Supplementary Material S2a. Relevance screening form on basis of bibliographic data (title and abstract).

	Ref No:						
	Authors:						
	Title:						
	Year of publication, DOI/PMID, journal and other bibliographic data:						
No	**Question**	**Answer**	**Answer's options**	**Exclusion criteria**	**Decision**	**Decision's options**	**Additional notes**
1	What type of source is the reference?		Peer reviewed journal article (1); Conference Paper (2); Book Section (3); Unpublished Work (4); Commentary (5); Editorial (6); Systematic review (7); Thesis (8); Protocol (9); Report (10); Grey literature (11); Other e.g., press article (12)	Result of category "others"		Inclusion (1); Exclusion (0); Unclear (2)	
2	Is an abstract available? (If no abstract, is the full text available?)		Yes, abstract and/or full text is available (1), No (0)	No abstract available and full text not accessible		Yes (1); No (0); Unclear (2)	
3	Does the article describe a single coronary artery identified incidentally or in an asymptomatic individual?		Yes (1), No (0), Unclear (2)	No		Yes (1); No (0); Unclear (2)	
	Screening decision:					Included (1); Excluded; Unclear (2)	

Supplementary Material S2b. Eligibility Screening form on basis of full-text screening.

	Ref No:						
	Authors:						
	Title:						
	Year of publication, DOI/PMID, journal and other bibliographic data:						
No	**Question**	**Answer**	**Answer's options**	**Exclusion criteria**	**Decision**	**Decision's options**	**Additional notes**
1	Is the full text available?		Yes (1); No (0)	No		Included (1); Excluded (0); Unclear (2)	
2	Is the full text in English?		Yes (1); No (0)	No		Included (1); Excluded (0); Unclear (2)	
3	Again: What type of source is the result?		Peer reviewed journal article (1); Conference Paper (2); Book Section (3); Unpublished Work (4); Commentary (5); Editorial (6); Systematic review (7); Thesis (8); Protocol (9); Report (10); Grey literature (11); Other e.g., press article (12)	Publication type is categorized as "Other" (non-scholarly source)		Included (1); Excluded (0); Unclear (2)	
4	The article is focused on human health, it is not an animal model nor in vitro study.		Yes (1); No (0); Unclear (2)	No		Included (1); Excluded (0); Unclear (2)	
5	Does the article describe a single coronary artery identified incidentally or in an asymptomatic individual?		Yes (1); No (0); Unclear (2)	No		Included (1); Excluded (0); Unclear (2)	
	Screening decision:					Included (1); Excluded (0); Unclear (2)	

Supplementary Material S2c. Characterization form on basis of full-text analysis.

	Ref No:			
	Authors:			
	Title:			
	Year of publication, DOI/PMID, journal and other bibliographic data:			
No	**Data Item**	**Description (to be extracted)**	**Response**	**Options / Examples**
	GENERAL ASPECTS			
1	**Study location**	Country or countries where the study was conducted.		free text (e.g., USA; India or unspecified) / M49 country code
2	**Study region**	Geographic region of the study setting (UN M49 classification)		region name as per UN M49 standard (https://unstats.un.org/unsd/methodology/m49/)
3	**Income level**	Country income level (World Bank classification).		low (1); lower-middle (2); upper-middle (3); high (4) or unspecified (0)
4	**Study design**	Study design or type.		Case study (1); clinical study - cross sectional (2); clinical study - cohort (3); randomized controlled trial (4); qualitative study (5); mixed-methods research (6); clinical study - other, explain in "additional notes" on the right (7); scoping review (8), systematic review (9), metaanalysis (10), review - other (11)
5	**Sample size**	Number of participants (or number of studies, if a review).		<100 / small (1); 100–500 / medium (2); >500 / large (3); case study (4) unspecified / not applicable (0)
6	**Population age group**	Age group(s) of the study population.		children: 0–1 y.o. (1); adolescents 13–18 y.o. (2); adults: 19–64 y.o. (3); older adults: 65+ y.o. (4); general population, mixed or not age-specific (5), unspecified/other (0)
7	**Sex/gender**	Sex/gender composition of the study population.		male (1); female (2); both (3); unspecified (0)
8	**Study aims**	Stated goals or objectives of the study (especially related to single coronary artery (SCA)).		free text (brief summary of aims)
	CLINICAL CHARACTERISTICS			
9	**SCA type**	Does the article describe a single coronary artery (SCA) as defined by a single coronary ostium supplying the entire coronary circulation?		Yes (1, free text if relevant); No (0, ree text if relevant); Other (2, free text)
10	**Lipton classification**	Is the anatomical subtype of SCA clearly characterized by Lipton classification? If yes, provide details.		Lipton classification, or; not reported
11	**Clinical risk**	Does the described anatomy include features considered potentially high risk (e.g. interarterial, intramural, or slit-like ostium)?		interarterial (1), intramural (2), slit-like ostium (3); other (4, provide details); paper does not describe features with high risk (5); no (0); not reported (6)
	DIAGNOSTICS			
12	**Medical imaging modality**	What imaging modality was used for detection?		angiography (1); MRI (2); computed tomography coronary angiography, CTCA (3); transthoracic echocardiography, TTE (4); other (5, which one?); not reported (0)
13	**Functional assessment**	Was functional assessment of ischemia performed?		stress testing (1); perfusion imaging (2); other (3, which one?); not performed (0)
14	**Left ventricular function**	Was left ventricular systolic function reported as preserved or impaired?		preserved (1); impaired (2); not reported (0)
	CLINICAL CONTEXT OF DETECTION			
15	**Incidental detection**	Was the SCA detected incidentally or during evaluation for non-coronary indications?		yes (1); no (0)
16	**Cardiac symptoms**	Were patients asymptomatic with respect to myocardial ischemia or arrhythmic events at the time of diagnosis?		yes (1); no (0)
17	**Symptoms attribution**	If symptoms were present, were they clearly attributable or not attributable to the coronary anomaly?		yes (1); no (0)
	RISK ASSESSMENT			
18	**Sudden cardiac death**	Does the article discuss the risk of sudden cardiac death or malignant ventricular arrhythmias associated with the described SCA variant?		yes (1); no (0)
19	**Adverse outcomes**	Are adverse outcomes reported during follow-up?		arrhythmias (1), syncope (2), ischemia (3), sudden cardiac death (4); other (4, which ones?); not reported (0)
20	**Follow up**	Is the duration of follow-up reported?		yes (1, which one?); no (0)
	MANAGEMENT STRATEGY			
21	**Management path**	What management approach was adopted?		conservative surveillance (1), surgical correction (2), percutaneous intervention (3), device-based prevention (4); other (5, which one?); not reported/not adopted (0)
22	**Management path justification**	What justified the choice of the management path?		anatomy, symptoms (1), ischemia testing (2), expert consensus (3); not justified (4); no management proposed (0)
23	**Preventive strategies**	Are preventive strategies in asymptomatic patients without demonstrable ischemia discussed?		yes (1); no (0)
	GUIDELINES & EVIDENCE BASE			
24	**Guidelines**	Does the article explicitly reference existing guideline recommendations (ESC, ACC/AHA, or equivalent)?		ESC (1); ACC/AHA (2); other (3, which ones?); not reported (0)
25	**Gaps**	Does it identify gaps, ambiguity, or lack of guidance for asymptomatic high-risk SCA variants?		yes (1, provide details); no (0)
26	**Decision making**	Does the article propose or imply individualized or anatomy-driven decision-making?		yes (1, provide details); no (0)