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P01 Glioma - Clinical Aspects

P01.001

Bevacizumab use in adult pilocytic astrocytoma, a single center experience

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P01.002

Evaluation of 31-P-MR-Spectroscopy in malignant glioma correlated with histopathological results and intraoperative fluorescence

*C. F. Freyschlag, J. Kerschbaumer, R. Steiger, D. Pinggera, E. R. Gizewski, C. Thomé;
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P01.003

Botulinum toxin therapy to improve Tumor Treating Field (TTF) compliance: A case report

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P01.004

New techniques in Radiotherapy for brain tumors, brain metastasis and pediatric gliomas, VMAT (volumetric modulated arc therapy) and SIB technique (simultaneous integrated boost) - Neuroaxis Radiation

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P01.005

The impact of thrombocytopenia from concomitant and adjuvant temozolomide in patients with glioblastoma

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P01.006

Gamma knife radiosurgery for diffuse low-grade gliomas: An Egyptian experience.

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P01.007

Absence of Correlation between Necrosis Volume and Overall Survival in Glioblastoma

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P01.008

Feasibility of a structured tumor related epilepsy education intervention in adult gliomas

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P01.009

Micro-infiltration before growth: the inverse paradigm of primary glioblastoma is crucial to overcome resistance and develop effective therapies

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P01.010**Patterns of care in glioma patients surviving beyond ten years**

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P01.011

Fluorescence diagnosis with 5 ALA and noncontrast ASL-perfusion in the planning of brain gliomas surgery

S. Goryaynov, A. Batalov, Zakharaova N., Pronin I., Baev A., Pogosbekyan E., Fadeeva L., Chelushkin D., Potapov A.;
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P01.012**Tumor Treating Fields (TTFields) in combination with lomustine (CCNU) and temozolomide (TMZ) in patients with newly diagnosed glioblastoma (GBM)**

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P01.013

Long-term analyses of the NOA-08 randomized phase III trial of temozolomide versus radiotherapy for elderly patients with malignant astrocytomas

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P01.014**Spatial correlation of FET uptake and MRI contrast enhancement in newly diagnosed glioblastoma patients prior to treatment**

P. Lohmann¹, P. Stavrinou², K. Lipke¹, E. K. Bauer³, G. Ceccon³, J. Werner³, G. R. Fink^{1,3}, N. J. Shah^{1,4}, K. Langen^{1,5}, N. Galldiks^{1,3};

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P01.015

Survival rates in patients with glioblastoma multiforme after combined therapy: a population-based study

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P01.016**Caregiver Burden and Distress in Newly Diagnosed Gliomas: A Prospective Analysis**

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P01.017**Geriatric Assessments in Neuro Oncology - a viable prospect**

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P01.018

Mismatch repair deficiency (MMRd) in glioma patients (PTS): frequency and correlation with clinical, histological and molecular characteristics

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P01.019

Blood derived exosomal hTERT mRNA in glioblastoma: A potential circulating biomarker

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P01.020

Results of treatment with bevacizumab in patients with recurrent high grade brain glioma

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P01.021

Comprehensive Geriatric Assessment (CGA) for outcome prediction in elderly patients (PTS)with glioblastoma (GBM): a mono-institutional experience.

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P01.022

Non-measurable speckled contrast-enhancing lesions appearing during course of disease are associated with IDH mutation in high-grade astrocytoma patients

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P01.023

Intraoperative mapping of long associated tracts in surgery of brain gliomas

S. Goryaynov, V. Jukov, S. Buklina, D. Pitzhelauri, A. Potapov, A. Ogurtsova, A. Batalov, N. Zakharova;
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P01.024

Corticosteroid use in elderly patients with newly diagnosed glioblastoma in the United States

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P01.025

MiRNA-181d expression significantly affects treatment responses to carmustinewafer implantation

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P01.026

Local control and radiologic effects in a glioblastoma patient treated with Tumor Treating Fields (TTFields) and chemotherapy

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P01.027

Pseudoprogession in glioblastoma: how sure are radiologists in location of „ high-dose RT region“

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P01.028

Tumor treating fields and radiotherapy for newly diagnosed glioblastoma: Safety results from a pilot study

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P01.029

Open-label phase 1 clinical trial testing personalized and targeted skull remodeling surgery to maximize TTF fields intensity for recurrent glioblastoma - Interim analysis and safety assessment (OptimalTTF-1)

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P01.030

Combination of Tumor Treating Fields (TTFields) and radiochemotherapy in patients with newly diagnosed glioblastoma

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P01.031

VXM01 phase I study in patients with progressive glioblastoma - final results

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P01.032

Associations of anticoagulant use with outcome in newly diagnosed glioblastoma

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P01.033

Increased compliance with tumor treating fields is prognostic for improved survival in the treatment of glioblastoma: A subgroup analysis of the EF-14 phase III trial

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P01.034

Prospective evaluation of alternative therapies in glioma patients in France

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P01.035

Nivolumab and Temozolomide (TMZ) vs TMZ alone in newly diagnosed elderly patients (pts) with Glioblastoma (GBM) (NUTMEG): Trial in progress

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P01.036**Treatment of Glioblastoma - improvements over two decades at a single centre.**

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P01.037**Quality criteria for glioma care, use in clinical practice: results of a national survey**

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P01.038

Drug resistance and recurrence in glioblastoma: molecular cytogenetic analysis in paired primary and recurrent form

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P01.039**Development of signaling questions assessing distress and quality of life in glioma patients - Results of 50 interviews and an expert analysis.**

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P01.040**Identification of a predictive biomarker of response to regorafenib in relapsed glioblastoma patients <REGOMA trial>**

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P01.041

Secondary prophylaxis with romiplostim for temozolomide-induced thrombocytopenia in newly diagnosed glioblastoma

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P01.042**Symptom clusters in newly diagnosed glioma patients: which clusters are associated with functioning and global health status?**

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P01.043

Is surgical resection useful in elderly newly diagnosed glioblastoma patients? Outcome evaluation and prognostic factors assessment

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P01.044

Impact of the addition of vinorelbine to temozolomide in the first-line treatment of pediatric high grade gliomas

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P01.045

Adherence to Tumor Treating Fields in patients with high-grade glioma - a single center experience

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P01.046

Complete radiological response under treatment with Tumor Treating Fields following subtotal resection in a series of three Glioblastoma patients

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P01.047

Improving quality of life in glioma patients: platform for exchange of patients' expertise in TTFields practice

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P01.048

A novel transducer array layout for delivering Tumor Treating Fields to the infratentorial brain at therapeutic levels.

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P01.049

Prediagnostic presentations of glioma in primary care: a case-control study

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P01.050

Circulating MACC1 transcript plasma levels in glioblastoma patients segregate together with prognostic markers and treatment response

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P01.051

Imaging based analysis of changes in grey and white matter in glioblastoma patients treated with tumor treating fields

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P01.052

Updated results of the INTELLANCE 2/EORTC trial 1410 randomized phase II study on Depatux -M alone, Depatux-M in combination with temozolomide (TMZ) and either TMZ or lomustine (LOM) in recurrent EGFR amplified glioblastoma (NCT02343406)

M. van den Bent¹, P. French¹, M. Eoli², J. Sepulvado³, A. Walenkamp⁴, M. Weller⁵, J. Looman⁶, P. Ansell⁶, T. Gorlia⁷, V. Golfopoulos⁷;
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Madrid, Spain, ⁴UMCG, Groningen, Netherlands, ⁵University Hospital Zurich, Zurich, Switzerland, ⁶Abbvie, Chicago, IL, United States, ⁷EORTC, Brussels, Belgium.

P01.053

The role of PET- and MRI-derived [¹⁸F]FET PET parameters in the discrimination of low- and high-grade gliomas

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P01.054

Patterns of first tumor progression and impact on survival of salvage therapies in low-grade gliomas following initial chemotherapy with temozolomide

A. Pellerino, R. Rudà, A. Pace, C. Carapella, C. Dealis, M. Caroli, M. Faedi, L. Bello, R. Soffietti;

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P01.055

Multiple extracranial metastases in a patient with oligodendroglioma - a case report

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P01.056

Tumor Treating Fields therapy in a newly diagnosed glioblastoma patient with multiple sclerosis

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P01.057

Effects of tumor treating fields on health-related quality of life (HRQoL) in newly diagnosed glioblastoma: An exploratory analysis of the EF-14 randomized phase III trial

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P01.058

Higher immune associated markers (PD-L1, PD-1, TMB, MSI) in gliosarcoma compared to glioblastoma.

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P01.059

Technical features of a medical device generating alternating electric fields (Tumor Treating Fields) for the treatment of glioblastoma

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P01.060

PriCoTTF: a phase III trial of Tumor Treating Fields prior and concomitant to radiotherapy in newly diagnosed glioblastoma

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P01.061**Autologous dendritic cells vaccination and standard radio-chemotherapy in patients with newly diagnosed glioblastoma: a retrospective single-center series**

I. Esparragosa¹, S. Inoges², A. L de Cerio¹, J. Espinos³, J. Aristu³, M. Puigdelloses⁴, M. Alonso⁴, S. Tejada-Solis⁵, R. Díez-Valle⁵, J. Gállego Pérez-Larraya¹;

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P01.062**Probability maps of glioblastoma indicate variation in surgical decisions between twelve surgical teams**

D. Müller¹, P. Robe², W. Van den Brink³, H. Ardon⁴, B. Idema⁵, F. Kloet⁶, M. Wagemakers⁷, F. Barkhof¹, P. Vandertop¹, L. Bello⁸, M. Conti Nibali⁹, M. Ross⁹, T. Sciortino⁹, G. Widhalm⁹, B. Kiese⁹, S. Han¹⁰, E. Mandonnet¹¹, M. Berger¹⁰, P. De Witt Hamer¹;

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P01.063**Influence of Pregnancy on Glioma Patients**

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P01.064**Correlation with MGMT pyrosequencing-based methylation levels and overall survival in glioblastoma patients with gross total resection and concomitant chemio and radiotherapy**

A. Parlange¹, E. Pirola¹, M. Caroli¹, C. Pesenti¹, S. Buonamassa², M. Miozzo¹, P. Rampini¹;

¹IRCCS Ca' Granda Policlinico, Milan, Italy, ²Quenn's Hospital, BHR NHS Trust, Romford, United Kingdom.

