

Sunday, 16. October 2022

Other

08:00 - 11:00

R1

EANS & World Neurosurgery Ambassadors Session 1.1*Chair:* Jesus Lafuente, ES*Chair:* William Couldwell, US

	Welcome Address	08:00 - 08:00
	<i>Speaker:</i> Lukas Rasulic, RS	
	<i>Speaker:</i> Andreas Demetriades, GB	
125	Application of the T1w/T2w mapping technique for evaluating the consistency of intracranial meningiomas	08:00 - 08:15
	<i>Speaker:</i> Elena Filimonova, RU	
126	Fractional anisotropy of trigeminal nerve in patients after microvascular decompression	08:15 - 08:30
	<i>Speaker:</i> Mikhail Amelin, RU	
118	Complex Skull Base Surgery in Resource-Limited Settings	08:30 - 08:45
	<i>Speaker:</i> Antonio Bernardo, US	
119	Brain Stem Cavernomas - My Philosophy	08:45 - 09:00
	<i>Speaker:</i> Talat Kiris, TR	
1	Use of Neuroendoscopy in the Management of Para-ventricular Tumors in Children	09:00 - 09:15
	<i>Speaker:</i> Wan Tew Seow, SG	
2	Management of Craniopharyngioma.... A Changing Paradigm	09:15 - 09:30
3	European contribution to the Evolution of Neurosurgery in Africa	09:30 - 09:45
	<i>Speaker:</i> Abdeslam El Khamlichi, MA	
5	Direct AVM surgery: where it has been and where it is going	09:45 - 10:00
	<i>Speaker:</i> Hiroki Kurita, JP	
123	Developing Resident Surgical Training Models in Neurosurgery	10:00 - 10:15
	<i>Speaker:</i> Iddo Paldor, IL	
7	Tubology in Spine Surgery: Current concept	10:15 - 10:30
	<i>Speaker:</i> Jose Soriano, MX	
8	Very long term hearing outcome after radiosurgery for acoustics in an historical cohorte of 4777 patients	10:30 - 10:45
	<i>Speaker:</i> Jean Regis, FR	
124	Challenges in Neurosurgical training in LMIC and MIC countries	10:45 - 11:00
	<i>Speaker:</i> Mangaleswaran Balamurugan, IN	

Joint Spine Societies Symposium

08:00 - 11:00

R2

Joint Spine Societies Symposium*Chair:* Bernhard Meyer, DE*Chair:* Maria Luisa Gandia Gonzalez, ES*Chair:* Dominique Rothenfluh, CH

10	Session 1: NAVIGATION AND ROBOTICS IN SPINAL SURGERY	08:00 - 08:00
11	Advantages of spinal navigation in comparison to present robotic techniques <i>Speaker:</i> Marcel Ivanov, GB	08:00 - 08:20
12	Advanced spinial navigation techniques <i>Speaker:</i> Sandro Krieg, DE <i>Speaker:</i> Bernhard Meyer, DE	08:20 - 08:40
13	Future potential of spinal robotics <i>Speaker:</i> Florian Ringel, DE	08:40 - 09:00
14	Session 2: MANAGEMENT OF ADULT SPINAL DEFORMITIES	09:00 - 09:00
16	Planning and prediction of mechanical complications <i>Speaker:</i> Ahmet Alanay, TR	09:00 - 09:15
15	Indications, complications and outcomes <i>Speaker:</i> Joerg Franke, DE	09:15 - 09:30
17	Proximal junctional kyphosis – prevention and management <i>Speaker:</i> Dominique Rothenfluh, CH	09:30 - 09:45
18	Beyond the sagittal profile – how and when to manage coronal curves in the adult <i>Speaker:</i> Ibrahim Obeid, FR	09:45 - 10:00
	Discussion	10:00 - 11:00

Neuro-Oncology

08:00 - 11:00

R3

Pre-congress Neuro-Oncology Event*Chair:* Rachel Grossman, IL*Chair:* Jiri Bartek, SE*Chair:* Brigitta Gertrud Baumert, CH*Chair:* Matthias Simon, DE

19	Recurrent gliomas: the challenges <i>Speaker:</i> Matthias Simon, DE	08:00 - 08:15
20	Tumour section panel & case presenters Interactive session: Learning from complications Case presentations (N=4) & 1st voting	08:15 - 08:35
22	Cognitive outcomes after operations for glioma recurrence <i>Speaker:</i> Sam Ng, FR	08:35 - 08:55
23	The surgical approach to recurrent high-grade gliomas	08:55 - 09:10

	<i>Speaker:</i> Rachel Grossman, IL	
25	LITT for recurrent high-grade gliomas <i>Speaker:</i> Jiri Bartek, SE	09:10 - 09:25
24	Break	09:25 - 09:40
26	Liquid biopsies for the diagnosis and management of recurrent gliomas <i>Speaker:</i> Franz Ricklefs, DE	09:40 - 10:00
21	7 Tesla metabolic neuroimaging of recurrent gliomas <i>Speaker:</i> Gilbert Hangel, AT	10:00 - 10:20
27	(Radio)-Oncological options for treatment of recurrent glioma <i>Speaker:</i> Brigitta Gertrud Baumert, CH	10:20 - 10:40
28	Tumour section panel A wrap-up: revisiting today's case presentations 2nd voting & case discussions	10:40 - 11:00

Functional

08:00 - 11:00

R4

2nd Joint EANS-ESSFN Functional Neurosurgery Symposium*Chair:* Dirk van Roost, BE*Chair:* Olaf Schijns, NL

96	ECoG: pro's & con's, intra- & extraoperative, prognostic value in lesional / non-lesional epilepsy, e.g. in multiple tuberous sclerosis lesions <i>Speaker:</i> Alexandre Rainha Campos, PT	08:00 - 08:30
97	sEEG: network concept, "virtual brain", possible benefits / superiority over ECoG <i>Speaker:</i> Viktor Jirsa, FR <i>Speaker:</i> Jean Regis, FR	08:30 - 09:00
98	ECoG high-frequency oscillations as resection guide in epilepsy surgery; outcome prediction <i>Speaker:</i> Johannes Sarnthein, CH	09:00 - 09:30
	Break	09:30 - 10:00
99	Decoding higher-order cognition from intracranial EEG <i>Speaker:</i> Christian Herff, NL	10:00 - 10:30
100	Insights into basal ganglia physiology extracted from STN-DBS <i>Speaker:</i> Dirk van Roost, BE	10:30 - 11:00

Other

08:00 - 11:00

R6

IANA Pre Congress Course- EANS/SNSS_Session 1.1*Course Director:* Imad N. Kanaan, US*Course Director:* Vladimir Benes, CZ*Chair:* Giovanni Broggi, IT*Chair:* Ramesh Nair, GB

38	Introduction	08:00 - 08:20
	<i>Speaker:</i> Andreas Demetriades, GB	
	<i>Speaker:</i> Vladimir Benes, CZ	
	<i>Speaker:</i> Imad N. Kanaan, US	
39	Microsurgical treatment of fourth ventricle tumors	08:20 - 08:40
	<i>Speaker:</i> Francesco Tomasello, IT	
40	Ventricular Tumors	08:40 - 09:00
	<i>Speaker:</i> Ekkehard Kasper, US	
41	Anatomy for Endoscopic Trans sphenoidal surgery of pituitary tumors	09:00 - 09:20
	<i>Speaker:</i> Ramesh Nair, GB	
42	Avoiding and dealing with complication in TSS for pituitary tumors	09:20 - 09:40
	<i>Speaker:</i> Mario Ammirati, US	
	Neuroanatomy for anterior skull base surgery	09:40 - 10:00
	<i>Speaker:</i> Roy Daniel, CH	
	Discussion	10:00 - 11:00

Other

08:00 - 13:30

EANS Board/ Council Room

EANS/SeENS Session*Chair:* Kresimir Rotim, HR*Chair:* Stefan Ioan Florian, RO

44	Opening remarks	08:00 - 08:15
	<i>Speaker:</i> Lukas Rasulic, RS	
	<i>Speaker:</i> Kresimir Rotim, HR	
45	Surgical strategy for the treatment of the tumors of the craniocervical junction	08:15 - 08:30
	<i>Speaker:</i> Kresimir Rotim, HR	
46	Vascular incidents in brain tumor surgery	08:30 - 08:45
	<i>Speaker:</i> Nikolaos Foroglou, GR	
47	Challenges in AVM Surgery	08:45 - 09:00
	<i>Speaker:</i> Stefan Ioan Florian, RO	
48	Mesial temporal lobe epilepsy surgery: seizure outcome after 10 years follow up	09:00 - 09:15
	<i>Speaker:</i> Tomislav Sajko, HR	

49	The employment of brain mapping techniques in modern neurosurgery <i>Speaker:</i> Kostas Fountas, GR	09:15 - 09:30
50	Restoration of cranial volumetry by 3D printed alloplastic cranioplasty <i>Speaker:</i> Bruno Splavski, HR	09:30 - 09:45
51	Role of minimal invasive techniques and new classification system in the surgical treatment of pathologies situated in the spinal canal <i>Speaker:</i> Peter Banczerowski, HU	09:45 - 10:00
52	Influence of molecular immunoprofiling compared with the extent of surgical resection in overall survival of patients harboring high grade gliomas <i>Speaker:</i> Aleksandar Caparoski, MK	10:00 - 10:15
53	Intraoperative ultrasonography guidance for optimal degree of lumbar decompressive surgery <i>Speaker:</i> Yavor Enchev, BG	10:15 - 10:30
54	Pathogenesis of brain AVMs Cerebrovascular session <i>Speaker:</i> Anastasia Tasiou, GR	10:30 - 11:00
55	Coffee break	11:00 - 11:30
56	Combined Microsurgical, Endoscopic and Stealth Neuronavigation for Treatment of Pituitary Tumors <i>Speaker:</i> Kenan Arnautovic, US	11:30 - 11:45
57	Instrumentation-associated vertebral fractures and pedicle screw loosening - treatment options with less or more screws <i>Speaker:</i> Yavor Enchev, BG	11:45 - 12:00
58	The level of the arthroplasty in hybrid surgery (hs) for the treatment of cervical degenerative diseases and its effect on cervical range of motion <i>Speaker:</i> Matjaž Voršič, SI	12:00 - 12:15
59	The role of the neurosurgeon in the management of Cushing's disease <i>Speaker:</i> Kostas Barkas, GR	12:15 - 12:30
60	Cerebellopontine angle masses - Surprise room <i>Speaker:</i> Ibrahim Omerhodzic, BA	12:30 - 12:45
61	Functional recovery after radial nerve palsy surgical repair <i>Speaker:</i> Slavko Djuraskovic, ME	12:45 - 13:00
64	Minimally invasive skullbase surgery: what is possible and what are the limitations? <i>Speaker:</i> Gunther Feigl, DE	13:00 - 13:15
	Discussion	13:15 - 13:30

Peripheral Nerve Surgery

08:00 - 18:10

Hyatt Regency Belgrade

EANS Peripheral Nerve Surgery Pre-Congress Course*Other*

08:30 - 13:30

R5

VIRTUAL REALITY IN NEUROSURGERY*Chair:* Amir Samii, DE*Chair:* Nikolay Velinov, BG

65	Welcome and Introduction <i>Speaker:</i> Amir Samii, DE <i>Speaker:</i> Nikolay Velinov, BG	08:30 - 08:45
66	The Role of Imaging & Visualization in Neurosurgery <i>Speaker:</i> Amir Samii, DE	08:45 - 09:15
67	Neuroanatomy Training by Augmented/Virtual Reality: Lecture, live demonstration and hands-on <i>Speaker:</i> Ihsan Solaroglu, TR <i>Speaker:</i> Oguz Baran, TR <i>Speaker:</i> Goktug Akyoldas, TR	09:15 - 10:15
68	Postprocessing of Imaging Data for Surgical Planning Live Demonstration <i>Speaker:</i> Mario Giordano, DE	10:15 - 10:30
69	Break	10:30 - 11:00
70	VR Planning for a Skull Base Tumour Case <i>Speaker:</i> Mario Giordano, DE <i>Speaker:</i> Massimo Gallieni, DE	11:00 - 11:22
71	VR Planning for Brain Tumour Case <i>Speaker:</i> Massimo Gallieni, DE <i>Speaker:</i> Mario Giordano, DE	11:22 - 11:45
72	Introduction to the VR system	11:45 - 12:00
73	Hands-on VR for Skull Base Lesion	12:00 - 12:40
74	Hands-on VR for intrinsic Brain Lesion	12:40 - 13:20
75	Conclusion <i>Speaker:</i> Amir Samii, DE <i>Speaker:</i> Nikolay Velinov, BG	13:20 - 13:30

Other

11:00 - 11:30

Pacific & Atlantic

Coffee Break in the Mezzanine Foyer

Other

11:30 - 13:30

R1

EANS & World Neurosurgery Ambassadors Session 1.2*Chair:* Andreas Demetriades, GB*Chair:* Lukas Rasulic, RS

76	Brain surgery today <i>Speaker:</i> Madjid Samii, DE	11:30 - 11:50
78	Microsurgical management of large sphenocavernous meningiomas <i>Speaker:</i> Francesco Tomasello, IT	11:50 - 12:10
79	Enough Lateral - Enough Telovelar Approach <i>Speaker:</i> Vladimir Benes, CZ	12:10 - 12:30
9	EANS <i>Speaker:</i> Karl Schaller, CH	12:30 - 12:50
121	Endoscopic assisted supraorbital keyhole approach: How I do it <i>Speaker:</i> Panagiotis Selviaridis, GR	12:50 - 13:10
111	Contemporary Management of Giant Aneurysms <i>Speaker:</i> Nicholas Bambakidis, US	13:10 - 13:30

Trauma

11:30 - 14:00

R3

ESICM/EANS Joint Symposium*Chair:* Bart Depreitere, BE*Chair:* Raimund Helbok, AT

81	ICP monitoring: EVD or intra-parenchymal? <i>Speaker:</i> Bart Depreitere, BE	11:30 - 11:50
82	Surgical practice variation in traumatic acute subdural hematoma <i>Speaker:</i> Thomas van Essen, NL	11:50 - 12:10
84	Sedation strategies <i>Speaker:</i> Geert Meyfroidt, BE	12:10 - 12:30
86	Strategies for mechanical ventilation <i>Speaker:</i> Robert Stevens, US	12:30 - 12:50
87	How does autoregulation fit in? <i>Speaker:</i> Sam Klein, BE	12:50 - 13:10
88	Decompressive craniectomy in real life <i>Speaker:</i> Elham Rostami, SE	13:10 - 13:30
89	Nutrition: does it matter? <i>Speaker:</i> Raimund Helbok, AT	13:30 - 13:50
	Discussion	13:50 - 14:00

Functional

11:30 - 15:00

R4

EANS ESSFN Course in Neuro-Radiosurgery EANS ESSFN European Diploma of Neuro-Radiosurgery*Chair:* Piero Picozzi, IT*Chair:* Jean Regis, FR

29	Introduction	11:30 - 12:00
	<i>Speaker:</i> Piero Picozzi, IT	
	<i>Speaker:</i> Jean Regis, FR	
30	Natural History	12:00 - 12:30
	<i>Speaker:</i> Josa M. Frischer, AT	
31	Cavernous sinus meningiomas	12:30 - 13:00
	<i>Speaker:</i> Michele Longhi, IT	
32	Petroclival Meningiomas	13:00 - 13:30
	<i>Speaker:</i> Antonio Santacrose, DE	
33	Periopic Meningiomas	13:30 - 14:00
	<i>Speaker:</i> Piero Picozzi, IT	
36	Combined Approaches in Meningiomas	14:00 - 14:30
	<i>Speaker:</i> Pierre Hugues Roche, FR	
37	Conclusions	14:30 - 15:00
	<i>Speaker:</i> Piero Picozzi, IT	
	<i>Speaker:</i> Jean Regis, FR	

Other

11:30 - 13:30

R6

IANA Pre Congress Course- EANS/SNSS_Session 1.2*Course Director:* Vladimir Benes, CZ*Course Director:* Imad N. Kanaan, US*Chair:* Giovanni Broggi, IT*Chair:* Ramesh Nair, GB

90	Eyebrow Approach	11:30 - 11:50
	<i>Speaker:</i> Giovanni Broggi, IT	
91	Microsurgical techniques in Degenerative Spine and biological Treatment	11:50 - 12:10
	<i>Speaker:</i> Tito Perilla, CO	
93	Parasagittal Meningiomas, Surgical Approach	12:10 - 12:30
	<i>Speaker:</i> Keki Turel, IN	
	Multi-modality management on glioma surgery	12:30 - 12:50
	<i>Speaker:</i> Pablo Gonzalez Lopez, ES	
94	Nerve surgery; Intraoperative morphology vs. intraoperative electrophysiology findings	12:50 - 13:10
	<i>Speaker:</i> Lukas Rasulic, RS	
95	Panel Discussion	13:10 - 13:30

Other

13:30 - 14:00

Pacific & Atlantic

Light Snack Break in the Mezzanine Foyer

Other

14:00 - 17:00

R1

EANS & World Neurosurgery Ambassadors Session 1.3*Chair:* Panagiotis Selviaridis, GR

101	Skull Base Chordoma: Choosing the right approach <i>Speaker:</i> Basant Misra, IN	14:00 - 14:15
102	Title to be announced <i>Speaker:</i> Giovanni Broggi, IT	14:15 - 14:30
105	Endoscopic Treatment of Complex Hydrocephalus in Children <i>Speaker:</i> Nasser El Ghandour, EG	14:30 - 14:45
106	Complications in Neurosurgery: Ethics, Morals and Legalities <i>Speaker:</i> Keki Turel, IN	14:45 - 15:00
107	CNS hemangioblastomas and VHL - current concepts <i>Speaker:</i> Martin Smrcka, CZ	15:00 - 15:15
109	The role of cerebral bypass surgery in uncommon and complicated scenarios <i>Speaker:</i> Amir Dehdashti, US	15:15 - 15:30
113	Management of foramen magnum meningiomas <i>Speaker:</i> Najia El Abbadi, MA	15:30 - 15:45
114	Endoscopic approaches in lumbar degenerative diseases <i>Speaker:</i> Enrique Osorio, CO	15:45 - 16:00
108	Hearing Preservation Techniques in Surgery of Vestibular Schwannomas <i>Speaker:</i> William Couldwell, US	16:00 - 16:15
117	Meningioma Genomics as a Predictor of Recurrence: ARID1A Mutation Associated with Recurrence and Shorter Progression-free Survival in Atypical Meningiomas	16:15 - 16:30
116	Timing of carotid endarterectomy after i.v.thrombolysis and mechanical thrombectomy <i>Speaker:</i> Martin Sames, CZ	16:30 - 16:45
122	Fifty shades of Odontoidectomy <i>Speaker:</i> Sukru Caglar, TR	16:45 - 17:00

Other

14:00 - 18:00

R2

ANNUAL GENERAL MEETING

Pediatric

14:00 - 16:15

R5

ESPN/EANS Joint Symposium*Chair:* Gianpiero Tamburrini, IT*Chair:* Sergey Gorelyshev, RU

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| 127 | Posthemorrhagic hydrocephalus of the premature infant: what did we learn from the advances in care that can be transferred to older children and adult cases
<i>Speaker:</i> Ulrich Thomale, DE | 14:00 - 14:15 |
| 128 | Post-infective hydrocephalus identity in children: its peculiarities according to different world regions and a possible algorithm in its management
<i>Speaker:</i> Graham Fieggen, ZA | 14:15 - 14:30 |
| 129 | Hydrocephalus in children with craniosynostoses: the individualized management of a complex CSF disorder
<i>Speaker:</i> Federico Di Rocco, FR | 14:30 - 14:45 |
| 130 | Multiloculated hydrocephalus: has endoscopic management always a role?
<i>Speaker:</i> Sergey Gorelyshev, RU | 14:45 - 15:00 |
| 131 | Hydrocephalus associated with Chiari I malformation: ETV and its failures
<i>Speaker:</i> Francesco Sala, IT | 15:00 - 15:15 |
| 132 | Ruptured Sylvian arachnoid cysts: is there a consensus on when and how to treat them?
<i>Speaker:</i> Marek Mandera, PL | 15:15 - 15:30 |
| 133 | Posterior fossa arachnoid cysts : a complex entity with different indications to surgical treatment
<i>Speaker:</i> Martina Messing Juenger, DE | 15:30 - 15:45 |
| 134 | Intra and para ventricular arachnoid cysts : success and failure of the endoscopic management
<i>Speaker:</i> Gianpiero Tamburrini, IT | 15:45 - 16:00 |
| | Discussion | 16:00 - 16:15 |

Other

14:00 - 16:00

R6

IANA Pre Congress Course- EANS/SNSS_Session 2*Course Director:* Imad N. Kanaan, US*Course Director:* Vladimir Benes, CZ*Chair:* Luciano Mastronardi, IT*Chair:* Pablo Gonzalez Lopez, ES

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|-----|---|---------------|
| 140 | Cranio-cervical junction Tumors
<i>Speaker:</i> Luciano Mastronardi, IT | 14:00 - 14:20 |
| 135 | Retro-sigmoid Approach for CPA tumors and the role of Endoscopy | 14:20 - 14:40 |

	<i>Speaker:</i> Imad N. Kanaan, US	
139	Enough Lateral-Enough Telovelar Approach <i>Speaker:</i> Vladimir Benes, CZ	14:40 - 15:00
	Direct cochlear nerve stimulation monitoring during surgery for large vestibular schwannom <i>Speaker:</i> Roy Daniel, CH	15:00 - 15:20
137	Variation of Petrosal Approach <i>Speaker:</i> Sebastien Froelich, FR	15:20 - 15:40
138	Microsurgical Anatomy for Supracerebellar Approach and variants <i>Speaker:</i> Abuzer Gungor, TR	15:40 - 16:00
142	Panel Discussion - Closure	16:00 - 16:10

Opening Ceremony

19:30 - 20:30

Pacific & Atlantic

Opening Ceremony*Chair:* Andreas Demetriades, GB*Chair:* Lukas Rasulic, RS*Other*

19:30 - 21:00

EPA

ePosters

Monday, 17. October 2022*Trauma*

08:30 - 10:00

R1

Impact of peripheral nerve injury on trauma management strategies*Chair:* Ana Maria Castano Leon, ES*Chair:* Carlos Rodriguez Aceves, MX

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|-----|---|---------------|
| 143 | Nerve transfers for spinal cord injury
<i>Speaker:</i> Justin Brown, US | 08:30 - 08:40 |
| 144 | Electric burn injuries on peripheral nerves: revision and case report
<i>Speaker:</i> Carlos Rodriguez Aceves, MX | 08:40 - 08:50 |
| 145 | Challenges in concomitant Tbi and plexus injury
<i>Speaker:</i> Willem Pondaag, NL | 08:50 - 09:00 |
| 146 | Timing and Strategy in acute peripheral nerve injury
<i>Speaker:</i> Christian Heinen, DE | 09:00 - 09:10 |
| 147 | Reviving matrix for reconstruction of traumatic injuries to the peripheral nerves and spinal cord
<i>Oral Presenter:</i> Shimon Rochkind, IL | 09:10 - 09:17 |
| 148 | Early supraclavicular nerve grafting is superior to late Oberlin transfer in non-flail adult brachial plexus traction lesions
<i>Oral Presenter:</i> Justus Groen, NL | 09:17 - 09:24 |
| | Discussion | 09:24 - 10:00 |

Skull Base

08:30 - 10:00

R2

CPA*Chair:* Roy Daniel, CH*Chair:* Pierre Hugues Roche, FR

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| 149 | How preoperative vestibular function can impact the functional outcome of vestibular schwannoma surgery
<i>Speaker:</i> Tony Van Havenbergh, BE | 08:30 - 08:40 |
| 150 | Potential clinical implications of tumour microenvironment in vestibular schwannoma
<i>Speaker:</i> Andrew King, GB | 08:40 - 08:50 |
| 151 | Very long term outcome for vestibular schwannomas radiosurgery: about a cohort of 4777 patients
<i>Speaker:</i> Jean Regis, FR | 08:50 - 09:00 |
| 152 | Experience on the management of petroclival meningiomas
<i>Speaker:</i> Sebastien Froelich, FR | 09:00 - 09:10 |
| 153 | Auditory brainstem implantation grading scale: an original validated grading scale for clinical practice | 09:10 - 09:17 |

	<i>Oral Presenter:</i> Gregory Lekovic, US	
154	Endoscopic approaches to orbital lesions <i>Oral Presenter:</i> Cesare Zoia, IT	09:17 - 09:24
155	Endoscope assisted bimanual technique for resection of intraventricular tumours <i>Oral Presenter:</i> Joy Roach, GB	09:24 - 09:31
156	A frailty-adjusted surgical risk, post-operative, long-term functional outcome and quality of life prediction score for intracranial meningiomas <i>Oral Presenter:</i> Leonardo Tariciotti, IT	09:31 - 09:38
158	Neoadjuvant B-RAF and MEK inhibitor targeted therapy for adult papillary craniopharyngiomas: a new treatment paradigm <i>Oral Presenter:</i> Francesco Calvanese, FR	09:38 - 09:45
	Discussion	09:45 - 10:00

Peripheral Nerve Surgery

08:30 - 10:00

R3

PNS-TUMORS AND ENTRAPMENTS*Chair:* Stefano Ferraresi, IT*Chair:* Thomas Kretschmer, AT

159	Benign peripheral nerve sheath tumors <i>Speaker:</i> Hesham El Sobkey, EG	08:30 - 08:40
160	Surgical approaches for the resection of the peripheral nerve sheath tumors at the sciatic notch; anterior vs posterior <i>Speaker:</i> Line Jacques, US	08:40 - 08:50
161	Scalene and pectoralis muscle blocks in TOS: does it help? <i>Speaker:</i> Arnaud Lombard, BE	08:50 - 09:00
162	Surgical treatment of extraorganic tumors of the neck with compression of the neurovascular bundle <i>Speaker:</i> Vasily Lukshin, RU	09:00 - 09:07
163	Peroneal nerve entrapment: outcomes of neurolysis and correlation with intraoperative electrophysiological data <i>Oral Presenter:</i> Danielle Dang, US <i>Speaker:</i> John Hamilton, US	09:07 - 09:14
164	Quality of Life and patient satisfaction in patients surgically treated for Cubital Tunnel Syndrome <i>Oral Presenter:</i> María Elena Córdoba-Mosqueda, RS	09:14 - 09:21
165	Selective neurotomy for focal spasm treatment <i>Oral Presenter:</i> Milan Lepi?, RS	09:21 - 09:28
166	Sacral nerves reconstruction after surgical resection of a large sacral chordoma restores the urinary and sexual functionality and the anal continence	09:28 - 09:35

Oral Presenter: Pietro Familiari, IT

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| 167 | Individual burden of disease, impact on work status, and health related quality of life in surgically treated patients for meralgia paresthetica
<i>Oral Presenter:</i> Shlomo Baruchi, DE | 09:35 - 09:42 |
| | Discussion | 09:42 - 10:00 |

Functional

08:30 - 10:00

R4

Epilepsy Surgery

Chair: Dirk van Roost, BE

Chair: Alexandre Rainha Campos, PT

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|-----|---|---------------|
| 168 | Complications of Anterior Temporal Lobectomy and Amygdalo-Hippocampectomy: Avoidance Strategy Development.
<i>Speaker:</i> Kostas Fountas, GR | 08:30 - 08:40 |
| 169 | Robot-assisted endoscopic surgery for hypothalamic hamartomas
<i>Speaker:</i> Lorand Eross, HU | 08:40 - 08:50 |
| 170 | Resection and disconnection in times of ablation – still justified to treat epilepsy?
<i>Speaker:</i> Marec von Lehe, DE | 08:50 - 09:00 |
| 171 | Non-invasive Treatment of essential tremor by MrgFUS: a single center 5-year experience
<i>Speaker:</i> Domenico Gerardo Iacopino, IT | 09:00 - 09:10 |
| 172 | Selective Dorsal Rhizotomy in non-ambulant children with cerebral palsy - results of a multi-centre, prospective study
<i>Oral Presenter:</i> Conor S Gillespie, GB | 09:10 - 09:17 |
| 173 | VNS - second chance for a patient after failed epilepsy surgery
<i>Oral Presenter:</i> Igor Trifonov, RU | 09:17 - 09:24 |
| 175 | The effect of colored pain drawing on outcome in patients undergoing Gamma Knife radiosurgery for trigeminal neuralgia
<i>Oral Presenter:</i> Selcuk Peker, TR | 09:24 - 09:31 |
| 176 | Structural changes in brains of patients with disorders of consciousness treated with deep brain stimulation
<i>Oral Presenter:</i> Marina Raguz, HR | 09:31 - 09:38 |
| | Discussion | 09:38 - 10:00 |

Vascular

08:30 - 10:00

R5

Spinal arteriovenous malformations

Chair: Andreas Raabe, CH

Chair: Wouter Moojen, NL

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| 177 | How to treat spinal AVMs? | 08:30 - 08:45 |
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	<i>Speaker:</i> Veit Rohde, DE	
178	Spinal AVMs: surgical considerations <i>Speaker:</i> Marco Cenzato, IT	08:45 - 09:00
179	Endovascular approach to spinal avms: technique, tips and tricks <i>Speaker:</i> Simone Peschillo, IT	09:00 - 09:15
180	Surgery for spinal AVM: strategy and nuances <i>Speaker:</i> Michael Lawton, US	09:15 - 09:30
	Discussion	09:30 - 10:00

Neuro-Oncology & Pediatric

08:30 - 10:00

R6

Same brain tumour, different approaches in adults and children*Chair:* Francesco Sala, IT

181	Why are Pediatric brain tumors different from the adult counterpart? <i>Speaker:</i> Jehuda Soleman, CH	08:30 - 08:45
182	Strategy on the treatment of visual pathway gliomas <i>Speaker:</i> Sergey Gorelyshev, RU	08:45 - 09:00
183	Surgical updates in glioma evolution <i>Speaker:</i> Tamara Ius, IT	09:00 - 09:15
184	Craniopharyngioma in children - limits of surgical treatment <i>Speaker:</i> Marek Mandera, PL	09:15 - 09:30
	Discussion	09:30 - 10:00

Spine

08:30 - 10:00

EANS Board/ Council Room

New Strategies and Technologies*Chair:* Maria Luisa Gandia Gonzalez, ES*Chair:* Nikolay Gabrovsky, BG

