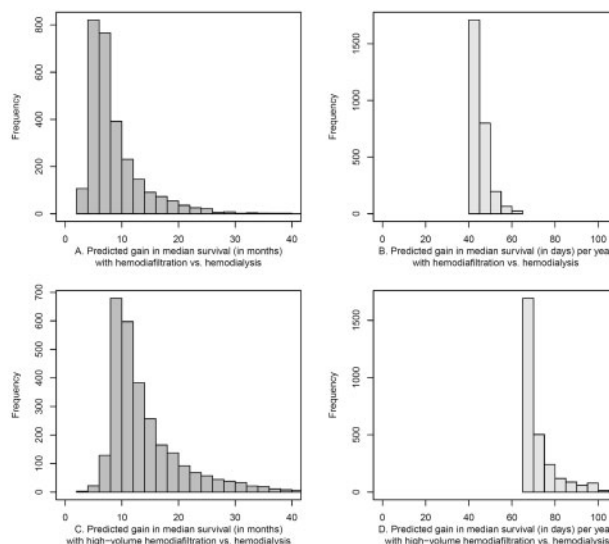ESKD patients, the absolute survival gain can vary greatly between individuals. Our results indicate that the effects of HDF on survival can be predicted using a combination of readily available patient and disease characteristics, which could guide shared decision-making.

MO825   Figure 1: Histograms for the distribution of (A) predicted gain in median survival for hemodiafiltration (HDF) versus hemodialysis (HD) in months, (B) predicted gain in median survival per year for HDF versus HD in days, (C) predicted gain in median survival for HDF with a convection volume of $\geq$23L per 1.73m2 (body surface area-adjusted), i.e. high-volume HDF, in months, and (D) predicted gain in median survival per year for high-volume HDF in days, in the pooled data.

MO825   **PERSONALIZING TREATMENT IN END-STAGE KIDNEY DISEASE: DECIDING BETWEEN HAEMODIAFILTRATION AND HEMODIALYSIS BASED ON INDIVIDUALIZED TREATMENT EFFECT PREDICTION**

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BACKGROUND AND AIMS: An individual participant data (IPD) meta-analysis of four randomized controlled trials (RCTs) demonstrated that hemodiafiltration (HDF) reduced overall mortality compared to hemodialysis (HD) in patients with end-stage kidney disease (ESKD). It remains, however, difficult to translate these average results into clinical practice as absolute treatment effects may substantially differ between individuals. The aim of this study was to develop and validate a treatment effect prediction model to determine which patients would benefit the most from HDF or HD in terms of all-cause mortality.
METHOD: We used an IPD meta-analysis based on four RCTs comparing HDF with HD on mortality endpoints to derive a Royston-Parmar model for prediction of absolute treatment effect of HDF based on pre-specified patient and disease characteristics. Validation of the model with regard to model discrimination, calibration and net benefit was performed using internal-external cross validation.
RESULTS: The median predicted gain in median survival was 44 (Q1-Q3: 44-46) days for every year of treatment with HDF compared to HD. The overall gain in median survival with HDF ranged from 2 to 48 months (Figure). Patients who benefited most from HDF were younger, less likely to have diabetes or a cardiovascular history and had higher serum creatinine and albumin levels. Internal-external cross validation showed adequate calibration and discrimination. Decision curve analysis indicated that prediction-based treatment allocation improved the net clinical benefit compared to treating all with patients HDF or treating all with HD.
CONCLUSION: Although overall mortality is reduced by HDF compared to HD in