

# EUROPEAN15th Congress of theSKULL BASEEuropean Skull Base SocietySOCIETY5 June to 8 June 2024 | Maastricht, The Netherlands

# Scientific programme

## 'Evidence Skull based'

### Wednesday 5 June 2024

#### Lobby North

10.00 – 18.00 hrs.	Registration
13.00 – 17.45 hrs.	Exhibition

#### Auditorium

<b>Opening</b> <b>Keynote lecture 1</b> – Expanded anterior endoscopic approach to skull base <i>Martin Jurlina, Croatia</i>
Chair: Dirk Kunst, The Netherlands
Clinical Pathway session 1 – Vestibular Pathology
Raymond van den Berg, The Netherlands (Moderator) When to perform vestibular surgery? Diagnostics and indications
Raymond van den Berg, The Netherlands
The success of surgery in Meniere's Disease is overestimated Tjasse Bruintjes, The Netherlands
Expertise of 20 years of Vestibular Nerve Section by Middle Fossa Approach Kazimierz Niemczyk
Break
Clinical Pathway session 1 – Vestibular Pathology
Raymond van den Berg, The Netherlands (Moderator)
Superior Canal Dehiscence Syndrome
Shakeel Saeed, United Kingdom
Vestibular management in the Skull base patient
Noweed Ahmad, United Kingdom
Round table about surgical management of vestibular disorders All speakers
Opening ceremony
Dirk Kunst, The Netherlands
Davide Locatelli, Italy
Handover of the Presidential chain, Honorary members recognition
Ugo Fisch Memorial Lecture: what will remain for the next generation of surgeons? Thomas Linder, Switzerland
Welcome drinks in bar/bistro SAAM

#### Room Brussels

13.00 – 13.30 hrs.	<b>Keynote lecture 2</b> – Treatment of Petroclival Meningiomas Lars Poulsgaard, Denmark Chair: Mark ter Laan
13.30 – 15.00 hrs.	Round table session 1 - Management of craniopharyngiomas Ilhan Elmaci, Turkey (Moderator and speaker) Craniotomy vs. endonasal treatment in craniopharyngioma Eduard Voormolen, The Netherlands Current state of art craniopharyngioma surgery Craniopharyngiomas: two entities, different indications Davide Locatelli, Italy
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Round table 3 – Tumors of the anterior and central skull base José Hardillo, The Netherlands (Moderator and speaker) Recent advances in multidisciplinary care for SNUC and SCC Matthew Geltzeiler, United States of America Treatment of large olfactory groove meningiomas (surgical approach and outcomes) Lars Poulsgaard, Denmark Functional Imaging of Pituitary tumors Wouter van Furth, The Netherlands Management of ITAC's using the Sato technique Dominiek Monserez, The Netherlands
<i>Room Paris</i> 13.00 – 13.30 hrs.	<b>Keynote lecture 3</b> – Intraoperative management of the facial nerve during vestibular schwannoma surgery <i>Siviero Agazzi, United States of America</i> <i>Chair: Yasin Temel, The Netherlands</i>
13.30 – 15.00 hrs.	Round table session 2 – Hearing rehabilitation after vestibular schwannoma surgery Introduction and Evidence base Shakeel Saeed, United Kingdom (Moderator and speaker) Intraoperative evaluation of the cochlear nerve for hearing rehabilitation in patients with vestibular schwannoma Luis Lassaletta, Spain What can we offer to patients with bilateral CPA lesions? Cordula Matthies, Germany Hearing rehabilitation and the role of auditory implants Thomas Lenarz, Germany Discussion and questions
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Round table session 4 - Malignancies of the temporal bone RT Dan Fliss, Israel (Moderator and speaker) Squamous Cell Carcinoma - of the temporal bone - evaluation of an international cohort focusing on T4 tumors Dirk Kunst, The Netherlands Malignancies extending into the temporal bone Ben Panizza, Australia

Temporal bone SCC: Do they have a better prognosis? *Giovanni Danesi, Italy* Endoscopic resection of malignancies involving the temporal bone *Paul Gardner, United States of America* Hearing rehabilitation after malignancies of the temporal bone *Sebastian Schraven, Germany* 

#### Room Berlin/Copenhagen

13.30 – 15.00 hrs.	Free paper session 1 - Video abstracts Chair: Thijs Jansen, The Netherlands
	Minimally invasive contralateral endoscopic endonasal approach for a true intracavernous epidermoid cyst resection <i>A. Faya</i>
	Combined petrosal approach (CPA) for petroclival tumours: a practical and training- oriented perspective <i>L. Tariciotti</i>
	Endoscopic trans-ventricular approach for cystic craniopharyngioma- a technical case report <i>A. Georgiannakis</i>
	Cranio-orbitozygomatic approach for resection of spheno-orbital meningioma with infratemporal fossa extension L. Tariciotti
	Left Occipital Artery to Right P3 Bypass with Radial Interposition Graft and Trapping of P3 Aneurysm <i>G. Zenonos</i>
	<i>G. Zenonos</i> Far Medial Approach for Clipping of Ventral Ruptured PICA Aneurysm <i>G. Zenonos</i>
	Cranio-orbitozygomatic approach for resection of spheno-orbital meningioma with infratemporal fossa extension <i>L. Tariciotti</i>
	E. Tariciotti Extra-axial hemangioblastoma of the cerebellopontine angle L. Tariciotti
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Free paper session 3 - Vestibular schwannoma Chair: Cordula Matthies, Germany
	British Skull Base Society Evidence-Based Consensus on Vestibular Schwannoma Surveillance.
	D. Borsetto Surgery for recurrent vestibular schwannoma – is it safe? A. Vlasak
	Continuous education in interdisciplinary vestibular schwannoma surgery C. Matthies
	Surgical outcomes of the multidisciplinary treatment of Koos grade IV vestibular schwannomas
	<ul><li>F. Ruiz Juretschke</li><li>Impact of Covid-19 pandemic and surgeon retirement on skull base caseload and vestibular schwannoma surgery outcomes.</li><li>B. Davis</li></ul>

