz, S. Patel, J. Gale, E. Eskandar	131
17:48 – 17:55	S822 Drains for chronic subdural haematoma: Have clinical trial results translated into clinical practice? J. Tailor, D. Fernando, K. Abeyasinghe, Z. Sidhu, S. Vivekanatham, D.C. Walsh	132
18:00 – 19:00		Auditorium
PARALLEL SESSION: ADULT DEFORMITIES		
Chairs: J. Calatayud (Spain), A. Isla Guerrero (Spain)		133
18:00 – 18:15	Management of proximal junctional kyphosis V. M. Russo (Italy)	134

18:15 – 18:30	New trends in management of complex degenerative scoliosis S. Kurpad (USA)	135
18:30 – 18:45	Current management in vertebral osteomyelitis causing spinal deformity E. Tessitore (Switzerland)	136
18:45 – 18:52	S48 Assessing thoracolumbar kyphosis in achonroplastic children L. Pieters, J.E.H. Pruijs, R.M. Castelein, C.L.A.M. Vleggeert-Lankamp	137
18:53 – 19:00	S237 Does Prophylactic Use of Reduction Bands Above a Long-Rigid Construct have Feasibility in the Context of PJK Avoidance? An Analysis of Intradiscal Pressure F. LaMarca, C. Farley, E. Matheis, J. Hao, B. Bucklen	138

18:00 – 19:00 **Castilla**

PARALLEL SESSION: ANEURYSMS		
Chairs: G. Conesa (Spain), A. Gabarrós (Spain)		139
18:00 – 18:10	Multiple Aneurysms through a single approach P. A. Rubino (Argentina)	140
18:12 – 18:22	Is neurosurgery rocket science? Importance of anatomy in treatment of complex aneurysms and vascular lesions M. Baskaya (USA)	141
18:24 – 18:34	Posterior circulation aneurysms – choice of treatment V. Beneš, O. Bradáč, A. Štekláčová (Czech Republic)	142
18:36 – 18:46	Flow diversion in aneurysms. Where do we stand? R. Navarro Balbuena (United Arab Emirates)	143
18:46 – 18:53	S991 Small intracranial aneurysms do ducture – a lifelong prospective finnish cohort study M. Korja, H. Lehto, S. Juvela	144
18:53 – 19:00	S484 Long-term excess mortality after aneurysmal subarachnoid hemorrhage – patients with multiple aneurysms at risk J. Huhtakangas, H. Lehto, K. Seppä, R. Kivisaari, M. Niemelä, J. Hernesniemi, M. Lehecka	145

18:00 – 19:00 **Hidalgo**

PARALLEL SESSION: MOVEMENT DISORDERS		
Chairs: M. del Álamo De Pedro (Spain), M. Lara (Spain)		146
18:00 – 18:15	An update on DBS for movement disorders A. Abosch (USA)	147
18:15 – 18:30	Stimulation in STN in parkinson's disease patients: Postoperative image analysis and clinical assessment J. Guridi (Spain)	148

18:30 – 18:45	Surgical and hardware complications of deep brain stimulation D. Sakas (Greece)	149
18:45 – 18:52	S1083 Beta-oscillations on-line and o-arm co-registered like predictive factor for DBS stimulation R. Conde-Sardón, A. Gutierrez, I. Martinez, P. Rubio, P. Perez, C. Botella	150
18:53 – 19:00	S512 Deep brain stimulation in refractory and incapacitating meige syndrome: Two years of follow-up T. Gomes, J. Massano, C. Chamadoira, R. Vaz, M.J. Rosas	151
18:00 – 19:00		Jardín
<hr/>		
PARALLEL SESSION: PREOPERATIVE PLANNING		
Chairs: P. D. Delgado (Spain), O. Mateo (Spain)		152
18:00 – 18:15	Intraoperative mapping techniques, as well motor as language mapping H. Colle (Belgium)	153
18:15 – 18:30	TMS for pre surgical mapping of brain functions F. Ringel (Germany)	154
18:30 – 18:45	Validating functional diffusion tractography: The Sylvius Project G. Conesa (Spain)	155
18:45 – 18:52	S734 Loss of subcortical language pathways correlate with surgery-related aphasia in brain tumor patients: An investigation via nTMS-based DTI fiber tracking E. Beurskens, C. Negwer, N. Sollmann, S. Maurer, S. Ille, T. Hauck, K. Giglhuber, J. Bauer, F. Ringel, B. Meyer, S. Krieg	156
18:53 – 19:00	S910 Independent component analysis increases the reliability of functional MRI in eloquent brain tumor patients D. Kis, A. Mate, A. Pejin, T. Fischer, P. Barzo	157
19:05 – 20:05		Neptuno
<hr/>		
EVENING SEMINAR ON NEUROTRAUMA (Limited Places available)		
With: P. Hutchinson (United Kingdom), A. Maas (Belgium), A. Quinones-Hinojosa (USA)		158
19:05 – 20:05		Castilla
<hr/>		
CORPORATE EVENING SYMPOSIUM		



Scientific Programme
Tuesday, October 20



Scientific Programme

Tuesday, October 20

Presentation No

08:00 – 09:00	Neptuno
BREAKFAST SEMINAR ON AVMs (Limited Places available) With: M. Lawton (USA), L. Ley (Spain), P. Vajkoczy (Germany)	159
09:05 – 11:05	Auditorium
PLENARY SESSION: TECHNICAL ADVANCES IN VASCULAR NEUROSURGERY Chairs: F. González Llanos (Spain), L. Ley (Spain)	160
09:05 – 09:25 New developments in endovascular treatment R. Chapot (Germany)	161
09:26 – 09:46 Radiosurgery for the treatment of complex AVMs M. Levivier (Switzerland)	162
09:47 – 10:07 What neurosurgeons should know about advances in stroke management P. Vajkoczy (Germany)	163
10:08 – 10:28 Surgical management of AVMs M. Lawton (USA)	164
10:29 – 10:49 Evolution of bypass surgery for complex aneurysms in the era of flow diverters? J. Morcos (USA)	165
10:50 – 10:57 S682 Cranial dural arteriovenous shunts: Embolization vs. surgery according to the classification system G. Baltsavias, L. Regli, A. Valavanis	166
10:58 – 11:05 S1085 Predictive factors for rebleeding after aneurysmal subarachnoid haemorrhage: The RUSH study C.E. van Donkelaar, N.A. Bakker, N.J.G.M. Veeger, M. Uyttenboogaart, J.D.M. Metzemaekers, G.J. Luijckx, R.J.M. Groen, J.M.C. Van Dijk	167
11:05 – 11:35	Exhibition Areas
COFFEE BREAK, ePOSTER VIEWING, VISIT THE EXHIBITION	

11:35 – 12:35		Auditorium
PARALLEL SESSION: CPA (Cerebellopontine Angle)		
Chairs: J. Enseñat (Spain), E. Urculo (Spain)		168
11:35 – 11:50	Microsurgery and endoscopy of vestibular schwannomas. The role of intrathecal papaverin for hearing preservation M. Tatagiba (Germany)	169
11:50 – 12:05	Strategies for hearing preservation and rehabilitation in acoustic neuroma surgery D. D'Avella (Italy)	170
12:05 – 12:20	Management of petroclival meningiomas P.-H. Roche (France)	171
12:20 – 12:27	S225 Endoscopic extradural supraorbital approach to the cavernous sinus and adjacent area: Anatomical and clinical considerations F. Komatsu, M. Shimoda, S. Oda, M. Imai, A. Hirayama, N. Hayashi, M. Tschabitscher, M. Matsumae	172
12:28 – 12:35	S754 Regrowth of the residual tumors after removal of acoustic neuromas H. Tokimura, H. Yamahata, S. Sugata, K. Tajitsu, H. Yonezawa, S. Yunoue, H. Uchida, S. Fujio, K. Arita	173
11:35 – 12:35		Castilla
PARALLEL SESSION: REVASCULARISATION		
Chairs: J. Olabe (Spain), R. Pérez Alfayate (Spain)		174
11:35 – 11:50	Bypass-posterior circulation R. Tanikawa (Japan)	175
11:50 – 12:05	Bypass-anterior circulation J. Mura (Chile)	176
12:05 – 12:20	How to avoid complications in bypass surgery F. González-Llanos (Spain)	177
12:20 – 12:27	S866 Good prognostic factors in emergency bypass surgery of acute cerebral infarction M.S. Byeon, H. Kim, Y.W. Kim, S.R. Kim, M.W. Baik, I.S. Park	178
12:28 – 12:35	S33 Elective and urgent intracranial bypass for the treatment of tumors, cerebral ischaemia and complex brain aneurysms J. Mura, N. Gonzalez, L. Contreras	179

11:35 – 12:35		Hidalgo
PARALLEL SESSION: PSYCHIATRIC SURGERY		
Chairs: C. De Quintana Schmidt (Spain), M. Manrique (Spain)		180
11:35 – 11:45	STN-DBS for OCD: Long term follow up S. Chabardes (France)	181
11:46 – 11:56	Advances in neuromodulation for psychiatric disorders C. Torres (Spain)	182
11:57 – 12:07	DBS in psychiatric disorders. One target fits all, or is there an individualised target? J. A. Barcia (Spain)	183
12:08 – 12:18	Deep brain stimulation for Tourette's syndrome V. Visser-Vandewalle (Germany)	184
12:20 – 12:27	S445 DBS of the GPi for Huntington's disease: Clinical efficacy and neuronal firing patterns A. Rogers, C. Delorme, M.L. Welter, B. Lau, S. Fernandez Vidal, A. Dürr, C. Karachi, D. Grabli	185
12:28 – 12:35	S468 Influence of psychiatric comorbidities on clinical outcome before and after brain surgery. A prospective observational study E. Shiban, Y. Shiban, J. Thiel, F. Bruckbauer, U. Hoffmann, F. Ringel, J. Lehmborg, A. Mühlberger, B. Meyer	186
12:40 – 13:40		Auditorium
PARALLEL SESSION: EXPERIENCE IN NEUROSURGERY		
Chairs: J. Lafuente (Spain), R. Navarro Balbuena (United Arab Emirates)		187
12:40 – 12:55	Telovelar approach to fourth ventricle tumors F. F. Angileri (Italy)	188
12:55 – 13:10	Supracerebellar infratentorial approach V. Beneš (Czech Republic)	189
13:10 – 13:25	The retrosigmoid transtentorial approach for large petroclival meningiomas. An evolution in skull base surgery M. Tatagiba (Spain)	190
13:25 – 13:40	Functional neurosurgery: My personal career and the treatment of dystonia J. Krauss (Germany)	191

12:40 – 13:40 **Castilla**

PARALLEL SESSION: ACUTE ISCHAEMIA		
Chairs: L. Ley (Spain), J. M. Roda (Spain)		192
12:40 – 12:55	Is there a role for surgery in acute ischaemia? J. Mura (Chile)	193
12:55 – 13:10	Decompressive craniectomy and ischaemic stroke L. Ley (Spain)	194
13:10 – 13:25	Surgical management of acute ischaemia R. Tanikawa (Japan)	195
13:25 – 13:32	S93 Hemisphericectomy for malignant middle cerebral artery (MCA) stroke Y. Li, M. Hou, H. Zhang	196
13:33 – 13:40	S129 PRAS40 plays a pivotal role in protecting against stroke by linking the Akt and mTOR pathways R. Xie, P. Wang, S. Gu, X. Che	197

12:40 – 13:40 **Hidalgo**

PARALLEL SESSION: SPINE TUMOURS		
Chairs: C. Conde (Spain), J. Rimbau (Spain)		198
12:40 – 12:55	Optimal therapy for spinal chordomas: Radical surgery versus proton beam W. Peul (The Netherlands)	199
12:55 – 13:10	New ideas in the treatment on spinal metastases G. Barbagallo (Italy)	200
13:10 – 13:25	Radiosurgery as a complementary/first choice treatment in Spine Tumours K. Sallabanda (Spain)	201
13:25 – 13:32	S876 Surgical treatment of spinal cord intramedullary tumors N. Konovalov, I. Shevelev, I. Pronin, U. Kushel, A. Golanov, A. Nazarenko, P. Zelenkov, R. Onoprienko, D. Asyutin, V. Korolishin, M. Martinova, A. Pogosyan, I. Cherkiev, B. Zakirov, S. Timonin	202
13:33 – 13:40	S569 En bloc sacrectomy for giant sacral tumors preserving S1 nerve roots. A report of surgical technic and functional outcome J.M. Saavedra, J.L. Buritica, A. Florez, P. Barajas1, H. Madrinan-Navia, W. Riveros	203

13:40 – 14:55 **Exhibition Areas**

LUNCH BREAK, ePOSTER VIEWING, VISIT THE EXHIBITION

13:55 – 14:55		Neptuno
LUNCH SEMINAR ON ANEURYSMS (Limited Places available)		
With: R. Chapot (Germany), F. González Llanos (Spain), R. Tanikawa (Japan)		204
13:55 – 14:55		Castilla
CORPORATE LUNCH SYMPOSIUM		
13:55 – 14:55		Hidalgo
CORPORATE LUNCH SYMPOSIUM		
14:55 – 16:25		Auditorium
PLENARY SESSION: TECHNICAL ADVANCES IN FUNCTIONAL NEUROSURGERY		
Chairs: J. A. Barcia (Spain), K. Sallabanda (Spain)		205
14:55 – 15:15	Focused ultrasound in the treatment of movement disorders: State of the art and next targets J. Rumia (Spain)	206
15:16 – 15:36	Epilepsy: Innovations in Epilepsy Surgery J. Gonzales-Martinez (USA)	207
15:37 – 15:57	Rescuing the injured brain (European Lecture) P. Hutchinson (United Kingdom)	208
15:58 – 16:18	Is radiosurgery a feasible treatment for trigeminal neuralgia? A. De Salles (USA)	209
16:18 – 16:25	S588 Peri-tumoural brain comprises a functional network hierarchy with local and long-range connectivity that are both subject to tumour induced cortical suppression M. Hart, S. J. Price, J. Suckling	210
16:25 – 16:55		Exhibition Areas
COFFEE BREAK, ePOSTER VIEWING, VISIT THE EXHIBITION		
16:55 – 17:55		Auditorium
PARALLEL SESSION: TEMPORAL APEX		
Chairs: J. Fernández Alén (Spain) (Spain), A. Torres (Spain)		211
16:55 – 17:10	Surgical management of the petrous apex region M. A. Arraez (Spain)	212

17:10 – 17:25	Endonasal endoscopic approaches to the middle and posterior coronal planes J. A. Simal (Spain)	213
17:25 – 17:40	Skull base tumors and radiosurgery. Control and reduction R. Spiegelmann (Israel)	214
17:40 – 17:47	S974 Afferent pupillary defect as a simple sign for avoiding missing tumors affecting the visual pathways: our experience N. Shimony, G. Barkay, S. Avramov, L. Gonen, A. Kesler, N. Margalit	215
17:48 – 17:55	S943 Tentorial notch meningiomas, surgical experience A. Xhumari, A. Seferi, A. Lame, J. Kerxhaliu, K. Pilika, A. Rroji, M. Petrela	216

16:55 – 17:55 **Castilla**

PARALLEL SESSION: SPINAL CORD		
Chairs: A. Isla Guerrero(Spain), P. Mendivil (Argentina)		217
16:55 – 17:10	Restoring neural circuits after spinal cord injury A. Chatzistiriou (Greece)	218
17:10 – 17:25	Spinal cord injury: Estonian experience T. Asser (Estonia)	219
17:25 – 17:40	Acute spinal cord injury from bench to bedside B. Depreitere (Belgium)	220
17:40 – 17:47	S358 Low spinal cord perfusion pressure is detrimental after traumatic spinal cord injury: A microdialysis study I. Phang, S. Saadoun, M.C. Papadopoulos	221
17:48 – 17:55	S714 Actual questions of diagnostics and treatment of spinal cord injury M. Salkov, V. Tsumbaliyk, L. Dzyak, A. Rodinskiy, Y. Cherednichenko, G. Titov	222

16:55 – 17:55 **Hidalgo**

PARALLEL SESSION: IMMUNOTHERAPY AND COMPLEMENTARY THERAPIES		
Chairs: C. Fernandez (Spain), I. Muñoz de Igneson (Spain)		223
16:55 – 17:10	Navigated brain stimulation improves resection of eloquently located gliomas R. Goldbrunner (Germany)	224
17:10 – 17:25	Experience with dendritic cells pulsed with tumor lysate in glioblastoma therapy R. Diez-Valle (Spain)	225
17:25 – 17:40	Phase 0 clinical trials in neuro-oncology N. Sanai (USA)	226

17:40 – 17:47	S364 First-in-man temporary disruption of the blood-brain barrier by ultrasound in patients with recurrent glioblastoma: A phase 1/2a safety study A. Carpentier, M. Canney, A. Vignot, J.-Y. Delattre, J.-Y. Chapelon, A. Idbah	227
17:48 – 17:55	S244 Combination immunotherapy in comprehensive treatment of patients with malignant gliomas of the brain S. Mishinov, V. Stupak, T. Tyrinova, O. Leplina, A. Ostanin, E. Chernykh	228
16:55 – 17:55		Galería
PARALLEL SESSION: ETHICS		
Chairs: J. A. Barcia (Spain), V. Calatayud (Spain)		229
16:55 – 17:10	Evidence/Philosophy of science in neurosurgery T. Mathiesen (Sweden)	230
17:10 – 17:25	Ethical considerations in glioma surgery J. Brennum (Denmark)	231
17:25 – 17:40	Challenges in the training of the european neurosurgery trainee A. Demetriades (United Kingdom)	232
17:40 – 17:47	S422 Theoretical and practical aspects of neurosurgical resident education – results of a multinational survey M. N. Stienen, D. Netuka, A. Demetriades, F. Ringel, J. Gempt, O.P. Gautschi, D.E. Kuhlen, K. Schaller	233
17:48 – 17:55	S423 Working Time of Neurosurgical Residents in Europe – results of a multinational survey M.N. Stienen, D. Netuka, A. Demetriades, F. Ringel, J. Gempt, O.P. Gautschi, D.E. Kuhlen, K. Schaller	234
18:00 – 19:00		Auditorium
PARALLEL SESSION: DEGENERATIVE		
Chairs: J. Lafuente (Spain), C. Ruiz-Ocaña (Spain)		235
18:00 – 18:10	Adult degenerative deformity treated with MISS techniques J. M. Torres (Spain)	236
18:10 – 18:20	Transpedicular dynamic stabilization of the spine: The past, the present and maybe the future? J. Lourido (Spain)	237
18:20 – 18:30	Cervical laminoplasty: A critical appraisal J. Rimbau (Spain)	238
18:30 – 18:40	The management of the vertebral artery in complex cervical spine procedures M. Bruneau (Belgium)	239

18:40 – 18:47	S83 Interspinous process fixation versus pedicle screw fixation: Outcomes in a prospective randomized multi-center trial K. Kim, R. Den Haese, C. Hill, B. Strenge, A. de Moura, A. Kranenburg, M. Dennis, A. Cappuccino, T. Thaiyananthan, P. Passias, P. Arnold, C. Ferry, K. Martin, C. Moore, S. Martineck, B. Bejin	240
18:47 – 18:54	S951 Hybrid Bone SPECT/CT imaging in evaluation of chronic low back pain. Scintigraphic evaluation of degenerative disc disease and facet joint arthropathy V.M. Russo, R. Dhawan, N. Dharmarajah, A. Lazzarino, A.T. Casey	241
18:54 – 19:00:	S784 Do we fix, halo or collar paediatric atlanto-axial rotatory fixation (AARF)? Is less more? D. J. Kamdar, G. Solanki	242
18:00 – 19:00		Castilla
PARALLEL SESSION: INTRA-OPERATIVE MARKERS Chairs: M. A. Arraez (Spain), A. Rodriguez de Lope (Spain)		243
18:00 – 18:15	5-ALA: Mmore benefit or more risks? A. Raabe (Switzerland)	244
18:15 – 18:30	The use of novel Intraoperative real time molecular fingerprinting of tissue in brain tumour surgery K. O'Neill (United Kingdom)	245
18:30 – 18:45	The role of Intra-operative biomarkers to optimise local therapies C. Watts (United Kingdom)	246
18:45 – 18:52	S741 Simultaneous fluorescein sodium and 5-ALA in fluorescence-guided glioma surgery: A comparison M. Schwake, W. Stummmer, E.J. Suero Mulina, S. Schipmann, G. von Campe, J. Wölfer	247
18:53 – 19:00	S220 Surgical management and survival in low-grade gliomas; an updated analysis A.S. Jakola, K. Johnsen, K. Sjøvik, G. Unsgård, R. Kloster, O. Solheim	248
18:00 – 19:00		Hidalgo
PARALLEL SESSION: EPILEPSY Chairs: J. Albisua (Spain), E. Garcia-Navarrete (Spain)		249
18:00 – 18:15	Surgical strategies for mesial temporal lobe epilepsy A. Gonçalves-Ferreira (Portugal)	250
18:15 – 18:30	Proposals-nuances to ameliorate the surgical results in temporal lobe epilepsy R. García de Sola (Spain)	251

18:30 – 18:45	Extra-operative cortical mapping in epilepsy and tumor cases K. Fountas (Greece)	252
18:45 – 18:52	S571 A quantitative MRI study looking at atypical language dominance in refractory epilepsy M. Mohan, U. C. Wieshmann, G. Baker, N. Roberts, V. Sluming, A. Marson, S. S. Keller	253
18:53 – 19:00	S1057 A hippocampal stereotactic coordinate system K. J. Miller	254

19:05 – 20:05 **Neptuno**

EVENING SEMINAR ON ACOUSTIC NEUROMAS (Limited Places available) With: J. A. Gutierrez Diaz (Spain), K. Sallabanda (Spain), A. Samii (Germany)	255
---------------------------------------------------------------------------------------------------------------------------------------------------------	-----

20:30 – 22:30

NETWORKING DINNER @ La Pesquera

Should you have not acquired your ticket for the Networking Event yet you can buy it at the registration desk until 18:00 on Tuesday 20, 2015 – subject to availability!



EANS 2015

Scientific Programme
Wednesday, October 21



Scientific Programme

Wednesday, October 21

Presentation No

08:00 – 09:00

Auditorium

CORPORATE MORNING SYMPOSIUM

09:05 – 11:10

Auditorium

PLENARY SESSION: TECHNICAL ADVANCES IN NEURO-ONCOLOGY

Chairs: R. Díez-Valle (Spain), C. Torres (Spain)

256

09:05 – 09:25 **The role of stem cells in gliomas**

A. Quinones-Hinojosa (USA)

257

09:26 – 09:46 **Overview in the management of low grade glioma tumours**

Z. Ram (Israel)

258

09:47 – 10:07 **Best of both worlds': Combined endoscopic-transnasal and supraorbital craniotomy approach for complex sellar lesions**

A. Grotenhuis (The Netherlands)

259

10:08 – 10:28 **Fluorescent markers in surgery for GBM**

W. Stummer (Germany)

260

10:29 – 10:49 **Radiosurgery for spine and skull base tumours**

P. C. Gerszten (USA)

261

10:50 – 11:10 **The management of craniopharyngiomas: Open vs endoscopic approach**

F. Gentili (Canada)

262

11:10 – 11:40

Exhibition Areas

COFFEE BREAK, ePOSTER VIEWING, VISIT THE EXHIBITION

11:40 – 12:45	Auditorium
CLOSING CEREMONY	
Presenter: J. A. Barcia (Spain)	263
• Closing words from the Meeting Co-Chairman J. Lafuente (Spain)	264
• Closing words from the Meeting Co-Chairman J. A. Barcia (Spain)	265
• Invitation from the EANS 2016 Congress President P. Selviaridis (Greece)	266
• Presentation of the EANS 2015 Best Oral Abstract Presentation Awards	
• Presentation of the EANS 2015 Best Poster Presentation Awards	
• Presentation of the Braakman Prize to Markus Wiedmann	
• Presentation of the Aesculap EANS Research Prize 2015 for the best clinical research paper to Hugh Sims-Williams	
• Presentation of the Aesculap EANS Research Prize 2015 for the best laboratory research paper to Mario Ganau	
• Presentation of the Fabricant Prize to Germán Rey Portolés	

Closing words from the EANS President A. Grotenhuis (The Netherlands)	267



Index of Speakers



Index of Speakers

The index is an alphabetical listing of names of speakers, session chairs and abstract authors and co-authors involved in the Scientific Programme.

The Presentation Number refers to the sequence in which their presentation appears in the programme. These numbers are in sequential order.

This Presentation number is not a page number. You are able to locate the speaker by presentation number in the Scientific Programme pages.

