

Do worse scores on patient-reported outcomes predict the progression of interstitial lung disease (ILD)?

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INTRODUCTION

- Dyspnoea and cough can have a negative impact on the health-related quality of life (HRQL) of patients with fibrosing ILDs.¹
- It is unclear whether, as has been observed in patients with idiopathic pulmonary fibrosis (IPF),^{2,3} worse scores on patient-reported outcomes (PROs) are associated with a greater risk of ILD progression in patients with other progressive fibrosing ILDs.

AIM

- To assess associations between PROs at baseline and outcomes in patients with progressive fibrosing ILDs in the INBUILD trial.

METHODS

Trial design⁴

- Patients in the INBUILD trial had diffuse fibrosing ILD (reticular abnormality with traction bronchiectasis, with or without honeycombing) of >10% extent on HRCT, FVC ≥45% predicted, DLco ≥30%–80% predicted. Patients with IPF were excluded.
- Patients met ≥1 of the following criteria for ILD progression at any point within the 24 months before screening, despite management deemed appropriate in clinical practice:

Relative decline in FVC ≥10% predicted

Relative decline in FVC ≥5–<10% predicted and increased extent of fibrosis on HRCT

Relative decline in FVC ≥5–<10% predicted and worsened respiratory symptoms

Worsened respiratory symptoms and increased extent of fibrosis on HRCT

- Patients were randomised to receive nintedanib or placebo, stratified by fibrotic pattern on HRCT (usual interstitial pneumonia [UIP]-like fibrotic pattern or other fibrotic patterns).

Patient-reported outcomes

King's Brief Interstitial Lung Disease (K-BILD) questionnaire⁵

- 15 items, each rated on a 7-point scale
- Includes 3 domains:
 - Psychological
 - Breathlessness and activities
 - Chest symptoms

Total scores range from 0 to 100
worse better

Living with Pulmonary Fibrosis (L-PF) questionnaire⁶

- 44 items, each rated on a 5-point scale
- Includes symptoms and impacts modules
- Symptoms module has 3 domains:
 - Dyspnoea
 - Cough
 - Fatigue

