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# Patient-Reported Outcomes in Acute Myeloid Leukemia Patients with *FLT3*-ITD Mutation Receiving Quizartinib vs Standard Chemotherapy: Results from the QuANTUM-First Trial

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## BACKGROUND

- Based on the QuANTUM-First (NCT02668653) data<sup>1</sup>:
  - Quizartinib has been approved in the US,<sup>2,3</sup> EU,<sup>4</sup> and Japan<sup>5</sup> in combination with chemotherapy across induction, consolidation, and as maintenance monotherapy (but not after transplantation in the US) for the treatment of adult patients with newly diagnosed *FLT3*-ITD+ AML<sup>1</sup>

## OBJECTIVE

- To assess the impact of quizartinib on patient-reported outcomes in the QuANTUM-First trial (exploratory endpoint)

AML, acute myeloid leukemia; EU, European Union; *FLT3*-ITD, FMS-like tyrosine kinase 3–internal tandem duplication; US, United States.

1. Erba HP, et al. *Lancet*. 2023. 2. Daiichi Sankyo Press Release. VANFLYTA® First FLT3 Inhibitor Approved in the U.S. Specifically for Patients with Newly Diagnosed FLT3-ITD Positive AML. Published July 20, 2023. 3. VANFLYTA® (quizartinib) package insert. Daiichi Sankyo, Inc. July 2023. 4. Daiichi Sankyo Press Release. VANFLYTA® Approved in the EU as the First FLT3 Inhibitor Specifically for Patients with Newly Diagnosed FLT3-ITD Positive AML. Published November 9, 2023.

5. Daiichi Sankyo Press Release. VANFLYTA® First FLT3 Inhibitor Approved in Japan for Patients with Newly Diagnosed FLT3-ITD Positive AML. Published May 25, 2023.

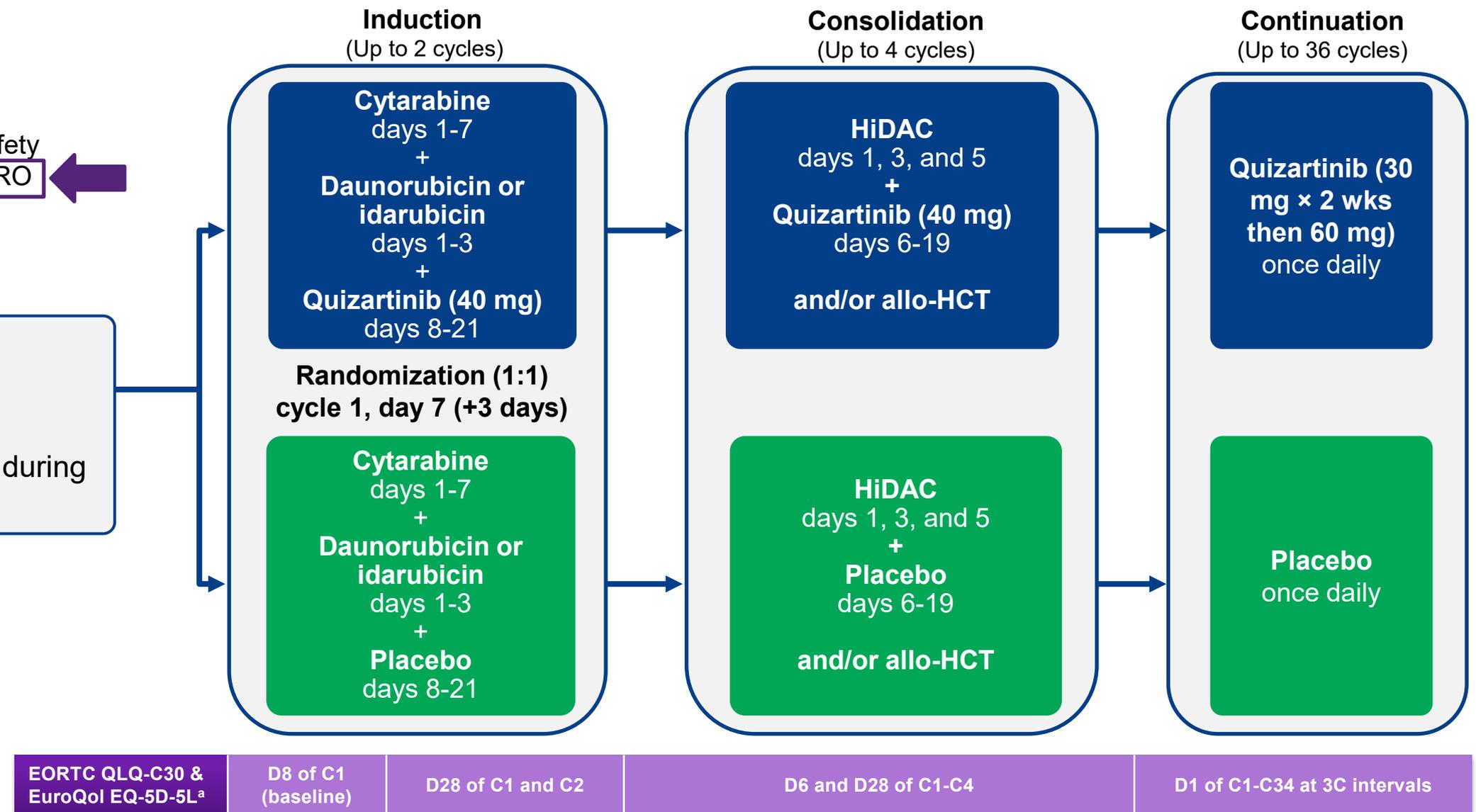
# QuANTUM-First Phase 3 Trial: Quizartinib Plus Standard Induction Chemotherapy and Consolidation Followed by Single-Agent Quizartinib

## Key endpoints

- **Primary endpoint:** OS
- **Secondary endpoints:** EFS, CR, CRc, CR/CRc with MRD- end of induction, safety
- **Exploratory endpoints:** RFS, DoCR, **PRO**

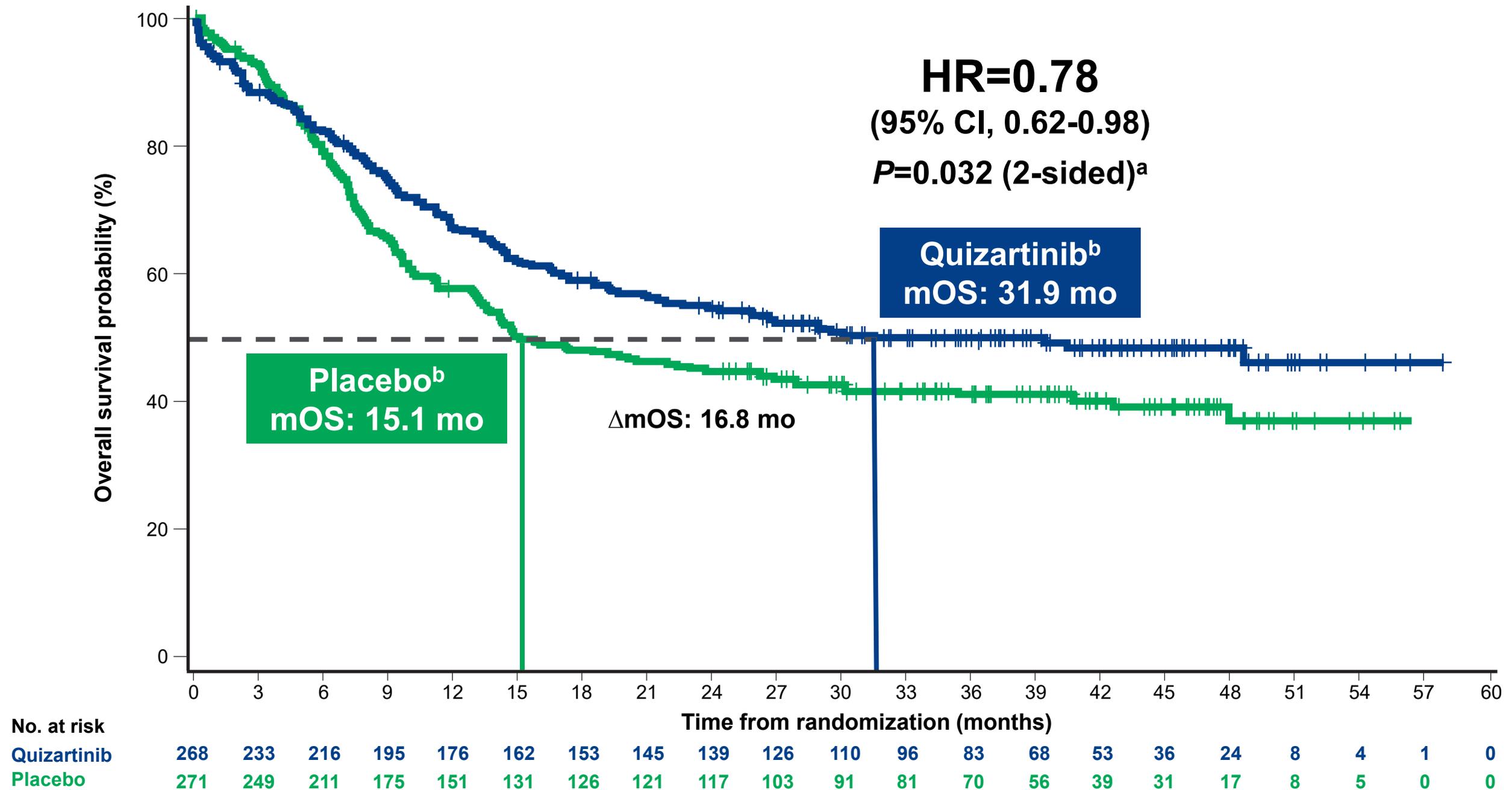
N=539

- Newly diagnosed *FLT3*-ITD+ AML
- 18-75 years of age
- $\geq 3\%$  *FLT3*-ITD allelic frequency
- Patients begin 7+3 chemotherapy during screening



<sup>a</sup>Data on the EuroQol EQ-5D-5L questionnaire are not shown in this presentation. Allo-HCT, allogeneic hematopoietic cell transplantation; AML, acute myeloid leukemia; C, cycle; CR, complete remission; CRc, composite complete remission; D, day; DoCR, duration of complete remission; EFS, event-free survival; EORTC QLQ-C30, European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Core 30 items; EuroQol EQ-5D-5L, European Quality of Life 5-Dimension 5-Level; *FLT3*-ITD, FMS-like tyrosine kinase 3–internal tandem duplication; HiDAC, high-dose cytarabine; MRD, measurable residual disease; OS, overall survival; PRO, patient-reported outcome; RFS, relapse-free survival. Erba HP, et al. *Lancet*. 2023.

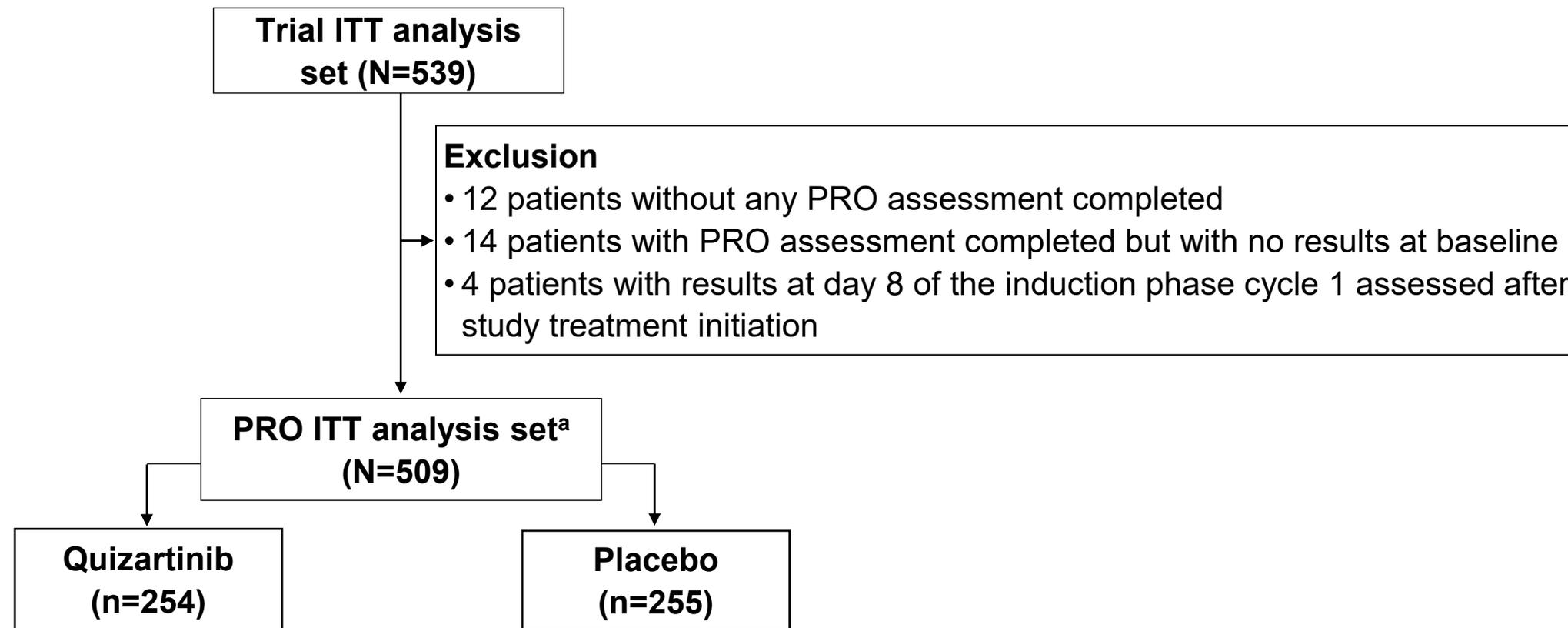
# Primary Endpoint: Overall Survival



<sup>a</sup>P value was calculated using a stratified log-rank test. <sup>b</sup>Median follow-up time for both arms was 39.2 months. HR, hazard ratio; mOS, median overall survival. Erba H, et al. *Lancet*. 2023.