	Vestibular schwannoma surgery: surgical approach based on tumor dimension. <i>G. Pepe</i> Untreated vestibular schwannoma: A systematic review on growth determinants. <i>D. Alvarado</i> Cerebral venous sinus thrombosis post vestibular schwannoma resection: A Case Series <i>A. Shoakazemi</i> Shifting management strategies in 30 years of multidisciplinary vestibular schwannoma care: an evaluation of 3141 patients <i>N. de Boer</i>
<i>Room Rome</i> 13.30 – 15.00 hrs.	<b>Free paper session 2 – (facial) Nerve</b> Chair: Paul Gardner, United States of America
	<ul> <li>Cranial nerve dysfunction in patients with an occipital condyle fracture: a 14-year retrospective observational study.</li> <li><i>M. Thevis</i></li> <li>Tear production in relation to intermediate nerve function and vestibularschwannoma surgery</li> <li><i>W. van Vollenhoven</i></li> <li>A retrospective study of facial nerve function preservation in large acoustic neuroma:</li> <li>A Young Doctor's Experience</li> <li><i>Z. Chen</i></li> <li>Delayed facial nerve palsy after vestibular schwannoma surgery during the Covid-19 pandemic.</li> <li><i>Z. Fik</i></li> <li>Facial Nerve Function after Incomplete Resection of Vestibular Schwannomas that Failed Initial Stereotactic Radiosurgery</li> <li><i>P. Gardner</i></li> <li>Two-year outcome of delayed facial palsy after resection of vestibular schwannoma <i>Y. Uozumi</i></li> <li>A Cross-over study comparing the effects of Lactated Ringers (LR) vs. Normal Saline (NS) irrigation on Multi-Modality Intra-operative Neuromonitoring during skull base Surgery involving the facial nerve</li> <li><i>G. Zenonos</i></li> <li>The mini-combined transpetrosal approach for skull base tumors: indications and surgical outcomes</li> <li><i>A. Fava</i></li> <li>Facial Nerve Decompression: the Cambridge and London experience.</li> <li><i>D. Borsetto</i></li> </ul>
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Free paper session 4 - Anterior/Central Benign tumors & General Chair: Hans Thomeer, The Netherlands
	Craniopharyngiomas: a personal surgical experience supporting endonasal resection <i>C. Hannen</i> Endocavitary treatment of cystic craniopharyngiomas with interferon alpha 2b. <i>S.A. Benbouali</i>

	The experience with the Inside-Out Technique for resection of Craniopharyngiomas during Endoscopic Endonasal Approaches (EEAs) <i>G. Zenonos</i>
	Endoscopic transclival approach to brainstem cavernomas: our preliminary experience and the role of diffusion tensor imaging with tractography <i>D. Aiudi</i>
	Surgical management and treatment outcome of patients with juvenile nasopharyngeal angiofibroma: a multicenter retrospective study <i>W. Szweryn</i>
	Long term follow-up of multidimensional health-related quality of life after endoscopic endonasal surgery for pituitary adenomas using the endoscopic endonasal sinus and skull base surgery questionnaire <i>G. Joustra</i>
	The "candy wrapper" of the pituitary gland: a road map to the parasellar ligaments and the medial wall of the cavernous sinus <i>S. Serioli</i>
	The Oculomotor Cistern and Pituitary Adenomas (PitNETs): Anatomical and Clinical Study S. Serioli
	Radiotherapy and Surgery for Vestibular Schwannomas: A Retrospective Analysis of a Single Center H. Thomeer
<i>Room Athens</i> 15.30 – 16.15 hrs.	<b>Basic instructional course ENT</b> - Transtemporal approaches to the CPA <i>Maurizio Falcioni, Italy</i>
16.15 – 17.00 hrs.	<b>Basic instructional course Neuro</b> - Skull base meningioma surgery (indications/ approaches and surgical techniques/closure and reconstruction) <i>Sebastien Froelich, France</i>

## Thursday 6 June 2024

<i>Lobby North</i> 07.30 – 18.00 hrs. 09.00 – 18.00 hrs.	Registration Exhibition
<i>Auditorium</i> 08.00 – 08.30 hrs.	<b>Keynote lecture -</b> The infratemporal fossa approaches to the skull base – state of the art Dan Fliss, Israel Chair: Erik Hensen, The Netherlands
08.30 – 10.00 hrs.	<b>Clinical Pathway session</b> – Vestibular schwannoma Sammy Schouten, The Netherlands (Organisator)
08.30 - 08.50 hrs.	Erik Hensen, The Netherlands (Moderator and speaker) VS diagnosis: tumor biology & imaging Andrew King, United Kingdom
08.50 - 09.10 hrs.	VS epidemiology & natural history Per Cayé-Thomasen, Denmark
09.10 - 09.30 hrs.	VS Treatment: Stereotactic radiosurgery Jeroen Verheul, The Netherlands
09.30 - 09.50 hrs.	VS Treatment: Microsurgery Erik Hensen, The Netherlands
09.50 - 10.00 hrs.	Discussion
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	<b>Clinical Pathway session</b> – Vestibular schwannoma Sammy Schouten, The Netherlands (Organisator <b>)</b> Erik Hensen, The Netherlands (Moderator and speaker)
10.30 - 10.55 hrs.	Quality of Life of VS patients Michael Link, United States of America
10.55 - 11.20 hrs.	Clinical decision making in the 21st century Shakeel Saeed, United Kingdom
11.20 - 12.00 hrs.	Case discussion
12.00 – 12.30 hrs.	<b>Special topic lecture</b> - Are robots our friends? Maarten Steinbuch, The Netherlands Chair: Dirk Kunst, The Netherlands
12.30 – 13.30 hrs.	Lunch
13.30 – 15.00 hrs.	<b>Clinical Pathway session</b> – Neurofibromatosis type 2 (NF2) Ineke Pruijn, The Netherlands (Organisator) Gareth Evans, United Kingdom (Moderator)
13.30 – 14.00 hrs.	Epidemiology, incidence, diagnosis/genetics Gareth Evans, United Kingdom
14.00 – 14.30 hrs.	Treatment VS Nick Thomas, United Kingdom
14.30 – 15.00 hrs.	Treatment meningeoma Michael Link, United States of America
15.00 – 15.30 hrs.	Break

15.30 – 17.00 hrs.	<b>Clinical Pathway session</b> – Neurofibromatosis type 2 (NF2) Ineke Pruijn, The Netherlands (Organisator) Gareth Evans, United Kingdom (Moderator)
15.30 – 16.00 hrs.	Cl in NF2 and quality of life Daniele Borsetto, United Kingdom
16.00–16.30 hrs.	The patients' perspective (Dutch NF Society) Ine Israel, The Netherlands
16.30 – 17.00 hrs.	Discussion (clinical cases, expert opinion)
17.00 – 17.30 hrs.	<b>Special topic lecture</b> – Presentation of the 'Chief failure officer' Paul Iske, The Netherlands Chair: Jolanda Derks, The Netherlands
Room Brussels	
08.00 – 08.30 hrs.	Keynote lecture - Dilemmas in temporal paragangliomas: partial versus total removal Giovanni Danesi, Italy
	Chair: Thijs Jansen, The Netherlands
08.30 – 10.00 hrs.	Round table session – Skull base reconstruction after tumor resection Eric Wang, United States of America (Moderator and speaker) Free Grafts: Indications, Benefits, and Limitations John DelGaudio, United States of America Intranasal Flaps beyond the Nasoseptal Flap Garret Choby, United States of America Lowering Post-operative CSF Pressure: When, How and How Long? Georgios Zenonos, United States of America Use of Regional Flaps in Open and Endoscopic Skull Base Surgery Christian Betz, Germany "The International Consensus Statement in Allergy and Rhinology: Sinonasal Tumors and How It Can Help Practice Edward Kuan, United States of America Free Flaps in Endoscopic Skull Base Surgery: An Emerging Option Eric Wang, United States of America Case Discussion All speakers
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	Round table session – Neuromodulation session Principles of Neuromodulation Yasin Temel, The Netherlands (Moderator and speaker) The vestibular implant Raymond van den Berg, The Netherlands Deep Brain stimulation in severe tinnitus Mark Janssen, The Netherlands Auditory Brainstem Implant for severe tinnitus Marc van Dijk, The Netherlands

