ported a ≥50% reduction in seizure frequency, 30 (32.3%) of whom were seizure-free. Improvements on PGIC were reported by 49 (52.7%) patients. The Kaplan-Meier estimated 6-month retention rate was 86.0%. Quality of life (EQ-5D-5L) and symptoms outcome measures (MDASI-BT) remained stable. ADRs leading to discontinuation occurred in 4 (4.3%) patients, most commonly vertigo (2 [2.2%] patients). **CONCLUSION:** This is the first prospective, multicenter study focusing on epilepsy due to slow-growing tumors (mainly low-grade gliomas), treated with LCM. The results suggest that LCM reduces seizures in patients with resistant BTRE. The majority of patients noticed a clinical improvement with the addition of LCM. Observed ADRs were consistent with the known safety profile of LCM. STUDY SUPPORTED BY: UCB Pharma.

OS10.3 PRIMARY THERAPY AND SURVIVAL IN OVER 70-YEAR-OLD PATIENTS WITH PRIMARY CENTRAL NERVOUS SYSTEM LYMPHOMA: A CONTEMPORARY, NATIONWIDE, POPULATION-BASED STUDY IN THE NETHERLANDS

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BACKGROUND: Elderly patients with primary central nervous system lymphoma (PCNSL) have a poor prognosis. In this contemporary, nationwide, population-based study, we assessed the contribution of primary therapy on overall survival (OS) among elderly PCNSL patients in the Netherlands. **METHODS:** All patients aged ≥ 70 years with cytologically and/or histologically proven PCNSL diagnosed between 2014–2016 were selected from the nationwide Netherlands Cancer Registry. Univariable analysis of OS was performed with the log-rank test. Multivariable Cox regression was applied to assess factors associated with OS, with adjustment for age (71–74, 75–79 and ≥80 years), sex, prior malignancy, primary therapy (no therapy, radiotherapy [RT] only, chemotherapy [CT]), and rituximab treatment. **RESULTS:** Overall, 109 patients were registered; 39%, 39%, and 22% were aged 71–74, 75–79 and ≥80 years, respectively. Most patients received CT (45%), followed by no therapy (33%) and RT only (22%). With increasing age, the application of CT decreased (60%, 43%, and 24%), and RT only increased (10%, 26%, 26%) in the three age groups. CT consisted of methotrexate (MTX)-based or MTX only regimens in 98%. In patients treated with CT, Rituximab was added in 31%. During follow-up, 89 patients (82%) died. Median OS was 5.3 months (95% confidence interval [CI], 3.3–7.8), no difference was observed in median OS across the three age groups (6.8, 4.4, and 4.6 months, respectively; P=0.348). However, in the groups no therapy, RT only, and CT, median OS (95% CI) was 1.3 (1.0–2.0), 6.5 (4.4–12.5), and 20.3 (8.6–41.4) months (P<0.001), respectively. Moreover, 2 year OS (95%CI) was 49% (34–62) in patients treated with chemotherapy compared with 17% (5–34) in patients treated with RT. Median OS (95% CI) was 20.3 (8.6–41.4) in recipients of MTX-based regimens and 5.0 (2.4-not reached) months in recipients MTX only (P=0.185). In multivariable analysis, treatment with CT or RT was the only factor associated with OS: age group and the addition of Rituximab were not associated with OS. **CONCLUSION:** In this contemporary population-based study, OS remained poor among patients with PCNSL aged over 70 years, irrespective of age group. Clinical condition likely influenced therapy choices but in those judged fit enough to receive CT, almost 50% survived 2 years. Therefore, future prospective intervention studies are warranted to assess which group of elderly patients benefit from CT or less intensive approaches.

OS10.4 INTRATHECAL LIPOSOMAL CYTARABINE PLUS SYSTEMIC THERAPY VERSUS SYSTEMIC CHEMOTHERAPY ALONE FOR LEPTOMENINGEAL METASTASIS FROM BREAST CANCER - A RANDOMIZED STUDY. FINAL RESULTS