Total and domain scores range from 0 to 100
better worse

Analyses

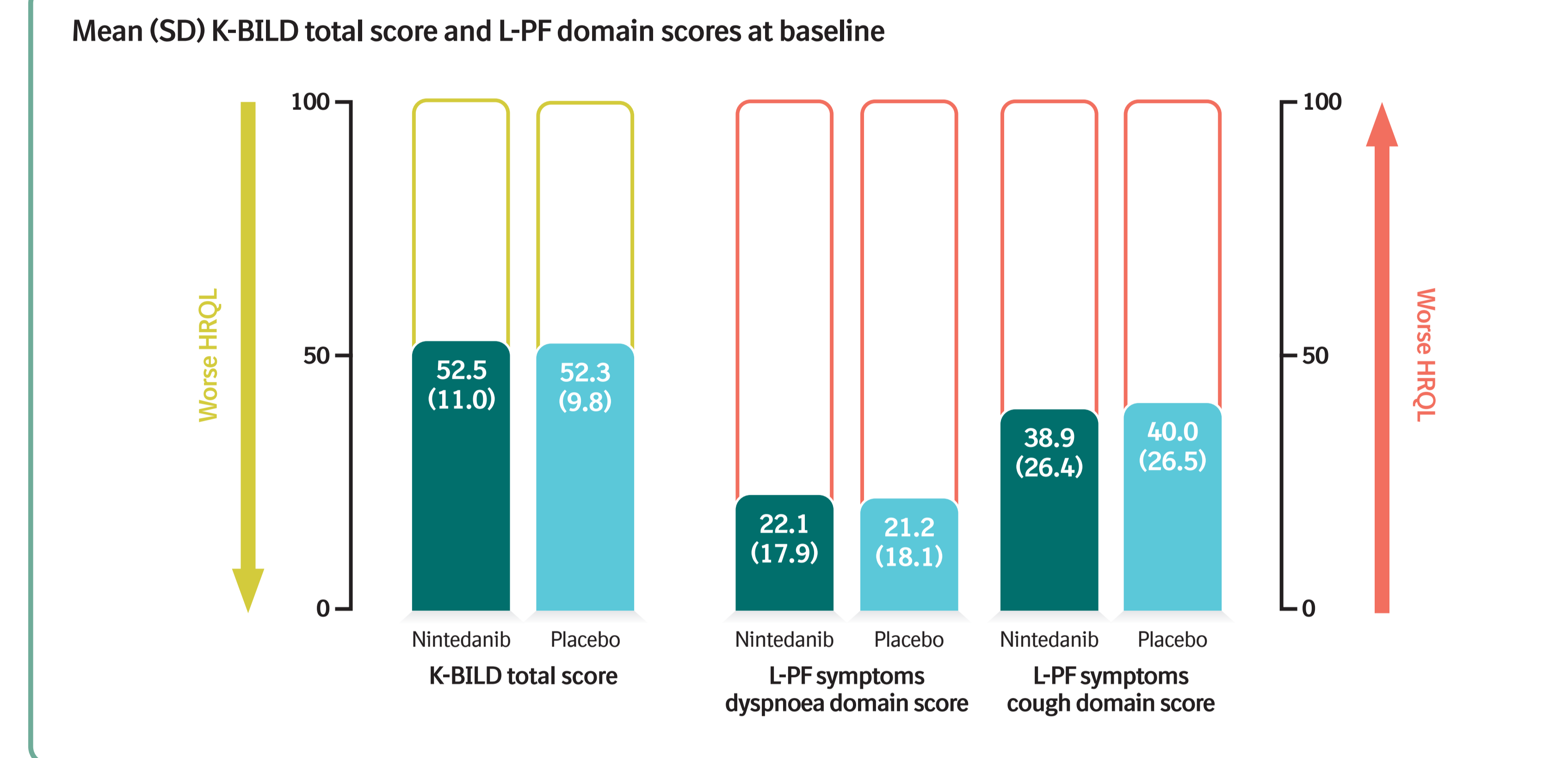
- We assessed associations between the K-BILD total score, L-PF symptoms dyspnoea domain score, and L-PF symptoms cough domain score at baseline and outcomes over the INBUILD trial. The following outcomes were assessed:
 - ILD progression (absolute decline in FVC ≥10% predicted) or death
 - Non-elective respiratory hospitalisation or death
 - Death.
- Analyses were based on a Cox's regression model with baseline score on the PRO as an explanatory variable, stratified by HRCT pattern (UIP-like fibrotic pattern or other fibrotic patterns).

CONCLUSIONS

- In patients with progressive fibrosing ILDs other than IPF, a worse K-BILD questionnaire total score or L-PF dyspnoea domain score at baseline was associated with a greater risk of ILD progression or death, non-elective respiratory hospitalisation or death, and death.