# Patient Inclusion in PRO Analysis

- 94.4% of the ITT analysis set patients completed relevant PRO assessment on day 8 of induction phase cycle 1 (baseline)



<sup>a</sup>Defined as all randomized patients with complete EORTC QLQ-C30 assessments at baseline. EORTC QLQ-C30, European Organisation for Research and Treatment of Cancer, Quality of Life Questionnaire-Core 30 items; ITT, intent-to-treat; PRO, patient-reported outcome.

# Assessment of EORTC QLQ-C30 Scores

- EORTC QLQ-C30 scores were calculated and reported as mean (95% CI, *P* value) and mean change from baseline score for each domain of the EORTC QLQ-C30 questionnaire, at each time point
  - **Baseline Score:** calculated on day 8 of induction cycle 1
- A minimal clinically important difference (MCID) score  $\geq 10$  points for each domain of the EORTC QLQ-C30, was defined as previously reported<sup>1</sup>
- A MMRM on change from baseline and survival analyses (Cox model and Kaplan-Meier estimates) on time until definitive deterioration (TUDD) were used to assess the longitudinal impact of treatment on PROs
  - **TUDD<sup>a</sup>:** the time from baseline PRO score to first deterioration of the score beyond the MCID relative to baseline without further improvement of  $>1$  MCID relative to the reference score or without any further available score
- The analyses were not powered for statistical significance

| EORTC QLQ-C30                   |
|---------------------------------|
| <b>Global health status/QoL</b> |
| <b>Functional subscale</b>      |
| Physical                        |
| Role                            |
| Emotional                       |
| Cognitive                       |
| Social                          |
| <b>Symptom subscale</b>         |
| Fatigue                         |
| Nausea and vomiting             |
| Pain                            |
| Dyspnea                         |
| Insomnia                        |
| Appetite loss                   |
| Constipation                    |
| Diarrhea                        |
| Financial difficulties          |

<sup>a</sup>Censoring for TUDD: patients without definitive deterioration before the end of the study or death or dropout are censored at the time of the last assessment for a respective score. Patients without baseline score are censored at baseline. EORTC QLQ-C30, European Organisation for Research and Treatment of Cancer, Quality of Life Questionnaire-Core 30 items; MMRM, mixed model with repeated measures; PRO, patient-reported outcome; QoL, quality of life. 1. Musoro JZ, et al. *Eur J Cancer*. 2023.

# Baseline EORTC QLQ-C30 Scores and Population Norms

- Patient compliance to questionnaire completion was high and similar for both arms and most scales throughout the study
  - GHS completion rates: induction cycle 1 (99.2%), consolidation cycle 1 (95.3%), and continuation cycle 1 (93.4%)

| EORTC QLQ-C30, mean score (SD) |                        | Quizartinib<br>(n=254) | Placebo<br>(n=255) | Total<br>(N=509) | Ref, EU <sup>a</sup> | Ref, US <sup>a</sup> |
|--------------------------------|------------------------|------------------------|--------------------|------------------|----------------------|----------------------|
| <b>Global QoL<sup>a</sup></b>  | GHS/QoL                | 45.9 (24.4)            | 48.1 (24.9)        | 47.0 (24.6)      | 66.1 (21.7)          | 63.9 (22.9)          |
| <b>Functional subscale</b>     | Physical               | 68.5 (28.2)            | 68.9 (26.8)        | 68.7 (27.5)      | 85.1 (18.9)          | 80.8 (25.2)          |
|                                | Role                   | 52.2 (35.1)            | 49.9 (38.0)        | 51.1 (36.6)      | 84.3 (24.6)          | 81.7 (28.2)          |
|                                | Social                 | 53.5 (34.3)            | 53.4 (36.1)        | 53.4 (35.2)      | 86.2 (24.1)          | 81.6 (29.4)          |
| <b>Symptom subscale</b>        | Fatigue                | 51.0 (29.2)            | 48.0 (29.0)        | 49.5 (29.1)      | 29.5 (25.5)          | 31.9 (27.8)          |
|                                | Nausea and vomiting    | 19.0 (23.7)            | 19.7 (24.7)        | 19.3 (24.2)      | 5.9 (16.0)           | 10.9 (22.6)          |
|                                | Appetite loss          | 45.0 (34.4)            | 46.5 (35.7)        | 45.7 (35.0)      | 10.0 (21.6)          | 14.1 (25.3)          |
|                                | Diarrhea               | 30.7 (35.2)            | 25.3 (30.5)        | 28.0 (33.0)      | 9.5 (20.9)           | 13.7 (27.1)          |
|                                | Financial difficulties | 27.2 (33.0)            | 25.0 (32.8)        | 26.1 (32.9)      | 10.6 (23.6)          | 17.5 (30.8)          |

- Higher scores on the Functional subscale are better, lower scores in the Symptom subscale are better
- Scores for all the other function and symptom subscale domains (not included in the table) were similar between QuANTUM-First data at baseline and the US or EU population norms

<sup>a</sup>The EU and US reference data are from other studies and are not adjusted for age and sex.

EU, European Union; GHS, global health status; NA, not applicable; QoL, quality of life; US, United States.

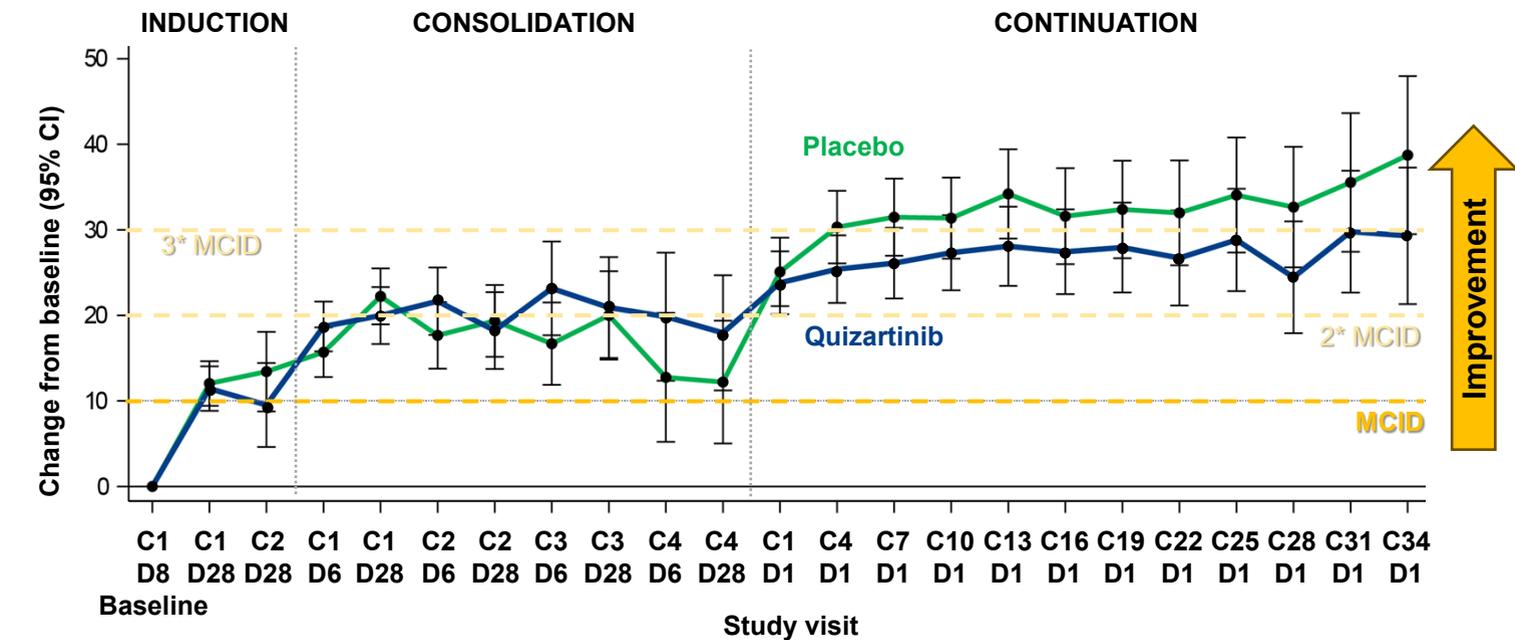
1. Nolte S, et al. *Eur J Cancer*. 2019.

# EORTC QLQ-C30 Global Health Status/QoL Scale and Physical Functioning Subscale MMRM for Change in Score From Baseline (Quizartinib vs Placebo)

- Improvements in GHS/QoL were observed for both placebo and quizartinib arms and reached MCID

**EORTC QLQ-C30 Global Health Status/QoL**

**EORTC QLQ-C30 Physical Functioning**

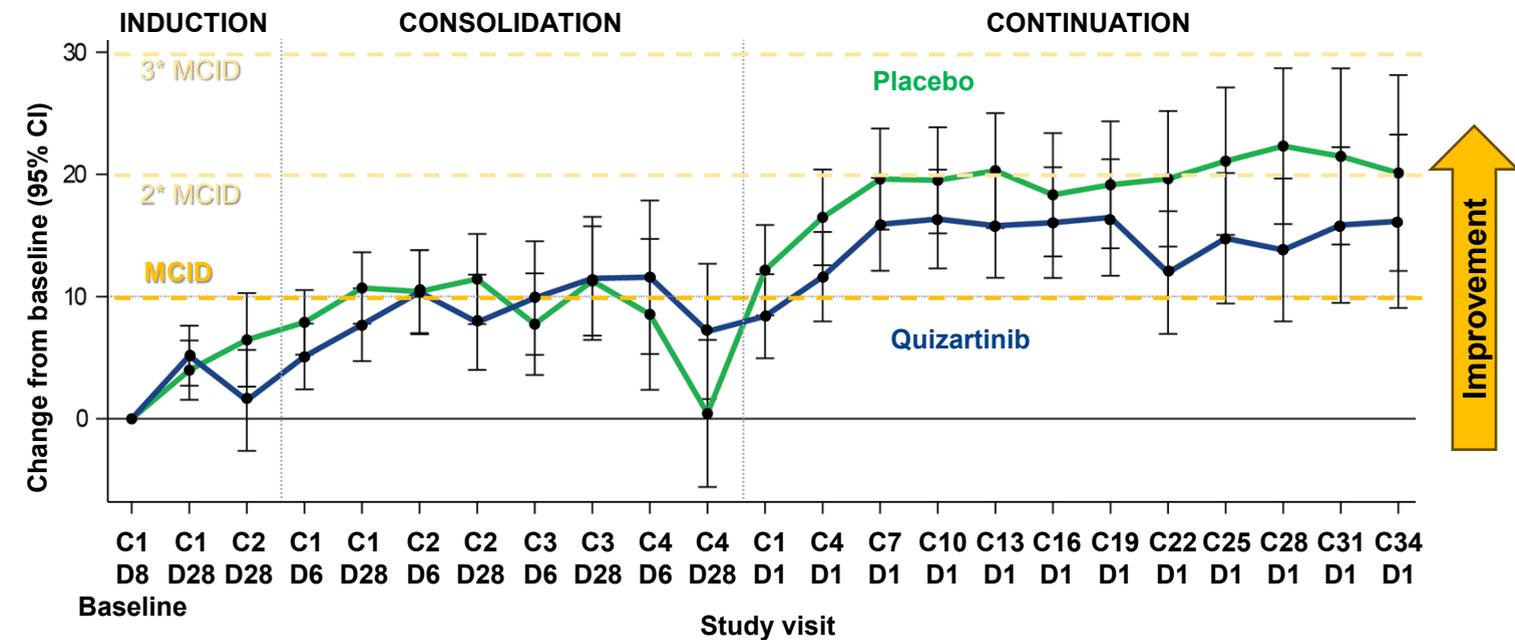


No. at risk

|             |     |     |    |     |     |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |    |    |    |
|-------------|-----|-----|----|-----|-----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 252 | 199 | 36 | 153 | 103 | 71 | 55 | 35 | 32 | 18 | 20 | 100 | 79 | 74 | 64 | 59 | 51 | 45 | 40 | 35 | 29 | 24 | 19 |
| Placebo     | 253 | 197 | 40 | 153 | 103 | 71 | 64 | 47 | 43 | 17 | 18 | 84  | 70 | 62 | 57 | 45 | 39 | 40 | 33 | 27 | 26 | 18 | 14 |

— Quizartinib    — Placebo

Mean (±SD) at baseline:      45.9 (24.4)      48.1 (24.9)



No. at risk

|             |     |     |    |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------|-----|-----|----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 249 | 195 | 35 | 150 | 103 | 71 | 55 | 35 | 32 | 17 | 20 | 98 | 76 | 73 | 62 | 57 | 50 | 45 | 40 | 36 | 29 | 24 | 19 |
| Placebo     | 252 | 197 | 40 | 152 | 106 | 71 | 63 | 47 | 43 | 17 | 17 | 84 | 69 | 61 | 56 | 45 | 39 | 40 | 33 | 27 | 26 | 18 | 15 |