185	Concept and benefits of ERAS <i>Speaker:</i> Bertrand Debono, FR	08:30 - 08:45
186	Robotics in spine surgery <i>Speaker:</i> Nikolay Gabrovsky, BG	08:45 - 09:00
187	Artificial intelligence in spine surgery - promising or overrated <i>Speaker:</i> Victor Staartjes, CH	09:00 - 09:15
188	Digital Phenotyping: Can Smartphones, Real World Data and Machine Learning Translate into Quality of Life in Spine Patients? <i>Speaker:</i> Timothy Smith, NL	09:15 - 09:30
	Discussion	09:30 - 10:00

Other

09:00 - 18:00

EPA

ePosters

EP01322	Management of a patient with spinal cord herniation caused by intraspinal bone spur: a case presentation <i>Poster Presenter:</i> Schirin Hunziker, DE	09:00 - 09:00
EP01323	Acute intratumoral haemorrhage in a pituitary adenoma patient undergoing a secondary stroke prophylaxis with ASS and Clopidogrel <i>Poster Presenter:</i> Orlin Pavlov, DE	09:00 - 09:00
EP01324	Perioperative assessment of patients with secondary malignancies of the spine for corpectomy and dorsal instrumentation <i>Poster Presenter:</i> Orlin Pavlov, DE	09:00 - 09:00
EP01325	Single institution experience of 42 patients undergoing vertebral corpectomy and dorsal instrumentation <i>Poster Presenter:</i> Orlin Pavlov, DE	09:00 - 09:00
EP01326	Vertebral corpectomy and dorsal instrumentation for traumatic fractures: single institution experience <i>Poster Presenter:</i> Orlin Pavlov, DE	09:00 - 09:00
EP01327	Percutaneous ozone nucleolysis: functional impact evaluation and determination of possible predictors <i>Poster Presenter:</i> Renata Marques, PT	09:00 - 09:00
EP01328	Thoracic intradural extramedullary meningotheial meningioma – case report <i>Poster Presenter:</i> Fatih Metin, CH	09:00 - 09:00
EP01332	Posterolateral epidural supra-C2-root approach (PESCA) for biopsy of lesions of the odontoid process and the retro-odontoid region in same sitting after occipitocervical fixation and decompression <i>Poster Presenter:</i> Sasan Darius Adib, DE	09:00 - 09:00
EP01333	Five months in winter paradise: neurosurgical implications of snowsport-related Traumatic Brain Injury <i>Poster Presenter:</i> Rik Demaerel, AT	09:00 - 09:00
EP01334	Custom titanium skull implants using Single Point Incremental Forming: accuracy optimization using 37 patient database <i>Poster Presenter:</i> Rik Demaerel, AT	09:00 - 09:00
EP01337	Analysis of the choice of surgical treatment for patients with chronic subdural hematomas in the ambulance hospital in Minsk, Republic of Belarus <i>Poster Presenter:</i> Vladimir Komar, BY	09:00 - 09:00
EP01338	Orbitocranial penetrating injury in 2 remarkable cases <i>Poster Presenter:</i> Vikram Thondabhabhi Padmaraju, IN	09:00 - 09:00

EP01340	Disabling headaches following a motor vehicle accident: an exceptionally rare cause <i>Poster Presenter:</i> Sergio Sousa, PT	09:00 - 09:00
EP01341	Occipital cutaneous mass: a rare metastasis of an operated and ?-knife treated meningioma <i>Poster Presenter:</i> Andreas Zigouris, GR	09:00 - 09:00
EP01342	Microsurgical clipping of recurrent intracranial aneurysms treated by endovascular occlusion <i>Poster Presenter:</i> Kresimir Rotim, HR	09:00 - 09:00
EP01343	SF36 healthy survey questionnaire as a tool in order to evaluate the outcome after mild traumatic craniocerebral injuries in male young amateur sportsmen <i>Poster Presenter:</i> Nikolaos Syrmos, GR	09:00 - 09:00
EP01344	SF36 healthy survey questionnaire as a tool in order to evaluate the outcome after mild traumatic craniocerebral injuries in female sportswomen <i>Poster Presenter:</i> Nikolaos Syrmos, GR	09:00 - 09:00
EP01345	Attentional skills following mild traumatic brain and skull injuries in young sports men <i>Poster Presenter:</i> Nikolaos Syrmos, GR	09:00 - 09:00
EP01346	Attentional skills following mild traumatic craniocerebral injuries in elite female athletes <i>Poster Presenter:</i> Vaitsa Giannouli, BG	09:00 - 09:00
EP01347	Intractable trigeminal neuralgia secondary to osteoma of the clivus: a case report and literature review <i>Poster Presenter:</i> Ebtesam Abdulla, BH	09:00 - 09:00
EP01348	Middle meningeal artery endovascular embolization as a novel management method for chronic subdural hematoma <i>Poster Presenter:</i> Ante Rotim, HR	09:00 - 09:00
EP01349	De novo cavernoma in the sensory cortex causing cervicobrachialgia <i>Poster Presenter:</i> Dhruv Jain, IN	09:00 - 09:00
EP01350	Chronic Subdural Hematomas and cognitive outcomes after neurosurgical treatment in adults: a systematic review <i>Poster Presenter:</i> Vaitsa Giannouli, BG	09:00 - 09:00
EP01351	Suggested predictive scoring system for postresection hydrocephalus in pediatric patients with posterior fossa tumors <i>Poster Presenter:</i> Maria Noor-ul-Huda, PK	09:00 - 09:00
EP01352	Simultaneous percutaneous pedicle screw instrumentation and endoscopic transforaminal interbody fusion in lumbar spondylodiscitis <i>Poster Presenter:</i> Bastian Stemmer, DE	09:00 - 09:00
EP01353	Therapeutic anticoagulation impacts MR morphologic	09:00 - 09:00

	recurrence patterns in glioblastoma – a matched-pair analysis <i>Poster Presenter:</i> Daniel Dubinski, DE	
EP01354	Vacuum-assisted closure with temporalis muscle reconstruction for recurrent scalp erosion following deep brain stimulation <i>Poster Presenter:</i> Tae Hyun Kang, KR	09:00 - 09:00
EP01355	Activation of CamKIIγ expressing neurons on ventrolateral periaqueductal gray improves behavioral hypersensitivity and thalamic discharge in a trigeminal neuralgia rat model <i>Poster Presenter:</i> Young Seok Park, KR	09:00 - 09:00
EP01357	Delayed screw removal 30 years after lumbar screw malpositioning: chances and risks <i>Poster Presenter:</i> Katalin Lörincz, DE	09:00 - 09:00
EP01358	A possible catheter induced blister-like cerebral aneurysm: a case report and literature review <i>Poster Presenter:</i> Ebtesam Abdulla, BH	09:00 - 09:00
EP01359	Radiologic and surgical predictors of tumor progression of pituitary adenomas after endonasal transsphenoidal surgery at a tertiary hospital in the Philippines <i>Poster Presenter:</i> Jonna Maala, PH	09:00 - 09:00
EP01360	Melanocytic ependymoma: a case report of a rare pigmented entity <i>Poster Presenter:</i> Sergio Sousa, PT	09:00 - 09:00
EP01361	Management of traumatic intracranial aneurysms associated with traffic accidents <i>Poster Presenter:</i> Filip Vitošević, RS	09:00 - 09:00
EP01362	Salivary gland heterotopia in the clivus after cerebrospinal fluid fistula secondary to nasal swab <i>Poster Presenter:</i> Patricia Alejandra Garrido Ruiz, ES	09:00 - 09:00
EP01363	Mechanical thrombectomy of very elderly patients over 90 years old with acute ischemic stroke <i>Poster Presenter:</i> Yushiro Take, JP	09:00 - 09:00
EP01364	Recurrent epistaxis in a recently coiled carotid-cavernous aneurysm protruding into infected sphenoid sinus due to pseudoaneurysmal development: a case report <i>Poster Presenter:</i> Fatimah Alghabban, SA	09:00 - 09:00
EP01365	Evidence-based recommendations for economic evaluations in spine surgery: study protocol for a Delphi consensus <i>Poster Presenter:</i> Ruud Droeghaag, NL	09:00 - 09:00
EP01367	Giant cell tumor of the sphenoid with extension to the clivus <i>Poster Presenter:</i> Patricia Alejandra Garrido Ruiz, ES	09:00 - 09:00
EP01368	Photodynamic therapy (PDT) and sonodynamic therapy (SDT) as alternative solutions in non-operative and operative	09:00 - 09:00

	neurological tumours - the current state of art <i>Poster Presenter:</i> Agata Zborowska, SE	
EP01369	Relationship between the elderly population and the number of endovascular thrombectomies <i>Poster Presenter:</i> Yushiro Take, JP	09:00 - 09:00
EP01370	Launching awake craniotomy technique in a resource-limited center: new insights into the patient experience, costs, long-term outcomes, and a review of the literature <i>Poster Presenter:</i> Sajjad Saghebdoost, IR	09:00 - 09:00
EP01371	Endoscopic third ventriculostomy in myelomeningocele <i>Poster Presenter:</i> Julia Eva Martin Colom, ES	09:00 - 09:00
EP01372	Textiloma can mimic glioma recurrence <i>Poster Presenter:</i> Maximilian Scheer, DE	09:00 - 09:00
EP01373	Surgery or conservative treatment inpatients with non-traumatic intracerebralhematoma: pros and cons <i>Poster Presenter:</i> Vladimir Komar, BY	09:00 - 09:00
EP01374	Leiomyosarcoma of the Inferior Vena Cava: a rare and underhand tumor, a case report <i>Poster Presenter:</i> Andrea Veroni, IT	09:00 - 09:00
EP01375	Surgical outcome of giant intracranial meningiomas: the role of peritumoral brain edema and localization. A retrospective clinical neuroradiological and immunohistochemical study <i>Poster Presenter:</i> Daniele Armocida, IT	09:00 - 09:00
EP01376	Surgical outcome prediction according to eloquence of brain arteriovenous malformation: a retrospective study in Nepal <i>Poster Presenter:</i> Gopal Sharma, NP	09:00 - 09:00
EP01377	More than a decade of intracranial aneurysm surgery and our outcome analysis of patients with microsurgical clipping <i>Poster Presenter:</i> Gopal Sharma, NP	09:00 - 09:00
EP01378	The role of experienced specialists in the analysis of stimulation-based language mappings in stuttering glioma patients: improving the specificity of nTMS-based language mapping <i>Poster Presenter:</i> Leonie Kram, DE	09:00 - 09:00
EP01379	Surgical results of pituitary apoplexy. Is it worth to do? <i>Poster Presenter:</i> Ashraf Elbadry, EG	09:00 - 09:00
EP01380	Giant Olfactory Groove Meningioma surgery results: case series <i>Poster Presenter:</i> Ashraf Elbadry, EG	09:00 - 09:00
EP01381	Brain cavernous malformation: Our early experience <i>Poster Presenter:</i> Gopal Sharma, NP	09:00 - 09:00
EP01382	Complete resection of sticky ossified dorsal meningioma	09:00 - 09:00

	without neurovascular complications <i>Poster Presenter:</i> Ali Hammed, SY	
EP01383	Surgeon as the main factor for successful minimal invasive spine surgery <i>Poster Presenter:</i> Barbara Smrke, SI	09:00 - 09:00
EP01384	Distal posterior cerebral artery ruptured aneurysm: a rare case report and review of the literature <i>Poster Presenter:</i> Antonia Malli, GR	09:00 - 09:00
EP01385	Giant frontal sinus mucocele presenting as a subcutaneous forehead mass following delayed facial trauma <i>Poster Presenter:</i> Antonia Malli, GR	09:00 - 09:00
EP01387	Minimally invasive transforaminal lumbar interbody fusion (MIS-TLIF) using expandable cages: increased risk of late post-operative subsidence without a real improve of perioperative outcomes <i>Poster Presenter:</i> Daniele Armocida, IT	09:00 - 09:00
EP01388	Intracranial meningioma in elderly patients. Retrospective multicentric risk and surgical factors study of morbidity and mortality <i>Poster Presenter:</i> Daniele Armocida, IT	09:00 - 09:00
EP01389	Schwannoma of the Greater Superficial Petrosal Nerve: an unusual site for a common tumor <i>Poster Presenter:</i> Abhishek Patil, IN	09:00 - 09:00
EP01391	Multicentric glioma found after 5 years of radiotherapy on supra and infratentorial with different histopatolgy: case report <i>Poster Presenter:</i> Dody Priambada, ID	09:00 - 09:00
EP01393	Use of social media during pandemic: a boom to neurosurgical learning <i>Poster Presenter:</i> Bipin Chaurasia, NP	09:00 - 09:00
EP01395	Unilateral right sided phrenic nerve palsy and Covid-19 <i>Poster Presenter:</i> Nilufar Turaeva, UZ	09:00 - 09:00
EP01397	Primary intradural extramedullary ewings sarcoma - a critical analysis and systemic review of literature <i>Poster Presenter:</i> Raman Bhavana, IN	09:00 - 09:00
EP01398	Oxidative stress-induced functional impairment of endothelial cells was reversed by Rapalink-1 <i>Poster Presenter:</i> Muhammad Sajjad, DE	09:00 - 09:00
EP01399	A case report and literature review of a high-voltage electrically injured head presenting with scalp necrosis with underlying calvarial osteomyelitis <i>Poster Presenter:</i> Raman Bhavana, IN	09:00 - 09:00
EP01400	Ultra-early treatment of neurosurgical emergencies with Endoscopic Endonasal Approach: Experience from three Italian	09:00 - 09:00

Referral Centers*Poster Presenter:* Cesare Zoia, IT

EP01401	Dermoid cysts of the conus medullaris associated with sacral meningocele: a case report and review of literature <i>Poster Presenter:</i> Dimbi Makoso José, MA	09:00 - 09:00
EP01402	Angio-architectural reorganization of a Cognard type V craniocervical junction arteriovenous fistula (CCV-AVF): strategic timing for retreatment <i>Poster Presenter:</i> Kristy Latour, IT	09:00 - 09:00
EP01403	Sodium fluorescein as a useful tool in vestibular schwannomas surgery	09:00 - 09:00
EP01404	Apports de l'IRM de perfusion dans les biopsies stéréotaxiques des lésions intracrâniennes <i>Poster Presenter:</i> Samir Amine Benbouali, DZ	09:00 - 09:00
EP01405	The impact of SarsCov2 measures on patient samples and complication rates in spine surgery <i>Poster Presenter:</i> Dragan Jankovic, DE	09:00 - 09:00
EP01406	Clinical and surgical characteristics of posterior fossa tumors in adults – a single-center experience <i>Poster Presenter:</i> Dragan Jankovic, DE	09:00 - 09:00
EP01407	The diagnostic potential of AI in COVID-related Stroke <i>Poster Presenter:</i> Antonia Vogt, GB	09:00 - 09:00
EP01408	Therapeutic role of olfactory ensheathing cells and neuropeptide Y in a <i>vitro</i> model of traumatic brain injury <i>Poster Presenter:</i> Mujahid Alizada, CN	09:00 - 09:00
EP01409	Early post-operative complications of endoscopic endonasal transphenoidal surgery for pituitary adenoma in population of Khyber-Pukhtoonkhwa Province, Pakistan <i>Poster Presenter:</i> Taimoor Ali, PK	09:00 - 09:00
EP01410	Frequency and risk factors of venous thromboembolic events in patients after brain tumor surgery <i>Poster Presenter:</i> Jamil Rzaev, RU	09:00 - 09:00
EP01411	Mini-pterional craniotomy for microsurgical ligation of a sylvian fissure arteriovenous fistula <i>Poster Presenter:</i> Rabeeia Parwez, GB	09:00 - 09:00
EP01412	Management of hyperdynamic therapy in a patient with implanted left ventricular assist device and aneurysmal subarachnoid haemorrhage: a technical note <i>Poster Presenter:</i> Anne Neumeister, DE	09:00 - 09:00
EP01413	Transitional vertebrae: a common cause of wrong level surgery - a case report and literature review <i>Poster Presenter:</i> Jack Wellington, GB	09:00 - 09:00

EP01414	A case of Type B perimedullary arteriovenous fistula resulting in acute paraplegia after lumbar puncture <i>Poster Presenter:</i> Diamantoula Pagkou, GR	09:00 - 09:00
EP01415	Homologous banked fascia lata for duroplasty: monocentric retrospective observational study <i>Poster Presenter:</i> Corrado Iaccarino, IT	09:00 - 09:00
EP01416	Updates on the mechanisms of exercise that regulates the plasticity of aging hippocampus <i>Poster Presenter:</i> Mujahid Alizada, CN	09:00 - 09:00
EP01417	Nondysraphic thoracic intramedullary lipoma after pregnancy: a case report <i>Poster Presenter:</i> Paula Otero-Fernández, ES	09:00 - 09:00
EP01419	Posterior fossa pilocytic astrocytoma contributing to paediatric obstructive sleep apnoea: a case report and review of literature <i>Poster Presenter:</i> Muhammad Ahmad Kamal, GB	09:00 - 09:00
EP01420	Muscle-free peritoneal approach for lumbo-peritoneal shunts – Spigelian fascia <i>Poster Presenter:</i> Muhammad Ahmad Kamal, GB	09:00 - 09:00
EP01421	Dorsal wiring surgery using polyester band for C1 and C2 fractures <i>Poster Presenter:</i> Marco Zanasi, IT	09:00 - 09:00
EP01422	Chew on this - retrospective analysis to evaluate the clinical importance of temporal muscle thickness in DBS candidates for idiopathic Parkinson's disease <i>Poster Presenter:</i> Nikhil Thakur, DE	09:00 - 09:00
EP01423	Endoscopic trans-Magendie foramen biopsy of cerebellar metastasis from lung adenocarcinoma: technical note <i>Poster Presenter:</i> Bruno Vernile, IT	09:00 - 09:00
EP01424	Combined one-step hybrid treatment for a pediatric giant internal carotid artery aneurysm <i>Poster Presenter:</i> Camilla Rizzi, IT	09:00 - 09:00
EP01425	Lumbar artery perforator flap for coverage of midline lumbar skin defect, following a fistula excision <i>Poster Presenter:</i> Aristeidis Prassas, GR	09:00 - 09:00
EP01426	From Focused Ultrasound tumor ablation to Brain Blood Barrier opening for High Grade Glioma: a systematic review <i>Poster Presenter:</i> Luca Paun, CH	09:00 - 09:00
EP01427	High-grade posterior thoracolumbar Fracture-dislocation treated with posterior approach. Case report and brief review of treatment options <i>Poster Presenter:</i> Aristeidis Prassas, GR	09:00 - 09:00
EP01428	Case report: transorbital endoscopic approach for frontal CSF fistula sealing	09:00 - 09:00

	<i>Poster Presenter:</i> Julia Eva Martin Colom, ES	
EP01429	Surgical treatment of thoracolumbar spondylodiscitis: Hybrid Minimally Invasive Mini-Open Technique <i>Poster Presenter:</i> Catherine Zhang, GB	09:00 - 09:00
EP01430	Atlantoaxial posterior screw fixation using intraoperative spinal navigation with 3D isocentric C-arm fluoroscopy <i>Poster Presenter:</i> Luca Paun, CH	09:00 - 09:00
EP01431	Prognostic value of cerebrospinal fluid production rate in haemorrhagic stroke <i>Poster Presenter:</i> Kanza Tariq, GB	09:00 - 09:00
EP01432	The impact of initial hemorrhage pattern on complications and outcome of non-aneurysmatic spontaneous Subarachnoid Hemorrhage <i>Poster Presenter:</i> Elena Kurz, DE	09:00 - 09:00
EP01433	Effectiveness of correction of coronal imbalance on functional outcome for patients with degenerative scoliosis <i>Poster Presenter:</i> Walid Abouzeid, EG	09:00 - 09:00
EP01434	Standardized skullremodeling surgery to improve Tumor Treating Fields therapy for glioblastoma. A technical description <i>Poster Presenter:</i> Nikola Mikic, DK	09:00 - 09:00
EP01435	3D-printed guide used in a patient with hemangioblastoma for neuronavigation <i>Poster Presenter:</i> Ersin Ikizoglu, TR	09:00 - 09:00
EP01436	3D-printed guide used in a patient with right thalamic high grade glial tumor <i>Poster Presenter:</i> Can Sensogut, TR	09:00 - 09:00
EP01437	3D-printed guide used for ventriculoperitoneal shunt placement <i>Poster Presenter:</i> Ceren Kizmazoglu, TR	09:00 - 09:00
EP01438	3D-printed template used for Cranioplasty in a patient with calvarial adenocarcinoma metastasis <i>Poster Presenter:</i> Ersin Ikizoglu, TR	09:00 - 09:00
EP01439	Factors influencing surgical outcome after intramedullary spinal cord cavernoma resection: a retrospective analysis of 30 patients <i>Poster Presenter:</i> Lucas Serrano Sponton, DE	09:00 - 09:00
EP01440	Subjective neurocognitive outcome in patients undergoing neuroendoscopic surgery <i>Poster Presenter:</i> Tim Jonas Hallenberger, CH	09:00 - 09:00
EP01441	Herniated disc or an extradural nerve sheath tumor, a case report <i>Poster Presenter:</i> Mert Arslan, TR	09:00 - 09:00
EP01442	Intradural Disc Herniation at the L2-L3 level, a case report	09:00 - 09:00

	<i>Poster Presenter:</i> Can Sensogut, TR	
EP01443	Spontaneous haemorrhage within ligamentum flavum in a patient operated for lumbar spinal stenosis <i>Poster Presenter:</i> Mert Arslan, TR	09:00 - 09:00
EP01444	A novel low cost exoscope device as an alternative for operative microscope in developing countries <i>Poster Presenter:</i> Manuel De Jesus Encarnacion Ramirez, RU	09:00 - 09:00
EP01445	STA-MCA bypass, trapping and resection of ruptured giant thrombosed MCA aneurysm <i>Poster Presenter:</i> Spyridon Karadimas, CA	09:00 - 09:00
EP01446	Ruptured intracranial dermoid cyst in a young woman with history of post puncture headache <i>Poster Presenter:</i> Paula Otero-Fernández, ES	09:00 - 09:00
EP01447	Do vertebral artery stenoses have an atherosclerotic origin? <i>Poster Presenter:</i> Mehmet Erkan Ustun, TR	09:00 - 09:00
EP01448	Contralateral lateral supraorbital translamina terminalis approach for resection of chiasmatic cavernoma <i>Poster Presenter:</i> Spyridon Karadimas, CA	09:00 - 09:00
EP01450	A global concern: delayed diagnosis of a case of obstructive hydrocephalus associated with a colloidal cyst of the third ventricle due to the COVID-19 pandemic <i>Poster Presenter:</i> Bianca Ioana Agavriloe, RO	09:00 - 09:00
EP01451	Large hypothalamic-optic pathway Rossette-forming glioneuronal tumour in a 6-year-old patient <i>Poster Presenter:</i> Christina Ble, GR	09:00 - 09:00
EP01452	Prediction of MRI in intra-operative findings for spinal arachnoid diseases <i>Poster Presenter:</i> Nadim Tahhan, FR	09:00 - 09:00
EP01455	Surgical management of a penetrating drill bit injury to the skull base <i>Poster Presenter:</i> Manuel De Jesus Encarnacion Ramirez, RU	09:00 - 09:00
EP01456	Interhemispheric transtentorial approach for resection of vermian Arteriovenous Malformation <i>Poster Presenter:</i> Spyridon Karadimas, CA	09:00 - 09:00
EP01459	Surgical correction for basilar invagination with atlantoaxial dislocation associated with anomalous C3 segmental vertebral artery <i>Poster Presenter:</i> Vikram Thondaebhavi Padmaraju, IN	09:00 - 09:00
EP01460	Distribution of the immunohistochemical expression of BAP1 in meningiomas <i>Poster Presenter:</i> Felix Behling, DE	09:00 - 09:00
EP01461	Expression of immune checkpoint markers and association with	09:00 - 09:00

	inflammatory cell infiltration in vestibular schwannomas <i>Poster Presenter:</i> Felix Behling, DE	
EP01463	The spinal metastatic melanoma with scalp lesion presenting as radiculopathy <i>Poster Presenter:</i> Mert Arslan, TR	09:00 - 09:00
EP01462	Peptide receptor radionuclide therapy for meningiomas - development, clinical application and future perspectives <i>Poster Presenter:</i> Christina Fodi, DE	09:00 - 09:00
EP01464	Lumbar disc herniation with congenital absence of lumbar pedicle <i>Poster Presenter:</i> Ceren Kizmazoglu, TR	09:00 - 09:00
EP01465	Can vertebrobasilar insufficiency lead to parkinson like symptoms? <i>Poster Presenter:</i> Mehmet Erkan Ustun, TR	09:00 - 09:00
EP01466	Embolization of Middle Meningeal Artery in patients with chronic subdural hematoma: a monocentric experience <i>Poster Presenter:</i> Corrado Iaccarino, IT	09:00 - 09:00
EP01467	Supplementary burr hole over handknob to determine motor threshold <i>Poster Presenter:</i> David Colle, BE	09:00 - 09:00
EP01468	Enhancing the efficacy of temozolomide and lomustine in glioblastoma cell lines with Tumor Treating Fields (TTFields) <i>Poster Presenter:</i> Leonardo Lustgarten, US	09:00 - 09:00
EP01469	Ishilagia in Covid 19 patients: frequency and characteristics <i>Poster Presenter:</i> Aleksandar Kostic, RS	09:00 - 09:00
EP01470	A probable very extensive skull base meningioma – a case report <i>Poster Presenter:</i> Tiago Ribeiro da Costa, PT	09:00 - 09:00
EP01472	From a questionable Nobel prize to functional neurosurgery: tracing the history and future of leukotomy and psychosurgery <i>Poster Presenter:</i> Kyriakos Birmpas, GR	09:00 - 09:00
EP01473	Management of abdominal giant pseudocyst due to ventriculoperitoneal shunt <i>Poster Presenter:</i> Can Sensogut, TR	09:00 - 09:00
EP01474	Foramen magnum meningiomas: surgical results <i>Poster Presenter:</i> Ashraf Elbadry, EG	09:00 - 09:00
EP01475	Brain hemorrhage after stereotactic biopsy for intracranial lesions: is minimal invasiveness be safer? An evaluation of possible risk factors <i>Poster Presenter:</i> Giuseppe Roberto Giammalva, IT	09:00 - 09:00
EP01476	Standardized reporting of adverse events and functional status from the first 5 years of awake-surgery for gliomas: a	09:00 - 09:00

	population-based single-institution consecutive series <i>Poster Presenter:</i> Margret Jensdottir, SE	
EP01477	Frameless navigated transcerebellar brainstem biopsy - case report and review of the literature <i>Poster Presenter:</i> Fatih Metin, CH	09:00 - 09:00
EP01478	Enrolment in spinal surgical trials over the past 20 years <i>Poster Presenter:</i> Maaz Ahmed Khan, GB	09:00 - 09:00
EP01479	An extended retrosigmoid suprameatal transtentorial approach to the upper clivus and posterior cavernous sinus <i>Poster Presenter:</i> Stavros Constantinou, US	09:00 - 09:00
EP01480	Synthetic anorganic bovine-derived hydroxyapatite matrix combined with a synthetic 15 amino acid sequence (ABM/P-15) as bone graft in spinal, craniotomic and burr holes neurosurgical procedures <i>Poster Presenter:</i> Lucio Lucchesi, IT	09:00 - 09:00
EP01481	Ruptured infectious ICA pseudoaneurysm into the sphenoid sinus after maxillofacial infection, successfully treated by selective embolization <i>Poster Presenter:</i> Andreas Theofanopoulos, GR	09:00 - 09:00
EP01482	Optimum drilling in cervical oblique corpectomy <i>Poster Presenter:</i> Oguz Baran, TR	09:00 - 09:00
EP01483	Case report of L3-L4 far lateral type disc extrusion treated with minimally invasive tubular microdiscectomy <i>Poster Presenter:</i> Blagoj Shuntov, MK	09:00 - 09:00
EP01484	Intraoperative ultrasound: emerging technology and novel applications in brain tumor surgery <i>Poster Presenter:</i> Rosario Maugeri, IT	09:00 - 09:00
EP01485	Delayed osteomyelitis: Methicillin-Sensitive <i>Staphyococcus Epidermidis</i> infection twenty-eight years after a craniotomy. Presentation of a case and review of the literature <i>Poster Presenter:</i> Raquel Gutiérrez-González, ES	09:00 - 09:00
EP01486	Cranial gastrointestinal stromal tumor metastasis without other systemic lesions - a rare entity <i>Poster Presenter:</i> Filipe Vaz da Silva, PT	09:00 - 09:00
EP01490	Surgical treatment of craniovertebral junction meningiomas using a simple minimally invasive posterior approach <i>Poster Presenter:</i> Nikolay Konovalov, RU	09:00 - 09:00
EP01491	Orbitofrontal cholesterol granuloma – a rare condition <i>Poster Presenter:</i> Armindo Picão Fernandes, PT	09:00 - 09:00
EP01492	Safety and efficacy of brain biopsy: a single-institution retrospective study <i>Poster Presenter:</i> Celia Gaier, GB	09:00 - 09:00

EP01493	A case report of a vertebral body osteoid osteoma in the cervical region <i>Poster Presenter:</i> Irena Cvrkota, RS	09:00 - 09:00
EP01495	A case report of the epidural abscess in the cervical region after oesophagoscopy <i>Poster Presenter:</i> Danilo Radulovi?, RS	09:00 - 09:00
EP01497	Sodium-fluorescein guided resection in brain metastases surgery: our results in a series of 59 patients <i>Poster Presenter:</i> Lorenzo Mongardi, IT	09:00 - 09:00
EP01499	Infundibular widening of the posterior communicating artery is a special place for aneurysm development? <i>Poster Presenter:</i> Danilo Radulovi?, RS	09:00 - 09:00
EP01501	Surgical steps and lessons learned in final separation of three-years-old Bangladeshi craniopagus twins <i>Poster Presenter:</i> András Csókay, HU	09:00 - 09:00
EP01502	Decrease of distress situation by contemplation during difficult neurosurgery like craniopagus separation <i>Poster Presenter:</i> András Csókay, HU	09:00 - 09:00
EP01503	WHO grade III extraventricular supratentorial ependymoma: a case report <i>Poster Presenter:</i> Alvaro Zamarron Perez, ES	09:00 - 09:00
EP01504	Spontaneous spondylodiscitis: experience from a single tertiary center <i>Poster Presenter:</i> Alvaro Zamarron Perez, ES	09:00 - 09:00
EP01506	Clinical evaluation of vertebral body replacement of carbon fiber-reinforced polyetheretherketone in patients with tumor manifestation of the thoracic and lumbar spine <i>Poster Presenter:</i> Maximilian Schwendner, DE	09:00 - 09:00
EP01507	Sciatica due to nerve entrapment by a pseudomeningocele - case report <i>Poster Presenter:</i> Julien Jost, CH	09:00 - 09:00
EP01508	Risk factors for progression of vertebral compression fractures <i>Poster Presenter:</i> Raquel Gutiérrez-González, ES	09:00 - 09:00
EP01509	Care for patients with lower urinary tract dysfunction in neurosurgical setting <i>Poster Presenter:</i> Dmitry Lysachev, RU	09:00 - 09:00
EP01510	Spontaneous cervico-dorso-lumbar pneumorachis: case report and literature review <i>Poster Presenter:</i> Raquel Gutiérrez-González, ES	09:00 - 09:00
EP01511	Expanded endoscopic endonasal approach: a single center experience <i>Poster Presenter:</i> Vjerislav Peterkovi?, HR	09:00 - 09:00