12.00 – 12.30 hrs.	<b>Keynote lecture</b> – Surgical approaches to anterior midline skull base meningiomas Michaël Bruneau, Belgium Chair: Yasin Temel, The Netherlands
12.30 – 13.30 hrs.	Lunch
13.30 – 15.00 hrs.	Round table session – AI & Imaging Patrick Langenhuizen, The Netherlands (Moderator and speaker) Stefan Cornelissen, The Netherlands Francis Creighton, United States of America Jonathan Shapey, United Kingdom
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Round table session - Multiple and bilateral paragangliomas: management and QOL Giovanni Danesi, Italy (Moderator and speaker) Managing paragangliomas found through surveillance - what to do and when Rupert Obholzer, United Kingdom Giuseppe De Donato, Italy Kazimierz Niemczyk, Czech Republic
17.00 – 17.30 hrs.	<b>Keynote lecture</b> - Genetics in skull base pathology Liesbeth Spruijt, The Netherlands Chair: Thijs Jansen, the Netherlands
Room Paris	
08.00 – 08.30 hrs.	<b>Keynote lecture</b> - Surgical anatomy of the lateral skull base Samy Youssef, United States of America Chair: Koos Hovinga, The Netherlands
08.30 – 10.00 hrs.	Round table session – Petroclival meningeoma Fernando Muñoz-Hernández, Spain (Moderator and speaker) Natural history of Petroclival Meningiomas. When not to operate? Fernando Muñoz-Hernández, Spain Transpetrosal approach for Petroclival Meningiomas Sebastien Froelich, France Retrosigmoid approach for Petroclival Meningiomas Ricardo Ramina, Brazil Endoscopic endonasal approach for Petroclival Meningiomas Paul Gardner, United States of America Combined endoscopic and transcranial approach for Petroclival Meningiomas Samy Youssef, United States of America
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	<b>Round table session</b> – Orbital approaches Davide Locatelli, Italy (Moderator and speaker) Paul Gardner, United States of America Carlos Pinheiro-Neto, United States of America
12.00 – 12.30 hrs.	<b>Key note lecture</b> - Updates in the Management of Skull Base Chordoma Paul Gardner, United States of America Chair: Thijs Jansen, The Netherlands

12.30 – 13.30 hrs.	Lunch
13.30 – 15.00 hrs.	Round table session – Carotid artery management in skull base surgery Carl Snyderman, United States of America (Moderator and speaker) Introduction Carl Snyderman, MD, MBA From Carotid Damage Back to Causes: How to Prevent Davide Locatelli, Italy Management of Carotid Injury during Endoscopic Endonasal Surgery Paul Gardner, United States of America ICA Manipulations in Anterior and Lateral Skull Base: Suggestions for a Safe Procedure Giovanni Danesi, Italy Team Simulation for Carotid Artery Injury Carl Snyderman, United States of America Revascularization Options for Carotid Replacement in Skull Base Tumors Amir Dehdashti, United States of America Discussion
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Round table session – Chordomas Wouter van Furth, The Netherlands (Moderator and speaker) Shaan Raza, United States of America Amir Dehdasthi, United States of America Damien Bresson, France Omar Pathmanaban, United Kingdom
Room Berlin/Copenhagen	
08.00 – 08.30 hrs.	<b>Keynote lecture</b> - Endoscopic management of orbital lesions John DelGaudio, United States of America Chair: Max Keizer, The Netherlands
08.30 – 10.00 hrs.	Free paper session 5 - Vestibular & General Chair: Thomas Linder, The Netherlands Investigating the role of [18F]-FDG PET-imaging in the treatment of necrotizing external otitis A. van Gestel Restoring vestibular function with a vestibular implant - Current challenges and an update on the second generation device J. Stultiens Vestibular implantation and obstructions of the semicircular canals J. Stultiens Vestibulocochlear implant (VCI) stimulation in bilateral temporal bone fractures to manage hearing loss and vestibulopathy: a case series B. Vermorken Subtotal Petrosectomy in children: what can be learned from a multicenter study? A. Fulcheri The effect of intratympanic gentamicin as a prehabilitation strategy for objective and subjective vestibular function in patients undergoing microsurgery for a unilateral vestibular schwannoma C. Fuentealba Bassaletti

	Anatomical challenges of the extralbyrinthine approach for vestibular implantation <i>M. Senol</i> Necrotizing otitis externa: A New Protocol for outpatient management and reducing hospital stay <i>S.S. Hashmi</i>
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	<b>Round table session</b> – Jugular foramen and craniocervical junction Rupert Obholzer, United Kingdom (Moderator and speaker) Giovanni Danesi, Italy Tonny van Havenbergh, Belgium Ricardo Ramina, Brazil
12.30 – 13.30 hrs.	Lunch
13.30 – 15.00 hrs.	Free paper session 7- Anterior/Central General Chair: Georgios Zenonos, United States of America
	Anatomical step-by-step dissection of complex skull base approaches for trainees: surgical anatomy of the microsurgical and endoscopic approaches to and through the orbit <i>Y. Alexander</i> Origin and course of the branches of the cavernous internal carotid artery from the endoscopic endonasal perspective: a cadaveric study <i>Y. Alexander</i> The Endoscopic Endonasal Surgery to The Lateral Compartment of Cavernous Sinus: Step-by-step Surgical Technique, Anatomical Considerations and Clinical Experience <i>G. Zenonos</i> Pushing the Limits of the Anterior Petrosectomy : Extension into the Clivus (Landmarks, Techniques and Limitations) <i>J. Justo</i> Minimally Invasive Lateral Orbitotomy Approach for Middle Fossa and Orbital Lesions <i>G. Zenonos</i> Cavernous sinus walls: an anatomical study of the dural layers <i>G. Zenonos</i> Optimizing neurovascular-protective transposition of the pterygopalatine fossa through orbito-pterygo-sphenoidal ligament release and descending palatine canal decompression: Anatomical principles and surgical strategies <i>Y. Alexander</i> Anatomical step-by-step dissection of complex skull base approaches for trainees: surgical anatomy of the endoscopic endonasal superior ethmoidectomy <i>Y. Alexander</i>
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Free paper session 9 - Tumor biology Chair: Zdenek Fik, Czech Republic
	Craniofacial Retraction Embryology: Beyond Cranial Base Evolution to the Power of the Mandible <i>A. Kunz</i>

Developmental gene expression in skull-base chordomas and chondrosarcomas <i>K. Hovinga</i>
Genomics analysis reveals molecular patterns of tumorigenesis in HPV-associated and HPV-independent sinonasal squamous cell carcinoma
N. London
Patient-derived Vestibular Schwannoma explants: a 3D in vitro model. <i>J. Meijvogel</i>
The Vestibular Schwannoma Tumor Slice Model for Pharmacological Testing <i>C. Matthies</i>
Dinstinct gene expression in ten Vestibular Schwannoma tumors versus tumor- associated nerves
S. Leisz
Proteomic analysis of vestibular schwannoma Z. Fik
Impact of immunomodulatory cytokines on tumor volume in sporadic vestibular schwannoma
S. Leisz
Free paper session 6 – Oncology
Chair: Dominiek Monserez, The Netherlands
Two Decades of Skull Pase Chandrosarcoma Management: Insights from Laribaisi

