

Supplementary materials

Supplementary table 1

RANO-PRO priority constructs		MDASI-BT items	EQ-5D-3L dimensions
Symptoms	Pain	Pain	Pain/Discomfort
	Perceived cognition	Difficulty remembering Difficulty concentrating	
	Seizures	Seizures	
	Difficulty communicating	Difficulty speaking Difficulty understanding	
	Symptomatic adverse event ¹	Fatigue ¹	
Physical functioning	Weakness	Weakness on one side of body	
	Walking	Interference with walking	Mobility
Role/Social functioning	Work	Interference with work	
	Usual activities	Interference with general activity	Usual activities Self-care

Abbreviations: MDASI-BT=MD Anderson Symptom Inventory Brain Tumor Module; RANO-PRO= Response Assessment in Neuro-Oncology-Patient Reported Outcome

¹ Symptomatic adverse events are treatment-specific symptoms chosen among those expected for the treatment agent based on its prevalence and/or severity. Fatigue was chosen as an example of a symptomatic adverse event due to its high prevalence and severity among primary brain tumor patients.

Supplementary table 2.

Item	None-Mild to Moderate-to-Severe n, %	Moderate-to-Severe to None-Mild, n, %	Sig.
Pain	12, 11	5, 5	0.14
Difficulty remembering	22, 20	8, 7	0.016
Difficulty concentrating	13, 12	4, 4	0.049
Seizures	5, 5	5, 5	1.00
Difficulty understanding	19, 17	6, 5	0.015
Difficulty speaking	9, 8	5, 5	0.42
Fatigue*	33, 30	13, 12	0.0045
Weakness on one side of body	16, 14	5, 5	0.027
Interference with walking*	26, 23	7, 6	0.0013
Interference with work	24, 21	13, 12	0.099
Interference with general activity	29, 26	13, 12	0.020

Abbreviations: MDASI-BT=MD Anderson Symptom Inventory Brain Tumor Module;

Sig.=Significance level

*Significant after Holms-Bonferroni adjustment, significance threshold ≈ 0.005

Supplementary table 3.

Item	Mean difference	95% CI of Difference	Effect size	Sig.
Pain	-0.1	[-0.5, 0.3]	-0.03	0.76
Difficulty remembering	0.4	[0.0, 0.8]	0.15	0.044
Difficulty concentrating	0.3	[-0.1, 0.7]	0.12	0.17
Seizures	0.0	[-0.3, 0.4]	0.02	0.84
Difficulty understanding*	0.7	[0.3, 1.1]	0.32	0.00088
Difficulty speaking	0.3	[-0.1, 0.7]	0.12	0.16
Fatigue	0.1	[-0.4, 0.7]	0.05	0.60
Weakness on one side of body	0.3	[-0.2, 0.8]	0.13	0.18
Interference with walking	0.0	[-0.4, 0.5]	0.01	0.93
Interference with work	-0.4	[-1.0, 0.1]	-0.12	0.13
Interference with general activity	0.1	[-0.4, 0.5]	0.02	0.76

Abbreviations: MDASI-BT=MD Anderson Symptom Inventory Brain Tumor Module;
 CI=Confidence interval; Sig.=Significance level

Effect size: *Glass' Δ*. MDASI-BT Minimally Important Difference = 1 point

*Significant after Holms-Bonferroni adjustment, significance threshold ≈ 0.005

Supplementary table 4.