Name	Presentation Nº	Name	Presentation Nº	Name	Presentation Nº
A					
Abargil, A. ...	86	Belli, A. ...	112	Chapot, R. ...	161, 204
Abdel-Aziz, S. ...	131	Bello, L. ...	107	Charalampaki, C. ...	74
Abeyasinghe, K. ...	132	Beneš, V. ...	30, 142, 189	Chatzistotiriou, A. ...	218
Abosch, A. ...	147	Bergé, J. ...	127	Chauhan, A.S. ...	130
Adelson, D. ...	17, 100	Bervini, D. ...	126	Che, X. ...	197
Aghakani, N. ...	127	Beurskens, E. ...	109	Cherednichenko, Y. ...	222
Akalan, N. ...	103	Bijlenga, P. ...	129	Cherkiev, I. ...	202
Albisua, J. ...	249	Billond Grand, R. ...	127	Chernykh, E. ...	228
Alía Benitez, J. ...	62	Bobinski, L. ...	117	Civit, T. ...	127
Alvarez Galovitch, L. ...	41	Boddu, J.V. ...	64	Coevoet, E. ...	128
Alvarez-Pinzon, A.M. ...	90	Bonfatti, R. ...	93, 122	Colle, H. ...	153
Amadatsu, T. ...	125	Borius, P.-Y. ...	58	Conde, C. ...	198
Amarasinghe, S.G. ...	130	Borse, V. ...	61	Conde-Sardón, R. ...	150
Amin-Hanjani, S. ...	16	Botella, C. ...	150	Conesa, G. ...	139, 155
Angileri, F. F. ...	188	Botella-Asuncion, C. ...	60	Constantini, S. ...	102
Arita, K. ...	173	Boucebci, S. ...	127	Contreras, L. ...	179
Arnold, P. ...	65, 240	Bozinov, O. ...	126	Corniola, M. ...	126
Arraez, M. ...	15, 212	Bracard, S. ...	127	Coste, A. ...	127
Arraez, M. A. ...	1, 243	Bradá, O. ...	142	Courthéoux, P. ...	127
Asser, T. ...	219	Brennum, J. ...	231		
Asyutin, D. ...	202	Bruckbauer, F. ...	40, 186	D	
Avecillas, J. ...	105	Bruneau, M. ...	239	D'Avella, D. ...	170
Avramov, S. ...	215	Bucklen, B. ...	138	D'Avella, E. ...	95
Azab, W.A. ...	87	Buki, A. ...	114	Daali, S. ...	74
		Bulters, D. ...	88	Daud, A. ...	68
B					
Baabor, M. ...	8	Bunc, G. ...	80	David, P. ...	127
Baik, M.W. ...	178	Burgos, R. ...	10, 108	De Quintana Schmidt, C. ...	180
Bailo, M. ...	123	Buritica, J.L. ...	203	De Felipe, J. ...	32
Baker, G. ...	253	Burkhardt, J.-K. ...	126	De Moura, A. ...	65, 240
Bakker, N.A. ...	167	Byeon, M.S. ...	178	De Notaris, M. ...	95
Balsano, M. ...	35	C			
Baltsavias, G. ...	166	Calatayud, J. ...	133	Del Álamo De Pedro, M. ...	146
Barajas, P. ...	203	Calatayud, V. ...	229	De Salles, A. ...	209
Barbagallo, G. ...	200	Canney, M. ...	227	Debono, B. ...	41, 58
Barcia, J. ...	29, 31, 183, 263, 265	Cao, C. ...	127	Dehdashti, A. ...	49
Barcia, J. A. ...	205, 229	Cappuccino, A. ...	65, 240	Del Bene, M. ...	97
Barkay, G. ...	215	Carlsen, S.M. ...	81	Delattre, J.-Y. ...	227
Barzo, P. ...	157	Carpentier, A. ...	227	Delgado, P. D. ...	152
Baskan, O. ...	67	Casali, C. ...	97	Delorme, C. ...	185
Baskaya, M. ...	141	Casey, A. ...	36	Demetriades, A. ...	232, 233, 234
Bauer, J. ...	156	Casey, A.T. ...	241	Demetriades, A.K. ...	68
Bauer, M. ...	73	Casimiro, M. ...	76	Den Haese, R. ...	65, 240
Beck, J. ...	46	Castelein, R.M. ...	137	Dennis, M. ...	65, 240
Bejin, B. ...	65, 240	Catapano, G. ...	95	Depauw, P. ...	94
Belan, V. ...	47	Cebula, H. ...	127	Depreitere, B. ...	116, 220
		Chabardes, S. ...	181	Dequidt, J. ...	128
		Chamadoira, C. ...	151	Dharmarajah, N. ...	241
		Chapelon, J.-Y. ...	227		

Name	Presentation No	Name	Presentation No	Name	Presentation No
Díez-Valle, R. ...	225, 256	Gagliardi, F. ...	123	Hernesniemi, J. ...	145
Dhawan, R. ...	241	Gale, J. ...	131	Hill, C. ...	65, 240
Di Somma, A. ...	95	Galloy, T. ...	128	Hinojosa, J. ...	82, 99
DiMeco, F. ...	44, 97	Gandía González, M. L. ...	75	Hirayama, A. ...	172
Diamantopoulos, J. ...	48	Gangemi, M. ...	104	Hodaie, M. ...	56
Dominguez, C. J. ...	124	García-Navarrete, E. ...	249	Hoffmann, U. ...	40, 186
Domínguez Esteban, I. ...	62	García Leal, R. ...	54, 89	Hollý, V. ...	47
Duff, J. ...	79	García Marín, V. ...	69	Horcajadas, A. ...	51
Duriez, C. ...	128	García de Sola, R. ...	251	Hou, M. ...	196
Duthil, P. ...	58	Gautschi, O.P. ...	233, 234	Huhtakangas, J. ...	145
Dürr, A. ...	185	Gauvrit, J.Y. ...	127	Hutchinson, P. ...	158, 208
Dzyak, L. ...	222	Gavin, C. ...	91		
E		Gempt, J. ...	233, 234	I	
Eicker, S.-O. ...	41	Gentili, F. ...	14, 262	Idbaih, A. ...	227
El Hajj, H. ...	127	Gerszten, P. ...	261	Igressa, A. ...	74
El Hassani, Y. ...	129	Giglhuber, K. ...	156	Ille, S. ...	109, 156
El Rahal, A. ...	129	Gimber, E. ...	127	Imai, M. ...	172
EL Ouahabi, A. ...	59	Goetz, P. ...	118	Inazuka, M. ...	92
Elmaci, I. ...	67	Golanov, A. ...	202	Irthum, B. ...	127
Emery, E. ...	127	Goldbrunner, R. ...	224	Isla Guerrero, A. ...	133, 217
Engqvist, H. ...	61	Gomes, T. ...	151		
Enseñat, J. ...	168	Gonen, L. ...	86, 215	J	
Eskandar, E. ...	131	Gonzales-Martinez, J. ...	207	Jacob, J. ...	61
		Gonzalez, N. ...	179	Jakola, A.S. ...	81, 248
F		González Llanos, F. ...	48, 160, 177, 204	Janssen, I. ...	66
Fabian, M. ...	47	González Rodríguez, R. ...	12, 19	Javed, M. ...	74
Falini, A. ...	123	Gonçalves-Ferreira, A. ...	250	Johnsen, K. ...	248
Farah, J. ...	55	Gousias, K. ...	110	Jones, B. ...	130
Farley, C. ...	138	Grabli, D. ...	185	Jose Maria, T. ...	236
Fernandez Vidal, S. ...	185	Groen, R.J.M. ...	167	Juhler, M. ...	85
Fernandez, C. ...	223	Grotenhuis, A. ...	98, 259, 267	Juvela, S. ...	144
Fernando, D. ...	132	Gu, S. ...	197		
Fernández Alén, J. ...	118, 211	Guiot, B. ...	41	K	
Ferry, C. ...	65, 240	Gulati, S. ...	81	Kaku, Y. ...	125
Fischer, T. ...	157	Guridi, J. ...	148	Kamdar, D.J. ...	242
Florez, A. ...	203	Gutierrez, A. ...	150	Kapur, N. ...	61
Fountas, K. ...	252	Gutierrez Diaz, J. A. ...	255	Karachi, C. ...	185
Frank, G. ...	93, 122			Kasamo, D. ...	125
Freyschlag, C.F. ...	73	H		Kasper, E. ...	23
Fujio, S. ...	173	Hall, R.M. ...	61	Kasuya, H. ...	92
Fung, C. ...	126	Hamilton, J.F. ...	64	Kawano, T. ...	125
		Hao, J. ...	138	Keil, V. ...	110
G		Hart, M. ...	210	Keller, S.S. ...	253
Gabarrós, A. ...	50, 139	Hauck, T. ...	156	Kerschbaumer, J. ...	73
Gaberel, T. ...	127	Hayashi, N. ...	172	Kerxhaliu, J. ...	216
Gabrilargues, J. ...	127	Heiroth, H.-J. ...	74	Kesler, A. ...	215
		Hempenstall, J. ...	88	Kim, H. ...	178

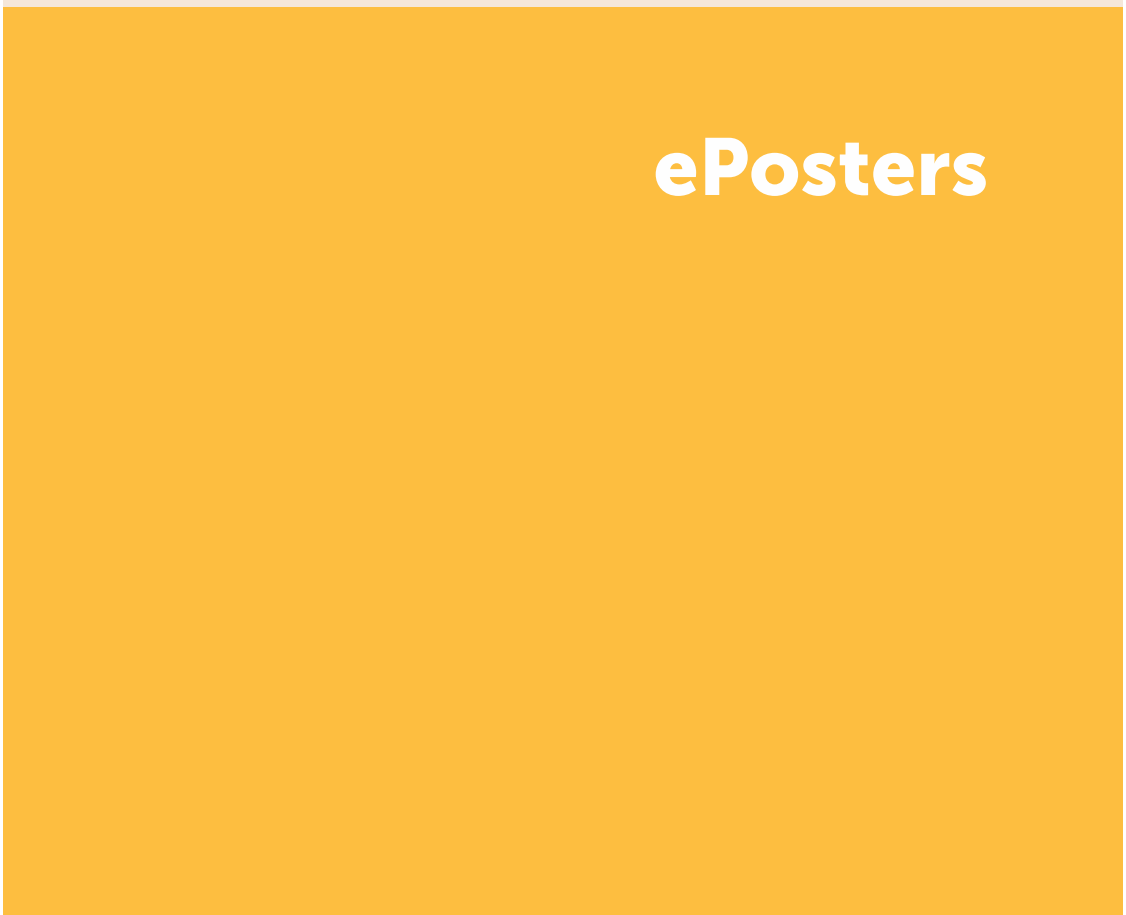
Name	Presentation No	Name	Presentation No	Name	Presentation No
Kim, K. ...	65, 240	Li, Y. ...	196	Mohan, M. ...	253
Kim, S.R. ...	178	Liddle, A.M. ...	61	Moiraghi, A. ...	97
Kim, Y.W. ...	178	Lippitz, B. ...	72	Moore, C. ...	65, 240
Kis, D. ...	157	Lonjon, M. ...	127	Morandi, X. ...	127
Kivisaari, R. ...	145	Lopez, E. ...	71	Morcos, J. ...	18, 165
Kloster, R. ...	248	Losa, M. ...	123	Mortini, P. ...	123
Knosp, E. ...	121	Lotterie, J.-A. ...	58	Mourier, K. ...	127
Komatsu, F. ...	172	Lourido, J. ...	237	Muacevic, A. ...	39
Konovalov, N. ...	202	Low, J.C.M. ...	52	Muñoz de Iñgeson, I. ...	223
Korja, M. ...	144	Luijckx, G.J. ...	167	Muñoz Hernández, F. ...	89
Korolishin, V. ...	202	Luque Pérez, R. ...	62	Mühlberger, A. ...	40, 186
Koskinen, L.-O. ...	117	Lønne, G. ...	81	Mura, J. ...	11, 98, 176, 179, 193
Kranenburg, A. ...	65, 240			Musigazi, G.U. ...	116
Krauss, J. ...	191			Muta, D. ...	125
Krieg, S. ...	156	M			
Krieg, S.M. ...	109	Maas, A. ...	113, 158	N	
Kuhlen, D.E. ...	233, 234	Madrinan-Navia, H. ...	203	Nakagawa, T. ...	125
Kulchytska, N. ...	109	Maduri, R. ...	126	Navarro Balbuena, R. ...	143, 187
Kuratsu, J. ...	125	Mallucci, C. ...	101	Nazarenko, A. ...	202
Kurpad, S. ...	135	Manrique, M. ...	180	Negwer, E. Beurskens C. ...	156
Kushel, U. ...	202	Manzano-Lopez Gonzalez, D. ...	111	Neidert, M.C. ...	126
Kwon, C.-S. ...	131	Marcus, H.J. ...	130	Nerland, U.S. ...	81
		Margalit, N. ...	86, 215	Netuka, D. ...	233, 234
L		Marklund, N. ...	115	Niemelä, M. ...	145
LaMarca, F. ...	138	Márquez, X. ...	82	Noriega Bastos, M. ...	62
Lafuente, J. ...	27, 28, 34, 187, 235, 264	Marson, A. ...	253	Nygaard, Ø. ...	81
Lagares, A. ...	111, 124	Martin, K. ...	65, 240		
Laleva, L. ...	95	Martineck, S. ...	65, 240	O	
Lame, A. ...	216	Martinez Alvarez, R. ...	57	O'Neill, K. ...	245
Landeiro, J. ...	6	Martinez, I. ...	150	Oda, S. ...	172
Langlois, O. ...	127	Martinova, M. ...	202	Ohmori, Y. ...	125
Lara, M. ...	146	Massano, J. ...	151	Olabe, J. ...	174
Lasjaunias, P. ...	127	Mate, A. ...	157	Olivecrona, M. ...	117
Latorzeff, I. ...	58	Mateo, O. ...	152	Onoprienko, R. ...	202
Lau, B. ...	185	Matgé, G. ...	63	Onoz, M. ...	67
Lawton, M. ...	159, 164	Matheis, E. ...	138	Ordidge, K. ...	130
Lazorthes, Y. ...	58	Mathiesen, T. ...	230	Ostanin, A. ...	228
Lazzarino, A. ...	241	Matsumae, M. ...	172	Ozek, E. ...	67
Leclerc, X. ...	127	Mattei, L. ...	97		
Legnani, F. ...	97	Maurer, S. ...	156		
Lehecka, M. ...	145	Mazzatenta, D. ...	93, 122		
Lehmberg, J. ...	40, 186	Meling, T. ...	120		
Lehto, H. ...	144, 145	Mendel, P. ...	47		
Lejeune, J.P. ...	127	Mendivil, P. ...	217		
Leplina, O. ...	228	Metzemaekers, J.D.M. ...	167		
Lereste, P. ...	127	Meyer, B. ...	33, 38, 40, 66, 109, 156, 186		
Levivier, M. ...	162	Miller, K.J. ...	254		
Ley, L. ...	159, 160, 192, 194	Mishinov, S. ...	228		

Name	Presentation No	Name	Presentation No	Name	Presentation No
P					
Palamar, O. ...	96	Ravnik, J. ...	80	Schaller, K. ...	22, 126, 129, 233, 234
Paluzzi, A. ...	119	Refai, D. ...	33, 37	Schatlo, B. ...	126
Papadopoulos, M.C. ...	221	Regis, J. ...	255	Schipmann, S. ...	247
Parajón, A. ...	33, 34, 78	Regli, L. ...	126, 166	Schlegel, J. ...	74
Park, I.S. ...	178	Revuelta-Gutierrez, R. ...	5	Schöni, D. ...	126
Parlangeli, A. ...	123	Rey Del Castillo, J. ...	62	Schramm, J. ...	110
Pasquini, E. ...	93, 122	Richetta, C. ...	97	Schucht, P. ...	46
Passias, P. ...	65, 240	Ricolfi, E. ...	127	Schwake, M. ...	247
Patel, S. ...	131	Ridwan, S. ...	110	Sedat, J. ...	127
Peiró García, A. ...	62	Rimbau, J. ...	198, 238	Seferi, A. ...	216
Pejin, A. ...	157	Ringel, F. ...	40, 41, 66, 109, 154, 156, 186, 233, 234	Seidel, K. ...	46
Pelissou, I. ...	127	Riveros, W. ...	203	Selviaridis, P. ...	266
Penchet, G. ...	127	Roach, J. ...	88	Senft, C. ...	43
Perez, P. ...	150	Robaina, F. ...	54	Seppä, K. ...	145
Pérez Alfayate, R. ...	174	Roberts, N. ...	253	Servadei, F. ...	26
Perilla, T. ...	7	Robles, S. G. ...	105	Shekhar, H. ...	68
Perin, A. ...	97	Roche, P. ...	171	Shevelev, I. ...	202
Persson, C. ...	61	Roda, J. M. ...	192	Shiban, E. ...	40, 66, 186
Petrela, M. ...	69, 216	Rodinskiy, A. ...	222	Shiban, Y. ...	40, 186
Petri_ková, L. ...	47	Rodríguez de Lope, A. ...	243	Shimoda, M. ...	172
Peul, W. ...	199	Rogers, A. ...	185	Shimony, N. ...	86, 215
Phang, I. ...	221	Rosas, M.J. ...	151	Shtaya, A. ...	88
Picht, T. ...	109	Rotta, J. ...	4	Sidhu, Z. ...	132
Pieters, L. ...	137	Röthlisberger, M. ...	126	Simal, J. ...	213
Pilika, K. ...	216	Rroji, A. ...	216	Simal, J. A. ...	98
Pogosyan, A. ...	202	Rubino, P. ...	140	Simon, M. ...	110
Pomposo Gaztelu, I. ...	42	Rubio, P. ...	150	Sjåvik, K. ...	248
Portillo, S. ...	9	Ruiz-Ocaña, C. ...	235	Skrzypiec, D. ...	61
Prada, F. ...	97	Rumia, J. ...	206	Sluming, V. ...	253
Prats-Galino, A. ...	95	Russo, V.M. ...	134, 241	Sol, J.-C. ...	58
Price, S. J. ...	210	S			
Pronin, I. ...	202	Saadoun, S. ...	221	Solanki, G. ...	242
Proust, F. ...	127	Saavedra, J.M. ...	203	Solberg, T.K. ...	81
Prujjs, J.E.H. ...	137	Sabatier, J. ...	58	Solheim, O. ...	81, 248
Q					
Quinones-Hinojosa, A. ...	158, 257	Sadek, A. ...	88	Sollmann, N. ...	156
R					
Raabe, A. ...	46, 244	Saini, M. ...	97	Spagnuolo, E. ...	2, 12
Radovanovic, I. ...	53	Sakas, D. ...	149	Spena, G. ...	106
Rainer, J. ...	66	Saladino, A. ...	97	Spiegelmann, R. ...	214
Ram, Z. ...	258	Salkov, M. ...	222	Spina, A. ...	123
Rao, V. ...	81	Sallabanda, K. ...	201, 205, 255	Spiriev, T. ...	95
Rascón, F. ...	42	Salvesen, Ø. ...	81	Spyros, S. ...	84
		Samii, A. ...	24, 255	Statham, P. ...	68
		Samprón, N. ...	75	Stavrinou, N. ...	68
		Sanai, N. ...	226	Stienen, M.N. ...	126, 233, 234
		Sanchez Gonzalez, M. ...	90	Štekláčová, A. ...	142
		Sari, R. ...	67	Šteňo, A. ...	47
				Šteňo, J. ...	47
				Stoffel, M. ...	66
				Strengge, B. ...	65, 240
				Stummer, W. ...	260

Name	Presentation No	Name	Presentation No	Name	Presentation No
Stummmer, W. ...	247	V		Y	
Stupak, V. ...	228	Vajkoczy, P. ...	109, 159, 163	Yamahata, H. ...	173
Sturiale, C. ...	93, 122	Valavanis, A. ...	166	Yampolsky, C. ...	3
Suckling, J. ...	210	Valdivia, J. ...	134	Yonezawa, H. ...	173
Suero Molina, E.J. ...	247	Valerio-Pascua, J.E. ...	90	Yoshimura, C. ...	92
Sugata, S. ...	173	Valluzzi, A. ...	93, 122	Yunoue, S. ...	173
Šurkala, J. ...	47	Valsecchi, D. ...	126		
Swiss SOS study group ...	126	Van Dijk, J.M.C. ...	167	Z	
T		Van Donkelaar, C.E. ...	167	Zakirov, B. ...	202
Taylor, J. ...	132	Van Doormaal, T.P. ...	94	Zelenkov, P. ...	202
Tajitsu, K. ...	173	Van der Zwan, A. ...	94	Zerah, M. ...	83
Takahashi, Y. ...	92	Vaz, R. ...	151	Zhang, H. ...	196
Tani, S. ...	92	Veeger, N.J.G.M. ...	167	Zoli, M. ...	93, 122
Tanikawa, R. ...	13, 175, 195, 204	Verbeken, E. ...	116		
Tatagiba, M. ...	169, 190	Vetrano, I.G. ...	97		
Tessitore, E. ...	136	Vignot, A. ...	227		
Thaiyananthan, T. ...	65, 240	Villarejo, F. ...	99		
Thiel, J. ...	40, 186	Visser-Vandewalle, V. ...	184		
Thines, L. ...	127, 128	Vivekanatham, S. ...	132		
Thomé, C. ...	73, 77	Vleggeert-Lankamp, C.L.A.M. ...	137		
Timárová, G. ...	47	Vorsic, M. ...	80		
Timonin, S. ...	202	Von Campe, G. ...	247		
Timothy, J. ...	61	W			
Titov, G. ...	222	Walsh, D.C. ...	132		
Tok, S. ...	126	Wang, P. ...	197		
Tokimura, H. ...	173	Watts, C. ...	246		
Tonn, J. ...	70	Weber, C. ...	81		
Torres, A. ...	211	Weber, F. ...	74		
Torres, C. ...	182, 256	Welbourne, J. ...	52		
Tschabitscher, M. ...	172	Welter, M.L. ...	185		
Tsumbaliyk, V. ...	222	Whitfield, P.C. ...	52		
Tu, Y. ...	21, 25	Wieshmann, U.C. ...	253		
Turjman, F. ...	127	Wilson, M.H. ...	130		
Tyrinova, T. ...	228	Wittig, R. ...	109		
U		Wolf, A. ...	90		
Uchida, H. ...	173	Wölfer, J. ...	247		
Ugur, T. ...	20	Wolfsberger, S. ...	45		
Undabeitia, J. ...	60	X			
Unsgård, G. ...	248	Xhumari, A. ...	216		
Urculo, E. ...	1, 168	Xie, R. ...	197		
Uyttenboogaart, M. ...	167				



ePosters



Aneurysms	ePoster Area
P51 The risk of seizure following surgery for unruptured supratentorial subarachnoid intracranial aneurysms: A prospective cohort study J.M. O'Donnell, M.K. Morgan, D. Bervini, G.Z. Heller, N. Assaad	1
P91 Intra-operative cerebral angio-sonography with ultrasound contrast agents F. Prada, M. Del Bene, M. Saini, P. Ferroli, F. DiMeco	2
P134 Predictors of shunt dependency after non-traumatic subarachnoid hemorrhage J.M. Vinas Rios, M. Sanchez- Aguilar, C. Heinen, T. Kretschmer, T. Schmidt	3
P167 Surgical management of complex vertebral and basilar artery aneurysms: A technique application and experience in 58 patients X. Shi, H. Qian	4
P179 Decompressive Craniectomy in Treatment of Patients with Cerebral Arterial Aneurysms M.O. Zorin, S.P. Grygoruk, I.E. Plyushev, Y.V. Cherednychenko, Y.Y. Novik	5
P181 Optimization of Strategy of Surgical Treatment of Combination of Cerebral Aneurysms and Cerebral Arteries Stenosis Y.V. Cherednychenko, M.O. Zorin, A.Y. Miroshnychenko, S.P. Grygoruk, I.E. Plyushev, N.O. Cherednychenko	6
P187 The experimental rat model of cerebral vasospasm after non-traumatic subarachnoid hemorrhage A. Prirodov, G. Titova, V. Krylov, E. Bakharev, O. Kochetkova	7
P189 The course of headache in patients with moderate-to-severe headache due to aneurysmal subarachnoid hemorrhage: A retrospective cross-sectional study J. Chung	8
P193 "Hemostat forceps" a simple and useful adjuvant to conventional clip applicators for clipping saccular cerebral aneurysms M. Krishna Pillai	9
P259 Difficulties during clipping of Anterior Communicating artery (AcoA) aneurysms: A series of 101 cases (with video presentation) G.R. Sharma	10
P282 Management and results of Intracranial infectious aneurysm in Saitama international medical center Y. Take, H. Nakajima, T. Ikeda, Y. Kikkawa, R. Takeda, Y. Yamaguti, S. Ito, W. Shimohigoshi, H. Kurita	11

P314 A site-specific, sustained release drug delivery system for aneurysmal subarachnoid hemorrhage	12
D. Hanggi, N. Etminan, H.J. Steiger, M. Johnson, M.M. Peet, T. Tice, K. Burton, B. Hudson, M. Turner, A. Stella, P. Heshmati, C. Davis, H.J. Faleck, R.L. Macdonald	
P316 Angiographic results of wide-necked intracranial aneurysms treated with coil embolization: A single center experience	13
I.B. Chang, J.H. Song, J.H. Ahn, B.M. Cho	
P333 The cerebral microcirculatory disturbance analyzed with two-photon laser scanning microscopy immediately after subarachnoid hemorrhage in mice	14
M. Ishikawa, M. Kajimura, T. Morikawa, G. Kusaka, Y. Tanaka, M. Suematsu	
P395 Management of blood blister-like aneurysms with microsuturing technique	15
H. Qian, X. Shi	
P397 Intravenous flat-detector computed tomography angiography for symptomatic cerebral vasospasm following aneurysmal subarachnoid hemorrhage	16
Y.S. Chung, J.P. Jeon, S.H. Sheen	
P438 Disturbance of CT perfusion on arrival is associated with WFNS grade and outcome but not development of delayed cerebral ischemia in patients with aneurysmal SAH	17
Y. Takahashi, A. Sasahara, M. Inaduka, T. Maegawa, A. Kikuchi, C. Yoshimura, S. Yokosako, N. Arai, Y. Kuroi, H. Koseki, H. Ohbuchi, K. Hirota, S. Hagiwara, M. Hirasawa, S. Tani, H. Kasuya	
P487 Neurodegenerative CSF-markers predict neurological outcome after aneurysmal subarachnoid hemorrhage – preliminary results of a prospective observational study	18
H. Joswig, L. Epprecht, J.-Y. Fournier, W. Korte, G. Hildebrandt, M.N. Stienen	
P562 Case report: Flow-diverter application treatment of several times recanalization aneurysm	19
T. Németh, I. Lázár, G. Gál, P. Barzó, E. Vörös	
P581 Incidence of vasospasm and treatment outcomes in a hospital using a “no oral nimodipine policy” – 4-year results	20
M.V. Corniola, M.N. Stienen, B. Schatlo, V. Mendes-Pereira, K. Schaller, P. Bijlenga	
P589 The usage of emergent revascularization during operations on giant and complex cerebral aneurysms (clinical cases)	21
V. Krylov, O. Nakhabin, V. Luk'yanchikov, N. Polunina, A. Tokarev, E. Grigor'eva	
P595 The treatment outcomes at patients with nontraumatic aneurysmal subarachnoid hemorrhage using various dosages of magnesium sulfate (MS) and nimodipine	22
A. Kalinkin, V. Krylov, S. Petrikov, E. Klychnikova, E. Tazina, V. Dash'yan, A. Solodov, T. Shatokhin, A. Ayrapetyan, V. Luk'yanchikov, N. Polunina	
P600 „Clip first” policy in management of intracranial MCA aneurysms. Single centre experience with the systematic review of literature	23
A. Steklacova	
P620 Intracranial hemorrhages in pregnancy and puerperium: Is it a risk factor?	24
P. Barrio Fernández, D. Santamarta Gómez, J. Pérez Suárez, Á. Lamoca Martín	

P677 The one piece clinoidectomy. 15 years later E. Seoane, A. Rhoton	25
P703 Considerations on the microsurgical anatomy of the hypoplastic precommunicating segment of the anterior cerebral artery and its coexistence with cerebral aneurysms K. Krystkiewicz, A. Drożdż, T. Wojciechowski, T. Skadorwa, B.M. Ciszek	26
P733 Posterior Circulation Aneurisms – A 13 years retrospective study of surgical vs endovascular treatment in a single institution P. Ribeiro da Cunha, R. Pereira, G. Costa, F. Raimundo, M. Barbosa	27
P799 Efficacy of the pterional keyhole approach for clipping of unruptured anterior circulation aneurysms S. Komazaki, H. Tokimura, H. Yamahata, K. Tajitsu, M. Tsuchiya, A. Taniguchi, M. Hirabaru, H. Kawano, T. Hirayama, S. Sugata, K. Arita	28
P805 A rare case of left internal carotid artery (ICA) aplasia associated with posterior communicating artery (PCOM) aneurysms presenting with subarachnoid haemorrhage S.K.D. Mak, Y.P.V. Ng, H.B.I. Ng	29
P810 Use of navigation and/or intraop ultrasound in ruptured aneurysms surgery, preliminary results in a personal recent series of 9 cases I. Poeata, Z. Faiyad, A. Chiriac, B. Iliescu, G. Ion, R. Poeata	30
P813 Adenosine-induced transient cardiac arrest for intraoperative aneurysm deflation in clipping surgery Y. Niiya, M. Kawabori, M. Iwasaki, S. Mabuchi, K. Houkin	31
P821 Is there an influence of routine daily transcranial doppler examination on clinical outcome in patients with aneurysmal subarachnoid hemorrhage? G. Ehrlich, T. Kirschning, H. Wenz, A.A. Hegewald, C. Groden, P. Schmiedek, M. Seiz-Rosenhagen	32
P871 Prevention of Safety Indicators for aneurysmal subarachnoid hemorrhage; its relation to health outcomes F. Revilla-Pacheco, S. Manrique-Guzman, D. Avila-Rebollar	33
P874 Comparative health survey in patients with aneurysm neck clipping by conventional craniotomy or eyebrow incision Y.J. Kim, I.S. Park	34
P877 Insertion of ventriculoperitoneal shunts in patients on dual antiplatelet therapy – A necessary evil L. Lee, J. Han, M.W. Chen, Y.P. Ng	35
P892 Endovascular treatment of brain aneurysms using remodelling techniques N. Alioski, N. Velinov, N. Gabrovsky, G. Kirova, G. Poptodorov, K. Uzunov, S. Gabrovsky	36
P911 Is oral nimodipine administration after aneurysmal subarachnoid hemorrhage still relevant? G. Ehrlich, T. Kirschning, A.A. Hegewald, E. Neumaier-Probst, M. Seiz-Rosenhagen	37