RESULTS

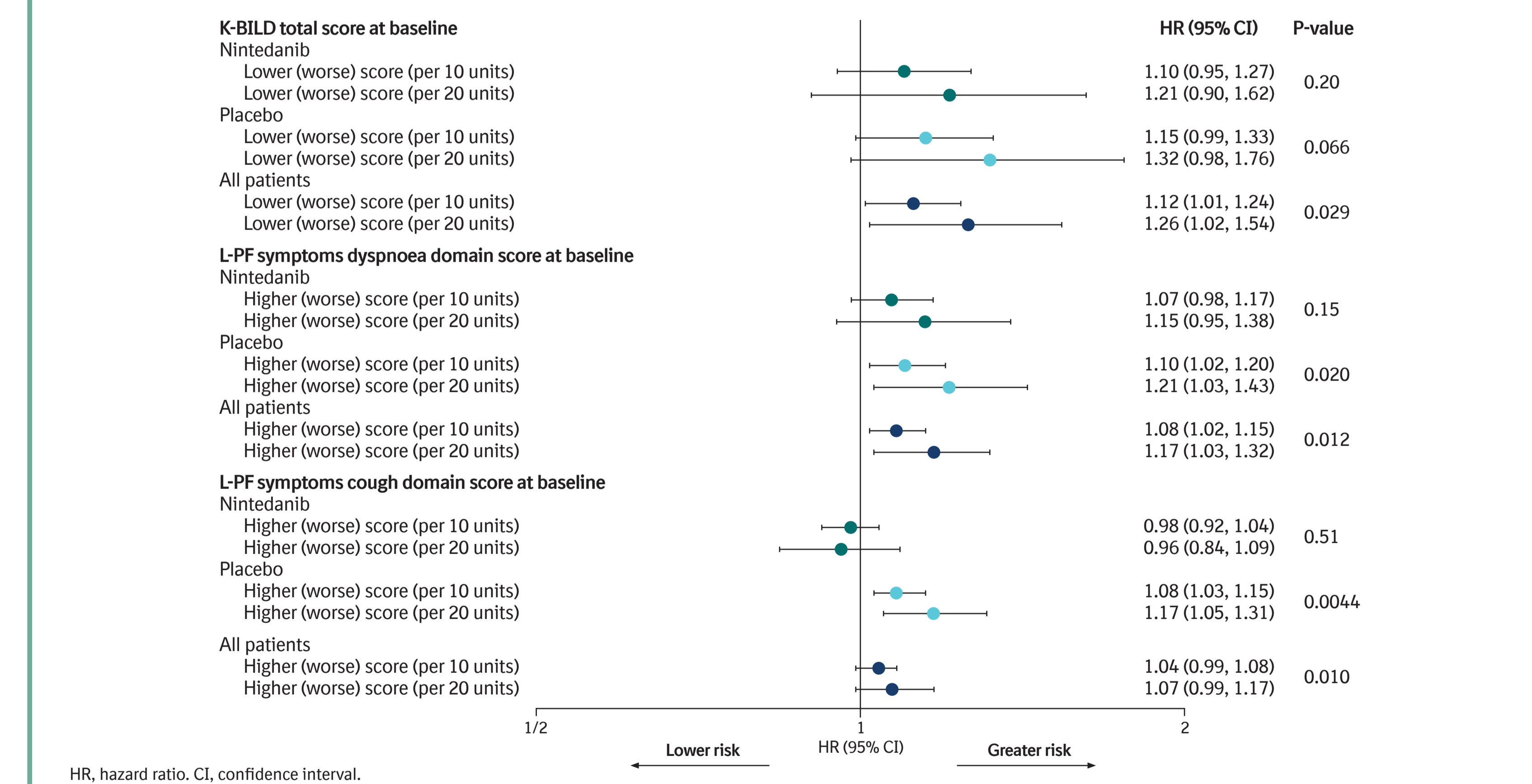
- A total of 332 patients received nintedanib and 331 received placebo.
- Median exposure to nintedanib or placebo was 17.4 months.