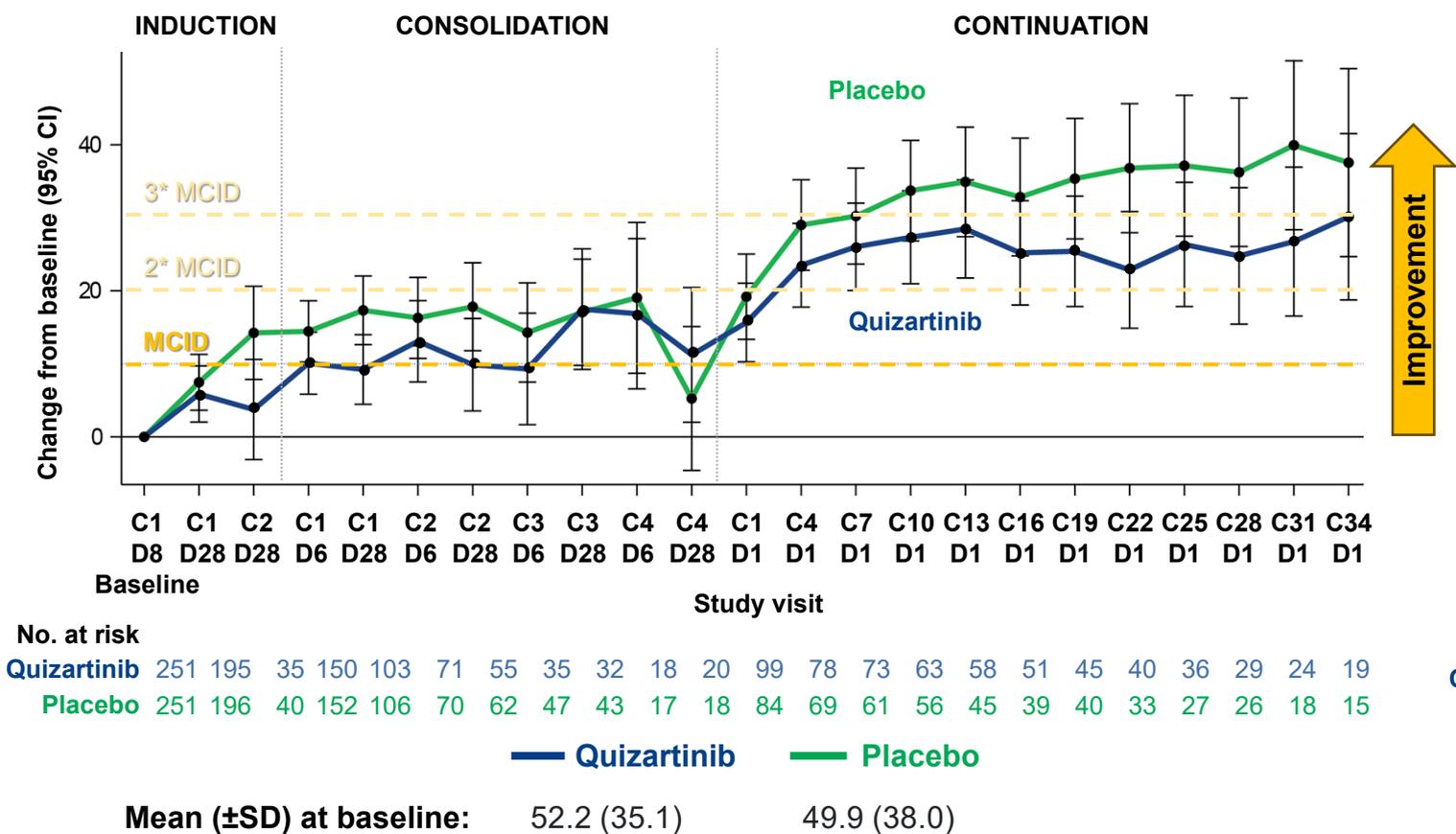
— Quizartinib    — Placebo

Mean (±SD) at baseline:      68.5 (28.2)      68.9 (26.8)

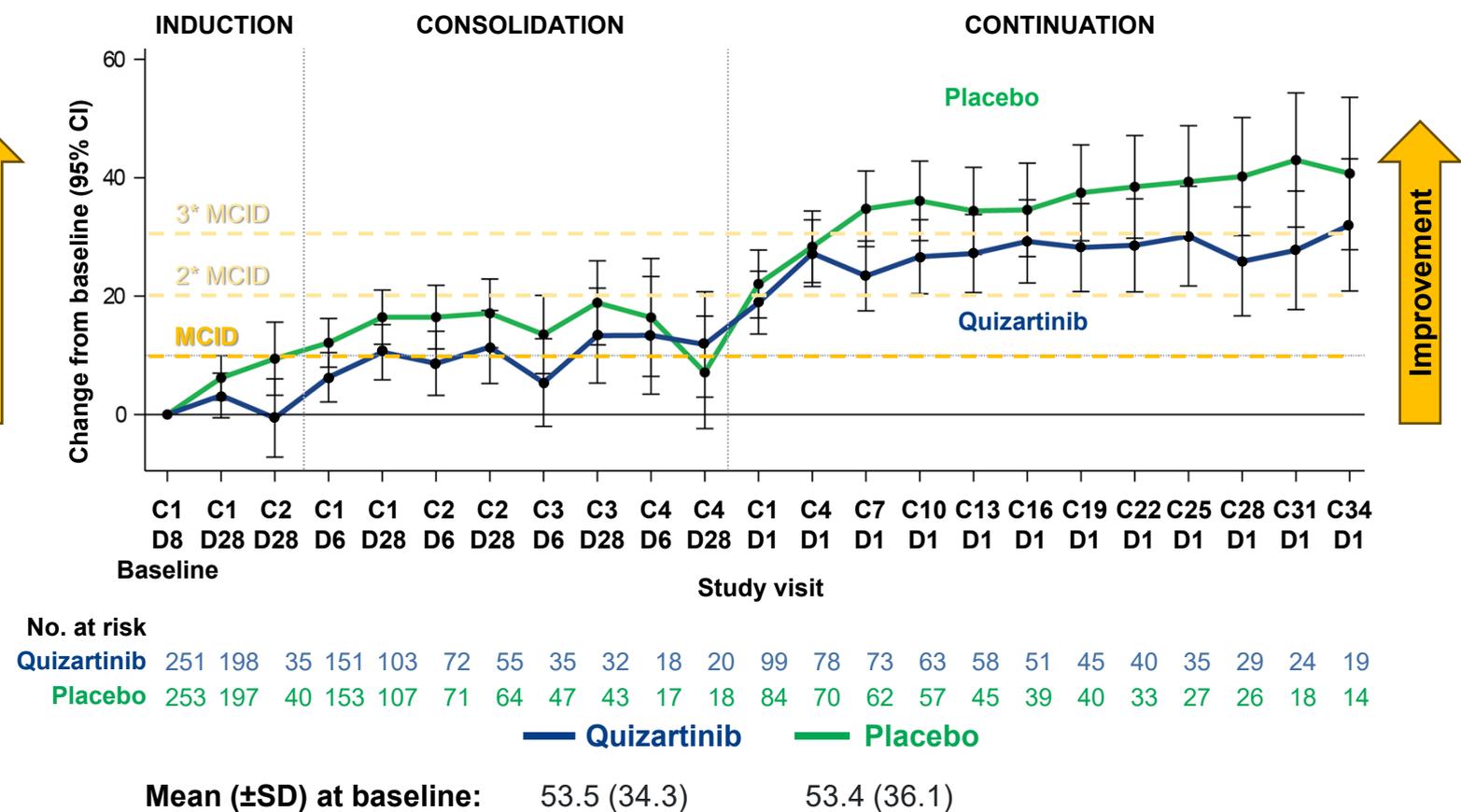
C, cycle; D, day; GHS, global health status; MCID, minimal clinically important difference; MMRM, mixed model with repeated measures; QoL, quality of life.

# EORTC QLQ-C30 Functional Subscales MMRM for Change in Score From Baseline (Quizartinib vs Placebo)

**EORTC QLQ-C30 Role Functioning**



**EORTC QLQ-C30 Social Functioning**

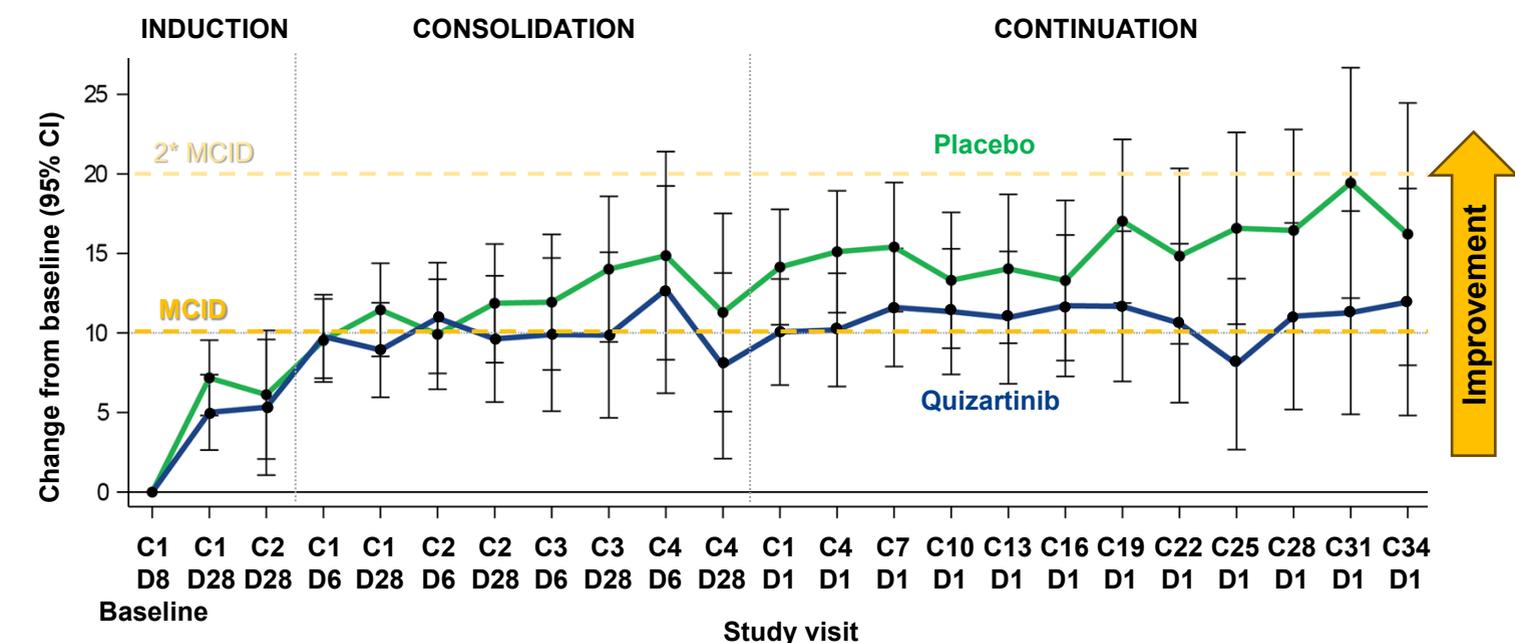


C, cycle; D, day; MCID, minimal clinically important difference; MMRM, mixed model with repeated measures; SD, standard deviation.

# EORTC QLQ-C30 Functional Subscales MMRM for Change in Score From Baseline (Quizartinib vs Placebo)

**EORTC QLQ-C30 Emotional Functioning**

**EORTC QLQ-C30 Cognitive Functioning**

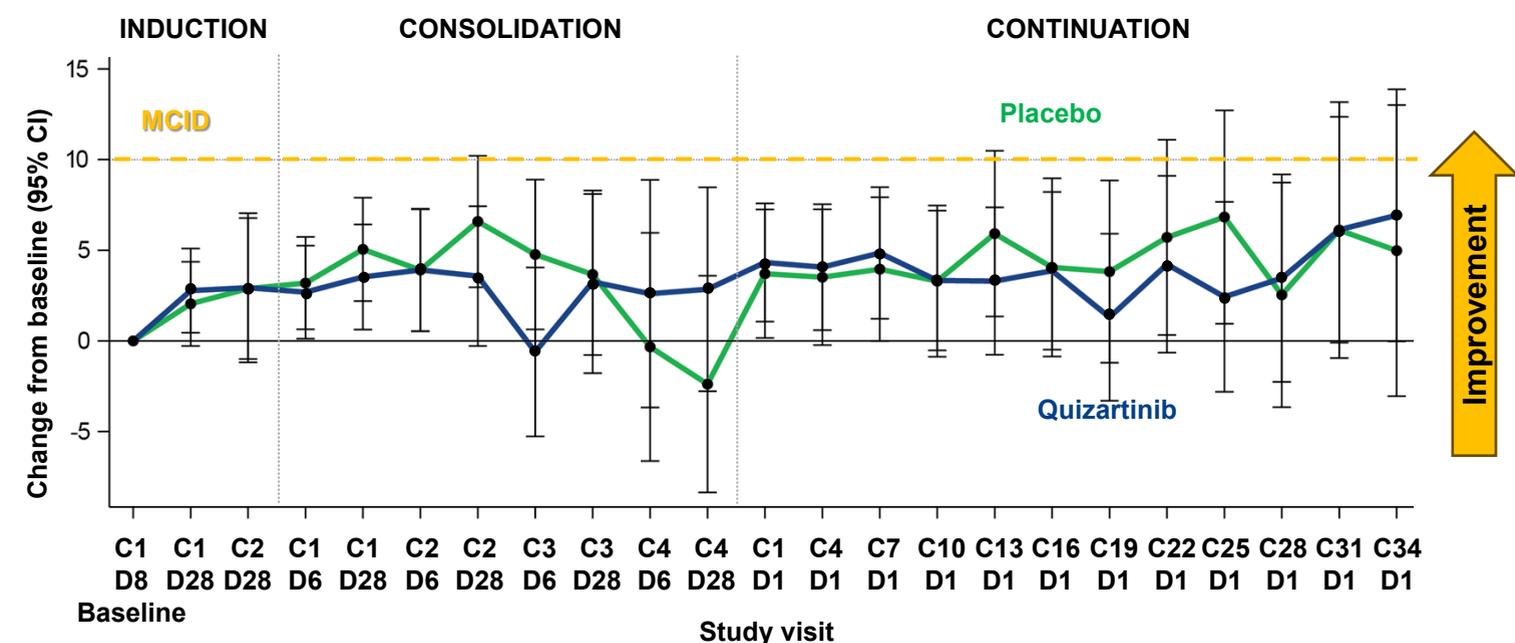


No. at risk

|             |     |     |    |     |     |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |    |    |    |
|-------------|-----|-----|----|-----|-----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 252 | 199 | 36 | 153 | 103 | 72 | 55 | 35 | 32 | 18 | 20 | 100 | 79 | 74 | 64 | 59 | 51 | 45 | 40 | 35 | 29 | 24 | 19 |
| Placebo     | 253 | 197 | 40 | 153 | 107 | 71 | 64 | 47 | 43 | 17 | 18 | 84  | 70 | 62 | 57 | 45 | 39 | 40 | 33 | 27 | 26 | 18 | 14 |

— Quizartinib — Placebo

Mean ( $\pm$ SD) at baseline: 71.7 (24.3) 72.3 (24.3)



No. at risk

|             |     |     |    |     |     |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |    |    |    |
|-------------|-----|-----|----|-----|-----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 252 | 199 | 36 | 153 | 103 | 72 | 55 | 35 | 32 | 18 | 20 | 100 | 79 | 74 | 64 | 59 | 51 | 45 | 40 | 35 | 29 | 24 | 19 |
| Placebo     | 253 | 197 | 40 | 153 | 107 | 71 | 64 | 47 | 43 | 17 | 18 | 85  | 70 | 62 | 57 | 45 | 39 | 40 | 33 | 27 | 26 | 18 | 14 |