P01.065**Tumor treating fields (TTFields) in combination with lomustine (CCNU) in the EF-14 phase 3 clinical study - a safety analysis**

A. Kinzel¹, G. Lavy-Shahaf², E. Kirson²;

¹Novocure GmbH, Munich, Germany, ²Novocure Ltd., Haifa, Israel.

P01.066**Patients with EGFR amplification but without EGFRvIII expression have improved benefit compared to those with EGFRvIII expression in samples of the INTELLANCE 2/EORTC 1410 randomized phase II trial**

P. J. French¹, J. Kros², I. de Heer¹, P. Ansel³, J. Looman³, E. Bain³, M. Morfouace⁴, T. Gorlia⁴, V. Goffinopoulos⁴, M. van den Bent¹;

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P01.067**Multicenter, single arm, phase II trial on the efficacy of ortataxel in recurrent glioblastoma: the experience of the Italian Association of Neuro-Oncology**

G. Simonetti¹, A. Silvani¹, E. Biagioli², A. Botturi¹, M. Caroli³, I. De Simone², V. Fregoni⁴, P. Gaviani¹, A. Lanza⁴, E. Marchioni⁵, A. Pace⁶, E. Quaquarini⁴, A. Salmaggi⁷, M. D'Incalci²;

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P01.068**The anti-tumor effect of androgen receptor antagonist on GBM may result, at least partially, through attenuation of CDK4 and CDC14a expression.**

N. Zalcman, A. Mordechai, A. Lossos, I. Lavon;

Hadassah Hebrew University Medical Center, Jerusalem, Israel.

P01.069**Re-irradiation for recurrent glioma: outcome evaluation, toxicity and prognostic factors assessment. A multicenter retrospective study by the Brain-Study-Group of the Radiation Oncology Italian Association (AIRO).**

P. Navarra¹, G. Minniti², V. Pinzi³, L. Draghini⁴, V. Borzillo⁵, P. Ciammella⁶, S. Scoccianti⁷, D. Amelio⁸, M. Krengli⁹, M. Buglione di Monale¹⁰;

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P01.070

Increasing TTFields acceptance with a patient-oriented communication

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P01.071

Genomic profiling identifies tubulin mutations that may predict response to depatuzumab mafodotin in patients with glioblastoma

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P01.072

Hydroxychloroquine and short course radiotherapy for elderly patients with glioma: a randomised study

L. Brazil¹, A. Swampillai¹, K. Mak², A. Hackshaw², D. Edwards², P. Mesiri², L. Clifton-Hadley², R. Shaffer³, J. Lewis⁴, C. Watts⁵, P. Gkogkou⁶, A. Chalmers⁷, N. Fersht⁸, S. C. Short⁹;

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P01.073

Hypofractionated radiation therapy (over 3 weeks) can replace conventional radiation therapy schedule (over 6 weeks) in newly diagnosed glioblastoma patients? The times are ripe

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P01.074

Interest of QulD-7 for insular localization gliomas

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P01.075

Understanding cognitive functioning in diffuse glioma patients: the relevance of IDH mutation status and functional connectivity

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P01.076

Experience with tumor treating fields (TTFields, Optune®) in Israel - patient compliance and adverse effects

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P01.077

Optimizing array layouts for glioblastoma therapy with tumor treating fields (TTFields) - Use of oblique array layouts surpass default left-right/anterior-posterior positions in a computer simulation model

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P01.078

Glioma surgery in the elderly, a retrospective population based registry study

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P01.079

Determining the content validity of measures of basic and instrumental activities of daily living (ADL) in patients with brain tumours, a systematic review.

Q. Oort¹, M. Taphoorn², S. Sikkes¹, B. Uitdehaag¹, J. Reijneveld¹, **L. Dirven³**;

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P01.080

Individual diagnosis of adult diffuse gliomas into the EM/PM molecular subtypes

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P01.081

Can psychological profile change during RT and influence survival in patients affected by high grade gliomas? Final report of a prospective study

L. Dinapoli¹, S. Chiesa¹, R. Gatta¹, F. Beghella Bartoli¹, G. Sabatino², **T. Zinicola¹**, F. Catucci¹, A. Oliv², V. Valentini¹, M. Balducci¹;

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P01.082

International survey regarding use of MGMT analyses for glioma

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P01.083

Expression and prognostic value of the immune checkpoint molecule galectin-9 in glioblastomas

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P01.084

Re-irradiation in recurrent glioblastoma: proton therapy with or without chemotherapy

D. Amelio¹, D. Scartoni¹, P. Farace¹, L. Widesott¹, S. Vennarini¹, F. Fellin¹, S. Brugnara², R. Pagone², M. Schwarz¹, M. Amichetti¹;

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P01.085

Experience with TTFIELDS (Optune®) in pediatric high grade glioma patients in Israel

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P01.086

Health-Related Quality of Life in recurrent Glioblastoma treated with re-irradiation with active scanning Protontherapy

D. Scartoni, **D. Amelio**, I. Giacomelli, M. Amichetti;

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P01.087

Reduced language lateralization in patients with a left-hemispheric glioma

G. Kaya, J. M. Jansma, G. J. M. Rutten;

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P01.088

Brain resection cavity delineation for radiation target volume definition in glioblastoma patients using deep learning

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P01.089

The patients' perspective on information level about supportive care in glioma patients - post-hoc evaluation and development of an online survey focusing on patients' information needs, clinical studies and alternative therapies.

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P01.090

Patterns of care and clinical outcome in patients with glioblastomas without histological verification: a population-based prospective study of 132 consecutive patients

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P01.091

A robust method for rapidly simulating TTFields distributions within patient-specific computational head models

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P01.092

Salvage Frameless Stereotactic Radiosurgery as first treatment option for recurrent brain metastases. May durable intracranial control be achieved?

P. A. Jablonska, M. Gimeno, L. Arbea, M. Moreno, D. Azcona, L. Ramos, B. Barbés, M. Santisteban, I. Gil Bazo, M. A. Idoate, M. R. García de Eulate, S. Tejada, R. Díez Valle, J. J. Aristu;
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P01.093

The level of reporting of neurocognitive outcomes in randomized controlled trials of brain tumour patients: a systematic review

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P01.094

Hypofractionated Stereotactic Radiation Therapy and Durvalumab combination in recurrent Glioblastoma (GBM): Results of the phase I part of the phase I/II STERIMGLI trial

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P01.095

The use of TTFields for newly diagnosed GBM patients in Germany in routine clinical care (TIGER: TTFields in Germany in routine clinical care)

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P01.096

Hypofractionated radiotherapy and temozolomide in patients with glioblastoma and poor prognostic factors other than age - is it worth it?

P. A. Jablonska, M. Gimeno, A. García-Consuegra, L. Arbea, M. Moreno, D. Azcona, B. Barbés, L. Ramos, J. M. Aramendía, A. Gúrpide, J. Guridi, R. Díez Valle, A. Tomás-Biosca, P. Domínguez, J. Arbizu, M. A. Idoate, J. J. Aristu;
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P01.097

Subclassification of low-grade gliomas considering TERT promoter mutation and ATRX loss: beyond the 2016 WHO classification

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P01.098

Have we been still defeated with treatment of GBM IDH wild-type recurrency

O. Kalita, M. Vaverka, L. Hrabalek, D. Vrana, R. Trojanec, Z. Sporikova, M. Hajduch, J. Drabek, P. Hok, P. Hlustik, L. Tuckova, J. Vrbkova;
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P01.099

Psychiatric alterations and behavioural changes in brain tumor patients

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P01.100

Tumour treating fields: Acceptable, tolerable, and can we reduce cost?

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P01.101

Treatment and survival of patients with lower grade glioma according to the 2007 and the 2016 WHO classification: A retrospective analysis of 423 patients.

E. Steidl, P. Zeiner, M. Wagner, E. Fokas, M. Forster, M. Ronellenfitsch, J. P. Steinbach, P. N. Harter, **O. Bähr**;
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P01.102

Cost effectiveness of treating glioblastoma patients age 65 years or older with Tumor Treating Fields plus Temozolomide versus Temozolomide alone

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P01.103

Molecular landscape of diffuse gliomas associated with seizures

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P01.104

Evaluation of high signal intensity in globus pallidus and dentate nucleus on unenhanced T1-weighted images after administration of Dotarem vs. Gadavist in brain tumor patients who undergo multiple MRI evaluations

S. Rozenblatt, J. Luckman, S. Yust-Katz, **T. Siegal**;
Rabin Medical Center, Petach Tikva, Israel.

P01.105**Clinical and imaging features of pseudoprogression in malignant glioma.**

S. F. Winter^{1,2}, E. J. Vaio¹, A. Muzikansky³, M. R. Bussière⁴, H. A. Shih⁴, M. Martinez-Lage⁵, F. Loebe⁶, P. Vajkoczy², J. Dietrich^{1,6};
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P01.106

Impact of intraoperative magnetic resonance imaging on the extent of resection and functional outcome in awake surgery for eloquent gliomas - a single center retrospective study

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P01.107**Resection of supratentorial lesions employing a combined surgical aspiration and monopolar stimulation device**

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Department of Neurosurgery, Frankfurt am Main, Germany.

