

547 patients with type 2 diabetes who admitted Toyama University Hospital from October, 2017 to April, 2021.

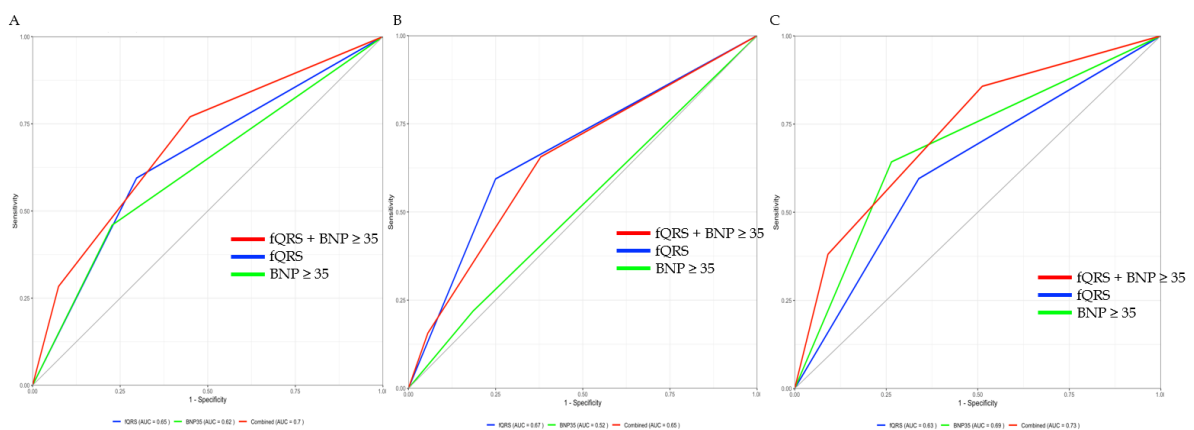
Excluding following exclusion criteria

Emergency or semi-emergency admission ($n = 33$);
Type 1 diabetes ($n = 20$);
Diabetes following corticosteroid administration and surgical resection of the pancreas ($n = 15$);
Permanent hemodialysis and renal dysfunction with serum creatine level > 2.5 mg/dL ($n = 18$);
Refractory malignant disorders ($n = 27$);
Genetically identified cardiomyopathy or severe valvular disease ($n = 8$);
Cardiac intervention within 1 year ($n = 14$);
Atrial fibrillation ($n = 23$);

Lack of plasma BNP measurement ($n = 12$);
Lack of ECG data ($n = 4$);
Lack of TTE data ($n = 27$);
Lack of E/E' ratio evaluation ($n = 27$);
LVEF $< 50\%$ ($n = 16$).

303 patients with type 2 diabetes and preserved LVEF. All the subjects were examined using ECG, TTE, and BNP level measurements.

Supplementary Figure 1 Study participant selection: Initially assessed a cohort of 547 patients with diabetes, excluding 244 patients according to the exclusion criteria.



Supplementary Figure 2 ROC Curves for fQRS, BNP at a cut-off of 35 pg/mL, and combined predictors. fQRS (blue line, AUC 0.65), BNP at a cut-off of 35 pg/mL (green line, AUC 0.62), and combined (red line, 0.70) of total participants (A); fQRS (blue line, AUC 0.67), BNP at a cut-off of 35 pg/mL (green line, AUC 0.57), and combined (red

line, 0.65) of overweight patients (B); and fQRS (blue line, AUC 0.63), BNP at a cut-off of 35 pg/mL (green line, AUC 0.69), and combined (red line, 0.73) of non-overweight patients (C). AUC, area under the ROC curve; BNP, B-type natriuretic peptide; LVDD, left ventricular diastolic dysfunction; ROC, receiver operating characteristic.

