

#### 14410

## Patient-reported outcomes in cancer patients newly diagnosed with brain metastases

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### Background

Assessing patient-reported outcomes (PROs) is an important element of treatment and care of cancer patients with brain metastases (BMs). BMs are associated with substantial morbidity and mortality. Few prospective studies on PROs in patients with BMs exist. Further, poor accrual, differential dropout, missing data, timing of assessments, and response shift complicate interpretation of PROs in previous studies. We conducted a prospective, population-based study with clinical data and PROs to gain insight into the health-related quality of life (HRQOL) of patients with BMs.

#### Methods

Norwegian patients with newly verified BMs from solid cancers, who were adults (≥18 years) and provided written consent were included. The European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire Core 15 Palliative (EORTC QLQ-C15-PAL) was used monthly to measure HRQOL. Student's t-tests were used to examine differences in EORTC scores at baseline and 3 months.

#### Results

725 patients have been included so far; mean age 66, 53% females, 45% with lung cancer, 79% with extracranial metastases, 59% with ECOG 0-1. 35% died within 3 months after BM diagnosis. The table shows HRQOL scores at baseline for the entire sample and baseline and 3 month scores for the 235 patients who completed both. Patients reported significantly lower physical functioning and more fatigue, pain, nausea/vomiting and dyspnea, and poorer appetite, but less sleep disturbances at 3 months compared to baseline. Table: 14410

EORTC QLQ-C15-PAL scores of the patients (n=725)

EORTC QLQ-C15-PAL	Baseline (n=7 Mean (SD)	25) Baseline (n=23	35)3 months (n=2	35) p-value*
Global Quality of life	55.3 (25.5)	59.4 (25.2)	58.2 (22.9)	0.447
Physical functioning	68.6 (28.1)	76.5 (23.7)	72.1 (28.3)	0.019
Emotional functionin	g 76.2 (25.2)	77.9 (23.6)	80.6 (23.7)	0.089
Fatigue	42.6 (26.9)	37.3 (25.5)	41.4 (27.3)	0.039
Nausea/vomiting	14.3 (25.0)	10.6 (20.7)	14.4 (24.2)	0.027
Pain	26.6 (30.0)	20.9 (25.7)	25.4 (28.0)	0.010
Dyspnea	24.6 (29.1)	20.9 (27.0)	24.4 (27.6)	0.040
Sleep disturbances	34.3 (31.6)	34.2 (29.9)	25.5 (28.8)	< 0.001
Appetite loss	20.8 (30.9)	15.5 (25.8)	22.4 (29.4)	0.001
Constipation	25.6 (31.5)	20.7 (27.7)	23.2 (27.4)	0.215

Notes: \* Comparison between baseline and 3 months (n=235). EORTC scores range from 0-100. Higher score represents a better functioning, or a higher level of symptoms.

### Conclusions

Deterioration in most HRQOL scores was detected three months after inclusion in the study. Preliminary analyses indicate a healthy bias, in that those with poor HRQOL at baseline have died or are too frail to complete PRO measures.

#### Clinical trial identification

NCT03346655.

Legal entity responsible for the study

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# Funding

The South-Eastern Norway Regional Health Authority.

# Disclosure

All authors have declared no conflicts of interest.

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