Supplementary Table S1. Literature search strategy and selection criteria

Component	Description
Search period	January 1, 1990 – November 8, 2025
Language restriction	English only
Search type	Structured literature review
Search keywords and Boolean strategy	**Pubmed** (("methamphetamine"[tiab] OR "crystal meth"[tiab]) AND ("cardiomyopathy"[tiab] OR "heart failure"[tiab] OR MACM[tiab] OR "dilated cardiomyopathy"[tiab]) AND ("stroke"[tiab] OR "thrombus"[tiab] OR "embolism"[tiab] OR thrombosis[tiab] OR "left ventricular thrombus"[tiab] OR LVT[tiab])) **Scopus** (TITLE-ABS-KEY(methamphetamine OR "crystal meth") AND TITLE-ABS-KEY("cardiomyopathy" OR "heart failure" OR MACM OR "dilated cardiomyopathy") AND TITLE-ABS-KEY(stroke OR thrombus OR embolism OR thrombosis OR "left ventricular thrombus" OR LVT) AND TITLE-ABS-KEY(human OR humans OR patient OR case) AND NOT TITLE-ABS-KEY(mouse OR mice OR rat OR murine OR rabbit OR canine OR animal*))
Screening process	1. Titles and abstracts screened for relevance 2. Full-text review for eligibility 3. Final inclusion by consensus 4. Reference lists of eligible articles were additionally screened to identify missed publications.
Inclusion criteria	1. Published between 1990 and 2025 2. English language 3. Human subjects 4. Case reports, case series, or observational cohorts 5. Definitive diagnosis of MACM confirmed by echocardiography, cardiac CT, or cardiac MRI 6. Reported patient-level clinical or imaging data on left ventricular

	dysfunction and/or thromboembolic complications
Exclusion criteria	1. Non-English publications 2. Experimental/animal studies 3. Reviews without primary patient data 4. Cases lacking cardiac imaging confirmation of MACM 5. Cases without clinical information on left ventricular function or thrombotic events
Primary extracted variables	Demographics, LVEF, presence of LVT or systemic embolism, treatments, clinical outcomes
Output tables	**Table 2.** Published cohorts and case-level reports of MACM, with associated cardiac or systemic thrombotic complications and clinical outcomes

Search updated through November 8, 2025. Reference lists of eligible articles were additionally screened to identify missed publications.

Abbreviations: CT, computed tomography; MRI, magnetic resonance imaging; LVEF, left ventricular ejection fraction; LVT, left ventricular thrombus; MACM, methamphetamine-associated cardiomyopathy.