

Supplementary file 2

Table S1. Table showing co-morbidities, functional class, etiology of degeneration, type of valve, access site and valvular complications for patients with ViV and ViR

S.N	Author/Year	Previous other cardiac surgeries	Co-morbidities	NYHA class	Etiology of degeneration	Type of procedure	Type of valve	Access site	Valvular complications
1	Cheung et al ¹	CABG	CAD,COPD,CKD	-	Stenosis	MViV	26 mm Cribier 9000	Transapical	None
2	Webb et al ²	-	-	IV	-	MViV	26 mm-Sapien XT	Transseptal	Valve embolization converted to open surgery
3	Webb et al ²	-	-	IV	-	MViV	26 mm-Sapien XT	Transapical	None
4	Webb et al ²	-	-	IV	-	MViV	26 mm-Sapien XT	Transapical	None
5	Webb et al ²	-	-	IV	-	MViV	26 mm-Sapien XT	Transapical	None
6	Webb et al ²	-	-	IV	-	MViV	23 mm-Sapien XT	Transapical	None
7	Webb et al ²	-	-	IV	-	MViV	23 mm-Sapien XT	Transapical	None
8	Van Garsse et al ³	-	IDDM,CKD	-	Stenosis	MViV	26 mm Sapien	Transapical	None
9	Seiffert et al ⁴	-	A.FIB,CVA, GI Bleed, Breast Cancer	III	Stenosis	MViV	22 mm- Sapien	Transapical	None
10	Seiffert et al ⁴	AVR, TAVR	CHF, CKD on HD,A.FIB,GI Bleed	III	Regurgitation	MViV	23 mm- Sapien	Transapical	None
11	Seiffert et al ⁴	AVR	IDDM	III	Regurgitation	MViV	26 mm- Sapien	Transapical	None
12	Seiffert et al ⁴	-	CAD, Breast Cancer	III	Regurgitation	MViV	26 mm- Sapien	Transapical	None
13	Nunez-Gil et al ⁵	-	Severe P.HTN	IV	Mixed	MViV	23 mm- Sapien	Transapical	None
14	Montorfano et al ⁶	-	-	-	Stenosis	MViV	26 mm-Sapien XT	Transapical	None
15	Poon et al ⁷	CABG	CHF	IV	Stenosis	MViV	26 mm-Sapien	Transapical	None
16	Latib et al ⁸	-	A.FIB	-	Stenosis	MViV	26 mm-Sapien XT	Transseptal	None
17	Elmariah et al ⁹	CABG	CVA	-	Stenosis	MViV	26 mm- Sapien	Transapical	None
18	Theron et al ¹⁰	-	-	-	Regurgitation	MViV	29 mm-Sapien XT	Transapical	None