P01.108**Use of complementary and alternative medicine in glioma patients**

C. Hertler¹, U. Roelcke², K. Conen^{3,4}, F. Huber⁵, T. Weiss⁵, S. Hofer^{6,7}, O. Heese⁸, M. Westphal⁹, P. Roth¹, M. Weller¹, G. Eisele¹;
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P01.109**Tumor treating fields treatment for patients with newly diagnosed glioblastoma: a cost-effectiveness analysis for Sweden**

G. F. Guzauskas¹, B. C. M. Wang¹, A. Kinzel², **C. Proescholdt**³;
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P01.110**Elderly patients >65years of age with newly diagnosed Glioblastoma multiforme gain life time from treatment with Tumor Treating Fields and Temozolomide**

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P01.111**Using the ASCO and ESMO frameworks to assess the clinical value of tumor treating fields for newly diagnosed Glioblastoma multiforme**

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P01.112**The challenge of health utility values for glioblastoma patients with long-term survival**

C. Proescholdt¹, J. Kelly², A. Kinzel³;
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P01.113**Increasing TTFelds dose to the tumor bed improves overall survival in newly diagnosed glioblastoma patients**

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P01.115**TERT as a biomarker in gliomas**

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P01.116**Treatment with Dabrafenib in a patient with BRAF mutated recurrent ganglioglioma**

F. Pasqualetti¹, A. Gonnelli², A. Molinar², M. Cantarella³, R. Mattioni², D. Baldaccini¹, M. Grazzini⁴, F. Paiar², R. Rudà⁵, R. Soffietti⁵;

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P01.117**Differentiating high grade gliomas with CT based radiomics**

I. Compter¹, M. Verduin², H. C. Woodruff³, R. T. H. Leijenaar³, A. A. Postma⁴, A. Hoeben², D. B. P. Eekers^{1,5}, P. Lambin³;

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P01.118**Prognostic factors and management of gliomatosi cerebri (GC) from real life experience of two neurooncology centers**

G. Lombardi¹, L. Bellu², G. Sabatino³, M. Caccese¹, F. Bert², F. Busato², A. Della Puppa⁴, D. D'Avella⁵, A. Olivi³, V. Zagone¹;

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P01.119**TSPO imaging in High Grade Glioma - a multitracer PET, MRI and neuropathology study**

E. Agushi, D. Lewis, R. Hinz, D. Coope, A. Jackson;

Wolfson Molecular Imaging Centre, Manchester, United Kingdom.

P01.120**Importance of systematic TERT promoter and IDH mutations screening in non-diagnostic biopsies from patients with a suspected glioma**

M. Barritault^{1,2}, T. Picart¹, D. Poncet¹, T. Fenouil¹, J. Guyotat¹, E. Jouanneau¹, B. Joubert¹, A. Vasiljevic¹, J. Honorat¹, D. Meyronet¹, F. Ducray^{1,3};

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P01.121**Optune treatment does not affect quality of life in treatment of high grade glioma compared to chemo-radiotherapy alone**

J. Onken¹, U. Goerling¹, M. Heinrich¹, S. Guenes², D. Krex³, P. Vajkoczy¹, M. Misch¹;

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P01.122**Safety, immunogenicity and optimization of the IMA950 multipeptide vaccine combined with Poly-ICLC in newly diagnosed HLA-A2 malignant glioma patients**

D. Migliorini^{1,2}, V. Dutoit², M. Allard³, S. Mohan³, A. Lobrinus³, D. Merkler³, M. Vargas³, P. R. Walker², A. Patrikidou², P. Dietrich²;

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P01.123

Matched-pair analysis of long- versus short-term survivors of glioblastoma: molecular markers make the difference

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P01.124

The expression of CD40 correlates negatively with overall survival of gliomas

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P01.125

intraventricular high grade glioma : neuroendoscopy and adjuvant therapy

P. Oppido, F. Cattani, C. Carapella, V. Villani;
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P01.126

FREQUENT TP53 AND ATRX/DAXX GENE ALTERATIONS IN GIANT CELL IDH-WILDTYPE GLIOBLASTOMAS

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P01.127

The impact of first MR in clinical decision making of patients with high grade glioma treated with radio-chemotherapy

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P01.128

Clinical epidemiology and risk factors for survival rate for high-grade glioma patients treated at the National Cancer Centre Hospital, Dharmais, Jakarta, Indonesia

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P01.129

Cost-effectiveness of [18F] FET for therapy assessment of temozolomide for patients with glioblastoma in a Belgian healthcare setting

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P01.130

Diffusion restriction on MR imaging in the T2 hyperintense, but otherwise normal-appearing white matter of glioblastoma patients treated with TTFields correlates with survival

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P01.131

Non-invasive detection of IDH-wildtype genotype in gliomas using dynamic 18F-FET-PET

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P01.132

A case of adult anaplastic ganglioglioma of the frontal lobe

E. Fotopoulou, G. Soulimioti, A. Theodoridou, S. Tzorakakis, I. Maravelis, K. Girmemis, E. Athanasiou; Radiation Therapy Department "Agiou Anargyroi" Cancer Hospital, Athens, Greece.

P01.133

Preoperative predictors of malignancy in non-enhancing glioma in the era of molecular classification

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P01.134

Extracranial spread of glioblastoma as the initial manifestation of the disease: case report and literature review

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P01.135

User experience with new, aesthetically improved transducer arrays for delivery of tumor treating fields for glioblastoma

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P01.136

Safety and adverse event profile of tumor treating fields in elderly patients - a post-market surveillance analysis

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P01.137

Long term follow-up of neuropsychological functions in patients with high grade gliomas: can cognitive status predict survival or tumor recurrence?

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P01.138

RADIO-CHEMOTHERAPY WITH TEMOZOLOMIDE IN ELDERLY PATIENTS WITH GLIOBLASTOMA: OUR EXPERIENCE

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P01.139

Safety and adverse event profile of tumor treating fields use in the EMEA region - a real-world data analysis

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P01.140

An H3.3K27M long peptide vaccine induces expansion of specific CD4 and CD8 T cell clones in a patient with progressive H3.3K27M-mutant midline glioma

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P01.141

Different timing to use bevacizumab in patients with recurrent glioblastoma: early versus delayed administration

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P01.142

Comparing Outcomes in Glioblastoma Multiforme patients undergoing Photodynamic Therapy with a Second-Generation Photosensitiser vs 5-Aminolevulinic Acid - A Single Site Retrospective Analysis

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P01.143**Unravelling the immune response components landscape in diffuse gliomas using immunophenotyping approach.**

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P01.144**TTFields for newly diagnosed Glioblastoma: Impact of consultation strategy**

A. Haj, C. Doenitz, C. Hohenberger, A. Brawanski, **M. A. Proescholdt**;

Department of Neurosurgery, Regensburg, Germany.

P01.145**Tumor growth dynamics in serially-imaged low-grade glioma patients**

J. F. Megyesi, C. Gui, S. Kosteniuk, J. Lau;

University of Western Ontario, London, ON, Canada.

P01.146**Neurocognitive changes after awake surgery for diffuse glioma; a retrospective cohort study**

E. van Kessel¹, T. J. Snijders¹, A. E. Baumfalk¹, C. Ruis¹, K. M. Van Baarsen¹, M. L. Broekman^{2,3}, M. J. E. van Zandvoort^{1,4}, P. A. Robe¹;

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P01.147**Recurrent glioblastoma or therapy-related changes: The diagnostic accuracy of O-(2-[18F]-fluoroethyl)-L-tyrosine PET imaging**

A. Bashir¹, S. Jacobsen², T. Urup¹, H. Broholm¹, K. Grunnet¹, S. Møller¹, O. Henriksen¹, V. Larsen¹, J. Skjøth-Rasmussen¹, H. Skovgaard Poulsen¹, I. Law¹;

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P01.148**Intra-tumor heterogeneity analysis of low-grade gliomas. A POLA Network study**

A. Alentorn^{1,2}, K. Labreche^{2,3}, C. Dehais¹, C. Carpentier², F. Ducray^{4,5}, K. Mokhtar^{6,2}, D. Figarella-Branger^{7,8}, M. Sanson^{1,2}, J. Delattre^{1,2}, A. Idbah¹, POLA Network;

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P01.149**Low-grade glioma post-Radiation therapy surveillance with advanced imaging techniques**

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P01.150**hypermutations in glioblastoma are associated with increased response to immunotherapy**

E. Anghileri¹, J. Zhao², M. Eoli¹, T. Langella¹, B. Pollo³, S. Indraccolo⁴, S. Pellegatta¹, A. Iavarone², R. Rabadar², G. Finocchiaro¹;

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P01.151**Gender differences in glioma - findings from the Swedish National Quality Registry for Primary Brain Tumors**

A. Malmström¹, L. Åkesson², T. Asklund³, S. Kinhult⁴, K. Werlenius⁵, G. Hesselager⁶, S. Hylén⁷, R. Henriksson⁸;

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P01.152

Evaluation of Factor V Leiden variant as risk a factor for venous thromboembolism in glioblastoma patients

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P01.153

The diagnostic pathway for brain tumours in adults Understanding factors causing slow diagnosis

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P01.154

Volumetric response to TTFields in newly diagnosed GBM.