EP01512	Anterior decompression with cage and rod fixation via thoracotomy for dorsal spine tuberculosis <i>Poster Presenter:</i> Adnan Ahmed, PK	09:00 - 09:00
EP01515	Surgeon's comfort: the ergonomics of a robotic exoscope using a head-mounted display <i>Poster Presenter:</i> Anto Abramovic, AT	09:00 - 09:00
EP01516	Delayed vasospasm following pituitary surgery: case report and literature review <i>Poster Presenter:</i> Camilla Rizzi, IT	09:00 - 09:00
EP01517	Refractory epilepsy secondary to angular gyrus ganglioglioma: the role of transdural ultrasonography and cortical stimulation language mapping in optimal surgical resection <i>Poster Presenter:</i> Victor Henriques, PT	09:00 - 09:00
EP01518	Transorbital intracranial penetrating injury: how simple management may translate into a good outcome <i>Poster Presenter:</i> Victor Henriques, PT	09:00 - 09:00
EP01519	Ewing's sarcoma presenting as severe acute paraparesis from thoracic epidural metastases <i>Poster Presenter:</i> Victor Henriques, PT	09:00 - 09:00
EP01520	Single-stage posterior circumferential stabilization using double small cages for the treatment of thoracic and lumbar spine fractures <i>Poster Presenter:</i> Jung-Kil Lee, KR	09:00 - 09:00
EP01521	Traumatic C2-C3 dislocation in the setting of osteopetrosis <i>Poster Presenter:</i> Ceren Kizmazoglu, TR	09:00 - 09:00
EP01522	Peritumoral brain edema and surgical morbidity in the skull base meningiomas <i>Poster Presenter:</i> Barbora Musilová, CZ	09:00 - 09:00
EP01523	Osteomyelitis of the skull bones in post COVID-19 patients <i>Poster Presenter:</i> Guia Shahinian, RU	09:00 - 09:00
EP01524	The prevalence of HIV in adults undergoing surgery for brain tumours <i>Poster Presenter:</i> Shahinur Rahman, GB	09:00 - 09:00
EP01525	From simple burr hole to craniotomy. When bilateral subacute subdural hematoma turns out to be a malignant lymphoma. A case report <i>Poster Presenter:</i> Stefka Byulbyuleva, BG	09:00 - 09:00
EP01526	Application of biologically integrated titanium cages of unique design for transforaminal fusion in patients with degenerative diseases of the spine <i>Poster Presenter:</i> Manuel De Jesus Encarnacion Ramirez, RU	09:00 - 09:00
EP01527	An interesting approach to treatment of bilateral frontal brain abscess that originated as a complication of COVID-19 therapy	09:00 - 09:00

	<i>Poster Presenter:</i> Vuk Aleksi?, RS	
EP01528	Intracranial hemorrhages after cerebral revascularization surgery <i>Poster Presenter:</i> Vagan Dalibaldyan, RU	09:00 - 09:00
EP01530	Cribriform fracture following COVID-19 nasopharyngeal swab: case report, operative management and review of the literature <i>Poster Presenter:</i> Anca-Mihaela Vasilica, GB	09:00 - 09:00
EP01531	A rare case of skull base osteosarcoma after treatment of anaplastic SFT/HPC tumor. A case report and review of the literature <i>Poster Presenter:</i> Dimitrios Charitos, GR	09:00 - 09:00
EP01533	Implementation of a three-dimensional (3D) robotic digital microscope (AEOS) in cranial procedures <i>Poster Presenter:</i> Maximilian-Niklas Bonk, DE	09:00 - 09:00
EP01534	Surgical clipping of vertebral PICA aneurysm <i>Poster Presenter:</i> Ehsan Mohammad Hosseini, IR	09:00 - 09:00
EP01535	Treatment of malignant peripheral nerve sheath tumor of the peripheral nerve <i>Poster Presenter:</i> Milan Lepi?, RS	09:00 - 09:00
EP01537	Microsurgical approach for symptomatic brain AVMs <i>Poster Presenter:</i> Radu Mircea Gorgan, RO	09:00 - 09:00
EP01538	The outcome of microsurgical treatment of multilevel cervical disc disease <i>Poster Presenter:</i> Haso Sefo, BA	09:00 - 09:00
EP01540	Proteomics analysis on human cerebral cavernous malformations reveals novel biomarkers for the disease pathology <i>Poster Presenter:</i> Henri Savander, FI	09:00 - 09:00
EP01543	The meaning of surgical experience in high grade gliomas <i>Poster Presenter:</i> Stefan Ioan Florian, RO	09:00 - 09:00
EP01545	Early outcome of ventriculoperitoneal (VP) shunt in terms of improvement and complications <i>Poster Presenter:</i> Arif Hussain, PK	09:00 - 09:00
EP01546	Primary CNS lymphoma of foramen magnum – a rare case report and literature review <i>Poster Presenter:</i> Antonia Malli, GR	09:00 - 09:00
EP01547	A deep learning model for preoperative differentiation of glioblastoma, brain metastasis, and primary central nervous system lymphoma: an external validation study <i>Poster Presenter:</i> Leonardo Tariciotti, IT	09:00 - 09:00
EP01548	Mirror middle cerebral artery aneurysms: anatomic characteristics and treatment options	09:00 - 09:00

	<i>Poster Presenter:</i> Hristo Tsonev, BG	
EP01549	The current state of psychosurgery (neurosurgery for mental disorder): provoking surgical taboo or effective treatment of the mind?	09:00 - 09:00
	<i>Poster Presenter:</i> Jack Wellington, GB	
EP01550	Natural history of carotid artery free-floating thrombus – a single centre, consecutive cohort analysis	09:00 - 09:00
	<i>Poster Presenter:</i> Mandy D Müller, CH	
EP01551	Endoscopic endonasal approach for resection of craniopharyngioma in children. A case presentation	09:00 - 09:00
	<i>Poster Presenter:</i> Savvas Melissaris, GR	
EP01552	Efficacy and safety of unilateral percutaneous Vertebroplasty for acute traumatic non-osteoporotic compression vertebral fractures	09:00 - 09:00
	<i>Poster Presenter:</i> Ali Hammed, SY	
EP01553	Paravertebral degenerated (ancient) Schwannoma of dorsal ramus nerve: a case report	09:00 - 09:00
	<i>Poster Presenter:</i> Yigit Can Senol, TR	
EP01554	Delayed epidural hematoma after mild head injury: report of two cases	09:00 - 09:00
	<i>Poster Presenter:</i> Irena Cvrkota, RS	
EP01555	Distal cerebral artery aneurysms with surpass evolve 2.5mm flow-diverter stent: a single-center experience	09:00 - 09:00
	<i>Poster Presenter:</i> Yigit Can Senol, TR	
EP01556	May-Thurner syndrome: an atypical cause of low-back pain	09:00 - 09:00
	<i>Poster Presenter:</i> Carlos Alberto Rodríguez-Arias, ES	
EP01557	Surgical treatment of cervical spondylotic myelopathy: preliminary results of Serbian group study	09:00 - 09:00
	<i>Poster Presenter:</i> Irena Cvrkota, RS	
EP01558	The spatial distribution of neurons in the human adult subthalamic nucleus	09:00 - 09:00
	<i>Poster Presenter:</i> Fadi Almahariq, HR	
EP01559	Spinal dural arteriovenous fistula (SDAVF): a case series	09:00 - 09:00
	<i>Poster Presenter:</i> Ioannis Gkalonakis, GR	
EP01560	Hypofractionated Gamma Knife radiosurgery: institutional experience on benign and malignant intracranial tumors	09:00 - 09:00
	<i>Poster Presenter:</i> Giuseppe E. Umana, IT	
EP01561	Arm-only access for intracranial venous stenting in idiopathic intracranial hypertension	09:00 - 09:00
	<i>Poster Presenter:</i> Carlos Alberto Rodríguez-Arias, ES	
EP01562	Venous Air Embolism Due to Skull Located Enlarged Vascular Lacunes During Giant Meningioma Surgery	09:00 - 09:00

	<i>Poster Presenter:</i> Ersin Ikizoglu, TR	
EP01563	"Salus aegroti suprema lex medicorum." History of neurosurgery at the Clinical Hospital Center Zemun <i>Poster Presenter:</i> Vuk Aleksi?, RS	09:00 - 09:00
EP01564	Microvascular decompression for trigeminal neuralgia secondary to vertebral artery dolichoectasia: cyanoacrylate glue-coated teflon sling transposition technique <i>Poster Presenter:</i> Giulio Bonomo, IT	09:00 - 09:00
EP01566	The suprasellar volume of nonfunctioning pituitary adenomas: a useful tool for predicting visual field deficits <i>Poster Presenter:</i> Giulio Bonomo, IT	09:00 - 09:00
EP01567	Follow-up technologies in traumatic brain injury: a scoping review <i>Poster Presenter:</i> Brandon G. Smith, GB	09:00 - 09:00
EP01568	Diagnostic approach, therapeutic strategies and surgical indications in intradural thoracic disc herniation associated with CSF leak, intracranial hypotension and CNS Superficial Siderosis <i>Poster Presenter:</i> Giulio Bonomo, IT	09:00 - 09:00
EP01569	Effect of robotic-assisted gait training on functional recovery of patients with incomplete spinal cord injuries <i>Poster Presenter:</i> Željka Ra?etovi?, BA	09:00 - 09:00
EP01570	Vagus nerve stimulation in pediatric drug-resistant epilepsy: single-institution experience <i>Poster Presenter:</i> Niko Njiri?, HR	09:00 - 09:00
EP01571	CSF shunting methods in the renal system – a review of past and present practice <i>Poster Presenter:</i> Cezar Octavian Morosanu, GB	09:00 - 09:00
EP01572	Experience in the use of minimally invasive microsurgical decompression (MMD) in spinal degenerative monosegmental stenosis of the spinal canal of the lumbosacral spine <i>Poster Presenter:</i> Nikolay Konovalov, RU	09:00 - 09:00
EP01573	Extracranial facial nerve schwannoma - case report <i>Poster Presenter:</i> Filipe Vaz da Silva, PT	09:00 - 09:00
EP01574	Utilization of surgeon designed three-dimensional fused deposition modeling in neurosurgical procedures <i>Poster Presenter:</i> Jagoš Golubovi?, RS	09:00 - 09:00
EP01575	Deep brain stimulation: a 15 year institutional experience <i>Poster Presenter:</i> Fadi Almahariq, HR	09:00 - 09:00
EP01577	Dystonia treated successfully using GPi DBS in early childhood <i>Poster Presenter:</i> Marina Raguz, HR	09:00 - 09:00
EP01579	Pituitary apoplexy due to metastasis from renal origin: a case	09:00 - 09:00

	report <i>Poster Presenter:</i> Paula Otero-Fernández, ES	
EP01580	Novel brain MRI volumetric software and MRI brains data base – preliminary study <i>Poster Presenter:</i> Marina Raguz, HR	09:00 - 09:00
EP01582	A neurosurgeon's view on the treatment of cerebral ischemia <i>Poster Presenter:</i> Vasily Lukshin, RU	09:00 - 09:00
EP01583	Isolated cerebellar tuberculoma mimicking posterior cranial fossa metastasis.? <i>Poster Presenter:</i> Firas Sliti, TN	09:00 - 09:00
EP01584	A case report on novel, minimally invasive approach for thoracic discectomy <i>Poster Presenter:</i> Shahinur Rahman, GB	09:00 - 09:00
EP01585	Curcumin plus radiotherapy for glioblastoma treatment <i>Poster Presenter:</i> George Alexiou, GR	09:00 - 09:00
EP01586	Extreme lateral interbody fusion (XLIF) with lateral modular plate fixation: preliminary report of clinical and radiological outcomes <i>Poster Presenter:</i> Alessandro Frati, IT	09:00 - 09:00
EP01587	Ventriculoatrial shunt nephritis - a rare but not negligible complication. A case report <i>Poster Presenter:</i> Rodrigo Batata, PT	09:00 - 09:00
EP01588	Siderol suppress glioma proliferation and induce cell cycle arrest <i>Poster Presenter:</i> George Alexiou, GR	09:00 - 09:00
EP01589	Thoracolumbar intradural disc herniation: operative video case report <i>Poster Presenter:</i> Stasa Tumpa, GB	09:00 - 09:00
EP01590	Treatment of focal spasticity <i>Poster Presenter:</i> Andrija Savic, RS	09:00 - 09:00
EP01591	Thoracic psammomatous meningioma with osseous metaplasia: a case report <i>Poster Presenter:</i> Aleksandar Petrovi?, RS	09:00 - 09:00
EP01592	Remote follow-up technologies for spinal cord injury: a scoping review <i>Poster Presenter:</i> Stasa Tumpa, GB	09:00 - 09:00
EP01593	Retro-odontoid pseudotumor with cervicomedullary compression: a case report <i>Poster Presenter:</i> Kyriaki Rafailia Kavazidi, DE	09:00 - 09:00
EP01594	Neuronavigation applied to Piezosurgery: towards robotic image-aided craniotomies? A technical note	09:00 - 09:00

	<i>Poster Presenter:</i> Guglielmo Iess, IT	
EP01595	Improvement in patient safety through provision of medication information leaflets <i>Poster Presenter:</i> Kanza Tariq, GB	09:00 - 09:00
EP01596	Chiari-type I: service evaluation in a regional neurosurgical centre to inform interim guidelines for management <i>Poster Presenter:</i> Wenxin Ma, GB	09:00 - 09:00
EP01597	Trident phase 3 trial (EF-32): first-line Tumor Treating Fields (TTFields; 200 kHz) concomitant with chemo-radiation, followed by maintenance TTFields/temozolomide in newly diagnosed glioblastoma <i>Poster Presenter:</i> Rachel Grossman, IL	09:00 - 09:00
EP01598	Case report and discussion of Calcific Discitis and symptomatic Calcified Schmorl's Node as rare cause of acute back pain <i>Poster Presenter:</i> Aida Denisse Negrete Durazo, DE	09:00 - 09:00
EP01600	Correlation of low CD44v4 and CD44v10 gene expression levels with early tumor progression <i>Poster Presenter:</i> Peter Baumgarten, DE	09:00 - 09:00
EP01601	Hemiparkinsonism caused by a lateral sphenoid wing meningioma and recovery after surgical resection: a case report with tractography and systematic literature review <i>Poster Presenter:</i> Attila Saemann, CH	09:00 - 09:00
EP01602	Effectiveness of targeted epidural blood patch through the catheter in the management of spontaneous intracranial hypotension <i>Poster Presenter:</i> Konrad Kubicki, PL	09:00 - 09:00
EP01599	Neurosurgical treatment and outcome of pediatric skull base lesions: a case series and systematic review of the literature <i>Poster Presenter:</i> Tim Jonas Hallenberger, CH	09:00 - 09:00
EP01603	Frailty and temporal muscle mass as predictors of immunotherapy response and overall survival in patients with brain metastases of non-small cell lung cancer <i>Poster Presenter:</i> Naureen Keric, DE	09:00 - 09:00
EP01604	The surgical planning for brain surgery using machine learning: cranial artificial intelligent approaches <i>Poster Presenter:</i> ?hsan Do?an, TR	09:00 - 09:00
EP01605	Anterior skull-base fractures. Single institute management and treatment in CSF leak, surgical techniques and outcome <i>Poster Presenter:</i> Luigi Schisano, IT	09:00 - 09:00
EP01606	Safeness of sodium fluorescein administration in neurosurgery: case-report of an erroneous very high-dose administration and review of the literature <i>Poster Presenter:</i> Francesco Restelli, IT	09:00 - 09:00

EP01607	Endoscopic evacuation of acute subdural hematoma in the elderly – a systematic review <i>Poster Presenter:</i> Nicole Frank, CH	09:00 - 09:00
EP01608	Sports-related concussion in soccer – a scoping review of the available guidelines <i>Poster Presenter:</i> Imran Shah, GB	09:00 - 09:00
EP01609	Ischemic stroke by post-traumatic fat embolism in an infant - case report <i>Poster Presenter:</i> Anna Laura Larcipretti, BR	09:00 - 09:00
EP01610	Art of clipping of aneurysm; problems and solutions <i>Poster Presenter:</i> Pranav Ghodgaonkar, IN	09:00 - 09:00
EP01611	The impact of the COVID-19 pandemic on the work of the Neurosurgical department at the Clinical Hospital Center Zemun <i>Poster Presenter:</i> Aleksandar Petrovi?, RS	09:00 - 09:00
EP01612	“The double S” technique: subfascial and splitting temporalis muscle dissection to prevent cerebrospinal fluid leak and maximize exposure in temporal craniotomies <i>Poster Presenter:</i> Federica Paolini, IT	09:00 - 09:00
EP01613	Minimally invasive, facet sparing dorsolateral approach for resection of intradural pathologies anterior to denticulate ligament in the thoracic spine <i>Poster Presenter:</i> Marco Gallus, DE	09:00 - 09:00
EP01615	Resection of osteophytes in diffuse idiopathic skeletal hyperostosis (DISH) causing massive dysphagia <i>Poster Presenter:</i> Bilal Barim, DE	09:00 - 09:00
EP01616	Spinal epidural abscess due to acute pyelonephritis: case report and literature review <i>Poster Presenter:</i> Federica Paolini, IT	09:00 - 09:00
EP01617	Management and outcomes of acute type II odontoid fractures in a resource limited setup <i>Poster Presenter:</i> Muhammad Shaheer Akhtar, PK	09:00 - 09:00
EP01618	Functional lesion-brain coupling in glioblastoma is more comparable to typical neural connectivity than in brain metastases <i>Poster Presenter:</i> Julius Kernbach, DE	09:00 - 09:00
EP01619	Demographics, presentation, radiographic findings and early outcomes of ruptured intracranial aneurysms <i>Poster Presenter:</i> Muhammad Shaheer Akhtar, PK	09:00 - 09:00
EP01620	Pituitary tuberculoma disguised as a pituitary adenoma <i>Poster Presenter:</i> Firas Sliti, TN	09:00 - 09:00
EP01621	Diffusion Tensor Imaging (DTI) as a predictor of neurological outcome in patients affected by Traumatic Brain Injury (TBI). A systematic review	09:00 - 09:00

	<i>Poster Presenter:</i> Federica Paolini, IT	
EP01622	Health-related quality of life after low-grade glioma resection <i>Poster Presenter:</i> Laurèl Rauschenbach, DE	09:00 - 09:00
EP01623	Primary Central Nervous System Lymphoma (PCNSL) mimicking the presentation of a pituitary apoplexy: a case report <i>Poster Presenter:</i> João Meira Gonçalves, PT	09:00 - 09:00
EP01626	Pituitary adenomas with parasellar extension. Can radicality be safe? <i>Poster Presenter:</i> Ruslan Aksyonov, UA	09:00 - 09:00
EP01627	IDH1 SNP G105G prognostic role in central nervous system diffuse gliomas <i>Poster Presenter:</i> Ayoub Saaid, IT	09:00 - 09:00
EP01628	Preliminary experience with sodium fluorescein in vestibular schwannoma microneurosurgery <i>Poster Presenter:</i> Salvatore Marrone, IT	09:00 - 09:00
EP01629	Machine learning approach for p75 neurotrophin receptor associated plasticity providing new prognostic value recovering acute brain injuries <i>Poster Presenter:</i> Antti Sajanti, FI	09:00 - 09:00
EP01630	Myxopapillary ependymomas of the cauda equina revisited in neuromonitoring era <i>Poster Presenter:</i> Panagiotis Papadopoulos-Manolarakis, GR	09:00 - 09:00
EP01634	Malignant transformation of ganglioglioma to anaplastic ganglioglioma: a ganglioside characterization study <i>Poster Presenter:</i> Mia Jurilj, HR	09:00 - 09:00
EP01635	Interdisciplinary treatment of complex C1/C2 fractures in a patient with concomitant three-vessel coronary artery disease and indication for bypass surgery <i>Poster Presenter:</i> Maria Elisa Di Francesco, DE	09:00 - 09:00
EP01636	Comparison between open and minimally invasive surgery in degenerative lumbar spine disease management <i>Poster Presenter:</i> Bruno Splavski, HR	09:00 - 09:00
EP01637	Multiplanar spinopelvic fracture reduction and dual triangular osteosynthesis stabilisation for complex multidirectional sacropelvic fractures: a case series and technical note <i>Poster Presenter:</i> Catherine Zhang, GB	09:00 - 09:00
EP01638	Management of wrist drop <i>Poster Presenter:</i> An?l Eray, TR	09:00 - 09:00
EP01639	A retrospective study of craniosynostosis in Latvian population <i>Poster Presenter:</i> Ritvars Kalnins, LV	09:00 - 09:00
EP01640	Surgical Treatment of Trigeminal Neuralgia	09:00 - 09:00

	<i>Poster Presenter:</i> Irakli Otarashvili, GE	
EP01641	Neurovascular dysfunction in aging <i>Poster Presenter:</i> Peter Toth, HU	09:00 - 09:00
EP01642	Surgical treatment of intraventricular meningiomas <i>Poster Presenter:</i> Irakli Otarashvili, GE	09:00 - 09:00
EP01643	High precision bone cutting by Er: YAG lasers might minimize the invasiveness of navigated brain biopsies <i>Poster Presenter:</i> Thanh Tu Ha, CH	09:00 - 09:00
EP01644	Management of pediatric complex artero-venous malformation of corpus callosum	09:00 - 09:00
EP01645	Cerebral neuroblastoma metastasis presented with parenchymal and ventricular hemorrhage in pediatric patient: a rare case <i>Poster Presenter:</i> Ozgur Orhan, TR	09:00 - 09:00
EP01646	Improving electrophysiological criteria for implantation of deep brain stimulation in patients with disorders of consciousness: a preliminary study <i>Poster Presenter:</i> Gabriela Plosnic, HR	09:00 - 09:00
EP01647	Prediction of postoperative speech dysfunction based on cortico-cortical evoked potentials and machine learning <i>Poster Presenter:</i> Andrey Bykanov, RU	09:00 - 09:00
EP01650	Surgical stabilization is an effective treatment for multiple myeloma causing gross or impending instability of the spine <i>Poster Presenter:</i> Andreas Kramer, DE	09:00 - 09:00
EP01651	Use of intraoperative ultrasound in surgical treatment of metastatic spinal cord compression <i>Poster Presenter:</i> Thaaqib Nazar, GB	09:00 - 09:00
EP01649	High-grade astrocytoma with piloid features: prevalence, diagnostics, genetic markers <i>Poster Presenter:</i> Stanislav Kaprovoy, RU	09:00 - 09:00
EP01652	The role of plasma Glial-Fibrillary Acid Protein (GFAP) as a biomarker for malignant brain tumors <i>Poster Presenter:</i> Athanasios Theofanopoulos, GR	09:00 - 09:00
EP01653	Post SRS capping cysts - tip of the iceberg? <i>Poster Presenter:</i> Murugan Sitaraman, GB	09:00 - 09:00
EP01654	A 10 year review of paediatric spinal High Grade Glioma in a regional paediatric neurosurgery centre <i>Poster Presenter:</i> Murugan Sitaraman, GB	09:00 - 09:00
EP01655	Posterior fossa lymphoma: a rare case report <i>Poster Presenter:</i> Ozgur Orhan, TR	09:00 - 09:00
EP01656	Hypofractionated frameless Gamma Knife radiosurgery for	09:00 - 09:00

	surgical bed of metastatic brain tumors <i>Poster Presenter:</i> Yavuz Samanci, TR	
EP01657	Expanded endoscopic endonasal transtuberculum transchiasmatic sulcus approach and adjuncts for maximal resection of paediatric and adult craniopharyngiomas: technical nuances and outcomes from a challenging series <i>Poster Presenter:</i> Adrian Zammit, GB	09:00 - 09:00
EP01658	Combined use of minimally invasive robotic techniques and radiotherapy in the management of pain in patients with spine metastases - review of a pilot programme <i>Poster Presenter:</i> Krzysztof Szalecki, PL	09:00 - 09:00
EP01659	Internal carotid artery-Posterior-communicating artery aneurysm with superomedial projection — An unusual case report <i>Poster Presenter:</i> Roada Bucpapaj, IT	09:00 - 09:00
EP01660	Second contralateral ventriculoperitoneal shunt for the treatment of the third ventricle and lateral ventricle dilatation in unusual hydrocephalus: a case report <i>Poster Presenter:</i> Tomas Moravec, CZ	09:00 - 09:00
EP01661	End-Stage Renal Disease (ESRD) associated with vertebral fragility fractures. Instrumentation in an adult <i>Poster Presenter:</i> Mary Solou, GR	09:00 - 09:00
EP01663	A rare case of a conus medullaris neurenteric cyst <i>Poster Presenter:</i> Stasa Tumpa, GB	09:00 - 09:00
EP01665	Smoking and degenerative spinal disease: a systematic review <i>Poster Presenter:</i> Niharika Rajesh, IE	09:00 - 09:00
EP01666	The application of advanced imaging in neuro-oncology: a focus on radiomics and machine-learning methods in the management of intracranial meningiomas <i>Poster Presenter:</i> Lara Brunasso, IT	09:00 - 09:00
EP01667	Technical description of a flow diversion implant for a challenging right indirect carotid-ophthalmic cavernous fistula <i>Poster Presenter:</i> Lara Brunasso, IT	09:00 - 09:00
EP01668	Spinal dysraphisms association in a day-old newborn. A case description and pathological overview <i>Poster Presenter:</i> Lara Brunasso, IT	09:00 - 09:00
EP01669	Orbital trauma, nausea, and bradycardia: a Trapdoor fracture case report <i>Poster Presenter:</i> Anna Laura Larcipretti, BR	09:00 - 09:00
EP01670	Serious neurologic implications in newborn after birth fracture: a case report <i>Poster Presenter:</i> Anna Laura Larcipretti, BR	09:00 - 09:00
EP01671	Brainstem hemorrhage following drainage of chronic subdural	09:00 - 09:00

	hematoma: a case report <i>Poster Presenter:</i> Anna Laura Larcipretti, BR	
EP01672	Skullremodeling surgery as a novel treatment to increase Tumor Treating Fields therapy dose for 1st recurrent glioblastoma. Study protocol: multi-center randomized phase 2 trial <i>Poster Presenter:</i> Nikola Mikic, DK	09:00 - 09:00
EP01673	The relationship between genes involved in neurogenesis and cancer stem cells in glioblastoma – an in silico analysis <i>Poster Presenter:</i> George E. D. Petrescu, RO	09:00 - 09:00
EP01674	Massive brain edema during meningioma resection secondary to peri-operative ruptured intracranial aneurysm: case report <i>Poster Presenter:</i> Mohammad G. Abdoh, SA	09:00 - 09:00
EP01677	Modern hemodynamic parameters in prediction of cerebral aneurysm rupture <i>Poster Presenter:</i> Filip Vrban, HR	09:00 - 09:00
EP01678	Unusual clinical presentation of spinal cord ependymoma in a pediatric patient <i>Poster Presenter:</i> Martina Rossitto, IT	09:00 - 09:00
EP01679	Factors influencing surgical and functional outcomes after Anterior Cervical Discectomy and Fusion (ACDF) procedure. A retrospective study with 2 years minimum follow up <i>Poster Presenter:</i> Aristidis Prasssas, GR	09:00 - 09:00
EP01680	The rise of pheonix- frontal osteomyelitis due to rhinocerebral mucormycosis - our institutional experience, Andhra Medical College, King George Hospital, India <i>Poster Presenter:</i> Hema Swaroop Kurumella, IN	09:00 - 09:00
EP01681	Patient custom targeting guides in vertebral screw placement: an alternative to neuronavigation <i>Poster Presenter:</i> Julio Alberto Andres Sanz, ES	09:00 - 09:00
EP01682	Mini craniectomy for torcular DAVF clipping: a case presentation and technical pearls <i>Poster Presenter:</i> Andreas Theofanopoulos, GR	09:00 - 09:00
EP01683	Traumatic brain injury in ski: a retrospective cohort study in a 1 level emergency department in Switzerland comparing different age population groups <i>Poster Presenter:</i> Alberto Consuegra, CH	09:00 - 09:00
EP01684	A 10-year follow-up of lumbar microdiscectomy <i>Poster Presenter:</i> George Alexiou, GR	09:00 - 09:00
EP01685	Translaminar approach for resection of a ventricular metastatic lesion <i>Poster Presenter:</i> An?l Eray, TR	09:00 - 09:00
EP01686	Neuroinflammation and intracranial meningiomas	09:00 - 09:00

