



Figure S1 Surgical valve procedure details. (A) Aortic valve replacement valve types: biological valves accounted for 78% and mechanical valves for 22%. (B) Aortic valve size distribution: the most used valve size in the aortic position was 23 mm, followed by 25, 21, and 19 mm. (C) Surgery procedures on the mitral position: for mitral valve procedures, the majority were replaced with biological valves, with 22% replaced by mechanical valves. For mitral repair patients, various repair techniques were applied for different pathologies.