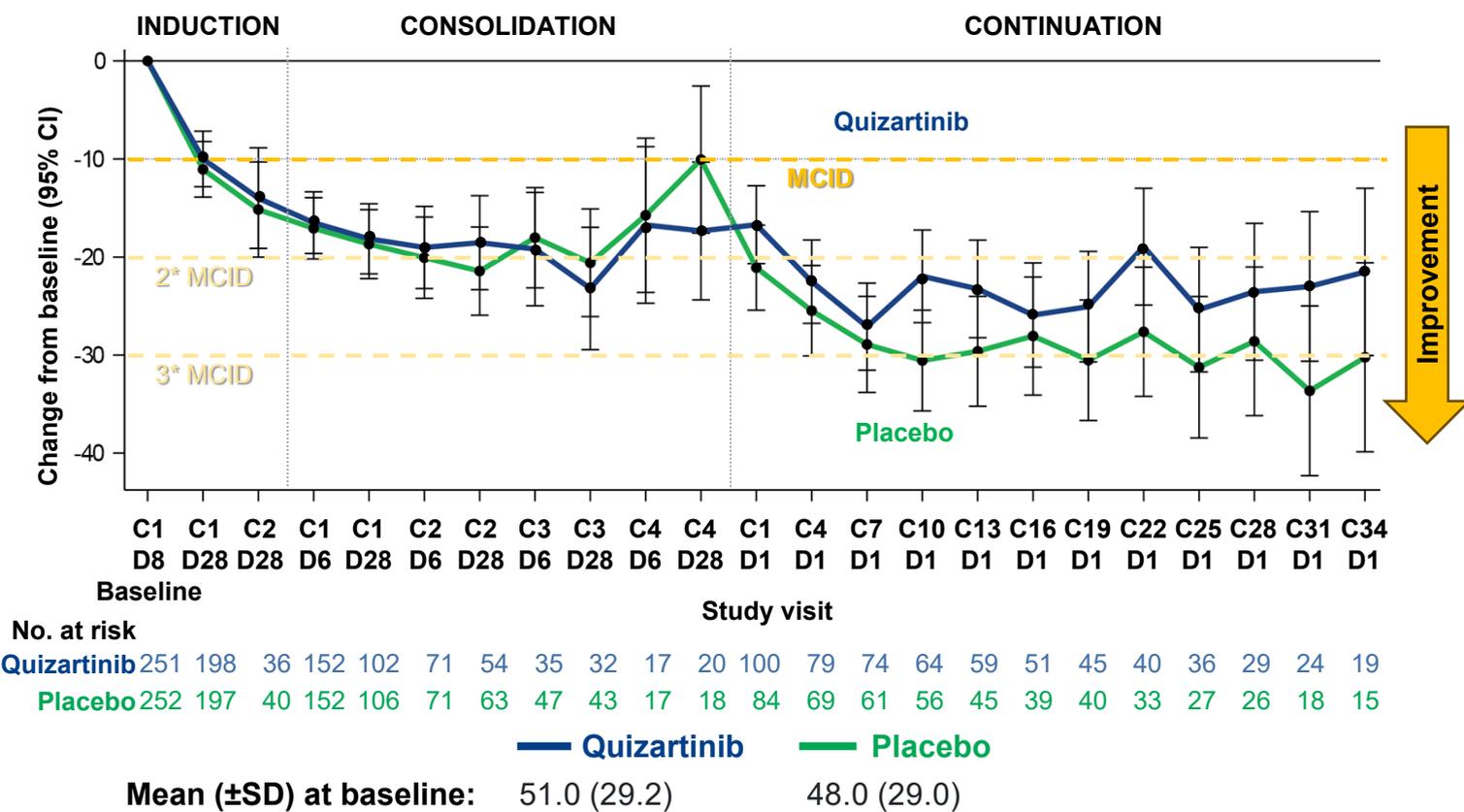
— Quizartinib — Placebo

Mean ( $\pm$ SD) at baseline: 80.4 (22.8) 81.9 (22.6)

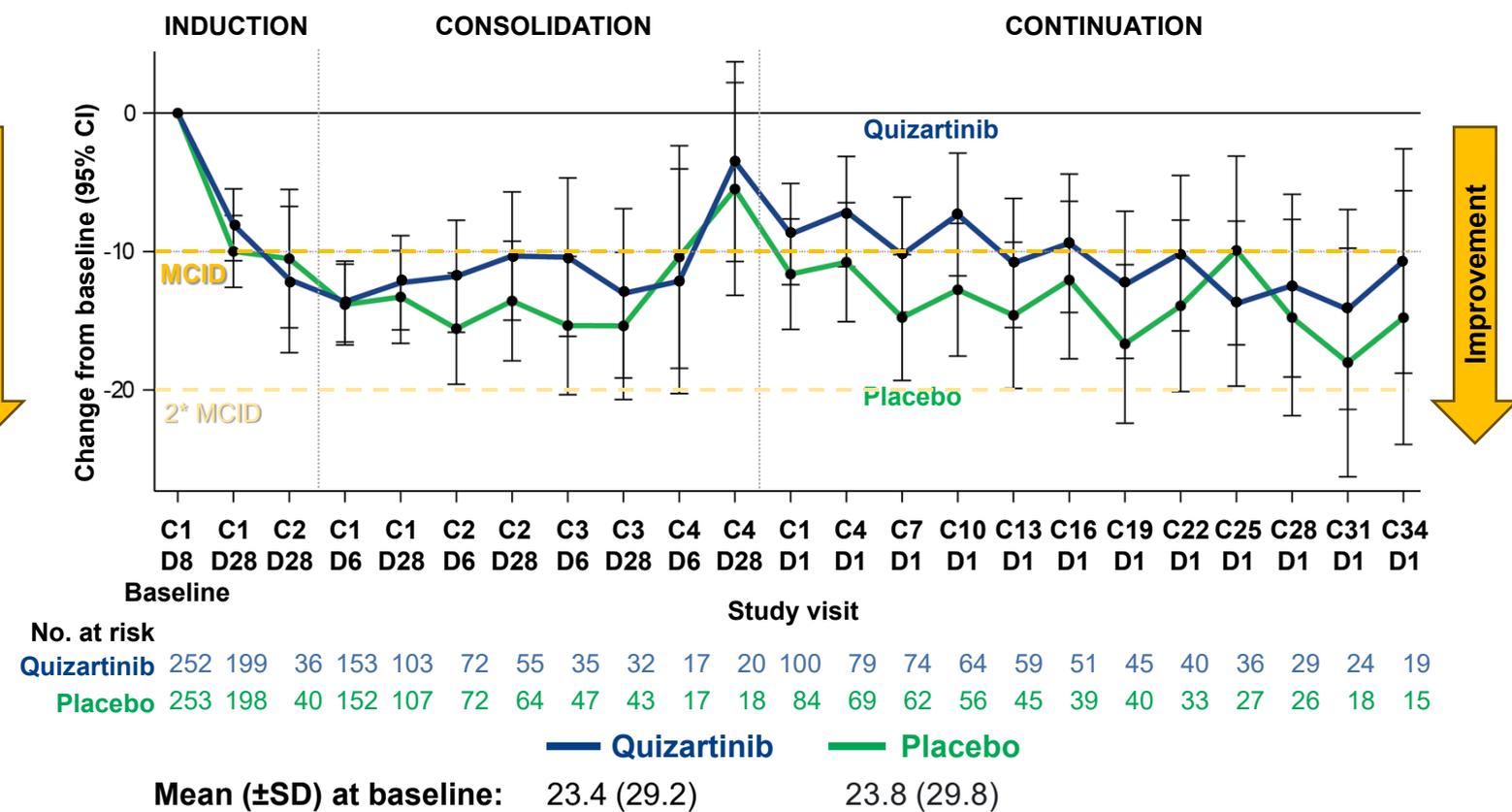
C, cycle; D, day; MCID, minimal clinically important difference; MMRM, mixed model with repeated measures; SD, standard deviation.

# EORTC QLQ-C30 Symptom Subscales MMRM for Change in Score From Baseline (Quizartinib vs Placebo)

**EORTC QLQ-C30 Fatigue**



**EORTC QLQ-C30 Dyspnea**

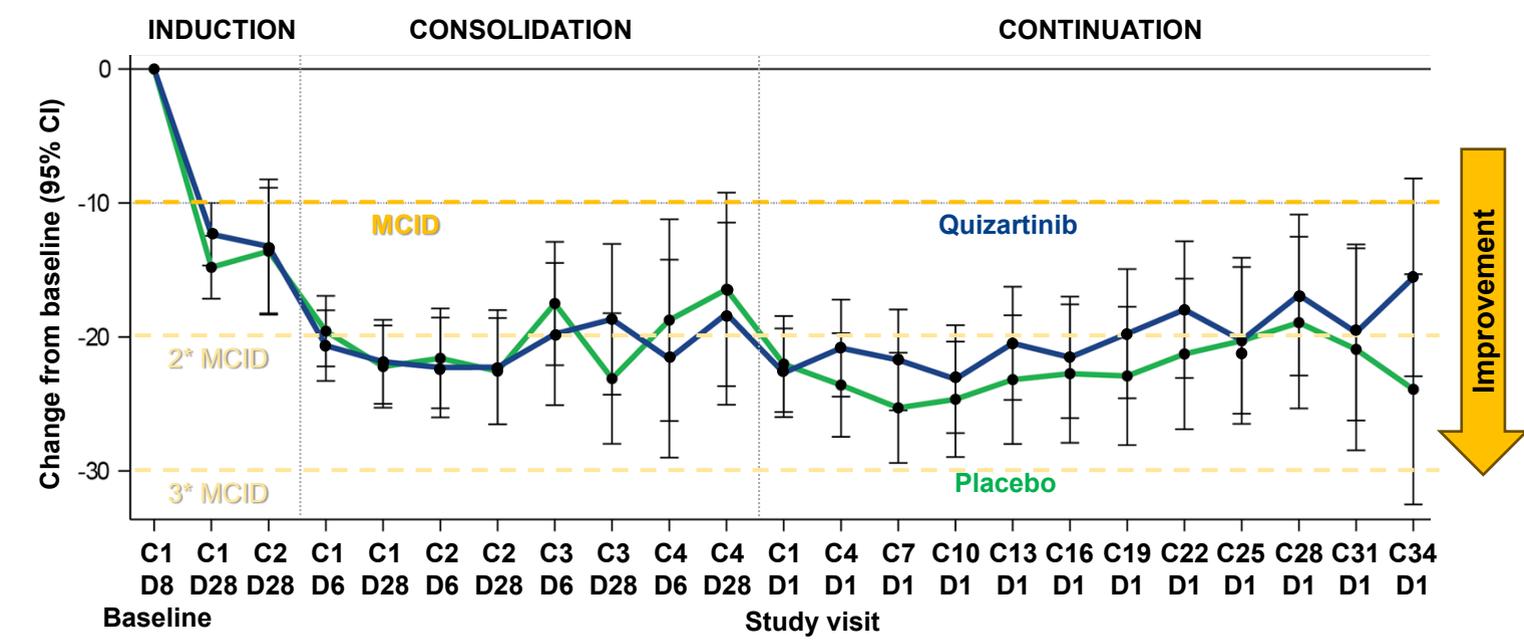


C, cycle; D, day; MCID, minimal clinically important difference; MMRM, mixed model with repeated measures; SD, standard deviation.

# EORTC QLQ-C30 Symptom Subscales MMRM for Change in Score From Baseline (Quizartinib vs Placebo)

**EORTC QLQ-C30 Diarrhea**

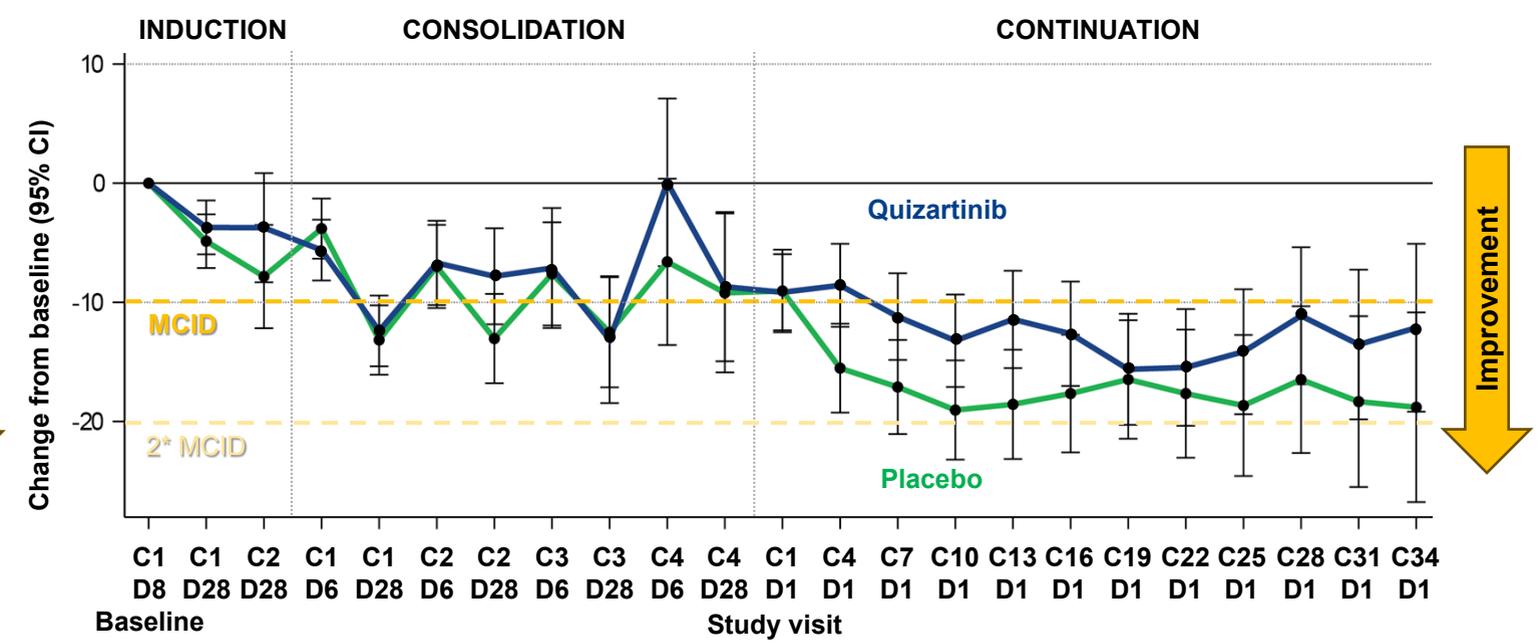
**EORTC QLQ-C30 Nausea and vomiting**



No. at risk

|             |     |     |    |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------|-----|-----|----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 252 | 199 | 36 | 153 | 102 | 72 | 55 | 35 | 32 | 18 | 20 | 99 | 79 | 74 | 64 | 59 | 51 | 45 | 40 | 35 | 29 | 24 | 19 |
| Placebo     | 253 | 197 | 40 | 153 | 107 | 71 | 64 | 47 | 43 | 17 | 18 | 84 | 70 | 62 | 57 | 45 | 39 | 40 | 33 | 27 | 26 | 18 | 14 |