P917 Location and size of ruptured intracranial aneurisms: A retrospective study of 175 patients	38
R. Manilha, J. Monteiro, B. Santiago, M. Cunha e Sa	
P941 Pericallosal artery aneurysm – two cases report	39
D. Stimac, N. Koruga, D. Planinic	
P944 From ELANA to SELANA: technical innovations	40
A. van der Zwan, T. van Doormaal, C.A. Tulleken	
P957 Comparison of clinical outcome and early complications in patients with MCA aneurysm treated with endovascular embolization and surgical clipping	41
B. Kapustka, K. Kubicki, A. Matlak, R. Sordyl, J. Jaskólski, P. Chodakowski, P. Bażowski, J. Baron, S. Kwiek	
P982 Aneurysms of anterior communicating artery – comparison of clinical outcomes, anatomic features and early complications in patients treated with endovascular embolization and surgical clipping	42
B. Kapustka, M. Hofman, T. Jamróz, W. Masarczyk, P. Chodakowski, J. Baron, P. Bażowski, S. Kwiek	
P995 Prediction of cerebral vasospasm occurrence – analysis of risk factors after aneurysmal subarachnoid hemorrhage	43
B. Kapustka, Z. Ślosarek, M. Ostry, P. Kałuża, P. Chodakowski, P. Bażowski, S. Kwiek	
P996 Dose-dependent association of smoking and subarachnoid hemorrhage	44
M. Korja, J. Lindbohm, V. Salomaa, J. Kaprio	
P998 Cholesterol and apolipoproteins as risk factors for subarachnoidal haemorrhage	45
J. Lindbohm, V. Salomaa, J. Kaprio, M. Korja	
P1003 Early inflammatory response after SAH: Evaluation of leukemia inhibitory factor and macrophage migration inhibitory factor serum profiles	46
A. Höllig, B. Stoffel-Wagner, G.A. Schubert, M. Coburn, C. Stoppe	
P1025 The results of urgent treatment of patients with cerebral aneurysm ruptures in a decompensated state	47
V.V. Tkachev, I.S. Blumenau, L.V. Shagal, G.G. Muzlaev	
P1028 The early results of combined treatment of the cerebral aneurysm ruptures in elderly patients	48
V.V. Tkachev, A.A. Usachev, L.V. Shagal, I.S. Blumenau, G.G. Muzlaev	
P1041 Prognostic parameters for shunt dependency after aneurysmal subarachnoid hemorrhage. A single-center experience	49
D. Pinggera, J. Kerschbaumer, O. Petr, M. Ortler, C. Freyschlag, C. Thomé	
P1044 The use of microsurgical and endovascular treatment on patients with cerebral aneurysm ruptures	50
V.V. Tkachev, A.A. Usachev, I.S. Blumenau, L.V. Shagal, G.G. Muzlaev	

AVMs	ePoster Area
P156 Experimental rat model of chronic cerebral hypoperfusion-reperfusion mimicking normal perfusion pressure breakthrough phenomenon J.M. Revuelta Barbero, Á. Pérez-Zamarrón, A. Saab, J. Fortes, G. Rodríguez-Boto, R. Gutiérrez González	51
P218 Combined treatment approach to cerebral arteriovenous malformation: Stereotactic radiosurgery to partially onyx-embolized arteriovenous malformation in pediatric patients D. Umansky, S. Maimon, T. Jonash-Kimchi, B.W. Corn, N. Shtraus, S. Constantini, V. Frolov, A.A. Kanner	52
P287 Results of gamma knife radiosurgical treatment of cerebral arteriovenous malformations S. Lonneville, B. Mine, C. Renier, D. Devriendt, B. Lubicz, N. Massager	53
P368 Surgical treatment of cavernous angiomas of the cerebral hemispheres A. Smeyanovich, Y. Shanko, A. Rodzich, S. Kapatsevich, A. Shchemelev	54
P419 AVM surgery assisted by intra-operative quantitative flow measurement by micro-vascular ultrasonic probe A. Della Puppa, O. Rustemi, M. Rossetto, R. Scienza	55
P428 Case report of arteriovenous malformation during pregnancy Z. Rideg	56
P525 Lobar intracerebral hemorrhage resulting from possible/probable cerebral amyloid angiopathy: Pathological study and clinical features of consecutive 42 surgical cases W. Shimohigoshi, H. Nakajima, Y. Kikkawa, T. Ikeda, R. Takeda, S. Itou, Y. Yamaguchi, M. Ikegami, A. Teranishi, H. Kurita	57
P675 Presentation, management and outcomes of intracranial arterio-venous malformations in children A. Shtaya, O. Sparrow	58
Fistulas	ePoster Area
P188 Endovascular treatment of brain arteriovenous fistulas Y. Makhambetov, A. Kaliyev, A. Shpekov, S. Faizulla, B. Mynzhylky, M. Yerkin	59
P479 Endovascular treatment of tentorial dural arteriovenous fistulae (2 cases) H.J. Lee, H.J. Kim, J.H. Yang, I.W. Lee	60
P539 Carotid cavernous fistula due to a mycotic aneurysm of the intracavernous carotid Artery treated successfully endovascularly – a case report J. Van Der Veken, F. Van Tussenbroek, J. Duerinck, M. Moens, V. Van Velthoven	61
P732 Long-term outcome after endovascular treatment of cavernous sinus dural arteriovenous fistula – with special reference to residual shunt after treatment Y. Nishimuta, T. Nagayama, R. Awa, T. Higashi, A. Kibe, S. Sugata, T. Makiuchi, R. Hanaya, H. Tokimura, K. Arita	62

P737 Arteriovenous fistula of the foramen magnum with a flow-related venous aneurysm causing sudden onset tetraparesis: report of a rare case and its surgical management C. Mantas, I. Mavridis, K. Adamos, A. Karagianni, K. Vlachos	63
P743 Case report: spinal dural arteriovenous fistula from the superior gluteal artery M. Schwake, S. Schipmann, V. Hesselmann, W. Stummer, M. Holling	64
P796 Surgical resection of a high risk carotid-jugular arteriovenous fistula after multiple failed embolization: A literature review J. Han, Y.P. Ng, I. Ng	65
P880 Combined surgical and endovascular management in a rare case of a complex tocular dural arteriovenous fistula L. Lee, W. Lee, Y.P. Ng	66
P968 Surgical and endovascular treatment of spinal thoracic DAVF E. Enesi, A. Rroji, F. Bilaj, E. Lilamani, A. Xhumari, R. Alimehmeti, A. Seferi, A. Lame, M. Petrela	67

Ischaemia and Revascularisation	ePoster Area
P16 Early recanalization rate of IV-tPA and additional IA-Tx results D.-S. Yoo	68
P32 Encephalo-duro-arterio-synangiosis (EDAS) for children with sickle cell disease P. Hever, A. Alamri, B. Cheserem, C. Gradil, S. Bassi, C.M. Tolias	69
P119 Delayed obstructive hydrocephalus due to intraventricular hemorrhage: A case report H. Kaptan, B. Gezer	70
P162 Utilization of blood sampling global oxygen extraction fraction to anticipate cerebral hyperperfusion syndrome following elective carotid artery stenting T. Mori, T. Iwata, Y. Tanno, S. Kasakura, K. Yoshioka	71
P180 Significance of dynamic CT-perfusion control in endovascular treatment of patients with multifocal cerebral artery stenotic lesions Y.V. Cherednychenko, M.O. Zorin, L.A. Dziak, A.Y. Miroshnychenko, N.O. Cherednychenko	72
P274 Factors associated with blunt cerebrovascular injury in patients with cervical spine injury: the SIMC experience H. Nakajima, T. Ikeda, Y. Kikkawa, R. Takeda, S. Ito, Y. Ymaguchi, W. Shimohigoshi, M. Ikegami, A. Teranishi, Y. Take, H. Kurita	73
P313 DWI-detected cytotoxic damage in 'Transient symptoms with infarction' (TSI) and TIA M.H. Kong, S.P. Kim, H.S. Park, S.Y. Jang, J.H. Kim, D.S. Kang, K.Y. Song	74
P437 Long-term outcome of basilar artery stenting for atherosclerotic stenosis Y.W. Kim, H. Kim, S.R. Kim, M.W. Baik	75
P583 Temporary subluxation of mandibular bone for surgical intervention in the case of high atherosclerotic lesions of extracranial part of internal carotid artery (ICA) V. Krylov, V. Dash'yan, V. Dalibaldyan, V. Luk'yanchikov, N. Polunina, A. Tokarev, A. Shalumov	76

P593 Cerebral revascularization at patients with acute cerebral ischemia of various etiology	77
V. Luk'yanchikov, O. Nakhabin, A. Tokarev, N. Polunina, I. Sen'ko, V. Dalibaldyan, E. Grigor'eva, G. Guseynova, V. Dash'yan, V. Krylov	
P735 Long-term outcome of patients after carotid artery stenting using distal balloon protection	78
T. Ueda, Y. Nishimuta, T. Nagayama, S. Sugata, M. Mori, T. Nishizawa, S. Yunoue, H. Tokimura, K. Arita	
P752 Hemodynamic analysis of regional cerebral blood flow after superficial temporal artery-middle cerebral artery bypass surgery	79
Y.W. Kim, H. Kim, I.S. Park	
P865 Image-based volumetric surgical outcome for patients with cerebellar infarction	80
M.J. Kim, J. Chung	
P885 Cerebral revascularisation: Single and double barrel extracranial-intracranial bypass comparison	81
A. Nemirovskiy, T. Nemirovskaya	
P1054 Clinical and bypass flow outcome after direct revascularization in carotid occlusion disease: French experience	82
L. Thines, C. Gautier, G. Petyt, L. Estrade, F. Tahon, O. Detante, A. Krainik, H. Henon	
Vertebral tumours	ePoster Area
P463 Spinal intradural extramedullary capillary hemangioma of the cauda equina: A case report	83
J. Saldivar Gomez, J. Pombo Otero, R.M. Hernandez, E. Rossi Mautone, J.M. Villa Fernandez	
P466 Giant sacral chordoma: A case report	84
B. Mansilla, A. Isla, S. Valderrábano, S. Santiago	
P467 Sacral neurogenic tumours	85
A. Isla, B. Mansilla, S. Valderrábano, S. Santiago	
P513 Case report: Pediatric spontaneous NF2 with cervical medullary compression	86
J. Santiago	
P515 Monostotic fibrous dysplasia of the sacrum	87
J.C. Teixeira, D.C. Simão, J. Pimentel, S. Livraghi	
P676 Primary Spinal Cord Melanoma	88
P. Ribeiro da Cunha, O. Rebelo, G. Costa	
P702 Simultaneous resection of chordoma and rectal neoplasm	89
N. Elenwoke, S. Cortes Franco, A. Lorente Muñoz, J. Casado Pellejero, J. Alberdi Viñas	
P778 Combined evaluation of results of spine metastasis surgery in stage of wide spread of cancer metastasis	90
N. Konovalov, A. Nazarenko, D. Asyutin, A. Solenkova, R. Onoprienko, B. Zakirov, S. Timonin, I. Cherkiev, M. Martynova, A. Kosyrkova, V. Korolishin	

P855 Evaluation of a novel fibrin sealant (Evicel®) in spinal dural closure augmentation; A two centre prospective cohort study	91
G. Prezerakos, D. Aimone Cat, P. Sayal, V. Russo, A. Casey	
P878 Results of surgical treatment intramedullary hemangioblastoma	92
N. Kononov, I. Shevelev, A. Nazarenko, D. Asyutin, V. Korolishin, R. Onoprienko, I. Cherkiev, A. Pogosyan, B. Zakirov, M. Martynova, A. Kosyrkova, L. Piminova, S. Timonin	
P899 Percutaneous radiofrequency ablation of spinal osteoid osteoma under ct-guidance: A case series	93
G.L. Morassi, S. Muquit, A.V. Kapinas, H. Schlag, C. Kokkinis	
P926 Spinal angioliipomas: Presentation of a series of cases	94
J.A. Gutiérrez Cierco, R. Carrasco Moro, H.G. Pian, H.D. Jiménez Zapata, E.E. Espinosa Rodriguez, L. Ley Urzaiz	
P959 Aseptic vertebral osteitis in SAPHO syndrome: Review of 15 years experience from a UK regional referral centre	95
P. Sayal, A. Duits, G. Prezerakos, K. Rezajooi, A. Casey	
P1036 Vertebral L2-L3 tuberculosis with extension to retroperitoneal space mimicking metastatic neuroblastoma in 3 year old girl	96
J.C. Roa Montes de Oca, A. Brownrigg-Gleeson Martínez, M. Jaramillo, M. Rivero Gavía, J. Marquez Rivas	
P1045 Giant Sacral Chordoma	97
G. Coloma Valverde, P. Avendaño Altimira, R. Díaz Romero, G. Coloma Rodríguez	
Adult Deformity	ePoster Area
P133 Validity of alternative down-sized surgery for osteoporotic vertebral compression fractures (OVCF) based on a recently developed theory	98
T. Iizuka, M. Ikenaga, Y. Ueda, K. Naito, M. Yamada, M. Kishida, Y. Iwata, Y. Tagawa, N. Masada	
P216 A minimally invasive approach to the surgical management of Bertolotti syndrome: A case series	99
N.G. Boin, J. Steinberger, A. Jenkins III	
P226 Congenital basilar invaginations: A modified classification and clinical analysis (report of 139 cases)	100
T. Fan	
P231 Biomechanical assessment of gradual stabilization using semi-rigid fixation in the thoracolumbar spine	101
F. LaMarca, I. Cheng, C. Farley, J. Pirolo, S. Yandamuri, E. Matheis, B. Bucklen	
P465 Image-guided minimally invasive solutions for adult degenerative scoliosis – single centre experience	102
A.H. Khoshab	

P596 „Lumbar to sacral nerve rerouting“ (animal experiment in rabbits) Z. Mackerle, E. Brichtova, P. Zerhau, M. Husar, D. Sochurkova, E. Gopfert	103
P625 Recurrent spontaneous spinal cord transdural herniation case report N. Elenwoke, A. Lorente Muñoz, S. Cortes Franco, J. Casado Pellejero, J. Alberdi Viñas	104
P653 Feasibility of selective dorsal rhizotomy and segmental correction of neuromuscular scoliosis in a single operative procedure S. Muquit, A.A. Moussa, A. Ammar, L.A. Nasto, H. Mehdian, M. Vloeberghs	105
P654 Costovertebral instrumentation for correction of proximal junctional kyphosis S. Muquit, L.A. Nasto, B. Perez-Romera, H. Mehdian	106
P655 Combined osteotomies for the treatment of severe sagittal imbalance S. Muquit, L.A. Nasto, B. Perez-Romera, H. Mehdian	107

Spondylolisthesis	ePoster Area
--------------------------	---------------------

P135 Volumetric change in interbody bone graft after Posterior Lumbar Interbody Fusion (PLIF) – A prospective study Z. Ito, S. Imagama, K. Ando, T. Kanemura, N. Ishiguro	108
P384 Radiographic restoration of sagittal spinopelvic alignment after less invasive mini-open TLIF in degenerative spondylolisthesis Y. Nishimura, M. Hara, S. Haimoto, T. Wakabayashi	109
P789 Robotic imaging guidance for dynamic percutaneous lumbar screw placement C.H. Carvalho, R. Ritz, M. Lange	110
P790 A prospective study of dynamic stabilisation of the lumbar spine C.H. Carvalho, R. Ritz, M. Lange	111
P832 Staged surgical management of symptomatic lumbar pars defects utilizing Anterior Lumbar Interbody Fusion (ALIF) with unilateral pedicle screw fixation J.F. Hamilton, J.V. Boddu	112

Osteoporotic fractures: thoracolumbar/cervical	ePoster Area
-------------------------------------------------------	---------------------

P21 Does Balloon Kyphoplasty induce the bone union of osteoporotic vertebral compression fractures? K. Tarukado, O. Tono, T. Doi	113
P235 Biomechanical study assessing failure through pullout of posterior fixation techniques including spinal-intra-laminar-correction fixation system F. LaMarca, C. Farley, E. Matheis, Y. Cai, B. Bucklen	114
P380 Evolving augmentation – cavity creation versus balloon kyphoplasty V. Borse, A. Liddle, J. Timothy, P. Millner, N. Kapur, R.M. Hall	115

P404 Treatment of traumatic spinal compression fractures with vertebroplasty and facet thermal ablation at the Department of Neurosurgery of Szeged, Hungary	116
T. Tóth, K. Watfa, P. Elek, P. Barzó	
P433 A delayed onset neurologic deterioration following balloon kyphoplasty for osteoporotic vertebral compression fracture	117
F. Tominaga, K. Ikuta, K. Masuda	
P572 Anterior cervical fusion and damage of esophagus. Causes and methods of treatment	118
A. Grin', V. Krylov, A. Pogodina, E. Shibaev, A. Kaykov	
P614 Three level thoracic burst fracture treated with the titanium mesh and posterior fixation. A case report	119
D. Stimac, N. Koruga, D. Planinic, I. Eric, M. Delalle, B. Kristek	
P707 Clinical evaluation of Elastoplasty, a new polymer in the treatment of osteoporotic fractures	120
M. Budke Neukamp, F. Villarejo, F. Carceller Benito, A. Gómez de la Riva, J.M. Saceda Gutierrez	
P781 Posterior C1-C2 fixation for geriatric odontoid fractures – early morbidity and perioperative complications	121
Y.-M. Ryang, E. Török, I. Janssen, F. Ringel, J. Gempt, B. Meyer	
P823 Human Parathyroid hormone analogue and arthrodesis of geriatric patients	122
S. Cortes Franco, N. Elenwoke, A. Lorente Muñoz, J. Casado Pellejero, J. Alberdi Viñas	
Degenerative	ePoster Area
P41 Coincidence of lumbar spinal stenosis and urinary tract symptoms in the community dwelling people – Prospective cohort study	123
Y. Ishikawa, S. Imagama, Z. Ito, N. Ishiguro, Y. Hasegawa	
P54 Adjacent segment pathology following cervical laminoplasty	124
K. Ikuta, K. Masuda, T. Kitamura, H. Senba, S. Shidahara	
P62 Open versus minimally invasive transforaminal lumbar interbody fusion: A prospective randomized study	125
G.C. Tender, D. Serban	
P106 Lumbar spine posterior dynamic stabilization of the lumbar spine: Results of a 10 year clinical cohort investigation	126
E.E. Paschel, N. Khattar, P.C. Gerszten	
P131 The tips and pitfalls of craniocervical junction surgery using O-arm	127
N. Shimokawa, J. Abe, H. Sato, S. Kawahara, Y. Tsukazaki, Y. Fu	
P199 Ossification of the anterior longitudinal ligament of the cervical spine causing dysphagia: A case report	128
T. Ohno, T. Takao, K. Tarukado, O. Tono, T. Doi	

P251 In-Vitro biomechanical evaluation of a novel lateral lumbar interbody fusion cage with integrated lateral modular plate fixation R. DenHaese, A. Gandhi, C. Ferry, S. Farmer, R. Porter	129
P253 In-Vitro biomechanical evaluation of a novel interspinous fixation device with in-situ compression/extension capabilities C. Wagener, R. Den Haese, A. Gandhi, C. Ferry, S. Farmer	130
P305 Intraoperative computed tomography navigation system for screw insertion of C1 and C2 instability M.-H. Lee, J.-T. Yang, W.-C. Cheng, K.-T. Cheng, W.-C. Huang	131
P310 Giant anterior sacral meningocele repaired through a posterior approach J.D. Patino, J. Lafuente, D. Manzano, L. Serrano, G. Conesa	132
P324 Is there an association between severity of stenosis, preoperative symptoms and clinical outcome in patients with lumbar spinal stenosis? C. Weber, S. Gulati, O. Solheim, C. Giannadakis	133
P346 Increased expression of matrix metalloproteinases in ligamentum flavum hypertrophy of the patients with lumbar spinal stenosis B. Eser, O. Eser, N. Simsek, E. Bulbul, M. Guven	134
P353 Radiometric analysis of the kinematics of the L4–L5 and L5–S1 spine segments in the 3 stages of the degenerative process Y. Tsitko, A.F. Smeinovich, O.S. Govrushko	135
P369 Anterior cervical corpectomy for cervical spondylotic myelopathy: reconstruction with expandable cylindrical cage versus iliac crest autograft. A retrospective study C. Gambacciani, P. Perrini, C. Martini, N. Montemurro, P. Lepori	136
P381 Risk factors for early reherniation after lumbar discectomy with or without anular closure: Results of a multicenter randomized controlled study J.C. Kienzler, J. Fandino, C. Thomé, R. Hes, R. Bostelmann, F. Martens, G.J. Bouma, M. Barth, P. Vajkoczy, P.D. Klassen	137
P383 Perioperative demographics, intraoperative findings and complications in lumbar microdiscectomy: Comparison of anular closure to discectomy alone J.C. Kienzler, J. Fandino, C. Thomé, R. Hes, R. Bostelmann, F. Martens, G.J. Bouma, M. Barth, P. Vajkoczy, P.D. Klassen	138
P410 Correlation of pain, functional disability and health-related quality of life with radiological grading scales of lumbar degenerative disc disease M.V. Corniola, M.N. Stienen, H. Joswig, I. Chau, G. Hildebrandt, K. Schaller, N.R. Smoll, O.P. Gautschi	139
P417 Prospective outcomes evaluation of a novel zero-profile device for single and multi-level anterior cervical discectomy and fusion E.E. Paschel, H. Mashaly, P.C. Gerszten	140

P427 Gender differences in subjective and objective measures for patients with lumbar degenerative disc disease	141
M.N. Stienen, M.V. Corniola, N.R. Smoll, H. Joswig, I. Chau, G. Hildebrandt, K. Schaller, O.P. Gautschi	
P471 Influence of psychiatric comorbidities on clinical outcome before and after elective spine surgery. A prospective observational study	142
E. Shibani, Y. Shibani, F. Bruckbauer, U. Hoffmann, J. Thiel, F. Ringel, J. Lehmborg, A. Mühlberger, B. Meyer	
P488 Zero-profile integrated plate and spacer device for the adjacent segment disease: Safe and efficacious option for the single-level cervical revision	143
D.-Y. Choi, J.T. Kim, H.J. Lee, M.H. Shin	
P516 Degenerative cervical disc disease: Arthroplasty vs anterior discectomy and fusion	144
J.C. Teixeira, J.L. Melancia	
P517 T1-T2 herniated disc presenting with Horner's syndrome	145
J.C. Teixeira, J.L. Melancia	
P546 Treatment of degenerative diseases of the spine using of dynamic stabilization systems	146
A. Gulzatyán, G. Shahinyan, T.M. Hiriev	
P604 Transfacetal lumbar screw fixation: A retrospective review	147
D. Štimac, N. Koruga	
P641 Anterior transvertebral foraminotomy without fusion for cervical radiculopathy: a mid-term follow-up study	148
Y. Nishimura, M. Hara, S. Haimoto, T. Wakabayashi	
P643 Influence of transversal angles and delta angles on reoperation rates after pedicle screw-based dynamic stabilization of the thoracolumbar spine	149
M. Behr, F.A. Schmidt, S.M. Krieg, A. Reinke, M. Stoffel, B. Meyer	
P647 Instrumented 'Double Door' cervical laminoplasty – Description of a modified technique and its clinical outcomes	150
S. Muquit, L.A. Nasto, B. Perez-Romera, H. Mehdian	
P669 Hemilaminectomy for extradural spinal cysts	151
M.-S. Lim, U. Okafo, A. Khalil, O. Dunlea, G.F. Kaar	
P683 Ossification of the ligamentum flavum at the lumbar spine in diffuse idiopathic skeletal hyperostosis: A case report	152
T. Ohno, K. Tarukado, O. Tono, T. Toho, T. Doi	
P756 Accuracy and safety of CT-Region matching navigated pedicle screws in the subaxial cervical spine and cervicothoracic junction	153
Y.-M. Ryang, N. Buchmann, J. Lehmborg, J. Gempt, B. Meyer	
P814 High preoperative expectations of patients with stabilization surgery of the cervical spine	154
H.S. Meyer, M. Vazan, F. Reinartz, C. Sonnleitner, B. Meyer, F. Ringel	

P826 Effect of mono- or bisegmental lordosizing fixation on short term global and index sagittal balance: A radiographic study E. Tessitore, I. Melloni	155
P828 Utilization of Direct/Extreme Lateral Interbody Fusion (DLIF/XLIF) in the minimally invasive management of lumbar degenerative disc disease within the high-risk patient J.F. Hamilton, J.V. Boddu	156
P839 Outcome following endoscopic uniportal transforaminal discectomy for the treatment of lumbar disc herniation G.L. Morassi, S. Muquit, A.V. Kapinas, H. Schlag	157
P844 Clinical and radiological outcome following anterior cervical discectomy and fusion with Stand-alone PEEK Cages with or without osteogenic filling substance: A retrospective matched-pair analysis E. Shiban, J. Kogler, M. Nies, B. Meyer, J. Lehmberg	158
P849 Long-term outcome following surgical treatment for spondylodiscitis in 211 cases E. Shiban, I. Janssen, J. Rainer, M. Stoffel, F. Ringel, B. Meyer	159
P893 Minimally invasive transforaminal lumbar interbody fusion N.S. Gabrovsky, M.L. Laleva, N.V. Velinov, P.L. Ilkov, S.N. Gabrovsky	160
P894 Percutaneous pedicle screw fixation for the treatment of spondylodiscitis N.S. Gabrovsky, M.L. Laleva, N. Velinov, K.A. Uzunov, S.N. Gabrovsky	161
P922 Hematoma between the layers of the lumbar spinal dura. Report of two cases and review of the literature T. Spiriev, E. Vachev, S. Kondoff, G. Kirova, L. Laleva, N. Gergelchev	162
P935 Measuring cervical mobility in the cases whom anterior cervical discectomy was performed by peek cage and comparison with patient satisfaction E. Ozek, F.H. Bolukbasi, O. Baskan, M. Onoz, I. Elmaci	163
P958 Laser epiduroscopic lumbar neural decompression: Postoperative outcomes of 45 cases H.Ö. Okay, Ü. Kahraman, M.K. Çoban, A. Güngör, Ü. Kamacı, O. Tanrıverdi, M. Ömeroğlu	164
P965 A comparison of postural control between healthy controls and patients with lumbar disc herniation during computerized dynamic posturography U. Zielińska, M. Rutkowski, G. Olchowik, E. Rutkowska, T. Trojanowski, P. Trojanowski, R. Rola	165
P987 The risk of getting worse: Predictors of deterioration after decompressive surgery for lumbar spinal stenosis – A multicenter observational study U.S. Nerland, C. Giannadakis, T.K. Solberg, Ø. Nygaard, A.S. Jakola, C. Weber, O. Solheim, S. Gulati	166
P1009 Single level discectomy wiith and without disc prosthesis: A comparative study of 80 cases T. Çakır, H.Ö. Okay, M. Çakır, B. Bayraktar, Ç. Yolaş, O. Tanrıverdi, M.K. Çoban, Ü. Kamacı	167