Associations between PROs at baseline and outcomes

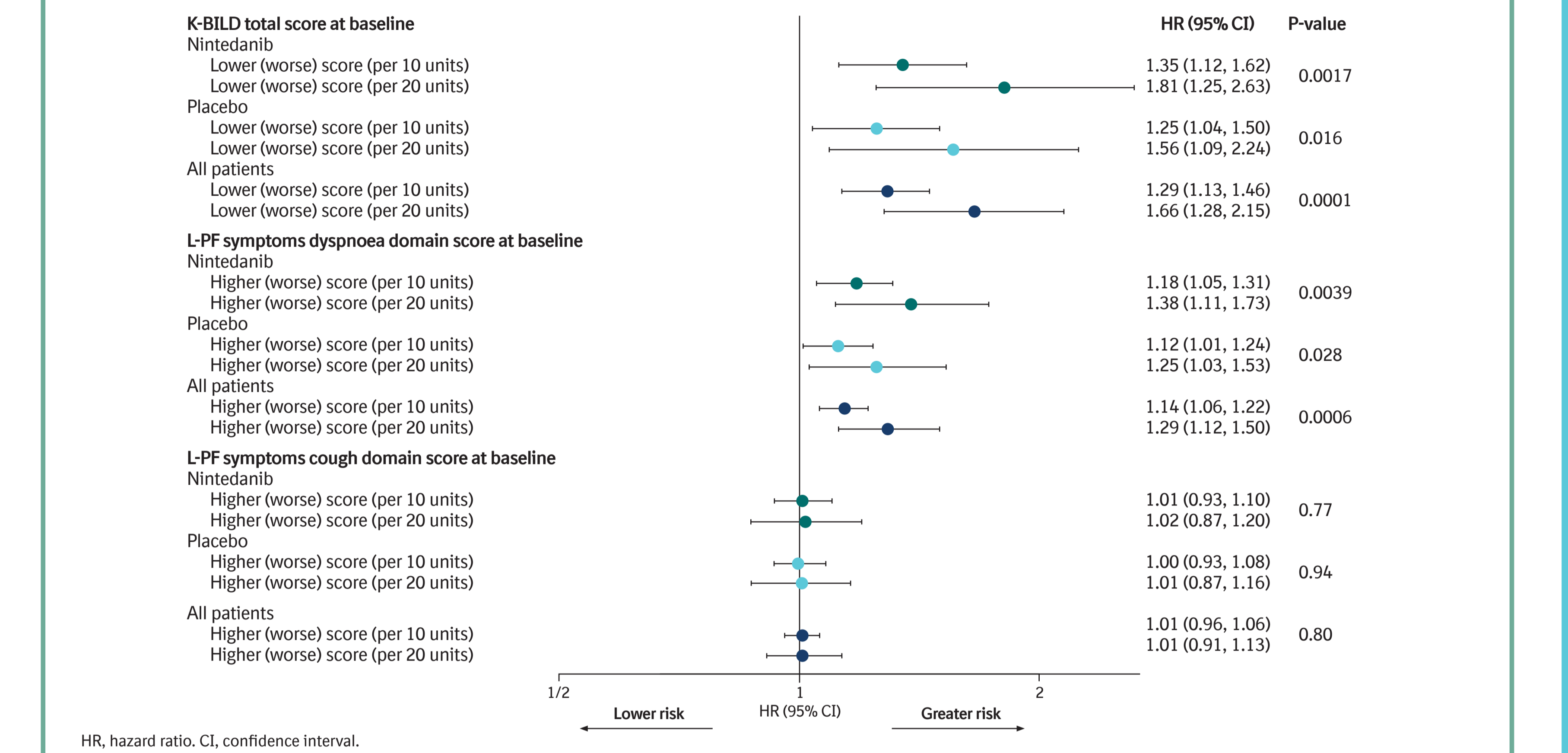
- In both treatment groups, a worse K-BILD total score or L-PF symptoms dyspnoea domain score at baseline was associated with a greater risk of ILD progression or death.
- In the placebo group and in the overall trial population, a worse L-PF symptoms cough domain score at baseline was associated with a greater risk of ILD progression or death.