Mean (±SD) at baseline:      **Quizartinib** 30.7 (35.2)      **Placebo** 25.3 (30.5)



No. at risk

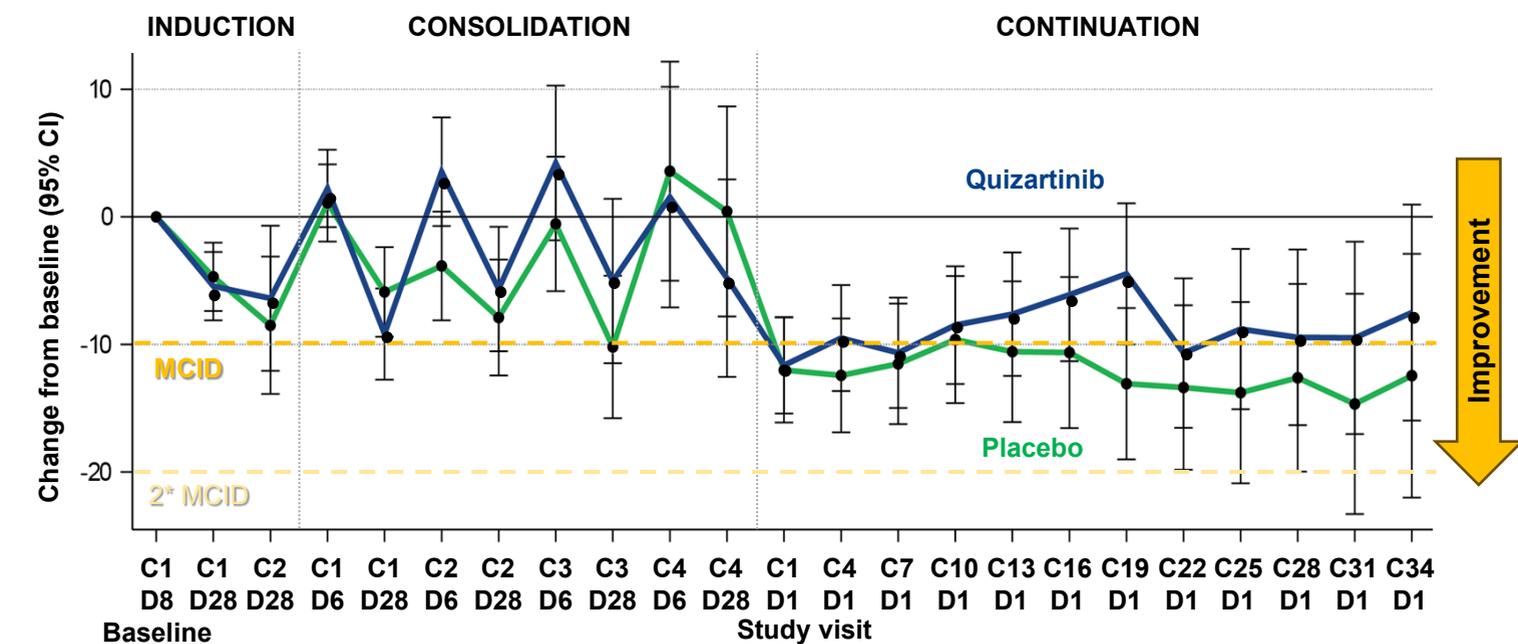
|             |     |     |    |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------------|-----|-----|----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 251 | 198 | 36 | 152 | 102 | 71 | 55 | 34 | 32 | 17 | 20 | 99 | 78 | 73 | 63 | 58 | 50 | 44 | 40 | 35 | 29 | 24 | 19 |
| Placebo     | 253 | 198 | 40 | 153 | 107 | 72 | 64 | 47 | 43 | 17 | 18 | 84 | 69 | 62 | 56 | 45 | 39 | 40 | 33 | 27 | 26 | 18 | 15 |

Mean (±SD) at baseline:      **Quizartinib** 19.0 (23.7)      **Placebo** 19.7 (24.7)

C, cycle; D, day; MCID, minimal clinically important difference; MMRM, mixed model with repeated measures; SD, standard deviation.

# EORTC QLQ-C30 Symptom Subscales MMRM for Change in Score From Baseline (Quizartinib vs Placebo)

**EORTC QLQ-C30 Constipation**

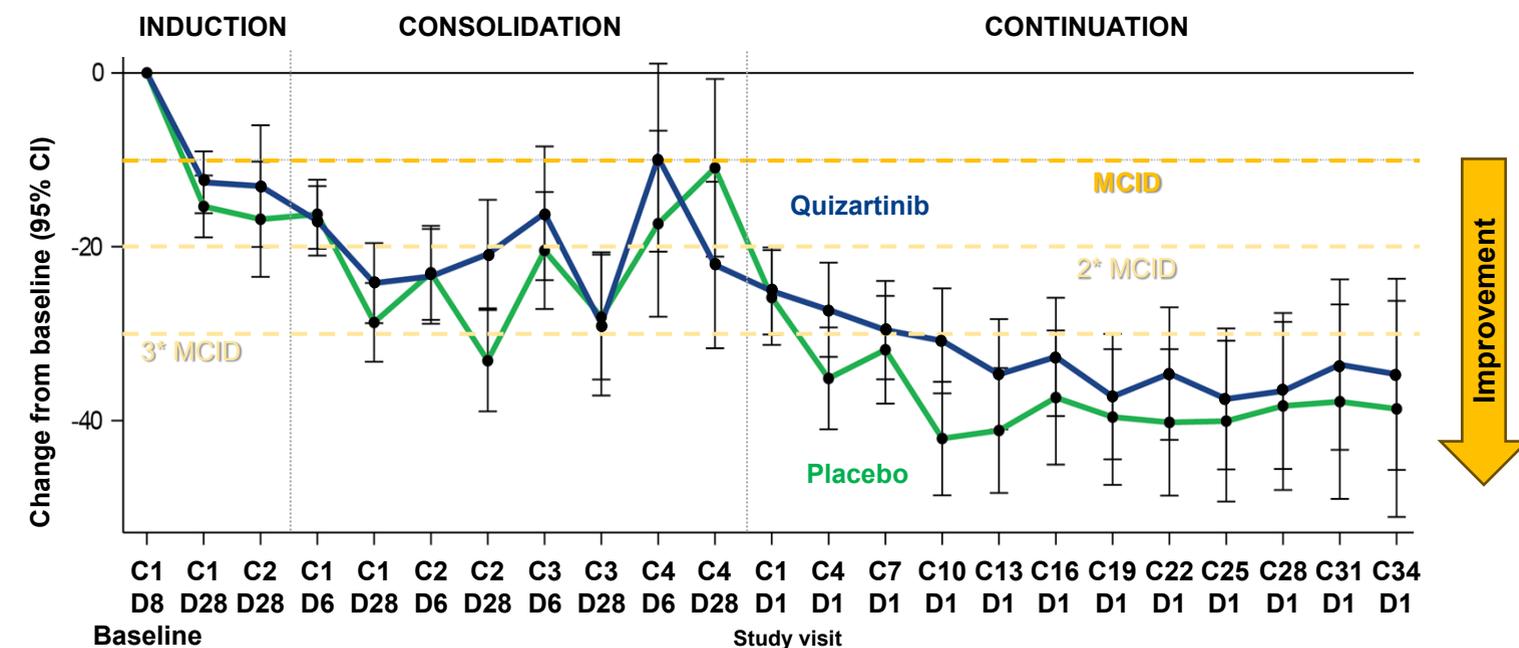


No. at risk

|             |     |     |    |     |     |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |    |    |    |
|-------------|-----|-----|----|-----|-----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 252 | 199 | 36 | 153 | 103 | 72 | 55 | 35 | 32 | 17 | 20 | 100 | 79 | 74 | 64 | 59 | 51 | 45 | 40 | 35 | 29 | 24 | 19 |
| Placebo     | 253 | 198 | 40 | 153 | 107 | 71 | 64 | 47 | 43 | 17 | 18 | 84  | 69 | 62 | 56 | 45 | 39 | 40 | 33 | 27 | 26 | 18 | 15 |

Mean (±SD) at baseline: Quizartinib 18.7 (28.4)      Placebo 15.8 (25.3)

**EORTC QLQ-C30 Appetite loss**

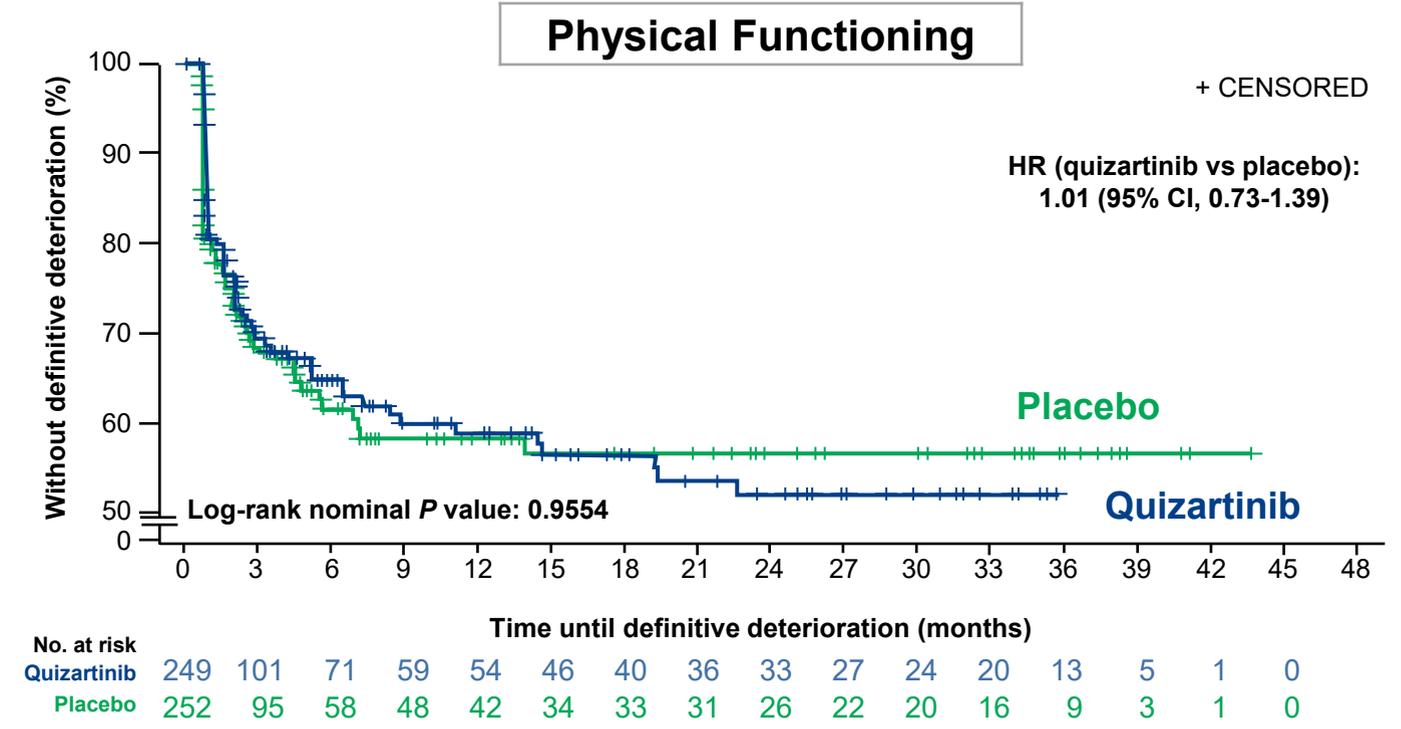
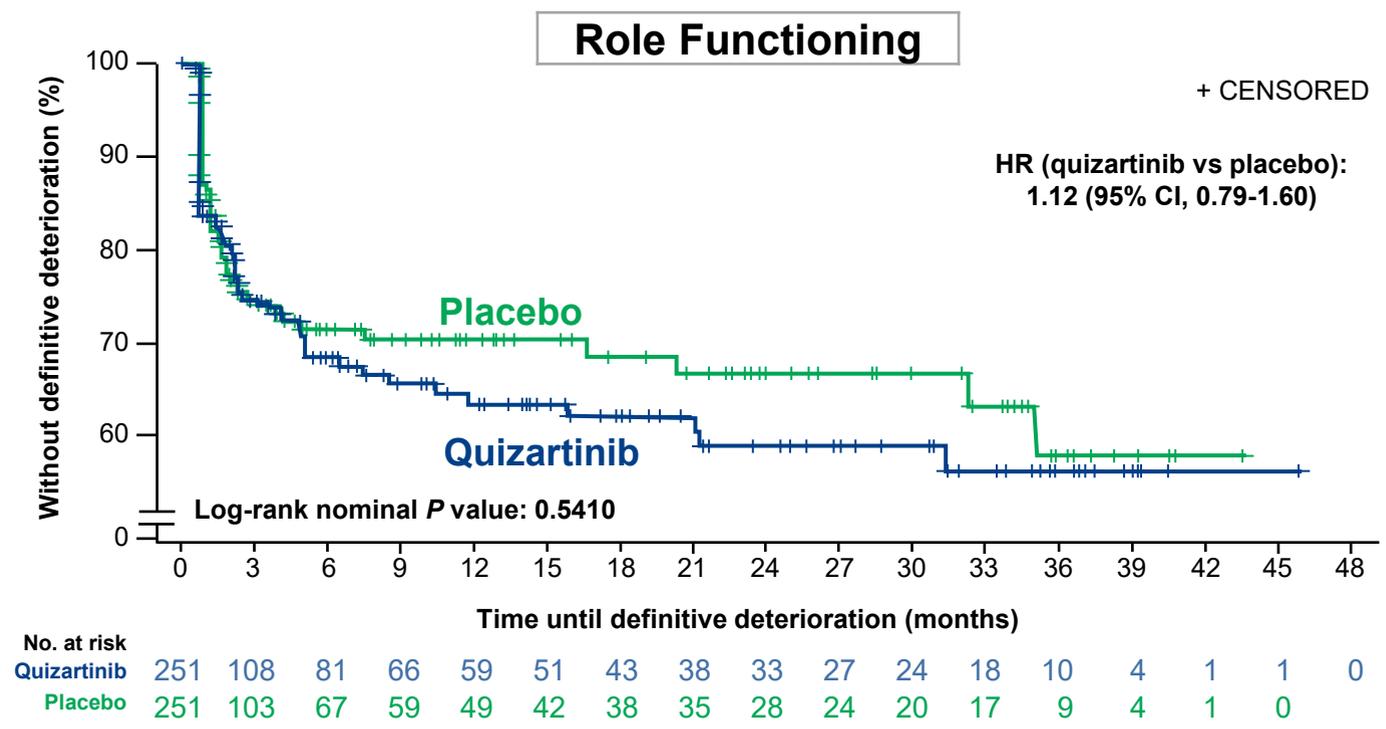
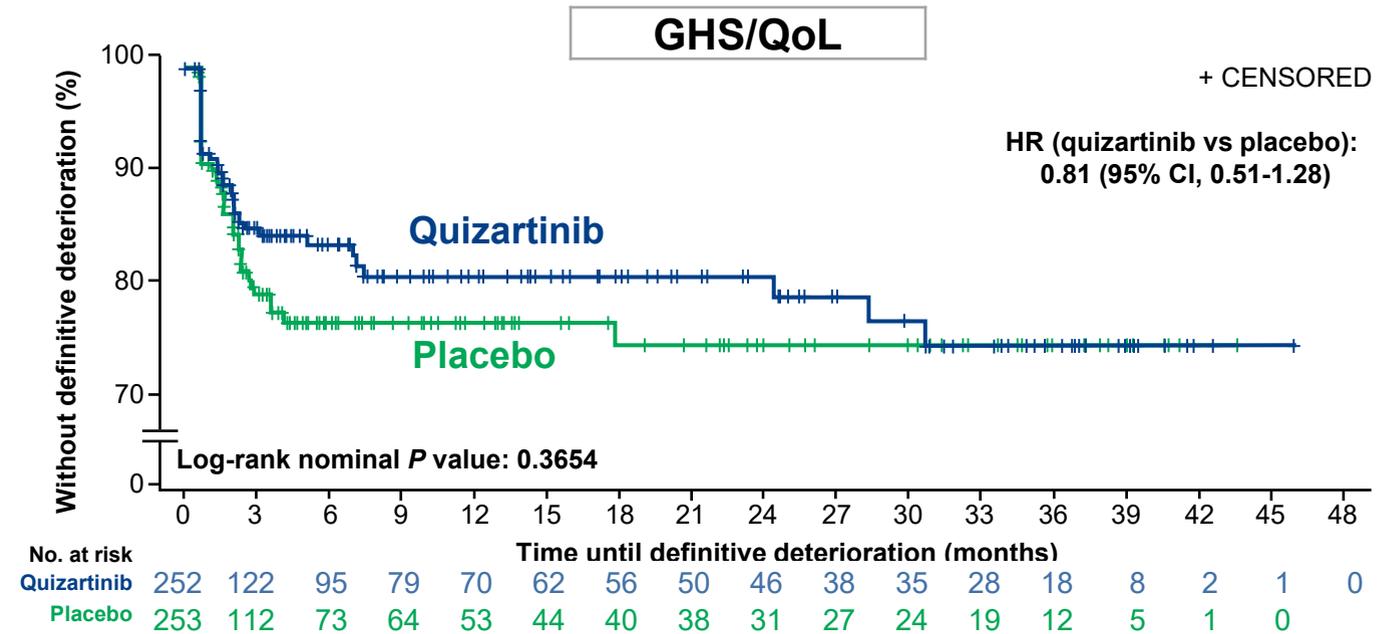