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P01.155

Verbal fluency analysis may support diagnosis of patients with brain tumours

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P01.156

Verbal fluency as a brief cognitive screening tool in newly diagnosed brain tumour patients A potential red flag

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P01.157

Glioma patients show reduced default mode deactivation during complex language production

J. M. Jansma, G. Kaya, G. J. M. Rutten;
ETZ, Tilburg, Netherlands.

P01.158

Effect of radiation therapy on microstructural changes in the brain in patients with glioblastoma. A diffusion tensor imaging study

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P01.159

elderly glioblastoma 5-ALA guided resection

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P01.160

Social needs and social services provision in Brain Tumor patients

M. Rotondi, S. Focarelli, V. Villani, D. Benincasa, L. Guariglia, S. Ieraci, A. Pace;
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P01.161

Neurocognitive evaluation in elderly Glioma patients

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P01.162

Radiation-induced glioblastoma long survivor: Case report

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P01.163

Impact of absolute postoperative tumor volume on survival in glioblastoma and significance of MGMT-methylation status for benefit of increasing surgical resection

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P01.164

Cognitive and neuropsychological outcome after awake surgery for left frontal and left temporal tumor resection

F. Kilinc, A. Noack, I. Lortz, V. Seifert, M. Behrens, **M. Forster**;
Goethe University, Frankfurt, Germany.

P01.165

A prospective study investigating the Impact Of Multidisciplinary tumor Board in brain tumor management: the OMNYBuS Project

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P01.166

Survival with pineal region tumours - Is the outlook changing?

P. Nanda, J. Duffin, P. Kane, A. Varma;
James Cook University Hospital, Middlesbrough, United Kingdom.

P01.167

Impact of retreatment or chemotherapy on survival in patients affected by recurrent glioblastoma: analysis from a single institution.

C. Mazzarella¹, S. Chiesa¹, s. Bracci¹, T. Zinicola¹, **F. Beghella Bartoli¹**, S. Luzi¹, G. Sabatino², C. Anile², A. Olivè², V. Valentini¹, M. Balducci¹;
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P01.168

International Inconsistency in management of recurrent glioblastoma creates challenges in developing new clinical trials

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P01.169

Neurosurgical patterns of care for diffuse low-grade gliomas in Sweden between 2005 and 2015

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P02 Other Tumor - Preclinical Aspects

P02.01

Altered FoxM1 expression contributes to the meningioma malignancy and can be a critical target for the tumor progression.

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P02.02

NKG2D ligand expression and tumor dormancy in brain metastases

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P02.03

ALK expression can differentiate the WNT-activated type of medulloblastoma from choroid plexus carcinoma and ependymoma

A. A. Sobocińska¹, J. Trubicka², A. Karkucińska-Więckowska², M. Kaleta², W. Grajkowska¹, E. Matyja¹, M. Łastowska^{1,2};

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P02.04

Tumor treating fields induce immunogenic cell death resulting in enhanced antitumor efficacy when combined with anti-PD-1 therapy

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P02.05

Role of ErbB4 and its modulation as a therapeutic approach in medulloblastoma

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P02.06

De-novo ceramide synthesis in skull base chordomas suggests a correlation with tumor proliferation

E. La Corte^{1,2}, **M. Patané³**, C. Calatozzolo³, E. Maderna³, A. Raggi⁴, M. Dei Cas^{1,5}, R. Paron⁶, R. Ghidoni^{1,6}, P. Ferrol², B. Pollo³;

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P02.07

Brain-derived circulating DNA as a biomarker for radiotherapy-induced brain damage

C. Makranz¹, A. Zick¹, H. Zemmour¹, R. Shemer¹, R. Lehmann-Werman¹, B. Glaser¹, M. Maoz¹, E. Sapir¹, J. E. Cohen¹, Y. Dor¹;

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P02.08

Visualizing tumor cell - lymphocyte interactions in the brain metastatic cascade using *in vivo* two photon microscopy

M. Piechutta^{1,2}, A. S. Berghoff^{1,2}, M. A. Karreman^{1,2}, K. Gunkel^{1,2}, W. Wick^{1,2}, F. Winkler^{1,2};

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P02.09

Proteomic analysis of meningioma discovers new pathways and their activation including NEK9 and AKT

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P02.10

Aggressiveness of meningiomas is predicted by cell immortalization *in vitro* and dependent on TERT promoter mutations

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P02.11

Fluorescence imaging of meningoma cells with somatostatin receptor ligands - a *in vitro* study

S. Linsler, R. Ketter, J. Oertel, S. Urbschat;

Department of Neurosurgery, Saarland University, Homburg, Germany.

P02.12

***Moringa oleifera*, Lam extract as anti tumor through inhibition of ICAM-1 expression in brain tissue of white rat with metabolic syndrome**

M. A. Fikri, 2015, B. E. Rezkita, 2015, R. L. Putri, 2015;

Pathology Anatomy of Universitas Sebelas Maret, Surakarta, Central java, Indonesia.

P02.13

Before requiring a cure: towards preventing the outgrowth of brain metastases

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P02.14

Tumour Treating Fields (TTFields) demonstrate variable efficacy on high-grade paediatric brain tumour cell lines in a frequency-dependent manner

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P02.15

Expression and prognostic value of HER3 and HER4 in meningiomas - an immunohistochemical study

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P02.16

Evaluating the therapeutic potential of anti-CD19 chimeric antigen receptor T-cells in a murine model of human primary CNS lymphoma using long-term *in vivo* imaging

M. Mulazzani¹, S. Fräßle², S. Langer¹, I. von Mücke-Heim¹, V. Buchholz², A. Straube¹, D. Busch², L. von Baumgarten¹;

¹Department of Neurology, Ludwig-Maximilians-Universität, Munich, Germany, ²Institute for Medical Microbiology, Immunology and Hygiene, Technische Universität München, Munich, Germany.

P02.17

CHMP4B is upregulated in meningiomas

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Laboratory of Neurooncology and Experimental Neurosurgery, University Hospital of Cologne, Cologne, Germany.

P03 Nursing Perspective

P03.01

Nursing Intervention of coping with life changes for family caregiver of primary malignant brain tumor patient

H. SATO^{1,2}, Y. NARITA², Y. MIYAKITA²;

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P03.02

Ketogenic diets as an adjuvant therapy in glioblastoma (KEATING): A mixed method, randomised, feasibility study.

K. J. Martin-McGill^{1,2}, M. G. Chery^{3,4}, A. G. Marson^{1,2}, C. Tudur Smith⁵, M. D. Jenkinson^{1,2};

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P03.03

Case management in the Functional Unit of Neuro-Oncology in adult patients

A. Hernández Marfil, V. Granados Casas, L. Garrote Moliner, S. Cabrera Jaime;
Institut Català d'Oncologia, Badalona, Spain.

P03.04

Observational, prospective study on complications and tolerability of PICC (central venous catheter with peripheral insertion) in neurooncological patients.

G. Simonetti, A. Sommariva, C. Basso Ricci, E. Anghileri, A. Botturi, M. Eoli, P. Gaviani, E. Lamperti, C. Moreschi, **A. Silvani**;
IRCCS Neurologico Carlo Besta, milano, Italy.

P03.05

Supporting function of nurses to facilitate TTFIELDS therapy for primary and recurrent Glioblastoma in clinical routine

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P03.06

Introduction of post neuro oncology multidisciplinary team meeting clinic to improve patient pathway within a tertiary care centre.

F. R. Berki;

Queen Elizabeth Hospital Birmingham, Birmingham, United Kingdom.

P03.07

A Care Pathway for personalized healthcare

F. Brienen, S. Bossmann, R. Smeenk, A. Gijtenbeek, S. Mulder, M. ter Laan;
Radboudumc, Nijmegen, Netherlands.

P04 Glioma - Preclinical Aspects

P04.01

Synergistic antitumor effects of a combined therapy consisting of immune checkpoint inhibitors and tumor-targeting nanoparticles in glioblastoma

M. Shevtsov^{1,2}, S. Stangl¹, B. Nikolaev³, S. Edmond^{1,4}, L. Yakovleva³, Y. Marchenko³, V. Ryzhov⁵, B. Margulis⁶, E. Pitkin⁷, G. Multhoff¹;

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P04.02

Adoptive transfer of lymphokine activated NK cells in combination with anti-PD-1 immune checkpoint inhibitor in therapy of glioblastoma

M. Shevtsov^{1,2}, E. Pitkin³, B. Nikolaev⁴, L. Yakovleva⁴, Y. Marchenko⁴, I. Guzhova⁵, B. Margulis⁵, G. Multhoff¹;

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P04.03

BMP4 regulates glioblastoma invasion through negative regulation of Snail1 signaling pathway

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P04.04

Regulation of glioma cell invasion by 3q26 gene products PIK3CA, SOX2 and OPA1

S. Leu¹, A. Ramadoss², T. Schaefer³, L. Tintignac⁴, C. Tostado², A. Bink⁵, G. Moffa⁶, P. Demougin⁷, S. Moes⁸, L. Mariani¹, J. Boulay²;

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P04.05

"The Development Tumor Model" used to reproduce and follow glioblastoma evolution in the whole brain and to test and monitor novel therapies

E. Brognaro;

Department of Neurosurgery, S. Maria della Misericordia Hospital, Rovigo, Italy.

