

Appendix A5. Description of Atrial Septal Aneurysm and Shunt Size Variables

Appendix Table 3. Variable Definition for ASA Class.

SCOPE Excursion Class	Systematic, Collaborative, PFO closure Evaluation (SCOPE)	defined as ≥ 10 mm of excursion from midline
TOTAL	CLOSURE	<i>mobility of septum of 10 mm or greater total excursion of the septum</i>
midline	PC Trial	<i>protrusion of the interatrial septum, or part of it, of more or equal to 15mm beyond the plane of the interatrial septum and the diameter of the aneurysm base measured at least 15mm.</i>
TOTAL	RESPECT	<i>defined as ≥ 10 mm septum primum excursion</i>
TOTAL	REDUCE	<i>defined as the movement of the septum primum into either atrium for a total excursion of at least 10 mm (from an imaginary midline).</i>
midline	DEFENSE	<i>ASA based on Defense defined as a or hypermobile septum, where ASA=atrial septal aneurysm (protrusion of the dilated segment of the septum at least 15 mm beyond the level surface of the atrial septum), hypermobility (phasic septal excursion into either atrium ≥ 10 mm)</i>
TOTAL	CLOSE	septum primum excursion greater than 10mm as identified on TEE

PFO indicates patent foramen ovale; TEE, transesophageal echocardiogram.

Appendix Table 4. Variable Definition for Large Shunt Size.

Systematic, Collaborative, PFO closure Evaluation (SCOPE)	Target: Large shunt size was defined in our database as >20+ bubbles (values below in BLUE coded as 'large' in our database)
CLOSURE	<i>Small: (1) None; (2): Trace, 1~10 bubbles, (3) Moderate, ~10-25 bubbles, Large: (4) Substantial, ~25 or more bubbles</i>

Appendix A: Supplementary Methods

PC Trial	<i>Small: grade 0 = none; grade 1 = minimal (1-5 bubbles), grade 2 = moderate (6 to 20 bubbles), Large: grade 3 = severe (>20 bubbles)</i>
RESPECT	<i>Small: Grade 0 (none), Grade 1 = 1-9 bubbles; Grade 2 = 10 to 20 bubbles; Large: Grade 3 = over 20 bubbles</i>
REDUCE	<i>PENN RE-READ FROM TEE (IF MISSING (~20% of time), USED ORIGINAL DATA FROM GORE): Small :(0)Grade 0[no bubbles], (1)Grade 1 [1-9 bubbles], (2)Grade 2 [10-20] bubbles, Large: (3)Grade3 [>20 bubbles]</i>
DEFENSE	<i>Small: (≤20 Microbubbles), Large (>20 microbubbles)</i>
CLOSE	<i>Small : ≤30 Bubbles on TTE or TEE, Large: >30 microbubbles on TTE or TEE</i>

PFO indicates patent foramen ovale; TEE, transesophageal echocardiogram; TTE, transthoracic echocardiogram;