	<i>Poster Presenter:</i> Jeppe Lohfert Haslund Vinding, DK	
EP01687	Natural history and treatment options of radiation-induced brain cavernomas: a systematic review <i>Poster Presenter:</i> Gildas Patet, CH	09:00 - 09:00
EP01688	Cancer-type somatic mutations in saccular cerebral aneurysms <i>Poster Presenter:</i> Behnam Rezai Jahromi, FI	09:00 - 09:00
EP01689	CRASY – CRAnioSYnostosis multidisciplinary team. Descriptive analysis of a Portuguese centre <i>Poster Presenter:</i> Tiago Ribeiro da Costa, PT	09:00 - 09:00
EP01690	Decompressive craniectomy beyond eligibility criteria. A case report reflecting on why every case should be wisely reviewed <i>Poster Presenter:</i> Tiago Ribeiro da Costa, PT	09:00 - 09:00
EP01691	Brain SPECT for the assessment of meningioma grade. Systematic review and meta-analysis <i>Poster Presenter:</i> Spyridon Voulgaris, GR	09:00 - 09:00
EP01692	Direct comparison between Kawase's approach and retrosigmoid intradural suprameatal corridor to access the petroclival region using CT quantitative volumetric analysis. A cadaveric study <i>Poster Presenter:</i> Evangelos Drosos, GB	09:00 - 09:00
EP01693	No relationship between the activity of the Androgen Receptor in Glioblastoma tissue and androgen circulating levels. <i>Poster Presenter:</i> Julio Plata-Bello, ES	09:00 - 09:00
EP01694	Multisegmental 3D approaches in resolving pathological processes of the cervical spine <i>Poster Presenter:</i> Nebojša Stojanovi?, RS	09:00 - 09:00
EP01695	Factors predicting recurrence after surgical evacuation of Chronic Subdural Hematoma <i>Poster Presenter:</i> Noelia Mirón Jiménez, ES	09:00 - 09:00
EP01697	Decompressive craniectomy during wartime: literature review <i>Poster Presenter:</i> Konstantinos Ntotsikas, GR	09:00 - 09:00
EP01698	A rare case: intraventricular cavernoma located at the foramen monro <i>Poster Presenter:</i> Emre Bahir Mete, TR	09:00 - 09:00
EP01699	Three dimensional immersive photorealistic layered dissection of extrinsic and intrinsic back muscles. Technical protocol <i>Poster Presenter:</i> Toma Spiriev, BG	09:00 - 09:00
EP01701	Role of Vitamin D in clinical course of intracranial aneurysms - from rupture to recovery <i>Poster Presenter:</i> Sepide Kashefiolasl, DE	09:00 - 09:00
EP01702	Ossification of cranial epidural hematomas: A systematic review of case presentations and management strategies	09:00 - 09:00

reported in the literature

EP01703	Management of Traumatic Brain Injury (TBI) patients during the covid-19 pandemic: a literature review <i>Poster Presenter: Sofia Lazarioti, GR</i>	09:00 - 09:00
EP01704	The role of music therapy in patients suffering from traumatic brain injury: a critical review <i>Poster Presenter: Aris Salapatias Gkinis, GR</i>	09:00 - 09:00
EP01705	Meningioma with chronic uncus herniation: a missed neurosurgical emergency <i>Poster Presenter: Mohammad G. Abdoh, SA</i>	09:00 - 09:00
EP01706	Biomimicry innovation in materials science can expand spinal surgery to patients with osteoporosis <i>Poster Presenter: Sebastian Koga, US</i>	09:00 - 09:00
EP01707	Surgical treatment of thoracolumbar spine fracture in ankylosing spondylitis patients in Zadar General Hospital <i>Poster Presenter: Hrvoje Krpina, HR</i>	09:00 - 09:00
EP01708	Unusual case of isolated neuropathic pain in the distribution of the posterior branch of the medial antebrachial cutaneous nerve: a case report and literature review <i>Poster Presenter: Shuvamay Chowdhury, GB</i>	09:00 - 09:00
EP01709	Interlaminar full endoscopic discectomy: preliminary results of first cohort study and technical nuances using a particular fluid collector drape in the Swiss canton of Valais <i>Poster Presenter: Arthur Kurzbuch, CH</i>	09:00 - 09:00
EP01710	Endoscopic frontal transcortical transventricular approach to thalamic tumors. Risks and limitations <i>Poster Presenter: Dmytro Teslenko, UA</i>	09:00 - 09:00
EP01711	Minimal invasive microvascular decompression for the treatment of Hemifacial Spasm <i>Poster Presenter: Andreas Theofanopoulos, GR</i>	09:00 - 09:00
EP01712	Intraoperative radiotherapy during awake craniotomies: preliminary results <i>Poster Presenter: Kathrin Steininger, DE</i>	09:00 - 09:00
EP01713	Efficacy of the sphingosine-1-phosphate receptor agonist fingolimod in cerebrovascular stroke: a systematic review and meta-analysis <i>Poster Presenter: Ahmed Aljabali, JO</i>	09:00 - 09:00
EP01714	Characterization of meningiomas and their recurrence. Multivariate analysis in Latin American Population <i>Poster Presenter: Daniel Alejandro Vega-Moreno, MX</i>	09:00 - 09:00
EP01717	Subdural hematoma following spinal anesthesia <i>Poster Presenter: Erkin Özgüray, TR</i>	09:00 - 09:00

EP01718	Endovascular treatment of posterior circulation aneurysms: results from a single-team experience of 81 cases including 13 flow diversion treatment <i>Poster Presenter: Cafer Ikbali Gulsever, TR</i>	09:00 - 09:00
EP01720	Isolated human intervertebral disc cells are a useful platform for "in vitro" toxicology assessment <i>Poster Presenter: Tomaz Velnar, SI</i>	09:00 - 09:00
EP01721	Papillary tumor of the pineal region: a case report <i>Poster Presenter: Farouk Hajhouji, MA</i>	09:00 - 09:00
EP01722	Vessel-wall imaging revealing the site of a thrombosed, angiographically negative posterior cerebral artery pseudoaneurysm in a patient with recurrent subarachnoid hemorrhage: a clinical case <i>Poster Presenter: Vasco Carvalho, PT</i>	09:00 - 09:00
EP01724	Investigation of information needs and digital health information literacy of Greek neurosurgeons <i>Poster Presenter: Dimitris Karabetsos, GR</i>	09:00 - 09:00
EP01725	Prospective study for outcome of percutaneous kyphoplasty in traumatic compression fracture of occupational hazard group <i>Poster Presenter: Khalil Khalil, SA</i>	09:00 - 09:00
EP01726	Information extraction on postoperative Pulmonary Embolism in neurosurgery using artificial intelligence <i>Poster Presenter: Gleb Danilov, RU</i>	09:00 - 09:00
EP01727	Synovial sarcoma of the brachial plexus mimicking peripheral nerve sheath tumor: a rare cause of brachial plexopathy <i>Poster Presenter: Murat Zaimoglu, TR</i>	09:00 - 09:00
EP01728	Extreme lateral interbody fusion (XLIF) as a feasible treatment for thoracolumbar spondylodiscitis: a multicenter Belgian case-series <i>Poster Presenter: Vincent Raymaekers, BE</i>	09:00 - 09:00
EP01729	Neurosurgical resident performing surgery in neuro-oncology patients: a retrospective study of a single institution <i>Poster Presenter: Maria-Eleni Sakellariou, GR</i>	09:00 - 09:00
EP01730	Idiopathic normal pressure hydrocephalus: increase of number of patients, reality of coincidence <i>Poster Presenter: Fahd Derkaoui Hassani, MA</i>	09:00 - 09:00
EP01731	Fibrin promotes glioblastoma progression via integrins and focal adhesion kinase <i>Poster Presenter: Fatemeh Khafaji, DE</i>	09:00 - 09:00
EP01732	Direct superficial temporal artery puncture for treatment of Dural Arteriovenous Fistula presenting as acute subdural hemorrhage <i>Poster Presenter: Gabriella Raccuia, IT</i>	09:00 - 09:00

EP01733	Left anterior cerebral artery aneurysm in an 8-month-old infant - a case report <i>Poster Presenter:</i> Anna Laura Larcipretti, BR	09:00 - 09:00
EP01734	Percutaneous Lumbar Nucleoplasty in the treatment of disc herniation: a retrospective clinical study of 27 patients <i>Poster Presenter:</i> ?enol Elmas, DE	09:00 - 09:00
EP01735	Neurocognitive recovery after aneurysmal subarachnoid hemorrhage surgery and evaluation of affecting factors <i>Poster Presenter:</i> Murat Zaimoglu, TR	09:00 - 09:00
EP01736	Primary sellar melanocytoma: a case report <i>Poster Presenter:</i> Abdelhafidh Slimane, TN	09:00 - 09:00
EP01737	Case report of Th11—Th12 dorsolateral disc herniation associated with progressive spastic paraparesis treated surgically via dorsolateral pedicle sparing transfacetal microdiscectomy <i>Poster Presenter:</i> Blagoj Shuntov, MK	09:00 - 09:00
EP01738	Arachnoid cysts of the fourth ventricle – our experience <i>Poster Presenter:</i> An?elo Kaštelan?i?, HR	09:00 - 09:00
EP01740	Subarachnoid Hemorrhage Early Brain Edema Score (SEBES) and SEBES 6c in subarachnoid hemorrhage as a radiological predictor of clinical outcome <i>Poster Presenter:</i> Pedro Sousa Barros, PT	09:00 - 09:00
EP01741	White Cord Syndrome, neologism of a well known major postoperative acute myelopathy or a truly new concept? Case report and systematic review of literature <i>Poster Presenter:</i> Juan Carlos Roa Montes de Oca, ES	09:00 - 09:00
EP01742	Dural arteriovenous fistula of the sphenoid wing with basal vein drainage: endovascular and surgical treatment <i>Poster Presenter:</i> Gabriella Raccuia, IT	09:00 - 09:00
EP01743	Vertebral metastases from intracranial meningioma: a case report <i>Poster Presenter:</i> Firas Sliti, TN	09:00 - 09:00
EP01744	Brown-Séquard syndrome due to an intradural extramedullary metastasis of small cell lung cancer: case report <i>Poster Presenter:</i> Mário Vale de Campos, PT	09:00 - 09:00
EP01746	Endoscopic endonasal approach of clival unifocal Langerhans' cell histiocytosis in a 14-year-old child <i>Poster Presenter:</i> Bernardo Smet, PT	09:00 - 09:00
EP01747	Primary intramedullary glioblastoma: a case report <i>Poster Presenter:</i> Abdelhafidh Slimane, TN	09:00 - 09:00
EP01748	Intradiploic epidermoid cyst of the posterior fossa – case report and review of the literature	09:00 - 09:00

	<i>Poster Presenter:</i> Bernardo Smet, PT	
EP01749	Brain metastasis: evaluation of epidemiology and global trends from 2015 to 2020 <i>Poster Presenter:</i> Pedro Sousa Barros, PT	09:00 - 09:00
EP01750	Tuberculoma – an uncommon lesion in the antibiotic era <i>Poster Presenter:</i> Bernardo Smet, PT	09:00 - 09:00
EP01751	Lumbar disc herniation with contralateral radiculopathy: a case presentation and literature review <i>Poster Presenter:</i> Maryna Isaieva, ES	09:00 - 09:00
EP01752	Retroperitoneal lesions – same location, different diagnosis <i>Poster Presenter:</i> Bernardo Smet, PT	09:00 - 09:00
EP01753	Posterior fossa cranioplasty for cerebellar ptosis after surgery for hemangioblastoma <i>Poster Presenter:</i> Pedro Sousa Barros, PT	09:00 - 09:00
EP01754	Cerebrospinal fluid leakage in retrosigmoid approach: toward 0% incidence - a single center experience and technical note <i>Poster Presenter:</i> Riccardo Draghi, IT	09:00 - 09:00
EP01755	Primary pituitary abscess presenting as an isolated bitemporal hemianopia <i>Poster Presenter:</i> Adrian Zammit, GB	09:00 - 09:00
EP01759	Mastering the anterior, middle cranial fossa and the orbit through an eyebrow incision. Illustrative case of combined mini-supraorbital and transorbital approach for an optic-sheath meningioma <i>Poster Presenter:</i> Marco Gallus, DE	09:00 - 09:00
EP01760	Diversified neurosurgical approaches to entire spectrum of post-covid invasive rhino-orbito-cerebral mucormycosis and its outcomes: an indian tertiary care center experience <i>Poster Presenter:</i> Anand Kumar Das, IN	09:00 - 09:00
EP01761	Postcraniotomy hematoma may not associate with worse outcome or survival following surgical evacuation of traumatic acute subdural hematomas <i>Poster Presenter:</i> Antti Sajanti, FI	09:00 - 09:00
EP01762	Alcohol intoxication and lack of helmet use are common in Electric Scooter related Traumatic Brain Injuries: a consecutive patient series from a tertiary university hospital <i>Poster Presenter:</i> Antti Sajanti, FI	09:00 - 09:00
EP01763	The role of interleukins in traumatic brain injury <i>Poster Presenter:</i> Nikolaos Moustakis, GR	09:00 - 09:00

General

10:00 - 10:40

EPB1

ePoster Presentation

Chair: Cesare Zoia, IT

EP01001	The life of Professor Norman McOmish Dott – Scottish pioneer in modern neurosurgery <i>Poster Presenter:</i> Abdel Rahman Osman, GB	10:00 - 10:03
EP01002	Delivering a virtual national neurosurgical teaching course in order to improve postgraduate education for prospective neurosurgical trainees <i>Poster Presenter:</i> Andrew Edwards-Bailey, GB	10:03 - 10:06
EP01003	Are UK medical schools using recommended national curricula for the teaching of clinical neuroscience? <i>Poster Presenter:</i> Omar Kouli, GB	10:06 - 10:09
EP01004	Training and Education in Neurosurgery: Challenges and Strategies for the Next Ten Years <i>Poster Presenter:</i> Daniele Bongetta, IT	10:09 - 10:12
EP01005	Fellowships as the next step after residency and how to organize them in Europe <i>Poster Presenter:</i> João Monteiro Silva, PT	10:12 - 10:15
EP01006	A young neurosurgeon in a European developing country – first two years of personal experience <i>Poster Presenter:</i> Adi Ahmetspahi?, BA	10:15 - 10:18
EP01007	Biography of professor Nedeljko Ercegovic, founder of the neurosurgery department at the Zemun Hospital <i>Poster Presenter:</i> Vuk Aleksi?, RS	10:18 - 10:21
EP01009	Defining the structural traits and problems of neurosurgical departments in Europe <i>Poster Presenter:</i> Stiliana Mihaylova, BG	10:21 - 10:24
EP01010	Complications in the early career of a neurosurgeon: how to manage them? <i>Poster Presenter:</i> João Monteiro Silva, PT	10:24 - 10:27
EP01012	Neuro_Qual: a qualitative resource for neurosurgery <i>Poster Presenter:</i> Charlotte J Whiffin, GB	10:27 - 10:30
EP01013	Multidisciplinary teaching and high-fidelity simulation facilitate the learning of lateral skull-base approaches. <i>Poster Presenter:</i> Alaa Al-Mohammad, GB	10:30 - 10:33
	Discussion	10:33 - 10:40

Functional

10:00 - 10:40

EPB2

ePoster Presentation

Chair: Claire Haegelen, FR

EP01015	Clinical outcome after stereotactic radiosurgery of trigeminal schwannomas – a single-center experience <i>Poster Presenter:</i> Jaromir May, CZ	10:00 - 10:03
EP01016	Upfront hypofractionated frameless Gamma Knife radiosurgery for large posterior fossa metastases <i>Poster Presenter:</i> Selcuk Peker, TR	10:03 - 10:06
EP01017	The potential role of biologically effective dose in symptomatic improvement after single Gamma Knife radiosurgery for posterior fossa meningiomas: a series of 46 consecutive cases <i>Poster Presenter:</i> Michaela May, CZ	10:06 - 10:09
EP01018	Gamma Knife radiosurgery for differentiated thyroid cancer brain metastases <i>Poster Presenter:</i> Selcuk Peker, TR	10:09 - 10:12
EP01019	The role of SWI sequence during preoperative subthalamic nucleus targeting for deep brain stimulation in Parkinson's disease: a retrospective randomized monocentric case-control study <i>Poster Presenter:</i> Dario Gagliano, IT	10:12 - 10:15
EP01021	Neuromodulation for Gait symptoms in PD: Results from a Network Meta-Analysis <i>Poster Presenter:</i> Victor Hvingelby, DK	10:15 - 10:18
EP01022	An updated overview of DBS interventions in patients with dementia and future directions: a systematic review <i>Poster Presenter:</i> Leonardo Tariciotti, IT	10:18 - 10:21
EP01023	Diffusion tensor imaging evaluation of patients with disorders of consciousness prior to deep brain stimulation: a preliminary study <i>Poster Presenter:</i> Marina Raguž, HR	10:21 - 10:24
	Discussion	10:24 - 10:40
<i>Other</i>		
10:00 - 10:40		Industry Exhibition
Coffee Break		
<i>General</i>		
10:40 - 11:20		R1
Lifetime Achievement Award and European Lecture		
<i>Chair:</i> Andreas Demetriades, GB		
<i>Chair:</i> Lukas Rasulic, RS		
189	Lifetime Achievement Award <i>Speaker:</i> Miroslav Samardzic, RS	10:40 - 10:45
190	Peripheral Nervous System Surgery-Neurosurgery Beyond Technology <i>Speaker:</i> Lukas Rasulic, RS	10:45 - 11:00

	Introduction to European Lecture	11:00 - 11:02
	<i>Speaker:</i> Andreas Demetriades, GB	
191	European lecture: Translational research in neurotrauma: the Biomarker Avenue (and some dead ends...)	11:02 - 11:20
	<i>Speaker:</i> Andras Buki, SE	
<i>General</i>		
11:20 - 13:00		R1
GLOBAL NEUROSURGERY		
<i>Chair:</i> Gail Rosseau, US		
<i>Chair:</i> Andreas Demetriades, GB		
<i>Chair:</i> Lukas Rasulic, RS		
<i>Chair:</i> Johannes van Loon, BE		
	Introduction	11:20 - 11:25
	<i>Speaker:</i> Andreas Demetriades, GB	
	Medal of Honour	11:25 - 11:35
	<i>Speaker:</i> Andre Grotenhuis, NL	
	Award for Exceptional Service to European Neurosurgery	11:35 - 11:40
	<i>Awardee:</i> Mustafa Necmettin Pamir, TR	
	Award for Exceptional Service to European Neurosurgery	11:40 - 11:45
	<i>Awardee:</i> Vinko Dolenc, SI	
	Award for Exceptional Service to European Neurosurgery	11:45 - 11:50
	<i>Awardee:</i> Panagiotis Selviaridis, GR	
192	Panel discussion / round table/ couch discussion	11:50 - 12:52
194	EANS GHC	12:52 - 12:52
	<i>Speaker:</i> Jesus Lafuente, ES	
195	CAANS	12:52 - 12:52
	<i>Speaker:</i> Mahmood Qureshi, KE	
196	WFNS	12:52 - 12:52
	<i>Speaker:</i> Franco Servadei, IT	
	<i>Speaker:</i> Gail Rosseau, US	
197	EANS GHC	12:52 - 12:52
	<i>Speaker:</i> Magnus Tisell, SE	
	Best Abstract: A collaborative approach to improve neurotrauma care and data collection - the Global Epidemiology and Outcomes after Traumatic Brain Injury (GEO-TBI) registry	12:52 - 13:00
	<i>Oral Presenter:</i> Tommi Kalevi Korhonen, GB	

Trauma

13:00 - 14:30

EPB1

ePoster Presentation

Chair: Cristina Aldea, RO

Chair: Djula Djilvesi, RS

EP01024	Clinical outcome of hypoglossal-facial nerve anastomosis in severe facial nerve paralysis: early experience from Khyber Pakhtoonkhwa (KPK) Pakistan <i>Poster Presenter:</i> Arif Hussain, PK	13:00 - 13:03
EP01025	Lesion of the posterior cord of the brachial plexus <i>Poster Presenter:</i> Andrija Savic, RS	13:03 - 13:06
EP01026	Effects of radial nerve neurolysis on patient's QOL and satisfaction <i>Poster Presenter:</i> Jovan Grujic, RS	13:06 - 13:09
EP01027	?Differentiated approach to surgery of peripheral nerve injury in children <i>Poster Presenter:</i> Elena Korotchenko, RU	13:09 - 13:12
EP01028	Bipolar subcortical stimulation with tip of ultrasound aspirator and suction device <i>Poster Presenter:</i> Henry Colle, BE	13:12 - 13:15
EP01029	Incidence of Cranial Nerve affection after acute head injury: clinical and surgical outcome <i>Poster Presenter:</i> Walid Abouzeid, EG	13:15 - 13:18
EP01031	Septic complications in open skull fractures: critical assessment from a high-volume center <i>Poster Presenter:</i> Ruan Grobler, ZA	13:18 - 13:21
EP01032	Hypertonic saline versus mannitol for patients with traumatic brain injury: a systematic review and meta-analysis <i>Poster Presenter:</i> Mohamed Daa Gabra, EG	13:21 - 13:24
EP01033	Effect on serum magnesium levels after traumatic brain injury <i>Poster Presenter:</i> Tahreem Fatima, PK	13:24 - 13:27
EP01034	Usefulness of polysorbate-80 and sodium-lauryl-sulfate coated polymeric nanoparticles as transport systems across the blood-brain-barrier for treatment of traumatic brain injury in an experimental animal model <i>Poster Presenter:</i> Lucas Serrano Sponton, DE	13:27 - 13:30
EP01036	Explanted skull flaps after decompressive hemicraniectomy demonstrate increased bone vitality. Is the reimplantation of autologous skulls still justified? <i>Poster Presenter:</i> Theodoris Theodoris, DE	13:30 - 13:33
EP01038	Management of post-traumatic hydrocephalus following decompressive craniectomy due to severe traumatic brain injury <i>Poster Presenter:</i> Bruno Splavski, HR	13:33 - 13:36

EP01039	Italian intersocietary document for management of intracranial hypertension following traumatic brain injury with a neurosurgical and neurointensivist survey <i>Poster Presenter:</i> Corrado Iaccarino, IT	13:36 - 13:39
EP01040	What is the best practice in the use of AED's for TBI patients? An update on MAST Trials <i>Poster Presenter:</i> Edoardo Viaroli, GB	13:39 - 13:42
EP01041	E-bikes (Electrical bicycles and scooters) related neurosurgical injuries in adults population – a single center experience <i>Poster Presenter:</i> Yevgeny Karepov, IL	13:42 - 13:45
EP01042	Impact of an early mobilization protocol on medical complications after surgery for chronic subdural hematoma – get up trial preliminary results and quality of life evaluation <i>Poster Presenter:</i> Filipe Vaz da Silva, PT	13:45 - 13:48
EP01044	Functional recovery in relation to the posttraumatic restitution of the Blood-Spinal-Cord-Barrier after experimental Spinal Cord Injury in the mouse <i>Poster Presenter:</i> Laurens Roolfs, DE	13:48 - 13:51
EP01047	Impact of intracranial pressure monitoring on outcome of traumatic brain injury in pediatric patients: a 15-year single center experience and literature review <i>Poster Presenter:</i> Konstantinos Ntotsikas, GR	13:51 - 13:54
	Discussion	13:54 - 14:30

Research

13:00 - 14:50

EPB2

ePoster Presentation*Chair:* Evangelos Drosos, GB*Chair:* Naci Balak, TR

EP01048	Frameless stereotactic brain biopsy: a prospective study on robot-assisted brain biopsies performed on 32 patients by using the RONNA G4 system <i>Poster Presenter:</i> Domagoj Dlaka, HR	13:00 - 13:03
EP01049	Risks and benefits of continuation and discontinuation of aspirin in elective craniotomies and transsphenoidal surgeries: a systematic review and meta-analysis <i>Poster Presenter:</i> Attil Saemann, CH	13:03 - 13:06
EP01051	Preliminary results of a two saccular elastase digested aneurysm model in a rabbit – a technical report <i>Poster Presenter:</i> Jeannine Kümin-Rey, CH	13:06 - 13:09
EP01052	An innovative, reusable, high-fidelity neurosurgical training simulator for cerebrovascular bypass surgery: Iatrotek®didactic platform validation study and systematic Literature review <i>Poster Presenter:</i> Lorenzo Mongardi, IT	13:09 - 13:12

EP01053	A patient-specific reference tracker for non-invasive electromagnetic navigation of endoscopic skull base surgery <i>Poster Presenter:</i> Alexander Micko, AT	13:12 - 13:15
EP01054	Ten-years single-center experience with three different robotic systems in spinal and brain neurosurgery: lessons learned and future perspectives <i>Poster Presenter:</i> Georgios Naros, DE	13:15 - 13:18
EP01056	Ethanol-induced inflammation and aging in endothelial cells was reduced by Doxycycline treatment <i>Poster Presenter:</i> Sajjad Muhammad, DE	13:18 - 13:21
EP01057	Augmenting the field of the surgeon's eye by high definition 3-dimensional exoscope. Learning curve and single-center experience in neurosurgical practice <i>Poster Presenter:</i> Giuseppe Roberto Giammalva, IT	13:21 - 13:24
EP01058	Comparative analysis of xenoperitoneal extracellular matrix (Xenograft) in rabbit dural plastics <i>Poster Presenter:</i> Khalit Mustafin, KZ	13:24 - 13:27
EP01060	Neuro-oncological augmented reality planning (NOA-p) <i>Poster Presenter:</i> Frederick Van Gestel, BE	13:27 - 13:30
EP01061	A walking app for gait assessment in normal pressure hydrocephalus and decompensated long-standing overt ventriculomegaly patients <i>Poster Presenter:</i> Kanza Tariq, GB	13:30 - 13:33
EP01062	Advances in robotic navigated laser craniotomy for depth electrode implantation: an in-vivo non-recovery animal study <i>Poster Presenter:</i> Fabian Winter, AT	13:33 - 13:36
EP01063	Virtual reality robotic assisted treatment for phantom limb pain in individuals with amputation, brachial plexus injury and spinal cord injury <i>Poster Presenter:</i> Dace Dimante, GB	13:36 - 13:39
EP01064	A comparative observational analysis of PMMA versus CaP titanium-enhanced implants for cranioplasty after decompressive craniectomy <i>Poster Presenter:</i> Dominik M. A. Wesp, DE	13:39 - 13:42
EP01065	The one-stop-shop approach: Navigating lumbar 360 degree instrumentation in single positioning <i>Poster Presenter:</i> Maximilian Schwendner, DE	13:42 - 13:45
EP01066	A novel microcontroller platform for data collection in neurosurgery <i>Poster Presenter:</i> Brandon G. Smith, GB	13:45 - 13:48
EP01067	Creation of sensory phantom map of hand using VR robotic system: initial case series <i>Poster Presenter:</i> Dace Dimante, GB	13:48 - 13:51

EP01068	Advances in MRI in service of Gamma Knife radiosurgery: time to change the paradigm? <i>Poster Presenter:</i> Fahd Derkaoui Hassani, MA	13:51 - 13:54
EP01069	Wearable mixed-reality devices and patient-specific 3-dimensionally printed models for patient education: preliminary results <i>Poster Presenter:</i> Joshua Haegler, CH	13:54 - 13:57
EP01070	Development and validation of a triple-LED surgical loupe device for fluorescence-guided resections with 5-ALA <i>Poster Presenter:</i> Eric Suero-Molina, DE	13:57 - 14:00
EP01071	Intraoperative CT-angiography reconstruction of the vertebral artery utilizing neuronavigation and intraoperative i.v. contrast application for dorsal upper cervical axial and subaxial cervical spine instrumentation <i>Poster Presenter:</i> Orlin Pavlov, DE	14:00 - 14:03
EP01072	Long Non-Coding RNA (Lnc RNA) NEAT1 is differentially expressed in ruptured and unruptured intracranial aneurysms (ICAs) <i>Poster Presenter:</i> Sajjad Muhammad, DE	14:03 - 14:06
EP01073	Doxycycline is a potential drug to reduce oxidative stress-induced expression of MMPs in Endothelial cells <i>Poster Presenter:</i> Sajjad Muhammad, DE	14:06 - 14:09
EP01074	Cold Ultra-short Pulsed Laser Bone Ablation for Neurosurgical Applications <i>Poster Presenter:</i> Peter C. Reinacher, DE	14:09 - 14:12
EP01075	The Neuronavigation 7D Surgical System using Flash™Registration. Monocentric neurosurgical preliminary experience <i>Poster Presenter:</i> Giacomo Pavesi, IT	14:12 - 14:15
EP01076	Augmented reality surgical navigation in hybrid OR for minimally invasive transforaminal lumbar interbody fusion <i>Poster Presenter:</i> Caterina Mollica, CH	14:15 - 14:18
EP01077	Cadaveric study of ergonomics and performance using a robotic exoscope with a head-mounted display in spine surgery <i>Poster Presenter:</i> Matthias Demetz, AT	14:18 - 14:21
EP01078	Robotic-assisted percutaneous vertebroplasty for the treatment of extreme codfish vertebrae <i>Poster Presenter:</i> Nikolay Gabrovsky, BG	14:21 - 14:24
EP01079	Temporal Metabolomic Profiling Revealed Common Metabolites Altered and Associations to Outcome after Different Acute Brain Injuries <i>Poster Presenter:</i> Janne Koskimäki, FI	14:24 - 14:27
EP01080	Novel quantitative hemodynamic parameters in ischemic	14:27 - 14:30

	stroke: agreement for the acute and chronic stroke stage	
	<i>Poster Presenter:</i> Martina Sebök, CH	
EP01081	Complications research in neurosurgery using artificial intelligence	14:30 - 14:33
	<i>Poster Presenter:</i> Gleb Danilov, RU	
EP01082	Patient registration based on intraoperative CT scan: a successful strategy to increase neuronavigation accuracy	14:33 - 14:36
	<i>Poster Presenter:</i> Roberto Altieri, IT	
EP01083	Machine learning and traumatic brain injury: a review of the literature	14:36 - 14:39
	<i>Poster Presenter:</i> Michail Tzavlas, GR	
	Discussion	14:39 - 14:50
<i>Other</i>		
13:00 - 14:30		
Lunch Break		Industry Exhibition
<i>Industry</i>		
13:15 - 14:15		
Industry Sponsored Symposium		R3
<i>Industry</i>		
13:15 - 14:15		
Industry Sponsored Symposium		R4
<i>Trauma</i>		
14:30 - 16:10		
Trauma Trends and Insights		R1
<i>Chair:</i> Djula Djilvesi, RS		
<i>Chair:</i> Bart Depreitere, BE		
200	Guideline adherence and impact on TBI outcome	14:30 - 14:45
	<i>Speaker:</i> Wilco Peul, NL	
201	The changing epidemiology of CNS injuries	14:45 - 15:00
	<i>Speaker:</i> Andreas Unterberg, DE	
202	Update on the RESCUEicp and RESCUE-ASDH decompressive craniectomy randomised trials	15:00 - 15:15
	<i>Speaker:</i> Angelos Kolias, GB	
203	Mild TBI - Return to Sports and Work	15:15 - 15:30
	<i>Speaker:</i> Teemu Luoto, FI	
204	Best Abstract: Traumatic Brain Injury in the elderly population: changes in injury patterns, management and outcome over a 2 decade period	15:30 - 15:38
	<i>Oral Presenter:</i> Rebeca Alejandra Gavrila Laic, BE	
205	Best Abstract: Simultaneous supra- and infratentorial ICP	15:38 - 15:46

monitoring in patients with posterior fossa lesions: nonsense or necessity? Preliminary results of the DUAL-ICP trial