	I wo Decades of Skull Base Chondrosarcoma Management: Insights from Lariboisiere
	Hospital J. Chainey
	Skull base chordomas and chondrosarcomas-long terms outcomes using 3600
	approach and multimodal treatment
	D. Stastna
	Radiomics in prediction of histology of skull base chordomas and chondrosarcomas
	D. Stastna
	Cervical chordomas: results and factors influencing prognosis and survival in a single center case series.
	R. Abbritti
	11 cases of sinonasal intestinal-type adenocarcinoma with spontaneous regression
	D. Monserez
	Sinonasal, nasopharyngeal, upper oral and oropharyngeal cavity adenoid cystic
	carcinoma: an international multi-center retrospective study on 457 patients G. Schiavo
	Immunotherapy in the Management of Sinonasal Mucosal Melanoma: A Systematic Review
	G. Choby
	Pathologic Dural Invasion is Associated with Regional Recurrence in Esthesioneuroblastoma: A Multi-Institutional Study
	G. Choby
	The Utility of lateral Temporal Bone Resection (LTBR) in localy advanced External
	Auditory Canal Carcinoma /VS concurrent chemoradiotherapy CCR: case report and
	litterature review
	A. Talbi
10.00 – 10.30 hrs.	Break

*Room Rome* 08.30 – 10.00 hrs.

10.30 – 12.00 hrs.	Round table session – Treatment strategies for large or giant skull base meningiomas Robert Behr, Germany (Moderator and speaker) Ilhan Elmaci, Turkey Gerasimos Baltsavias, Germany Roland Goldbrunner. Germany Stefan Grau, Germany Lina-Elisabeth Qasem, Germany
12.30 – 13.30 hrs.	Lunch
13.30 – 15.00 hrs.	Free paper session 8 - Anterior/Central General Chair: Maurizio Lacoangeli
	A case series of intracranial aneurysms treated via the extended endonasal corridor in a single center. Indications, outcomes, and technical considerations. <i>M. Karampouga</i> A comparative study of six different transorbital approaches. Skull base exposure and qualitative traits. <i>M. Karampouga</i> Transorbital Neuroendoscopic Surgery (TONES), the Latin American Experience. Indications Beyond tumoral pathology. S. Gomez-Niebles Extended Endoscopic Endonasal Approaches for Traumatic or Inflammatory Lesions of C1-C2: Retrospective Analysis of a 10-Years Case Series <i>M. Lacoangeli</i> The extended endoscopic endonasal transplanum optic canal decompression. Surgical technique in steps and anatomical considerations. <i>M. Karampouga</i>
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Free paper session 10 - Radiotherapy Chair: Cindy Nabuurs, The Netherlands Routinely postoperative radiotherapy for pT1- and pT2-classified Squamous Cell Carcinoma of the External Auditory Canal C. Nabuurs Repeat gamma knife radiosurgery for trigeminal neuralgia. D. Silva Cochlear-optimised treatment planning in photon and proton radiosurgery for vestibular schwannoma patients K. Koetsier Tumour shrinkage and good facial nerve function after planned partial resection and Gamma Knife radiosurgery in Koos 4 vestibular schwannoma
	<i>M. Keizer</i> Skull-Base Chondrosarcoma: A Systematic Review of the Role of Postoperative Radiotherapy <i>M. Keizer</i>

Room Athens	
08.30 – 10.00 hrs.	<b>Round table</b> – Accreditation Jörg Schipper, Germany (Moderator and speaker) Carl Snyderman, United states of America Ruediger Gerlach, Germany Nick Thomas, United Kingdom
10.00 – 10.30 hrs.	Break
10.30 – 11.15 hrs.	<b>Basic instructional course ENT</b> - Anterior skull base approaches: endoscopic approaches (indications/ approaches and surgical techniques/closure and reconstruction) <i>Carl Snyderman, United States of America</i>
11.15 – 12.00 hrs.	<b>Public debate</b> Treatment of orbito-sphenoidal meningeoma with progressive vision loss Jerome Waterval, The Netherlands (Moderator) Sebastien Froelich, France Inge Compter, The Netherlands
12.30 – 13.30 hrs.	Lunch
13.30 – 14.15 hrs.	<b>Basic instructional course ENT -</b> Infratemporal fossa approach Types A-C: indications, approaches and how (not) do it <i>Thomas Linder, Switzerland</i>
15.30 - 17.00 hrs.	<ul> <li>Round table - Lateral Skull base surgery - managing complications</li> <li>Jeroen Jansen, The Netherlands (Moderator and speaker)</li> <li>The likelihood of surgical complications in comparison with other procedures</li> <li>Romain Kania, France</li> <li>Complications in lateral skull base operations</li> <li>Goran Mrak, Croatia</li> <li>Troubles and solutions for cochlear implantations</li> <li>Thomas Linder, Switzerland</li> <li>How to avoid facial nerve complications and how to manage it</li> <li>Thomas Somers, Germany</li> <li>Facial rehabilitation after iatrogenic palsy</li> <li>Cristina Ciardiello, Italy</li> <li>The non-technical skills in managing complications</li> </ul>

## Friday 7 June 2024

Lobby North	
07.30 – 18.00 hrs.	Registration
09.00 – 18.00 hrs.	Exhibition
Auditorium	
08.00 – 08.30 hrs.	Keynote lecture - Surgical treatment of tumors extending across the ant skull base
00.00 00.50 ms.	Ben Panizza, Australia
	Chair: Jerome Waterval, The Netherlands
08.30 – 10.00 hrs.	Clinical Pathway session – Paraganglioma (PGL)
	Thijs Jansen, The Netherlands (Moderator)
08.30 - 09.00 hrs.	General information on epidemiology, tumor biology, and potentially
	medical/patient history
	Angelika Albrecht, Germany
09.00 - 09.30 hrs.	Presentation of essential components in the process of gathering medical
	information and clinical examination during Outpatient Department (OPD) visits. à as
	described in Dutch Medical Guideline
	Dirk Kunst, The Netherlands
09.30 - 10.00 hrs.	Available treatments, their outcomes, and the pros and cons of various treatment
10100 1101	options
	Giovanni Danesi, Italy
	Glovanni Danesi, Raiy
10.00 10.20 hrs	Break
10.00 – 10.30 hrs.	Dreak
10.30 – 12.00 hrs.	Clinical Pathway session – Paraganglioma (PGL)
	Thijs Jansen, The Netherlands (Moderator)
10.30 - 11.00 hrs.	Imaging, minimal imaging, and differential diagnosis based on imaging
	Jeroen Jansen, The Netherlands
11.00 - 11.30 hrs.	Short-term and long-term outcomes, possibly including Quality of Life (QOL) – mainly
	focussing on cranial nerve preservation
	Thijs Jansen, The Netherlands
11.30 - 12.00 hrs.	Case discussion
12.00 – 12.30 hrs.	<b>Special topic lecture</b> – Trusting the machine? AI-assisted decision making in
	healthcare
	Anco Peeters, The Netherlands
	Chair: Jolanda Derks, The Netherlands
12.30 – 13.30 hrs.	Lunch
12.50 15.50 m3.	Landi
13.30 – 15.00 hrs.	Clinical Pathway session – Malignancies of the anterior skull base
15.50 - 15.00 1115.	
	Jolanda Derks, The Netherlands (Organiser)
	Ben Panizza, Australia (Moderator and Speaker)
	SESSION 1 – CLINICAL ASPECTS AND TREATMENTS
13.30 - 13.40 hrs.	Introduction
	Ben Panizza, Australia
13.40 - 13.55 hrs.	Diagnostic Evaluation of Nasal Masses
	Eric Wang, United States of America
13.55 - 14.10 hrs.	Anterior Cranial Base Resections – ENT
	Carlos Pinheiro-Neto, United States of America