P1010 Anterior lumbar interbody fusion (ALIF) – analysis of biomechanical effects and patient's outcomes	168
B.J. Kapustka, Z. Śłosarek, M. Ostry, P. Chodakowski, K. Paruzel, G. Kiwic	
P1039 Does daily tobacco smoking affect outcomes after microdecompression for degenerative central lumbar spinal stenosis? – A multicenter observational registry-based study	169
S. Gulati, T. Nordseth, U.S. Nerland, M. Gulati, C. Weber, C. Giannadakis, Ø.P. Nygaard, T.K. Solberg, O. Solheim, A.S. Jakola	
P1052 Evaluation of cervical sagittal parameters in patients submitted to simple laminectomy for treatment of cervical spondylotic myelopathy	170
R. Manilha, J. Monteiro, B. Santiago, M. Cunha e Sa	
P1065 The management of vertebral artery injury in anterior cervical spine operation: A systematic review of published cases	171
H.-K. Park	
P1079 Chronic low back pain treatment with meloxicam	172
N. Syrmos, N. Haftouras, V. Sanidas	
Metastasis	ePoster Area
P211 Frameless radiosurgery in brain metastases	173
E. Lopez, G. Arregui, D. Rivas, A. Lazo, A. Sacchetti	
P292 Using of integrated DWI, DTI fiber tracking, and FLAIR data for surgical planning and image-guided resection of brain metastasis in eloquent areas	174
A. Rozumenko, V. Rozumenko	
P429 Primary manifestation of prostatic adenocarcinoma simulating a torcular intraosseous meningioma	175
J. Santiago	
P526 Caveolin-1 enhances brain metastasis in non-small cell lung cancer: Possible relationship with EMT marker, SNAIL	176
K.-S. Moon, Y.-J. Kim, W.-Y. Jang, T.-Y. Jung, I.-Y. Kim, S. Jung	
P529 A rare manifestation of multiple myeloma mimicking an acute subdural hematoma	177
A. Prajsnar-Borak, N. Balak, H. von Pein, M. Glaser	
P578 Cognitive impact of radiosurgery in patients with brain metastasis	178
A. Sanz Cortés, C. Yélamos Agua, I. Azinovic, J. Samblás García, K. Sallabanda	
P629 The significance of postoperative radiation therapy on survival of intracranial hemangiopericytoma: Patterns of failure depending on getting radiation therapy or not	179
E.J. Lee, Y.H. Cho, S.H. Hong, J.H. Kim, C.J. Kim	
P680 Secondary leptomeningeal gliomatosis: A case report and literature review	180
H.D. Jiménez Zapata, V. Rodríguez Berrocal, H. Pian Arias, M. García Villanueva, J.S. Martínez San Millán, J.A. Gutiérrez Cierco, E. Espinosa Rodríguez, L. Ley Urzaiz	

P700 Intracranial meningioma with leptomeningeal dissemination: Retrospective study with review of literature	181
J.-H. Hwang, K.-S. Park, K.-H. Kim, S.-H. Park	
P715 A rare occurrence of meningeal sarcoma of the cervical spine with both intramedullary and extramedullary locations presenting with complete occlusion of the left subclavian artery	182
A. Karagianni, E. Lakiotaki, I. Mavridis, C. Mantas, K. Adamos, P. Korkolopoulou, K. Vlachos	
P748 First clinical report of an intravascular papillary endothelial hyperplasia of the pineal region	183
A. Penumaka, L. Charalambous, A.H. Friedman	
P749 Metastatic meningiomas	184
P. Ribeiro da Cunha, J. Rato, M. Carvalho, G. Costa, O. Rebelo, M. Rui, H. Tão	
P755 Far lateral approach to metastatic pituitary adenoma	185
J. Duerinck, J. D'haens, S. Gläsker, V. Van Velthoven	
P825 Frame-based CT guided stereotactic biopsy – Our experience in treatment of different brain lesions	186
P. Vuleković, B. Jelača, M. Karan, V. Papić, D. Djilvesi	
P879 Case study of solitary intracerebral plasmocytoma as a multiple myeloma relapse	187
A. Maiwald, F. Baumann, K. Kothbauer	
P906 Microsurgical management of optic nerve metastasis. Case report and review of the literature	188
S. Kondoff, M. Milev, C. Tzekov, T. Spiriev, L. Laleva, G. Kirova, C. Kostadinova	
P985 Benefits of surgical treatment of brain metastases from lung cancer	189
B. Kapustka, P. Chodakowski, D. Pawlus, M. Dworak, Z. Ślosarek, M. Ostry, T. Latusek, P. Bażowski, S. Kwiek	
Awake Surgery	ePoster Area
P80 Neurophysiological management strategies to guide low grade glioma resection	190
K. Seidel, J. Beck, P. Schucht, A. Raabe	
P175 Remodeling of language sites in the vicinity of brain tumors across time	191
D.M. Weinert, E. Kraus, R. Steinmeier	
P442 Successful surgical resection for brain tumor in eloquent area with diffusion tensor imaging and intraoperative neuromonitoring	192
W.-S. Yoon, J.-H. Park, D.-S. Chung	
P448 Interhemispheric connectivity as a sign of language function at risk in brain tumor patients	193
N. Sollmann, C. Negwer, L. Tussis, T. Hauck, S. Ille, S. Maurer, K. Giglhuber, F. Ringel, J.S. Bauer, B. Meyer, S.M. Krieg	

P449 nTMS-based DTI fiber tracking of language pathways using a fractional anisotropy threshold	194
N. Sollmann, C. Negwer, S. Ille, S. Maurer, T. Hauck, F. Ringel, J.S. Bauer, B. Meyer, S.M. Krieg	
P475 The Simpson grading revisited: Aggressive surgery still has a place in modern meningioma management	195
K. Gousias, J. Schramm, M. Simon	
P533 Structured evaluation of patients with low grade glioma by an occupational therapist – is our clinical examination enough?	196
C.F. Freyschlag, J. Kerschbaumer, D. Pinggera, C. Thomé	
P646 Non-invasive mapping of calculation function by repetitive navigated transcranial magnetic stimulation	197
S. Maurer, N. Tanigawa, N. Sollmann, T. Hauck, S. Ille, T. Boeckh-Behrens, B. Meyer, S.M. Krieg	
P648 Evoking visual neglect-like deficits in healthy volunteers – an investigation by repetitive navigated transcranial magnetic stimulation	198
K. Giglhuber, S. Maurer, C. Zimmer, B. Meyer, S.M. Krieg	
P651 Language function distribution in lefthanders: A transcranial magnetic stimulation study	199
L. Tussis, N. Sollmann, T. Boeckh-Behrens, B. Meyer, S.M. Krieg	
P652 Language function distribution in left-handers: A rTMS study	200
L. Tussis, N. Sollmann, T. Boeckh-Behrens, B. Meyer, S.M. Krieg	
P708 Cortical language mapping by rTMS compared to fMRI	201
S. Ille, N. Sollmann, C. Zimmer, F. Ringel, B. Meyer, S.M. Krieg	
P853 Patient experience and satisfaction with Dexmedetomidine in awake craniotomy for brain tumours	202
J.R. Roach, C. Weidmann, R. Chapman, V. Apostolopoulos, P. Grundy	
Intra-operative Imaging	ePoster Area
P26 Accuracy and workflow of navigated spinal instrumentation with the mobile AIRO® CT scanner	203
N. Hecht, M. Czabanka, B. Hamm, S. König, M. Synowitz, J. Woitzik, P. Vajkoczy	
P90 From grey scale B-Mode to elastosonography: Multimodal ultrasound imaging in meningioma surgery	204
M. Del Bene, F. Prada, C. Casali, F. Legnani, A. Saladino, A. Perin, I.G. Vetrano, L. Mattei, M. Saini, F. DiMeco	
P102 A simple, safe and effective targeting method combined with intraoperative ultrasound for small subcortical intracranial lesions	205
A. Kazanci, O. Gurcan, A.G. Gurcay, I. Bozkurt, O. Algin, O.F. Turkoglu, M. Bavbek	

P142 Two different primary brain tumors in the same hemisphere: Case report and review of the literature	206
O. Gurcan, A. Kazanci, A.G. Gurcay, S.K. Simsek, O.F. Turkoglu, M. Bavbek	
P190 Dorsal column mapping for identifying posterior median sulcus in intramedullary tumor resection	207
T. Hida, S. Imagama, Z. Ito, K. Ando, K. Ito, Y. Ishikawa, N. Ishiguro	
P337 Total excision of a huge frontal intraparenchymal Schwannoma: A case report	208
M.-H. Lee, W.-C. Cheng, J.-T. Yang, Y.-J. Kuo	
P441 High grade gliomas in the motor areas and pathways: Surgical results after tailored craniotomy with intra-operative monitoring (IOM)	209
F.G. Legnani, R. Cordella, P. d'Orio, C. Casali, A. Saladino, L. Mattei, F. Prada, I.G. Verano, A. Perin, M. Del Bene, A. Moiraghi, C. Richetta, A. Mangraviti, M. Saini, F. DiMeco	
P482 The value of optical coherence tomography in glioma surgery	210
D.J. Park, J.S. Park, J.S. Woo, S.M. Kim, Y.J. Joo, T.J. Eom, S.S. Jeun	
P486 Navigation-assisted direct "over-the-sinus" drilling technique: A safe and accurate technique for craniotomies extended to venous sinuses	211
V. Minichini, M.A. Rynkowski, J. Spitaels, H.B. Pouleau, S. Schuind, R. Kamouni, F. Schoovaerts, O. De Witte, M. Bruneau	
P543 Effects of using 3D printed models for pre-operative patient education	212
D.C. Grim, H.G.B. Nijmeijer, T.H. Van de Belt, M. ter Laan	
P615 Patterns and time-dependence of unspecific enhancement in postoperative MRI after glioblastoma resection	213
S. Bette, J. Gempt, T. Huber, C. Zimmer, F. Ringel, J. Bauer	
P650 Resection of pre-rolandic nTMS-positive motor areas impairs postoperative motor function	214
T. Moser, L. Bulubas, J. Sabih, B. Meyer, S.M. Krieg	
P673 Chronic encapsulated intracerebral hematoma mimicking neoplasm: Case report	215
M.A. Sönmez, E. Karavelioğlu, F. Aslan, O. Eser	
P705 Polysynaptic motor areas within the frontal cortex in patients with motor eloquent brain lesions	216
L. Bulubas, J. Sabih, A. Wohlschläger, N. Sollmann, T. Hauck, S. Ille, F. Ringel, B. Meyer, S.M. Krieg	
P710 Intraoperative update of residual tumor volume without additional imaging: A new software tool for skull base surgery	217
N. Thon, U. Mezger, W. Rachinger, W. Flatz, C. Schichor, J.-C. Tonn	
P711 Can GBM Recurrence be predicted by early postoperative FET-PET?	218
N. Buchmann, J. Gempt, Y.-M. Ryang, B. Meyer, F. Ringel	
P740 Comparison of nTMS-based DTI fibertracking of language pathways with the Stieglitz protocol	219
C. Negwer, S. Ille, N. Sollmann, T. Hauck, B. Meyer, F. Ringel, S. Krieg	

P762 Fluorescein sodium-guided surgery in cerebral lymphoma K.-M. Schebesch, A. Brawanski, J. Höhne	220
P766 Perioperative imaging in low-grade astrocytomas – intraoperative MRI guidance and postoperative assessment of resection extent M. Scherer, C. Jungk, A. Unterberg	221
P815 Ultrasonography-assisted neurosurgical operation, endonasal ultrasonographic imaging and superb micro-vascular imaging (SMI) M. Ishikawa, Y. Fujiwara, N. Soma, T. Yamaguro, M. Ikoda, A. Ebihara, G. Kusaka, Y. Tanaka	222
P864 Reliable approach to motor area surgery F.H. Bolukbasi, E. Ozek, O. Baskan, R. Sari, I. Elmaci	223
P900 Do patients with a poor clinical status profit from tumor volume reduction? J. Gerhardt, S. Bette, V. Butenschön, Y.-M. Ryang, F. Ringel, B. Meyer, J. Gempt	224
P936 Tumorvolume and survival in patients with Glioblastoma J. Gempt, J. Gerhardt, S. Bette, T. Huber, N. Buchmann, Y.-M. Ryang, V. Butenschön, B. Meyer, F. Ringel	225
P937 Correlation of the intraoperative ultrasound characteristics of the glial tumors with the histopathological grades O. Baskan, R. Sari, F.H. Bolukbasi, E. Ozek, O. Canoz, I. Elmaci	226
P938 Intraoperative ultrasonography of spinal intradural lesions: Comparision of the intraoperative ultrasound findings with postoperative magnetic resonance imaging O. Baskan, E. Ozek, R. Sari, F.H. Bolukbasi, I. Elmaci	227
P950 A critical view into the neurosurgical OR: bottlenecks and perspectives in human-human and human-machine interaction H. Clusmann, M. Blaar, J. Dell'Anna, A. Janß, A. Höllig, K. Radermacher	228
P952 Improvement of human-machine-interaction and workflow in the OR by central surgical workstations in an open-network approach H. Clusmann, A. Janß, J. Dell'Anna, K. Radermacher	229
Tumor markers	ePoster Area
P63 eLearning to enhance multiprofessional education in molecular neuro-oncology A. Lawson McLean, D. Wang, J.E. Martin	230
P78 miR-192 suppresses leptomeningeal dissemination of medulloblastoma by modulating cell proliferation and anchoring through the regulation of DHFR, integrins, and CD47 S.Y. Yang, S.A. Choi, S.-K. Kim	231
P165 Defining specific molecular targets of mTOR signaling in meningiomas and gliomas M. Simon, D. Freitag, T. Steinbach, R. Kalff, J. Walter	232

P240 The miR-17-5p expression correlates with grade and outcome of children with ependymoma M. Zakrzewska, K. Zakrzewski, W. Fendler, P.P. Liberski	233
P249 Clinical and molecular prognostic factors of long-term survival in patients with newly diagnosed glioblastoma T.H. Roh, E.H. Kim, S.H. Kim, S.H. Kim, C.-O. Suh, K.S. Lee, J.H. Chang	234
P339 HER2 expression in meningiomas and its relation to WHO-grade and tumor recurrence M. Coenen, D. Brandsma, J. Westerga, A. Broeks, P. Wesseling, J. Wesseling, D. Verbaan, S.M. Peerdeman	235
P436 Surgical outcomes in a modern series of 1p19q co-deleted low-grade gliomas: A volumetric analysis J.N. Orina, S. Fang, F.B. Meyer, W.R. Marsh, I.F. Parney	236
P504 Glioblastoma multiforme: a retrospective study of 344 patients in a single Irish institution P.J. O'Halloran, P. O'Sullivan, S. MacNally	237
P514 Case report: Mixed ganglioglioma and dysembryoplastic neuroepithelial tumour J. Santiago, M. Carvalho	238
P659 NDRG2 and 4 expression is changed in primary glioblastoma and effect survival in MGMT methylated tumors M. Kolodziej, C. Weischer, M. Stein, K. Quint, E. Uhl	239
P663 Comparison of the predictive survival factors in primary glioblastoma (GBM): Extension of resection (EOR) vs residual tumour volume (RTV) R. Garcia-Armengol, C. Botella, F.J. Goncalves, B. Menendez, C. Hostalot, P. Teixidor, C.J. Dominguez, J. Perez-Bovet, J. Rimbau	240
P689 Oxidative stress markers in patients with tumors of the central nervous system A. Karagianni, K. Venetsanou, C. Mantas, I. Mavridis, K. Adamos, K. Vlachos	241
P690 Erdheim Chester disease an incredible simulator cases reports and review of literature F.J. Rascón Ramírez, O.A. Salazar Ascencio, K. Sallabanda Díaz, J. Porta Etessam, J.M. Avecillas Chasin, J.A. Barcia Albácar	242
P804 Optical biopsies in Neurosurgery: The first use of raman spectroscopy for the real-time identification of WHO II-IV intrinsic brain tumours during surgery B. Vaqas, M. Short, I. Patel, U. Faiz, H. Zeng, K. O'Neill	243
P819 Desmoplastic astrocytoma: Three new cases and literature review L.M. Rojas-Medina, M. Rivero-Garvía, R. Carrasco-Moro, C. Bautista-Jiménez, E. Iglesias-Díez, J. Márquez-Rivas, Pediatric Neurosurgery	244
P829 Activation of Calpain-1 in CNS tumors is related to rate of proliferation I. Melloni, M. Pellegrini, M. Averna, G. Zona	245

P836 Supratentorial Primitive Neuroectodermal Tumors (PNET) in adults – Presentation of 3 cases	246
P. Zogopoulos, T.S. Paleologos, I. Ydraios, V. Xenaki, P.G. Papanikolaou, E. Chatzidakis	
P872 Mass Spectrometry as a novel method for the real-time intraoperative identification of intracranial tumours	247
B. Vaqas, J. Balog, F. Roncaroli, Z. Takats, K. O'Neill	
P875 Development of novel imaging and treatment that focuses on coagulation dysfunction of malignant glioma	248
J. Kuroda, H. Takashima, M. Yasunaga, Y. Matsumura, J. Kuratsu	
P884 Prognostic value of the extent of resection and IDH1 mutation status in WHO grade II astrocytomas	249
C. Jungk, M. Scherer, A. Mock, A. von Deimling, C. Herold-Mende, A. Unterberg	
P890 Expression of vascular endothelial growth factor receptor 2 is associated with insulin growth factor 1 signaling in glioblastoma multiforme	250
T. Asser, J. Junninen, T. Metsaots, A. Minajeva, M. Kase, M. Joonsalu, T. Jõgi, M. Vardja, J. Jaal	
P895 A possible new biomarker of GBM progression: changes of ADC values of contralateral white matter in glioblastoma patients during the treatment compared to healthy controls	251
Á. Varga, D. Kis, K. Hideghéty, A. Máté, P. Barzó	
P903 Outcome and survival in elderly glioblastoma patients	252
J. Gerhardt, S. Bette, T. Huber, N. Buchmann, F. Ringel, B. Meyer, J. Gempt	
P971 The derived neutrophil-lymphocyte ratio as prognostic marker in patients with glioblastoma	253
J. Kerschbaumer, D. Pinggera, C.F. Freyschlag, C. Thomé	
P977 A novel concept in the diagnostic work-up of malignant brain tumors: A pilot study based on immunosignatures	254
D. Ferdinandov, V. Kostov, M. Hadjieva, S. Nachev, C. Vassilev, A. Bussarsky, A. Pashov	
P978 Diagnostic value of proton magnetic resonance spectroscopic imaging in patients with cerebral gliomas	255
I. Krzyzanowska, T. Pyka, T. Boeckh-Behrens, B. Meyer, F. Ringel, J. Gempt	
P1007 5-Aminolevulinic acid-induced fluorescence as an intraoperative marker in high-grade gliomas frameless stereotactic biopsies	256
C. Botella-Campos, R. García-Armengol, A. Blanco Ibañez de Opacua, C.J. Domínguez-Alonso, P. Teixidor-Rodríguez, J. Rimbau-Muñoz	
P1069 Malignant transformation in a desmoplastic non-infantile ganglioglioma	257
N. Smith, B. Thakur, M. Aizpurua, A. Calado Bravo, S. Al-Sarraj, S. Bassi, C. Chandler, B. Zebian	

Radiosurgery	ePoster Area
P2 Gammaknife radiosurgery in pituitary adenomas: A 10-year single centre study of 150 cases A. Balossier, G. Touzet, N. Reyns, T. Sarrazin, C. Cortet-Rudelli, S. Blond	258
P224 Upfront stereotactic radiosurgery for pineal parenchymal tumors in adults J.H. Park, J.H. Kim, D.H. Kwon, C.J. Kim, S.K. Khang, Y.H. Cho	259
P288 Gamma Knife surgery for pilocytic astrocytomas N. Massager, F. De Smedt, D. Devriendt, S. Lonneville	260
P360 Two cases of glioblastoma development after radiotherapy for benign brain tumors S.-H. Kim	261
P736 11C-Methionine positron emission tomography for differential diagnosis of radiation necrosis and tumor recurrence in the patients with brain metastasis after stereotactic radiosurgery A. Kibe, K. Yatsushiro, M. Ogita, K. Nakamura, T. Fujimoto, K. Arita	262
Immunotherapy	ePoster Area
P568 Long-term results and future prospects of the treatment of primary central nervous system malignant lymphoma with high-dose methotrexate T. Yamaguchi, N. Kaneko, K. Ohmine, A. Gomi, E. Watanabe	263
Psycho-oncology	ePoster Area
P250 Does brain tumor laterality affect patient-reported quality of life? C. Drewes, L.M. Sagberg, A.S. Jakola, O. Solheim	264
P468 Influence of psychiatric comorbidities on clinical outcome before and after brain surgery. A prospective observational study E. Shiban, Y. Shiban, J. Thiel, F. Bruckbauer, U. Hoffmann, F. Ringel, J. Lehmsberg, A. Mühlberger, B. Meyer	265
P497 Post traumatic stress disorder symptoms following brain surgery. Is surgery really the reason? E. Shiban, Y. Shiban, U. Hoffmann, F. Bruckbauer, J. Thiel, J. Lehmsberg, F. Ringel, A. Mühlberger, B. Meyer	266
P554 The right frontal lobe – is it really non-eloquent? A. Jamjoom, P. Gallo, J. Kandasamy, J. Philips, D. Sokol	267
P577 Quality of life in patients with gliomas: Role of psychological variables A. Sanz Cortés, E. Olivares Crespo, J.A. Barcia	268
P588 Peri-tumoural brain comprises a functional network hierarchy with local and long-range connectivity that are both subject to tumour induced cortical suppression M. Hart, S.J. Price, J. Suckling	269

P602 Proton MR spectroscopy in the assessment of hippocampal radiation injury and the correlation to neurocognitive function impairment: An initial experience	270
R. Jancalek, P. Pospisil, M. Bulik, T. Kazda	
P913 Living with a high-grade glioma after first-line treatment. Functional status and personal, medical, familial and social experiences through a mixed evidenced-based and prospective narrated-based approach	271
O. Mateo-Sierra, J.C. Hernández-Clemente, J. Lázaro, B. Alba, M. Blanco, I. García Fíliá, C.I. González-Santillana	
P940 Cognitive function of patients with neuroepithelial brain tumors	272
J. Gempt, J. Järschke, Y.-M. Ryang, L. Schirmer, B. Meyer, F. Ringel	
P1077 Quality of life in pre-operative patients with meningiomas	273
V. Giannouli, N. Syrmos	
P1078 The influence of religiosity on cognition and depression in pre-operative patients with meningiomas	274
V. Giannouli, N. Syrmos	

Sports and Spinal Cord Injury**ePoster Area**

P103 Six level isolated spinous process fractures of thoracic vertebrae (Clay Shoveler's Fracture) and review of the literature	275
A. Kazanci, O. Gurcan, A.G. Gurcay, O.F. Turkoglu, M. Bavbek	
P837 Study of bridging vein anatomy based on CT angiogram data for optimization of finite element models simulating acute subdural hematoma	276
G.U. Musigazi, B. Depreitere	
P969 Military neurosurgery in a modern warfare: experience in the French role 3 medical treatment facility of Kabul (Afghanistan)	277
C. Joubert, N. Desse, M. Fouet, J.-M. Delmas, R. Dulou, A. Dagain	
P1008 Diffusion tensor imaging of the corpus callosum and clinical outcome 6 and 12 months after diffuse axonal injury	278
J.C. Ljungqvist, D. Nilsson, T. Skoglund	

Decompressive Craniotomy**ePoster Area**

P17 Influence of decompressive craniectomy on the blood pressure and pulse rate; reverse Cushing phenomenon	279
D.-S. Yoo	
P27 A three-dimensional printing as a preferable technique to advance manufacturing of prefabricated cranioplastic implants. A two-case report	280
B. Splavski, M. Kovacevic, D. Muzevic	
P228 Evacuation of chronic subdural hematoma using flexible endoscope	281
M. Majovsky, V. Masopust, V. Benes	

P281 The experience of reconstructive operations using autotransplants and titanium implants A. Shchemelev, R. Sydorovich, A. Rodzich	282
P334 Clinical outcomes of cranioplasty with different materials after decompressive craniectomy in single institution M.J. Kim, C.J. Yoo, Y.H. Kim	283
P359 Complications of cranioplasty using a bone flap sterilized by autoclaving following decompressive craniectomy J. Mracek, J. Hommerova, J. Mork, D. Stepanek, V. Priban	284
P366 Decompressive craniotomy in patients with hemorrhagic progression of a brain contusion A. Kordonskiy, V. Krylov, A. Talyov	285
P376 Reconstruction of cranial bone defects with fiber-reinforced composite – bioactive glass implant J.P. Posti, J. Piitulainen, P.K. Vallittu, V. Vuorinen, W. Serlo	286
P379 Validation of non-invasive absolute intracranial pressure measurements in traumatic brain injury and intracranial hemorrhage: Preliminary results J.C. Kienzler, S. Bähler, R. Zakelis, E. Remonda, A. Ragauskas, J. Fandino	287
P382 Optical pupilometry in traumatic brain injury: Could subtle changes in the nature of the Pupils response predict changes in ICP? D.J.D. Davies, Z. Su, A. Belli, J. Bishop, K. Yakoub, A. Stevens	288
P398 Expression of cyclooxygenase-2 and vascular endothelial growth factor in the outer membrane on chronic subdural hematoma C.H. Kim, T.G. Cho, J.G. Moon, H.K. Lee	289
P478 Risk factors of hydrocephalus and subdural hygroma after decompressive craniectomy in traumatic head injury patients H.J. Lee, H.Y. Ahn, H.J. Lee, J.S. Yi, J.H. Yang, I.W. Lee	290
P537 Preliminary results of the Compact trial – A randomized controlled trial investigating optimal treatment for chronic subdural hematoma J. Van Der Veken, J. Duerinck, V. Van Velthoven	291
P550 A novel piscine acellular dermal graft for dura repair in an ovine model: A randomized controlled trial E.T. Bjornsson, I.H. Olafsson, H. Kjartansson, S. Karason, E. Gunnarsson, E. Jorundsson	292
P553 "Does the 4-hour rule still apply?": A 4-year retrospective study of 100 patients with acute subdural haematomas requiring emergency neurosurgery at London major trauma centre S. Amarasinghe, H. Kareem	293
P592 Pediatric ischemic stroke after head trauma: A case report and review of the literature P. Barrio Fernández, J. Pérez Suárez, J. Ibáñez Plágaro, J. Fernández Fernández, G.D. Mattos Piaggio, R. Uriel Lavín	294

P679 Cranioplasty after decompressive craniectomy: Retrospective analysis of risk factors for complications and infection	295
L. Sveikata, M.N. Stienen, A. El Rahal, B. Leemann, K. Schaller, A. Bartoli	
P744 Incidence of sinking flap syndrome after decompressive craniectomy	296
M. Schwake, M. Schöpfer, W. Stummmer, B. Fischer, M. Holling, S. Schipmann	
P758 Multidisciplinary management of blast – induced traumatic brain injury from explosive device: A case of survival and review of the literature	297
M. Blagia, M.T. Bozzi, A. Colamaria, A. De Tommasi	
P824 The effect of intrathecal infusion in the treatment of chronic subdural haematomas	298
K. Watfa, B. Fülöp, T. Tóth, P. Barzó	
Craniopharyngiomas & Pituitary Gland	ePoster Area
P23 The perspective differences of pterional approach in comparison with the frontolateral approach on structures around the optic chiasm: A cadaver study with artificial lesions	299
S.D. Adib, F.H. Ebner, S. Herlan, M. Tatagiba, J. Honegger	
P25 Transcranial or extended transsphenoidal approach to central skull base tumors	300
A. Melada, M. Jurlina, V. Peterković, M. Marjanović	
P28 Craniopharyngiomas: description of an historical cohort	301
I. Castro-Dufourny, J.M. Pascual, R. Carrasco, R. Prieto, L. Barrios	
P176 A rare case of primary tubercular Pituitary abscess mimicking as craniopharyngioma	302
P.V. Ramana	
P352 A retrospective analysis of perioperative outcomes in craniopharyngioma patients	303
P. Shetty, A. Moiyadi	
P357 Surgical technique of contralateral subfrontal approach for eccentric located tuberculum sellae meningiomas	304
S. Jung, W.-Y. Jang, K.-S. Moon, I.-Y. Kim, T.-Y. Jung	
P375 long-term oncological outcome of endoscopy-assisted cranionasal resection for olfactory neuroblastoma	305
G.K.K. Leung, R.K. Tsang, A.C.O. Tsang, J. Lam, W.K. Ho	
P481 Graded repair protocol for cerebrospinal fluid leaks in endoscopic endonasal transsphenoidal surgery	306
D.J. Park, J.S. Park, S.S. Jeun	
P509 Bromocriptine treatment of invasive giant prolactinomas involving the cavernous sinus: Clinical outcomes of ten-year follow up	307
Z.B. Wu, L. Cai, S.J. Lin, Z.G. Leng, Y.H. Guo, W.G. Zhao	

