## Supplementary Material 1

The definitions of the clinical trial phases were as per the ClinicalTrials.gov glossary below1:

Early phase I (formerly listed as phase 0) – *a phase of research used to describe exploratory trials conducted before traditional phase I trials to investigate how or whether a drug affects the body. They involve very limited human exposure to the drug and have no therapeutic or diagnostic goals.*

Phase I – *a phase of research to describe clinical trials that focus on the safety of a drug… the goal is to determine the drug’s most frequent and serious adverse events, and often, how the drug is broken down and excreted by the body. These trials usually involve a small number of participants*.

For the oncology trials in our study, many phase I studies included patients rather than healthy volunteers.

1. US National Library of Medicine. ClinicalTrials.gov: glossary of common site terms. 2020. Available from: <https://clinicaltrials.gov/ct2/about-studies/glossary>.

Supplementary Material Table S1. PRO measures used across 129 phase I trials.

|  |  |  |  |
| --- | --- | --- | --- |
| PRO measure | PRO abbreviation | Times used(*n*) | Times used(%) |
| Quality of life\* (unspecified) | QoL | 42 | 23% |
| European Organisation for the Research and Treatment of Cancer Quality of Life Questionnaire  | EORTC QLQ-30 | 22 | 12% |
| Pain\* (unspecified) | --- | 5 | 3% |
| European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Lung Cancer | EORTC QLQ-LC13 | 5 | 3% |
| Functional Assessment of Cancer Therapy-General | FACT-G | 4 | 2% |
| Symptoms\* (unspecified) | --- | 4 | 2% |
| Brief Pain Inventory  | BPI | 4 | 2% |
| Brief Pain Inventory-Short Form | BPI-sf | 4 | 2% |
| Functional Assessment of Cancer Therapy-Ovarian Cancer | FACT-O | 3 | 2% |
| MD Anderson Symptom Inventory for Brain Tumor | MDASI-BT | 3 | 2% |
| Hospital Anxiety and Depression Scale | HADS | 3 | 2% |
| European Organisation for Research and Treatment of Cancer (instrument not specified; most likely EORTC QLQ-30) | EORTC | 3 | 2% |
| European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Palliative Care | EORTC QLQ-C15-PAL | 3 | 2% |
| Functional Assessment of Chronic Illness Therapy‐Fatigue | FACIT-Fatigue | 3 | 2% |
| European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Prostate Cancer | EORTC QLQ-PR25 | 3 | 2% |
| Center for Epidemiologic Studies Depression Scale | CES-D | 2 | 1% |
| European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Head and Neck | EORTC QLQ-H&N35 | 2 | 1% |
| MD Anderson Symptom Inventory-Symptom Interference Score | MDASI | 2 | 1% |
| European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Brain Cancer | EORTC QLQ-BN20 | 2 | 1% |
| Mini-Mental State Examination | MMSE | 2 | 1% |
| EQ-5D | --- | 2 | 1% |
| European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Ovarian Cancer | EORTC QLQ-OV28 | 2 | 1% |
| Lung Cancer Symptom Scale | LCSS | 2 | 1% |
| Functional Assessment of Cancer Therapy-Hepatobiliary | FACT-hepatobiliary | 2 | 1% |
| 36-Item Short Form Survey | SF-36 | 1 | 1% |
| Adverse Events Tabulated by Patient | --- | 1 | 1% |
| Brief Fatigue Inventory | BFI | 1 | 1% |
| Cancer Symptoms | --- | 1 | 1% |
| Cognitive Change Over Time - Cogstate Software | --- | 1 | 1% |
| The Dermatology Life Quality Index | DLQI | 1 | 1% |