14.10 - 14.25 hrs.	Anterior Cranial Base Resections – Neuro Shaan Raza, United States of America
14.25 - 14.35 hrs.	Reconstruction
	Matthew Geltzeiler, United States of America
14.35 - 14.45 hrs.	Quality of Life Outcomes in Anterior Skull Base Malignancy
	Eric Wang, United States of America
14.45 - 15.00 hrs.	Neoadjuvant therapy prior to definitive treatment
	Ehab Hanna, United States of America
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Clinical Pathway session – Malignancies of the anterior skull base
	Jolanda Derks, The Netherlands (Organiser)
	Ben Panizza, Australia (Moderator and Speaker)
	SESSION 2 – DISEASE SPECIFIC MANAGEMENT
15.30 - 15.35 hrs.	Introduction
	Ben Panizza, Australia
15.35 - 15.45 hrs.	SCC
10.00 10.40 110.	Matthew Geltzeiler, United States of America
15.45 - 15.55 hrs.	Adenocarcinoma
10.45 - 10.55 1113.	Eric Wang, United States of America
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15.55 - 16.05 hrs.	Olfactory Neuroblastoma
	Carlos Pinheiro-Neto, United States of America
16.05 - 16.15 hrs.	SNUC and its variants
	Ehab Hanna, United States of America
16.15 - 16.25 hrs.	Adenoid Cystic Carcinoma
	Ben Panizza, Australia
16.25 - 16.35 hrs.	Sinonasal Melanoma
	Matthew Geltzeiler, United States of America
16.35 - 17.00 hrs.	Cases
17.00 – 17.30 hrs.	General Assembly
	Dirk Kunst, The Netherlands
	Davide Locatelli, Italy
Room Brussels	
08.00 – 08.30 hrs.	Keynote lecture - Patient specific craniomaxillofacial reconstruction
	Nils-Claudius Gellrich, Germany
	Chair: Yasin Temel, The Netherlands
08.30 – 10.00 hrs.	Clinical Pathway session – Chordomas
	Yasin Temel, The Netherlands and Sebastien Froelich, France (Moderators)
08.30 - 09.00 hrs.	Epidemiology and clinical presentation
	Eduard Voormolen, The Netherlands
09.00 - 09.30 hrs.	Biology of chordoma
00100 00100 1110.	Yasin Temel, The Netherlands
09.30 - 10.00 hrs.	Radiological characteristics of chordoma
10.00 m3.	Remco Santegoeds, The Netherlands
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	Clinical Pathway session – Chordomas

	Yasin Temel, The Netherlands and Sebastien Froelich, France (Moderators)
10.30 - 11.00 hrs.	Surgical anatomy of the chordoma
	Necmettin Tanriover, Turkey
11.00 - 11.30 hrs.	Surgical approach and outcomes
	Sebastien Froelich, France
11.30 - 12.00 hrs.	Panel discussion
12.00 – 12.30 hrs.	Keynote lecture - Limits of endoscopic skull base surgery
	Sebastien Froehlich, France
	Chair: Yasin Temel, The Netherlands
12.30 – 13.30 hrs.	Lunch
13.30 – 15.00 hrs.	Round table session – Facial nerve in skull base surgery
	Luis Lassaletta, Spain (Moderator and speaker)
	Facial and cochlear nerve preservation in large vestibular schwannoma surgery Roy Daniel, Switzerland
	Indications and outcomes of facial-hypoglossal nerve transfer for restoring
	longstanding facial nerve palsy following vestibular schwannoma resection
	Gustavo Jung, Brazil
	Facial nerve reinforcement in the APC
	Jose Manuel Morales, Spain
	Facial nerve schwannomas: a multicentric study
	Thomas Somers, Belgium
15.00 – 15.30 hrs.	Break
15.30 – 16.05 hrs.	Keynote lecture: Surgical anatomy of the anterior/central skull base
	Maria Peris Celda, United States of America
	Chair: Thijs Jansen, The Netherlands
16.20 – 16.55 hrs.	Keynote lecture - Surgical anatomy of the lateral skull base
	Maria Peris Celda, United States of America
	Chair: Thijs Jansen, The Netherlands
16.55 - 17.00 hrs.	Questions
Room Paris	
08.30 – 10.00 hrs.	Round table session – Rehabilitation of long-term facial paresis
	Koen Ingels, The Netherlands (moderator)
	Periorbital reconstruction in facial paralysis
	Barbara Kofler, Austria
	The role of contact lenses in patients with exposure keratitis due to facial paresis
	Nienke Miltenburg-Soeters, The Netherlands
	Side-to-end hypoglossal-to-facial transfer: Tips and Tricks
	Jose Manue Morales, Spain
	The role of combined nerve transfers in facial reanimation: The perspective of a Facial Nerve Unit
	Luis Lassaletta, Spain Combining static and dynamic reconstructions in facial palsy reconstruction: my
	approach
	Stefania Tuinder, The Netherlands
	סנכןעווע דעוועבר, דוב ויכנוובוועוועג

	The combination of ansa hypoglossi with the masseteric branch in facial reanimation surgery Koen Ingels, The Netherlands
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	Round table session – Radiotherapy and various treatment modalities Danielle Eekers, The Netherlands (Moderator and speaker) Radiotherapy treatment of chordoma and chondrosarcoma, a team effort Ida Coremans, The Netherlands Meningeoma & radiotherapy, a good match? Inge Compter, The Netherlands Local control medium-large vestibular schwannoma Daniele Borsetto, United Kingdom State of the arts Radiotherapy modalities Mirko Unipan, The Netherlands Neurofibromatosis: to beam or not to beam Martijn Broen, The Netherlands Q&A during round table discussion All speakers
12.00 – 12.30 hrs.	<b>Keynote lecture</b> – Organization of head and neck oncology in The Netherlands Robert Takes, The Netherlands Chair: Danielle Eekers, The Netherlands
12.30 – 13.30 hrs.	Lunch
13.30 – 15.00 hrs.	Round table session – Intraoperative monitoring Jörg Schipper, Germany (Moderator and speaker) Cochlea nerve management in CPA tumors with different acoustic and anatomic profiles Jörg Schipper, Germany Facial nerve monitoring during VS surgery Mark ter Laan, The Netherlands Cochlea nerve monitoring and surgical management during VS surgery Cordula Matthies, Germany Cochlea nerve monitoring with the ANT electrode in VS surgery in patients with a complete hearing loss Thomas Klenzner, Germany Cochlea nerve monitoring with ABR and the ball electrode Jan Cornelius, Germany
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Round table session – Technical innovation in Skull base surgery Daniele Borsetto, United Kingdom (Moderator and speaker) Photogrammetry and AR - novel tools for Skull Base Surgery training Jan Cornelius, Germany New Ways to the Labyrinth - Robotic Assisted Cochlear Implantation Thomas Klenzner, Germany Mind the Gap: Bridging AI Technical Innovation into Clinical Impact Stefan Cornelissen, The Netherlands