P04.06

Temozolomide influence on global DNA methylation in glioblastoma cell lines

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P04.07

Mild-thermic intracranial drug delivery using biodegradable wireless electronics for glioblastoma treatment

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P04.08

GLIOTRAIN: Exploiting Glioblastoma intractability to address European research training needs in translational brain tumour research, cancer systems medicine and integrative multi-omics

A. C. O'Farrell, A. T. Byrne, *The GLIOTRAIN Consortium;*
Royal College of Surgeons in Ireland, Dublin, Ireland.

P04.09

MicroRNA analysis of the invasive margin of Glioblastoma reveals druggable therapeutic targets in lipid metabolism pathways

H. Alfardus, M. de los Angeles Estevez Cebrero, J. Rawlinson, A. Lourdasamy, R. Grundy, A. McIntyre, S. Smith;
University of Nottingham, Nottingham, United Kingdom.

P04.10

Chains of magnetosomes induce full destruction of intracranial U87-Luc and subcutaneous GL-261 glioma in mice under the application of an alternating magnetic field.

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¹UPMC, Paris, France, ²Kremelin Bicetre, Paris, France, ³MNHN, Paris, France, ⁴Nanobacterie, Paris, France.

P04.11

Profound sensitivity of glioblastoma cells to apoptosis induction by TG02, a novel oral multi-cyclin-dependent kinase inhibitor

E. Le Rhun¹, C. Von Achenbach¹, B. Lohmann¹, M. Silginer¹, H. Schneider¹, K. Meetze², E. Szabo¹, M. Weller¹;
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P04.12

The preclinical efficacy study using mesenchymal stem cells expressing TRAIL & CD for glioblastoma.

S. Ahn, S. Jeun;
Seoul St.Mary's Hospital, Seoul, Korea, Republic of.

P04.13

LRIG3 and Soluble LRIG3 Ectodomain both inhibit the Proliferation and Invasion of Glioma cells *in vitro* and *in vivo* through modulation of Met-PI3K-Akt pathway

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Department of Neurosurgery, Tongji Hospital, Wuhan, Hubei, China, China.

P04.14

Multimomics analysis on primary and recurrent paired tumors reveals a possible immune evasion mechanism through reduced neoantigen expression in some glioma

T. Nejo^{1,2}, H. Matsushita², T. Karasaka², M. Nomura¹, S. Takayanagi¹, S. Tanaka¹, A. Mukasa¹, K. Kakim², N. Saito¹;
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P04.15

Autophagy induction following TTFIELDS application serves as a survival mechanism mediated by AMPK signaling

Y. Porat¹, A. Shteingauz¹, T. Voloshin¹, R. Schneiderman¹, **M. Giladi**¹, E. Kirson¹, U. Weinberg², A. Kinzel³, Y. Palti¹;
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P04.16

Tumor treating fields affect invasion properties and cell morphology of various cancer cells

R. Schneiderman, **M. Giladi**, E. Zeevi, A. Shteingauz, T. Voloshin, Y. Porat, M. Munster, E. Kirson, Y. Palti;
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P04.17

Cancer cell lines response to tumor treating fields: results of a meta-analysis

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¹Novocure, Haifa, Israel, ²Novocure GmbH, Munich, Germany, ³Novocure GmbH, Root, Switzerland.

P04.18

Unravelling the tumour microenvironment of glioma

K. McKelvey^{1,2}, A. Hudson^{1,3}, H. Wheeler^{1,4}, C. Diakos^{1,4}, V. Howell^{1,3};
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Group, North Shore Private Hospital, St Leonards, Australia, ⁴Northern Sydney Cancer Centre, Royal North Shore Hospital, St Leonards, Australia.

P04.19

Detailed analysis of mutation change after treatment in glioblastoma

M. Nagane¹, K. Saito¹, S. Shimizu¹, E. Nozak², K. Kobayashi¹, S. Kume¹, T. Chiba³, J. Shibahara³, Y. Shiokawa¹;

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P04.20

Analysis of HORMAD1, FTHL17 and ADAM29 Cancer/testis specific genes expression in Glioblastoma

K. Anvari¹, M. Mojarraf², M. Gholamin¹, M. Fathi¹, A. Tabatabaie¹, A. Eslahi¹;

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P04.21

Combination therapy of CAR-NK cells and anti-PD-1 antibody displays potent efficacy against late-stage Glioblastoma and induces protective antitumor immunity

F. Strassheimer¹, C. Zhang², I. C. Mildner¹, P. N. Harter³, T. Tonn⁴, J. P. Steinbach¹, W. S. Wels², **M. C. Burger¹**;

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P04.22

Data-driven prioritization and evaluation of novel therapeutic targets in glioblastoma

C. G. Brahm^{1,2}, A. M. E. Walenkamp², M. E. van Linde¹, U. K. Abdul³, B. A. Westerman³, H. M. W. Verheul¹, R. S. N. Fehrmann²;

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P04.23

Pericytes contribute to tumour immune system evasion in glioblastoma multiforme through the under-expression of ICAM-1, VCAM-1 and MCP-1.

M. O. Joret^{1,2}, T. I. Park¹, J. M. Macapagal¹, J. Rustenhoven¹, B. J. Kim¹, J. Correia², E. Mee², R. L. M. Faull¹, P. Schweder², M. Dragunow¹;

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P04.24

MTOR signaling in glioma-associated microglia and macrophages

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P04.25

Expression and prognostic value of the transcription factors EGR1 and EGR3 in gliomas

A. M. Knudsen¹, I. Eilertsen¹, S. Kielland¹, M. W. Pedersen¹, M. D. Sørensen¹, R. H. Dahlrot², H. B. Boldt³, C. S. Møllegaard¹, S. Munthe⁴, F. R. Poulsen⁴, B. W. Kristensen³;

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P04.26

The novel therapeutic curcumin enhances targeted bacteriophage mediated *in-vitro* cell death in primary human DIPG

G. Samarth, K. Suwan, M. Al-Bahrani, P. Asavarut, A. Hajitou;

Imperial College London, London, United Kingdom.

P04.27

Silence of Hippo pathway induces pro-tumoral immunity: New therapeutic target of glioblastomas

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¹Yonsei University College of Medicine, Seoul, Korea, Republic of, ²MD Anderson Cancer Center, Houston, TX, United States.

P04.28**Effect of fibroblast activation protein-expressing stromal cells from human glioblastomas on glioma and endothelial cells**

P. Busek, E. Balaziová, R. Mateu, P. Vymola, K. Vlasicová, A. Sedo;
Institute of biochemistry and experimental oncology, First Faculty of Medicine, Prague, Czech Republic.

P04.29**Modelling delivery of Tumor Treating Fields (TTFields) to the brain using Water-based Electrical Properties Tomography**

Z. Bomzon¹, C. Temple-Brami¹, H. S. Hershkovich¹, M. Giladi¹, C. Wenger²;
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P04.31**Defining Tumor Treating Fields (TTFields) dosimetry using Power Density Loss and related measures**

N. Urman, H. S. Hershkovich, A. Naveh, S. Levy, **Z. Bomzon**;
Novocure Ltd., Haifa, Israel.

P04.32**Integrative analysis of DNA methylation suggests down-regulation of oncogenic pathways and reduced de-novo mutation in survival outliers of glioblastoma**

T. Hwang¹, D. Mathios², K. McDonald³, I. Daris³, S. Park⁴, P. Burger², S. Kim⁴, Y. Dho⁴, C. Hruban², C. Bettegowda², J. Shin¹, M. Lim², **C. Park**⁴;

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P04.33**Effects of Tumor Treating Fields (TTFields) on blood brain barrier (BBB) permeability**

A. F. Kessler¹, C. Schaeffer¹, M. Burek², U. Ruschig¹, R. Ernestus¹, M. Löhr¹, C. Förster², **C. Hagemann**¹;
¹University of Würzburg, Department of Neurosurgery, Tumorbiology Laboratory, Würzburg, Germany, ²University of Würzburg, Department of Anesthesia and Critical Care, Division Molecular Medicine, Würzburg, Germany.