No. at risk

|             |     |     |    |     |     |    |    |    |    |    |    |     |    |    |    |    |    |    |    |    |    |    |    |
|-------------|-----|-----|----|-----|-----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 252 | 198 | 36 | 153 | 103 | 72 | 55 | 35 | 32 | 17 | 20 | 100 | 79 | 74 | 64 | 59 | 51 | 45 | 40 | 36 | 29 | 24 | 19 |
| Placebo     | 253 | 198 | 40 | 152 | 107 | 72 | 64 | 47 | 43 | 17 | 18 | 84  | 69 | 62 | 56 | 45 | 39 | 40 | 33 | 27 | 26 | 18 | 15 |

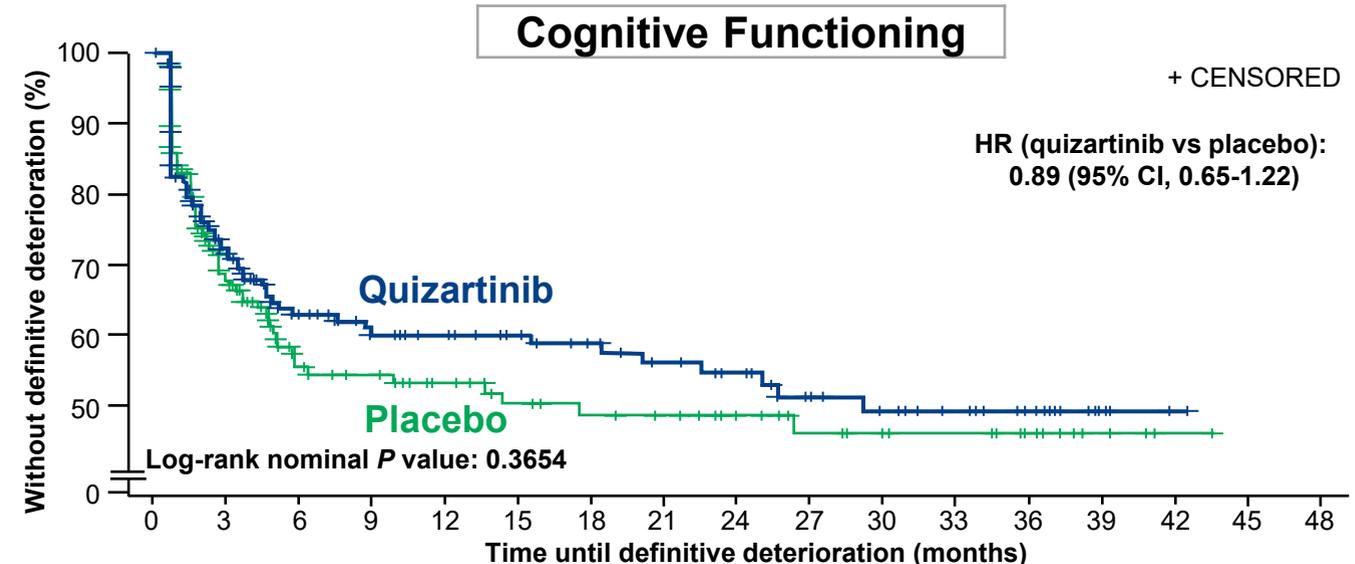
Mean (±SD) at baseline: Quizartinib 45.0 (34.4)      Placebo 46.5 (35.7)

# Time Until Definitive Deterioration (TUDD) of EORTC QLQ-C30

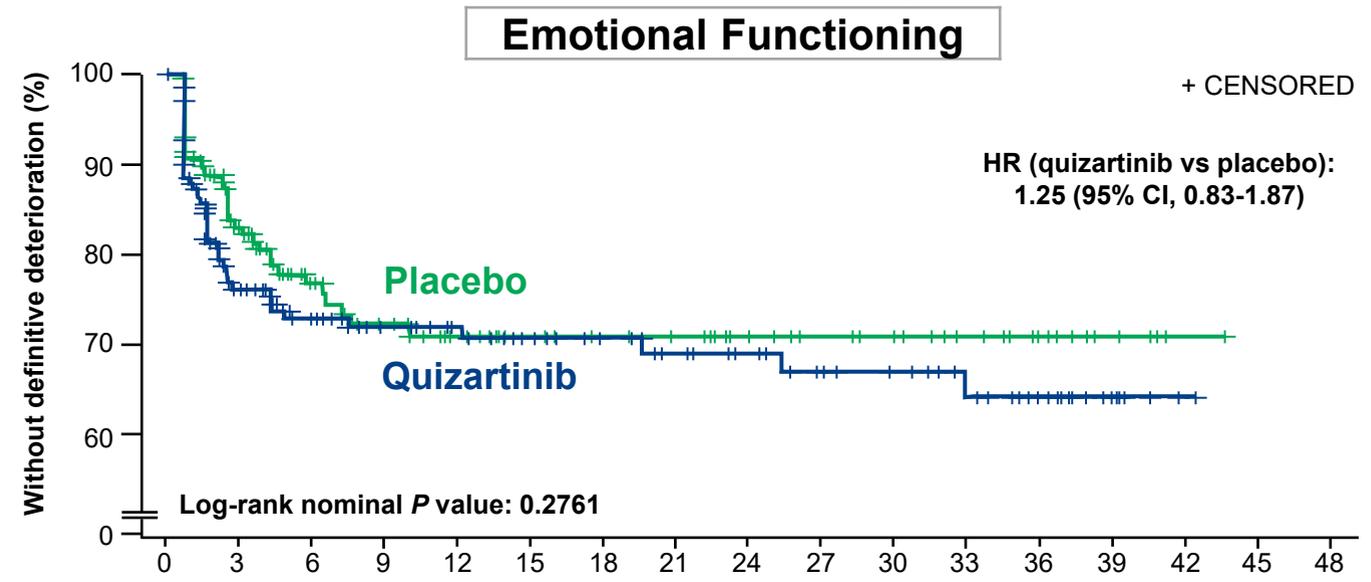


GHS, global health status; HR, hazard ratio; QoL, quality of life.

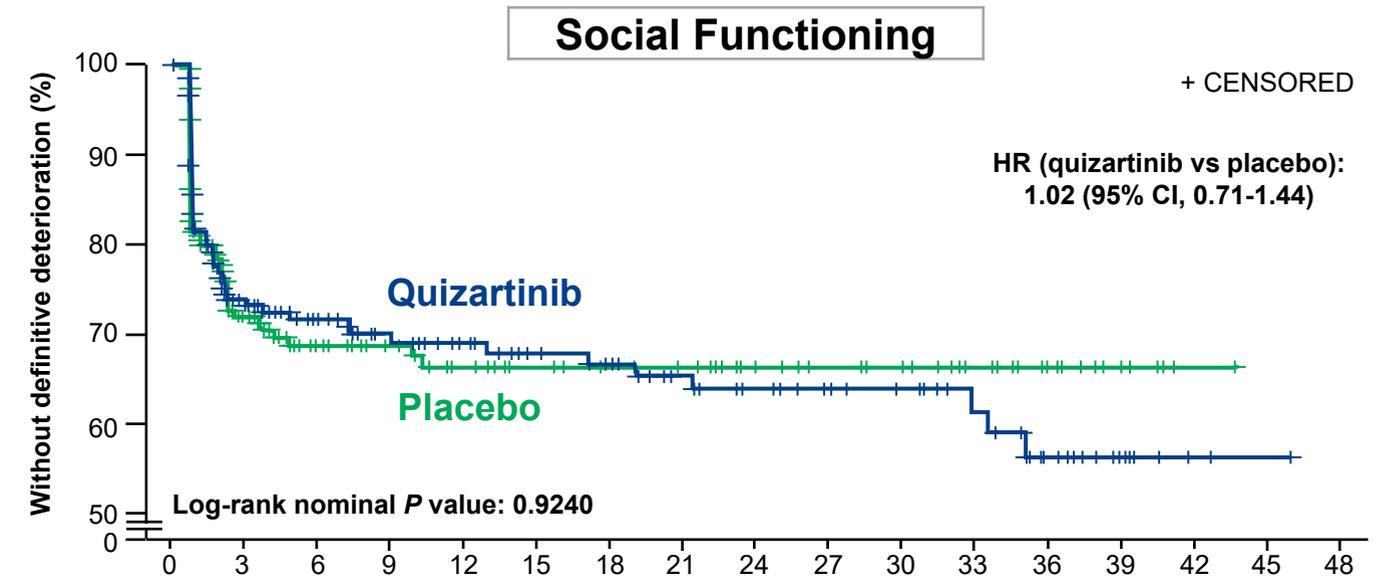
# Time Until Definitive Deterioration (TUDD) of EORTC QLQ-C30



| No. at risk | 0   | 3   | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 | 48 |
|-------------|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 252 | 104 | 71 | 60 | 55 | 50 | 45 | 40 | 36 | 27 | 23 | 18 | 12 | 4  | 1  | 0  |    |
| Placebo     | 253 | 93  | 54 | 48 | 40 | 33 | 30 | 28 | 23 | 18 | 14 | 13 | 9  | 4  | 1  | 0  |    |



| No. at risk | 0   | 3   | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 | 48 |
|-------------|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 252 | 108 | 82 | 68 | 60 | 52 | 46 | 41 | 37 | 30 | 27 | 22 | 15 | 6  | 1  | 0  |    |
| Placebo     | 253 | 111 | 70 | 58 | 49 | 40 | 37 | 35 | 29 | 25 | 22 | 18 | 12 | 5  | 1  | 0  |    |