	Precision cochlear implantation Vedat Topsakal
Room Berlin/Copenhag	gen
08.00 – 08.30 hrs.	<b>Keynote lecture</b> – Adenocystic carcinoma of the temporal bone Chunfu Dai, China Chair: Thijs Jansen, The Netherlands
08.30 – 10.00 hrs.	<b>Free paper session 11 – NF2/Other Schwannomas/QoL</b> Chair: Daniele Borsetto, United Kingdom
	Quality of life in surgically treated vestibular schwannoma patients <i>C. Matthies</i> update on functional results of microsurgery via the middle fossa approach in small
	vestibular schwannomas (VS) <i>M. Scheich</i>
	Health-related quality of life in patients with a stable or growing vestibular schwannoma managed by wait and scan or stereotactic radiosurgery <i>I. Pruijn</i>
	Longitudinal assessment of quality of life in patients with NF2-related schwannomatosis treated with Avastin <i>S. Mes</i>
	Efficacy of bevacizumab in patients with neurofibromatosis 2-realated vestibular schwannomas <i>V. Koucký</i>
	Long-Term Tumour Control Rates in Vestibular Schwannoma Treated with Radiotherapy – a multi-centre, international study. D. Borsetto
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	<b>Round table session</b> – Large and giant vestibular schwannomas Erik Hensen, The Netherlands (Moderator and speaker) Tony Van Havenbergh, Belgium Nick Thomas, United Kingdom Lars Poulsgaard, Denmark
12.00 – 12.30 hrs.	<b>Keynote lecture</b> – Neoadjuvant therapy for advanced sinonasal cancers Ehab Hanna, United States of America Chair: Martin Lacko, The Netherlands
12.30 – 13.30 hrs.	Lunch
13.30 – 15.00 hrs.	Free paper session 13 - Imaging Chair: Patrick Langenhuizen, The Netherlands
	The transposition of the V3 segment of the vertebral artery in the surgery of craniocervical junction: anatomo-radiological study and clinical implications. <i>S. Serioli</i> Automated measurement of vestibular schwannoma on MRI <i>O. Neve</i>

	Vestibular Schwannoma growth, comparison of volumetric analysis and linear measurements. S.S. Hashmi
	Defining tumor growth in vestibular schwannomas: a volumetric inter-observer variability study in contrast-enhanced T1-weighted MRI S. Cornelissen
	Long-term natural history and patterns of sporadic Koos grade 4 vestibular schwannomas: A single-institution volumetric analysis of 215 patients S. Schouten
	Dynamic-contrast enhanced and diffusion MR imaging for predicting short-term tumor growth of sporadic vestibular schwannomas: a prospective study <i>S. Schouten</i>
	Computer-aided prediction of short-term tumor growth in sporadic vestibular schwannomas using both structural and dynamic-contrast enhanced MR imaging <i>S. Cornelissen</i>
	Analysis of prognosis and influencing factors of 151 cases of external auditory canal cancer W. Wang
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	<b>Free paper session 15 - General</b> Chair: Carl Snyderman, United States of America
	The Inter-Maxillary-Mandibular Approach to the Upper Parapharyngeal Space: Anatomic Basis and Clinical Case <i>C. Snyderman</i>
	Introduction to the volume of operative manoeuvrability (VOM) as a novel metric in microneurosurgical anatomical research: toward a reproducible data-driven measurement perspective in complex skull base corridor computation. <i>L. Tariciotti</i>
	Introduction to the visuo-operative angle (VoA) as a novel parameter in microneurosurgical anatomical research: toward a reproducible data-driven measurement perspective in intraoperative microscopic and endoscopic visualization <i>L. Tariciotti</i>
	Multidisciplinary Treatment of Skull Base Pathologies: CMF-ENT-NSY Collaboration Experience of a New Center <i>C. Ciardiello</i>
	C. Claratello Deskeletonizing the sigmoid sinus is noncompulsory in skull base surgery: 3D modeling of the translabyrinthine approach D. Samlal
	Enhancing Neuroanatomical Dissection and Simulation Training Through Indocyanine Green Fluorescence in Embalmed Human Specimens: A Procedural Overview L. Tariciotti
<i>Room Rome</i> 08.30 – 10.00 hrs.	<b>Free paper session 12 – Anterior/Central/General</b> Chair: Stefan Linsler, Germany
	Use of the Vascularized Lateral Nasal Wall Flap for Closure of Complex Skull Base Defects <i>C. Snyderman</i>

	Live Demonstration of Skull Base Surgery Performed by Visiting Surgeons at International Sites: Is It Safe? <i>C. Snyderman</i>
	Skull Base Neurosurgery in the Pediatric Population: A Single-Center Case Series <i>P. Gardner</i>
	Real-time evaluation of the vascular supply of the optic apparatus comparing indocyanine green video angiography in correlation to intraoperative visual evoked potential <i>S. Linsler</i>
	Suture as a reconstruction method for skull base after transnasal endoscopic surgery J. Dominguez
	Experience in the surgical treatment of patients with a diagnosis of Cushing's disease in cecanot relating to 12 cases J. Dominguez
	Safety and efficacy of intrathecal fluorescein administration for cerebrospinal fluid leak diagnosis in the selar region
	M. Marjanovic Kavanagh The Coexistence of Carotico-Clinoid Foramen and Interclinoidal Osseous Bridge: An Anatomo-Radiological Study with Surgical Implications. S. Serioli
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	<b>Round table session</b> – Petrous bone/ apex lesions Maurizio Falcioni, Italy (Moderator and speaker) Richard Irving, United Kingdom Giuseppe De Donato, Italy Andrew Fishman, United States of America Thomas Somers, Belgium
12.00 – 12.30 hrs.	<b>Keynote lecture</b> – Pulsatile tinnitus Patrick Axon, United Kingdom
12.30 – 13.30 hrs.	Lunch
13.30 – 15.00 hrs.	<b>Free paper session 14 – Lateral/General</b> Chair: Jerome Waterval, The Netherlands
	Cerebrospinal fluid leakage in lateral skull base: surgical approach and treatment strategy <i>H. Thomeer</i>
	Characteristics and clinical management strategy of petrous apex cholesterol granulomas <i>W. Szweryn</i>
	Middle Cranial Fossa Approach: The Incudomalleolar Joint as a Reliable Landmark S.S. Hashmi
	Management and clinical outcomes of glomus jugulare with cervical extension: Our Institution's Experience L. Tariciotti
	Intracranial complications due to otogenic and sinogenic infections in pediatric cases J. Waterval
	360 <sup>o</sup> to the petrous apex: comprehensive surgical anatomy and limitations of open and endoscopic endonasal approaches to the petrous apex