P04.34**Low-dose irradiation increases recruitment and effector function of tumor-specific T cells in experimental gliomas**

X. Zhang^{1,2}, K. Sahn^{1,2}, J. Sonner², K. Jähne², M. Breckwoldt^{2,3}, M. Piechutta^{4,5}, P. Häring⁶, F. Winkler^{4,5}, W. Wick^{4,5}, M. Platten^{1,2};
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P04.35**Preoperative tumor growth and microvessel density measurements in patients with glioblastoma**

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P04.36**Technology for the research of Primary and Partially Passaged Cell Cultures by Human Glioblastoma is necessary for studying the characteristics of a tumor and searching for therapy.**

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P04.37**The dielectric properties of malignant glioma tissue**

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P04.38**Orai2 related transcriptome profile and clinical outcome in classical and mesenchymal subtype of glioblastoma**

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P04.39**Tenascin-c expression correlates to vasculogenic mimicry formation and predicts a poor prognosis in glioblastoma**

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P04.40**Telomere maintenance and glioma predisposition - relevance of telomere genetic score and telomere length**

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P04.41

Expression and prognostic value of the transcription factors EGR1 and EGR3 in gliomas

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P04.42

Utilising whole transcriptome profiling to increase understanding of mechanisms driving *IDH*-mutant glioma progression and recurrence

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P04.43**Pre-diagnostic plasma metabolites linked to future brain tumor development**

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P04.44**Therapeutic implications of altered cholesterol homeostasis mediated by loss of CYP46A1 in human glioblastoma**

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P04.45**Periarteriolar glioblastoma stem cell niches express bone marrow hematopoietic stem cell niche proteins**

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P04.46**Variable RNA sequencing depth impacts gene signatures and target compound robustness - case study examining brain tumour (glioma) disease progression**

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P04.47

Nrf2 mediates hypoxic tolerance in human glioblastoma cells

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P04.48

Role of the expression of protein kinase D1 and its phosphorylated forms in glioma-derived cell line exposed to modified isothioureia derivative ZKK-3 combined with hyperbaric oxygen therapy

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P04.49

<The evaluation of anti cancer activity of isothioureia derivatives and CK2 inhibitors on cell lines of human glial tumor in vitro>

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P04.50

Doxycycline impairs mitochondrial function and protects human glioma cells from hypoxia-induced cell death: implications of using Tet-inducible systems

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P04.51

TERT promoter mutation-driven TERT activation is mediated by ETS1 in BRAF V600E mutated glioma

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P04.52

Spontaneous intratumoral T cell responses against glioblastoma-associated antigens

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P04.53

Multiregional radiomics profiling from multiparametric MRI: identifying an imaging predictor of IDH1 mutation status in glioblastoma multiforme

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P04.54**High Dose Progesterone Induces Growth Inhibition in Human U87 and A172 Glioblastoma Cell With Concomitant Changes in Mitochondrial and Cytoskeleton Proteins**

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P04.55**Efficacy of Tumor Treating Fields (TTFields) and aurora B kinase inhibitor**

D. Krex¹, P. Bartmann¹, A. Temme¹, R. Schneidermar², T. Voloshin², **M. Gilad**², A. Kinzel³, E. Kirson², U. Weinberg⁴, Y. Palt²;

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P04.56**Brain tumor patients with impaired cognitive flexibility do not efficiently update functional connectivity within the fronto-parietal network**

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P04.57**Creating patient-specific computational head models for the study of tissue-electric field interactions using deformable templates**

N. Urman¹, S. Levy¹, A. Frenkel¹, A. Naveh¹, H. S. Hershkovich¹, E. Kirson¹, C. Wenger², G. Lavy-Shahaf¹, D. Manzur¹, O. Yesharim¹, **Z. Bomzon**¹;

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P04.58**A new computational method for comprehensive estimation of anti tumor efficacy of tumor treating fields (TTFields). Accounting for field intensity, exposure time and unwanted spatial field correlation.**

A. R. Korshoej, A. Thielscher;

Aarhus University Hospital, Aarhus C, Denmark.

P04.59**Modeling the safety of topical agents for skin toxicity associated with tumor treating fields therapy in glioblastoma**

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P04.60**Genomic profile of tumorigenesis in a patient with Turcot syndrome**

P. Karschnia, E. Z. Erson-Omay, A. J. Huttner, R. K. Fulbright, M. Günel, J. M. Baehring;

Yale School of Medicine, New Haven, CT, United States.

P04.62**The oncometabolite R-2-Hydroxyglutarate suppresses the innate immune microenvironment of IDH1-mutated gliomas via aryl hydrocarbon receptor signaling**

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P04.63**ENO1 is downregulated in meningiomas and upregulated in low grade gliomas**

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P04.64**Molecular characterization of glioma patient derived orthotopic xenografts to improve outcome of preclinical studies**

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P04.65**Towards new therapies for glioblastoma treatment: role of Dkk-3 and Claudin-5**

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P04.66**Prospects of aptamerotheranostics for glioma**

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P04.67**Assessments for prediction of bystander effect in HSV-tk/GCV gene therapy**

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Department of Neurosurgery, Hamamatsu University School of Medicine, Hamamatsu city, Shizuoka, Japan.

P04.68**Relation of the expression between TERT and GABPA/B isoforms in gliomas using quantitative real time-PCR**

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P04.69**Differential microglia - glioma cell interaction during tumor progression**

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P04.70**Anti-Notch1 treatment suppressed the invasion, self-renewal and tumor growth of glioma initiating cells mediated by chemokine system CXCL12/CXCR4**

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Tianjin medical university general hospital, Tianjin, China.

P04.71**LRIG2 promotes the proliferation of glioblastoma cells in vitro and in vivo through enhancing the PDGFR β signaling pathways**

Q. Xiao, M. Dong, F. Cheng, F. Mao, W. Zong, K. Wu, R. Xie, B. Wang, T. Lei, D. Guo;
Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China.

P04.72**Using Mendelian randomization to find potential novel drug targets for the treatment of glioma**

J. W. Robinson¹, J. Zheng¹, S. Tsavachidis², P. Haycock¹, M. Bondy², C. Relton¹, R. Martin¹, G. D. Smith¹, K. M. Kurian¹;
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P04.73

Detection of protein markers of two IDH1 gene mutation (R132H, R132S) by immunohistochemistry in brain Astrocytomas

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P04.74**Preclinical evaluation of combinations targeting the DNA damage response in 2D and 3D models of glioblastoma stem cells**

O. Rominiyi^{1,2}, N. Gomez-Roman³, N. Lad¹, Y. Al-Tamim², D. A. Jellinek², A. J. Chalmers³, T. A. Carroll², B. Chen⁴, S. J. Collis¹;
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P04.75**Tibolone, an estrogenic progestin of hormone replacement therapy reduces colony formation and 3-dimensional spheroid S-phase in C6 rat glioma *in vitro***

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P04.76

The expression of cytotoxic T-lymphocyte-associated antigen 4 (CTLA4) is upregulated in high grade gliomas

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P04.77**Death receptor 6 (DR6) is overexpressed in astrocytomas**

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P04.78**Ultraprapid FGFR3 immunostaining for diagnosis of gliomas harboring FGFR3 gene fusions**

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P04.79

Cytotoxic T cells and their activation status are independent prognostic markers in meningiomas

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P04.80**Diagnostic potential of the IgM igOme (IgM repertoire) biomarkers for brain tumors**

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P04.81**Calpain 2 mediates ZBTB18 proteolytic cleavage in GBM**

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P04.82**[¹⁸F]-FET and [¹⁸F]-FAZA PET based radiotherapy of F98 glioblastoma rats**

J. Verhoeven¹, J. Bolcaen², S. Donche², V. De Meulenaere³, B. Descamps⁴, G. Hallaer⁵, K. Kersemans², T. Boterberg⁶, C. Vanhove⁴, F. De Vos¹, I. Goethals²;

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P04.83**Additive effect of tonabersat on standard medical treatment in glioblastoma: preliminary results**

V. De Meulenaere¹, E. Bonte¹, **J. Verhoeven**², J. Kalala Okito³, L. Leybaert⁴, C. Vanhove⁵, B. Descamps⁵, K. Deblaere¹;
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P04.84**Lysine-specific histone demethylase 1 (LSD1) contributes to the maintenance of Glioblastoma stem cell population**

S. Faletti¹, D. Osti¹, C. Richichi¹, I. Marangoni¹, E. Ceccacci¹, S. Minucci¹, G. Pelicci^{1,2};
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P04.85**Molecular characteristics of low grade glioma progression**

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P04.86**Correlation between activated infiltrating neutrophils and MGMT methylation in patients with diffuse malignant gliomas (MGs)**

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P04.87**Delineating the invasive component of human brain tumors using brain organoids**

W. Zhou^{1,2}, B. Klink³, T. R. Lunavat¹, H. Miletic¹, J. V. Joesph¹, M. Han¹, M. Bahador¹, J. Wang^{1,2}, R. Bjerkvig^{1,4};
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P04.88**Phasic alertness deficits in brain tumor patients**

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P04.89**Investigation of the interaction of simultaneously applied photon irradiation and Tumor Treating Fields using a Geant4 simulation**

M. Mayer¹, G. Hürtgen¹, **M. Schlechter**¹, A. Stahf¹, M. Eble¹;
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P04.90**Observational prospective multi-centric study of delta radiomics Features Analysis for the prediction of patients outcomes in Glioblastoma multiforme: GLI.F.A. Project.**

M. Lupattelli¹, S. Chiesa², **F. Beghella Bartolè**¹, I. Palumbo¹, R. Gatta², R. Tarducci¹, N. Dinapoli², M. Balducci², C. Aristei¹, V. Valentin²;
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P04.91

ABC-drug efflux transporters at the blood-brain barrier limit the efficacy of treatment against primary and secondary brain tumors.

O. van Tellingen, M. C. de Gooijer, L. C. M. Buil, L. Fan, N. A. de Vries, E. M. Kemper, C. Citirikaya, J. H. Beijnen; Netherlands Cancer Institute, AMSTERDAM, Netherlands.

P04.92

Silencing Lis1 gene enhances the radiosensitivity and chemosensitivity of U87 glioblastoma cells grown in vitro

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P05 Other Tumor - Clinical Aspects

P05.01

New techniques in Radiotherapy for brain tumors and brain metastasis, VMAT (volumetric modulated arc therapy) and SIB technique (simultaneous integrated boost), Neuroaxis radiotherapy, pediatric gliomas.

