Supplementary Online Content

Hshieh TT, Jung WF, Grande LJ, et al. Prevalence of cognitive impairment and association with survival among older patients with hematologic cancers. *JAMA Oncol*. Published online March 1, 2018. doi:10.1001/jamaoncol.2017.5674

eFigure 1. Examples of Clock-In-the-Box (CIB) Tests From Phenotypically Robust Patients 75 Years or Older With Blood Cancers

eFigure 2. Examples of Clock-In-the-Box (CIB) Tests From Phenotypically Prefrail Patients 75 Years or Older With Blood Cancers

eFigure 3. Examples of Clock-In-the-Box (CIB) Tests From Phenotypically Frail Patients 75 Years or Older With Blood Cancers

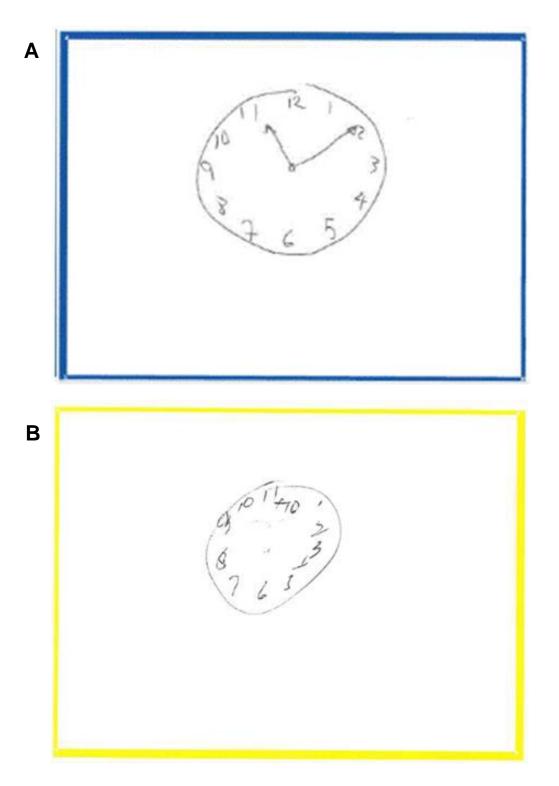
eFigure 4. Survival Among Older Patients With Blood Cancers Stratified by Previous Treatment

eFigure 5. Survival Among Older Patients With Blood Cancers and Probable Cognitive Impairment Stratified by Treatment Intensity

This supplementary material has been provided by the authors to give readers additional information about their work.

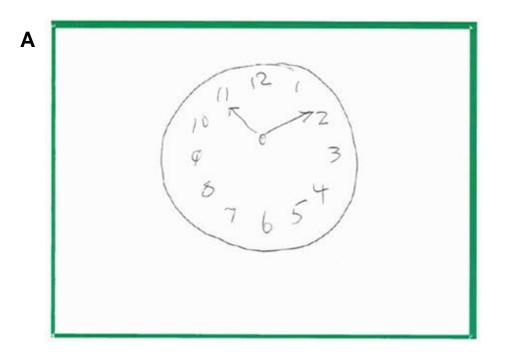
eFigure 1. Examples of Clock-In-the-Box (CIB) Tests From Phenotypically Robust Patients 75 Years or Older With Blood Cancers

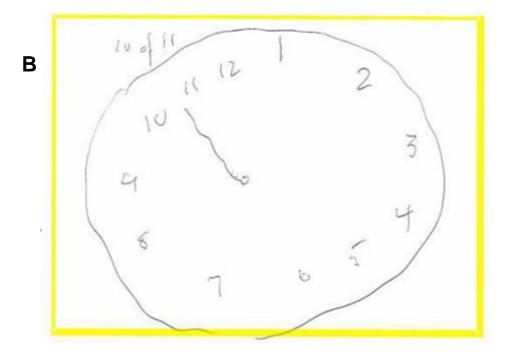
- A) Robust patient with normal cognition, CIB score = 8/8.
- **B**) **Robust** patient with **probable cognitive impairment**, CIB score = 3/8 because drawing is in the wrong color square, missing the 12 and the time is not indicated.



eFigure 2. Examples of Clock-In-the-Box (CIB) Tests from Phenotypically Prefrail Patients 75 Years or Older With Blood Cancers

- **A) Pre-frail** patient with **normal cognition**, CIB score = 7/8 because drawing is in the wrong color square.
- **B**) **Pre-frail** patient with **probable cognitive impairment**, CIB score = 4/8 because drawing is in the wrong color square, time is incorrect, and missing one hand.