P535 Nasal lobular capillary hemangioma as a complication after an endoscopic transsphenoidal gonadotrophin-producing pituitary adenoma resection	308
D. Forte, A.S. Irañeta, A. Nabais, M. Mafra, V. Gonçalves, A. Figueiredo	
P621 Expanded endoscopic endonasal approach for suprasellar and anterior and midline skull base tumours	309
C. Hostalot, A. Blanco, C. Pollán, C. Botella, J. Vergés, J. Rimbau	
P649 Incidence and clinical outcomes of atypical pituitary adenomas	310
S. Muquit, A.A. Ammar, A.A. Moussa, I.J.A. Robertson	
P672 A case report of a pituitary fibrosarcoma without prior history of radiation	311
A.B. Bayoumi, P. Swiatek, B. Swearingen, M. Frosch, E.T. Hedley-Whyte, E.M. Kasper	
P681 Functional outcome for secreting pituitary adenomas – A 15 years single-center case series evaluation	312
P. Ribeiro da Cunha, P. Ferreira, S. Tavares, G. Costa, M. Carvalho, D. Matos, R. Pereira, M. Rito, F. Belo	
P701 BioGlue® reinforcement for CSF leak repair during endoscopic transsphenoidal pituitary and anterior skull base surgery	313
K. Tambirajoo, M. Javadpour	
P769 Cystics craniopharyngiomas, brachytherapy and the MRI perfusion	314
Y. Haddadi, M. Nebbal, L. Ziani	
P770 Navigation-guided combined endoscopic and microscopic posterior transseptal transsphenoidal pituitary surgery	315
B. Fulop, Z. Bella, Z. Rideg, P. Barzo	
P827 Success rate of sellar floor reconstruction following transsphenoidal endoscopic surgery	316
B. Jelača, P. Vuleković, V. Kljajić, V. Papić, D. Djilvesi, M. Karan	
P897 Endoscopic treatment of craniopharyngiomas: Our experience, results and comparison with the open transcranial approach	317
R. Lipina, P. Matoušek, L. Čábalová, T. Krejčí	
P915 The use of 3D virtual endoscopy for the surgical planning in endoscopic spontaneous cerebrospinal fluid leak repair	318
T. Spiriev, M. de Notaris, L. Laleva, D. Di Maria, G. Catapano	
P948 Tuberculum sellae and suprasellar Meningiomas: Microsurgical anatomy, surgical technique and functional outcome in 27 cases. Single surgeon experience	319
A. Lame, R. Alimehmeti, A. Xhumari, E. Dervishi, E. Spaho, E. Enesi, M. Demneri, M. Petrela	
Cavernous sinus	ePoster Area
P882 Quantative measurments of the sphenoid ridge using anatomical and 3D modeling studies and its relevance to the MacCarty and Sphenoid ridge keyholes	320
T. Spiriev, L. Poulsgaard, K. Fugleholm	

Petrous bone Lesions	ePoster Area
P22 The endoscopic transventricular approach for the surgical management of ecchordosis physaliphora S.D. Adib, M.U. Schuhmann	321
P82 Three-dimensional CT reconstruction study of the endoscopic endonasal approach of the pterygopalatine fossa J. Yong, B. Zhiqiang, T. Baohong	322
P492 Functional outcome of facial nerve in surgery for vestibular schwannomas: To what extent is postoperative facial palsy tolerable? H.J. Seol, S.H. Lee, K. Park, J.-I. Lee, D.-H. Nam, D.-S. Kong, Y.-S. Cho	323
P688 Suboccipital-facial anastomosis as a proposition of the new facial nerve repair technique – an anatomical study K. Krystkiewicz, T. Wojciechowski, A. Drożdż, T. Skadorwa, B.M. Cizek	324
P860 Ethmoid-spheno-petro-clival chondroblastoma and prepontine abscess: Case report G. Coloma, P. Avendaño, R. Diaz-Romero, M. Knezevic, A. Junco, G. Coloma-Rodriguez	325
P928 Keyhole surgical approach to left large petroclival meningioma with technological refinement in microsurgical operating V. Konofaou, G. Liberti, T. Fukushima	326
Craneo cervical Junction	ePoster Area
P145 Endoscopic contralateral transmaxillary approach to the clivus and the hypoglossal canal E. Pamiás-Portalatin, J. Rincon-Torroella, T. Vivas-Buitrago, K.O. Boahene, A. Quiñones-Hinojosa	327
P340 Modelized skull base tumor pathology for fresh cadaver exercises A. Csókay, P. Forró	328
P699 Surgical experience of dorsal cervicomedullary solid hemangioblastomas J.-H. Hwang, J. Park, S.-K. Hwang	329
P868 Foramen magnum meningioma with Occipito-C1-2 instability S.G. Lee, I.Y. Shin	330
P881 Single stage surgical treatment of a patient with cranial chondroid chordoma using combined transoral, far-lateral approaches and occipitospinodesis. Case report N.S. Gabrovsky, N.V. Velinov, N.M. Hristov, S.N. Gabrovsky	331
P934 Superficial siderosis caused by a fourth ventricle hemorrhagic ependymoma mimicking a cavernoma E. Espinosa, R. Carrasco, J. Sanmillán, H. Pian	332
P1012 Posterolateral surgical approach to the ventral tumors cervico-occipital region N.N. Stojanovic, R. Mitic, A. Kostic, A. Igic	333

Hydrocephalus	ePoster Area
P66 Newborns hydrocephalus treatment option S.A. Zinchenko, O.V. Volkodav	334
P67 Newborns intracerebral hemorrhages treatment option O.V. Volkodav, S.A. Zinchenko	335
P149 Clinical factors associated with external ventricular drainage related complications: Retrospective analysis J. Plata Bello, L. Flórez Restrepo, B.M. Espinosa Sánchez, R. López García, V. García Marín, V. Rocha Patzi, V. Hernández-Hernández, A. Dóniz	336
P258 Acute MR examination in hydrocephalic pediatric patients with programmable drainage system E. Brichtova, J. Senkyrik	337
P377 Cavum septum pellucidum: A novel endoscopic approach to the posterior third ventricle H. Asif, N. Jayakumar, P. Heppner	338
P385 Significant rate improvement of adequate free-hand proximal catheter placement by drawing individualized radioanatomical coordinates of the entry point and trajectory planes in ventriculoperitoneal shunt surgery J. Spitaels, M. Bruneau	339
P412 Endoscopic third ventriculostomy in patients with a small prepontine distance W.A. Azab	340
P460 Mielomeningocele – Operative treatment and prevention of tethered cord syndrome A. Cekov, S. Kondoff, C. Tzekov, K. Minkin, J. Vasilev, N. Alioski	341
P551 YouTube usefulness in learning how to insert an EVD A. Bisson, G. Zilani, P. Leach, M. Zaben	342
P619 From childhood to adolescence: Vulnerable period in the follow up of tuberous sclerosis P. Barrio Fernández, D. Santamarta Gómez, J. Pérez Suárez	343
P717 The assessment of usefulness phase contrast MRI in differential diagnosis of communicating hydrocephalus in children E.S. Nowosławska, D. Gwizdała, D. Barańska, P. Grzelak, M. Podgórski, K. Zakrzewski, W. Mikołajczyk-Wieczorek, B. Polis, J. Krawczyk, W. Szymański, A. Kogut, M. Stasiotek, D. Sokotowska, L. Polis	344
P742 Migration of distal ventriculoperitoneal shunt catheter into the abdominal wall: A case report and review of the literature H.-S. Koh, H.-J. Kwon	345
P863 Successful treatment of low pressure hydrocephalus associated with arachnoid cyst overdrainage R. Diaz-Romero, G. Coloma, P. Avendaño	346

P891 Simple and reliable method of distal catheter elongation of ventriculo-peritoneal shunt in a pediatric hydrocephalus patient	347
N. Alioski, M. Zaharinov, N. Gabrovsky, M. Laleva, N. Velinov, S. Gabrovsky	
P980 Are arachnoid cysts asymptomatic? A population-based study on prevalence and symptoms of arachnoid cysts in the elderly	348
K. Rabiei, D. Jaraj, T. Marlow, C. Jensen, I. Skoog, C. Wikkelsö	
P984 The Incidence of epilepsy in children with hydrocephalus	349
A. Kogut, E. Nowostawska, W. Mikołajczyk-Wieczorek, L. Polis	
P1049 Hydrocephalus and social media: A combined content and network analysis of global Twitter data	350
A. Lawson McLean	
P1060 A historically underestimated presenting symptom of pediatric shunt failure: Seizures	351
C. Quinsey, C. Adams, M. Cools, S. Elton	
Craneo cervical malformations	ePoster Area
P418 Non-dysraphic intramedullary cervical-thoracic lipoma in infant with intracranial extension	352
C. Fanizzi, E. Pirola, M. Minichiello, I. Vetrano, M. Locatelli, P. Rampini	
P773 Posterior fossa abscess secondary to dermal sinus associated with dermal cyst in a children: A case report and literature review	353
M. Blagia, P. Cascardi, G. Cirrottola, V. Blè, A. De Tommasi	
P963 Unilateral hypertrophic occipital condyle in a patient with Wildervanck syndrome: Case report	354
J. Pérez, E. Espinosa, B. Pascual, P. Barrio, J. Hinojosa	
Invasive Monitoring and ROSA	ePoster Area
P656 The uncus recess: An intraoperative landmark for sufficient amygdala resection	355
E. Seoane, A. Rhoton	
Neural networks	ePoster Area
P157 An evolutionary approach to febrile seizures and thermoregulation	356
A. Kunz, A. Csokay	

Trigeminal neuralgia	ePoster Area
P243 Using diffuse tensor image (DTI) metrics as a potential predictor of the effective response in the patients with Trigeminal Neuralgia after radiofrequency thermorhizotomy W.-C. Huang, S.-T. Chen, Y.-H. Tsai, J.-T. Yang	357
P345 Microvascular decompression for the refractory trigeminal neuralgia after Gamma knife radiosurgery M. Takanashi	358
P630 Vagus neuralgia caused deep ear pain treated with microvascular decompression: Case illustration with cadaveric correlation K. Watanabe, T. Fukushima, S. Tubbs, S. Froelich	359
P746 Trigeminal Neuralgia – Microvascular decompression surgical experience of 22 years from the Neurosurgical Department of HUC-CHUC, Portugal P. Ribeiro da Cunha, P. Ferreira, G. Costa, M. Rito, F. Belo, R. Pereira, F. Gomes	360
P862 Microvascular decompression for trigeminal neuralgia in patients older than 70 years: Efficacy and safety considerations F. Ruiz Juretschke	361
P929 Comparison of long-term quality of life after microvascular decompression and percutaneous retrogasserian glycerol rhizotomy T. Asser, A. Avi, A. Vetkas, A. Asser, M. Braschinsky	362
P953 Microvascular decompression for trigeminal neuralgia caused by verteobasilar dolichoectasia F. Ruiz Juretschke	363
Pain	ePoster Area
P86 Chronic pain due to spinal dural arteriovenous fistulae during follow-up T. Sasamori, K. Hida, T. Osanai, S. Yano, T. Seki, K. Houkin	364
P245 Cerebellopontine angle lipoma causing a glossopharyngeal Neuralgia Y.H. Ahn	365
P946 Late referral adult tethered cord patients due to neglected lumbosacral myelomeningocele S.Ç. Önal, Y. Akyuva, Ö. Tarim, T. Ateş, G. Reşitoğlu	366
Psycho-surgery	ePoster Area
P34 How does vagus nerve stimulation improve Alzheimer's disease? A. Kumaria, C. Tolias	367

Brachial plexus	ePoster Area
P290 Surgical outcome of single-portal endoscopic carpal tunnel release using a forward-facing knife in 1,000 consecutive hands S.-H. Park, D.-S. Park	368
P444 Retractorendoscopic vs. Open carpal tunnel release: A prospective randomized study F.P. Schwarm, M. Boroumand, K. Graf, M. Reinges, K.G. Krishnan, E. Uhl, M.A. Kolodziej	369
P610 Thoracic outlet syndrome – a case seria report of nine patients D. Stimac, D. Ledic, D. Planinic, B. Kristek	370
P830 Case Presentation: The optimal neurosurgical management of a NF-1 associated malignant peripheral nerve sheath tumor of the brachial plexus J.F. Hamilton, J.V. Boddu, F. Wodajo	371
Acoustic neurinoma	ePoster Area
P289 Repeated gamma knife surgery for vestibular schwannomas S. Lonneville, D. Carine, C. Renier, D. Devriendt, N. Massager	372
Outcome measurements	ePoster Area
P40 11C-Methionine positron emission tomography for temozolomide treatment follow-up of malignant glioma patients N. Silva Baticam, O. De Witte, N. Sadeghi, S. Goldman, F. Lefranc	373
P146 Quantitative analysis of transcallosal transchoroidal and transcallosal transforniceal transchoroidal approaches to the third ventricle – A human cadaver study J.L. Vitorino Araujo, E.G. Figueiredo, J.C.E. Veiga, W.H. Tzu, A.F. Andrade, M.J. Teixeira, J.P. Otoch, M.C. Preul, R.F. Spetzler	374
P147 Qualitative analysis of transcallosal transchoroidal and transcallosal transforniceal transchoroidal approaches to the third ventricle – A human cadaver study J.L. Vitorino Araujo, E.G. Figueiredo, J.C.E. Veiga, W.H. Tzu, A.F. Andrade, M.J. Teixeira, J.P. Otoch, A.L. Rhoton, M.C. Preul, R.F. Spetzler	375
P151 Subarachnoid Hemorrhage and visuospatial/visuoperceptive impairment: Disruption of the mirror neuron system J. Plata Bello, S. Acosta-López, C. Modroño, Y. Pérez-Martín, V. García Marín, F. Marcano, J.L. González-Mora	376
P212 Biomechanics of short segment pedicle instrumentation in conjunction with kyphoplasty for the treatment of spinal burst fractures N. Brandolini, J. Timothy, N. Kapur, R.M. Hall	377
P217 The effect of day of surgery and rehabilitation utilization on hospital length of stay in patients undergoing elective meningioma resection C.A. Sarkiss, J. Lee, A. Yao, J.A. Papin, E.K. Oermann, E.L. Gordon, K.D. Post, J.B. Bederson, R.K. Shrivastava	378

P263 Role of monitoring of serum phenytoin levels in peri operative period in supratentorial intra dural surgery H. Bansal, A. Chaudhary	379
P276 The relationship between brain activity in the left and right hemisphere and the language lateralization index as determined with functional MRI G.-J. Rutten, N. Ramsey, M. Jansma	380
P295 CT perfusion and CT angiography in the acute stage in patients with traumatic intracranial lesions: Usefulness for early assessment and further management C. Yoshimura, I. Mayuko, T. Maegawa, A. Kikuchi, Y. Takahashi, S. Yokosako, M. Hirasawa, S. Hagiwara, A. Sasahara, S. Tani, H. Kasuya	381
P303 Case-control study of patients at risk of internal complications after elective craniotomy K.-M. Schebesch, J. Anthofer, F. Zeman, M. Wester, A. Brawanski	382
P348 Our experience of surgical treatment of arachnoid cysts in the brain A. Lutsko, Y. Shan'ko, O. Govrushko	383
P354 Anaplastic pilocytic astrocytoma in adults: A distinct tumor entity? M. Fiechter, E. Hewer, U. Knecht, R. Wiest, J. Beck, A. Raabe, M.F. Oertel	384
P363 Translational research in neurosurgery, a contemporary approach R. Ramos-Zúñiga	385
P367 Academic productivity of neurosurgery residents: An analysis and ranking based on research publications C.A. Sarkiss, K.J. Riley, C.M. Hernandez, J. Lee, E.K. Oermann, R.K. Shrivastava	386
P371 Use of APACHE II and SAPS II to predict mortality for hemorrhagic and ischemic stroke patients B.H. Moon, K.S. Jang	387
P372 Association Factors for CT angiography spot sign and hematoma growth in Korean patients with acute spontaneous intracerebral hemorrhage: A single-center cohort study B.H. Moon, K.S. Jang, S.K. Park	388
P388 GFAP and UCH-L1 are promising outcome predictors in traumatic brain injury J.P. Posti, R.S.K. Takala, H. Runtti, V. Newcombe, J. Outtrim, A.J. Katila, J. Frantzén, H. Ala-Seppälä, J.P. Coles, M.I. Hossain, A. Kyllönen, H.-R. Maanpää, J. Tallus, P.J. Huthcinson, M. van Gils, D.K. Menon, O. Tenovuo	389
P399 Functional outcomes of surgically treated and conservatively managed unruptured intracranial aneurysms: A prospective study of cognitive abilities related to driving J.M. O'Donnell, M.K. Morgan, G. Savage, A.C. Bundy	390
P402 Prediction of postoperative functional level after brain tumour surgery L.M. Sagberg, C. Drewes, A.S. Jakola, O. Solheim	391

P415 Hyperbaric oxygen therapy in spontaneous brain abscess patients; a population-based comparative cohort study	392
J. Bartek Jr., A.S. Jakola, S. Skyрман, P. Forander, P. Alpkvist, G. Schechtmann, M. Glimáker, F. Lind, T. Mathiesen	
P432 Cabergoline induces autophagic pituitary tumor cell death by blocking autophagic flux	393
S.J. Lin, Z.G. Leng, Y.H. Guo, W.G. Zhao, Z.B. Wu	
P443 Changing profile of intracranial abscesses in a Middle-Eastern country	394
R. Kariyattil	
P459 Preliminary results of the Golden hour study – Part II: Multi-dimensional outcomes of traumatic brain injury in comparison with orthopaedic controls	395
M.X. Wang, Z. Su, D.J. Davies, D. Hacker, R. Jennings, A. Clarkson, N. Crombie, J. Mitchell, M. Midwinter, L. Hill, A. Logan, A. Belli, NIHR Surgical Reconstruction and Microbiology Research Centre	
P461 Intraorbital meningiomas	396
C. Tzekov, K. Romanski, A. Cekov, S. Kondoff, T. Spiriev, L. Laleva, V. Pelinkov	
P462 The tethering effect in Lipomielomeningocele	397
A. Cekov, C. Tzekov, S. Kondoff, H. Kostadinova, E. Naidenov, N. Gergelchev	
P464 SPIOs-labeled PBCA-BDNF complex for tracking and neuronal differentiation of iPSCs	398
J.-T. Yang, W.C. Cheng, M.H. Lee, M. Lin, W.H. Yang, C.H. Lin, K.T. Chen, W.C. Huang, B.R. Tsai, Y.-C. Huang	
P483 In vitro evaluation of blood-brain barrier permeability of induced pluripotent stem cells/magnetic nanoparticle composite with or without ischemic/hypoxic injury	399
W.-C. Cheng, M.H. Lee, Y.-C. Huang, M. Lin, W.H. Yang, C.H. Lin, K.T. Chen, W.C. Huang, B.R. Tsai, J.-T. Yang	
P507 Preliminary results of the Golden hour study – Part I: Potential ultra-early biomarkers of outcome following traumatic brain injury and extracranial trauma	400
Z. Su, D.J. Davies, J. Hazeldine, M.X. Wang, D. Hacker, A. Clarkson, N. Crombie, V. Di Pietro, M. Midwinter, A. Logan, J. Lord, A. Belli, NIHR Surgical Reconstruction and Microbiology Research Centre	
P519 Traumatic brain injury – relating mental health symptoms to patient-reported outcomes at first outpatient follow-up	401
S.A. Evans, Z. Su, D.J. Davies, D. Hacker, A. Belli	
P552 Is routine CT scan necessary after the removal of benign brain tumor?	402
I. Ben Zvi, G. Rubin, Z.H. Rappaport	
P564 A novel tool for Intra-operative wrist rigidity evaluation during deep brain stimulation using inertial sensors	403
P. Costa, C. Chamadoira, M.J. Rosas, R. Vaz, J.P. Cunha	
P576 Validation of a computational model of a human thoracolumbar spine segment	404
K.S. Duric, J. Rauker, M. Stančić, J. Sorić	

P594 Resective focal epilepsy surgery – has selection of candidates changed? A systematic review	405
C.-S. Kwon, J. Tellez-Zenteno, A. Metcalfe, L. Hernandez-Ronquillo, W. Hader, S. Wiebe, N. Jette	
P618 Minimally invasive combined approaches and open combined approaches for skull base lesions	406
J. Rincon-Torroella, M. Albathi, A. Quiñones-Hinojosa, K.O. Boahene	
P678 The results of neurosurgical treatment of patients with extra-intracranial tumors	407
I.S. Blumenau, G.I. Kovalev, I.V. Pospeev, D.A. Volkov, G.G. Muzlaev	
P693 Evaluation of cranio-vertebral anomalies through an instability index: Decision making and functional outcome	408
N. Samprón, S. Torres, J. Undabeitia, E. Urculo	
P716 Intraoperative neurophysiological monitoring favoring maximal resection of intramedullary tumors	409
K. Vlachos, A. Karagianni, I. Mavridis, C. Mantas, K. Adamos, M. Pantazi, K. Papadopoulos	
P720 Diffusion Tensor Imaging-based assessment of chronic compression neuropathy treated with adipose-derived stem cells	410
L. Sottaz, S. Madduri, B. Stieltjes, S. Schären, D. Schaefer, D. Kalbermatten	
P738 Analysis of time utilization in elective neurosurgery operating theatres to improve efficiency and performance	411
A. Baig, I. Bhatti, M. Zaben	
P751 Audit of the reasons for cancellation of elective neurosurgical operations	412
F. Sharouf, V. Moosajee, S. Plummer, M. Zaben	
P800 The number and newly appeared hemosiderin spots highly predicts recurrence of perforator-related stroke	413
S. Hori, M. Kubo, T. Shibata, E. Hori, S. Okamoto, T. Hayashi, Y. Horie, S. Kuroda	
P820 Emergency neurosurgical intervention in critically ill patients: Patient demographics and audit of anaesthesia practice at Cork University Hospital, Ireland (June 2012 – December 2013)	414
A. O'Loughlin, A.M. Leo, C. Lim, P. Mahon	
P842 Clinical evaluation of intracranial pressure and brain oxygenation monitoring in brain trauma	415
P. Zogopoulos, P.G. Papanikolaou, P. Kokkalis, V. Xenaki, M. Fratzoglou, T.S. Paleologos, E. Chatzidakis	
P843 Correlation between intracranial pressure and brain tissue oxygen values in head trauma	416
V. Xenaki, P.G. Papanikolaou, K. Stavridi, M. Sklavounou, A. Leventis, P. Kokkalis, T.S. Paleologos	
P896 Enhancement of temozolomide effect with atorvastatin and pioglitazone on malignant glioma	417
Ö.C. Yildiz, J.H. Tapia Pérez, E. Kirches, C. Mawrin, T. Schneider	

P931 Cognitive improvement in normal pressure hydrocephalus associates with huge meningioma by ventriculo-atrial shunt in elderly patients: Report of three cases	418
K. Kato, K. Takagi	
P949 A biomarker Panel to rule-out CT-Scan lesions in mild traumatic brain injury	419
L. Lagerstedt, J.J. Egea-Guerrero, J. Montaner, N. Turck, E. Andereggen, N. Tiberti, A. Bulla, L. Rinaldi, K. Schaller, A. El Rahal, A. Sarrafzadeh, J.-C. Sanchez	
P966 The teaching of neurosurgery in UK medical schools: What are the students telling us?	420
C. Findlay, Y. Skarparis, A.K. Demetriades	
P989 Clinical outcomes and prognostic factors of patients with aneurysmal subarachnoid hemorrhage	421
B. Kapustka, M. Ostry, Z. Ślosarek, P. Chodakowski, P. Bażowski, J. Baron, S. Kwiek	
P992 Normal pressure hydrocephalus: Outcome analysis after surgical treatment – A 5-year single center experience	422
D. Forte, L. Cardoso, A. Nabais, P. Branco, J. Monteiro	
P1001 mRS is a vague outcome measure in cranial neurosurgery – A prospective and unselected cohort study	423
E. Reponen, H. Tuominen, J. Hernesniemi, M. Korja	
P1005 The diagnostic relevance between alkaline phosphatase and chiari malformations	424
M. Omeroglu, M.K. Çoban, O. Okay, O. Tanrıverdi, U. Kamaci, B. Bayraktar, U. Kahraman, C. Yolas	
P1013 Surgery for lumbar spinal stenosis in octo- and nonagenarians: A multicenter observational study	425
C. Giannadakis, O. Solheim, A.S. Jakola, T. Nordseth, A.M. Gulati, U.S. Nerland, Ø.P. Nygaard, T.K. Solberg, S. Gulati	
P1016 Quantitative assesment of motor symptoms presented in patients with Parkinson's disease treated with stereotactic deep brain stimulation (DBS) using Motion Capture (MoCap) method	426
B. Kapustka, K. Kubicki, R. Sordyl, A. Matlak, M. Stawarz, M. Boczarska-Jedynak, A. Polański, K. Wojciechowski, A. Przybyszewski, P. Bażowski, S. Kwiek	
P1038 Indirect costs associated to Glioblastoma multiforme. A single institution experience	427
J. Undabeitia, N. Sampron, M. Arrazola, S. Torres-Bayona, E. Urculo	

Ethics**ePoster Area**

P425 Future career perspectives of Neurosurgical residents in Europe – results of a multinational survey	428
M.N. Stienen, D. Netuka, A. Demetriades, F. Ringel, J. Gempt, O.P. Gautschi, D.E. Kuhlen, K. Schaller	
P1019 Increased population density of neurosurgeons associated with decreased risk of death from traffic accidents in Poland	429
B. Kapustka, P. Chodakowski, M. Łączyński, A. Ignatowicz, P. Bażowski, S. Kwiek, I. Jakutowicz	



**Index of
ePoster Authors**

Index of ePoster Authors

The names of all ePoster Authors of the EANS 2015 Annual Meeting are listed in alphabetical order in this index.

The index number indicated next to each name coincides with the numbers in the ePoster Section of the Final Programme where poster title and number can also be found.

The index number in the ePoster Section is listed in sequential order and does not represent a page number.