M. Theodorou, M. Theodorou;

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P05.02

Re-Radiation for progressive brain metastasis after previous whole brain radiation with VMAT (volumetric modulated arc therapy) technique in order to avoid Radionecrosis risk

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P05.03

Stereotactic Radiosurgery to Surgical Cavity Post Resection of Brain Metastases: Local Recurrence and Overall Survival Rates. A Single Centre Experience.

M. J. Higgins¹, O. Burke¹, K. Nugent¹, C. Skourou¹, M. Dunne¹, M. Javadpour², D. Fitzpatrick¹, C. Faul¹;

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P05.04

Intramedullary spinal cord tumours - a single centre ten year analysis

O. Richards, E. Goacher, C. Derham;

Leeds Teaching Hospitals NHS Trust, Leeds, United Kingdom.

P05.05

Gamma knife radiosurgery for foramen magnum meningiomas: a single centre study

K. Abdel Karim^{1,2}, A. M. N. El Shehaby^{2,3}, W. A. Reda^{2,3}, A. Nabee^{2,4}, R. Emad^{6,2}, S. R. Tawadros^{2,2};

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P05.06

Hearing preservation after gamma knife radiosurgery for cerebellopontine angle meningiomas

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P05.07

Three-dimensional multimodal imaging and intraoperative navigation in endonasal endoscopic surgery for non-functioning pituitary adenomas invading the cavernous sinus

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Beijing Tiantan hospital, Capital medical university, Beijing, China.

P05.08

Ependymal tumors - Heterogeneity and multidisciplinary behavior in this adult neuroepithelial malignancy

A. L. C. Vasconcelos^{1,2}, A. F. P. Figueiredo^{1,2}, D. Possidónio^{1,2}, L. Bujor^{3,4}, M. R. Dionísio^{1,5}, M. L. Albuquerque^{1,5}, J. Miguéns^{1,6};

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P05.09

Detection of clinically relevant mutations in the cerebrospinal fluid of patients with central nervous system metastases

I. Moya¹, S. Villatoro², C. Mayo², A. Balada², S. Viteri³, M. González-Cao³, N. Karachaliou⁴, F. Pons¹, X. González¹, R. Rosell^{3,5};

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P05.10**Prospective evaluation of cerebrospinal fluid circulating tumor cells (CSF CTC) in patients with HER2 positive cancers and leptomeningeal metastases receiving treatment with intrathecal trastuzumab.**

E. Pentsova¹, R. Malani¹, M. Fleisher¹, X. Lin², A. Omuro³, M. Groves⁴, N. Lin⁵, M. Melisko⁶, A. Lassman⁷, S. Jeyapalan⁸, A. Boire¹, L. DeAngelis¹, J. Raizer⁹;

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P05.11**Combined FET PET/MRI radiomics for the differentiation of radiation injury from recurrent brain metastasis**

P. Lohmann^{1,2}, M. Kocher^{1,2}, G. Ceccon³, E. K. Bauer³, G. Stoffels¹, S. Viswanathan¹, M. I. Ruge², B. Neumaier¹, N. J. Shah^{1,4}, G. R. Fink^{1,3}, K. Langen^{1,5}, N. Galldiks^{1,3};

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P05.12**Comparison of next-generation sequencing results between brain metastasis and blood in NSCLC patients with acquired EGFR-TKI resistance other than T790M mutation**

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P05.13

Long term clinical outcomes with helical tomotherapy based image guided intensity modulated radiotherapy for benign and low grade brain tumours

M. P. Maitre, T. Gupta, R. Krishnatry, J. S. Goda, S. Epari, G. Chinnaswamy, A. Moiyadi, R. Jalali;
Tata Memorial Centre, Mumbai, India.

P05.14**Optimising trial recruitment in a meningioma trial using qualitative research methods: results from the ROAM / EORTC 1308 information study**

M. D. Jenkinson¹, F. C. Sherratt¹, B. J. Haylock², D. C. Weber³, B. Young¹;

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P05.15**Surgically treated meningiomas at Dr. Cipto Mangunkusumo General Hospital: clinicopathological aspects**

R. A. Aman, A. Harlyjoy, D. N. Alby, S. Ashari, D. Tandian, S. Ichwan, S. W. Nugroho;

Department of Neurosurgery Faculty of Medicine Universitas Indonesia Dr Cipto Mangunkusumo General Hospital, Jakarta, Indonesia.

P05.16**Successful high dose chemotherapy for recurrent pineoblastoma - cases report**

C. Lee;

Department of Neurosurgery, Novalis radiosurgery Center, Ilsan Paik hospital, Goyang, Korea, Republic of.

P05.17**Dorsal solid cervicomedullary hemangioblastomas: surgical results in seven patients**

J. Hwang, K. Park, S. Yoon, S. Hwang;

Dept of Neurosurgery, Kyungpook National University Hospital, Daegu, Korea, Republic of.

P05.18**Comparison of N-acetylaspartate concentration decrease in hippocampal and white brain tissue after whole brain radiotherapy**

P. Pospisil^{1,2}, P. Solar^{3,4}, M. Bulik^{5,6}, P. Burkon^{1,2}, P. Slampa^{1,2}, J. Sana⁷, O. Slaby^{7,8}, R. Jancalek^{4,3}, T. Kazda^{1,2};

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P05.19

Hippocampal N - acetylaspartate concentration correlates to verbal memory before radiotherapy for brain metastases

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P05.20

Laterality of hippocampal metastases: MRI analysis of 260 patients with 2595 brain metastases

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P05.21

T1-flair to T1-gadolinium MRI ratio as a predictive value of treatment response in non-small-cell lung cancer (NSCLC) patients affected by multiple brain metastases

M. Alemany¹, **M. Domènech**², **N. Vilariño**², **M. Jové**², **I. Brao**², **M. Arellano**², **A. Lucas**³, **A. Navarro**³, **R. Palmero**², **M. Simó**¹, **R. Velasco**¹, **E. Nada**¹, **J. Bruna**¹;
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P05.22

Growth deceleration of meningioma associates with progression of calcification: evaluation with CT Hounsfield units

S. Nakasu, **T. Ohnishi**, **S. Kitahara**, **H. Ohwaki**, **K. Matsumura**;
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P05.23

Local recurrence and leptomeningeal dissemination after resection of brain metastases: a single-institution, retrospective study in the era of individualized treatment

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P05.24

The diagnosis and comprehensive treatment of leptomeningeal metastases--results of a phase II trial

Y. Ma, **J. Xiao**, **S. Yang**, **R. Zhao**, **H. Zhang**, **Y. Xu**, **Y. Tian**, **N. Bi**, **Q. Liu**, **X. Chen**, **J. Yi**, **Y. Li**;
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P05.25

Helical tomotherapy for whole- brain irradiation with integrated boost to multiple brain metastases: dosimetric analysis and clinical outcomes

Y. Ma, **J. Xiao**, **N. Bi**, **Y. Xu**, **Y. Tian**, **H. Zhang**, **Y. Zhang**, **Q. Liu**, **R. Zhao**, **S. Yang**, **J. Yi**, **Y. Li**;
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P05.26

Efficacy and tolerability of high dose chemotherapy with autologous stem cell rescue after surgery in patients with congenital brain tumors

M. Guidi¹, **L. Giunti**¹, **A. Buccoliero**², **B. Spacca**³, **M. Lucchesi**¹, **S. Farina**¹, **C. Fonte**¹, **C. Moscheo**¹, **M. Censullo**¹, **L. Genitori**³, **I. Sardi**¹;
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P05.27**Reirradiation of brain metastases with stereotactic radiosurgery**

J. B. JEPPESEN, H. Roed, F. Kjær-Kristoffersen, J. Lauritsen, A. Muhic;
Department of Oncology, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark.

P05.28**Karnofsky performance score of brain tumor patients depends on clinician status.**

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P05.29**Improvement of stereotactic radiosurgery plan quality with multiple non-coplanar VMAT beams**

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P05.30**Intracranial meningiomas: a systematic analysis of prognostic factors for recurrence in a large surgical series**

F. Pessina¹, P. Navarria¹, G. Carta¹, E. Clerici¹, M. Conti Nibali¹, R. Soffietti^{1,2}, R. Rudà^{1,2}, M. Scorsetti³, L. Bello⁴;
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P05.31**Plan quality of stereotactic radiosurgery in a multicenter phase III randomized trial in patients with 4 up to 10 brain metastases**

D. Hartgerink¹, A. Swinnen¹, A. Bruynzeel², C. Hurkmans³, D. de Ruysscher¹, P. van der Toorn³, A. Swaak⁴, R. Wiggeraad⁶, L. Veelen⁶, J. Verhoeff⁶, A. van der Geest⁶, E. Dieleman⁹, A. Jonkman¹⁰, G. Wester¹¹, **J. Zindler**¹;
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P05.32**Update on a metronomic antiangiogenic combination therapy for recurrent atypical teratoid rhabdoid tumor**

I. Slavc¹, A. Peyrl¹, M. Chocholous¹, T. Czech², K. Dieckmann³, C. Haberler⁴;
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P05.33**Extra-articular tenosynovial giant cell tumor of diffuse type in the temporal area with brain parenchymal invasion**

Y. Park, C. Woo, M. H. Moon, B. Moon, S. You;
Chungbuk National university, Cheongju, Korea, Republic of.

P05.34**Multidisciplinary treatment in patients with leptomeningeal metastasis from gastric cancer in the era of individualized treatment: A single-institution, retrospective study**

K. Mitsuya, N. Yoko, D. Shoichi, N. Hayashi, H. Yasui, H. Harada;
Shizuoka cancer centre, Shizuoka, Japan.

P05.35**Intraoperative radiotherapy after resection of brain metastases (INTRAMET) - initial safety/efficacy analysis of a prospective phase II study**

