State of the Art and Innovations in Gliomas

28th – 29th May 2018

Jugendstilhörsaal
Rektoratsgebäude (BT 88) Level 02
Medical University Vienna
Spitalgasse 23, 1090 Vienna

Department of Neurosurgery
Medical University Vienna
Dear colleagues!

I am very delighted to welcome you to the 25th Neurosurgical Oncology Meeting at the Medical University in Vienna. The main focus of our Meeting will be on “State of the Art and Innovations in Gliomas”. We invite participants from all disciplines involved and interested in the management of this challenging tumor entity.

National and international experts from 8 different countries are expected to join our Meeting (United States, Russia, Sweden, Germany, Netherlands, Switzerland, Czech Republic and Austria). We are very honored that the Chairman of the Department of Neurological Surgery from the University of California, San Francisco, Mitchel S. Berger will be our special guest and will give two key note lectures. Additionally, also young colleagues and scientists will have the possibility to present their work.

Our Meeting will provide a great opportunity to update the knowledge as well as discuss innovations, exchange ideas and create new collaborations between young and experienced colleagues of different disciplines.

I am looking forward to welcoming you in Vienna for these interesting and exiting two days.

Georg Widhalm
Meeting of the Section for Neurosurgical Oncology (ANCO) of the Austrian Neurosurgical Society 2018

Day 1, Monday May 28th

10:00-10:10 Welcome  
Georg Widhalm, Medical University Vienna

Keynote Lecture

Introduction: Engelbert Knosp, Medical University Vienna

10:10-10:40 Value of brain mapping to achieve maximal safe glioma resection  
Mitchel S. Berger, University of California, San Francisco, US

State of the Art Session I

Chairs: Asgeir Jakola (Sahlgrenska University Hospital Goteborg, Sweden)  
Engelbert Knosp (Medical University Vienna)

10:40-11:00 Epidemiology, histopathology and molecular markers in gliomas  
Adelheid Wöhrer, Medical University Vienna

11:00-11:20 Anatomical considerations in gliomas  
Peter Winkler, University Clinic Salzburg (angefragt)

11:20-11:40 Management of seizures in glioma patients  
Ekaterina Patariaia, Medical University Vienna

11:40-12:00 Radiology and advanced imaging methods in gliomas  
Franz Payer, Medical University Graz

12:00-12:20 Functional imaging in gliomas  
Gregor Kasprian, Medical University Vienna

12:20-12:40 Positron emission tomography for investigation of gliomas  
Tatjana Traub-Weidinger, Medical University Vienna

12:40-13:40 Lunch break
Neurosurgical Session

Chairs: Philip C. de Witt Hamer (VU University Medical Center, Amsterdam, Netherlands)
Georg Widhalm (Medical University Vienna)

13:40-14:00  The impact of extent of resection in glioma surgery
Asgeir Jakola, Sahlgrenska University Hospital Goteborg, Sweden

14:00-14:20  Resection probability maps to evaluate glioma surgery
Philip C. de Witt Hamer, VU University Medical Center, Amsterdam, Netherlands

14:20-14:40  Glioma surgery assisted by multimodal imaging
Engelbert Knosp, Medical University Vienna

14:40-15:00  Intraoperative visualization of gliomas with fluorescence
Georg Widhalm, Medical University Vienna

15:00-15:20  Intraoperative MRI for improved resection of gliomas
Christian Senft, University Hospital Frankfurt, Germany

15:20-15:40  Coffee break

State of the Art Session II

Chairs: Karin Dieckmann (Medical University Vienna)
Matthias Preusser (Medical University Vienna)

15:40-16:00  Radiotherapy for treatment of gliomas
Meinhard Nevinny-Stickel, Medical University Innsbruck

16:00-16:20  Oncological treatment options in gliomas
Stefan Oberndorfer, University Clinic St. Pölten

16:20-16:40  Proton Beam therapy as a new treatment option in gliomas
Eugen B. Hug, MedAustron Wiener Neustadt

16:40-17:00  Neuropsychology and quality of life in glioma patients
Gabriele Schauer-Maurer, Medical University Innsbruck

17:00  Drinks and Networking
Day 2, Tuesday May 29th

**Guest lecture at the Medical University Vienna**

09:00-10:00  *Current concepts in the management of low-grade gliomas*
  *Mitchel S. Berger, University of California, San Francisco, US*

10:00-10:30  **Coffee break**

**Scientific Session I – Basic Research in Gliomas**

*Chairs:* Sabine Spiegl-Kreinecker (Johannes Kepler University Linz)
  Walter Berger (Medical University Vienna)

10:30-10:50  *Surgery meets lab: translational research on glioma*
  *Sabine Spiegl-Kreinecker, Johannes Kepler University Linz*

10:50-11:00  *Targetable molecular alterations in gliomas*
  *Daniela Lötsch, Medical University Vienna*

11:00-11:10  *Inflammatory microenvironment in gliomas*
  *Anna S. Berghoff, Medical University Vienna*

11:10-11:20  *Immunological learnings from a phase II glioblastoma immunotherapy trial*
  *Friedrich Erhart, Medical University Vienna*