	Y. Alexander NIR indocyanine-white light overlay visualization mode for neuro-oto-vascular preservation in the anterior transpetrosal approach: technical note for tailored MDK rhomboid drilling L. Tariciotti
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Free paper session 16 - Meningiomas Chair: Goran Mrak, Croatia
	Predictive factors for internal carotid narrowing in anterior clinoidal meningiomas: a retrospective study. <i>A. Moniakis</i>
	A. Mondais Stepwise differentiation of visual device in minimally invasive transcranial approaches for anterior skull base meningiomas. N. Watanabe
	3-D Printing for Customized Reconstruction in Spheno-Orbital Meningiomas S. Serioli
	Long-term Outcomes of Endoscopic Endonasal Resection for Tuberculum Sella Meningiomas: A Single-Center Study P. Gardner
	The experience with treating Diaphragma Sellae Meningiomas at the University of Pittsburgh Medical Center
	G. Zenonos Surgical management of tuberculum sellae meningiomas: single center experience of different surgical approaches A. Naboichenko
	A Systematic Comprehensive Classification for Skull Base Meningiomas <i>C. Hannen</i>
	Paradigm shifts in skull base meningioma treatment over the last five decades <i>G. Mrak</i> Endoscopic assisted microsurgical meningioma resection of the skull base via
	minicraniotomy: is there a difference of radicality and outcome between anterior skull base and posterior fossa? S. Linsler
Room Athens	
10.30 – 11.15 hrs.	<b>Basic instructional course ENT</b> - Anterior skull base approaches: open approaches (indications/ approaches and surgical techniques/closure and reconstruction) <i>Kyle Van Koevering, United States of America</i>
11.15 – 12.00 hrs.	<b>Public debate</b> - NF2 vestibular schwannoma treatment Jerome Waterval, The Netherlands (Moderator) Gareth Evans, United Kingdom Marcos Tatagiba, Germany
12.30 – 13.30 hrs.	Lunch
13.30 – 14.15 hrs.	<b>Basic instructional course Neuro</b> - vestibular schwannoma surgery (indications/ approaches and surgical techniques/closure and reconstruction) <i>Morten Lund-Johansen, Norway</i>

Terje Sundstrøm, Norway

14.15 – 15.00 hrs.	Public debate - Open versus endoscopic approach in anterior skull base surgery Thijs Jansen, The Netherlands (Moderator) Jan Cornelius, Germany (Panellist) Martin Jurlina, Croatia (Panellist)
15.00 – 15.30 hrs.	Break
15.30 – 17.00 hrs.	Round table – Giant vestibular schwannomas: Management paradigmsPer Cayé-Thomasen, Denmark and Marcos Tatagiba, Germany (Moderators)Radical Surgery is the best option for giant VSAntonio Cerejo, PortugalThe pros & cons of staged surgery in giant VSCordula Matthies, GermanyCombined treatment (surgery & radiation) is the best option in giant VSRoy Daniel, SwitzerlandManagement of giant VS after previous radiationGustavo Jung, BrazilCombined treatment (bevacizumab + surgery) in giant NF2-associated VSMartin Schuhmann, GermanyQuality of life in patients with giant VSZdenek Fik, Czech Republic

## Saturday 8 June 2024

<i>Lobby North</i> 08.00 – 13.00 hrs. 09.00 – 13.00 hrs.	Registration Exhibition
<i>Auditorium</i> 08.00 – 08.30 hrs.	<b>Keynote lecture</b> - Pros and cons in 2 and 3-D endoscopy with single- and binostral approach to the central skull base <i>Ruediger Gerlach, Germany Chair: Max Keizer, The Netherlands</i>
08.30 – 10.00 hrs.	<b>Clinical Pathway session</b> – Osteomyelitis of the skull base Jerome Waterval, The Netherlands (Moderator and speaker)
08:30 – 08:55 hrs.	General Introduction on skull base osteomyelitis Jerome Waterval, The Netherlands
09:00 – 09:25 hrs.	Radiology of skull base osteomyelitis Lieke van der Meer, The Netherlands
09:30–10:00 hrs.	Follow-up imaging in skull base osteomyelitis Cristina Mitea, The Netherlands
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	Clinical Pathway session – Osteomyelitis of the skull base Jerome Waterval, The Netherlands (Moderator and speaker)
10:30 – 11:00 hrs.	Treatment (considerations) of skull base osteomyelitis Hassan Mohammed, United Kingdom
11:00 – 12.00 hrs.	Panel on recent advances in research & towards (inter)national guidelines
12.00 – 12.30 hrs.	<b>Special topic lecture</b> - These macarons look unbelievable tasty - Preventing and recognizing publication fraud <i>Marcel van der Heyden, The Netherlands Chair: Jolanda Derks, The Netherlands</i>
12.30 – 13.00 hrs	<b>Wrap-up and farewell</b> Dirk Kunst, The Netherlands Yasin Temel, The Netherlands
<i>Room Brussels</i> 08.00 – 08.30 hrs.	<b>Keynote lecture</b> - Endoscopic approach to giant pituitary adenomas Davide Locatelli, Italy
08.30 – 10.00 hrs.	Round table session – Current management of Sino nasal malignancies Ehab Hanna, United States of America (Moderator and speaker) Sinonasal Malignancies: Evidence-Based Treatment and Molecular Advances Nyall London, United States of America Olfactory Neuroblastoma: Management and updated analysis of the multicenter clinical data Matt Lechner, United Kingdom Treatment Strategies for Recurrent Olfactory Neuroblastoma and Related Malignancy Carl Snyderman, United States of America

	Long Term Outcomes in Open versus Endoscopic Management of Sinonasal Malignancies with Skull Base Invasion: Is there True Equipoise? <i>Shaan Raza, United States of America</i> The International Consensus Statement in Allergy and Rhinology: Sinonasal Tumors and How It Can Help Practice <i>Edward Kuan, United States of America</i>
10.00 – 10.30 hrs.	Break
10.30 – 12.00 hrs.	<b>Round table session</b> – Anterior Skull base surgery - managing complications Nick Thomas, United Kingdom (Moderator and speaker) Paul Gardner, United States of America Eric Wang, United States of America
<i>Room Paris</i> 12.00 – 12.30 hrs.	<b>Keynote lecture</b> – Clinical and molecular features of NF2: results from UK patients Andrew King, United Kingdom Chair: Thijs Jansen, The Netherlands
<i>Room Berlin/Copenhagen</i> 08.00 – 08.30 hrs.	<b>Keynote lecture</b> – Hearing preservation and rehabilitation surgery Robert Behr, Germany Chair: Jerome Waterval, The Netherlands
08.30 – 10.00 hrs.	<b>Free paper session 17 – Video abstracts</b> Chair: Noweed Ahmad, United Kingdom
	Functional preservation surgery in Giant skull base cholesteatoma involving jugular foramen S.S. Hashmi Endoscopic Endonasal Clipping of Left carotid Cave Aneurysm G. Zenonos Minimally Invasive Lateral Orbitotomy for Resection of Trigeminal Schwannoma G. Zenonos Endoscopic-assisted anterior petrosectomy for a recurrent petrous chondrosarcoma in Ollier disease J. Justo Extra-axial hemangioblastoma of the cerebellopontine angle L. Tariciotti Transclival resection of petroclival chondrosarcoma L. Tariciotti
10.00 – 10.30 hrs.	Break