S. Brehmer¹, M. Welsch¹, A. Karakoyun¹, A. Förster², M. Seiz-Rosenhagen¹, S. Clausen³, F. Schneider³, F. Wenz³, D. Hänggi¹, F. A. Giordano³;
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P05.36

Skull base meningiomas: prognostic factors analysis for recurrence with multimodality treatment

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P05.37

Hypofractionated radiosurgery for benign skull base tumors

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P05.38

Stereotactic radiosurgery of benign brain tumors in elderly patients: Evaluation of clinical outcome and toxicity

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P05.39

Skull-base chordoma treated with proton and carbon ion radiotherapy : C.N.A.O. clinical experience

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P05.40

Clinical and radiological outcome of vestibular schwannomas (Koos grade I - IV) after stereotactic radiosurgery

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P05.41

The influence of complex cytogenetic aberration patterns on recurrent meningiomas

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P05.42

The natural course of atypical meningioma after gross total resection without adjuvant treatment

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P05.43

Proton therapy of CNS tumors

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P05.44

Single-cell transcriptomic analysis of microglia/macrophages in Glioblastoma

A. Michelucci¹, A. Golebiewska¹, Y. Pires-Afonso¹, S. K. Poovathingal², A. Oudin¹, R. Balling², A. Skupin², **S. P. Niclou¹**;

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P05.45

Hydroxyurea (HU) or VAC (vincristine, adriamycin and cyclophosphamide) in a group of recurrent meningioma patients

A. Silvani, G. Simonetti, L. Elena Antonia, B. Pollo, L. Fariselli, P. Gaviani;

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P05.46**Metachronous malignancies and brain tumor in children with germline TP53 mutation**

M. Guidi¹, L. Giunti¹, A. Buccoliero², S. Farina¹, C. Fonte¹, C. Caporali², C. Moscheo¹, M. Censullo¹, L. Genitori³, **I. Sardi¹**;
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P05.47**Long-lasting response in spinal metastases from ALK rearranged Non-Small-Cell Lung Cancer treated with different ALK inhibitors.**

A. Pellerino, R. Rudà, F. Franchino, G. Marchese, F. Bruno, F. Mo, R. Soffiatti;
Department of Neuro-Oncology, University and City of Health and Science Hospital, Turin, Italy.

P05.48**The data base of adult medulloblastomas patients: the experience of Italian Association of Neuro-oncology (AINO)**

A. Silvani¹, P. Gavian¹, A. Pace², G. Simonetti¹, M. Caffo³, T. Lus⁴, M. Possanzin⁵, M. A. Teriaca⁶, G. Panzarasa⁷, A. Salmaggi⁸, R. Rudà⁹;
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P05.49**Extra-neural metastases from a sacro-coccygeal myxopapillary ependymoma: a case report.**

F. Bruno, F. Franchino, C. Chiavazza, A. Pellerino, R. Soffiatti, R. Rudà;
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P05.50**Hypofractionated stereotactic radiation therapy (HSRT) in skull base meningiomas.**

C. Franzese¹, **P. Navarra¹**, E. Clerici¹, T. Comito¹, F. Pessina¹, L. Bello¹, G. Reggiori¹, S. Tomatis¹, M. Scorsetti^{1,2};
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P05.51**Prognostic impact of genetic alterations and methylation class in meningioma**

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P05.52**The phenomenon of pseudoprogression in diffuse astrocytic and oligodendroglial tumors (grade II-III), treated with photon beam radiotherapy and temozolamide. Report of a single institution.**

E. Fotopoulou, **G. Soulimioti**, A. Theodoridou, S. Tzorakakis, E. Athanasiou;
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P05.53**Long-term cognitive function after radiation therapy for primary brain tumours grade I-III**

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P05.54**Meningioma surgery in the elderly, a retrospective population based registry study**

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P05.55**Tumor location may be more predictive than histology for postoperative cerebellar mutism: case series**

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Health-related quality of life in patients with large skull base benign meningiomas treated with proton therapy

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Active beam scanning proton therapy for large skull base benign meningiomas: early outcomes

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Management of adult patients with medulloblastoma at Skane University Hospital between 1994 and 2017

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Post-operative cardiovascular complications and time to recurrence in meningioma patients treated with versus without pre-operative embolization: a retrospective cohort study of 741 patients

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A. H. Zamanipoor Najafabadi^{1,2}, P. B. van der Meer², F. W. Boele³, J. C. Reijneveld^{4,5}, M. J. B. Taphoorn^{2,6}, W. R. van Furth¹, L. Dirven^{2,6}, S. M. Peerdeman⁷, .. The Netherlands Meningioma Research Group¹;

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P05.65**The caregiver burden in meningioma: long-term results and its effects on caregiver's health-related quality of life, anxiety and depression**

A. H. Zamanipoor Najafabadi^{1,2}, P. B. van der Meer², F. W. Boele³, J. C. Reijneveld^{4,5}, M. J. B. Taphoorn^{2,6}, M. Klein⁵, W. R. van Furth¹, L. Dirven^{2,6}, S. M. Peerdeman⁷, ... The Netherlands Meningioma Research Group¹;

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P05.66**Metastatic atypical teratoid rhabdoid tumor (ATRT) of the central nervous system in the adult: A case report**

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P05.67**Primary Central Nervous System Lymphomas retrospective review of a single hospital center case series**

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P05.68**Secondary Central Nervous System Lymphomas retrospective review of a single hospital center**

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P05.69**Independent risk factors for pre- and postoperative seizures in meningioma patients identified by logistic regression analysis**

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P05.70**Tuberculum sellae meningiomas: endoscopic transsphenoidal or transcranial resection? A meta-analysis of comparative cohort studies**

F. Zheng, L. Goertz, P. Stavrinou, **M. Timmer**, R. Goldbrunner, B. Krischek;

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P05.72**Single-step resection of spheno-orbital meningiomas and orbital reconstruction using customized CAD/CAM implants**

B. Krischek, L. Goertz, **M. Timmer**, R. Goldbrunner, P. Stavrinou;

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P05.73**Nasoethmoidal meningioma with cytogenetic features of tumor aggressiveness in a 16-year-old child: a case report followed up over 15 years**

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P05.74**Congruence between brain tumor patients and their informal caregivers on patients' executive functioning**

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P05.75**Surgery followed by fractionated radiosurgery on the tumor bed in patients with single large brain metastases from solid tumor: preliminary results of a phase II study.**

P. Navarra¹, E. Clerici¹, F. Pessina¹, C. Franzese¹, L. Bello¹, M. Riva¹, L. Toschi¹, G. Masci¹, T. Comito¹, M. Scorsetti^{1,2};

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P05.76**Resuming treatment with immune checkpoint inhibitors in cancer patients who developed immune-related meningitis**

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P05.78**Improving quality of care of meningioma patients: initial evaluation of issues in care trajectories according to the Plan-Do-Study-Act Cycle**

A. H. Zamanipoor Najafabadi^{1,2}, J. P. M. van de Mortel^{1,2}, D. J. Lobatto¹, D. Brandsma³, W. C. Peul^{1,4}, M. J. B. Taphoorn^{2,5}, L. Dirven², W. R. van Furth¹;

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P05.79**Semiautomatic image segmentation based volume approximation of intracranial meningiomas**

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P05.80**Cognitive functioning in patients with non-functioning pituitary adenoma before and after endoscopic transsphenoidal resection: Individual and group results**

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P05.81**Neurocognitive assessment in cancer patients without central nervous system disease treated with bevacizumab at week 34: an observational transversal multi-centric pilot study**

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P05.82**Clinical decision making. The route from an ontology to a prediction model for stereotactic radiotherapy: PRE.M.I.S.E. (PREdiction Models in Stereotactic External Radiotherapy).**

F. Bianciardi¹, S. Chiesa², B. Tolu¹, **S. Longo**², G. Minniti¹, B. Nardiello¹, F. Cellini³, F. Rea¹, P. Gentile¹, V. Valentin²;

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P05.83**Tumor Treating Fields and radiosurgery for supra- and/or infratentorial brain metastases (1-10) from NSCLC in the phase 3 METIS study**

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P05.84**Clinical and radiological patterns of brain radiation necrosis after ion beam radiotherapy for head and neck tumors**

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P05.85**Mismatch repair system and immune-checkpoints profile in brain metastasis: study of 65 patients**

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P05.86**Hippocampal sparing in primary central nervous system lymphoma. Is it routinely possible?**

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P05.87**Hemoglobin level is a relevant prognostic marker of overall survival in primary central nervous system lymphoma: a retrospective study on 160 PCNSL.**

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P05.88**Radiomics analysis of brain metastases from non-small cell lung cancer brings relevant supplementary information to clinical scores**

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P05.89**Comparison of local control of brain metastases with stereotactic radiosurgery versus surgical resection: A secondary analysis of EORTC 22952-26001**

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P05.90**A prospective phase II study of whole brain radiotherapy concomitant to Temozolomide in primary central nervous system lymphoma after high dose methotrexate.**

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Sellar atypical teratoid rhabdoid tumor (ATRT) in an adult: A case report and review of the literature

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Brain invasion in meningiomas previously classified as WHO grade I has limited impact on outcome

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Perioperative imaging in patients treated with neurosurgical resection of brain metastases: a European Association of Neuro-Oncology (EANO) Youngsters Survey

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