Oral Presenter: Ondra Petr, AT

Discussion

15:46 - 16:10

Ethics & Integrity

14:30 - 16:00

R5

Ethics in publication

Chair: Wail Mohammed, IE

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| 206 | Treacherous Incentivisation
<i>Speaker:</i> Tiit Mathiesen, DK | 14:30 - 14:50 |
| 207 | Ethics of Innovation publication
<i>Speaker:</i> Marike Broekman, NL | 14:50 - 15:10 |
| 208 | Code of Publication Ethics
<i>Speaker:</i> Naci Balak, TR | 15:10 - 15:30 |
| | Discussion | 15:30 - 16:00 |

Radiosurgery

14:30 - 16:00

R6

Combination of surgery and radiosurgery in the treatment of secreting pituitary adenomas

Chair: Sergej Marasanov, HR

Chair: Josa M. Frischer, AT

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| 209 | Endoscopic Surgery: Endocrinological results
<i>Speaker:</i> Giovanni Batista Lasio, IT | 14:30 - 14:45 |
| 210 | Radiosurgery after surgery in secreting adenomas
<i>Speaker:</i> Roman Liskak, CZ | 14:45 - 15:00 |
| 211 | Complications of radiosurgical treatments for pituitary adenomas
<i>Speaker:</i> Selcuk Peker, TR | 15:00 - 15:15 |
| | Discussion | 15:15 - 16:00 |

General

16:10 - 16:50

EPB1

ePoster Presentation

Chair: Cristina Aldea, RO

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|---------|---|---------------|
| EP01084 | Implementation of the “No ICU – Unless” approach in postoperative neurosurgical management in times of Covid-19
<i>Poster Presenter:</i> Lina-Elisabeth Qasem, DE | 16:10 - 16:13 |
| EP01085 | Life balance from a neurosurgeon’s perspective
<i>Poster Presenter:</i> Xanthoula Lambrianou, GR | 16:13 - 16:16 |
| EP01086 | Various surgical modalities for cerebral mucormycosis - our institutional experience, King George Hospital, Andhra Medical | 16:16 - 16:19 |

	College, Visakhapatnam, India	
	<i>Poster Presenter:</i> Hema Swaroop Kurumella, IN	
EP01087	Increasing volumes of malignant brain tumors in times of COVID-19 – a single-center analysis <i>Poster Presenter:</i> Lydia Karamani, DE	16:19 - 16:22
EP01090	Adult brain tumors in Sub-Saharan Africa: A scoping review <i>Poster Presenter:</i> Arsene Daniel Nyalundja, CD	16:22 - 16:25
EP01091	Qualitative analysis of artefacts caused by auditory brain implants on MRI scans <i>Poster Presenter:</i> Orlin Plavov, DE	16:25 - 16:28
EP01093	Anatomical study of pterion in Serbian population <i>Poster Presenter:</i> Milenko Stani?, RS	16:28 - 16:31
EP01094	Impact of COVID-19 on neurosurgical practice <i>Poster Presenter:</i> Nikolaos Moustakis, GR	16:31 - 16:34
EP01095	Training model for brain tumor removal (Model TOM meningioma) <i>Poster Presenter:</i> Yohei Nounaka, JP	16:34 - 16:37
	Discussion	16:37 - 16:47
<i>Functional</i>		
16:10 - 16:50		EPB2
ePoster Presentation		
<i>Chair:</i> Kostas Fountas, GR		
<i>Chair:</i> Marec von Lehe, DE		
EP01096	Memory and executive functioning outcomes of selective amygdalohippocampectomy in patients with hippocampal sclerosis: a preliminary study in a developing country <i>Poster Presenter:</i> Sajjad Saghebdoost, IR	16:10 - 16:13
EP01098	Neocortical layers 5 and 6 are the drivers of network activity in Micro-Electrode Array recordings of epileptic human brain slice cultures <i>Poster Presenter:</i> Jonas Ort, DE	16:13 - 16:16
EP01099	Is SEEG necessary before an anterior temporal lobectomy in pharmaco-resistant epileptic patients? <i>Poster Presenter:</i> Krisztina Stari-Schmidt, FR	16:16 - 16:19
EP01100	Magnetic resonance-guided laser interstitial thermal therapy (MR-gLiTT) in pediatric epilepsy surgery: experience at Giannina Gaslini Children's Hospital (Genoa, Italy)	16:19 - 16:22
EP01101	Multimodal spatial omics in human focal epilepsy <i>Poster Presenter:</i> Isabeau Vermeulen, NL	16:22 - 16:25
EP01102	From Euler to the Neocortex – the potential of graph analytical approaches to characterize electrophysiological network	16:25 - 16:28

	properties of human cortical brain slice cultures	
	<i>Poster Presenter:</i> Jonas Ort, DE	
EP01103	Increase the accuracy of invasive epilepsy treatment by using multimodality brain imaging	16:28 - 16:31
	<i>Poster Presenter:</i> Albert J Colon, NL	
EP01106	Does diabetic polyneuropathy influence patients' outcome after Spinal Cord Stimulation (SCS) for chronic leg pain in Failed Back Surgery Syndrome (FBSS)?	16:31 - 16:34
	<i>Poster Presenter:</i> Frank Patrick Schwarm, DE	
EP01107	Spinal cord stimulation in pain control and its indications. A comparative study	16:34 - 16:37
	<i>Poster Presenter:</i> Lapo Bonosi, IT	
	Discussion	16:37 - 16:50
<i>Other</i>		
16:10 - 16:50		Industry Exhibition
Coffee Break		
<i>Neuro-Oncology</i>		
16:50 - 18:20		R1
Brain metastases		
<i>Chair:</i> Hakan Emmez, TR		
<i>Chair:</i> Christian Freyschlag, AT		
212	Modern management strategies for brain metastases	16:50 - 17:00
	<i>Speaker:</i> Naureen Keric, DE	
213	Developing a novel, population-specific prognosis prediction system in the case of surgically treated metastases patients	17:00 - 17:10
	<i>Speaker:</i> Peter Banczerowski, HU	
214	Using genomics for drug discovery in brain metastases – from patient samples to preclinical trials	17:10 - 17:20
	<i>Speaker:</i> Cláudia Faria, PT	
215	Sodium fluorescein and YELLOW 560 nm filter for resection of newly diagnosed glioblastoma: impact on resection quality and outcome	17:20 - 17:27
	<i>Oral Presenter:</i> Julius Hoehne, DE	
216	How to dose-stage large or high risk brain metastases - an alternative two-fraction radiosurgical treatment approach	17:27 - 17:34
	<i>Oral Presenter:</i> Josa M. Frischer, AT	
217	Defining the role of surgery in patients with multiple brain metastases	17:34 - 17:41
	<i>Oral Presenter:</i> Tunc Faik Ersoy, DE	
218	Radiogenomics and radiomics of Skull Base Chordoma: machine learning-based classification of genetic signatures and clinical outcomes by multiparametric MRI	17:41 - 17:48

	<i>Oral Presenter:</i> Georgios A. Zenonos, US	
219	Recurrent local cerebral metastases. The role of surgery in 23 patients <i>Oral Presenter:</i> Stefano Telera, IT	17:48 - 17:55
220	An intra-operative brain tumour recognition tool: when smoke, fluorescence, biomarkers and immune cells come together <i>Oral Presenter:</i> Eva Cuypers, NL	17:55 - 18:02
221	IN VIVO confocal endomicroscopy in neuro-oncological surgery: preliminary results from a monocentric prospective blinded trial using CONVIVOat Neurological Institute Carlo Besta <i>Oral Presenter:</i> Francesco Acerbi, IT	18:02 - 18:09
222	Evaluation of the diagnostic value of confocal laser endomicroscopy images in brain tumors <i>Oral Presenter:</i> Marielena Gutt-Will, CH	18:09 - 18:16
	Discussion	18:16 - 18:20
<i>Vascular</i>		
16:50 - 18:20		
		R2
	Complication avoidance in aneurysm surgery	
	<i>Chair:</i> Peter Vajkoczy, DE	
	<i>Chair:</i> Patricia Polonia, PT	
223	Adjuncts for successful aneurysm surgery <i>Speaker:</i> Daniel Walsh, GB	16:50 - 17:00
224	Hybrid OR: toy or game changer <i>Speaker:</i> Andreas Gruber, AT	17:00 - 17:10
225	Complications in brain aneurysm surgery <i>Speaker:</i> Goran Tasic, RS	17:10 - 17:20
226	Propranolol as a potentially novel treatment of arteriovenous malformations: from bench to bedside <i>Oral Presenter:</i> Sepide Kashefiolasl, DE	17:20 - 17:27
227	Microsurgical clipping vs. Woven EndoBridge (WEB) device for the management of ruptured wide-neck bifurcation aneurysms <i>Oral Presenter:</i> Beate Kranawetter, DE	17:27 - 17:34
229	Prospective assessment of the clinical course and outcome in non-aneurysmal subarachnoid haemorrhage <i>Oral Presenter:</i> Wouter Dronkers, NL	17:34 - 17:41
230	Natural history of intracavernous aneurysms — cohort of 250 patients with 276 aneurysms <i>Oral Presenter:</i> Eeva Leivo, FI	17:41 - 17:48
231	De novo intracranial aneurysm formation in young (<40 years) aneurysm patients	17:48 - 17:55

Oral Presenter: Behnam Rezai Jahromi, FI

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| 232 | Successful weaning vs. permanent cerebrospinal fluid diversion after aneurysmal subarachnoid hemorrhage – post-hoc analysis of a Swiss multicenter study
<i>Oral Presenter:</i> Ahmed El-Garci, CH | 17:55 - 18:02 |
| | Discussion | 18:02 - 18:20 |

Spine

16:50 - 18:20

R3

Degenerative Diseases

Chair: Nikolay Gabrovsky, BG

Chair: Carmen Vleggeert-Lankamp, NL

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| 233 | Lumbar endoscopy debate: pro
<i>Speaker:</i> Enrico Tessitore, CH | 16:50 - 17:00 |
| 234 | Lumbar endoscopy debate: con
<i>Speaker:</i> Florian Ringel, DE | 17:00 - 17:10 |
| 235 | Pre-treatment patients' expectations and factors affecting outcome of degenerative lumbar disease
<i>Speaker:</i> Djula Djilvesi, RS | 17:10 - 17:20 |
| 236 | Impact of sarcopenia and bone density on implant failure and adjacent level degeneration in lumbar instrumentation
<i>Oral Presenter:</i> Naureen Keric, DE | 17:20 - 17:27 |
| 237 | Novel modification of midline lumbar interbody fusion (mMIDLIF): a series of 28 patients
<i>Oral Presenter:</i> Benedikt Trnovec, SK | 17:27 - 17:34 |
| 238 | Bladder function recovery after surgical decompression of cauda equina in patients with lumbar disc herniation
<i>Oral Presenter:</i> Vojislav Bogosavljevi?, RS | 17:34 - 17:41 |
| 239 | The value of psychosocial factors in predicting postoperative somatoform disorder and surgical outcome in patients operated for Degenerative Disc Disease (DDD) - a preliminary study
<i>Oral Presenter:</i> Redwan Jabbar, PL | 17:41 - 17:48 |
| 240 | The occurrence of sacroiliac joint (SIJ) syndrome following lumbar decompression, lumbar fusion and possibilities of its treatment
<i>Oral Presenter:</i> Jakub Sipos, SK | 17:48 - 17:55 |
| 241 | Clinical utility of Radiofrequency Echographic Multi Spectrometry (REMS) scans in surgical planning for spinal fusions
<i>Oral Presenter:</i> Sebastian Koga, US | 17:55 - 18:02 |
| 242 | Efficacy and indications of Anterior Lumbar Interbody Fusion (ALIF): a single-center experience on more than 100 cases | 18:02 - 18:09 |

Discussion

18:09 - 18:20

Trauma

16:50 - 18:20

R4

Chronic and acute subdural hematoma*Chair:* Petar Vulekovic, RS*Chair:* Alexander Younsi, DE

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| 243 | Technique and role for MMA embolization
<i>Speaker:</i> Jo Peluso, BE | 16:50 - 17:00 |
| 244 | Antithrombotic therapy and CSDH
<i>Speaker:</i> Parmenion Tsitsopoulos, GR | 17:00 - 17:10 |
| 245 | Irrigation fluid temperature: the SIC study
<i>Speaker:</i> Andreas Bartley, SE | 17:10 - 17:20 |
| 246 | Impact of oral anticoagulation and adenosine diphosphate inhibitor therapies on short-term outcome of traumatic brain injury
<i>Oral Presenter:</i> Jussi P. Posti, FI | 17:20 - 17:27 |
| 247 | GET-UP randomized prospective trial: a one-year interim analysis of the third quartile
<i>Oral Presenter:</i> Sergio Sousa, PT | 17:27 - 17:34 |
| 248 | Differences in presentation, radiological features, and outcome in traumatic versus spontaneous acute subdural hematomas – a single-institution population-based study
<i>Oral Presenter:</i> Alba Corell, SE | 17:34 - 17:41 |
| 249 | Middle meningeal artery embolization for chronic subdural hematoma: a systematic review and meta-analysis
<i>Oral Presenter:</i> Hazem Ghaith, EG | 17:41 - 17:48 |
| 250 | The role of active or passive drainage after evacuation of chronic Subdural Hematoma: an analysis of two randomized controlled trials (cSDH-Drain-trial and TOSCAN trial)
<i>Oral Presenter:</i> Florian Ebel, CH | 17:48 - 17:55 |
| 251 | Cerebral perfusion changes in acute Subdural Hematoma | 17:55 - 18:02 |
| 252 | Surgery versus conservative treatment for traumatic acute subdural hematoma: a prospective, multicentre, comparative effectiveness study
<i>Oral Presenter:</i> Thomas Arjan Van Essen, NL | 18:02 - 18:09 |

Discussion

18:09 - 18:20

Functional

16:50 - 18:20

R5

DBS surgery*Chair:* Linda Ackermans, NL*Chair:* Olaf Schijns, NL

253	Mechanism of action in DBS of basal nuclei <i>Speaker:</i> Cihan Isler, TR	16:50 - 17:00
254	Prediction of deep brain stimulation outcomes with machine learning from multimodal pre-operative biomarkers <i>Speaker:</i> Claire Haegelen, FR	17:00 - 17:10
255	Deep Brain Stimulation in Disorders of Consciousness <i>Speaker:</i> Darko Chudy, HR	17:10 - 17:20
256	Neurosurgical ablative procedures for pain palliation at the end of Life <i>Speaker:</i> Ido Strauss, IL	17:20 - 17:30
257	Gait and balance after bilateral DBS or radiosurgery in essential tremor <i>Oral Presenter:</i> Jean Regis, FR	17:30 - 17:37
258	Deep brain stimulation in disorders of consciousness: a single institutional experience <i>Oral Presenter:</i> Darko Chudy, HR	17:37 - 17:44
259	Voice analysis for patients with essential tremor and tremor dominant Parkinson's disease before and after deep brain stimulation in posterior subthalamic area <i>Oral Presenter:</i> Dimitrios Giakoumettis, GB	17:44 - 17:51
260	Immersive three-dimensional modeling augmented reality and virtual reality for enhanced visualization of the white matter pathways <i>Oral Presenter:</i> Serdar Onur Aydin, TR	17:51 - 17:58
261	High-resolution 7 Tesla magnetic resonance metabolic imaging in epilepsy patients <i>Oral Presenter:</i> Fabian Winter, AT	17:58 - 18:05
	Discussion	18:05 - 18:20

Peripheral Nerve Surgery

16:50 - 18:20

R6

Nerve injuries*Chair:* Robert Spinner, US*Chair:* Mariano Socolovsky, AR

262	The Presence and Persistence of Unrealistic Expectations in Patients Undergoing Nerve Surgery <i>Speaker:</i> Robert Spinner, US	16:50 - 17:05
263	Traumatic nerve lesions <i>Speaker:</i> Mariano Socolovsky, AR	17:05 - 17:20
264	Better outcome after acute surgery in adult brachial plexus injury <i>Speaker:</i> Justus Groen, NL	17:20 - 17:30

265	Early experience with 7T MRI and peripheral nerve tumors <i>Speaker:</i> Robert Spinner, US	17:30 - 17:45
266	Injury patterns and management of neonatal brachial plexus injuries. Our experience in the UAE <i>Speaker:</i> Debora Garozzo, AE	17:45 - 18:00
	Discussion	18:00 - 18:20

Skull Base

16:50 - 18:20

EANS Board/ Council Room

Meet the Masters 1*Chair:* Dimitris Paraskevopoulos, GB*Chair:* Massimiliano Visocchi, IT

267	Vestibular schwannomas <i>Speaker:</i> Marcos Tatagiba, DE	16:50 - 17:05
268	Large posterior fossa meningioma surgery <i>Speaker:</i> Ekkehard Kasper, US	17:05 - 17:20
269	Falco tentorial meningioma surgery <i>Speaker:</i> Ekkehard Kasper, US	17:20 - 17:35
270	CVJ Tumors: a 360 degree surgical strategy <i>Speaker:</i> Massimiliano Visocchi, IT	17:35 - 17:50
	Discussion	17:50 - 18:20

Tuesday, 18. October 2022*Spine*

08:30 - 10:00

R1

Spinal Trauma & intradural tumors*Chair:* Bart Depreitere, BE*Chair:* Emma Svensdotter, SE

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| 271 | Controversies in cervical spine trauma management in the elderly
<i>Speaker:</i> Luis Marques, PT | 08:30 - 08:40 |
| 272 | Odontoid fractures in the elderly: INNOVATE trial results
<i>Speaker:</i> Carmen Vleggeert-Lankamp, NL | 08:40 - 08:50 |
| 273 | Timing of decompression in SCI: SCI-POEM results
<i>Speaker:</i> Giuseppe Barbagallo, IT | 08:50 - 09:00 |
| 274 | Concomitant upper cervical spine trauma in Traumatic Brain Injury: lessons from an institutional case series
<i>Oral Presenter:</i> Nicolò Marchesini, IT | 09:00 - 09:07 |
| 275 | Onsite pressure monitoring in spinal cord compression of traumatic and degenerative origin
<i>Speaker:</i> Goran Pavlicevic, RS | 09:07 - 09:14 |
| 276 | Spinal meningiomas: influence of cord compression and radiological features on preoperative functional status and outcome
<i>Oral Presenter:</i> Luca Paun, CH | 09:14 - 09:21 |
| 277 | s facetectomy required for the resection of dumbbell tumors in the lumbar spine?
<i>Oral Presenter:</i> Michael Schwake, DE | 09:21 - 09:28 |
| 278 | Factors influencing neurological recovery after surgical treatment of spinal meningiomas in the elderly: a meta analysis of multiple centers experience
<i>Oral Presenter:</i> Nadim Tahhan, FR | 09:28 - 09:35 |
| 279 | Mental status plays an important role in outcome of spinal stenosis surgery
<i>Oral Presenter:</i> Judith M.P. van Grafhorst, NL | 09:35 - 09:42 |
| | Discussion | 09:42 - 10:00 |

Neuro-Oncology

08:30 - 10:00

R2

Meningiomas & Rare Tumours*Chair:* Matthias Simon, DE*Chair:* Tina Karabatsou, GB

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| 280 | Grading meningioma resections
<i>Speaker:</i> Jeppe Lohfert Haslund Vinding, DK | 08:30 - 08:40 |
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281	Management of pineal tumours <i>Speaker:</i> Tina Karabatsou, GB	08:40 - 08:50
282	Dysembryoblastic neuroepithelial tumors: surgical and seizure outcomes <i>Speaker:</i> Tomislav Sajko, HR	08:50 - 09:00
283	Diagnostic discrepancy between MRI-based non-GBM like tumors and molecular GBM-confirmation based on the 2021-WHO-classification of CNS tumors <i>Oral Presenter:</i> Fortesa Bytyqi, DE	09:00 - 09:07
284	nTMS-derived DTI-based motor fiber tracking in radiotherapy treatment planning of high-grade gliomas for avoidance of motor structures <i>Oral Presenter:</i> Enrike Rosenkranz, DE	09:07 - 09:14
285	Diagnostic performance of machine learning based MR techniques vs conventional MR images in brain tumors - A Systematic Review and meta-analysis <i>Oral Presenter:</i> Surobhi Chatterjee, IN	09:14 - 09:21
286	Metastatic markers as potential targets for the treatment of glioblastoma <i>Oral Presenter:</i> Peter Baumgarten, DE	09:21 - 09:28
287	Intraoperative real-time near-infrared image-guided surgery to identify intracranial meningiomas by Indocyanine green - DWIG technique - <i>Oral Presenter:</i> Jun Muto, JP	09:28 - 09:35
	Discussion	09:35 - 10:00
<i>Vascular</i> 08:30 - 10:00		
	Vascular diseases	R3
	<i>Chair:</i> Martin Sames, CZ <i>Chair:</i> Vasily Lukshin, RU	
288	Surgical Management of giant aneurysm of the vertebro-basilar junctio <i>Speaker:</i> Antonio Bernardo, US	08:30 - 08:40
289	Causes of death in aneurysmal SAH – any change within the last 2 decades?	08:40 - 08:50
290	Brainstem Cavernomas - challenges and strategies to improve outcomes <i>Speaker:</i> Domingos Coiteiro, PT	08:50 - 09:00
291	Brainstem Cavernomas: which treatment should be applied when? <i>Speaker:</i> Ulrich Sure, DE	09:00 - 09:10
292	Impact of neurosurgical treatment on 30-days mortality after	09:10 - 09:17

	spontaneous intracerebral haemorrhage <i>Oral Presenter:</i> Roger M. Krzyżewski, PL	
293	Female hormone therapy and risk of intracranial haemorrhage from cerebral cavernous malformations: a multicentre observational cohort study <i>Oral Presenter:</i> Alejandro Santos, DE	09:17 - 09:24
294	Effects of medication intake on the risk of haemorrhage in patients with sporadic cerebral cavernous malformations <i>Oral Presenter:</i> Bixia Chen, DE	09:24 - 09:31
295	Medication intake and hemorrhage risk in patients with Familial Cerebral Cavernous Malformations <i>Oral Presenter:</i> Christoph Rieß, DE	09:31 - 09:38
296	How can we optimize the long-term outcome in children with intracranial cavernous malformations? A single-center experience of 61 cases <i>Oral Presenter:</i> Dorian Hirschmann, AT	09:38 - 09:45
297	Factors associated with subsequent subarachnoid hemorrhages in patients with multiple intracranial aneurysms <i>Oral Presenter:</i> Luigi Rigante, NL	09:45 - 09:52
	Discussion	09:52 - 10:00

Young Neurosurgeons
08:30 - 10:00

R4

YOUNG NEUROSURGEONS TRAINING CHALLENGES

Chair: Cesare Zoia, IT

Chair: Maria Luisa Gandia Gonzalez, ES

298	Neurosurgery and medical students: Does the medical school curriculum allow appropriate exposure to our specialty and how can we enhance the recruitment of future neurosurgeons? <i>Speaker:</i> Andreas Demetriades, GB	08:30 - 08:40
299	Culture of medicine as a barrier to training <i>Speaker:</i> Katrin Rabie, SE	08:40 - 08:50
300	Transformation of neurosurgical training: from "see one, do one, teach one" to AR/VR and simulators <i>Speaker:</i> Felix Stengel, CH <i>Speaker:</i> Giovanni Raffa, IT	08:50 - 09:00
301	Medical students' perceptions of neurosurgery <i>Oral Presenter:</i> Aysegul Esen Aydin, TR	09:00 - 09:07
302	Attitudes towards neuroanatomy amongst neurosurgeons: an international, two-stage cross-sectional survey <i>Oral Presenter:</i> Shivani B. Joshi, GB	09:07 - 09:14
303	The prevalence of Imposter syndrome among young neurosurgeons and residents in neurosurgery: a multicentric	09:14 - 09:21

	study	
	<i>Oral Presenter:</i> Ismail Zaed, IT	
304	Improving the neurosurgery inpatient weekend handover at the National Hospital for Neurology & Neurosurgery	09:21 - 09:28
	<i>Oral Presenter:</i> Sheikh Muktaadir Bin Momin, GB	
305	The medicolegal burden in neurosurgery: an analysis of closed malpractice claims in the Netherlands between 2007 and 2017	09:28 - 09:35
	<i>Oral Presenter:</i> Wouter Dronkers, NL	
306	Medical student training using augmented reality and cadaver-free brain models by UpSurgeOn: an educational effectiveness study	09:35 - 09:42
	<i>Oral Presenter:</i> Ibrahim Efekan Efe, DE	
307	Global Training Project 2021: report of an international non-profit initiative to bring cadaver-free training to LMICs	09:42 - 09:49
	Discussion	09:49 - 10:00
<i>Radiosurgery</i>		
08:30 - 10:00		R5
Spine Radiosurgery		
<i>Chair:</i> Artur Xhumari, AL		
<i>Chair:</i> Kita Sallabanda, ES		
308	Combination of surgery and SRS	08:30 - 08:40
	<i>Speaker:</i> Kita Sallabanda, ES	
309	Radiosurgery alone: indications	08:40 - 08:50
	<i>Speaker:</i> Antonio Santacroce, DE	
310	Radiosurgery for benign lesions	08:50 - 09:00
	<i>Speaker:</i> Andrey V Golanov, RU	
	Discussion	09:00 - 10:00
<i>CSF & Pediatric</i>		
08:30 - 10:00		R6
Does CSF circulation differ in children and adults?		
<i>Chair:</i> Karl Roessler, AT		
<i>Chair:</i> Mansoor Foroughi, GB		
311	Update on CSF Pressure and Circulation	08:30 - 08:45
	<i>Speaker:</i> Miroslav Vukic, HR	
312	Normal Pressure Hydrocephalus: what we do not know	08:45 - 09:00
	<i>Speaker:</i> Giorgio Palandri, IT	
313	NPH treatment does not end with surgery	09:00 - 09:15
	<i>Speaker:</i> Uwe Kehler, DE	
314	Modern theories of CSF circulation	09:15 - 09:30
	<i>Speaker:</i> Sergey Gorelyshev, RU	

Discussion

09:30 - 10:00

Trauma

08:30 - 10:00

EANS Board/ Council Room

Penetrating TBI & SCI*Chair:* Parmenion Tsitsopoulos, GR*Chair:* Aurelia Peraud, DE

315	Gunshot head trauma. Pathophysiology and management <i>Speaker:</i> Kostas Fountas, GR	08:30 - 08:45
316	Penetrating trauma in Sweden in the last decade <i>Speaker:</i> Elham Rostami, SE	08:45 - 09:00
317	Management of stabbing spinal injuries <i>Speaker:</i> Brad Harrington, ZA	09:00 - 09:15
318	Gunshot spinal cord injury <i>Speaker:</i> Parmenion Tsitsopoulos, GR	09:15 - 09:30
	Discussion	09:30 - 10:00

Other

09:00 - 18:00

EPA

ePosters*Vascular*

10:00 - 10:40

EPB1

ePoster Presentation*Chair:* Ondra Petr, AT*Chair:* Adisa Kuršumović, DE

EP01108	Multiple cerebral cavernous malformations – clinical course of confirmed, assumed and non-familial disease <i>Poster Presenter:</i> Alejandro Santos, DE	10:00 - 10:03
EP01109	Bleeding risk of cerebral cavernous malformations in patients on statin and antiplatelet medication <i>Poster Presenter:</i> Luca Marques, CH	10:03 - 10:06
EP01110	Modifiable cardiovascular risk factors in patients with cerebral and spinal cavernous malformations: a complete ten-year follow-up study <i>Poster Presenter:</i> Steffen Rauscher, DE	10:06 - 10:09
EP01111	Role of i-CT, i-US and neuromonitoring in surgical management of brain cavernous malformations and arterio-venous malformations: a case series <i>Poster Presenter:</i> Francesco Certo, IT	10:09 - 10:12
EP01113	Embolization of spinal dural arteriovenous fistulae: clinical outcomes and long-term follow-up - a multicenter study <i>Poster Presenter:</i> Walid Abouzeid, EG	10:12 - 10:15

EP01114	Augmented reality-guided (AR) drainage of intracerebral hemorrhage: accuracy compared to stereotactic and freehand puncture <i>Poster Presenter:</i> Peter C. Reinacher, DE	10:15 - 10:18
EP01115	Initial single-center experience with Middle Meningeal Artery embolization for treatment of Chronic Subdural Hematoma <i>Poster Presenter:</i> Adisa Kuršumović, DE	10:18 - 10:21
EP01116	ACTIVE study – use of active fluid exchange to treat intraventricular hemorrhage, preliminary data from a multi center, randomized controlled trial <i>Poster Presenter:</i> Mette Haldrup, DK	10:21 - 10:24
EP01117	Baseline perihematoma oedema and CRP are not associated with 30-day mortality in intracerebral haemorrhage <i>Poster Presenter:</i> Isabel Charlotte Hostettler, DE	10:24 - 10:27
EP01118	Management of spontaneous subarachnoid hemorrhage: results of a national survey in Germany <i>Poster Presenter:</i> Christina Wolfert, DE	10:27 - 10:30
EP01119	Active removal of cerebral haemorrhage via CSF exchange <i>Poster Presenter:</i> Behnam Rezai Jahromi, FI	10:30 - 10:33
	Discussion	10:33 - 10:40
<i>CSF</i>		
10:00 - 10:40		EPB2
ePoster Presentation		
<i>Chair:</i> Giorgio Palandri, IT		
<i>Chair:</i> Nebojša Stojanović, RS		
EP01121	Salomon Hakim, MD (1922–2011): a honeymoon with neurosurgery <i>Poster Presenter:</i> Daniel Jaramillo-Velásquez, ES	10:00 - 10:03
EP01122	Safety, sequelae and effectiveness of nerve root clipping in patients with SIH <i>Poster Presenter:</i> Amir El Rahal, DE	10:03 - 10:06
EP01123	Watkins Point and trajectory, description of a new method to guide freehand ventricular catheter insertion <i>Poster Presenter:</i> Kanza Tariq, GB	10:06 - 10:09
EP01124	Long term prognostic factors in NPH patients after ventriculo-peritoneal shunt <i>Poster Presenter:</i> Stefano Colonna, IT	10:09 - 10:12
EP01125	Placement of ventricular catheter in ventriculoperitoneal shunt procedure <i>Poster Presenter:</i> Seungyeob Yang, KR	10:12 - 10:15
EP01126	The utility and reversibility of MRI biomarkers in predicting raised intracranial pressure	10:15 - 10:18