Name	ePoster №	Name	ePoster №	Name	ePoster №
A					
Abe, J.	127	Awa, R.	62	Bervini, D.	1
Acosta-López, S.	376	Ayrapetyan, A.	22	Bette, S.	213, 224, 225, 252
Adamos, K.	63, 182, 241, 409	Azab, W.A.	340	Bhatti, I.	411
Adams, C.	351	Azinovic, I.	178	Bijlenga, P.	20
Adib, S.D.	299, 321	B			
Ahn, H.Y.	290	Bäbler, S.	287	Bilaj, F.	67
Ahn, J.H.	13	Baig, A.	411	Bishop, J.	288
Ahn, Y.H.	365	Baik, M.W.	75	Bisson, A.	342
Aimone Cat, D.	91	Bakharev, E.	7	Bjornsson, E.T.	292
Aizpurua, M.	257	Balak, N.	177	Blaar, M.	228
Akyuva, Y.	366	Balog, J.	247	Blagia, M.	297, 353
Alamri, A.	69	Balossier, A.	258	Blanco, A.	309
Ala-Seppälä, H.	389	Bansal, H.	379	Blanco, M.	271
Alba, B.	271	Baohong, T.	322	Blanco Ibañez de Opacua, A.	256
Albathi, M.	406	Barańska, D.	344	Blè, V.	353
Alberdi Viñas, J.	89, 104, 122	Barbosa, M.	27	Blond, S.	258
Algin, O.	205	Barcia, J.A.	268	Blumenau, I.S.	47, 48, 50, 407
Alimehmeti, R.	67, 319	Barcia Albácar, J.A.	242	Boahene, K.O.	327, 406
Alioski, N.	36, 341, 347	Baron, J.	41, 42, 421	Boczarska-Jedynak, M.	426
Alpkvist, P.	392	Barrio, J.	354	Boddu, J.V.	112, 156, 371
Al-Sarraj, S.	257	Barrio Fernández, P.	24, 294, 343	Boeckh-Behrens, T.	197, 199, 200, 255
Amarasinghe, S.	293	Barrios, L.	301	Boin, N.G.	99
Ammar, A.	105	Bartek Jr., J.	392	Bolukbasi, F.H.	163, 223, 226, 227
Ammar, A.A.	310	Barth, M.	137, 138	Boroumand, M.	369
Anderegg, E.	419	Bartoli, A.	295	Borse, V.	115
Ando, K.	108, 207	Barzo, P.	315	Bostelmann, R.	137, 138
Andrade, A.F.	374, 375	Barzó, P.	19, 116, 251, 298	Botella, C.	240, 309
Anthofer, J.	382	Baskan, O.	163, 223, 226, 227	Botella-Campos, C.	256
Apostolopoulos, V.	202	Bassi, S.	69, 257	Bouma, G.J.	137, 138
Arai, N.	17	Bauer, J.	213	Bozkurt, I.	205
Arita, K.	28, 62, 78, 262	Bauer, J.S.	193, 194	Bozzi, M.T.	297
Arrazola, M.	427	Baumann, F.	187	Branco, P.	422
Arregui, G.	173	Bautista-Jiménez, C.	244	Brandolini, N.	377
Asif, H.	338	Bavbek, M.	205, 206, 275	Brandsma, D.	235
Aslan, F.	215	Bayoumi, A.B.	311	Braschinsky, M.	362
Assaad, N.	1	Bayraktar, B.	167, 424	Brawanski, A.	220, 382
Asser, A.	362	Bažowski, P.	41, 42, 43, 189, 421, 426, 429	Brichtova, E.	103, 337
Asser, T.	250, 362	Beck, J.	190, 384	Broeks, A.	235
Asyutin, D.	90, 92	Bederson, J.B.	378	Brownrigg-Gleeson	
Ateş, T.	366	Behr, M.	149	Martínez, A.	96
Avecillas Chasín, J.M.	242	Bella, Z.	315	Bruckbauer, F.	142, 265, 266
Avendaño, P.	325, 346	Belli, A.	288, 395, 400, 401	Bruneau, M.	211, 339
Avendaño Altimira, P.	97	Belo, F.	312, 360	Buchmann, N.	153, 218, 225, 252
Averna, M.	245	Benes, V.	281	Bucklen, B.	101, 114
Avi, A.	362	Ben Zvi, I.	402		
Avila-Rebollar, D.	33				

Name	ePoster №	Name	ePoster №	Name	ePoster №		
Budke Neukamp, M. ...	120	Cheng, W.-C. ...	131, 208, 399	D	D'haens, J. ...	185	
Bulbul, E. ...	134	Cherednychenko, N.O. ...	6, 72		d'Orio, P. ...	209	
Bulik, M. ...	270	Cherednychenko, Y.V. ...	5, 6, 72		Dagain, A. ...	277	
Bulla, A. ...	419	Cherkiev, I. ...	90, 92		Dalibaldyan, V. ...	76, 77	
Bulubas, L. ...	214, 216	Cheserem, B. ...	69		Dash'yan, V. ...	22, 76, 77	
Bundy, A.C. ...	390	Chiriac, A. ...	30		Davies, D.J. ...	395, 400, 401	
Burton, K. ...	12	Cho, B.M. ...	13		Davies, D.J.D. ...	288	
Bussarsky, A. ...	254	Cho, T.G. ...	289		Davis, C. ...	12	
Butenschön, V. ...	224, 225	Cho, Y.H. ...	179, 259		Delalle, M. ...	119	
C		Cho, Y.-S. ...	323		Del Bene, M. ...	2, 204, 209	
	Čabalová, L. ...	317	Chodakowski, P. ...		41, 42, 43, 168, 189, 421, 429	Dell'Anna, J. ...	228, 229
	Cai, L. ...	307	Choi, D.-Y. ...		143	Della Puppa, A. ...	55
	Cai, Y. ...	114	Choi, S.A. ...		231	Delmas, J.-M. ...	277
	Çakır, M. ...	167	Chung, D.-S. ...		192	Demetriades, A. ...	428
	Çakır, T. ...	167	Chung, J. ...		8, 80	Demetriades, A.K. ...	420
	Calado Bravo, A. ...	257	Chung, Y.S. ...		16	Demneri, M. ...	319
	Canoz, O. ...	226	Cirrottola, G. ...		353	DenHaese, R. ...	129
	Cancellor Benito, F. ...	120	Ciszek, B.M. ...		26, 324	Den Haese, R. ...	130
	Cardoso, L. ...	422	Clarkson, A. ...		395, 400	de Notaris, M. ...	318
	Carine, D. ...	372	Clusmann, H. ...		228, 229	Depreitere, B. ...	276
	Carrasco, R. ...	301, 332	Çoban, M.K. ...		164, 167, 424	Dervishi, E. ...	319
	Carrasco Moro, R. ...	94	Coburn, M. ...		46	De Smedt, F. ...	260
	Carrasco-Moro, R. ...	244	Coenen, M. ...		235	Desse, N. ...	277
	Carvalho, C.H. ...	110, 111	Colamaria, A. ...		297	Detante, O. ...	82
	Carvalho, M. ...	184, 238, 312	Coles, J.P. ...		389	De Tommasi, A. ...	297, 353
	Casado Pellejero, J. ...	89, 104, 122	Coloma, G. ...		325, 346	Devriendt, D. ...	53, 260, 372
	Casali, C. ...	204, 209	Coloma Rodríguez, G. ...		97	De Witte, O. ...	211, 373
	Cascardi, P. ...	353	Coloma-Rodríguez, G. ...	325	Diaz-Romero, R. ...	325, 346	
	Casey, A. ...	91, 95	Coloma Valverde, G. ...	97	Díaz Romero, R. ...	97	
	Castro-Dufourny, I. ...	301	Conesa, G. ...	132	Di Maria, D. ...	318	
	Castano, G. ...	318	Constantini, S. ...	52	Di Meco, F. ...	2, 204, 209	
	Cekov, A. ...	341, 396, 397	Cools, M. ...	351	Di Pietro, V. ...	400	
	Chamadoira, C. ...	403	Cordella, R. ...	209	Djilvesi, D. ...	186, 316	
	Chandler, C. ...	257	Corn, B.W. ...	52	Doi, T. ...	113, 128, 152	
	Chang, I.B. ...	13	Corniola, M.V. ...	20, 139, 141	Dominguez, C.J. ...	240	
	Chang, J.H. ...	234	Cortes Franco, S. ...	89, 104, 122	Dominguez-Alonso, C.J. ...	256	
Chapman, R. ...	202	Cortet-Rudelli, C. ...	258	Dóniz, A. ...	336		
Charalambous, L. ...	183	Costa, G. ...	27, 88, 184, 312, 360	Drewes, C. ...	264, 391		
Chatzidakis, E. ...	246, 415	Costa, P. ...	403	Drożdż, A. ...	26, 324		
Chau, I. ...	139, 141	Crombie, N. ...	395, 400	Duerinck, J. ...	61, 185, 291		
Chaudhary, A. ...	379	Csokay, A. ...	356	Duits, A. ...	95		
Chen, K.T. ...	398, 399	Csókay, A. ...	328	Dulou, R. ...	277		
Chen, M.W. ...	35	Cunha, J.P. ...	403	Dunlea, O. ...	151		
Chen, S.-T. ...	357	Cunha e Sa, M. ...	38, 170	Duric, K.S. ...	404		
Cheng, I. ...	101	Czabanka, M. ...	203	Dworak, M. ...	189		
Cheng, K.-T. ...	131			Dziak, L.A. ...	72		
Cheng, W.C. ...	398						

Name	ePoster №	Name	ePoster №	Name	ePoster №
E					
Ebihara, A. ...	222	Flatz, W. ...	217	Gezer, B. ...	70
Ebner, F.H. ...	299	Flórez Restrepo, L. ...	336	Giannadakis, C. ...	133, 166, 169, 425
Egea-Guerrero, J.J. ...	419	Forander, P. ...	392	Giannouli, V. ...	273, 274
Ehrlich, G. ...	32, 37	Forró, P. ...	328	Giglhuber, K. ...	193, 198
Elek, P. ...	116	Forte, D. ...	308, 422	Glaser, M. ...	177
Elenwoke, N. ...	89, 104, 122	Fortes, J. ...	51	Gläsker, S. ...	185
Elmaci, I. ...	163, 223, 226, 227	Fouet, M. ...	277	Glimåker, M. ...	392
El Rahal, A. ...	295, 419	Fournier, J.-Y. ...	18	Goldman, S. ...	373
Eltou, S. ...	351	Frantzen, J. ...	389	Gomes, F. ...	360
Enesi, E. ...	67, 319	Fratzoglou, M. ...	415	Gómez de la Riva, A. ...	120
Eom, T.J. ...	210	Freitag, D. ...	232	Gomi, A. ...	263
Epprecht, L. ...	18	Freyschlag, C. ...	49	Goncalves, F.J. ...	240
Eric, I. ...	119	Freyschlag, C.F. ...	196, 253	Gonçalves, V. ...	308
Eser, B. ...	134	Friedman, A.H. ...	183	González-Mora, J.L. ...	376
Eser, O. ...	134, 215	Froelich, S. ...	359	González-Santillana, C.I. ...	271
Espinosa, E. ...	332, 354	Frolov, V. ...	52		
Espinosa Rodríguez, E. ...	180	Frosch, M. ...	311	Gopfert, E. ...	103
Espinosa Rodríguez, E.E. ...	94	Fu, Y. ...	127	Gordon, E.L. ...	378
Espinosa Sánchez, B.M. ...	336	Fugleholm, K. ...	320	Gousias, K. ...	195
		Fujimoto, T. ...	262	Govrushko, O. ...	383
Estrade, L. ...	82	Fujiwara, Y. ...	222	Govrushko, O.S. ...	135
Etminan, N. ...	12	Fukushima, T. ...	326, 359	Gradil, C. ...	69
Evans, S.A. ...	401	Fulop, B. ...	315	Graf, K. ...	369
		Fülöp, B. ...	298	Grigor'eva, E. ...	21, 77
F					
Faiyad, Z. ...	30	G			
Faiz, U. ...	243	Gabrovsky, N. ...	36, 347	Grim, D.C. ...	212
Faizulla, S. ...	59	Gabrovsky, N.S. ...	160, 161, 331	Grin', A. ...	118
Faleck, H.J. ...	12	Gabrovsky, S. ...	36, 347	Groden, C. ...	32
Fan, T. ...	100	Gabrovsky, S.N. ...	160, 161, 331	Grundy, P. ...	202
Fandino, J. ...	137, 138, 287			Grygoruk, S.P. ...	5, 6
Fang, S. ...	236	Gál, G. ...	19	Grzelak, P. ...	344
Fanizzi, C. ...	352	Gallo, P. ...	267	Gulati, A.M. ...	425
Farley, C. ...	101, 114	Gambacciani, C. ...	136	Gulati, M. ...	169
Farmer, S. ...	129, 130	Gandhi, A. ...	129, 130	Gulati, S. ...	133, 166, 169, 425
Fendler, W. ...	233	García-Armengol, R. ...	240	Gulzatyan, A. ...	146
Ferdinandov, D. ...	254	García-Armengol, R. ...	256	Güngör, A. ...	164
Fernández Fernández, J. ...	294	García Filia, I. ...	271	Gunnarsson, E. ...	292
		García Marín, V. ...	336, 376	Guo, Y.H. ...	307, 393
Ferreira, P. ...	312, 360	García Villanueva, M. ...	180	Gurcan, O. ...	205, 206, 275
Ferrolí, P. ...	2	Gautier, C. ...	82	Gurcay, A.G. ...	205, 206, 275
Ferry, C. ...	129, 130	Gautschi, O.P. ...	139, 141, 428	Guseynova, G. ...	77
Fiechter, M. ...	384	Gempt, J. ...	121, 153, 213, 218, 224, 225, 252, 255, 272, 428	Gutiérrez Cierco, J.A. ...	94, 180
Figueiredo, A. ...	308			Gutiérrez González, R. ...	51
Figueiredo, E.G. ...	374, 375	Gergelchev, N. ...	162, 397	Guven, M. ...	134
Findlay, C. ...	420	Gerhardt, J. ...	224, 225, 252	Gwizdata, D. ...	344
Fischer, B. ...	296	Gerszten, P.C. ...	126, 140		

Name	ePoster №	Name	ePoster №	Name	ePoster №
H					
Hacker, D. ...	395, 400, 401	Hill, L. ...	395	Inaduka, M. ...	17
Haddadi, Y. ...	314	Hinojosa, J. ...	354	Ion, G. ...	30
Hader, W. ...	405	Hirabaru, M. ...	28	Irañeta, A.S. ...	308
Hadjieva, M. ...	254	Hirasawa, M. ...	17, 381	Ishiguro, N. ...	108, 123, 207
Haftouras, N. ...	172	Hirayama, T. ...	28	Ishikawa, M. ...	14, 222
Hagiwara, S. ...	17, 381	Hiriev, T.M. ...	146	Ishikawa, Y. ...	123, 207
Haimoto, S. ...	109, 148	Hirota, K. ...	17	Isla, A. ...	84, 85
Hall, R.M. ...	115, 377	Ho, W.K. ...	305	Ito, K. ...	207
Hamilton, J.F. ...	112, 156, 371	Hoffmann, U. ...	142, 265, 266	Ito, S. ...	11, 73
Hamm, B. ...	203	Hofman, M. ...	42	Ito, Z. ...	108, 123, 207
Han, J. ...	35, 65	Höhne, J. ...	220	Itou, S. ...	57
Hanaya, R. ...	62	Höllig, A. ...	46, 228	Iwasaki, M. ...	31
Hanggi, D. ...	12	Holling, M. ...	64, 296	Iwata, T. ...	71
Hara, M. ...	109, 148	Hommerova, J. ...	284	Iwata, Y. ...	98
Hart, M. ...	269	Honegger, J. ...	299		
Hasegawa, Y. ...	123	Hong, S.H. ...	179	J	
Hauck, T. ...	193, 194, 197, 216, 219	Hori, E. ...	413	Jaal, J. ...	250
Hayashi, T. ...	413	Hori, S. ...	413	Jakola, A.S. ...	166, 169, 264, 391, 392, 425
Hazeldine, J. ...	400	Horie, Y. ...	413	Jakutowicz, I. ...	429
Hecht, N. ...	203	Hossain, M.I. ...	389	Jamjoom, A. ...	267
Hedley-Whyte, E.T. ...	311	Hostalot, C. ...	240, 309	Jamróz, T. ...	42
Hegewald, A.A. ...	32, 37	Houkin, K. ...	31, 364	Jancalek, R. ...	270
Heinen, C. ...	3	Hristov, N.M. ...	331	Jang, K.S. ...	387, 388
Heller, G.Z. ...	1	Huang, W.C. ...	398, 399	Jang, S.Y. ...	74
Henon, H. ...	82	Huang, W.-C. ...	131, 357	Jang, W.-Y. ...	176, 304
Heppner, P. ...	338	Huang, Y.-C. ...	398, 399	Jansma, M. ...	380
Herlan, S. ...	299	Huber, T. ...	213, 225, 252	Janß, A. ...	228, 229
Hernandez, C.M. ...	386	Hudson, B. ...	12	Janssen, I. ...	121, 159
Hernandez, R.M. ...	83	Husar, M. ...	103	Jaraj, D. ...	348
Hernández-Clemente, J.C. ...	271	Huthcinson, P.J. ...	389	Jaramillo, M. ...	96
Hernández-Hernández, V. ...	336	Hwang, J.-H. ...	181, 329	Järschke, J. ...	272
Hernandez-Ronquillo, L. ...	405	Hwang, S.-K. ...	329	Jaskólski, J. ...	41
Hernesniemi, J. ...	423			Javadpour, M. ...	313
Herold-Mende, C. ...	249	I		Jayakumar, N. ...	338
Hes, R. ...	137, 138	Ibáñez Plágaro, J. ...	294	Jelača, B. ...	186, 316
Heshmati, P. ...	12	Igic, A. ...	333	Jenkins III, A. ...	99
Hesselmann, V. ...	64	Iglesias-Diez, E. ...	244	Jennings, R. ...	395
Hever, P. ...	69	Ignatowicz, A. ...	429	Jensen, C. ...	348
Hewer, E. ...	384	Iizuka, T. ...	98	Jeon, J.P. ...	16
Hida, K. ...	364	Ikeda, T. ...	11, 57, 73	Jette, N. ...	405
Hida, T. ...	207	Ikegami, M. ...	57, 73	Jeun, S.S. ...	210, 306
Hideghéty, K. ...	251	Ikenaga, M. ...	98	Jiménez Zapata, H.D. ...	94, 180
Higashi, T. ...	62	Ikoda, M. ...	222	Jögi, T. ...	250
Hildebrandt, G. ...	18, 139, 141	Ikuta, K. ...	117, 124	Johnson, M. ...	12
		Iliescu, B. ...	30	Jonash-Kimchi, T. ...	52
		Ilkov, P.L. ...	160	Joo, Y.J. ...	210
		Ille, S. ...	193, 194, 197, 201, 216, 219	Joonsalu, M. ...	250
		Imagama, S. ...	108, 123, 207		

Name	ePoster №	Name	ePoster №	Name	ePoster №
Jorundsson, E. ...	292	Kawabori, M. ...	31	Kogler, J. ...	158
Joswig, H. ...	18, 139, 141	Kawahara, S. ...	127	Kogut, A. ...	344, 349
Joubert, C. ...	277	Kawano, H. ...	28	Koh, H.-S. ...	345
Junco, A. ...	325	Kaykov, A. ...	118	Kokkalis, P. ...	415, 416
Jung, S. ...	176, 304	Kazanci, A. ...	205, 206, 275	Kokkinis, C. ...	93
Jung, T.-Y. ...	176, 304	Kazda, T. ...	270	Kolodziej, M. ...	239
Jungk, C. ...	221, 249	Kerschbaumer, J. ...	49, 196, 253	Kolodziej, M.A. ...	369
Junninen, J. ...	250	Khalil, A. ...	151	Komasaku, S. ...	28
Jurlina, M. ...	300	Khang, S.K. ...	259	Kondoff, S. ...	162, 188, 341, 396, 397
K					
Kaar, G.F. ...	151	Khattar, N. ...	126	Kong, D.-S. ...	323
Kahraman, U. ...	424	Khoshab, A.H. ...	102	Kong, M.H. ...	74
Kahraman, Ü. ...	164	Kibe, A. ...	62, 262	König, S. ...	203
Kajimura, M. ...	14	Kienzler, J.C. ...	137, 138, 287	Konofaou, V. ...	326
Kalbermatten, D. ...	410	Kikkawa, Y. ...	11, 57, 73	Konovalov, N. ...	90, 92
Kalff, R. ...	232	Kikuchi, A. ...	17, 381	Kordonskiy, A. ...	285
Kalinkin, A. ...	22	Kim, C.H. ...	289	Korja, M. ...	44, 45, 423
Kaliyev, A. ...	59	Kim, C.J. ...	179, 259	Korkolopoulou, P. ...	182
Katuža, P. ...	43	Kim, E.H. ...	234	Korolishin, V. ...	90, 92
Kamacı, U. ...	424	Kim, H. ...	75, 79	Korte, W. ...	18
Kamacı, Ü. ...	164, 167	Kim, H.J. ...	60	Koruga, N. ...	39, 119, 147
Kamouni, R. ...	211	Kim, I.-Y. ...	176, 304	Koseki, H. ...	17
Kandasamy, J. ...	267	Kim, J.H. ...	74, 179, 259	Kostadinova, C. ...	188
Kaneko, N. ...	263	Kim, J.T. ...	143	Kostadinova, H. ...	397
Kanemura, T. ...	108	Kim, K.-H. ...	181	Kostic, A. ...	333
Kang, D.S. ...	74	Kim, M.J. ...	80, 283	Kostov, V. ...	254
Kanner, A.A. ...	52	Kim, S.H. ...	234, 234	Kosyrkova, A. ...	90, 92
Kapatsevich, S. ...	54	Kim, S.-H. ...	261	Kothbauer, K. ...	187
Kapinas, A.V. ...	93, 157	Kim, S.-K. ...	231	Kovacevic, M. ...	280
Kaprio, J. ...	44, 45	Kim, S.M. ...	210	Kovalev, G.I. ...	407
Kaptan, H. ...	70	Kim, S.P. ...	74	Krainik, A. ...	82
Kapur, N. ...	115, 377	Kim, S.R. ...	75	Kraus, E. ...	191
Kapustka, B. ...	41, 42, 43, 189, 421, 426, 429	Kim, Y.H. ...	283	Krawczyk, J. ...	344
Kapustka, B.J. ...	168	Kim, Y.J. ...	34	Krejčí, T. ...	317
Karagianni, A. ...	63, 182, 241, 409	Kim, Y.-J. ...	176	Kretschmer, T. ...	3
Karan, M. ...	186, 316	Kim, Y.W. ...	75, 79	Krieg, S. ...	219
Karason, S. ...	292	Kirches, E. ...	417	Krieg, S.M. ...	149, 193, 194, 197, 198, 199, 200, 201, 214, 216
Karavelioğlu, E. ...	215	Kirova, G. ...	36, 162, 188	Krishnan, K.G. ...	369
Kareem, H. ...	293	Kirschning, T. ...	32, 37	Krishna Pillai, M. ...	9
Kariyattil, R. ...	394	Kis, D. ...	251	Kristek, B. ...	119, 370
Kasakura, S. ...	71	Kishida, M. ...	98	Krylov, V. ...	7, 21, 22, 76, 77, 118, 285
Kase, M. ...	250	Kitamura, T. ...	124	Krystkiewicz, K. ...	26, 324
Kasper, E.M. ...	311	Kiwic, G. ...	168	Krzyzanowska, I. ...	255
Kasuya, H. ...	17, 381	Kjartansson, H. ...	292	Kubicki, K. ...	41, 426
Katila, A.J. ...	389	Klassen, P.D. ...	137, 138	Kubo, M. ...	413
Kato, K. ...	418	Kljajić, V. ...	316	Kuhlen, D.E. ...	428
		Klychnikova, E. ...	22	Kumaria, A. ...	367
		Knecht, U. ...	384		
		Knezevic, M. ...	325		
		Kochetkova, O. ...	7		

Name	ePoster №	Name	ePoster №	Name	ePoster №
Kunz, A. ...	356	Lee, W. ...	66	Mahon, P. ...	414
Kuo, Y.-J. ...	208	Leemann, B. ...	295	Maimon, S. ...	52
Kuratsu, J. ...	248	Lefranc, F. ...	373	Maiwald, A. ...	187
Kurita, H. ...	11, 57, 73	Legnani, F. ...	204	Majovsky, M. ...	281
Kuroda, J. ...	248	Legnani, F.G. ...	209	Mak, S.K.D. ...	29
Kuroda, S. ...	413	Lehmsberg, J. ...	142, 153, 158, 265, 266	Makhambetov, Y. ...	59
Kuroi, Y. ...	17	Leng, Z.G. ...	307, 393	Makiuchi, T. ...	62
Kusaka, G. ...	14, 222	Leo, A.M. ...	414	Mangraviti, A. ...	209
Kwiek, S. ...	41, 42, 43, 189, 421, 426, 429	Lepori, P. ...	136	Manilha, R. ...	38, 170
Kwon, C.-S. ...	405	Leung, G.K.K. ...	305	Manrique-Guzman, S. ...	33
Kwon, D.H. ...	259	Leventis, A. ...	416	Mansilla, B. ...	84, 85
Kwon, H.-J. ...	345	Ley Urzaiz, L. ...	94, 180	Mantas, C. ...	63, 182, 241, 409
Kyllönen, A. ...	389	Liberski, P.P. ...	233	Manzano, D. ...	132
L		Liberti, G. ...	326	Marcano, F. ...	376
Łączyński, M. ...	429	Liddle, A. ...	115	Marjanović, M. ...	300
Lafuente, J. ...	132	Lilamani, E. ...	67	Marlow, T. ...	348
Lagerstedt, L. ...	419	Lim, C. ...	414	Marquez Rivas, J. ...	96
Lakiotaki, E. ...	182	Lim, M.-S. ...	151	Márquez-Rivas, J. ...	244
Laleva, L. ...	162, 188, 318, 396	Lin, C.H. ...	398, 399	Marsh, W.R. ...	236
Laleva, M. ...	347	Lin, M. ...	398, 399	Martens, F. ...	137, 138
Laleva, M.L. ...	160, 161	Lin, S.J. ...	307, 393	Martin, J.E. ...	230
Lam, J. ...	305	Lind, F. ...	392	Martinez San Millán, J.S. ...	180
LaMarca, F. ...	101, 114	Lindbohm, J. ...	44, 45	Martini, C. ...	136
Lame, A. ...	67, 319	Lipina, R. ...	317	Martynova, M. ...	90, 92
Lamoca Martín, Á. ...	24	Livraghi, S. ...	87	Masada, N. ...	98
Lange, M. ...	110, 111	Ljungqvist, J.C. ...	278	Masarczyk, W. ...	42
Latusek, T. ...	189	Locatelli, M. ...	352	Mashaly, H. ...	140
Lawson McLean, A. ...	230, 350	Logan, A. ...	395, 400	Masopust, V. ...	281
Lázár, I. ...	19	Lonneville, S. ...	53, 260, 372	Massager, N. ...	53, 260, 372
Lázaro, J. ...	271	Lopez, E. ...	173	Masuda, K. ...	117, 124
Lazo, A. ...	173	López García, R. ...	336	Maté, A. ...	251
Leach, P. ...	342	Lord, J. ...	400	Mateo-Sierra, O. ...	271
Ledic, D. ...	370	Lorente Muñoz, A. ...	89, 104, 122	Matheis, E. ...	101, 114
Lee, E.J. ...	179	Lubicz, B. ...	53	Mathiesen, T. ...	392
Lee, H.J. ...	60, 143, 290, 290	Luk'yanchikov, V. ...	21, 22, 76, 77	Matlak, A. ...	41, 426
Lee, H.K. ...	289	Lutsko, A. ...	383	Matos, D. ...	312
Lee, I.W. ...	60, 290	M		Matoušek, P. ...	317
Lee, J. ...	378, 386	Maanpää, H.-R. ...	389	Matsumura, Y. ...	248
Lee, J.-I. ...	323	Mabuchi, S. ...	31	Mattei, L. ...	204, 209
Lee, K.S. ...	234	Macdonald, R.L. ...	12	Mattos Piaggio, G.D. ...	294
Lee, L. ...	35, 66	Mackerle, Z. ...	103	Maurer, S. ...	193, 194, 197, 198
Lee, M.H. ...	398, 399	MacNally, S. ...	237	Mavridis, I. ...	63, 182, 241, 409
Lee, M.-H. ...	131, 208	Madduri, S. ...	410	Mawrin, C. ...	417
Lee, S.G. ...	330	Maegawa, T. ...	17, 381	Mayuko, I. ...	381
Lee, S.H. ...	323	Mafra, M. ...	308	Mehdian, H. ...	105, 106, 107, 150