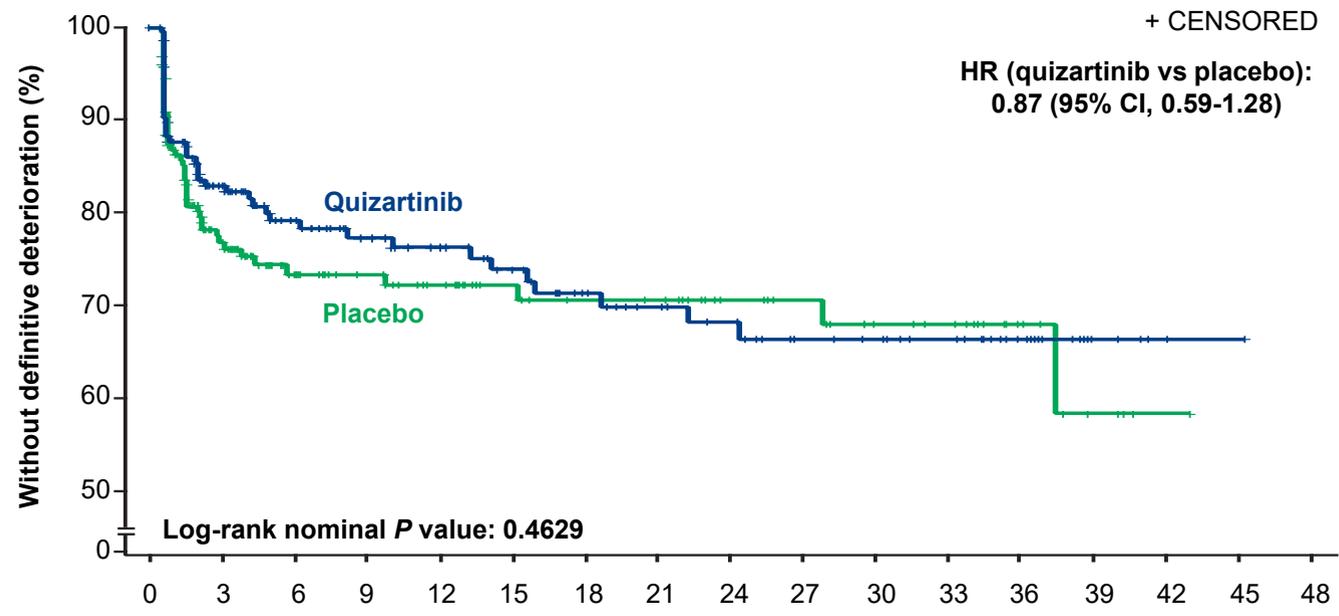


| No. at risk | 0   | 3   | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 | 48 |
|-------------|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 251 | 109 | 85 | 73 | 65 | 57 | 52 | 45 | 40 | 35 | 32 | 25 | 17 | 7  | 2  | 1  | 0  |
| Placebo     | 253 | 101 | 69 | 61 | 52 | 45 | 42 | 40 | 33 | 29 | 25 | 19 | 12 | 5  | 1  | 0  |    |

HR, hazard ratio.

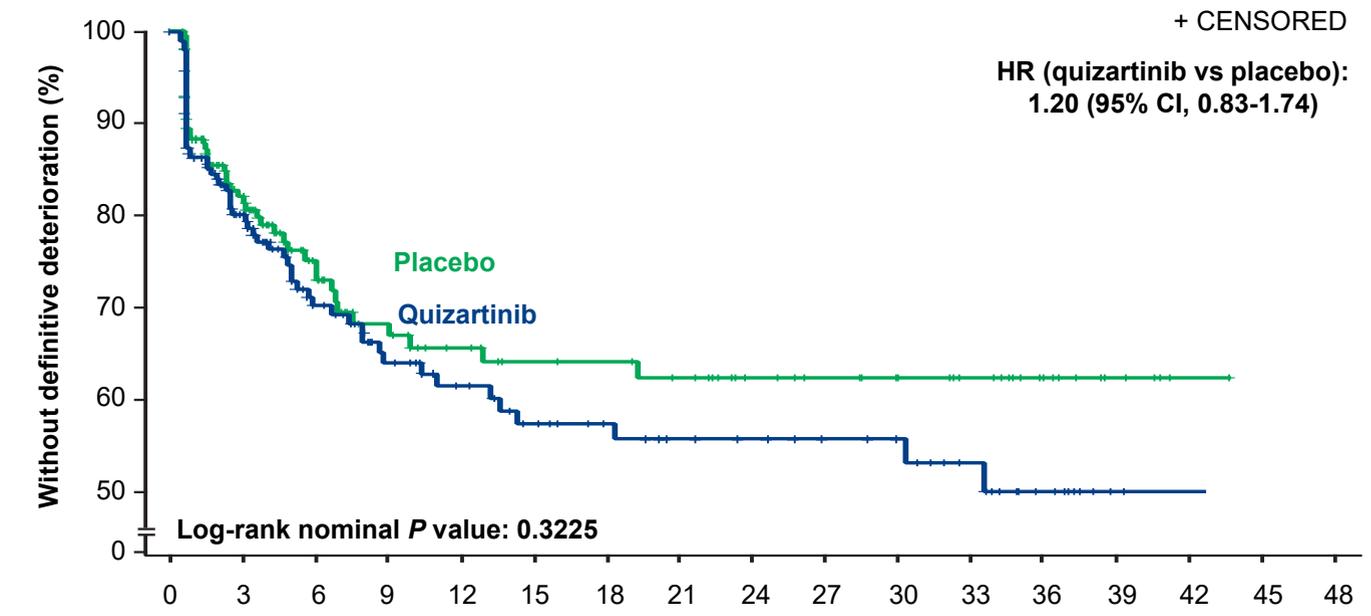
# Time Until Definitive Deterioration (TUDD) of EORTC QLQ-C30 Symptom Subscales

**Fatigue**



| No. at risk |     | 0   | 3  | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 | 48 |
|-------------|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 251 | 122 | 92 | 77 | 68 | 59 | 51 | 44 | 40 | 33 | 30 | 25 | 16 | 8  | 2  | 1  | 0  |    |
| Placebo     | 252 | 108 | 72 | 62 | 54 | 45 | 41 | 39 | 31 | 27 | 22 | 19 | 11 | 5  | 1  | 0  |    |    |

**Dyspnea**

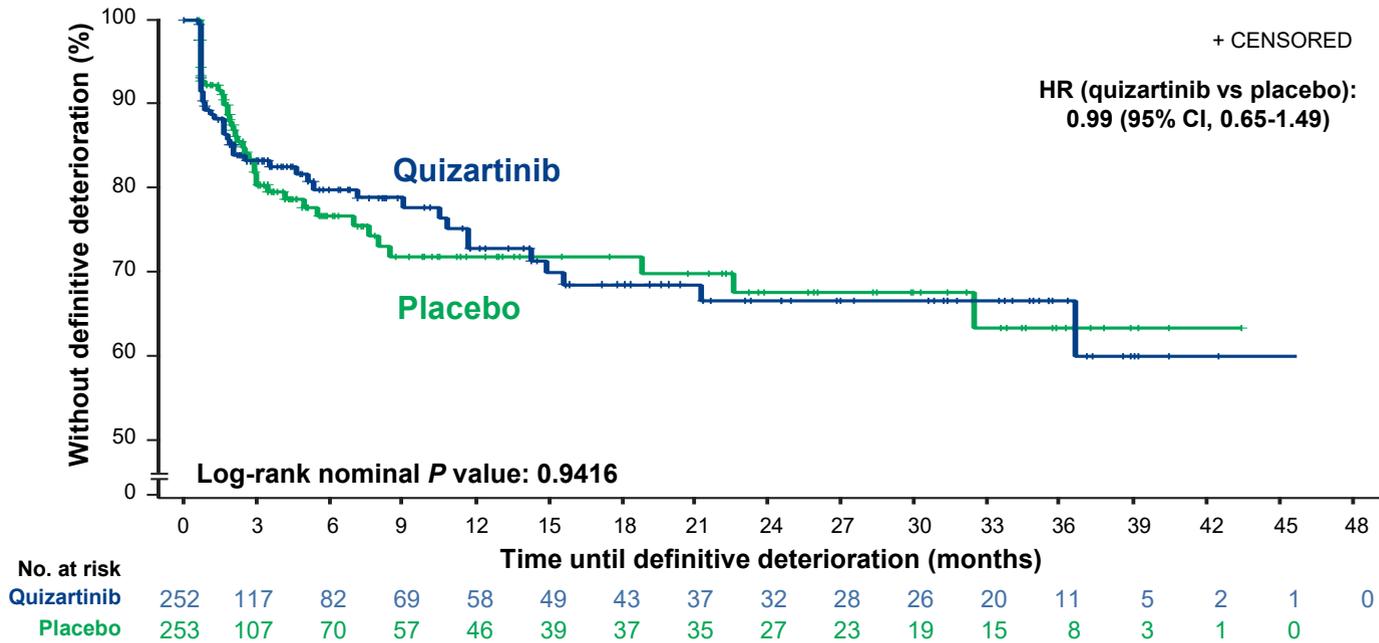


| No. at risk |     | 0   | 3  | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 33 | 36 | 39 | 42 | 45 | 48 |
|-------------|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Quizartinib | 252 | 114 | 76 | 58 | 47 | 39 | 34 | 30 | 28 | 24 | 22 | 17 | 9  | 2  | 1  | 0  |    |    |
| Placebo     | 253 | 114 | 70 | 54 | 45 | 40 | 39 | 36 | 29 | 25 | 21 | 18 | 10 | 5  | 1  | 0  |    |    |

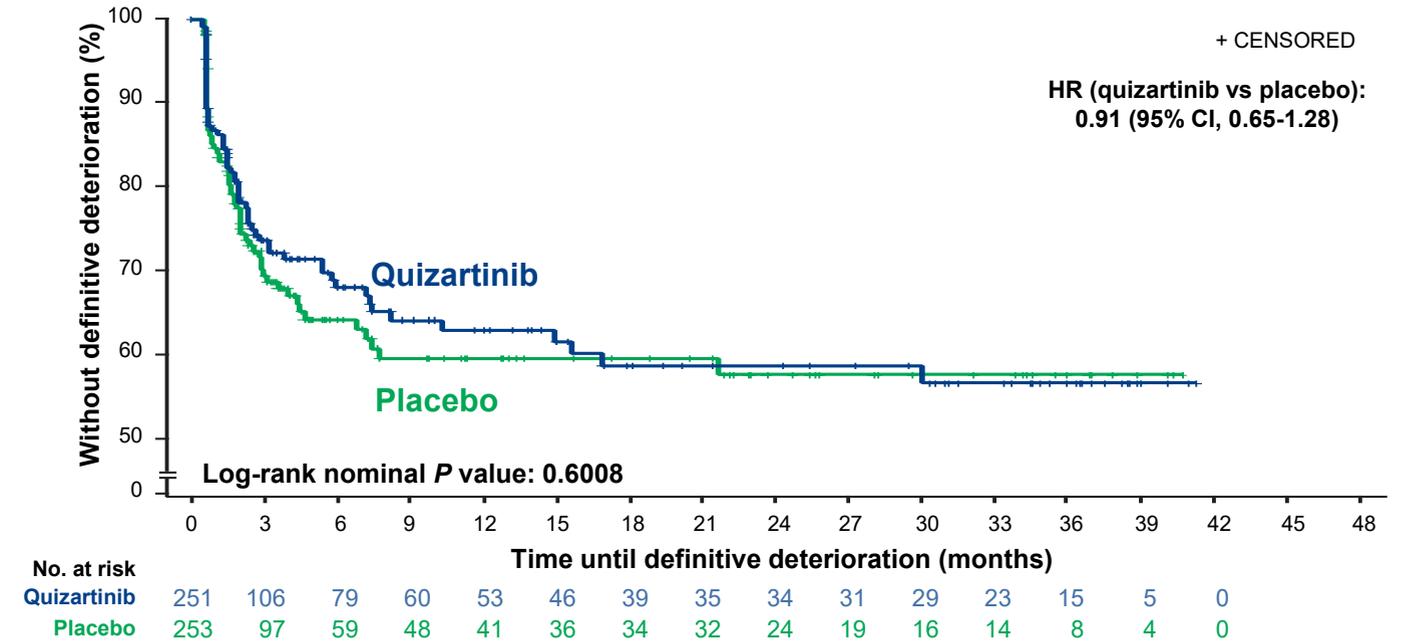
HR, hazard ratio.