	<i>Poster Presenter:</i> Anand S. Pandit, GB	
EP01128	Role of automated intracranial pressure control devices and optic nerve ultrasound in idiopathic intracranial hypertension <i>Poster Presenter:</i> Luigi de Gennaro, IT	10:18 - 10:21
EP01129	Transverse sinus stenting for Idiopathic Intracranial Hypertension. A presentation of two cases and a review of the literature <i>Poster Presenter:</i> Dimitrios Charitos, GR	10:21 - 10:24
	Discussion	10:24 - 10:40
<i>Other</i>		
10:00 - 10:40		Industry Exhibition
Coffee Break		
<i>General</i>		
10:40 - 11:20		R1
EDUCATION AND TRAINING		
<i>Chair:</i> Andreas Demetriades, GB		
<i>Chair:</i> Karl Schaller, CH		
319	Panel discussion / round table/ couch discussion	10:40 - 10:40
320	CAANS <i>Speaker:</i> Graham Fieggen, ZA	10:40 - 10:46
321	AANS as an Enterprise Supporting Research and Education <i>Speaker:</i> Ann Stroink, US	10:46 - 10:52
322	EANS <i>Speaker:</i> Vakis Papanastassiou, CY	10:52 - 10:58
	Discussion	10:58 - 11:20
<i>Skull Base</i>		
11:20 - 12:35		R1
Update in skull base neurosurgery		
<i>Chair:</i> Michael Bruneau, BE		
<i>Chair:</i> Miodrag Rakic, RS		
325	Porus trigeminus meningiomas : comprehensive management <i>Speaker:</i> Pierre Hugues Roche, FR	11:20 - 11:35
326	Surgical treatment of cranio-orbital and craniofacial meningiomas <i>Speaker:</i> Nikolay Lasunin, RU	11:35 - 11:47
327	Management of cavernous sinus meningiomas: Consensus statement on behalf of the EANS skull base section <i>Speaker:</i> Torstein Meling, CH	11:47 - 11:59
328	Retractorless Brain Surgery for Skull Base Meningiomas	11:59 - 12:11

	<i>Speaker:</i> Moshe Attia, IL	
329	Best Abstract: Bigger isn't better! Macroadenomas in Cushing's disease, a single center experience and outcomes <i>Oral Presenter:</i> Andrea Cavalli, GB	12:11 - 12:19
330	Best Abstract: Endocrinological aspects of pituitary adenoma surgery in Europe <i>Oral Presenter:</i> David Netuka, CZ	12:19 - 12:27
	Discussion	12:27 - 12:35
<i>Other</i>		
	12:35 - 13:05	R1
Awards Ceremony		
<i>Chair:</i> Andreas Demetriades, GB		
<i>Chair:</i> Asgeir Jakola, SE		
<i>Chair:</i> Johannes van Loon, BE		
<i>Chair:</i> Aki Laakso, FI		
331	A Prize: Best Laboratory Paper	12:35 - 12:35
332	T-Cell Dysfunction in the Glioblastoma Microenvironment is Mediated by Myeloid Cells Releasing Interleukin-10 <i>Speaker:</i> Nicolas N. Neidert, DE	12:35 - 12:38
333	A Prize: Best Clinical Paper	12:38 - 12:38
334	Ultra-early tranexamic acid after subarachnoid haemorrhage (ULTRA): a randomised controlled trial <i>Speaker:</i> Rene Post, NL	12:38 - 12:41
335	B Prize: Best Candidate's Performance	12:41 - 12:41
336	B Prize <i>Speaker:</i> Mohit Arora, GB	12:41 - 12:41
337	2022 EANS Research Fund	12:41 - 12:41
338	First-in-human experience using novel ultraflexible low-impedance electrode arrays: an IDEAL Stage 1 study <i>Speaker:</i> Hugo Layard Horsfall, GB	12:41 - 12:44
339	Fate of the glymphatic system and its implications for cognitive dysfunction in mild traumatic brain injury (GLYCO-TBI) <i>Speaker:</i> Nagesh Shanbhag, SE	12:44 - 12:47
340	Understanding hydrocephalus in subarachnoid haemorrhage - during a plenary session <i>Speaker:</i> Lucia Darie, GB	12:47 - 12:50
341	Assessing functional outcome after epilepsy surgery - A connectomics approach <i>Speaker:</i> Matthias Tomschik, AT <i>Speaker:</i> Fabian Winter, AT	12:50 - 12:53

342	Utilization of a new miniature confocal microscope (CONVIVO system) to identify tumor tissue during CNS tumors resection – a preliminary prospective observational in-vivo study <i>Speaker:</i> Francesco Restelli, IT	12:53 - 12:56
343	Three-Dimensional Photorealistic Atlas of Neurological Surgery <i>Speaker:</i> Toma Spiriev, BG	12:56 - 12:59
344	Biomechanical validation of CT-measured bone mineral density in the lumbar spine <i>Speaker:</i> Anto Abramovic, AT	12:59 - 13:02
345	The role of the vasoprotectant losartan in prevention of delayed cerebral vasospasm and neuronal injury after experimentally-induced subarachnoid hemorrhage in rabbits <i>Speaker:</i> Stefan Wanderer, CH	13:02 - 13:05

Vascular

13:05 - 14:30

EPB1

ePoster Presentation*Chair:* Goran Tasic, RS*Chair:* Miikka Korja, FI

EP01131	Neointima sealing provided by endothelial cells of the parent artery in a rat saccular side wall model – Methodology of in-vivo cell tracer injection <i>Poster Presenter:</i> Stefan Wanderer, CH	13:05 - 13:08
EP01132	The primitive variant of the basal vein of Rosenthal and the potential role in the etiology of non-aneurysmal perimesencephalic SAH <i>Poster Presenter:</i> Dimitrios Charitos, GR	13:08 - 13:11
EP01133	Systematic review and meta-analysis of outcome-relevant anemia in patients with subarachnoid hemorrhage <i>Poster Presenter:</i> Maryam Said, DE	13:11 - 13:14
EP01134	Impact of beginning, duration, and severity of anemia on the outcome of aneurysmal subarachnoid hemorrhage <i>Poster Presenter:</i> Maryam Said, DE	13:14 - 13:17
EP01136	Intracranial aneurysm rupture is associated with macrophage polarization <i>Poster Presenter:</i> Mária Stratilová, CZ	13:17 - 13:20
EP01137	Surgical treatment of anterior communicating artery aneurysms: risk factors and predictors for postoperative clinical outcome <i>Poster Presenter:</i> Philipp Geiger, AT	13:20 - 13:23
EP01138	Large and giant ACA aneurysms: analysis of surgical techniques and ischemic complications in a series of 112 patients <i>Poster Presenter:</i> Vadim Gadzhiagaev, RU	13:23 - 13:26

EP01139	Contrast labeled immunoliposomes for detecting rupture prone aneurysms <i>Poster Presenter:</i> Behnam Rezai Jahromi, FI	13:26 - 13:29
EP01140	Challenges of microvascular neurosurgery discussed in the treatment of intracranial aneurysms prior treated with various endovascular methods: North Atlanta experience <i>Poster Presenter:</i> Arthur Grigorian, US	13:29 - 13:32
EP01141	Association of arterial tortuosity with haemodynamic parameters – a Computational Fluid Dynamics study <i>Poster Presenter:</i> Roger M. Krzyżewski, PL	13:32 - 13:35
EP01142	Clinical characteristics and morphological parameters associated with the risk of rupture of anterior communicating artery aneurysms <i>Poster Presenter:</i> Filip Vitošević, RS	13:35 - 13:38
EP01143	Predicting vasospasm following aneurysmal subarachnoid haemorrhage from total blood volume on CT head: a semi-automated segmentation pipeline <i>Poster Presenter:</i> Anand S. Pandit, GB	13:38 - 13:41
EP01144	Blood pressure and outcome after aneurysmal subarachnoid hemorrhage <i>Poster Presenter:</i> Marvin Darkwah Oppong, DE	13:41 - 13:44
EP01145	The outcome of a subarachnoid hemorrhage of "poor grade" in developing European country – a single center experience <i>Poster Presenter:</i> Adi Ahmetspahi, BA	13:44 - 13:47
EP01146	Retinotopic mapping guides microsurgical resection of occipital arteriovenous malformation <i>Poster Presenter:</i> Spyridon Karadimas, CA	13:47 - 13:50
EP01147	Epidemiology-based evaluation of trends in treatment for ruptured intracranial aneurysms in Italy <i>Poster Presenter:</i> Daniele Bongetta, IT	13:50 - 13:53
EP01148	Shunt dependency after aneurysmal subarachnoid haemorrhage and influence of admission hyperglycaemia <i>Poster Presenter:</i> Isabel Charlotte Hostettler, DE	13:53 - 13:56
EP01149	Diagnostic yield of different imaging modalities to detect intracranial aneurysm remnants after microsurgical clipping: a systematic review <i>Poster Presenter:</i> Serge Marbacher, CH	13:56 - 13:59
EP01150	Stent-assisted coiling in acute phase of subarachnoid hemorrhage <i>Poster Presenter:</i> Sevak Badalyan, AM	13:59 - 14:02
EP01152	Surgical treatment of ACOM aneurysm via anterior interhemispheric approach <i>Poster Presenter:</i> ?hsan Do?an, TR	14:02 - 14:05

EP01153	Physical exertion is associated with perimesencephalic non-aneurysmal subarachnoid hemorrhage	14:05 - 14:08
EP01154	Impact of COVID-19 pandemic on treatment management and clinical outcome of aneurysmal subarachnoid hemorrhage – A single center experience <i>Poster Presenter:</i> Sepide Kashefiolasl, DE	14:08 - 14:11
EP01155	Patients with brain arteriovenous malformation-associated epilepsy exhibit more pronounced hemodynamic alterations <i>Poster Presenter:</i> Martina Sebök, CH	14:11 - 14:14
EP01156	Novel biomarkers identified in brain arteriovenous malformation proteomics assay <i>Poster Presenter:</i> Henri Savander, FI	14:14 - 14:17
EP01157	Segmentation techniques of cerebral arteriovenous malformations for 3D visualisation: a systematic review <i>Poster Presenter:</i> Elisa Colombo, CH	14:17 - 14:20
EP01158	Urgent Microneurosurgical Treatment Of Ruptured AVMs Without Embolization <i>Poster Presenter:</i> An?l Eray, TR	14:20 - 14:23
	Discussion	14:23 - 14:30

Skull Base
13:05 - 14:30

EPB2

ePoster Presentation

Chair: Johanne Kerschbaumer, AT

EP01159	Safety and usefulness of 2 µg-Thulium laser in posterior fossa meningiomas <i>Poster Presenter:</i> Julio Alberto Andres Sanz, ES	13:05 - 13:08
EP01160	One size does not fit all - tailored individualized treatment approaches for petroclival and sphenopetroclival meningiomas based on differences in expected outcome <i>Poster Presenter:</i> Christina Fodi, DE	13:08 - 13:11
EP01162	Medial sphenoid wing meningiomas with major artery encasement; results of single institution series <i>Poster Presenter:</i> Erkin Özgiray, TR	13:11 - 13:14
EP01163	Microsurgical resection of the meningiomas of the skull base: a multicentric study <i>Poster Presenter:</i> Michaela May, CZ	13:14 - 13:17
EP01164	The assessment of gamma probe-assisted removal of intracranial meningioma <i>Poster Presenter:</i> Darius Kalasauskas, DE	13:17 - 13:20
EP01165	Postoperative cranial nerve deficits in petroclival meningioma surgery <i>Poster Presenter:</i> Hrvoje Baric, HR	13:20 - 13:23

EP01166	Recurrent meningiomas within and around the cavernous sinus after radiosurgery: the pretemporal transcavernous approach <i>Poster Presenter:</i> Gabriella Raccuia, IT	13:23 - 13:26
EP01169	Development and external validation of clinical prediction models for pituitary surgery <i>Poster Presenter:</i> Olivier Zanier, CH	13:26 - 13:29
EP01170	Expanded endoscopic endonasal approach for complex functioning tumours with cavernous sinus, suprasellar and clival invasion: technical nuances for maximising extent of resection and biochemical remission <i>Poster Presenter:</i> Adrian Zammit, GB	13:29 - 13:32
EP01171	Pituitary adenoma surgery survey: neurosurgical centers and pituitary adenomas <i>Poster Presenter:</i> David Netuka, CZ	13:32 - 13:35
EP01172	Visualization of tumor remnant in pituitary adenoma surgery with intraoperative cone-beam computed tomography <i>Poster Presenter:</i> Laurèl Rauschenbach, DE	13:35 - 13:38
EP01173	Pre and postoperative remission predictors of surgical treatment of acromegaly <i>Poster Presenter:</i> Ludmila Astafieva, RU	13:38 - 13:41
EP01174	Herophilus-Galen line can predict the extent of resection in the occipital interhemispheric transtentorial approach to pineal tumors in children <i>Poster Presenter:</i> Alessandra Marini, IT	13:41 - 13:44
EP01175	A minimally invasive endoscope-assisted mandibular notch infratemporal transclival approach to the foramen magnum and anterior brainstem <i>Poster Presenter:</i> Stavros Constantinou, US	13:44 - 13:47
EP01177	Endoscopic multiportal approaches to the lateral sellar compartment: an anatomic study <i>Poster Presenter:</i> Aurel Hasanbelliu, IT	13:47 - 13:50
EP01180	Diagnostic and treatment algorithm for indeterminate lesions of the pituitary stalk in children and adults – case series <i>Poster Presenter:</i> Eric Suero-Molina, DE	13:50 - 13:53
EP01181	Endoscopic transorbital approach <i>Poster Presenter:</i> Cesare Zoia, IT	13:53 - 13:56
EP01183	Endoscope assisted resection for cystic cerebellar haemangioblastomas <i>Poster Presenter:</i> Joy Roach, GB	13:56 - 13:59
EP01184	Technical nuances for maximising the sublacerum versus supralacerum expanded endoscopic endonasal transclival approach: maximizing extent of resection of chordomas,	13:59 - 14:02

chondrosarcomas and petroclival lesions*Poster Presenter:* Adrian Zammit, GB

EP01185	Endoscopic transnasal odontoidectomy in basilar invagination with ventral cord compression due to posterior displacement of the odontoid process <i>Poster Presenter:</i> Idoia Zazpe, ES	14:02 - 14:05
EP01186	Sphenoid sinus pneumatization in Middle Eastern patients - implications for endoscopic skull base approaches	14:05 - 14:08
	Discussion	14:08 - 14:30

Other

13:05 - 14:30

Industry Exhibition

Lunch Break*Industry*

13:15 - 14:15

R3

Industry Sponsored Symposium*Industry*

13:15 - 14:15

R5

Industry Sponsored Workshop*Industry*

13:15 - 14:15

R6

Industry Sponsored Workshop*Industry*

13:15 - 14:15

EANS Board/ Council Room

Industry Sponsored Workshop*Vascular*

14:30 - 16:10

R1

Plenary vascular*Chair:* Andreas Raabe, CH*Chair:* Andreas Gruber, AT

346	Outcome after early lumbar CSF-drainage in aneurysmal subarachnoid hemorrhage: final results of a randomized controlled trial <i>Speaker:</i> Stefan Wolf, DE	14:30 - 14:45
347	Can aneurysm surgery be learned without additional morbidity and mortality? <i>Speaker:</i> Miikka Korja, FI	14:45 - 15:00
348	Blister aneurysms: a continuing surgical challenge <i>Speaker:</i> Michael Lawton, US	15:00 - 15:15
349	Treatment or follow up for unruptured aneurysms?	15:15 - 15:30

	<i>Speaker:</i> Jeroen Boogaarts, NL	
350	Results from the Nicapant Phase2b RCT reveal a significant reduction in cerebral vasospasm following aneurysmal subarachnoid hemorrhage <i>Speaker:</i> Peter Vajkoczy, DE	15:30 - 15:38
351	Best Abstract: Factors affecting outcomes of open and endovascular procedures for unruptured intracranial aneurysms are different: implications from UCAS Japan data <i>Oral Presenter:</i> Akio Morita, JP	15:38 - 15:46
352	Best Abstract: Results from a prospective nationwide study on Subarachnoid Hemorrhage in Sweden: complications related to endovascular treatment <i>Oral Presenter:</i> Bryndís Baldvinsdóttir, SE	15:46 - 15:54
	Discussion	15:54 - 16:10
<i>Functional</i>		
14:30 - 16:00		R5
Neuroimaging for Epilepsy surgery		
<i>Chair:</i> Daniel Delev, DE		
<i>Chair:</i> Sophie Colnat Coulbois, FR		
353	How to detect epileptogenic lesions on MRI? It is not only a question of the applied MRI protocol! <i>Speaker:</i> Joerg Wellmer, DE	14:30 - 14:45
354	Ultra-high field MRI in the workup for epilepsysurgery <i>Speaker:</i> Olaf Schijns, NL	14:45 - 15:00
355	Multimodal imaging guided resections without invasive monitoring <i>Speaker:</i> Tom Theys, BE	15:00 - 15:15
356	State of the art clinical MRI for epilepsy surgery <i>Speaker:</i> Eric Achten, BE	15:15 - 15:30
	Discussion	15:30 - 16:00
<i>Trauma & Pediatric</i>		
14:30 - 16:00		R6
Severe TBI in children		
<i>Chair:</i> Aurelia Peraud, DE		
<i>Chair:</i> Martina Messing Juenger, DE		
357	Decompressive craniectomy in children <i>Speaker:</i> Janna Semenova, RU	14:30 - 14:45
358	Decompressive craniectomy in infants <i>Speaker:</i> Martina Messing Juenger, DE	14:45 - 15:00
359	Guidelines and surgical aspects on TBI in children <i>Speaker:</i> Aurelia Peraud, DE	15:00 - 15:15

360	ICP monitoring in children: ICP burden in the KIDS-Brain-IT study <i>Speaker:</i> Bart Depreitere, BE	15:15 - 15:30
	Discussion	15:30 - 16:00
<i>Vascular</i>		
16:10 - 16:50		EPB1
ePoster Presentation		
<i>Chair:</i> Isabel Charlotte Hostettler, DE		
EP01187	Time trends in the risk of delayed cerebral ischemia after subarachnoid hemorrhage: a meta-analysis of randomized controlled trials <i>Poster Presenter:</i> Luigi Rigante, NL	16:10 - 16:13
EP01193	46 years history of cerebral Bypass surgery in a single institution in Italy <i>Poster Presenter:</i> Davide Boeris, IT	16:13 - 16:16
EP01189	North Atlanta external carotid-to-internal carotid artery bypass early experience: a retrospective case series <i>Poster Presenter:</i> Arthur Grigorian, US	16:16 - 16:19
EP01190	Neoangiogenesis after surgical treatment in patients with Moyamoya disease: efficiency factors of combined revascularization <i>Poster Presenter:</i> Vasily Lukshin, RU	16:19 - 16:22
EP01191	Double-barrel bypass for cerebral ischemia: indications, rationale and experience of 71 cases <i>Poster Presenter:</i> Vasily Lukshin, RU	16:22 - 16:25
EP01194	Efficacy and safety of multiple tenecteplase doses compared to alteplase for acute ischemic stroke patients, a frequentist network meta-analysis <i>Poster Presenter:</i> Ahmed Negida, EG	16:25 - 16:28
EP01195	Intravenous thrombolysis before mechanical thrombectomy for acute ischemic stroke due to large vessel occlusion; should we cross that bridge? A meta-analysis of 36,123 patients <i>Poster Presenter:</i> Hazem Ghaith, EG	16:28 - 16:31
EP01196	Results of treatment in the long-term period after the formation of extra-intracranial microsurgical anastomosis in patients with symptomatic occlusion of the internal carotid artery <i>Poster Presenter:</i> Tatiyana Kudryashova, RU	16:31 - 16:34
EP01197	Decompressive craniectomy and cranioplasty for malignant brain infarction: comparing prognostic factors <i>Poster Presenter:</i> Corrado Iaccarino, IT	16:34 - 16:37
EP01198	Histological Analysis of Carotid Plaques: Predictors of Stroke Risk <i>Poster Presenter:</i> Norbert Svoboda, CZ	16:37 - 16:40

EP01199	DWI-MRI hyperintensity associated with post ECIC bypass surgery cerebral hyperperfusion syndrome <i>Poster Presenter:</i> Alexander Nemirovskiy, RU	16:40 - 16:43
	Discussion	16:43 - 16:50
<i>Pediatric</i> 16:10 - 16:50		
		EPB2
ePoster Presentation		
<i>Chair:</i> Michael Schwake, DE		
<i>Chair:</i> Vojin Kovacevic, RS		
EP01200	Comparison of long-term functionality and revision rate of two different shunt valves in pediatric and adult patients <i>Poster Presenter:</i> Peter Baumgarten, DE	16:10 - 16:13
EP01201	CSF leak after cranial surgery in the pediatric population: preliminary results of a retrospective multicenter study <i>Poster Presenter:</i> Emma M.H. Slot, NL	16:13 - 16:16
EP01202	Sagittal neosuture following scaphocephaly correction surgery <i>Poster Presenter:</i> Simona Mihaela Florea, FR	16:16 - 16:19
EP01203	Facial dysmorphisms and severe hypocalvaria: a challenging and often late diagnosis for cleidocranial dysplasia <i>Poster Presenter:</i> Kristy Latour, IT	16:19 - 16:22
EP01204	The role of intraoperative ultrasound in surgery of occult spinal dysraphisms <i>Poster Presenter:</i> Ignazio Vetrano, IT	16:22 - 16:25
EP01205	Maternal status of trace elements and risk of neural tube defects in offspring: a meta-analysis of 6121 pregnancies <i>Poster Presenter:</i> Ahmed Aljabali, JO	16:25 - 16:28
EP01206	Augmented 5-aminolevulinic acid derived photodynamic therapy <i>Poster Presenter:</i> Michael Schwake, DE	16:28 - 16:31
EP01207	Presurgical functional planning for pediatric thalamopeduncular tumors <i>Poster Presenter:</i> Giulia Melinda Furlanis, IT	16:31 - 16:34
EP01209	Transnasal endoscopic approach for osteoid osteoma of the odontoid process in a child. Technical note and systematic review of the literature <i>Poster Presenter:</i> Giuseppe Roberto Giammalva, IT	16:34 - 16:37
EP01211	Intramedullary spinal cord tumors in children: the relevance of motor evoked potentials and D-wave monitoring <i>Poster Presenter:</i> Lukasz Antkowiak, PL	16:37 - 16:40
EP01212	The management of subdural haematomas in newborns: a case series <i>Poster Presenter:</i> Peter Spazzapan, SI	16:40 - 16:43

	Discussion	16:43 - 16:50
<i>Other</i>		
16:10 - 16:50		Industry Exhibition
Coffee Break		
<i>Vascular</i>		
16:50 - 18:20		R1
How to become a competent vascular neurosurgeon?		
<i>Chair:</i> Miikka Korja, FI		
<i>Chair:</i> Goran Tasic, RS		
361	Future training of the vascular and endovascular neurosurgeons	16:50 - 17:00
	<i>Speaker:</i> Delia Cannizzaro, IT	
362	Psychomotor Skill Training and Hybrid Reality in Vascular Neurosurgery	17:00 - 17:10
	<i>Speaker:</i> Federico Nicolosi, IT	
363	"See one, simulate many, do one, teach one": advances in simulation, learning and teaching of aneurysm surgery	17:10 - 17:20
	<i>Speaker:</i> David Bervini, CH	
364	Entrusted professional activities for vascular neurosurgery	17:20 - 17:30
	<i>Speaker:</i> Jeroen Boogaarts, NL	
365	Virtual Reality in Aneurysm surgery planning and treatment	17:30 - 17:37
	<i>Speaker:</i> Raphael Guzman, CH	
366	Clinical outcomes following microsurgical treatment of middle cerebral artery aneurysms: reaffirming the role of a "clip first" policy in the endovascular era	17:37 - 17:44
	<i>Oral Presenter:</i> Marcello D'Andrea, IT	
367	Complications in endovascular neurosurgery	17:44 - 17:51
	<i>Oral Presenter:</i> Nikolay Velinov, BG	
368	Risk of intracranial aneurysm recurrence after microsurgical clipping based on three-dimensional digital subtraction angiography	17:51 - 17:58
	<i>Oral Presenter:</i> Serge Marbacher, CH	
369	Antifibrinolytic therapy for aneurysmal subarachnoid haemorrhage	17:58 - 18:05
	<i>Oral Presenter:</i> Wouter Dronkers, NL	
370	The minipterional versus Sylvian keyhole craniotomy for microsurgical clipping of middle cerebral artery bifurcation aneurysms: an anatomical and virtual reality comparative study	18:05 - 18:12
	<i>Oral Presenter:</i> Atill Saemann, CH	
	Discussion	18:12 - 18:20

Skull Base

16:50 - 18:20

R2

Pituitary*Chair:* Idoia Zazpe, ES*Chair:* Luigi Cavallo, IT

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| 371 | Managing Recurrences in Pituitary Adenomas. The surgeon's aspect
<i>Speaker:</i> Theophilos Palaiologos, GR | 16:50 - 17:00 |
| 372 | Pituitary apoplexy - current concepts of management
<i>Speaker:</i> Daniel Rotariu, RO | 17:00 - 17:10 |
| 373 | Skull base defect reconstruction: challenging contexts
<i>Speaker:</i> Pedro Alberto Silva, PT | 17:10 - 17:20 |
| 374 | Challenges with giant pituitary adenomas
<i>Speaker:</i> Artur Xhumari, AL | 17:20 - 17:30 |
| 375 | Automated volumetric assessment of pituitary adenoma
<i>Oral Presenter:</i> Raffaele Da Mutton, CH | 17:30 - 17:37 |
| 376 | Association of pre- and postoperative β-Klotho levels with long-term remission after pituitary surgery for acromegaly | 17:37 - 17:44 |
| 377 | Radiomic analysis of T2-weighted MRI scans for prediction of pituitary adenoma consistency and gross total resection: preliminary results
<i>Oral Presenter:</i> Martin Šterný, CZ | 17:44 - 17:51 |
| 378 | Safety, feasibility, and success of endoscopic endonasal transsphenoidal reoperation for residual or recurrent Cushing's disease | 17:51 - 17:58 |
| 379 | Dumbbell-Shaped Pituitary Adenomas: prognostic factors for prediction of tumor non-descent of the Supradiaphragmal Component from a multicenter series
<i>Oral Presenter:</i> Alexander Micko, AT | 17:58 - 18:05 |
| 380 | Post-surgical hypopituitarism in Cushing disease, surgical outcomes in a life threatening condition
<i>Oral Presenter:</i> Luigi Schisano, IT | 18:05 - 18:12 |
| 381 | The evaluation of psychological distress in patients with sellar processes
<i>Oral Presenter:</i> Jens Conrad, DE | 18:12 - 18:19 |
| | Discussion | 18:19 - 18:20 |

Peripheral Nerve Surgery

16:50 - 18:20

R3

PNS - BASIC AND INNOVATIVE*Chair:* Shimon Rochkind, IL*Chair:* Debora Garozzo, AE

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| 382 | Biohybrid neural interfaces: merging neuroprosthetics and | 16:50 - 17:00 |
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	stem cell technology	
	<i>Speaker:</i> Damiano Barone, GB	
383	Surgical treatment of obstetrical brachial plexus palsy	17:00 - 17:10
	<i>Speaker:</i> Pavel Haninec, CZ	
384	Evidence based medicine in peripheral nerve surgery - quo vadis?	17:10 - 17:20
	<i>Speaker:</i> Nora Dengler, DE	
385	Alteration of lipid asset in peripheral nerve sheath tumors: targeted and untargeted lipidomic analyses	17:20 - 17:27
	<i>Oral Presenter:</i> Ignazio Gaspare Vetrano, IT	
386	Spinal cord stimulation for the treatment of chronic pain in refractory neurogenic thoracic outlet syndrome	17:27 - 17:34
	<i>Oral Presenter:</i> Hao Jiang, UA	
387	Extended upper brachial plexus palsy	17:34 - 17:41
	<i>Oral Presenter:</i> Andrija Savic, RS	
388	Risk factors as predictor variables for Quality of Life and patient satisfaction posterior to the surgical treatment of Cubital Tunnel Syndrome	17:41 - 17:48
	<i>Oral Presenter:</i> María Elena Córdoba-Mosqueda, RS	
389	Quality of life and satisfaction in patients surgically treated with cubital tunnel syndrome	17:48 - 17:55
	<i>Oral Presenter:</i> Jovan Grujic, RS	
390	Clinical aspects of ballistic peripheral nerve injury: shrapnel versus gunshot	17:55 - 18:02
	<i>Oral Presenter:</i> Shimon Rochkind, IL	
391	Experimental animal models for peripheral nerve reconstruction	18:02 - 18:09
	<i>Oral Presenter:</i> Shimon Rochkind, IL	
	Discussion	18:09 - 18:20

General

16:50 - 18:20

R4

Global Neurosurgery*Chair:* Nicolò Marchesini, IT*Chair:* Jake Timothy, GB*Chair:* Gail Rosseau, US

392	Challenges of long-term follow-up following Traumatic Brain Injury in low- and middle-income countries	16:50 - 16:57
	<i>Oral Presenter:</i> Brandon G. Smith, GB	
393	Footprint of reports from low- and low- to middle-income countries in the neurosurgical data: the evolution in the last 5 years	16:57 - 17:04
	<i>Oral Presenter:</i> Ismail Zaed, IT	

