of death could be well-stratified. Indeed, FIPS score might be a landmark since it is the first model to achieve individual outcome prediction for patients receiving TIPS. However, in our cohort, Child-Pugh score appeared to be a more favourable choice with better performance (Fig. 1A, Table S1) if a single prognostic model is to be independently used for risk stratification, since it had the best performance. Interestingly, in subgroup analyses, FIPS score could further stratify risk levels in patients even if they were classified as low and intermediate risk groups according to Child-Pugh score (*i.e.*, grade A and B), and Child-Pugh score could also stratify low-risk patients defined by FIPS score. These results might be caused by the different variables used in these 2 scoring systems, and consequently indicated that FIPS score and Child-Pugh score are to some degree complementary in identifying high-risk patients. Therefore, when a more accurate and detailed risk stratification is required, the FIPS risk stratification based on Child-Pugh grading system could be a new solution.

In summary, for individual outcome prediction of survival after TIPS, FIPS score is the best option; whereas for risk stratification, Child-Pugh score appeared to be more favorable for Chinese patients, while FIPS score could provide a more detailed and accurate "secondary" risk stratification on the basis of Child-Pugh grade.

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Conflict of interest
Prof. Han is listed as a co-author in the FIPS study by Bettinger *et al.* due to his role of data acquisition.

Authors' contributions
Study concept and study design: Qiuhe Wang, and Guohong Han. Follow-up and data collection: Wei Bai. Statistical analyses: Qiuhe Wang. Drafting and revision of the manuscript: Qiuhe Wang, Wei Bai, and Guohong Han.

Data availability statement
The deidentified data can be made available upon request for non-commercial purposes and after approval of a study proposal through a signed data access agreement. Proposals should be directed to the corresponding author (hangh@fmmu.edu.cn).

Supplementary data
Supplementary data to this article can be found online at https://doi.org/10.1016/j.jhep.2021.05.042.

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Reply to: Correspondence on "Refining prediction of survival after TIPS with the novel Freiburg index of post-TIPS survival"

To the Editor:
With great interest, we have read the letters from Kraglund *et al.*[1] and Wang *et al.*[2] who provided external validation of the FIPS score[3] and also proposed a detailed risk stratification combining the Child-Pugh score and the FIPS score.

Kraglund *et al.* analyzed 104 patients who received transjugular intrahepatic portosystemic shunt (TIPS) implantation. In their cohort, only 5 patients presented with a FIPS score ≥0.92 and were therefore classified as high-risk patients. Due to the low number of high-risk patients the FIPS score did not show superior prognostic accuracy compared to the model for end-stage liver disease (MELD) and Child-Pugh score.[1]

Importantly, the authors mention that their cohort was similar to our FIPS cohort.[3] However, after reviewing the detailed description of the baseline characteristics of their study cohort,[4] it has to be mentioned that there are important differences compared to the FIPS cohort. Indeed, Kraglund *et al.* included 18 patients with emergency TIPS and 3 patients with urgent TIPS implantation (20.2% of the included 104 patients).[4] These patients with preemptive or urgent TIPS implantation were not included for development of the FIPS score as these patients are clinically

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different to elective TIPS patients. With these differences in mind, we performed a subgroup analysis in patients with preemptive TIPS implantation. In this analysis, we could confirm that the FIPS score showed no sufficient prognostic discrimination in these patients. Indeed, other factors such as bleeding in the index endoscopy or hemorrhagic shock are more relevant important prognostic factors in these patients that are not included in the FIPS score.[5] Therefore, it has to be emphasized that the FIPS score is not intended for use in these patients.

Moreover, Kraglund *et al.* also included 13 non-cirrhotic patients (12.5%).[1,4] We also decided not to include these patients in our cohort. Again, in these patients, other factors such as thrombophilia or immunosuppression are also important factors that are not considered in the FIPS score. In summary, the reduced prognostic discrimination of the FIPS score in the cohort of Kraglund *et al.* may be mainly due to the selection of patients that fall outside the intended scope of the FIPS score.

Moreover, information concerning bilirubin and creatinine levels as the main parameters in the FIPS score, have not been reported.[4] As almost all patients were allocated to the low-risk FIPS group, this may represent a well-selected patient cohort for TIPS implantation with *a priori* exclusion of high-risk patients. Therefore, analyzing the prognostic impact of a score that stratifies patients into low- and high-risk groups would be limited.

Further, we fully agree that independent external validation is necessary before a prediction model should be used in clinical practice. Meanwhile, our results have been reproduced in 2 other independent cohorts of patients receiving TIPS.[2,6] Massoumy *et al.*[6] and Wang *et al.*[2] discussed if a modification of the cut-off for defining high-risk patients is necessary. Indeed, further validation of the FIPS score is necessary and these analyses should also focus on the determination of an optimal cut-off for selection of high-risk patients.

Interestingly, Wang *et al.* showed that the FIPS score was able to provide further prognostic stratification in patients within Child-Pugh grade A and B.[2] Their conclusion that the FIPS score could serve as a complementary tool for risk stratification together with the Child-Pugh score is of clinical relevance and we highly recommend analyzing this proposal in further clinical studies.

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Conflict of interest
DB: Consultant: Bayer Healthcare, Boston Scientific, Shionogi. Lectures: Falk Foundation. MS: Consultant: Bayer Healthcare, L.W. Gore Lectures: Falk Foundation.

Authors' contributions
Drafting the manuscript: DB, RT, MS.

Supplementary data
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Do we need to re-define the Baveno VI elastography criteria for compensated advanced chronic liver disease (cACLD)?

To the Editor:
We read with interest the article by Papatheodoridi *et al.*[1] proposing a change in the cut-offs for excluding and diagnosing compensated advanced chronic liver disease (cACLD). We agree with the authors on the need for validation of these criteria

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