Item	Mean difference	95% CI of Difference	Effect size	Sig.
Nausea	0.3	[-0.2, 0.7]	0.12	0.27
Disturbed sleep	0.5	[-0.2, 1.1]	0.16	0.13
Feeling distressed	0.9	[0.2, 1.5]	0.30	0.0069
Shortness of breath	0.2	[-0.3, 0.6]	0.08	0.46
Lack of appetite	0.6	[0.1, 1.0]	0.27	0.014
Feeling drowsy*	1.2	[0.6, 1.9]	0.42	0.00017
Dry mouth	0.4	[-0.1, 1.0]	0.17	0.12
Feeling sad	0.7	[0.1, 1.3]	0.25	0.024
Vomiting	0.1	[-0.2, 0.5]	0.07	0.50
Numbness/Tingling	0.7	[0.1, 1.3]	0.24	0.030
Vision	0.8	[0.2, 1.4]	0.30	0.0081
Change in appearance	0.03	[-0.5, 0.4]	-0.01	0.92
Change in bowel pattern	0.5	[-0.03, 1.2]	0.20	0.062
Irritability	0.4	[-0.2, 1.0]	0.13	0.23
Interference with mood*	0.9	[0.3, 1.5]	0.34	0.0024
Interference with relations with others	0.8	[0.2, 1.4]	0.27	0.015
Interference with enjoyment of life*	1.1	[0.4, 1.7]	0.36	0.0011

Abbreviations: MDASI-BT=MD Anderson Symptom Inventory Brain Tumor Module; CI=Confidence interval; Sig.=Significance level

Effect size: Hedges' *g*. MDASI-BT Minimally Important Difference = 1 point

*Significant after Holms-Bonferroni adjustment, significance threshold ≈ 0.003

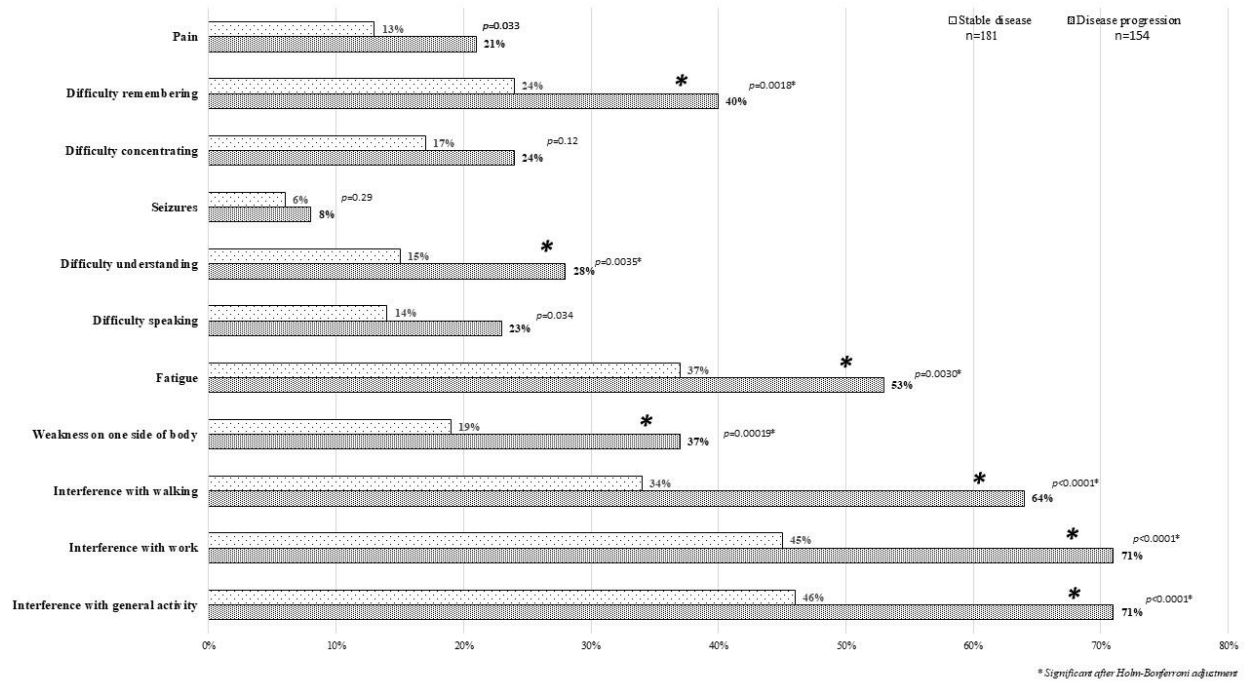
Supplementary table 5.