394	Global Neurosurgery among the EANS community: where are we at? <i>Oral Presenter:</i> Nicolò Marchesini, IT	17:04 - 17:11
395	Exploring the adherence to guidelines for adult spinal trauma in low and middle-income healthcare economies: a survey on barriers and possible solutions <i>Oral Presenter:</i> Nicolò Marchesini, IT	17:11 - 17:18
396	Management and outcomes of sellar, suprasellar, and parasellar masses in low-and middle- income countries: a scoping review <i>Oral Presenter:</i> Abdullah Egiz, GB	17:18 - 17:25
397	How to start and maintain a global neurosurgical research network; the story of the Global Neurosurg Research Collaborative <i>Oral Presenter:</i> Ahmed Negida, EG	17:25 - 17:32
398	Spinal surgery trials in high-, middle- and low-income countries over the past two decades <i>Oral Presenter:</i> Maaz Ahmed Khan, GB	17:32 - 17:39
399	YouTube as a Source of Information for neurosurgical care in Africa <i>Oral Presenter:</i> Chibuikem Anthony Ikwuegubenyi, CM	17:39 - 17:46
	Discussion	17:46 - 18:20
<i>CSF</i> 16:50 - 18:20		
	CSF Disorders	R5
	<i>Chair:</i> Mansoor Foroughi, GB <i>Chair:</i> Giorgio Palandri, IT	
400	Skull Base Repair During Endonasal Skull Base Neurosurgery: Results From a Multi-Centre Observational Study <i>Speaker:</i> Danyal Khan, GB	16:50 - 17:00
401	Neuroendoscopy: Obstructive hydrocephalus isn't just aqueductal stenosis <i>Speaker:</i> Uwe Kehler, DE	17:00 - 17:10
402	Endoscopy in Neurosurgery: ventricular and paraventricular pathology <i>Speaker:</i> Bassel Zebian, GB	17:10 - 17:20
403	[68Ga]Ga-DOTA PET for validation of spinal cerebrospinal fluid leakage in spontaneous intracranial hypotension <i>Oral Presenter:</i> Petros Evangelou, DE	17:20 - 17:27
404	Cerebrospinal fluid shunt surgery under ongoing system infectious conditions. Are there more complications? <i>Speaker:</i> Arthur Wagner, DE	17:27 - 17:34
405	Diagnostic value of cerebrospinal fluid production rate in	17:34 - 17:41

	normal pressure hydrocephalus	
	<i>Oral Presenter:</i> Kanza Tariq, GB	
406	Treating hydrocephalus by shunting to the venous intracranial sinus - first in human SinuShunt Project no.849502 supported by the European Union's Horizon 2020 Programme	17:41 - 17:48
	<i>Oral Presenter:</i> Sune Munthe, DK	
407	Ventriculoperitoneal shunt placement for hydrocephalus following acute subarachnoid hemorrhage: functional outcomes and revision rates	17:48 - 17:55
	<i>Oral Presenter:</i> Eric Goulin Lippi Fernandes, DE	
408	Interpretation of M.scio waveform in the diagnosis of shunt malfunction	17:55 - 18:02
	<i>Oral Presenter:</i> Eleanor M Moncur, GB	
409	The impact of telesensors on neurosurgical service demand: a cohort cost-effectiveness analysis from institutional and patient perspectives	18:02 - 18:09
	<i>Oral Presenter:</i> Ptolemy D W Banks, GB	
	Discussion	18:09 - 18:20

Neuro-Oncology

16:50 - 18:20

R6

Glioma treatment and research: Recent advances*Chair:* Einar Vik Mo, NO*Chair:* Nikolaos Foroglou, GR

410	The new WHO 2021 classification of CNS tumours	16:50 - 17:05
	<i>Speaker:</i> Adelheid Woehrer, AT	
411	Interdisciplinary neuro-oncology: recent developments and perspectives	17:05 - 17:20
	<i>Speaker:</i> Giuseppe Lombardi, IT	
412	Stereotactic laser ablation for irresectable glioblastomas	17:20 - 17:35
	<i>Speaker:</i> Mark Ter Laan, NL	
413	Spatial biology of malignant brain tumors	17:35 - 17:50
	<i>Speaker:</i> Dieter Henrik Heiland, DE	
	Discussion	17:50 - 18:20

Spine

16:50 - 18:20

EANS Board/ Council Room

Cervical Myelopathy*Chair:* Giuseppe Barbagallo, IT

414	Surgical indications and outcome predictors of cervical myelopathy	16:50 - 17:05
	<i>Speaker:</i> Aria Nouri, CH	
415	Surgical techniques and differential indications	17:05 - 17:20

	<i>Speaker:</i> Enrico Tessitore, CH	
416	Treatment challenge: Myelopathy with degenerative deformities <i>Speaker:</i> Andrzej Maciejczak, PL	17:20 - 17:35
417	DCM: pathophysiology & avenues for regeneration <i>Speaker:</i> Mark Kotter, GB	17:35 - 17:50
	Discussion	17:50 - 18:20

Wednesday, 19. October 2022*Spine*

08:30 - 10:00

R1

Spinal Oncology*Chair:* Miroslav Vukic, HR

418	Modern treatment concepts of spinal metastases <i>Speaker:</i> Bart Depreitere, BE	08:30 - 08:40
419	Surgical strategies for intramedullary spinal cord tumors: experience of more than 1000 cases <i>Speaker:</i> Nikolay Konovalov, RU	08:40 - 08:50
420	Indications for surgical management of spinal multiple myeloma <i>Speaker:</i> Julia Onken, DE	08:50 - 09:00
421	One-stage posterior total en bloc sacrectomy: A new step-by-step cadaveric demonstration <i>Oral Presenter:</i> Oguz Baran, TR	09:00 - 09:07
422	The neurology-stability-epidural compression assessment: a new score to establish the need for surgery in spinal metastases <i>Speaker:</i> Daniele Armocida, IT	09:07 - 09:14
423	Current concepts in the management of spinal multiple myeloma: a single centre experience <i>Oral Presenter:</i> Mark Kusah Nyanzu, GB	09:14 - 09:21
424	Management of vertebral column lesions in Multiple Myeloma patients - a two-center experience of 450 cases <i>Oral Presenter:</i> Vanessa Hubertus, DE	09:21 - 09:28
425	Stabilization surgery for instable neoplastic lesions of the cervicothoracic junction is associated with a high complication profile <i>Oral Presenter:</i> Andreas Kramer, DE	09:28 - 09:35
426	Management of spinal bone metastases with radiofrequency ablation, vertebral reinforcement and transpedicular fixation: a retrospective single-center case series <i>Oral Presenter:</i> Rosario Maugeri, IT	09:35 - 09:42
427	Impact of sarcopenia, obesity and bone mineral density on implant failure after spondylodesis in patients with osteoporotic vertebral fractures <i>Oral Presenter:</i> Naureen Keric, DE	09:42 - 09:49
	Discussion	09:49 - 10:00

Vascular

08:30 - 10:00

R2

Revascularization*Chair:* Daniel Haenggi, DE*Chair:* Marco Cenzato, IT

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| 428 | Reconstructive surgery of the magistral arteries of the brain in neurosurgical practice
<i>Speaker:</i> Vasily Lukshin, RU | 08:30 - 08:40 |
| 429 | Complications and management in Moya Moya surgery
<i>Speaker:</i> Laurent Thines, FR | 08:40 - 08:50 |
| 430 | Issues of revascularization surgery in cerebral ischemia treatment
<i>Speaker:</i> Vasily Lukshin, RU | 08:50 - 09:00 |
| 431 | Cerebral oximetry – a simple and reliable indicator of brain hypoxia in patients during carotid endarterectomy
<i>Oral Presenter:</i> Aleš Hejzl, CZ | 09:00 - 09:07 |
| 433 | Recurrent stroke in symptomatic steno-occlusive disease: identifying patients at high-risk using impaired BOLD cerebrovascular reactivity
<i>Oral Presenter:</i> Martina Sebök, CH | 09:07 - 09:14 |
| 434 | Ischemic complications of surgical revascularization in Moyamoya disease
<i>Oral Presenter:</i> Vasily Lukshin, RU | 09:14 - 09:21 |
| 435 | Predictors of decompressive hemicraniectomy after mechanical thrombectomy in ischemic stroke
<i>Oral Presenter:</i> Xenia Hautmann, DE | 09:21 - 09:28 |
| 436 | Postoperative cerebral ischemia after temporary occlusion in anterior communicating artery aneurysms
<i>Oral Presenter:</i> Ondra Petr, AT | 09:28 - 09:35 |
| 437 | Interrater and intrarater agreement superior for 3D-DSA over 2D-DSA classification for detecting remnants after intracranial aneurysm clipping, a GRRAS Reliability and Agreement Study
<i>Oral Presenter:</i> Stefan Wanderer, CH | 09:35 - 09:42 |
| 438 | Prognostic value of erythrosis in cerebrospinal fluid for formation of cerebral vasospasm and delayed cerebral ischemia
<i>Oral Presenter:</i> Vladyslav Kaliuzhka, UA | 09:42 - 09:49 |
| | Discussion | 09:49 - 10:00 |

Trauma

08:30 - 10:00

R3

(Big) Data in TBI/SCI*Chair:* Andras Buki, SE

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| 439 | Machine learning algorithm for outcome prediction in patients with TBI | 08:30 - 08:40 |
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	<i>Speaker:</i> Rahul Raj, FI	
440	Factors influencing outcome after mild TBI <i>Speaker:</i> Petar Vulekovic, RS	08:40 - 08:50
441	The neurotrauma epidemic among the elderly - consequences for neurosurgery <i>Speaker:</i> Eirik Helseth, NO	08:50 - 09:00
442	Demographic and clinical aspects of traumatic brain injury (TBI) in octo- and nonagenarians: a Collaborative European NeuroTrauma Effectiveness Research in TBI (CENTER-TBI) analysis <i>Oral Presenter:</i> Meltem Ivren, DE	09:00 - 09:07
443	Case-mix, management and mortality of patients receiving emergency neurosurgery for traumatic brain injury in the Global Neurotrauma Outcomes Study (GNOS): a prospective, observational cohort study <i>Oral Presenter:</i> David Clark, GB	09:07 - 09:14
444	Early surgery versus conservative treatment in patients with traumatic intracerebral hematoma: a CENTER-TBI study <i>Oral Presenter:</i> Inge Arnoldina Maria van Erp, NL	09:14 - 09:21
445	Care paths and clinical management of 939 mild TBI patients presenting to a neurosurgical emergency department <i>Oral Presenter:</i> Tamara Schink, DE	09:21 - 09:28
446	Validity of post-marketing analysis in the evaluation of post-implantation analysis of cranioplasty: a multicentric European analysis <i>Oral Presenter:</i> Ismail Zaed, IT	09:28 - 09:35
447	Timing and value of early MRI in severe traumatic brain injury <i>Oral Presenter:</i> Daniel Pinggera, AT	09:35 - 09:42
448	The effects of reduced clinical activity on mortality in moderate and severe traumatic brain injury – an observational cohort study <i>Oral Presenter:</i> Joakim Stray Andreassen, NO	09:42 - 09:49
	Discussion	09:49 - 10:00
<i>Pediatric</i>		
08:30 - 10:00		R4
	Tumor related epilepsy	
	<i>Chair:</i> Marek Mandera, PL	
	<i>Chair:</i> Martina Messing Juenger, DE	
449	Tumor related epilepsy in children <i>Speaker:</i> Moni Benifla, IL	08:30 - 08:40
450	Laser induced thermal therapy (LITT) for refractory epilepsy in tuberous sclerosis children	08:40 - 08:50

	<i>Speaker:</i> Karl Roessler, AT	
451	HDEEG stereo-EEG and EcoG as combined tools in the identification of the epileptogenic area in pediatric epileptogenic low grade tumors <i>Speaker:</i> Gianpiero Tamburrini, IT	08:50 - 09:00
452	Infant hydrocephalus: what valve should be used first? Analysis of the BASICS trial, institutional cohort study and literature review <i>Oral Presenter:</i> Conor S Gillespie, GB	09:00 - 09:07
454	Is “Polymorphous low-grade neuroepithelial tumor of the young (PLNTY)” the correct name to indicate a tumor entity that can arise at any age? <i>Oral Presenter:</i> Francesco Certo, IT	09:07 - 09:14
455	A new method for quantification of frontal retrusion and complex skull shape in metopic craniosynostosis: a pilot study of a new outcome measure for endoscopic-strip-craniectomy <i>Oral Presenter:</i> Hassan Haidar, TR	09:14 - 09:21
456	Preoperative transcranial magnetic stimulation in paediatric brain tumour surgery <i>Oral Presenter:</i> Cristina Bleil, GB	09:21 - 09:28
	Discussion	09:28 - 10:00
<i>Research</i>		
08:30 - 10:00		R5
Research Parallel		
<i>Chair:</i> Aki Laakso, FI		
<i>Chair:</i> Katrin Rabie, SE		
457	Delivering large-scale neurosurgical studies - the impact of trainees <i>Speaker:</i> Danyal Khan, GB	08:30 - 08:40
458	From bench to bedside: experimental and translational research in cerebrovascular neurosurgery <i>Speaker:</i> Serge Marbacher, CH	08:40 - 08:50
459	Big money - A beginner's guide to international research funding <i>Speaker:</i> Thomas Picht, DE	08:50 - 09:00
460	Telemedical follow-up in patients after decompressive spine surgery – a retrospective, single center analysis <i>Oral Presenter:</i> Christoph Orban, AT	09:00 - 09:07
461	Anarchy in economic evaluations in spine surgery: a systematic qualitative assessment <i>Oral Presenter:</i> Ruud Droeghaag, NL	09:07 - 09:14
462	The Artificial Intelligence Motion study (AIM): Artificial	09:14 - 09:21

	Intelligence-assisted image recognition of cervical spine motion <i>Oral Presenter:</i> Inge Caelers, NL	
463	An AI-enabled predictive analytics dashboard for acute neurosurgical referrals <i>Oral Presenter:</i> Anand S. Pandit, GB	09:21 - 09:28
464	Evaluation of biomechanical properties of various alloplastic implant materials for the replacement of bony defects of the skull <i>Oral Presenter:</i> Stefan Busch, CH	09:28 - 09:35
465	Spontaneous brain abscess formation: challenge of a changing pathogen spectrum over the last 21 years <i>Oral Presenter:</i> Luisa Mona Kraus, DE	09:35 - 09:42
466	Non-invasive low pulsed electrical fields for inducing transient BBB disruption depicted by TRAMs <i>Oral Presenter:</i> Yael Mardor, IL	09:42 - 09:49
467	Treatment planning for patients undergoing neurovascular surgeries using patient specific 3D printed models and mixed reality: Methodological approach <i>Oral Presenter:</i> Joshua Haegler, CH	09:49 - 09:56
468	The impact of routine 3-dimensional models for preoperative clip selection in aneurysm surgeries: preliminary results <i>Oral Presenter:</i> Serge Marbacher, CH	09:56 - 10:03
 <i>IONM</i> 08:30 - 10:00		
	Challenges in Intraoperative Neurophysiological Monitoring <i>Chair:</i> Francesco Sala, IT <i>Chair:</i> Djula Djilvesi, RS	R6
469	Developing Neuromonitoring in European LMIC <i>Speaker:</i> Olga Herasymenko, UA	08:30 - 08:40
470	Cortico-cortical evoked potentials: A new tool for monitoring cerebral connectivity during asleep brain tumor surgery <i>Speaker:</i> Davide Giampiccolo, GB	08:40 - 08:50
471	Challenges in the interpretation of facial MEPs during CPA tumor surgery <i>Speaker:</i> Andrea Szelenyi, DE	08:50 - 09:00
472	Machine learning approaches for the automated classification of intraoperative motor evoked potentials. A pilot study <i>Oral Presenter:</i> Alessandro Boaro, IT	09:00 - 09:07
473	Stimulation-based language mapping in patients with severe expressive aphasia and healthy controls: piloting a new comprehension-related task <i>Oral Presenter:</i> Leonie Kram, DE	09:07 - 09:14

474	New DTI protocol improves visualization of brain-tumor interface <i>Oral Presenter:</i> Sebastian Koga, US	09:14 - 09:21
475	Speech and Arcuate Fasciculus (AF) mapping in patients with gliomas of the dominant temporal lobe: analysis of a series of 27 cases <i>Oral Presenter:</i> Sergey Goryaynov, RU	09:21 - 09:28
	Discussion	09:28 - 10:00

Skull Base
08:30 - 10:00

EANS Board/ Council Room

Meet the Masters 2

Chair: Jan Frederick Cornelius, DE

Chair: Michael Bruneau, BE

476	Anterior skull base malignancies <i>Speaker:</i> Torstein Meling, CH	08:30 - 08:45
477	Endonasal route for unconventional pituitary adenomas <i>Speaker:</i> Luigi Cavallo, IT	08:45 - 09:00
478	Modern management of craniopharyngioma <i>Speaker:</i> Emmanuel Jouanneau, FR	09:00 - 09:15
479	Craniopharyngiomas <i>Speaker:</i> Diego Mazzatenta, IT	09:15 - 09:30
	Discussion	09:30 - 10:00

Other
09:00 - 18:00

EPA

ePosters

Spine
10:00 - 10:40

EPB1

ePoster Presentation

Chair: Nikolay Gabrovsky, BG

Chair: Maria Luisa Gandia Gonzalez, ES

EP01214	Presentation, management and outcomes of typical and atypical Hangman fractures - a case series <i>Poster Presenter:</i> Muhammad Shaheer Akhtar, PK	10:00 - 10:03
EP01215	Spinopelvic injuries and fixation: a case series <i>Poster Presenter:</i> Ioannis Gkalonakis, GR	10:03 - 10:06
EP01216	Assessment of surgical time and clinician radiation exposure of navigated robotic assisted minimally invasive transpedicular screw fixation versus conventional percutaneous technique <i>Poster Presenter:</i> Nikolay Gabrovsky, BG	10:06 - 10:09
EP01217	Clinical application of neuronavigation for lateral	10:09 - 10:12

	instrumentation of the thoracolumbar spine	
	<i>Poster Presenter:</i> Maximilian Schwendner, DE	
EP01218	Worsening neurology following epidural blood patch for intracranial hypotension: causative or coincidental?	10:12 - 10:15
	<i>Poster Presenter:</i> Mohamed Draz, GB	
EP01219	Adequate fusion as correction of craniocervical and atlantoaxial instability in patients with traumatic lesions, using O-Arm System versus C-arm procedure - a single centre review	10:15 - 10:18
	<i>Poster Presenter:</i> Nikolay Mirchev, DE	
EP01220	Percutaneous O-arm guided navigated screw implantation for C2 fractures: the technique adaptation according to Magerl and Judet	10:18 - 10:21
	<i>Poster Presenter:</i> Benedikt Trnovec, SK	
EP01221	Spondylodiscitis in super-aging society	10:21 - 10:24
	<i>Poster Presenter:</i> Takeshi Aoyama, JP	
EP01222	Is degenerative disc disease a consequence of bacterial infection?	10:24 - 10:27
	<i>Poster Presenter:</i> Tomaz Velnar, SI	
EP01223	Management of postoperative discitis with debridement and local antibiotic infusion: functional outcomes from a low-middle-income country	10:27 - 10:30
	<i>Poster Presenter:</i> Ahmad Ozair, IN	
EP01224	Treating craniovertebral pathology in Bogota, Colombia; challenges to perform high quality neurosurgery in a developing country. (parhology to pathology)	10:30 - 10:33
	<i>Poster Presenter:</i> Gustavo Uriza, CO	
EP01225	Occipito-cervical and cervical arthrodesis in childhood. Experience at Giannina Gaslini Children's Hospital	10:33 - 10:36
EP01226	Ventral and dorsal fusion as correction of craniocervical and atlantoaxial instability using O-Arm system versus C-arm procedure – a single centre review of 200 patients	10:36 - 10:39
	<i>Poster Presenter:</i> Nikolay Mirchev, DE	
	Discussion	10:39 - 10:40
 <i>Neuro-Oncology</i>		
10:00 - 10:40		EPB2
ePoster Presentation		
<i>Chair:</i> Sebastian Ille, DE		
<i>Chair:</i> Aleksandrs Krigers, AT		
EP01227	The accuracy of brain tumor mapping with 3D visualisation techniques compared to MRI	10:00 - 10:03
	<i>Poster Presenter:</i> Tim Fick, NL	
EP01228	Benefit of verb over standard noun naming task to reveal	10:03 - 10:06

	cortical language areas in preoperative language mapping under navigated Transcranial Magnetic Stimulation <i>Poster Presenter:</i> Ann-Katrin Ohlerth, NL	
EP01229	Intraoperative corticobulbar motor evoked potential in cerebellopontine angle surgery: a clinically meaningful tool to predict early and late facial nerve recovery <i>Poster Presenter:</i> Vito Stifano, IT	10:06 - 10:09
EP01230	Revisiting the connectivity of the parietal lobe: a cadaveric dissection atlas for the white matter fibers of the sensory integration system <i>Poster Presenter:</i> Evangelos Drosos, GB	10:09 - 10:12
EP01231	Impact of intraoperative MRI on cranial surgical site infections <i>Poster Presenter:</i> Ann-Kathrin Joerger, DE	10:12 - 10:15
EP01232	Metabolic delineation of IDH1 wild type Glioblastoma anatomy: how to plan surgical strategy <i>Poster Presenter:</i> Roberto Altieri, IT	10:15 - 10:18
EP01233	Increased excitability of peritumoral cortex to transcranial magnetic stimulation in IDH1-mutant gliomas <i>Poster Presenter:</i> Georgios Naros, DE	10:18 - 10:21
EP01234	Automated brain tumour identification using magnetic resonance imaging: a systematic review and meta-analysis <i>Poster Presenter:</i> Dania Badran, GB	10:21 - 10:24
EP01235	The limits of brain plasticity – lessons from low-grade gliomas <i>Poster Presenter:</i> Velislav Pavlov, BG	10:24 - 10:27
EP01236	From pre- and intraoperative functional mapping to postoperative adjuvant treatment – Individualized glioma treatment reveals optimal oncological results in the elderly <i>Poster Presenter:</i> Sebastian Ille, DE	10:27 - 10:30
EP01237	Navigated 3D-ultrasound power Doppler and visualization of lenticulostriate arteries during resections of insular gliomas <i>Poster Presenter:</i> Andrej Steno, SK	10:30 - 10:33
EP01238	Impact of intraoperative CT scan in brain tumors. Surgical and radiological considerations based on 503 patients <i>Poster Presenter:</i> Giacomo Cammarata, IT	10:33 - 10:36
	Discussion	10:36 - 10:40
<i>Other</i>		
	10:00 - 10:40	Industry Exhibition
	Coffee Break	

Spine

10:40 - 12:20

R1

Spine Plenary Session*Chair:* Jesus Lafuente, ES*Chair:* Andreas Demetriades, GB

480	Treatment of degenerative lumbar spondylolisthesis - Results from the NORSTEN trial <i>Speaker:</i> Tore Solberg, NO	10:40 - 10:55
481	Timing of disc surgery determines motor recovery in lumbar disc herniation patients <i>Speaker:</i> Claudius Thome, AT	10:55 - 11:10
482	Management of SCI - Rationale behind the DISCUS trial <i>Speaker:</i> Samira Saadoun, GB	11:10 - 11:25
483	Novel Insights into Cervical Myelopathy - the Corticospinal Reserve Capacity <i>Speaker:</i> Anna Zdunczyk, DE	11:25 - 11:40
484	Best Abstract: (Cost)Effectiveness of full-endoscopic transforaminal discectomy compared to microdiscectomy for sciatica: one-year results of a randomized controlled trial <i>Oral Presenter:</i> Sanjay Harhangi, NL	11:40 - 11:48
485	Best Abstract: FUSE-ML: development and external validation of a clinical prediction model for mid-term outcomes after lumbar spinal fusion for degenerative disease <i>Oral Presenter:</i> Moira Vieli, CH	11:48 - 11:56
	Effect of spinal cord burst stimulation vs placebo stimulation on disability in patients with chronic radicular pain after lumbar spine surgery: A randomized clinical trial <i>Speaker:</i> Sozaburo Hara, NO	11:56 - 12:04
	Discussion	12:04 - 12:20

Other

12:20 - 13:50

Pacific & Atlantic

Lunch Break*Spine*

12:20 - 13:50

EPB1

ePoster Presentation*Chair:* Ehab Shiban, DE

EP01239	Operative management of Lumbar Disc Herniation <i>Poster Presenter:</i> Momir Jovanovi?, RS	12:20 - 12:23
EP01240	Do flare-ups in systemic Disease Activity correlate to cervical deformity in patients with Rheumatoid Arthritis? <i>Poster Presenter:</i> Carmen Vleggeert-Lankamp, NL	12:23 - 12:26
EP01241	Enabled by 4K visual field during full endoscopic spinal surgery	12:26 - 12:29

	<i>Poster Presenter:</i> Yasuhiko Nishimura, JP	
EP01242	Single-level anterior cervical disc arthroplasty versus anterior cervical discectomy and fusion: a multicenter retrospective case-control study of 153 patients <i>Poster Presenter:</i> Kumanan Rune Nanthan, DK	12:29 - 12:32
EP01243	Accuracy and safety of C1 and C2 screws placement without computerized navigation <i>Poster Presenter:</i> Vítor Pinto, PT	12:32 - 12:35
EP01246	The meningovertebral ligaments as a barrier to a herniated intervertebral disc – an anatomical study <i>Poster Presenter:</i> Marcin Tosik, PL	12:35 - 12:38
EP01247	Transforaminal endoscopic lumbar discectomy versus open microdiscectomy for symptomatic lumbar disc herniation: a comparative cohort study on costs and long-term outcomes in a resource-limited setting <i>Poster Presenter:</i> Sajjad Saghebdoost, IR	12:38 - 12:41
EP01248	Patient attrition in two decades of spinal surgical trials <i>Poster Presenter:</i> Maaz Ahmed Khan, GB	12:41 - 12:44
EP01249	Long-term outcomes after four-level cervical arthrodesis with stand-alone PEEK cage versus PEEK cage with anterior plating: a retrospective multicenter comparative study <i>Poster Presenter:</i> Walid Abouzeid, EG	12:44 - 12:47
EP01250	Surgery for 6 cases of advanced cervical hyperostosis (Forestier's disease) <i>Poster Presenter:</i> Stilianina Mihaylova, BG	12:47 - 12:50
EP01253	Clinical and radiological outcomes for mini-open one step anterior, and oblique approach for L5-S1 and L4-L5 interbody fusion. A single center prospective study <i>Poster Presenter:</i> Pablo Mendivil, AR	12:50 - 12:53
EP01254	Reoperation rate after open versus minimally invasive spine surgery <i>Poster Presenter:</i> Daniel Fahim, US	12:53 - 12:56
EP01255	Minimally invasive surgical methods in the treatment of chronic back pain	12:56 - 12:59
EP01256	Independent double-center observational study of minimally invasive sacroiliac joint fusion for sacroiliac joint dysfunction: one-year results <i>Poster Presenter:</i> Sem Hermans, NL	12:59 - 13:02
EP01258	Screening for Degenerative Cervical Myelopathy (SCREEN-DCM) in patients based on signs, symptoms and known risk factors: preliminary results of an ongoing prospective multicenter study <i>Poster Presenter:</i> Aria Nouri, CH	13:02 - 13:05

EP01259	“Lateral-PLIF”, modified PLIF technique for spinal arthrodesis: concept, technique, results, complications and outcomes <i>Poster Presenter:</i> Gabriele Capo, FR	13:05 - 13:08
EP01260	Is gender a factor affecting long-term heterotopic ossification incidence after single-level cervical disc arthroplasty? <i>Poster Presenter:</i> Daniele Bongetta, IT	13:08 - 13:11
EP01261	Discontinuation and non-publication of randomised controlled trials in spine disease: an observational analysis <i>Poster Presenter:</i> Jay J. Park, GB	13:11 - 13:14
EP01262	Radiological findings in degenerative spine diseases at the Provincial General Reference Hospital of Bukavu <i>Poster Presenter:</i> Arsene Daniel Nyalundja, CD	13:14 - 13:17
EP01263	The benefits and indications of spinal injections in degenerative disease: a case series <i>Poster Presenter:</i> Panagiotis Papadopoulos-Manolarakis, GR <i>Poster Presenter:</i> Ioannis Charalampous-Georgoulakos, GR	13:17 - 13:20
EP01264	Increased osteophyte length: a possible risk factor for motor weakness after oblique lumbar lateral fusion surgery <i>Poster Presenter:</i> Jong-Hwan Hong, KR	13:20 - 13:23
EP01265	Intraoperative CT scan for instrumented spine surgery: a single-institution experience <i>Poster Presenter:</i> Massimiliano Maione, IT	13:23 - 13:26
EP01266	An audit of referrals for suspected cauda equina syndrome at a tertiary neurosurgical centre during the COVID-19 pandemic <i>Poster Presenter:</i> Sheikh Muktadir Bin Momin, GB	13:26 - 13:29
	Discussion	13:29 - 13:50

Neuro-Oncology
12:20 - 13:50

EPB2

ePoster Presentation*Chair:* Andrej Steno, SK*Chair:* Johanne Kerschbaumer, AT

EP01268	Refractory epilepsy in grade II and III gliomas: a translational approach <i>Poster Presenter:</i> Julia Eva Martin Colom, ES	12:20 - 12:23
EP01269	DeepEOR: Automated perioperative volumetric assessment of variable grade gliomas using deep learning <i>Poster Presenter:</i> Olivier Zanier, CH	12:23 - 12:26
EP01270	Surgical and oncological score to estimate the survival benefit of resection and chemoradiotherapy in elderly (>70 years) glioblastoma patients: a preliminary analysis <i>Poster Presenter:</i> Joy Roach, GB	12:26 - 12:29
EP01271	Are thalamic intrinsic lesions operable? No-man's land	12:29 - 12:32

	revisited by the analysis of a large retrospective, mono-institutional, case-control cohort <i>Poster Presenter:</i> Francesco Restelli, IT	
EP01272	An assessment of predictive factors for overall survival in glioblastoma – MGMT methylation is solely important for younger patients <i>Poster Presenter:</i> Tolga Cosar, AT	12:32 - 12:35
EP01273	The association between calreticulin and glucagon-like peptide-1 expressions with prognostic factors in high-grade gliomas <i>Poster Presenter:</i> Goktug Akyoldas, TR	12:35 - 12:38
EP01275	First-in-human study of a novel Upar-targeted imaging agent (FGO01) for visualization of malignant glioma during surgery <i>Poster Presenter:</i> Jane Skjøth-Rasmussen, DK	12:38 - 12:41
EP01276	Mechanisms of cytomegalovirus to tumor transmission across the blood brain barrier in glioblastoma <i>Poster Presenter:</i> Naureen Keric, DE	12:41 - 12:44
EP01277	Photodynamic effect of 5-ALA on cancer stem cells cultivated from glioblastoma <i>Poster Presenter:</i> Krasimir Minkin, BG	12:44 - 12:47
EP01280	Fluorescein-guided surgery with a dedicated filter on the surgical microscope for the resection of pilocytic astrocytomas and other astrocytic tumors: a monocentric, retrospective preliminary study <i>Poster Presenter:</i> Francesco Acerbi, IT	12:47 - 12:50
EP01278	Prognostic value of 0-(2-[18F]-fluoroethyl)-L-tyrosine PET in patients with recurrent GBM	12:50 - 12:53
EP01282	Accuracy of FET-PET for detection of glioma recurrence <i>Poster Presenter:</i> Max Jägersberg, DE	12:53 - 12:56
EP01283	?Protoporphyrin IX in serum of glioblastoma patients after 5-ALA administration – a potential biomarker? <i>Poster Presenter:</i> Eric Suero-Molina, DE	12:56 - 12:59
EP01284	Nanomechanical characterization of gliomas <i>Poster Presenter:</i> Abraham Tsitlakidis, GR	12:59 - 13:02
EP01285	Meta-topologies define distinct anatomical classes of brain tumors linked to histology and survival <i>Poster Presenter:</i> Kevin Akeret, CH	13:02 - 13:05
EP01286	HbA1c in patients with glioblastomas - a preliminary study <i>Poster Presenter:</i> Darko Oreškovi?, HR	13:05 - 13:08
EP01287	The role of cytoreductive surgery in multifocal/multicentric glioblastoma <i>Poster Presenter:</i> Diyan Dimov, DE	13:08 - 13:11

