

Supplementary Table 1: Definition of aFMR across the different studies.

Study, year	Study design	Definition
Yoon et al. 2022	retrospective, single center	FMR with no or mild LV remodeling but moderate or severe LA dilatation
Tanaka et al. 2022	retrospective, single center	1. Normal mitral leaflets; 2. LVEF >50%; 3. Absence of LV enlargement and segmental abnormality.
Sodhi et al. 2022	prospective, multicenter	1. LVEF ≥ 45%, 2. Normal MV leaflets, 3. History of AF with LA or mitral annular enlargement (LA volume index >34 mL/m ²)
Simard et al. 2022	retrospective, single center	1. MR ≥ 2+ ;2. LVEF ≥ 50%; 3. Severe LA enlargement (≥48 ml/m ²)
Shiota et al. 2021	retrospective, single center	1. LVEF ≥50% without LV wall motion abnormality 2. LV end-diastolic diameter (LVEDD) <55mm; 3. Permanent AF rhythm
Rubio et al. 2022	retrospective, multicenter	AF and FMR without structural leaflets abnormalities and with HF with preserved LVEF
Rottlander et al. 2022	retrospective, single center	1. FMR ≥ 3+; 2. LVEF ≥ 50%; 3. LVEDD ≤ 55 mm; 4. HFpEF (NT-proBNP ≥ 125 pg/ml, LA dilation ≥ 34 ml/m ² , echocardiographic signs of diastolic dysfunction, e.g., E/e' ≥ 13); 5. No regional wall motion abnormalities of the LV
Petrescu et al 2021	retrospective, single center	FMR with 1. Relevant LA dilatation, 2. No LV systolic dysfunction or dilatation, 3. No ischemic etiology of FMR
Doldi et al. 2022	retrospective, multicenter	LVEF ≥50% without any regional wall motion abnormalities, Carpentier type I leaflet motion, and dilated left atria.
Claeys et al. 2021	retrospective, multicenter	FMR in the presence of LVEF ≥50% and LAVI >34 ml/m ² (or anterior-posterior left anterior dimension index >23 cm/m ²)
Gonzalez et al. 2021	retrospective, multicenter	1. Normal MV leaflets; 2. History of AF; 3. Normal LV systolic function with LVEF > 50% and no segmental abnormalities

Abbreviations:

AF: Atrial fibrillation; FMR: Functional mitral regurgitation; HFpEF: Heart failure with preserved ejection fraction; LA: Left atrium; LAVI: left atrium volume index; LV: Left ventricle; LVEF: Left ventricle ejection fraction; MR: mitral regurgitation; MV: Mitral valve.