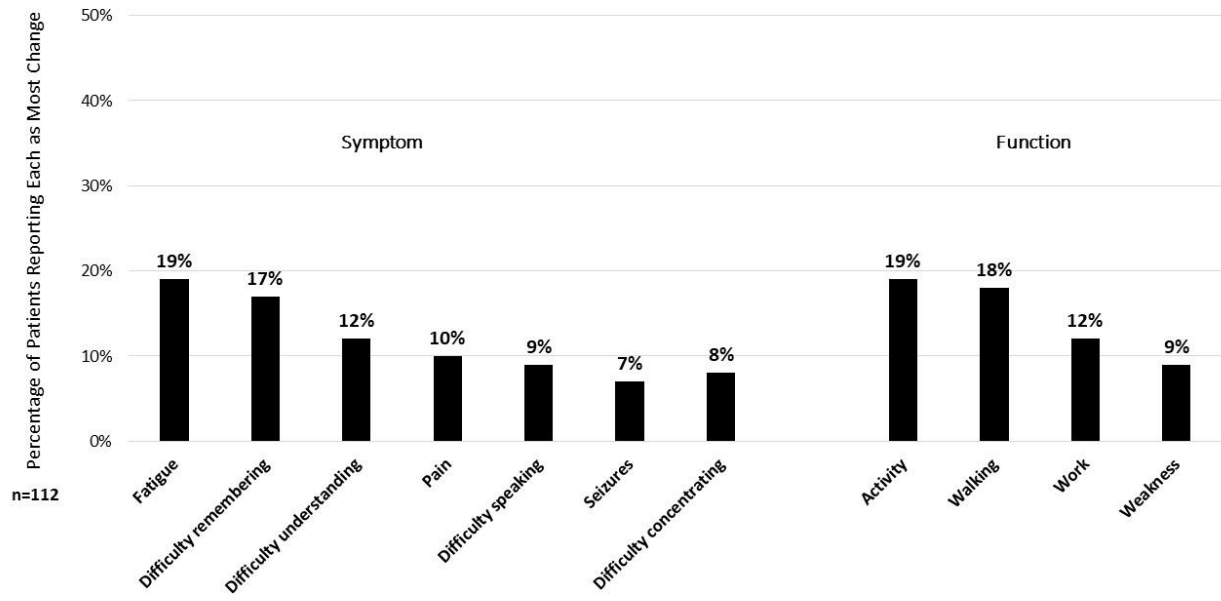
Item	Mean difference	95% CI of Difference	Effect size	Sig.
Nausea	0.5	[0.1, 0.9]	0.38	0.075
Disturbed sleep	0.7	[0.1, 1.3]	0.26	0.028
Feeling distressed*	1.1	[0.5, 1.7]	0.45	0.00032
Shortness of breath	0.5	[0.1, 0.9]	0.32	0.019
Lack of appetite	0.3	[-0.2, 0.8]	0.13	0.29
Feeling drowsy*	1.1	[0.5, 1.7]	0.44	0.00024
Dry mouth	0.3	[-0.2, 0.9]	0.15	0.18
Feeling sad	0.8	[0.2, 1.3]	0.31	0.0071
Vomiting	0.0	[-0.3, 0.4]	0.03	0.78
Numbness/Tingling*	0.6	[0.2, 1.0]	0.28	0.0022
Vision	0.5	[0.1, 1.0]	0.21	0.028
Change in appearance	0.1	[-0.3, 0.4]	0.05	0.61
Change in bowel pattern	0.1	[-0.5, 0.6]	0.02	0.84
Irritability	0.3	[-0.2, 0.9]	0.14	0.23
Interference with mood	0.6	[0.0, 1.2]	0.24	0.040
Interference with relations with others	0.8	[0.1, 1.4]	0.32	0.017
Interference with enjoyment of life*	1.0	[0.4, 1.7]	0.37	0.0014

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Effect size: *Glass' Δ*. MDASI-BT Minimally Important Difference = 1 point

*Significant after Holms-Bonferroni adjustment, significance threshold ≈ 0.003





*Multiple symptoms may have been reported with same change