19	Soon et al ¹¹	-	CKD	-	Regurgitation	MViV	29 mm-Sapien	Transapical	None
20	Bapat et al ¹²	-	CHF	-	Stenosis	MViV	26 mm-Sapien	Transapical	None
21	Bapat et al ¹²	-	IDDM, A.FIB	-	Regurgitation	MViV	26 mm-Sapien XT	Transapical	Valve embolization converted to open surgery
22	Schaefer et al ¹³	AVR	COPD	III	Regurgitation	MViV	26 mm-Sapien	Transapical	None
23	Schaefer et al ¹³	-	P.HTN	III	Regurgitation	MViV	26 mm-Sapien XT	Transseptal	None
24	Schaefer et al ¹³	-	COPD, P.HTN	III	Regurgitation	MViV	26 mm-Sapien XT	Transseptal	None
25	Schaefer et al ¹³	-	CKD on FD, P.HTN	III	Stenosis	MViV	26 mm-Sapien XT	Transseptal	None
26	Schaefer et al ¹³	AVR	COPD	III	Regurgitation	MViV	23 mm-Sapien XT	Transseptal	None
27	Schaefer et al ¹³	-	P.HTN	III	Stenosis	MViV	26 mm-Sapien XT	Transseptal	None
28	Michelena et al ¹⁴	CABG, AVR	PAD	IV	Mixed	MViV	22 mm-Melody	Transseptal	None
29	Fassa et al ¹⁵	-	-	-	Stenosis	MViV	26 mm-Sapien XT	Transseptal	Embolization of valve, Successful placement of second valve
30	Wilbring et al ¹⁶	-	A.FIB, CVA, P.HTN	III	Mixed	MViV	29 mm-Sapien XT	Transapical	None
31	Wilbring et al ¹⁶	-	A.FIB,CKD, P.HTN, IDDM	III	Mixed	MViV	29 mm-Sapien XT	Transapical	None
32	Wilbring et al ¹⁶	-	CHF, CKD, CVA	III	Mixed	MViV	29 mm-Sapien XT	Transapical	None
33	Wilbring et al ¹⁶	-	COPD,CVA, P.HTN	III	Mixed	MViV	26 mm-Sapien XT	Transapical	None
34	Wilbring et al ¹⁶	-	A.FIB, COPD, P.HTN	III	Mixed	MViV	29 mm-Sapien XT	Transapical	None
35	Wilbring et al ¹⁶	-	CHF, CVA, P.HTN	III	Mixed	MViV	26 mm-Sapien XT	Transapical	None
36	Wilbring et al ¹⁶	-	CHF, CKD, CVA, P.HTN	III	Mixed	MViV	26 mm-Sapien XT	Transapical	None
37	Cheung et al ¹⁷	CABG	-	-	Stenosis	MViV	26 mm- Cribier	Transapical	None
38	Cheung et al ¹⁷	CABG	-	-	Stenosis	MViV	23 mm-Sapien	Transapical	None
39	Cheung et al ¹⁷	AVR	-	-	Regurgitation	MViV	23 mm- Sapien	Transapical	None
40	Cheung et al ¹⁷	-	-	-	Regurgitation	MViV	26 mm- Sapien	Transapical	None
41	Cheung et al ¹⁷	-	-	-	Regurgitation	MViV	26 mm- Sapien	Transapical	None
42	Cheung et al ¹⁷	CABG	-	-	Stenosis	MViV	23 mm- Sapien	Transapical	None

43	Cheung et al ¹⁷	CABG	-	-	Mixed	MViV	23 mm- Sapien	Transapical	None
44	Cheung et al ¹⁷	TVR	-	-	Regurgitation	MViV	26 mm- Sapien XT	Transapical	None
45	Cheung et al ¹⁷	CABG	-	-	Stenosis	MViV	26 mm- Sapien XT	Transapical	None
46	Cheung et al ¹⁷	CABG	-	-	Mixed	MViV	26 mm- Sapien XT	Transapical	None
47	Cheung et al ¹⁷	CABG, TVR	-	-	Regurgitation	MViV	29 mm- Sapien XT	Transapical	None
48	Cheung et al ¹⁷	CABG, AVR	-	-	Regurgitation	MViV	29 mm- Sapien XT	Transapical	None
49	Cheung et al ¹⁷	CABG	-	-	Mixed	MViV	26 mm- Sapien	Transapical	None
50	Cheung et al ¹⁷	-	-	-	Mixed	MViV	29 mm- Sapien XT	Transapical	None
51	Cheung et al ¹⁷	-	-	-	Mixed	MViV	26 mm- Sapien	Transapical	None
52	Cheung et al ¹⁷	TVR	-	-	Stenosis	MViV	23 mm- Sapien XT	Transapical	None
53	Cheung et al ¹⁷	-	-	-	Stenosis	MViV	26 mm- Sapien	Transapical	None
54	Cheung et al ¹⁷	CABG	-	-	Mixed	MViV	26 mm- Sapien	Transapical	None
55	Cheung et al ¹⁷	AVR	-	-	Regurgitation	MViV	29 mm- Sapien XT	Transapical	None
56	Cheung et al ¹⁷	TVR	-	-	Stenosis	MViV	26 mm- Sapien XT	Transapical	None
57	Cheung et al ¹⁷	AVR	-	-	Mixed	MViV	29 mm- Sapien XT	Transapical	None
58	Rossi et al ¹⁸	-	-	III	Regurgitation	MViV	26 mm-Sapien XT	Transapical	None
59	De Biasi et al ¹⁹	CABG, TAVR	CAD,A.FIB, CKD	-	Regurgitation	MViV	26 mm-Sapien	Transapical	None
60	Bruschi et al ²⁰	-	-	-	-	MViV	26 mm-Sapien XT	Transseptal	Incomplete valve apposition requiring surgical valve replacement
61	Donofrio et al ²¹	-	-	-	-	MViV	26 mm-Sapien XT	Transapical	None
62	Kliger et al ²²		CVA, CKD	IV	Mixed	MViV	24 mm- Melody	Transseptal	None
63	Kliger et al ²²		CVA, CKD, P.HTN	IV	Mixed	MViV	24 mm- Melody	Transseptal	None
64	Kliger et al ²²	CABG	P.HTN	III	Stenosis	MViV	24 mm- Melody	Transseptal	None
65	Kliger et al ²²	CABG, AVR		III	Regurgitation	MViV	25 mm- Melody	Transseptal	Valve embolization converted to open surgery
66	Kliger et al ²²	-	P.HTN	III	Mixed	MViV	25 mm- Melody	Transseptal	None
67	Kaneko et al ²³	AVR,	CAD, CKD, CVA	-	Stenosis	MViV	26 mm-Sapien	Transseptal	None