10.30 – 12.00 hrs.	Round table session – Managing benign nasal tumours <i>Kyle van Koevering, United States of America (Moderator and speaker)</i> Inverting Papilloma <i>Matthew Geltzeiler, United States of America</i> When benign tumors go bad <i>Martin Jurlina, Croatia</i> Vascular tumors <i>Rienk Hoven, The Netherlands</i> Fibro-osseous tumors and case presentations <i>Kyle van Koevering, United States of America</i>
12.00 – 12.30 hrs.	<b>Keynote lecture</b> – Vestibular schwannoma Morten Lund-Johansen, Norway Chair: Jerome Waterval, The Netherlands
<i>Room Rome</i> 08.30 – 10.00 hrs.	<b>Free paper session 18 - General</b> Chair: Maria Karampouga, United States of America
	Toward a new data-driven workflow to compute, compare and share anatomical metrics during microneurosurgical dissections: an open-source python library <i>L. Tariciotti</i> Application of internal carotid artery stent in skull base surgery <i>Z. Chen</i> Long-term results and technology-assisted presigmoid retrolabyrinthine approach for the treatment of medium to large vestibular schwannomas: our experience <i>D. Aiudi</i> A new streamlined grading system for the transverse, sigmoid and superior petrosal sinus configuration with possible outcome predictive value based on a preliminary case series. <i>M. Karampouga</i> A case report of Canida Albicans central osteomyelitis : The role of long term fluconazole therapy in association with surgical debridement <i>A. Talbi</i> Awareness of Skull Base pathologies in Emergency and Intensive Care physicians in Slovenia. A pilot study. <i>J. Urbancic</i> A challenging case of lateral osteomyelitis mimiking malignancy lesion : the utility of leucocytes scintigraphy <i>A. Talbi</i>
<i>Room Athens</i> 08.30 – 10.00 hrs.	<b>GSBS session</b> Nils-Claudius Gellrich, Germany Jörg Schipper, Germany
10.30 – 11.15 hrs.	<b>Basic instructional course Neuro</b> – Pituitary surgery (indications/approaches and surgical techniques/closure and reconstruction) <i>Davide Locatelli, Italy</i>

#### The topics

- Anterior/central skull base
- Lateral skull base
- Oncology
- Imaging & interventional radiotherapy
- Radiotherapy
- Basic science

#### Session types

- Special Keynote lectures
- Keynote lectures
- Clinical pathway sessions
- Round table sessions
- Public debates
- Instructional courses
- Free papers and posters

#### **Invited faculty**

Siviero Agazzi (US) Noweed Ahmad (UK) Angelika Albrecht (DE) Patrick Axon (UK) Gerasimos, Baltsavias (DE) Robert Behr (DE) Raymond van den Berg (NL) Christian Betz (DE) Daniele Borsetto (UK) Damien Bresson (FR) Martijn Broen (NL) Michaël Bruneau (BE) Tjasse Bruintjes (NL) Per Cayé-Thomasen (DK) Antonio Cerejo (PT) Garret Choby (US) Cristina Ciardiello (IT) Inge Compter (NL) Stefan Cornelissen (NL) Ida Coremans (NL) Jan Cornelius (DE) Chunfu Dai (CN) Francis Creighton (US) Giovanni Danesi (IT) Roy Daniel (CH) Marc van Dijk (NL) Giuseppe De Donato (IT) Amir Dehdashti (US) John DelGaudio (US) Jolanda Derks (NL) Danielle Eekers (NL) Ilhan Elmaci (TR) Gareth Evans (UK) Maurizio Falcioni (IT) Zdenek Fik (US)

Andrew Fishman (RS) Dan Fliss (IL) Sebastien Froelich (FR) Wouter van Furth (NL) Paul Gardner (US) Nils-Claudius Gellrich (DE) Mathew Geltzeiler (US) Ruediger Gerlach (DE) Roland Goldbrunner (DE) Stefan Grau (DE) Ehab Hanna (US) Jose Hardillo (NL) Tonny van Havenbergh (BE) Erik Hensen (NL) Marcel van der Heyden (NL) Rienk Hoven (NL) Koen Ingels (NL) Paul Iske (NL) Ine Israel (NL) Richard Irving (UK) Jeroen Jansen (NL) Mark Janssen(NL) Thijs Jansen (NL) Martin Jurlina (HR) Gustavo Jung (BR) Romain Kania (FR) Andrew King (UK) Thomas Klenzner (DE) Barbara Kofler (AT) Edward Kuan (US) Dirk Kunst (NL) Mark Ter Laan (NL) Patrick Langenhuizen (NL) Luis Lassaletta (ES) Matt Lechner (UK) Thomas Lenarz (DE) Thomas Linder (CH) Michael Link (US) Davide Locatelli (IT) Nyall London (US) Morten Lund-Johansen (NO) Cordula Matthies (DE) Cem Meco (TR) Lieke van der Meer (NL) Dominiek Monserez (NL) Jose Manuel Morales (ES) Nienke Miltenburg-Soeters (NL) Cristina Mitea (NL) Hassan Mohammed (UK) Goran Mrak (HR) Fernando Muñoz-Hernández (ES) Kazimierz Niemczyk (CZ) Rupert Obholzer (UK)

Ben Panizza (AU) Omar Pathmanaban (UK) Maria Peris Celda (US) Anco Peeters (NL) Guy Petruzzelli (US) Carlos Pinheiro-Neto (US) Lars Poulsgaard (DK) Ineke Pruijn (NL) Lina-Elisabeth Qasem (DE) Ricardo Ramina (BR) Shaan Raza (US) Shakeel Saeed (UK) Remco Santegoeds (NL) Jörg Schipper (DE) Sebastian Schraven (DE) Sammy Schouten (NL) Martin Schuhmann (DE) Jonathan Shapey (UK) Carl Snyderman (US) Thomas Somers (BE) Liesbeth Spruijt (NL) Maarten Steinbuch (NL) Terje Sundstrøm (NO) Robert Takes (NL) Necmettin Tanriover (TR) Marcos Tatagiba (DE) Yasin Temel (NL) Nick Thomas (UK) Stefania Tuinder (NL) Mirko Unipan (NL) Kyle van Koevering (US) Jeroen Verheul (NL) Eduard Voormolen (NL) Eric Wang (US) Jerome Waterval (NL) Samy Youssef (US) Georgios Zenonos (US)