Name	ePoster №	Name	ePoster №	Name	ePoster №
Roach, J.R. ...	202	Samprón, N. ...	408	Sen'ko, I. ...	77
Roa Montes de Oca, J.C. ...	96	Sanchez, J.-C. ...	419	Senba, H. ...	124
Robertson, I.J.A. ...	310	Sanchez- Aguilar, M. ...	3	Senkyrik, J. ...	337
Rocha Patzi, V. ...	336	Sanidas, V. ...	172	Seoane, E. ...	25, 355
Rodríguez Berrocal, V. ...	180	Sanmillán, J. ...	332	Seol, H.J. ...	323
Rodríguez-Boto, G. ...	51	Santamarta Gómez, D. ...	24, 343	Serban, D. ...	125
Rodzich, A. ...	54, 282	Santiago, B. ...	38, 170	Serlo, W. ...	286
Roh, T.H. ...	234	Santiago, J. ...	86, 175, 238	Serrano, L. ...	132
Rojas-Medina, L.M. ...	244	Santiago, S. ...	84, 85	Shagal, L.V. ...	47, 48, 50
Rola, R. ...	165	Sanz Cortés, A. ...	178, 268	Shahinyan, G. ...	146
Romanski, K. ...	396	Sari, R. ...	223, 226, 227	Shalumov, A. ...	76
Roncaroli, F. ...	247	Sarkiss, C.A. ...	378, 386	Shan'ko, Y. ...	383
Rosas, M.J. ...	403	Sarrafzadeh, A. ...	419	Shanko, Y. ...	54
Rossetto, M. ...	55	Sarrazin, T. ...	258	Sharma, G.R. ...	10
Rossi Mautone, E. ...	83	Sasahara, A. ...	17, 381	Sharouf, F. ...	412
Rozumenko, A. ...	174	Sasamori, T. ...	364	Shatokhin, T. ...	22
Rozumenko, V. ...	174	Sato, H. ...	127	Shchemelev, A. ...	54, 282
Rroji, A. ...	67	Savage, G. ...	390	Sheen, S.H. ...	16
Rubin, G. ...	402	Sayal, P. ...	91, 95	Shetty, P. ...	303
Rui, M. ...	184	Schaefer, D. ...	410	Shevelev, I. ...	92
Ruiz Juretschke, F. ...	361, 363	Schaller, K. ...	20, 139, 141, 295, 419, 428	Shi, X. ...	4, 15
Runtti, H. ...	389	Schären, S. ...	410	Shibaev, E. ...	118
Russo, V. ...	91	Schatlo, B. ...	20	Shiban, E. ...	142, 158, 159, 265, 266
Rustemi, O. ...	55	Schebesch, K.-M. ...	220, 382	Shiban, Y. ...	142, 265, 266
Rutkowska, E. ...	165	Schechtmann, G. ...	392	Shibata, T. ...	413
Rutkowski, M. ...	165	Scherer, M. ...	221, 249	Shidahara, S. ...	124
Rutten, G.-J. ...	380	Schichor, C. ...	217	Shimohigoshi, W. ...	11, 57, 73
Ryang, Y.-M. ...	121, 153, 218, 224, 225, 272	Schipmann, S. ...	64, 296	Shimokawa, N. ...	127
Rynkowski, M.A. ...	211	Schirmer, L. ...	272	Shin, I.Y. ...	330
S		Schlag, H. ...	93, 157	Shin, M.H. ...	143
Saab, A. ...	51	Schmidt, F.A. ...	149	Short, M. ...	243
Sabih, J. ...	214, 216	Schmidt, T. ...	3	Shpekov, A. ...	59
Sacchetti, A. ...	173	Schmiedek, P. ...	32	Shrivastava, R.K. ...	378, 386
Saceda Gutierrez, J.M. ...	120	Schneider, T. ...	417	Shtaya, A. ...	58
Sadeghi, N. ...	373	Schoovaerts, F. ...	211	Shtraus, N. ...	52
Sagberg, L.M. ...	264, 391	Schöpper, M. ...	296	Silva Baticam, N. ...	373
Saini, M. ...	2, 204, 209	Schramm, J. ...	195	Simão, D.C. ...	87
Saladino, A. ...	204, 209	Schubert, G.A. ...	46	Simon, M. ...	195, 232
Salazar Ascencio, O.A. ...	242	Schucht, P. ...	190	Simsek, N. ...	134
Saldivar Gomez, J. ...	83	Schuhmann, M.U. ...	321	Simsek, S.K. ...	206
Sallabanda, K. ...	178	Schuind, S. ...	211	Skadorwa, T. ...	26, 324
Sallabanda Díaz, K. ...	242	Schwake, M. ...	64, 296	Skarparis, Y. ...	420
Salomaa, V. ...	44, 45	Schwarm, F.P. ...	369	Sklavounou, M. ...	416
Samblás García, J. ...	178	Scienza, R. ...	55	Skoglund, T. ...	278
Sampron, N. ...	427	Seferi, A. ...	67	Skoog, I. ...	348
		Seidel, K. ...	190	Skyrman, S. ...	392
		Seiz-Rosenhagen, M. ...	32, 37	Ślosarek, Z. ...	43, 168, 189, 421
		Seki, T. ...	364	Smeinovich, A.F. ...	135

Name	ePoster №	Name	ePoster №	Name	ePoster №
Smeyanovich, A. ...	54	Stummer, W. ...	64, 296	Tender, G.C. ...	125
Smith, N. ...	257	Su, Z. ...	288, 395, 400, 401	Tenovuo, O. ...	389
Smoll, N.R. ...	139, 141	Suckling, J. ...	269	Teranishi, A. ...	57, 73
Sochurkova, D. ...	103	Suematsu, M. ...	14	ter Laan, M. ...	212
Sokol, D. ...	267	Sugata, S. ...	28, 62, 78	Tessitore, E. ...	155
Sokołowska, D. ...	344	Suh, C.-O. ...	234	Thakur, B. ...	257
Solberg, T.K. ...	166, 169, 425	Sveikata, L. ...	295	Thiel, J. ...	142, 265, 266
Solenkova, A. ...	90	Swearingen, B. ...	311	Thines, L. ...	82
Solheim, O. ...	133, 166, 169, 264, 391, 425	Swiatek, P. ...	311	Thomé, C. ...	49, 137, 138, 196, 253
Sollmann, N. ...	193, 194, 197, 199, 200, 201, 216, 219	Sydorovich, R. ...	282	Thon, N. ...	217
Solodov, A. ...	22	Synowitz, M. ...	203	Tiberti, N. ...	419
Soma, N. ...	222	Syrmos, N. ...	172, 273	Tice, T. ...	12
Song, J.H. ...	13	Syrmos, N. ...	274	Timonin, S. ...	90, 92
Song, K.Y. ...	74	Szymański, W. ...	344	Timothy, J. ...	115, 377
Sönmez, M.A. ...	215			Titova, G. ...	7
Sonnleitner, C. ...	154	T		Tkachev, V.V. ...	47, 48, 50
Sordyl, R. ...	41, 426	Tagawa, Y. ...	98	Toho, T. ...	152
Sorić, J. ...	404	Tahon, F. ...	82	Tokarev, A. ...	21, 76, 77
Sottaz, L. ...	410	Tajitsu, K. ...	28	Tokimura, H. ...	28, 62, 78
Spaho, E. ...	319	Takagi, K. ...	418	Tolias, C. ...	367
Sparrow, O. ...	58	Takahashi, Y. ...	17, 381	Tolias, C.M. ...	69
Spetzler, R.F. ...	374, 375	Takala, R.S.K. ...	389	Tominaga, F. ...	117
Spiriev, T. ...	162, 188, 318, 320, 396	Takanashi, M. ...	358	Tonn, J.-C. ...	217
Spitaels, J. ...	211, 339	Takao, T. ...	128	Tono, O. ...	113, 128, 152
Splavski, B. ...	280	Takashima, H. ...	248	Török, E. ...	121
Stančić, M. ...	404	Takats, Z. ...	247	Torres, S. ...	408
Stasiotek, M. ...	344	Take, Y. ...	11, 73	Torres-Bayona, S. ...	427
Stavridi, K. ...	416	Takeda, R. ...	11, 57, 73	Tóth, T. ...	116, 298
Stawarz, M. ...	426	Tallus, J. ...	389	Touzet, G. ...	258
Steiger, H.J. ...	12	Talypov, A. ...	285	Trojanowski, P. ...	165
Stein, M. ...	239	Tambirajoo, K. ...	313	Trojanowski, T. ...	165
Steinbach, T. ...	232	Tanaka, Y. ...	14, 222	Tsai, B.R. ...	398, 399
Steinberger, J. ...	99	Tani, S. ...	17, 381	Tsai, Y.-H. ...	357
Steinmeier, R. ...	191	Tanigawa, N. ...	197	Tsang, A.C.O. ...	305
Steklacova, A. ...	23	Taniguchi, A. ...	28	Tsang, R.K. ...	305
Stella, A. ...	12	Tanno, Y. ...	71	Tsitko, Y. ...	135
Stepanek, D. ...	284	Tanriverdi, O. ...	164, 167, 424	Tsuchiya, M. ...	28
Stevens, A. ...	288	Tão, H. ...	184	Tsukazaki, Y. ...	127
Stieltjes, B. ...	410	Tapia Pérez, J.H. ...	417	Tubbs, S. ...	359
Stienen, M.N. ...	18, 20, 139, 141, 295, 428	Tarim, Ö. ...	366	Tulleken, C.A. ...	40
Stimac, D. ...	39, 119, 370	Tarukado, K. ...	113, 128, 152	Tuominen, H. ...	423
Štimac, D. ...	147	Tatagiba, M. ...	299	Turck, N. ...	419
Stoffel, M. ...	149, 159	Tavares, S. ...	312	Turkoglu, O.F. ...	205, 206, 275
Stoffel-Wagner, B. ...	46	Tazina, E. ...	22	Turner, M. ...	12
Stojanovic, N.N. ...	333	Teixeira, J.C. ...	87, 144, 145	Tussis, L. ...	193, 199, 200
Stoppe, C. ...	46	Teixeira, M.J. ...	374, 375	Tzekov, C. ...	188, 341, 396, 397
		Teixidor, P. ...	240	Tzu, W.H. ...	374, 375
		Teixidor-Rodríguez, P. ...	256		
		Tellez-Zenteno, J. ...	405		

Name	ePoster №	Name	ePoster №	Name	ePoster №
U					
Ueda, T.	78	Vloeberghs, M.	105	Yamaguti, Y.	11
Ueda, Y.	98	Volkodav, O.V.	334, 335	Yamahata, H.	28
Uhl, E.	239, 369	Volkov, D.A.	407	Yandamuri, S.	101
Umansky, D.	52	von Deimling, A.	249	Yang, J.H.	60, 290
Undabeitia, J.	408, 427	von Pein, H.	177	Yang, J.-T.	131, 208, 357, 398, 399
Unterberg, A.	221, 249	Vörös, E.	19	Yang, S.Y.	231
Urculo, E.	408, 427	Vuleković, P.	186, 316	Yang, W.H.	398, 399
Uriel Lavin, R.	294	Vuorinen, V.	286	Yano, S.	364
Usachev, A.A.	48, 50	W			
Uzunov, K.	36	Wagener, C.	130	Yao, A.	378
Uzunov, K.A.	161	Wakabayashi, T.	109, 148	Yasunaga, M.	248
V					
Vachev, E.	162	Walter, J.	232	Yatsushiro, K.	262
Vajkoczy, P.	137, 138, 203	Wang, D.	230	Ydraios, I.	246
Valderrábano, S.	84, 85	Wang, M.X.	395, 400	Yélamos Agua, C.	178
Vallittu, P.K.	286	Watanabe, E.	263	Yerkin, M.	59
Van de Belt, T.H.	212	Watanabe, K.	359	Yi, J.S.	290
Van Der Veken, J.	61, 291	Watfa, K.	116, 298	Yildiz, Ö.C.	417
van der Zwan, A.	40	Weber, C.	133, 166, 169	Ymaguchi, Y.	73
van Doormaal, T.	40	Weidmann, C.	202	Yokosako, S.	17, 381
van Gils, M.	389	Weinert, D.M.	191	Yolas, C.	424
Van Tussenbroek, F.	61	Weischer, C.	239	Yolaş, Ç.	167
Van Velthoven, V.	61, 185, 291	Wenz, H.	32	Yong, J.	322
Vaqas, B.	243, 247	Wesseling, J.	235	Yoo, C.J.	283
Vardja, M.	250	Wesseling, P.	235	Yoo, D.-S.	68, 279
Varga, Á.	251	Wester, M.	382	Yoon, W.-S.	192
Vasilev, J.	341	Westerga, J.	235	Yoshimura, C.	17, 381
Vassilev, C.	254	Wiebe, S.	405	Yoshioka, K.	71
Vaz, R.	403	Wiest, R.	384	Yunoue, S.	78
Vazan, M.	154	Wikkelsö, C.	348	Z	
Veiga, J.C.E.	374, 375	Wodajo, F.	371	Zaben, M.	342, 411, 412
Velinov, N.	36, 161, 347	Wohlschläger, A.	216	Zaharinov, M.	347
Velinov, N.V.	160, 331	Woitzik, J.	203	Zakelis, R.	287
Venetsanou, K.	241	Wojciechowski, K.	426	Zakirov, B.	90, 92
Verano, I.G.	209	Wojciechowski, T.	26, 324	Zakrzewska, M.	233
Verbaan, D.	235	Woo, J.S.	210	Zakrzewski, K.	233, 344
Vergés, J.	309	Wu, Z.B.	307, 393	Zebian, B.	257
Vetkas, A.	362	X			
Vetrano, I.	352	Xenaki, V.	246, 415, 416	Zeman, F.	382
Vetrano, I.G.	204	Xhumari, A.	67, 319	Zeng, H.	243
Villa Fernandez, J.M.	83	Y			
Villarejo, F.	120	Yakoub, K.	288	Zerhau, P.	103
Vinas Rios, J.M.	3	Yamada, M.	98	Zhao, W.G.	307, 393
Vitorino Araujo, J.L.	374, 375	Yamaguchi, T.	263	Zhiqiang, B.	322
Vivas-Buitrago, T.	327	Yamaguchi, Y.	57	Ziani, L.	314
Vlachos, K.	63, 182, 241, 409	Yamaguro, T.	222	Zielińska, U.	165
				Zilani, G.	342
				Zimmer, C.	198, 201, 213
				Zinchenko, S.A.	334, 335
				Zogopoulos, P.	246, 415
				Zona, G.	245



**Recognition,
Acknowledgements &
Industry Support**

Acknowledgements

EANS wishes to express its gratitude and acknowledges the support of the partners of the EANS 2015 Annual Meeting:

Platinum Partner



Silver Partners



Bronze Partners



Non-Profit Partners




Corporate Symposia

13:55 – 14:55 Monday, October 19 Jardín

PERSPECTIVES IN ANEURYSMAL SUBARACHNOID HEMORRHAGE

Chair: R. Loch Macdonald

Symposium organised by  **EDGE**
Therapeutics, Inc.

Evidence-Based Standard of Care and an Overview of Current Clinical Research in SAH and DCI Challenges in Conducting Modern clinical Trials in SAH: The NEWTON Experience
Prof Claudius Thomé (Innsbruck, Austria)

Challenges in Conducting Modern Clinical. Trials in SAH: The NEWTON Experience
Prof Daniel Hänggi (Mannheim, Germany)

13:55 – 14:55 Monday, October 19 Hidalgo

NEW MODALITIES OF TREATMENT FOR ICH/IVH AND RELATED NEW CLINICAL TRIALS

Symposium Organised by  **Penumbra** P

Deep Hemorrhage Evacuation: A Game-changing Surgical Approach to a Largely Untreated Condition
Dr Adam Arthur (USA)

Introducing the EPOCH trial, a European randomized trial on the early evacuation of deep brain hematoma using the Apollo system
Dr Jan Regelsberger (Germany)

Introducing the Mr Clean ICH trial, a Dutch randomized trial on surgical management of ICH
Tba

You Are Cordially Invited!

to attend a Luncheon Symposium on Monday, October 19 from
13:55 to 14:55 in the Session Hall Jardin on the Lower Level (Floor 1)
Lunch will be provided

Perspectives in Aneurysmal Subarachnoid Hemorrhage

chaired by:
R. Loch Macdonald, M.D., Ph.D.
Toronto, Canada

Monday, October 19 from 13:55 to 14:55 in the
Session Hall Jardin on the Lower Level (Floor 1)

Presentations:

**1. Evidence-Based Standard of Care and An Overview
of Current Clinical Research in SAH and DCI**

Prof. Dr. med. Claudius Thomé
Innsbruck, Austria

**2. Challenges in Conducting Modern
Clinical Trials in SAH: The NEWTON
Experience**

Prof. Dr. med. Daniel Hänggi
Düsseldorf, Germany


<http://www.edgetherapeutics.com>



13:55 – 14:55 **Monday, October 19** **Castilla**

ULTRASONIC BONE CUTTING IN MINIMALLY INVASIVE SPINE SURGERY

Chair: Dr Jean Destandau (Bordeaux, France)

Symposium organised by  **Söring**
INNOVATIVE SURGERY

Presentation of clinical data and experience for Söring's new ultrasonic bone dissector in endoscopic spine surgery. Discussion of clinical benefits and suitable application areas.


Tips and tricks for the usage of a mind changing surgical technique.
Dr Shrinivas Rohidas (Kolhapur, India)

19:05 – 20:05 **Monday, October 19** **Castilla**

Drinks and finger food will be provided.

GROWING IMPORTANCE OF BRAIN RADIOSURGERY

Chair: Dr Kita Sallabanda, Instituto Madrilenio de Oncologia (IMO) and the Hospital Clínico San Carlos (Madrid, Spain)

Symposium organised by  **ELEKTA**

Radiosurgery for Malignant Tumors

Prof Bodo Lippitz, Bupa Cromwell Hospital (London, UK)

Radiosurgery for Functional indications


Dr Roberto Martinez Alvarez. Hospital Ruber Internacional. Médico-Neurocirujano (Madrid, Spain)

Radiosurgery for skull base lesions

Prof Marc Levivier de l'Université de Lausanne(CHUV) (Lausanne, Switzerland)

13:55 – 14:55 Tuesday, October 20 Castilla

DURAL REPAIR CHALLENGES

Symposium organised by  **INTEGRA**
LIMIT UNCERTAINTY

- 25' **Regenerating the Dura** (Simon Archibald)
- DuraGen[®] extracellular matrix technology for dural regeneration.
 - Review of literature for skull convexity, spine and posterior fossa.
 - Matrix DuraGen[®] Secure: a new addition to the DuraGen[®] family of duraplasty materials.
- 20' **Early experience with matrix DuraGen[®] Secure** (Neil Kitchen)
- Cases presentation and results.
 - Surgical Technique: Tips and tricks.
 - Which benefits in which procedures.
- 15' **Discussion**

13:55 – 14:55 Tuesday, October 20 Hidalgo

INTRAOPERATIVE IMAGING IN NEUROSURGERY

Symposium organised by  **BRAINLAB**

Spinal and cranial applications of the mobile intraoperative CT scanner Airo
Prof Peter Vajkoczy (Charité Berlin, Germany)


Navigated Intraoperative Ultrasound: Technics, Results and Limitations
Prof Nikolai Hopf (Stuttgart, Germany)

Intraoperative MRI with integrated navigation
Dr Mike Carter (University of Bristol, UK)

08:00 – 09:00 Wednesday, October 21 Auditorium

MANAGEMENT ON CERVICAL MYELOPATHY

Moderator: John Duff

Symposium organised by  **AOSPINE**
EUROPE

Lecture 1: Avelino Parajon (15min)
Pathophysiology of cervical Myelopathy

Lecture 2: Adrian Casey (15min)
Anterior approaches for the cervical Spine

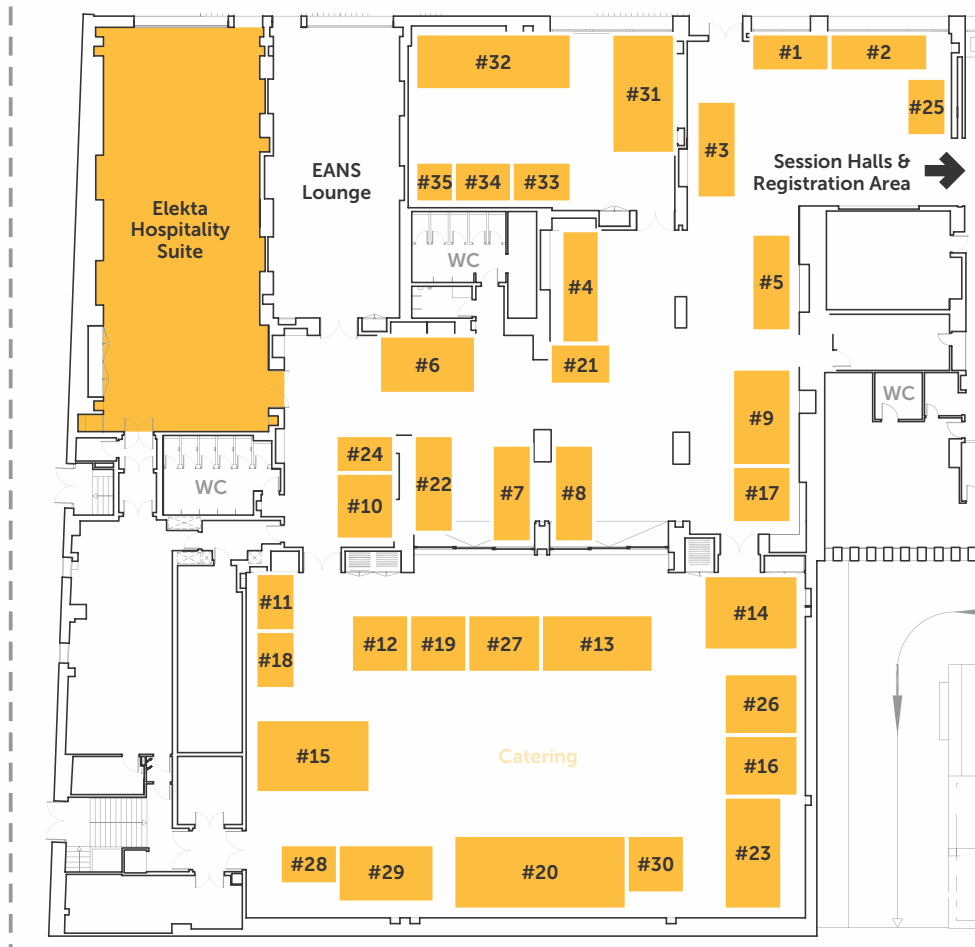
Lecture 3: Jesus Lafuente (15min)
Posterior approaches for the cervical Spine

Discussion with all the faculty members (15min)

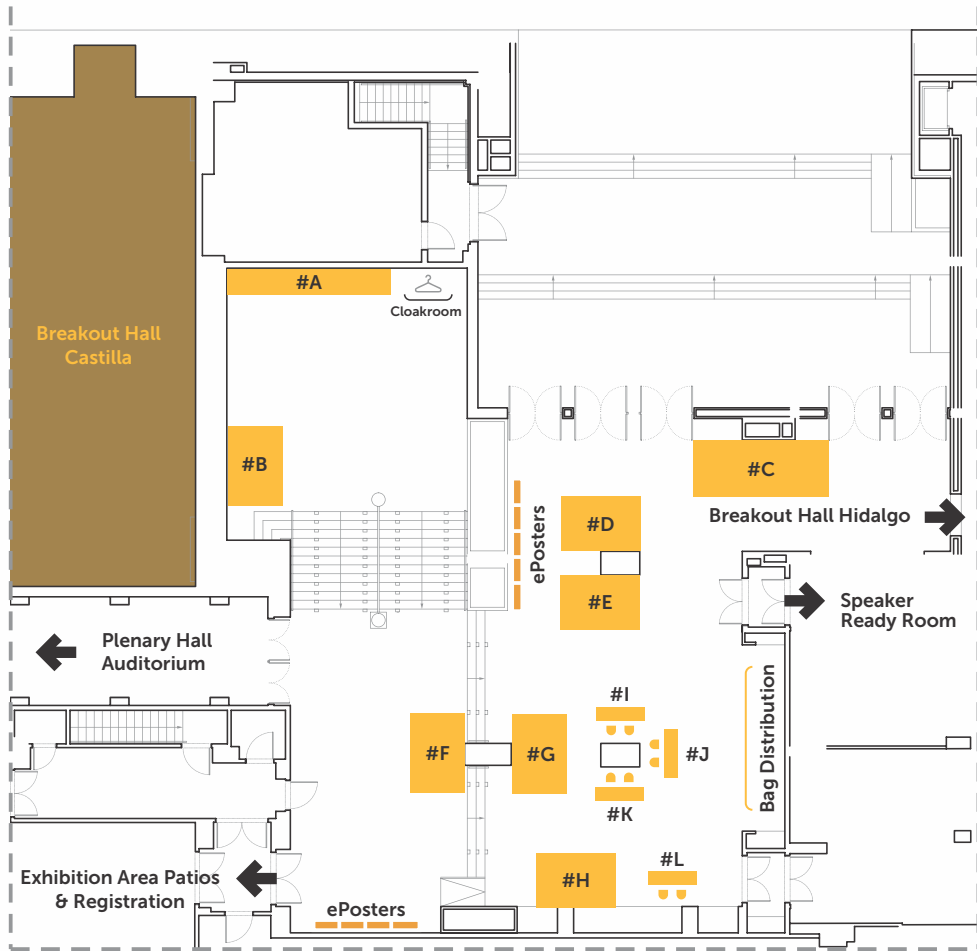
Exhibition Floorplan

Lobby Floor Level 0

Exhibition Area Patios & Catering



Exhibition Area Auditorium & Poster Area



List of Exhibitors

COMPANY	Booth		
Accuray	14	Leica	31
AOSpine	Table J	medac	35
A. W. M. Artworld Medical	18	Medprin Biotech GmbH	26
B. Braun Aesculap	29	Medtech SA	2
Bien-Air Surgery SA	28	Medtronic	27
BK Medical	7	Micromar	5
Brainlab	20	Neuronews	Table K
Cadwell	34	NOVOCURE	25
Carl Zeiss Meditec AG	13	NSK Europe GmbH	17
Codman J&J – DePuy Synthes	9	ntplast s.r.l.	H
EANS	10	Penumbra Europe GmbH	32
EBC	Table L	Premia Spine	1
Edge Therapeutics, Inc	E	pro med instruments GmbH	6
Elekta	15	SOPHYSA	21
ESSFN	Table I	Söring GmbH	3
EUROSPINE	B	Stryker European Operations B.V.	23
Evonos	F	G. Surgiwear Limited	22
Fiagon Telea	C	Sutter Medizintechnik GmbH	19
inomed Medizintechnik GmbH	11	Tissuemed Ltd	24
INSIGHTEC	G	UFSK-International OSYS GmbH	12
INTEGRA	4	Virtual Proteins	33
S. Karger AG	D	Wisepress Medical Bookshop	A
KARL STORZ GmbH & Co. KG	16	Zimmer Biomet CMF	8
KLS Martin Group	30		

Exhibitor and Sponsor Company Profiles

Accuray

Accuray is a radiation oncology company that develops, manufactures and sells precise, innovative tumor treatment solutions that set the standard of care with the aim of helping patients live longer, better lives. The Company's leading-edge technologies deliver the full range of radiation therapy and radiosurgery treatments.



AOSpine

AOSpine International
Stettbachstrasse 6
CH—8600 Dübendorf
info@aospine.org



AOSpine is an international community of spine surgeons generating, distributing, and exchanging knowledge to advance science and the spine care profession through research, education, and community development. With this collaborative approach, AOSpine is advancing spine care worldwide.

A. W. M. Art World Medical Ltd.

17 Dikomou Str, 2054 Stovolos
Nicosia-CYPRUS
Managing Director – Katerina Katsamba
Tel.: +357 22511028
Fax: +357 22511029
www.artworldmedical.com
info@artworldmedical.com



ArtworldMedical was established in 2010 with a vision to design, develop & manufacture state-of-the-art new concept solutions for cervical and lumbar spine. Our product range consists of:

- NEOphytos[®], an innovative one-piece artificial cervical disc, for Total Disc Replacement.
- NEOdesmos[®], an expandable stand-alone PLIF cage for dynamic fusion.
- NEOdessis[®], a low profile, silver coated antibacterial pedicle screw system.
- NEOu[®], a silver coated antibacterial Interspinous device.
- NEOostosis[®], a Peek cervical cage either used stand alone or in combination with "S" shaped titanium plate for powerful fusion.
- NEOdesmos peek[®], a Peek PLIF cage.

B. Braun Sharing Expertise

B. Braun Aesculap
Am Aesculap Platz
78532 Tuttlingen, Germany
+49 7461 95 0
+49 7461 95 2600
www.bbraun.com
information@aesculap.de



Through exchanging knowledge with its customers, B. Braun helps to improve treatments and working procedures in hospitals and medical practices and to increase the safety of patients, doctors and nursing staff.

B. Braun offers a wide range of products in the field of continence care, urological specialties, wound closure and sutures and process-oriented advice Aesculap – a B. Braun company is pursuing a goal: to improve therapies and make processes more efficient.

Bien-Air Surgery SA

Rue de l'Ouest 2b
2340 Le Noirmont
Switzerland
Tel: +41 32 344 64 40
Fax: +41 32 344 64 45
Email: surgery@bienair.com
www.bienairsurgery.com



Creator of excellence since 1959, the Swiss company Bien-Air develops, produces and markets high quality drills for neuro, spine and ENT surgery.

Developed for and by the most demanding surgeons, our micromotors and handpieces combine state-of-the-art performance and constant innovation.

Fitting perfectly with the Swiss-Made tradition, the precision and extreme reliability of our products have made us won global recognition and a market presence in more than 70 countries.

BK Ultrasound

Mileparken 34
2730 Herlev
Denmark
www.bkultrasound.com



For the past 30 years, BK Ultrasound has been devoted to the development and production of high quality diagnostic ultrasound systems with a range of offerings that meet the challenges of clinicians today. The company's suite of products include the premium performance Flex Focus 800 ultrasound system which incorporates Quantum Plus Technology, and combined with a broad range of specialized, sterilizable transducers, provides the most comprehensive ultrasound solution for surgeons. The Flex Focus 800 is lightweight and mobile, with a small footprint, and has a full backup power solution that gives up to four hours of plug-free imaging.