| Duke-UNC Functional Social Support Questionnaire  | FSSQ | 1 | 1% |
| European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Bone Metastases | EORTC QLQ-BM22 | 1 | 1% |
| European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire – Chinese Translation | EORTC QLQ-C30 (Chinese) | 1 | 1% |
| European Organisation for the Research and Treatment of Cancer Quality of Life Questionnaire-Hepatocellular Carcinoma/Primary Liver Cancer Module (Chinese) | EORTC QLQ-HCC18 (Chinese) | 1 | 1% |
| European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire-Myeloma | EORTC QLQ-MY20 | 1 | 1% |
| EQ-5D-3L | --- | 1 | 1% |
| EQ-5D-5L | --- | 1 | 1% |
| EQ-5D Visual Analog Scale | EQ-5D-VAS | 1 | 1% |
| Expanded Prostate Cancer Index Composite Survey | EPIC-H | 1 | 1% |
| Functional Assessment of Cancer Therapy | FACT | 1 | 1% |
| Functional Assessment of Cancer Therapy-Brain | FACT-Br  | 1 | 1% |
| Functional Assessment of Cancer Therapy-Cognitive | FACT-Cog | 1 | 1% |
| Functional Assessment of Cancer Therapy-Colorectal Cancer | FACT-C | 1 | 1% |
| Functional Assessment of Cancer Therapy-Head & Neck Cancer | FACT-H&N | 1 | 1% |
| Functional Assessment of Cancer Therapy-Prostate | FACT-P | 1 | 1% |
| Functional Assessment of Cancer Therapy-Leukemia | FACT-Leu | 1 | 1% |
| Functional Assessment of Cancer Therapy-Lung/Lung Cancer Subscale | FACT-L/LCS | 1 | 1% |
| Functional Assessment of Cancer Therapy-Lymphoma | FACT-Lym | 1 | 1% |
| Functional Assessment of Cancer Therapy-Melanoma Subscale | FACT-MS | 1 | 1% |
| Functional Assessment of Cancer Therapy-Neurotoxicity | FACT-Taxane | 1 | 1% |
| Generalized Anxiety Disorder 7-Item | GAD7 | 1 | 1% |
| Life Orientation Test-Revised | LOT-R | 1 | 1% |
| Linear Analog Self-Assessment | LASA6 | 1 | 1% |
| Linear Analog Self-Assessment Indicators  | LASA | 1 | 1% |
| Lung Cancer Symptom Scale-Mesothelioma | LCSS-mesothelioma | 1 | 1% |
| MD Anderson Symptom Inventory for Acute Myeloid Leukemia/Myelodysplastic Syndrome | MDASI-AML/MDS | 1 | 1% |
| MD Anderson Symptom Assessment Inventory-Diarrhea | MDASI-D | 1 | 1% |
| MD Anderson Symptom Inventory-Lung Cancer | MDASI-LC | 1 | 1% |
| Modified Brief Pain Inventory-Short Form | mBPI-sf | 1 | 1% |
| Mood Scales\* | --- | 1 | 1% |
| Myeloproliferative Neoplasm Symptom Assessment Form | MPN-SAF | 1 | 1% |
| Neurocognition\* | --- | 1 | 1% |
| Neurological Assessment/Questionnaire\* |  | 1 | 1% |
| Pain (Visual Analog Scale)\* | Pain (VAS) | 1 | 1% |
| Patient Health Questionnaire-9 | PHQ-9 | 1 | 1% |
| Patient-Reported Outcomes Measurement Information System  | PROMIS | 1 | 1% |
| PRO (pain-specific measures)\* | --- | 1 | 1% |
| PRO (toxicity-related symptoms)\* | --- | 1 | 1% |
| PRO (unspecified)\* | --- | 1 | 1% |
| Short Form-12 (Quality of Life-Questionnaire) | SF-12 | 1 | 1% |
| Therapy-Induced Neuropathy Assessment Scale | TINAS | 1 | 1% |
| Total Neuropathy Scale  | TNS | 1 | 1% |
| Toxicity and Patient-Reported Quality of Life\*  | --- | 1 | 1% |
| Was It Worth It Questionnaire | WIWI | 1 | 1% |
| Work Productivity and Activity Impairment Questionnaire: General Health | WPAI-GH | 1 | 1% |
| World Health Organization Quality of Life | WHOQOL | 1 | 1% |
| Total number of PROs | --- | 181 | 100% |

\*No other information provided in ClinicalTrials.gov record.

Shaded cells indicate one-time use instruments.