Associations between PROs at baseline and risk of ILD progression or death



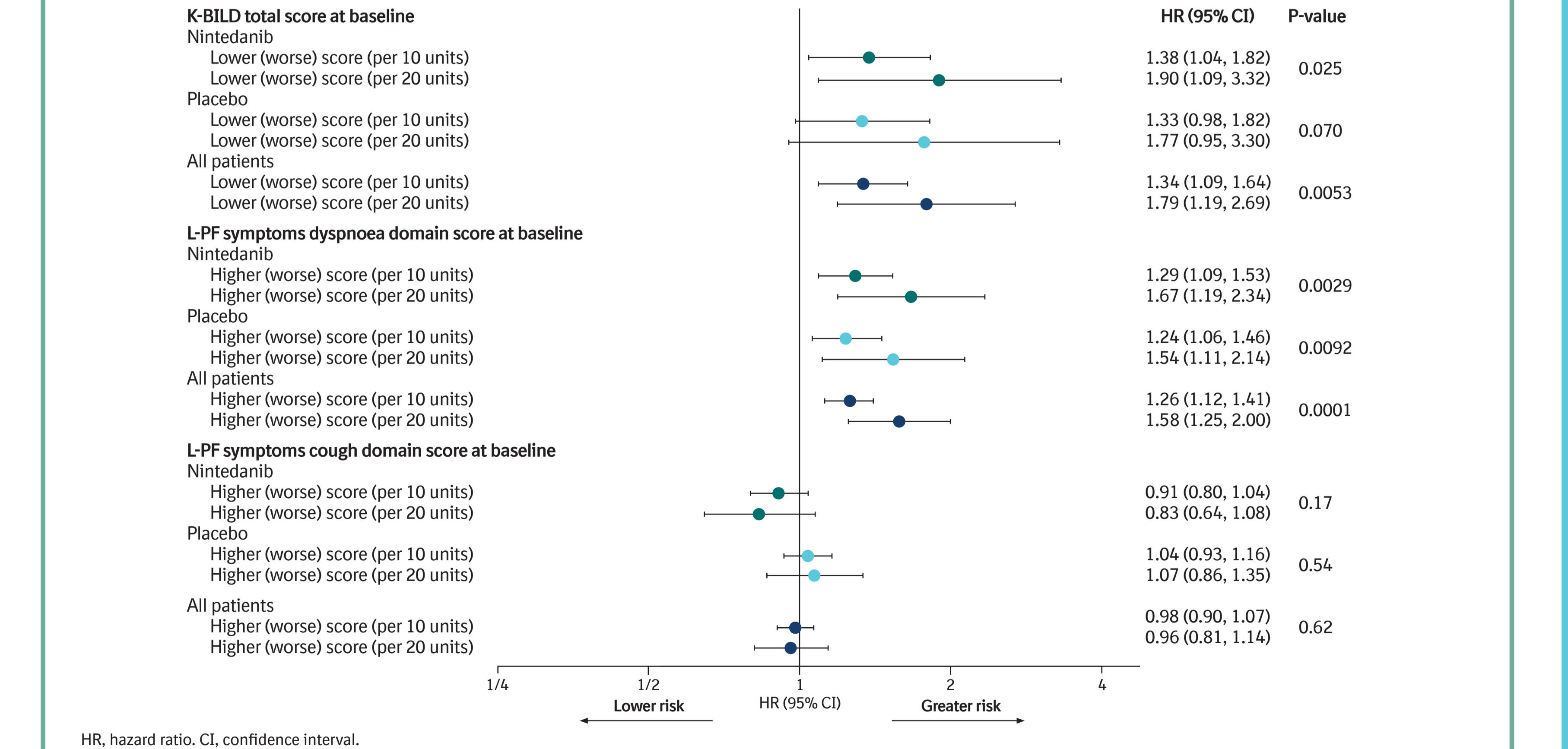
- In both treatment groups, a worse K-BILD total score or L-PF symptoms dyspnoea domain score (but not L-PF symptoms cough domain score) at baseline was associated with a greater risk of non-elective respiratory hospitalisation or death.

Associations between PROs at baseline and risk of non-elective respiratory hospitalisation or death



- In both treatment groups, a worse K-BILD total score or L-PF symptoms dyspnoea domain score (but not L-PF symptoms cough domain score) at baseline was associated with a greater risk of death.

Associations between PROs at baseline and risk of death



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INTERACTIVE

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ACKNOWLEDGEMENTS AND DISCLOSURES

The INBUILD trial was funded by Boehringer Ingelheim International GmbH (BI). The authors meet criteria for authorship as recommended by the International Committee of Medical Journal Editors (ICMJE). The authors did not receive payment for the development of this poster. Editorial support and formatting assistance were provided by Julie Fleming and Wendy Morris of FleishmanHillard, London, UK, which was contracted and funded by BI. BI was given the opportunity to review the poster for medical and scientific accuracy as well as intellectual property considerations. MSW reports grants, consulting fees, support for attending meetings and payment for presentations from BI and Hoffmann-La Roche; grants from The Netherlands Organisation for Health Research and Development, The Dutch Lung Foundation, The Dutch Pulmonary Fibrosis Patient Association, The Thorax Foundation, ErasmusMC and Sarcoidosis.nl; she has received consulting fees and served on a Data Safety Monitoring Board or Advisory Board with Galapagos; consulting fees from Bristol-Myers Squibb, Galacto, Respiant; payment for presentations from Novartis; she has served on a Data Safety Monitoring Board or Advisory Board for Savara; all grants and fees were paid to her institution.