11:20-11:30  *DNA methylation landscapes in recurrent glioblastomas*
  *Barbara Kiesel, Medical University Vienna*

**Scientific Session II – Preoperative Imaging and Function in Gliomas**

*Chairs:* Martha Nowosielski (Medical University Innsbruck)
  Gregor Kasprian (Medical University Vienna)

11:20-11:40  *Innovations in MRI analysis of gliomas*
  *Martha Nowosielski, Medical University Innsbruck*

11:40-11:50  *First experience with phosphor spectroscopy in gliomas*
  *Johannes Kerschbaumer, Medical University Innsbruck*
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<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker/Institution</th>
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<tbody>
<tr>
<td>11:50-12:00</td>
<td>High resolution mapping of gliomas with 7 Tesla magnetic resonance imaging</td>
<td>Gilbert Hangel, Medical University Vienna</td>
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<td>12:00-12:10</td>
<td>Transcranial magnetic stimulation (TMS): a powerful tool to localize brain function?</td>
<td>Christian Windischberger, Medical University Vienna</td>
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<td>12:10-12:20</td>
<td>Non-Invasive and Intraoperative Language Mapping in Glioma Patients: A Comparative Study Using Continuous Theta Burst TMS and DCS</td>
<td>Sascha Freigang, Medical University Graz</td>
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<td>12:20-12:30</td>
<td>Resting state MRI: Manifold learning to map functional brain architecture across individuals</td>
<td>Georg Langs, Medical University Vienna</td>
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<td>12:30-12:40</td>
<td>Impact of epileptogenic gliomas on the language network</td>
<td>Olivia Fösleitner, Medical University Vienna</td>
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12:40-13:40  Lunch break

Scientific Session III – Improved Visualization of Gliomas

*Chairs: Sergey Goryayanov (Burdenko Institute Moscow, Russia)*
*Gord von Campe (Medical University Graz)*

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<tr>
<td>13:40-14:00</td>
<td>The value of 5-ALA fluorescence in low-grade gliomas</td>
<td>Sergey Goryayanov, Burdenko Institute Moscow, Russia</td>
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<td>14:00-14:10</td>
<td>Ex-vivo quantitative analysis of 5-ALA fluorescence for detection of histopathological heterogeneity in gliomas</td>
<td>Mauricio Martinez-Moreno, Helios Hospital Schwerin, Germany</td>
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<td>14:10-14:20</td>
<td>In-vivo quantitative analysis of 5-ALA fluorescence to visualize suspected low-grade gliomas: Collaborative study of UCSF and Dartmouth</td>
<td>Jonathan Weller, University Hospital Zürich, Switzerland</td>
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<td>14:20-14:30</td>
<td>Intraoperative detection of glioblastoma tissue in initially suspected low-grade gliomas: Experience at MUV and UCSF</td>
<td>Arthur Hosmann, Medical University Vienna</td>
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<td>14:30-14:40</td>
<td>Semiquantitative analysis of 5-ALA fluorescence levels in glioblastomas</td>
<td>Mario Mischkulnig, Medical University Vienna</td>
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<td>14:40-14:50</td>
<td>Combined use of 5-ALA fluorescence and intraoperative MRI in glioma surgery</td>
<td>Martin Aichholzer, Johannes Kepler University Linz</td>
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<td>14:50-15:00</td>
<td>Ultrasound-based Navigation in Glioma Surgery</td>
<td>Michael Bartos, University Hospital Hradec Kralove, Czech Republic</td>
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15:00-15:10  **New techniques for intraoperative tissue diagnosis**  
Stefan Wolfsberger, Medical University Vienna

15:10-15:20  **Ultramicroscopy as a new tool for 3D histopathology of tumors**  
Hans-Ulrich Dodt, Vienna University of Technology

15:20-15:40  **Coffee break**

### Scientific Session IV – Management of Gliomas

**Chairs:** Christian Freyschlag (Medical University Innsbruck)  
Christine Marosi (Medical University Vienna)

15:40-16:00  **The value of tumor treating fields in high-grade gliomas**  
Christian Freyschlag, Medical University Innsbruck

16:00-16:10  **Resection probability maps of glioblastoma in surgical decision-making: A focus on MUV**  
Domenique Mueller, VU University Medical Center, Amsterdam, Netherlands

16:10-16:20  **Surgery of recurrent glioblastomas: Indications, surgical outcome and histology**  
Florian Scheichel, University Clinic St. Pölten

16:20-16:30  **Radiosurgical treatment of recurrent high-grade gliomas**  
Josa Frischer, Medical University Vienna

15:30-16:40  **Perioperative challenges in surgery of complex glioma cases**  
Wolfgang Pfisterer, SMZ Ost Vienna

16:40-16:50  **NN**  
Stefan Schweiger, Hospital Wr. Neustadt

16:50-17:00  **Management of glioma patients in Europe and South Africa: Personal experience from the Tygerberg Hospital**  
Petra A. Mercea, Medical University Vienna

17:00-17:05  **Closing remarks**  
Georg Widhalm, Medical University Vienna