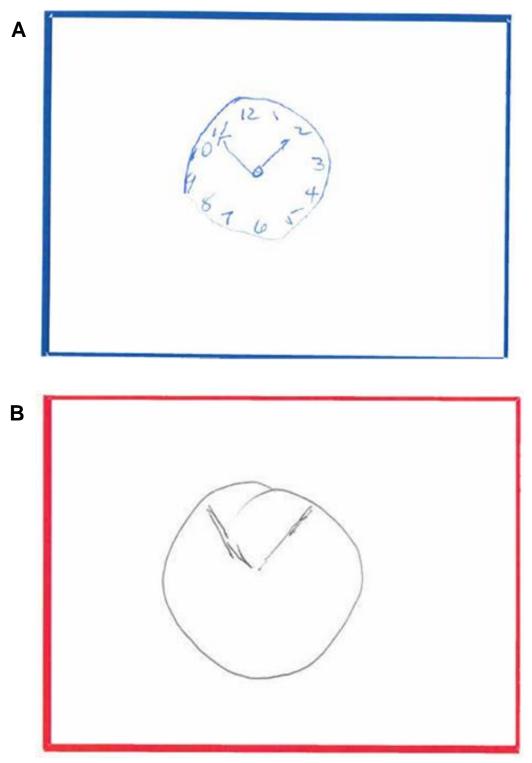




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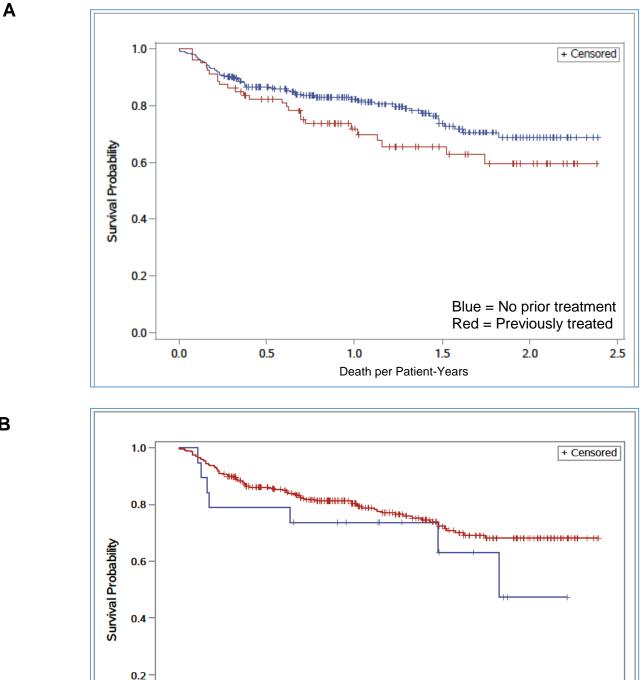
eFigure 3. Examples of Clock-In-the-Box (CIB) Tests From Phenotypically Frail Patients 75 Years or Older With Blood Cancers

- A) Frail patient with normal cognition, CIB score = 7/8 because hands are not the correct length.
- **B**) Frail patient with probable cognitive impairment, CIB score = 2/8 because drawing is in the wrong color square, missing all numbers and the hands are not the correct length.



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eFigure 4. Survival Among Older Patients With Blood Cancers Stratified by Previous Treatment A) Survival among patients who had been previously treated vs. no prior treatment (log-rank p=0.87) **B**) Survival among patients who declined cognitive screening vs. rest of the cohort (log-rank p=0.28)



2.5

2.0

Blue = Declined cognitive screening

Red = Rest of cohort

1.5

Β

0.0

0.0

0.5

1.0

Death per Patient-Years

eFigure 5. Survival Among Older Patients With Blood Cancers and Probable Cognitive Impairment Stratified by Treatment Intensity

A) Normal vs. probable cognitive impairment by **5-word delayed recall** among untreated patients (log-rank p=0.673). **B**) Normal vs. probable cognitive impairment by **Clock in the Box** among untreated patients (log-rank p=0.510). **C**) Normal vs. probable cognitive impairment by **5-word delayed recall** among those receiving supportive/attenuated treatment (log-rank p=0.137). **D**) Normal vs. probable cognitive impairment by **Clock in the Box** among those receiving supportive/attenuated treatment (log-rank p=0.137). **D**) Normal vs. probable cognitive impairment by **Clock in the Box** among those receiving supportive/attenuated treatment (log-rank p=0.485).

