Figure 1.

**How to diagnose HFPEF**

- **Symptoms or signs of heart failure**
  - Normal or mildly reduced left ventricular systolic function
    - LVEF > 50%
    - LVEDVI < 97 mL/m²
- **Evidence of abnormal LV relaxation, filling, diastolic distensibility, and diastolic stiffness**
  - Invasive Haemodynamic measurements
    - mPCW > 12 mmHg
    - LVEDP > 16 mmHg
    - t > 46 ms
    - b > 0.27
  - TD
    - E/E' > 15
    - 15 > E/E' > 8
  - Biomarkers
    - NT-proBNP > 220 pg/mL
    - BNP > 200 pg/mL
  - Echo – bloodflow Doppler
    - E/A < 0.5 and DT > 280 ms
    - Ard-Ad > 30 ms
    - LAVI > 40 mL/m²
    - LVMI > 122 g/m² (a)
    - >149 g/m² (c)
    - Atrial fibrillation
  - TD
    - E/E' > 8

HFPEF

LVEDVI, left ventricular end-diastolic volume index; mPCW, mean pulmonary capillary wedge pressure; LVEDP, left ventricular end-diastolic pressure; t, time constant of left ventricular relaxation; b, constant of left ventricular chamber stiffness; TD, tissue Doppler; E, early mitral valve flow velocity; E0, early TD lengthening velocity; NT-proBNP, N-terminal-pro brain natriuretic peptide; BNP, brain natriuretic peptide; E/A, ratio of early (E) to late (A) mitral valve flow velocity; DT, deceleration time; LVMI, left ventricular mass index; LAVI, left atrial volume index; Ard, duration of reverse pulmonary atrial systolic flow; Ad, duration of mitral valve atrial wave flow.