Brainlab Corporate Boilerplate

www.brainlab.com
<https://www.facebook.com/brainlabcorporate>
<https://www.linkedin.com/company/brainlab>
<https://twitter.com/Brainlab>
<https://www.youtube.com/user/BrainlabCorporate>



Brainlab, headquartered in Munich, develops, manufactures and markets software-driven medical technology, enabling access to advanced, less invasive patient treatments.

Core products center on information-guided surgery, radiosurgery, precision radiation therapy, digital operating room integration, and information and knowledge exchange. Brainlab technology powers treatments in radiosurgery and radiotherapy as well as numerous surgical fields including neurosurgery, orthopedic, ENT, CMF, spine and trauma.

Privately held since its formation in 1989, Brainlab has over 9000 systems installed in about 100 countries. Brainlab employs over 1200 people in 18 offices worldwide, including 300 research & development engineers, who form a crucial part of the product development team.

Cadwell

909 North Kellogg Street
Kennewick, 99336 Washington, USA
Phone: 1-509-735-6481
Fax: 1-509-783-6503
Email: info@cadwell.com
www.cadwell.com



Established in 1979 by two brothers Dr. John Cadwell and Dr. Carl Cadwell, Cadwell designs, manufactures and sells neurodiagnostic and neurophysiological monitoring instruments to laboratories, hospitals, physicians, and others across the globe. Clinical diagnostic products include the Sierra® Summit EMG/NCV/EP, Easy® III EEG for clinical EEG, ICU Neurological and Epilepsy Monitoring, Easy III PSG, Easy Ambulatory EEG & PSG. For Intraoperative neuromonitoring, the Cascade line features the 32 channel Cascade Elite.

DePuy Synthes

Luzernstrasse 21
4528 Zuchwil, Switzerland
Tel: +41 32 720 40 60
Fax: +41 32 720 40 61
dpsy-congresses-emea@its.jnj.com
www.depuyssynthes.com



DePuy Synthes Companies of Johnson & Johnson provides the most comprehensive orthopaedic and neurological solutions in the world. The company offers an unparalleled breadth of products, services, programs and research and development capabilities. DePuy Synthes Companies' solutions in the specialties of joint reconstruction, trauma, neurological, craniomaxillofacial, spinal surgery and sports medicine are designed to advance patient care while delivering clinical and economic value to health care systems worldwide. For more information visit, www.depuyssynthes.com

EBC

www.europeanbraincouncil.org

The European Brain Council (EBC) is a coordinating council formed by European organisations in neurology, neurosurgery, psychiatry, basic brain research (neuroscience), as well as patient organisations and companies from within the pharma and biotech industries. It represents a vast network of patients, doctors and scientists, and these stakeholders along with its industrial partners make it eminently suited to work in close partnership with the European Parliament and Commission, national governments as well as other policy making bodies. The EBC was officially founded on 22 March 2002 in Brussels.



Edge Therapeutics, Inc

200 Connell Drive, Suite 1600
Berkeley Heights, NJ 07922
Phone: 800-208-EDGE
Fax: 908-790-1212
info@edgetherapeutics.com
www.edgetherapeutics.com



Edge Therapeutics, Inc. is a biotechnology company that discovers, develops and seeks to commercialize hospital-based therapies for acute neurological conditions. EG-1962, our lead product candidate can potentially improve patient outcomes after aneurysmal subarachnoid hemorrhages by delivering a high concentration of nimodipine directly to the brain with sustained drug exposure over 21 days. We recently completed the Phase 1/2 NEWTON trial, a randomized, controlled open label study comparing EG-1962 to oral nimodipine. Our second product candidate, EG-1964, is being evaluated to prevent recurrence of chronic subdural hematomas. Both products utilize our Precisa™ development platform that enables site specific and sustained drug exposure.

Elekta

www.elekta.com
info.europe@elekta.com
+46 8 59825400



Elekta is a human care company pioneering significant innovations and clinical solutions for treating cancer and brain disorders. For 60 years, Elekta has been setting the standard for treating challenging brain diseases that defy most conventional treatment methods. With its long-standing expertise in stereotaxy, Elekta has created solutions that are both extremely accurate and non-invasive.

Elekta's Leksell Stereotactic System is used by more than 1,500 sites around the world to localize and treat targets within the brain in a minimally invasive manner. It has become the benchmark solution in stereotactic neurosurgery. And Gamma Knife® radiosurgery alone has helped more than 700,000 people worldwide live longer and better lives. Elekta's most advanced system, Leksell Gamma Knife® Icon™, takes stereotactic radiosurgery to a new level of accuracy and dose conformity.

Meet Icon™ – the new solution in intracranial radiosurgery



Welcome to our booth #15



ESSFN

www.essfn.org



EUROSPINE, the Spine Society of Europe

Seefeld str. 16
8610 Uster
Switzerland
www.eurospine.org



The aims of EUROSPINE, the Spine Society of Europe are to stimulate the exchange of knowledge and ideas in the field of research, prevention and treatment of spine diseases and related problems and to coordinate efforts undertaken in European countries for further development in this field.

Evonos GmbH & Co. KG – medical technology at the head

Stockacher str. 134
78532 Tuttlingen
info@evonos.de
www.evonos.de
Tel.: 0049 7461 965774 0
Fax: 0049 7461 965774 89



There's only one kind of technology we call advanced – the kind that benefits people. As a medical technology company, evonos develops instruments, sterile implants, devices and system solutions for neurosurgery, orthopedics and spine surgery, which physicians and patients around the world rely on. Wherever the evonos products are used it's about life. Our Products and Services are created to reliably diagnose the health status of patients, to treat them minimally invasively and to improve the quality of their life.

Fiagon

info@fiagon.de
www.fiagon.de



Fiagon AG Medical Technologies, based in Hennigsdorf near Berlin, Germany, develops and manufactures innovative surgical navigation systems of the latest generation with its proprietary "FlexSensor" technology. In the last years Fiagon, along with world-renowned physicians, has changed the standard in ENT navigation with its proprietary navigation technology. And this unique technology is also very useful in Oral and Maxillofacial Surgery, Neuro and Spine Surgery.

Inomed Medizintechnik GmbH

Im Hausgrün 29
79312 Emmendingen
Germany
Contact: Mr. Srinath Berthold/Congressmanager



Hitting the nerve

inomed is a medical technology company, operating internationally, which develops nerve protection instruments and systems for precisely targeted patient treatment.

Sharing knowledge

Working with doctors and users, inomed develops new tools and methods in the fields of intraoperative neuromonitoring, neurosurgery, pain therapy and neurological diagnostics.

Providing safety

inomed supplies high-quality products to improve treatment outcomes, and uses innovative technologies to ensure safety for both treatment providers and patients.

INSIGHTEC

www.insightec.com



INSIGHTEC is the global leader in MRgFUS.

The company, founded in 1999, develops and distributes ExAblate, a non-invasive therapy platform that is transforming medicine. INSIGHTEC is continuously expanding its applications ranging from functional neurosurgery to oncology and gynecology. MRgFUS is embraced by world renowned physicians in more than 120 medical facilities who applaud both its clinical and economic value.

The company has received numerous innovation awards, among others from the Wall Street Journal and TIME magazine. INSIGHTEC is privately held by GE Healthcare, Elbit Imaging, York Capital Management, GEOC Hengtong Investment Limited Partnership and MediTech Advisors.

INTEGRA

**International Customer Service
Integra LifeSciences Services
Immeuble Sequoia 2 , 97 allée Alexandre Borodine
69800 Saint Priest – France
Email: csemea@integralife.com
Website: www.integra-ls.eu**



Integra is active in several neurosurgery fields and provides surgeons with operating room equipment and implantable solutions. Product lines cover a number of neurosurgery specialties, from diagnosis to treatment, to provide the surgeon with the right solution in all circumstances.

Integra's commitment to finding innovative solutions tailored to the needs of neurosurgeons, with the aim of reducing uncertainty in the profession, has enabled it to develop products that have influenced generations of professionals, in particular in the treatment of tumors and hydrocephalus.

S. Karger AG

**Allschwilerstrasse 10, CH-4055 Basel, Switzerland
Tel. + 41 61 306 11 11
Fax + 41 61 306 12 34
E-Mail: karger@karger.com
www.karger.com/neurosurgery**



S. Karger Medical Publishers is a publishing house whose titles in the field of neurosurgery include two scientific journals, 'Pediatric Neurosurgery', and 'Stereotactic and Functional Neurosurgery', and the book series 'Progress in Neurological Surgery'. Published papers are accessible online at www.karger.com/neurosurgery, with full-text search of articles, pay-per-view options and many other services. Founded 125 years ago, this Swiss-based family-owned publishing house combines highly sophisticated production technology with customized services for its authors, editors and readers.

Gebrüder Martin GmbH & Co. KG, a company of the KLS Martin Group

**KLS Martin Platz 1, 78532 Tuttlingen
Phone: +49 (7461) 706-218
Fax: +49 (7461) 706-312
Mail: jacek.nowinski@klsmartin.com
www.klsmartin.com**



Leica

www.leica-microsystems.com
For further information contact Mr Barnaby Westfold,
Marketing Manager Surgical Division:
barnaby.westfold@leica-microsystems.com



Leica Microsystems Medical Division partners with and supports surgeons in their aim to take best care of patients, with innovative and high-quality surgical microscope technology. Visit us on Stand no. 31 to learn more about our latest generation of neurosurgery microscopes, the Leica M530 OH6 and the new Leica M530 OHX with unique FusionOptics technology, which combines high resolution and increased depth of field. Also worth seeing: TrueVision 3D visualization and intra-operative fluorescence imaging as well as our HD documentation systems.

medac

Theaterstraße 6
22880 Wedel
Germany
www.medac.de



medac. Your reliable partner for special treatment needs.

medac is an established and successful, privately held pharmaceutical company with a growing pharmaceutical and diagnostics business. Established in Hamburg for 45 years, medac provides a range of high-quality basic and speciality therapeutics and innovative diagnostics for use in oncology and autoimmune diseases.

In 2008, medac started up a 'neurosurgical division' with gliolan® (5-aminolevulinic acid hydrochloride). gliolan® is indicated in adult patients for visualization of malignant tissue during surgery for malignant glioma (WHO grade III and IV).

To learn more about medac and its products, visit www.medac.de.

Medprin Biotech GmbH

Thomas Huang
sales@medprin.com
Tel: +49-69-58005-9970
www.medprin.com



Medprin Biotech GmbH is a high-tech enterprise co-founded by outstanding biomedicine scientists in 2008, specializing in R & D and manufacturing of human tissue regenerative implantable medical devices with advantage of 3D Bio-printing technology, Nano-bionics technology and Rapid Prototyping Technology.

Our first product ReDura TM, Biomimetic-Synthetic-Absorbable Dural Substitute, has got CE certificate and been applied in more than 30 countries. MEDPRIN has been actively executing strategy of globalization, and set up branches in America, Germany and China, providing market and technical support to customers around the world.

Medtech SA

ZAC Eurêka
900 rue du Mas de Verchant
34000 Montpellier
France
Phone: +33 467 10 77 40
FAX: +33 467 59 74 18
Contact: Mr. Steven BOUDREZ
Vice-President of Sales, Europe
s.boudrez@medtechsurgical.com



Medtech designs, develops and markets the latest generation of robotic assistance for minimally invasive surgery.

ROSA™ is devoted to brain and spine surgery featuring optimal safety, enhanced accuracy and valuable assistance in locating patient anatomy.

ROSA™ technology offers substantial benefits for patients, surgeons and healthcare institutions and has already been adopted by over forty leading hospitals around the world.

Medtronic

www.medtronic.com



As a global leader in medical technology, services and solutions, Medtronic improves the lives and health of millions of people each year. We use our deep clinical, therapeutic, and economic expertise to address the complex challenges faced by healthcare systems today. Let's take healthcare Further, Together. Learn more at Medtronic.com.

Micromar

www.micromar.com



Since 1986 Micromar develops solutions that allow several professionals to perform their tasks with excellence and ensuring excellent results.

Our continuous searches for excellence allow us to offer products of high technology and international recognition. We develop and manufacture our products working with the highest standard of quality, by applying severe international standards, such as ISO13485, CE Mark, besides Good Manufacturing Practices (GMP). This is quality that enables our products to be used in over 30 countries, in the most renowned medical centers.

With offices in Europe and Latin America, Micromar providing always the best service, which is our trademark.



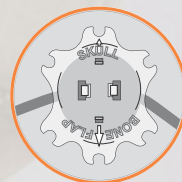
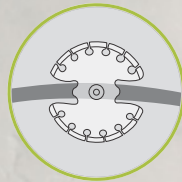
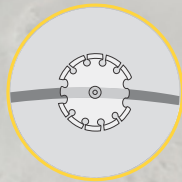
REINVENTING CRANIAL FIXATIONS

INSTRUMENT-FREE
Fast & Easy implantation

HIGH STRENGTH & SAFETY
Double locking mechanism

CT/MRI ARTIFACT-FREE
100% PEEK-OPTIMA®

MINIMAL PROFILE
3D adaptation



CRANIAL
Loop™

CRANIAL
Loop(L)™

CRANIAL
Loop(XL)™
BURR HOLE

www.neosurgery.com

NEOS Surgery, S.L.

Contact details:
NEOS Surgery S.L.
Ceramistes 2 Parc Tecnològic del Vallès
08290 Cerdanyola del Valles (Barcelona)
Spain
Phone: +34.93.594.47.26
info@neosurgery.com
www.neosurgery.com



NEOS Surgery is an innovative and technology-based company dedicated to the research and development of surgical products. We create, design, produce and commercialize innovative medical devices in the field of cranial and spinal neurosurgery which occupy a place in the existing niches of the current market and respond to the needs of neurosurgery and neurosurgeons.

NEOS Surgery's current product line includes a postoperative, instrument-free and artifact-free cranial bone fixation system made of PEEK: Cranial LOOPTM, distributed in more than 20 markets around the globe. NEOS Surgery has more than a decade of experience in neurosurgery.

NeuroNews

www.neuronewsinternational.com



NOVOCURE

www.novocure.com



Novocure is a private oncology company pioneering a novel therapy for solid tumors called TTFields. Tumor Treating Fields (TTFields) are delivered by a portable non-invasive medical device (Optune®) designed for continuous use by patients. In vitro and in vivo studies have shown that TTFields therapy slows and reverses tumor growth by inhibiting mitosis. TTFields are low intensity, alternating electric fields within a tumor that exert physical forces on electrically charged cellular components, preventing the normal mitotic process and causing cancer cell death. TTFields are approved for use as a treatment in newly diagnosed GBM as well as in recurrent GBM.

NSK Europe GmbH

Elly-Beinhorn-Str. 8
Eschborn, 65760
Germany
www.nsk-surgery.com
info@nsk-europe.de
Tel: +49 6196 77606-0
Fax: +49 6196 77606-29



NSK is a Japanese manufacturer of surgical and dental drills with over 80 years experience in these markets. Since its establishment in 1930, NSK has dedicated itself to the development and production of high speed rotational technologies. To this day, NSK has grown into one of the global leading suppliers of surgical drill systems (Primado, Primado2).

During the last 5 years, the worldwide use of Primado helped gather valuable recommendations for improvement, which have now been implemented in Primado2 under the premise of meticulous attention to top quality products. The product was developed for the challenging demands in neurological and spinal surgery, and is characterized by ultimate precision, ease of use and a favourable cost-benefit ratio.

ntplast s.r.l.

www.ntplast.com
info@ntplast.com



- Our philosophy is keeping the human being at the center and to exploit our intuition and experience to improve life quality, creating new and helpful products.
- Our team is strongly multidisciplinary, combining a wide range of skills: design & engineering, regulatory & process expertise, knowledge of the clinical world.
- Our ideas arise from a close link with surgeons and physicians and aim to provide new answers to actual needs.
- Our flagship products are implantable devices, manufactured mainly by injection molding of polymers in clean room environment.
- Our target medical specialties are neurosurgery and cardiac surgery: qualified surgeons support our research.

OssDsign AB

Virdings Allé 2, 75450 Uppsala, Sweden
Tel: +46(0)18-55 39 93
Email: info@ossdsign.com
Website: ossdsign.com



OssDsign is a Sweden-based medical technology company dedicated to creating regenerative implants for improved healing of bone defects. By combining latest clinical insights and implant designs with a proprietary technology platform based on clinical development at Karolinska University Hospital in collaboration with material science experts at Ångström Laboratory at Uppsala University, OssDsign supplies an expanding range of tailored solutions for cranial repair and facial bone reconstruction.

Penumbra Europe GmbH

marketing-eu@penumbrainc.com
www.penumbrainc.com
+49 30 200 5676 0
Am Borsigturm 44
13507 Berlin, Germany



Penumbra is a specialty interventional therapies company that develops and markets innovative medical devices to treat challenging medical conditions with significant unmet clinical needs. We design our therapies to provide our specialist physician customers with improved clinical outcomes through faster and safer procedures at significant overall cost savings to the healthcare system. Today we have over 800 employees with sales operations in North America, Europe, Australia and Asia.

Premia Spine

www.betterthanspinalfusion.com
www.premiaspine.com



The TOPS™ System from Premia Spine is a motion-preserving alternative to lumbar spinal fusion. The TOPS™ System is designed to stabilize the diseased vertebral level following decompression surgery to alleviate pain stemming from spinal stenosis and/or spondylolisthesis. TOPS recreates physiologic motion in flexion, extension, lateral bending, axial rotation and blocks translation forces.

The result is optimum decompression, spine stability, and pain relief. Long-term clinical results from worldwide studies demonstrate excellent outcomes with TOPS posterior arthroplasty.

Other Premia Spine products include the Versalink™ Fixation System, the Nexux™ Spine System, and the ProMIS™ Percutaneous Fusion System.

pro med instruments GmbH

Boetzinger Str. 3879111 Freiburg, Germany
pmi@pmisurgical.com
pmisurgical.com
Phone +49 761 384 222 10
Fax +49 761 384 222 81



Founded in 1993, pro med instruments (PMI) is specialized in developing state-of-the-art cranial stabilization and retractor systems.

The DORO® brand soon became a synonym for high quality and unique flexibility worldwide. Quality, innovation, continuity, partnership and service are not just words to us. Rather these are lived values that form the foundation of our company's philosophy to provide an extra benefit for surgeons and patients alike.

Today, PMI is present with a subsidiary in Cape Coral, Florida, USA and in a still growing number of over 70 countries worldwide. Our privately owned company consists of competent and highly motivated employees.

SKULLE IMPLANTS

www.skulleimplants.com



Skulle Implant Corporation sales, designs and manufactures one-of-a-kind sandwich designed craniomaxillofacial (CMF) – implants that delivers outstanding functionality and aesthetics to improve patients' quality of life.

Skulle Implants has combined years of research with an in-depth understanding of the clinical requirements of Neuro- and CMF- surgery. The result is GLACE™ Custom Made and Standard, groundbreaking skull reconstruction implants with a **bacteriostatic** bioactive center. All these with easy application over the bone margin – GLACE™ – implants have exceeded all expectations.

SOPHYSA

www.sophysa.com
contact@sophysa.com



Founded in 1976, SOPHYSA is a French company pioneer in the development of adjustable neurosurgical valves, the most advanced type of valves for the treatment of Hydrocephalus. Indeed, they offer the possibility to neurosurgeons to adjust the operating pressure non-invasively on patient's clinical needs.

Two adjustable valves are available from Sophysa: the Sophy® Mini valve, which was the first adjustable valve in the World launched in 1984 and the Polaris® valve, with the additional feature of being MRI-stable up to 3Tesla.

In addition to a complete range of neurosurgical implants, SOPHYSA offers a continuous intracranial pressure measurement system required on patients with a trauma brain injury, Hydrocephalus, hemotoma Pressio® ICP monitoring system: a user-friendly monitor with its range of catheters for intracranial pressure and temperature measurement.

Söring GmbH

Justus-von-Liebig-Ring 2
25451 Quickborn, Germany
+49 4106 61 00 0
info@soering.com
www.soering.com



Söring, one of the pioneers in ultrasonic technology, has been providing the international market with innovative products for ultrasonic and high-frequency surgery for 30 years.

Customized solutions for neurosurgery and spine surgery include ultrasonic surgical devices for highly selective tumor dissection and precise bone instruments for microscopic as well as endoscopic techniques.

Globally recognized quality and high reliability of our products hinge on the close cooperation with surgeons combined with an uncompromising quality assurance concept.

You share our vision of taking medical technology yet another step further?
Then get in touch with us!

SPINAL NEWS

www.spinalnewsinternational.com

SPINAL NEWS
International

KARL STORZ GmbH & Co. KG

Mittelstrasse 8
78532 Tuttlingen
Germany
info@karlstorz.com
www.karlstorz.com

STORZ
KARL STORZ – ENDOSKOPE

KARL STORZ is a renowned manufacturer that is well established in all fields of endoscopy and can be considered as market leader in rigid endoscopy. The still family held company was founded in 1945 in Tuttlingen, Germany, and has grown to one with a worldwide presence and 7100 employees. KARL STORZ offers a range of both rigid and flexible endoscopes for a broad variety of applications. Today's product range also includes fully integrated concepts for the OR and servicing.

Stryker European Operations B.V.

Herikerbergweg 110
1101 CM Amsterdam Zuidoost
The Netherlands
Sabine.Vonbank@stryker.com

stryker[®]

The Stryker Corporation is one of the world's leading medical technology companies with the most broadly based range of products in orthopaedics and a significant presence in other medical specialties. Stryker works with respected medical professionals to help people lead more active and more satisfying lives. The Company's products include implants used in joint replacement, trauma, craniomaxillofacial and spinal surgeries; biologics; surgical, neurologic, ear, nose & throat and interventional pain equipment; endoscopic, surgical navigation, communications and digital imaging systems; as well as patient handling and emergency medical equipment. For more information about Stryker, please visit www.stryker.com.

G. Surgiwear Limited

Rasoolpur Jahanganj, Near Hathoda Chauraha
Shahjahanpur-242001
India

SURGIWEAR

World's largest manufacturer of Chhabra Hydrocephalus Shunts. Also manufacturing EVD sets, Dura Patch, Cranial fixation titanium plates and screws, disposable drapes for neurosurgery, bone grafting products, Craniomapper for marking on skin after CT scan, neurosurgical patties, 1Fix and D-Fix for cranial flap fixation and many more products for neurosurgery.

Sutter Medizintechnik GmbH

Tullastraße 87
79108 Freiburg
Germany
+49 (0) 761 51551-0
www.sutter-med.de
Ellen Peters: peters@sutter-med.de



Over 40 years of experience have led to multiple innovative breakthroughs on an international scale. Sutter Medizintechnik pioneered the non-stick technology for bipolar forceps and is a leader for radiofrequency systems for minimally invasive treatment of snoring.

Sutter specializes in electrosurgical devices, especially for microsurgical and endoscopic applications.

The Sutter CURIS® system offers the radiofrequency advantage: Precision for all cutting and coagulating applications in ENT. Specially designed probes facilitate OSA and larynx procedures. Non-stick forceps and coagulation instruments can be used for sinus surgery, for adenoids, tonsils and for head & neck dissections.

Telea

info@teleamedical.it
www.teleamedical.com



Telea Electronic Engineering Srl is a modern and fast growing Company, whose core business is the Research, Development, Production and Sale of Medical Devices. The Company was founded in 1988 and since then has consolidated its presence within the international market during a steady and continuous growth. To date, Telea is present with its products in more than 30 countries worldwide.

All Medical Devices produced by Telea are based on a proprietary technology patented as Quantum Molecular Resonance (QMR).

The QMR Technology is used in Surgery field, through the product lines Vesalius, Quantum and Essential.

Tissuemed Ltd

5 Killingbeck Drive, Leeds, LS14 6UF, UK
+44 113 2000500
info@tissuemed.com
www.tissuemed.com



Tissuemed Ltd is based in the UK and is a leading manufacturer of synthetic surgical sealants used in the prevention / management of CSF leaks.

TissuePatchDural™ is a sterile, synthetic, single-use, self-adhesive, absorbable surgical sealant and barrier film used to reinforce dura mater closure and to seal closure against cerebrospinal fluid (CSF) leakage. TissuePatchDural™ films are an alternative to liquid sealants, providing a zero preparation, easy to apply, functionally and economically effective method of sealing conventional dural closures.

UFSK-International OSYS GmbH

Kirchhoffstraße 1
93055 Regensburg
Germany
phone +49 941 78862-15
telefax +49 941 78862-35
info@ufsk-osys.com
www.ufsk-osys.com



To be successful in the business of surgery today requires a profit-making mindset. The strategy must ultimately be one of reducing non-operative time.

Our Solution: Mobile Table Rotation

UFSK's revolutionary Mobile Table Rotation system will vastly improve your patient throughput and minimize non-operative time in the OR. This system has been shown to save up to two hours per day over traditional surgical solutions.

Virtual Proteins

Nanoos High Tech Offices
Eindhoven – the Netherlands
+31 40 218 0031
www.virtualproteins.com
info@virtualproteins.com

Virtual Proteins

Virtual Proteins provides sophisticated / disruptive medical imaging products, based on immersive 3D virtual simulations, which enable surgeons and medical students to view and interact with anatomical structures in a completely new way. Our unique 3D virtual simulations have the potential to increase the speed, precision and cost-effectiveness of medical procedures, and improve the learning process for students. Our ultimate goal is to reduce risk and improve outcomes for patients, while improving the quality and efficiency of healthcare.

Wisepress Medical Bookshop

25 High Path
Merton Abbey
London SW19 2JL
UK
Phone: +44 20 8715 1812
Fax: +44 20 8715 1722
marketing@wisepress.com
www.wisepress.com



Wisepress.com, Europe's leading conference bookseller, has a range of books and journals relevant to the themes of the meeting. In addition to attending 200 conferences per year, Wisepress has a comprehensive medical and scientific bookshop online with great offers. Follow us on Twitter for the latest news @WisepressBooks.

Carl Zeiss Meditec AG

Goeschwitzer Strasse 51-52
07745 Jena, Germany
+49 3641 - 220 0
+49 3641 - 220 112
info.meditec@zeiss.com
www.meditec.zeiss.com



Carl Zeiss Meditec AG is the parent company of the Carl Zeiss Meditec Group. Main activities are in the field of ophthalmology and microsurgery. The company supplies and provides:

- innovative technologies and application-oriented solutions designed to help doctors improve their patients' quality of life
- innovative visualization solutions in the field of microsurgery
- complete solutions for the diagnosis and treatment of ophthalmic diseases, including implants and consumables

The extensive neuro product portfolio includes a comprehensive line of surgical microscopes that enhances visualization during surgery and allows simple, uninterrupted workflows which lead to more efficient treatments, and offers additional clinical benefits through optimally synchronized system components.

Zimmer Biomet CMF

1520 Tradeport Drive,
Jacksonville, Florida 32218 USA
www.zimmerbiomet.com






Founded in 1927 and headquartered in Warsaw, Indiana, Zimmer Biomet is a global leader in musculoskeletal healthcare. With operations in more than 25 countries around the world, we design, manufacture and market orthopaedic reconstructive products; sports medicine, biologics, extremities and trauma products; spine, bone healing, craniomaxillofacial and thoracic products; dental implants; and related surgical products.

Want to watch EANS2015 presentations again?



EANS ACADEMY

The EANS is delighted to present its comprehensive online library, featuring state of the art neurosurgical material from our events, including talks from EANS2015.

-  Watch state of the art webcasts multiple times, or study e-posters and abstracts
-  Use the sophisticated search bar to refine your results by topic, speaker, event and type of content so the information you see is tailored for you
-  EANS Academy is a valuable online learning tool for you to access wherever and whenever you choose – even on the move with Talks on the Go

Privileged access to all material for EANS Individual Members free of charge. Subscribe as an EANS member today from €75 annually. High quality content also available to non-members



academy.eans.org
www.eans.org



THE EUROPEAN ASSOCIATION
OF NEUROSURGICAL SOCIETIES

Neurosurgery: From the Classics to the future



Athens | September
Greece | 4 – 8, 2016

EANS 2016 Congress



Sign up today at www.eans2016.com to obtain exclusive previews of the comprehensive spine programme. Those who subscribe before 1st November 2015 will be automatically entered into our draw to win FREE registration to the Congress for themselves and a colleague. Scan the QR code to take advantage now!

See you in
Athens!



EANS2016



THE EUROPEAN ASSOCIATION
OF NEUROSURGICAL SOCIETIES

eans2016@aimgroup.eu | www.eans2016.com