# Time Until Definitive Deterioration (TUDD) of EORTC QLQ-C30 Symptom Subscales

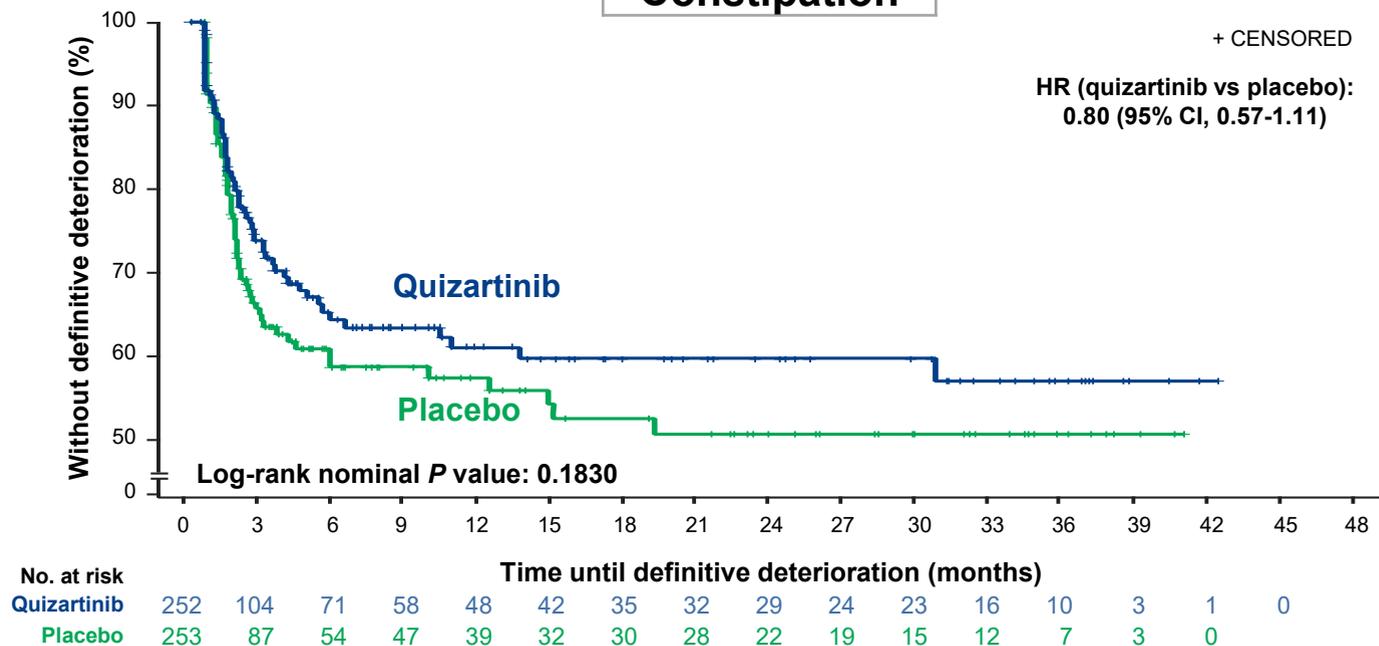
## Diarrhea



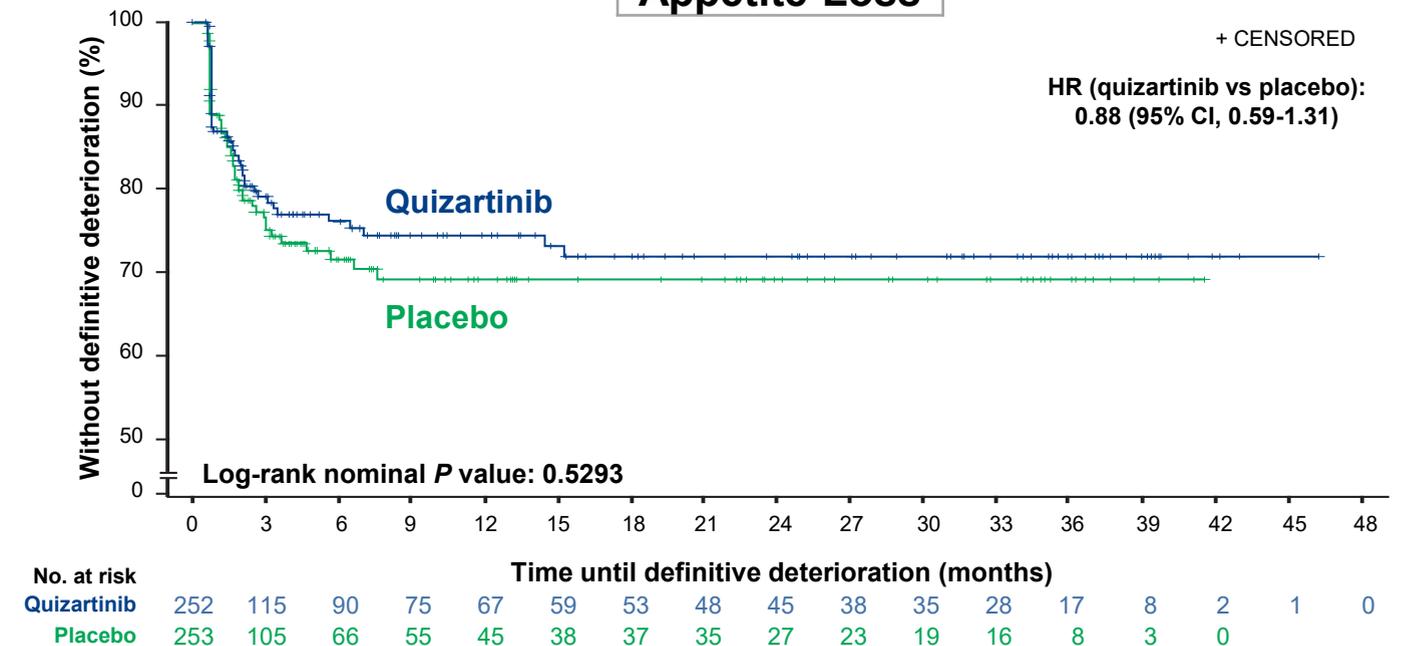
## Nausea and Vomiting



## Constipation



## Appetite Loss



HR, hazard ratio.

# Analysis During Treatment Continuation Phase

- Propensity score weighting leads to sufficient balance/overlap to conduct further analysis in the continuation PRO ITT analysis set

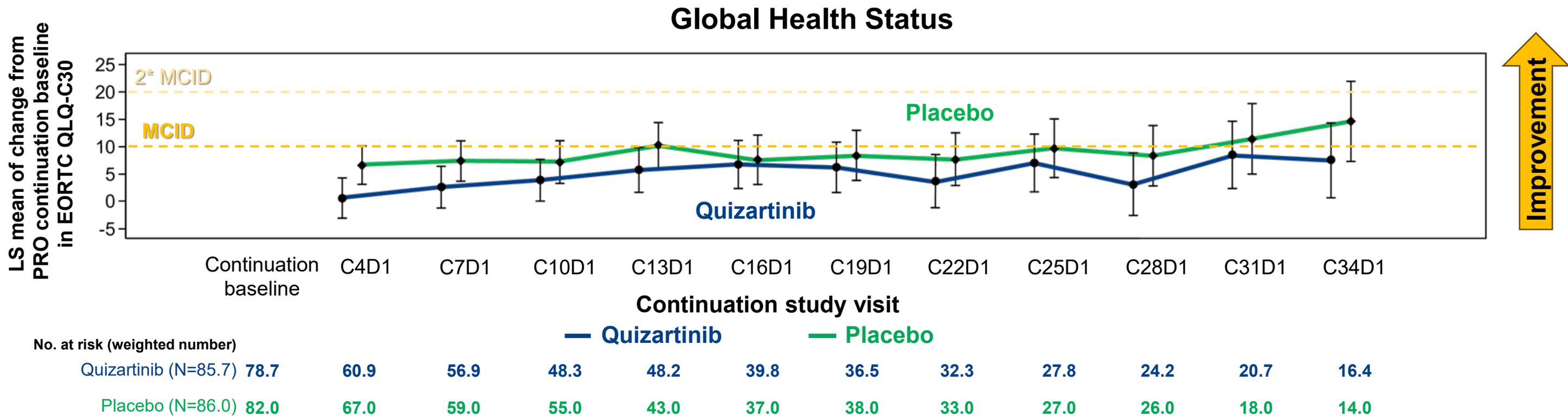
## Patient Characteristics After Propensity Score Weighting: Descriptive Summary (Continuation PRO ITT Analysis Set)<sup>a</sup>

|  | Quizartinib              |   | Placebo                 |  |
|--|--------------------------|---|-------------------------|--|
|  | Before weighting (N=109) | After propensity score weighting (N=85.7) | Before weighting (N=88) | After propensity score weighting (N=86.0) <sup>b</sup> |
| Median age at study baseline, years  | 53.0                     | <b>58.0</b>                               | 57.0                    | <b>57.0</b>  |
| Male sex, n (%)  | 52 (47.7)                | <b>33.3 (38.8)</b>                        | 35 (39.8)               | <b>35.0 (40.7)</b>                                     |
| WBC count at initial diagnosis <40×10 <sup>-9</sup> /L, n (%)                      | 53 (48.6)                | <b>50.9 (59.4)</b>                        | 53 (60.2)               | <b>52.0 (60.5)</b>                                     |
| Unfavorable AML cytogenetic risk score at study baseline, n (%)                    | 8 (7.3)                  | <b>8.0 (9.3)</b>                          | 9 (10.2)                | <b>8.0 (9.3)</b>                                       |
| ECOG PS of 0 at study baseline   | 38 (34.9)                | <b>31.0 (36.1)</b>                        | 34 (38.6)               | <b>32.0 (37.2)</b>                                     |
| <i>FLT3</i> -ITD VAF ≥3 to ≤25%, by central laboratory testing, n (%) <sup>c</sup> | 41 (37.6)                | <b>37.4 (43.6)</b>                        | 41 (46.6)               | <b>40.0 (46.5)</b>                                     |
| <i>NPM1</i> mutational status positive at study baseline, n (%)                    | 64 (58.7)                | <b>56.8 (66.2)</b>                        | 57 (64.8)               | <b>57.0 (66.3)</b>                                     |
| Median rederived allelic ratio at study baseline                                   | 0.5                      | <b>0.4</b>                                | 0.4                     | <b>0.4</b>   |
| Median platelet count at study baseline  | 22.0                     | <b>22.0</b>                               | 25.0                    | <b>25.0</b>  |

<sup>a</sup>Propensity score weighting conducted based on a logistic regression model with treatment as dependent variable and the variables listed in the table as independent variables. Covariance balance was assessed based on a prespecified SMD criterion of 0.1. <sup>b</sup>Due to missing data for some variables included in the propensity score weighting, 2 patients were removed from the placebo group to estimate the propensity scores. <sup>c</sup>*FLT3*-ITD VAF refers to the allelic ratio of *FLT3*-ITD/total *FLT3*. AML, acute myeloid leukemia; ECOG PS, Eastern Cooperative Oncology Group performance status; *FLT3*-ITD, FMS-like tyrosine kinase 3–internal tandem duplication; ITT, intent-to-treat; *NPM1*, nucleophosmin 1; PRO, patient reported outcome; SMD, standardized mean difference; VAF, variant allele frequency; WBC, white blood cell.

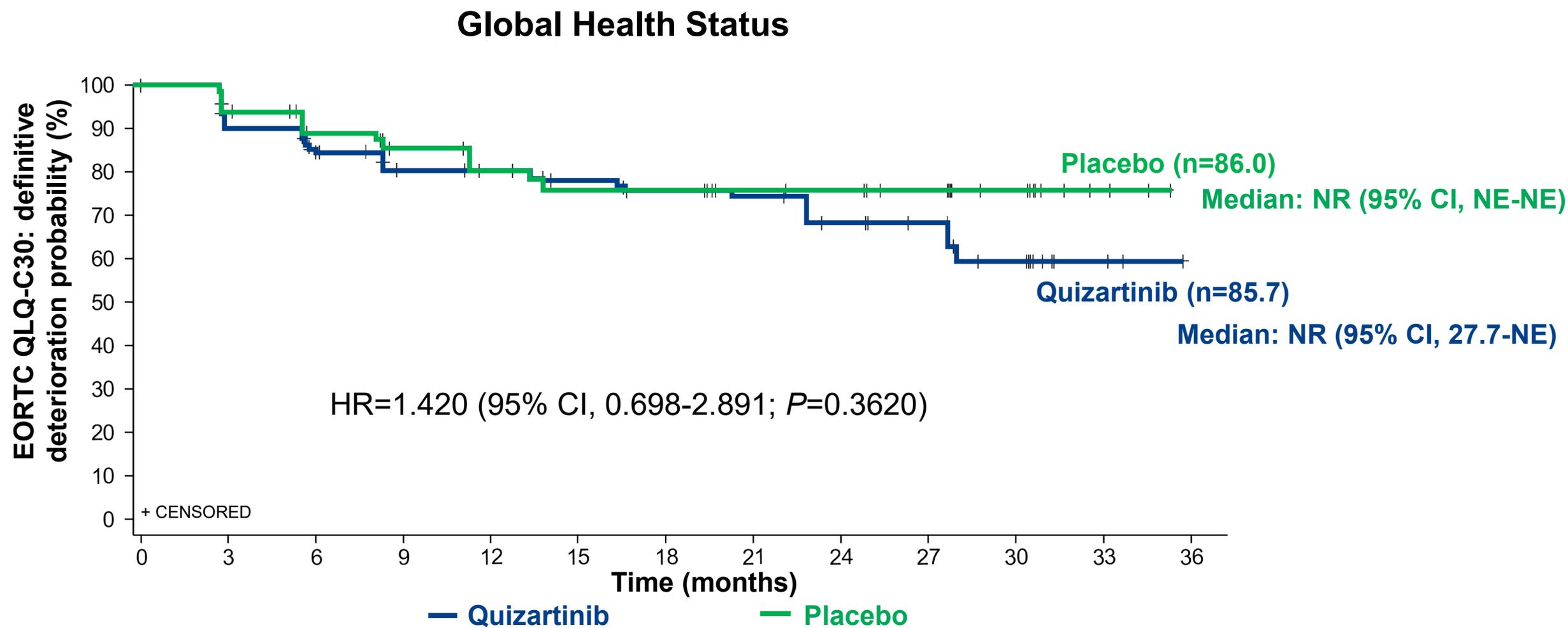
# MMRM Analysis During Treatment Continuation Phase

- Plot of LS mean estimate by treatment over time (propensity score weighted) showing the change from baseline of continuation up to the end of the study
  - Baseline scores are high (mean [ $\pm$ SD] of 67.5 [ $\pm$ 22.7] with quizartinib and 71.0 [ $\pm$ 17.3] with placebo) relative to the normal population
  - There is no difference between quizartinib and placebo over time
  - QoL is maintained in both arms



C, cycle; D, day; LS, least squares; MMRM, mixed model with repeated measures; QoL, quality of life.

# Time Until Definitive Deterioration (TUDD) Analysis of GHS During Treatment Continuation Phase



No. at risk (weighted number)

|                      |      |      |      |      |      |      |      |      |      |      |      |     |   |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|-----|---|
| Quizartinib (N=85.7) | 78.7 | 54.1 | 49.3 | 42.2 | 40.6 | 35.8 | 30.0 | 24.7 | 20.5 | 16.9 | 12.4 | 3.6 | 0 |
| Placebo (N=86.0)     | 82.0 | 58.0 | 51.0 | 39.0 | 34.0 | 31.0 | 28.0 | 23.0 | 22.0 | 18.0 | 13.0 | 3.0 | 0 |

# Conclusions

- QuANTUM-First is the first study to explore the impact on PROs of a FLT3 inhibitor as first-line therapy that has shown a significant advantage in OS
- The EORTC QLQ-C30 has shown improvement in the QoL for all patients in the study during induction, consolidation, and maintained during continuation irrespective of the treatment arm. Patients who received quizartinib did not show negative impact in their QoL compared with the patients who received placebo
- TUDD showed that for most PRO scales, there was no consistent longitudinal difference between treatment arms
- Quizartinib showed no consistent short- or long-term deterioration of QoL and symptoms while providing a significant OS benefit in comparison with placebo

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