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BACKGROUND: Leptomeningeal metastasis (LM) is a common manifestation in metastatic breast cancer. Standards of care remain controversial, notably intrathecal pharmacotherapy. **MATERIAL AND METHODS:** DEPO-SEIN was a randomized open-label phase III study to explore the addition of intrathecal liposomal cytarabine to systemic therapy for the treatment of newly diagnosed LM from breast cancer. Patients diagnosed with LM based on the detection of tumor cells in the cerebrospinal fluid or typical clinical and neuroimaging signs of LM were randomly assigned to receive systemic therapy alone (control group) or systemic therapy plus intrathecal liposomal cytarabine (five injections of 50 mg every two weeks, followed by one monthly injection of 50 mg until progression, unacceptable toxicity or for one year) (experimental group). Progression-free survival related to LM (LM-PFS) was the primary endpoint. **RESULTS:** Thirty-seven and 36 patients were assigned to the control and the experimental groups. The median number of liposomal cytarabine injections in the experimental group was five (range 1–20). Focal radiotherapy was performed in six patients (16%) and three patients (8%) in the control and experimental groups. In the intent-to-treat population, median LM-PFS was 2·2 months (95% confidence interval (CI) 1·3-3·1) in the control versus 3·8 months (95% CI 2·3–6·8) in the experimental group (hazard ratio 0·61, 95% CI 0·38-0·98) (p=0·04). Seventy-one patients have died. Median OS was 4·0 months (95% CI 2·2–6·3) in the control versus 7·3 months (95% CI 3·9-9·6) in the experimental group (hazard ratio 0·85, 95% CI 0·53-1·36) (p=0·51). Serious adverse events were reported in 22 and 30 patients in the control and experimental groups. Quality of life until progression did not differ between groups. **CONCLUSION:** Intrathecal liposomal cytarabine improves LM-related PFS. A larger confirmatory trial with optimized patient selection criteria may be required to demonstrate a survival benefit from intrathecal pharmacotherapy.

OS10.5 OUTCOME OF UNRESECTABLE DE NOVO IDH WILD-TYPE GBM: A DECADE ANALYSIS OF FACTORS INFLUENCING SURVIVAL

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BACKGROUND: Patients with unresectable GBM represent an understudied and underpowered disease subgroup for which limited outcome data exist to support treatment recommendations. In this study, we present a ten-year analysis on outcome of unresectable GBM patients at our unit. **MATERIAL AND METHODS:** We collected data for all consecutive adult de novo IDH wild-type (IDHwt) GBM patients who had undergone biopsy at our unit (2009–18, N= 177) and analysed those that had complete data on performance status, radiology, MGMT status, and adjuvant treatment (N= 156). We used step-wise cox proportional hazards regression to analyse factors associated with survival and outcomes. **RESULTS:** Of 156 patients, mean age was 60.8 years old (range 19–89, 34/21.8% >69 years old), 63 (40.4%) were females, and 50 (32.1%), 26 (16.7%) and 12 (7.7%) had multifocal, butterfly or both lesion types respectively. 101 (64.7%) patients had good performance status (ECOG 0–1), and 49 (31.4%) had methylated MGMT lesions. Adjuvant treatment modalities were best supportive care (41, 26.3%), RT only (33, 21.2%), TMZ only (20, 12.8%), RT and TMZ (10, 6.4%), concurrent TMZ/RT only (29, 18.6%) and concurrent TMZ/RT plus adjuvant TMZ [TMZ/RT+TMZ] (23, 14.7%).

Median OS was 6.1 months (range 0–50.7), with 22% and 2% 1- and 2-year OS respectively. Patients who were MGMT methylated, had good performance status, and received TMZ/RT+TMZ had the highest survival (median OS 18.7 vs 5.5 months, P<0.0001).

Multivariate analysis revealed factors associated with worse OS; these include male sex (HR 1.6, 95%CI 1.1–2.2), unmethylated MGMT (1.8, 1.3–2.8), poor performance status ie ECOG>1 (2.4, 1.6–3.3), not receiving TMZ/RT+TMZ (3.1, 1.8–5.1). In addition, univariate analysis initially revealed that older age (>69yrs) was significantly associated with poorer outcome, however in multivariate analysis, this effect was obliterated (HR 1.3, 95%CI 0.9–2.1). **CONCLUSION:** In this study, we provide one of the largest series of unresectable IDHwt GBM outcome in the literature. Survival of patients harbouring unresectable IDHwt GBM can be unexpectedly long, and may even reach nearly twice that of the unselected, biopsy-only GBM patients receiving TMZ/RT+TMZ studied in the original Stupp trial (median OS of 9.4 months). For this subgroup of IDHwt GBM patients, advanced age may not necessarily predict poor outcome, once adjusted for other outcome predictors. Future randomised trials looking into unresectable IDHwt GBM should stratify patients according to the factors revealed above.

OS10.6 INFIGRATINIB (BGJ398) IN PATIENTS WITH RECURRENT GLIOMAS WITH FIBROBLAST GROWTH FACTOR RECEPTOR (FGFR) ALTERATIONS: A MULTICENTER PHASE II STUDY

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