EP01288	Quantifying functionally relevant subcortical differences in arcuate and inferior fronto-occipital fasciculus between language-eloquent brain tumor patients with no, transient and permanent aphasia <i>Poster Presenter:</i> Leonie Kram, DE	13:11 - 13:14
EP01289	Surgical management of periventricular glioblastomas: does porencephaly define outcomes? <i>Poster Presenter:</i> Artem Rozumenko, UA	13:14 - 13:17
EP01290	MR-guided LITT therapy in patients with primary irresectable glioblastoma: a controlled, prospective pilot study (EMITT pilot-study) <i>Poster Presenter:</i> Ilaria Viozzi, NL	13:17 - 13:20
EP01291	Fully endoscopic trans-sphenoidal (TNS) gross total resection of a rare granular cell tumour of the neurohypophysis: surgical video and case strategy discussion <i>Poster Presenter:</i> Dario Gagliano, IT	13:20 - 13:23
EP01292	Zika/Lentiviral pseudotype particles as a novel tool for glioblastoma infection in oncolytic virotherapy <i>Poster Presenter:</i> Christian Schwalbe, DE	13:23 - 13:26
EP01293	Sexual hormones and Androgen Receptor activity may influence radiological features in Glioblastoma: preliminary data <i>Poster Presenter:</i> Julio Plata-Bello, ES	13:26 - 13:29
EP01294	Impact of combined use of intraoperative MRI and awake microsurgical resection on patients with gliomas: a systematic review and meta-analysis <i>Poster Presenter:</i> Constantin Tuleasca, CH	13:29 - 13:32
	Discussion	13:32 - 13:50

Spine

13:50 - 14:30

R1

Brain & Spine, The Official Journal of EANS & EUROSPINE*Chair:* Wilco Peul, NL

486	One year of B & S: Looking Back (and) into the Future <i>Speaker:</i> Wilco Peul, NL	13:50 - 14:00
487	The EANS point of view by the EANS president <i>Speaker:</i> Andreas Demetriades, GB	14:00 - 14:07
489	Best B&S EANS Reviewer Award <i>Awardee:</i> Michael Bruneau, BE	14:07 - 14:12
	EBC and the Brain Policies in Europe <i>Speaker:</i> Wolfgang Oertel, DE	14:12 - 14:27
	Discussion	14:27 - 14:30

Neuro-Oncology

14:30 - 16:10

R1

Adjunct technologies for tumour surgery*Chair:* Rachel Grossman, IL*Chair:* Steven De Vleeschouwer, BE

	Awake craniotomy – personal experience and perspectives	14:30 - 14:45
	<i>Speaker:</i> Rachel Grossman, IL	
491	Intraoperative MRI for endoscopic tumor surgery	14:45 - 15:00
	<i>Speaker:</i> Emrah Celtikci, TR	
492	Novel techniques for real-time intra-operative visualization of gliomas: working on integrated solutions	15:00 - 15:15
	<i>Speaker:</i> Steven De Vleeschouwer, BE	
493	nTMS – from diagnostics to function-guided neuro-oncology	15:15 - 15:30
	<i>Speaker:</i> Bernhard Meyer, DE	
494	Best Abstract: Is FLAIRectomy directly correlated with prolonged survival in glioblastoma? A multicentric study	15:30 - 15:38
	<i>Oral Presenter:</i> Francesco Certo, IT	
495	Best Abstract: Anatomical phenotyping and staging of brain tumors	15:38 - 15:46
	<i>Oral Presenter:</i> Kevin Akeret, CH	
	Discussion	15:46 - 16:10

Trauma

14:30 - 16:00

R6

Medical management and decision making*Chair:* Peter Toth, HU*Chair:* Ifti Hossein, GB

496	ICU treatment strategies clustering	14:30 - 14:45
	<i>Speaker:</i> Thomas van Essen, NL	
497	CBF measurement in everyday practice	14:45 - 15:00
	<i>Speaker:</i> Elham Rostami, SE	
498	Concomitant severe TBI and polytrauma	15:00 - 15:15
	<i>Speaker:</i> Andras Buki, SE	
499	The role of biomarkers in the management of TBI	15:15 - 15:30
	<i>Speaker:</i> George Alexiou, GR	
	Discussion	15:30 - 16:00

Spine

16:10 - 16:50

EPB1

ePoster Presentation*Chair:* Anna Zdunczyk, DE

EP01295	Six pediatric cases with thoracic vertebral pathological	16:10 - 16:13
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	subsidence: gross total tumor removal, corpectomy and 360 degree stabilization via posterolateral approach <i>Poster Presenter:</i> Koral Erdo?an, TR	
EP01296	The role of mini-invasive surgery (MIS) in symptomatic spinal metastases <i>Poster Presenter:</i> Stefano Telera, IT	16:13 - 16:16
EP01297	Early results, complication and revision rates following CFR-PEEK pedicle screw instrumentation for spinal metastases and spinal primary bone tumors <i>Poster Presenter:</i> Ann-Kathrin Joerger, DE	16:16 - 16:19
EP01298	The treatment of spinal metastasis in the 21st century <i>Poster Presenter:</i> Maximilian-Niklas Bonk, DE	16:19 - 16:22
EP01299	Comparison of artifact intensity after implantation of thoracolumbar titanium vs. carbon-fibre/PEEK pedicle screws <i>Poster Presenter:</i> Darius Kalasauskas, DE	16:22 - 16:25
EP01300	Video-assisted thoracoscopy in surgical treatment of paravertebral tumors of the thoracic spine	16:25 - 16:28
EP01301	The predictive value of the spinal instability neoplastic score (SINS) <i>Poster Presenter:</i> Maximilian-Niklas Bonk, DE	16:28 - 16:31
EP01302	Durability of short segment posterior construct with concomitant vertebrectomy for the treatment of metastatic disease to the thoracic spine <i>Poster Presenter:</i> Daniel Fahim, US	16:31 - 16:34
EP01303	Impact of intraoperative neurophysiological monitoring on the extent of resection and postoperative neurological outcomes in patients with spinal cord ependymoma: a retrospective multicenter comparative study <i>Poster Presenter:</i> Walid Abouzeid, EG	16:34 - 16:37
EP01304	One-piece C0-C3 piezoelectric osteotomy for a cervico-bulbar intramedullary ependymoma <i>Poster Presenter:</i> Francesco Restelli, IT	16:37 - 16:40
EP01305	Intradural Spinal Tumors: surgical considerations and 11 years of institutional experience <i>Poster Presenter:</i> Domagoj Gajski, HR	16:40 - 16:43
EP01306	Relevance of Nerve root sacrifice for spinal foraminal and/or dumbbell schwannomas <i>Poster Presenter:</i> Gabriele Capo, FR	16:43 - 16:46
EP01307	Assessment of neurological outcome after resection of spinal meningiomas <i>Poster Presenter:</i> Dragan Jankovic, DE	16:46 - 16:49
EP01308	Intraoperative neurophysiology monitoring for excision of intradural extramedullary tumours - Is it useful?	16:49 - 16:52

Poster Presenter: Mohit Arora, GB

Neuro-Oncology

16:10 - 16:50

EPB2

ePoster Presentation

Chair: Naureen Keric, DE

Chair: Petar Vulekovic, RS

EP01309	Outcome of patients affected by supratentorial single brain metastasis after “en bloc” resection related with decrease of perilesional edema <i>Poster Presenter:</i> Pietro Familiari, IT	16:10 - 16:13
EP01310	The Clinical Frailty Scale is superior to the Karnofsky Performance Status as predictor of overall survival in patients with surgical treatment of brain metastases <i>Poster Presenter:</i> Nadine Pichler, AT	16:13 - 16:16
EP01311	Status epilepticus after posterior fossa surgery: a journey to a mysterious land. Case series and systematic literature review <i>Poster Presenter:</i> Lorenzo Mongardi, IT	16:16 - 16:19
EP01312	Resection versus biopsy for management of primary central nervous system lymphoma: a meta-analysis <i>Poster Presenter:</i> Martina Offi, IT	16:19 - 16:22
EP01313	Now you see me - the use of sodium fluoresceine for resection of brain metastases <i>Poster Presenter:</i> Johanne Kerschbaumer, AT	16:22 - 16:25
EP01314	Tumor Treating Fields (TTFields) therapy in glioblastoma patients with ventriculoperitoneal shunts: real-world safety and feasibility evidence <i>Poster Presenter:</i> Leonardo Lustgarten, US	16:25 - 16:28
EP01315	Photodynamic therapy for malignant brain tumors <i>Poster Presenter:</i> Igor Trifonov, RU	16:28 - 16:31
EP01316	Nimodipine in combination with vincristine: increases tumour cell susceptibility and protects normal tissue <i>Poster Presenter:</i> Maximilian Scheer, DE	16:31 - 16:34
EP01317	Management and safety of intraoperative ventriculostomy during early surgery for ruptured intracranial aneurysms <i>Poster Presenter:</i> Davide Nasi, IT	16:34 - 16:37
EP01318	Glycated hemoglobin in patients with intracranial meningiomas <i>Poster Presenter:</i> Darko Oreskovic, HR	16:37 - 16:40
EP01319	The clinical and prognostic role of S100B expression in meningiomas <i>Poster Presenter:</i> Felix Behling, DE	16:40 - 16:43
EP01320	Immunoregulatory effects of glioma-associated stem cells on the glioblastoma peritumoral microenvironment: a differential	16:43 - 16:46

PD-L1 expression from core to periphery?*Poster Presenter:* Grazia Menna, ITEP01321 **Cytokines as prognostic and diagnostic tools of gliomas** 16:46 - 16:49*Poster Presenter:* Eleftheria Chara Stamoulaki, GR**Discussion** 16:49 - 16:50*Other*

16:10 - 16:50

Industry Exhibition

Coffee Break*Neuro-Oncology*

16:50 - 18:20

R1

Clinical Neuro-Oncology*Chair:* Margret Jensdottir, SE*Chair:* Stefan Ioan Florian, RO500 **Quantitative UHF MRI techniques for early detection of** 16:50 - 17:00**progression in low grade glial tumors - preliminary results***Speaker:* Radosław Rola, PL501 **Glioblastoma five year survival - fact or fiction? A Swedish** 17:00 - 17:10**survey.***Speaker:* Peter Milos, SE502 **The meaning of surgical experience in high grade gliomas** 17:10 - 17:20*Speaker:* Stefan Ioan Florian, RO503 **Anatomical distribution of Cancer Stem Cells between** 17:20 - 17:27**Enhancing Nodule and FLAIR hyperintensity in supratentorial****Glioblastoma: time to recalibrate the surgical target?***Oral Presenter:* Roberto Altieri, IT504 **CMV infection in glioblastoma leads to shortened overall** 17:27 - 17:34**survival and TMZ resistance *in vitro* and *in vivo****Oral Presenter:* Naureen Keric, DE505 **Delayed temporary neurological deterioration after surgical** 17:34 - 17:41**treatment of gliomas in eloquent location under awake****conditions***Oral Presenter:* Tomasz Dziedzic, PL506 **Mixed Reality Assisted Navigation Guided Microsurgical** 17:41 - 17:49**Removal of Cranial Tumors***Speaker:* Sukru Caglar, TR507 **Accuracy assessment of double fluorescence-guided resection** 17:49 - 17:56**of high-grade gliomas: a prospective series***Oral Presenter:* Luca Speranzon, IT508 **Connectome analysis based on intraoperative awake mapping** 17:56 - 18:03**reveals new insights on language network organization***Oral Presenter:* Sebastian Ille, DE

509	Impact on outcome of patients underwent surgery for glioblastoma with and without use of intraoperative sodium fluorescein <i>Oral Presenter:</i> Camilla Rizzi, IT	18:03 - 18:10
	Discussion	18:10 - 18:20
<i>Spine</i> 16:50 - 18:20		
		R2
Spinal Infections <i>Chair:</i> Yu-Mi Ryang, DE <i>Chair:</i> Marcus Czabanka, DE		
510	European variation in treatment of spinal infections <i>Speaker:</i> Ehab Shiban, DE	16:50 - 17:00
511	A matched cohort analysis of surgery versus conservative treatment in vertebral osteomyelitis <i>Speaker:</i> Andreas Demetriades, GB	17:00 - 17:10
512	Posterior versus anterior-posterior instrumentation for spondylodiscitis in the thoracolumbar spine <i>Speaker:</i> Marcus Czabanka, DE	17:10 - 17:20
513	Surgical techniques for treatment of pyogenic thoracolumbar spondylodiscitis: a systematic review <i>Oral Presenter:</i> Catherine Zhang, GB	17:20 - 17:27
514	Complications of degenerative lumbar spondylolisthesis and stenosis surgery in patients over 80s: comparative study with over 60s and 70s. Experience with 678 cases <i>Oral Presenter:</i> Guglielmo Iess, IT	17:27 - 17:34
515	Factors associated with an increased risk of developing postoperative symptomatic lumbar spondylolisthesis after decompression surgery: an explorative two-centre international cohort study <i>Oral Presenter:</i> Inge Caelers, NL	17:34 - 17:41
516	The role of spinopelvic parameters in clinical and functional outcomes in patients with spinal stenosis after lumbar interbody fusion surgery – a prospective study <i>Oral Presenter:</i> Renata Marques, PT	17:41 - 17:48
517	Motion analysis in patients with sacroiliac joint dysfunction: a cross-sectional case-control study <i>Oral Presenter:</i> Sem Hermans, NL	17:48 - 17:55
518	Lumbar discectomy with annulus fibrosus closure: a retrospective series of 53 consecutive patients <i>Oral Presenter:</i> Arthur Kurzbuch, CH	17:55 - 18:02
	Discussion	18:02 - 18:20

Skull Base

16:50 - 18:20

R3

Posterior fossa*Chair:* Sebastien Froelich, FR*Chair:* Mentor Petrela, AL

519	Chiari formation or malformation: This is the question <i>Speaker:</i> Massimiliano Visocchi, IT	16:50 - 17:00
520	Foramen magnum meningiomas <i>Speaker:</i> Mentor Petrela, AL	17:00 - 17:10
521	Challenges in the resection of Brainstem tumors <i>Speaker:</i> Michael Bruneau, BE	17:10 - 17:20
522	Skull Base Chordoma: long-term observation and evaluation of prognostic factors after surgical resection <i>Oral Presenter:</i> Amrit Roy, DE	17:20 - 17:27
523	Microsurgical anatomy and surgical exposure of the cerebellar peduncles <i>Oral Presenter:</i> Oguz Baran, TR	17:27 - 17:34
524	Dural sinus thrombosis after resection of vestibular schwannoma using suboccipital retrosigmoid approach - thrombosis classification and management proposal <i>Oral Presenter:</i> Kamil Krystkiewicz, PL	17:34 - 17:41
525	Tumour recurrences after microsurgery of vestibular schwannomas <i>Oral Presenter:</i> Maximilian Scheer, DE	17:41 - 17:48
526	Artificial neural network analysis of evoked auditory brainstem responses for prediction of active auditory brainstem implant (ABI) electrodes in patients with neurofibromatosis type II <i>Oral Presenter:</i> Gregory Lekovic, US	17:48 - 17:55
527	Volumetric growth trends of residual vestibular schwannomas: a systematic review and meta-analysis <i>Oral Presenter:</i> Abdullah Egiz, GB	17:55 - 18:02
528	Pituitary apoplexy - current concepts of management <i>Oral Presenter:</i> Daniel Rotariu, RO	18:02 - 18:09
	Discussion	18:09 - 18:20

Radiosurgery

16:50 - 18:20

R4

Treatment options for Essential Tremor*Chair:* Jean Regis, FR*Chair:* Hakan Emmez, TR

529	The role of DBS	16:50 - 17:00
530	Treatment options for essential tremor: The Role of Radiosurgery	17:00 - 17:10

	<i>Speaker:</i> Constantin Tuleasca, CH	
531	The roleMRgFUS <i>Speaker:</i> Michele Longhi, IT	17:10 - 17:20
532	Biologically effective dose correlates with linear tumor volume changes after upfront single-fraction stereotactic radiosurgery for vestibular schwannomas <i>Oral Presenter:</i> Constantin Tuleasca, CH	17:20 - 17:27
533	Adaptive staged-dose Gamma Knife Radiosurgery for the treatment of large brain metastases. Report of 40 consecutive cases and review of literature <i>Oral Presenter:</i> Francesco Maria Crisà, IT	17:27 - 17:34
534	Artificial intelligence for automatic longitudinal MRI evaluation of brain metastases following Stereotactic Radiosurgery <i>Speaker:</i> Yigal Shoshan, IL	17:34 - 17:41
535	Increased Gray Matter Density in the right mesencephalic tegmentum is associated with better Engel classes I and II after radiosurgery for hypothalamic hamartomas <i>Oral Presenter:</i> Constantin Tuleasca, CH	17:41 - 17:48
	Discussion	17:48 - 18:20
<i>Young Neurosurgeons</i>		
16:50 - 18:20		R5
Trends, insights and innovations in neuro-oncology		
<i>Chair:</i> Michael Schwake, DE		
<i>Chair:</i> Evangelos Drosos, GB		
536	Image-guidance in neurooncological surgery <i>Speaker:</i> Thomas Picht, DE	16:50 - 17:05
537	Advanced preoperative brain mapping for glioma surgery <i>Speaker:</i> Giovanni Raffa, IT	17:05 - 17:20
538	Intraoperative ultrasonography in neuro-oncology for dummies <i>Speaker:</i> Milan Lepi?, RS	17:20 - 17:35
539	Concepts of visualisation in neurooncological surgery: from microscope to robotics <i>Speaker:</i> Christian Freyschlag, AT	17:35 - 17:50
	Discussion	17:50 - 18:20
<i>Functional</i>		
16:50 - 18:20		R6
New Indications in functional neurosurgery		
<i>Chair:</i> Mikael von und zu Fraunberg, FI		
<i>Chair:</i> Marie Krueger, CH		
540	DBS for tinnitus <i>Speaker:</i> Jana Devos, NL	16:50 - 17:05

541	DBS for advanced tremor <i>Speaker:</i> Marie Krueger, CH	17:05 - 17:20
542	Neurosurgical treatment for spasmodic dysphonia <i>Speaker:</i> Christopher Honey, CA	17:20 - 17:35
543	Microvascular Decompression of the Trigeminal Nerve for SUNHA <i>Speaker:</i> Ludvic Zrinzo, GB	17:35 - 17:50
	Discussion	17:50 - 18:20

Vascular

16:50 - 18:20

EANS Board/ Council Room

Disaster management*Chair:* Daniel Walsh, GB*Chair:* Daniel Haenggi, DE

544	Management of intraoperative rupture during aneurysm surgery <i>Speaker:</i> Andreas Raabe, CH	16:50 - 17:05
545	Intraoperative AVM bleeding <i>Speaker:</i> Amir Dehdashti, US	17:05 - 17:20
546	Complex Cerebral Aneurysms: from the definition of the complexity criteria to the identification of the best surgical management <i>Speaker:</i> Alessio Albanese, IT	17:20 - 17:35
547	Disaster management in high low & low flow bypass surgery <i>Speaker:</i> Luca Regli, CH	17:35 - 17:50
	Discussion	17:50 - 18:20

Thursday, 20. October 2022*Neuro-Oncology*

08:30 - 10:00

R1

Translational Neuro-Oncology*Chair:* Kresimir Rotim, HR*Chair:* Javier Fandino, CH

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| 548 | Intraoperative flow cytometry in brain tumor surgery
<i>Speaker:</i> Spyridon Voulgaris, GR | 08:30 - 08:40 |
| 549 | Profiling Glioblastoma Cases with an Expression of DCX, OLIG2 and NES
<i>Speaker:</i> Rola Radoslaw, PL | 08:40 - 08:50 |
| 550 | Microglia and macrophages: central players in the future of glioblastoma treatment
<i>Speaker:</i> Gregor Hutter, CH | 08:50 - 09:00 |
| 551 | Characterization of autofluorescence and quantitative protoporphyrin IX biomarkers for optical spectroscopy-guided glioma surgery
<i>Oral Presenter:</i> Eric Suero-Molina, DE | 09:00 - 09:07 |
| 552 | Individualized CSF proteomics for real-time glioma espionage
<i>Oral Presenter:</i> Cecile Riviere-Cazaux, US | 09:07 - 09:14 |
| 553 | Proteomic analysis of glioma biopsies shows consistency with glioma grading
<i>Oral Presenter:</i> Severina Leu, CH | 09:14 - 09:21 |
| 554 | Lower-grade glioma in elderly patients: treatment and outcomes in a molecularly characterized contemporary cohort
<i>Oral Presenter:</i> Christine Jungk, DE | 09:21 - 09:28 |
| 555 | Impact of GAP-43 and actin expression on the outcome and overall survival in diffuse and anaplastic gliomas
<i>Oral Presenter:</i> Aleksandrs Krigers, AT | 09:28 - 09:35 |
| 556 | Clinical and molecular features of primary central nervous system neuroblastoma and ganglioneuroblastoma in adult patients
<i>Oral Presenter:</i> Anastasiia S. Nechaeva, RU | 09:35 - 09:42 |
| | Discussion | 09:42 - 10:00 |

Trauma

08:30 - 10:00

R2

Basic Science in CNS injury*Chair:* Elham Rostami, SE*Chair:* Laura Lipa, IT

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| 557 | Spreading depolarizations and the neurovascular unit in TBI
<i>Speaker:</i> Jens Dreier, DE | 08:30 - 08:40 |
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558	White matter changes in repetitive head injury <i>Speaker:</i> Niklas Marklund, SE	08:40 - 08:50
559	Cellular reprogramming in the context of CNS injuries <i>Speaker:</i> Alexander Younsi, DE	08:50 - 09:00
560	Post-acute blood biomarkers and disease progression in Traumatic Brain Injury <i>Oral Presenter:</i> Jussi P. Posti, FI	09:00 - 09:07
561	Serum assessment of traumatic axonal injury: the correlation of GFAP, t-Tau, UCHL-1 and NfL levels with Diffusion Tensor Imaging metrics and its prognosis utility. <i>Poster Presenter:</i> Ana Maria Castano Leon, ES	09:07 - 09:14
562	Adjustable and MRI conditional implantation of brain tissue oxygenation probe in neurosurgery: technical note <i>Oral Presenter:</i> Tarik Alp Sargut, DE	09:14 - 09:21
563	Posttraumatic disruption of the Blood-Spinal-Cord-Barrier is aggravated by the endothelial cell-specific knock-out of Ephrin-B2 after experimental Spinal Cord Injury <i>Oral Presenter:</i> Vanessa Hubertus, DE	09:21 - 09:28
564	An implanted spinal window chamber allows for chronic longitudinal <i>in vivo</i> microscopy following experimental Spinal Cord Injury in the mouse <i>Oral Presenter:</i> Vanessa Hubertus, DE	09:28 - 09:35
	Discussion	09:35 - 10:00

Diversity in Neurosurgery

08:30 - 10:00

R3

Diversity in Neurosurgery - Lessons from the past and future initiatives*Chair:* Silvia Hernandez Duran, DE*Chair:* Marike Broekman, NL

565	The history of European women in Neurosurgery <i>Speaker:</i> Stiliana Mihaylova, BG	08:30 - 08:50
566	Alice Rosenstein/Rost (1898-1991) - the first woman in neurosurgery <i>Speaker:</i> Daniel Dubinski, DE	08:50 - 09:00
567	Lessons on diversity from the past: Jewish neurosurgeons in Nazi Germany - part II <i>Speaker:</i> Daniel Dubinski, DE	09:00 - 09:10
568	Diversity in Neurosurgery fosters the advancement of our specialty <i>Speaker:</i> Gail Rosseau, US	09:10 - 09:30
569	Vulnerability of African neurosurgery to predatory journals: an e-survey of aspiring neurosurgeons, residents and consultants <i>Oral Presenter:</i> Kantenga DM Kabulo, CG	09:30 - 09:37

570	Evaluating the role of practical skills assessments in the UK neurosurgical national selection process <i>Oral Presenter:</i> Tom Grundy, GB	09:37 - 09:44
	Discussion	09:44 - 10:00
<i>Spine</i> 08:30 - 10:00		
		R4
Cervical spine		
571	Shoulder depression should be avoided during anterior cervical surgery to reduce postoperative C5 nerve root palsy – a prospective multicentric cohort study with 1,244 patients <i>Oral Presenter:</i> Sebastian Ille, DE	08:30 - 08:37
573	Clinical and radiological outcomes of multilevel cervical arthroplasty <i>Oral Presenter:</i> Rui Reinas, PT	08:37 - 08:44
574	Anterior approach versus posterior approach for patients with cervical spondylotic myelopathy: a meta-analysis of 2318 patients <i>Oral Presenter:</i> Hazem Ghaith, EG	08:44 - 08:51
575	Long-term functional outcome of surgical treatment for Degenerative Cervical Myelopathy <i>Oral Presenter:</i> Mark Daniel Dijkman, NL	08:51 - 08:58
576	Clinical evaluation versus Magnetic Resonance Imaging findings in patients with radicular arm pain - a pragmatic study <i>Oral Presenter:</i> Henrietta Nittby Redebrandt, SE	08:58 - 09:05
577	Influence of subsidence after stand-alone anterior cervical discectomy and fusion in patients with degenerative cervical disease: a long-term follow-up study <i>Oral Presenter:</i> Moon-Soo Han, KR	09:05 - 09:12
578	The position of the cervical prosthesis in Hybrid Surgery for the two-level cervical degenerative disease and its effect on cervical range of motion <i>Oral Presenter:</i> Matjaž Voršič, SI	09:12 - 09:19
579	Craniovertebral realignment for basilar invagination via posterior midline approach: a novel surgical method to treat basilar invagination <i>Oral Presenter:</i> ?hsan Do?an, TR	09:19 - 09:26
580	Assessment of the quality of reporting in randomised controlled trials for spinal disease using the CONSORT checklist <i>Oral Presenter:</i> Jay J. Park, GB	09:26 - 09:33
581	Surgical treatment of Chiari I Malformation: a one fits all approach? <i>Oral Presenter:</i> Farjad Khalaveh, AT	09:33 - 09:40

Discussion

09:40 - 10:00

Neuro-Oncology

08:30 - 10:00

R5

Tumour surgery in difficult locations*Chair:* Emel Avci, TR*Chair:* Francesco Signorelli, IT

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| 582 | Microneurosurgical management of midbrain gliomas
<i>Speaker:</i> Ugur Ture, TR | 08:30 - 08:45 |
| 583 | Personalized surgical treatment for gliomas
<i>Speaker:</i> Arnaud Vincent, NL | 08:45 - 09:00 |
| 584 | Surgery for tumours in the insulo-temporomesial region: Seizure outcomes
<i>Speaker:</i> Matthias Simon, DE | 09:00 - 09:15 |
| 585 | Cervical tumours
<i>Speaker:</i> Michael Bruneau, BE | 09:15 - 09:30 |
| | Discussion | 09:30 - 10:00 |

Spine

08:30 - 10:00

R6

Intradural Pathologies*Chair:* Marcel Ivanov, GB*Chair:* Nicolas Sampron, ES

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| 586 | Intramedullary tumors
<i>Speaker:</i> Bernhard Meyer, DE | 08:30 - 08:45 |
| 587 | Extramedullary tumors
<i>Speaker:</i> Marcel Ivanov, GB | 08:45 - 09:00 |
| 588 | Spinal cord herniation
<i>Speaker:</i> Marcel Ivanov, GB | 09:00 - 09:15 |
| 589 | Spinal spurs and vein-CSF fistulas as causes of intracranial hypotension
<i>Speaker:</i> Juergen Beck, DE | 09:15 - 09:30 |
| | Discussion | 09:30 - 10:00 |

Other

10:00 - 10:40

Pacific & Atlantic

Coffee Break*Peripheral Nerve Surgery*

10:40 - 12:20

R1

Plenary PNS Session*Chair:* Lukas Rasulic, RS*Chair:* Christian Heinen, DE

590	Quality of life after surgical pudendal nerve decompression <i>Speaker:</i> Christian Heinen, DE	10:40 - 10:55
591	Let's play the game of brain plasticity <i>Speaker:</i> Mariano Socolovsky, AR	10:55 - 11:10
592	Reviving Matrix for Nerve Reconstruction in Rabbit Model of Chronic Peripheral Nerve Injury with Massive Loss Defect <i>Speaker:</i> Shimon Rochkind, IL	11:10 - 11:25
593	Nerve transfer - from history to current trends <i>Speaker:</i> Thomas Kretschmer, AT	11:25 - 11:40
594	Education in Peripheral Nerve Surgery <i>Speaker:</i> Fernando Guedes, BR	11:40 - 11:55
595	Best Abstract: Why neurosurgeons should do peripheral nerve surgery <i>Oral Presenter:</i> Jovan Grujic, RS	11:55 - 12:03
	Discussion	12:03 - 12:20

General

12:20 - 12:50

R1

Closing Ceremony

Chair: Lukas Rasulic, RS

Chair: Andreas Demetriades, GB

Chair: Kelly Angelaki, GR