		CABG							
68	Duncan et al ²⁴	AVR	A.FIB, COPD, CAD	-	Stenosis	MViV	29 mm- Sapien XT	Transapical	None
69	Cerrillo et al ²⁵	AVR	-	-	Mixed	MViV	26 mm-Sapien	Transapical	None
70	Fuchs et al ²⁶	-	CAD	IV	Mixed	MViV	Sapien 3	Transseptal	None
71	Singh et al	-	-	-	Regurgitation	MViV	29 mm-Sapien XT	Transseptal	None
72	Chrissoheris et al ²⁸	-	-	IV	Stenosis	MViV	29 mm-Sapien XT	Transapical	None
73	Chaikriangkrai et al	-	CKD on HD		Stenosis	MViV	26 mm-Sapien XT	Transapical	None
74	Alli et al ³⁰	-	-	IV	Stenosis	MViV	29 mm-Sapien XT	Transapical	None
75	Baldizon et al ¹	CABG	A.FIB	-	-	MViV	29 mm-Sapien XT	Transapical	None
76	Schaefer et al ³²	-	P.HTN, PBC,CAD	III	Stenosis	MViV	25 mm-Lotus	Transapical	None
77	Schaefer et al ³²	-	P.HTN. Recurrent GI Bleeds	III	Regurgitation	MViV	27 mm-Lotus	Transapical	None
78	Schaefer et al ³²	-	P.HTN	III	Regurgitation	MViV	25 mm-Lotus	Transapical	None
79	Schaefer et al ³²		P.HTN, CKD, A.FIB	IV	Regurgitation	MViV	26 mm-Sapien 3	Transapical	None
80	Worku et al ³⁴	TVR	A.FIB	-	Regurgitation	MViV	26 mm-Sapien	Transapical	None
81	Worku et al ³⁴	CABG, AVR	CKD, A.FIB, CAD	-	Mixed	MViV	26 mm-Sapien	Transapical	None
82	Jochheim et al ³⁵	-	Hepatic Carcinoma, P.HTN, CHF	IV	Stenosis	MViV	23 mm-Sapien 3	Transseptal	None
83	Bruschi et al ⁶	CABG	A.FIB, P.HTN,CKD, CHF	IV	Regurgitation	MViV	25 mm-DFM	Transapical	None
84	Ranney et al ³⁷	-	COPD, P.HTN	IV	Stenosis	MViV	26 mm-Sapien	Transapical	None
85	Ranney et al ³⁷	-	A.FIB, COPD	IV	Regurgitation	MViV	23 mm-Sapien XT	Transapical	None
86	Ranney et al ³⁷	AVR	A.FIB,CAD, CHF, P.HTN	IV	Stenosis	MViV	26 mm-Sapien	Transapical	None
87	Ranney et al ³⁷	CABG	A.FIB	IV	Regurgitation	MViV	29 mm-Sapien XT	Transapical	None
88	Schuler et al ³⁸	CABG, AVR	A.FIB	-	Mixed	MViV	22 mm-Melody	Transseptal	None

89	Akhras et al ³⁹	CABG	-	III	Regurgitation	MViV	29 mm-Sapien XT	Transapical	Valve thrombosis treated with anticoagulation
90	Cerillo et al ⁴⁰	AVR	CHF, CKD,CAD, CVA	IV	-	MViV	26 mm -Sapien	Transapical	None
91	Cerillo et al ⁴⁰	CABG	IDDM, CKD, CHF, PVD	III	-	MViV	26 mm- Sapien	Transapical	None
92	Cerillo et al ⁴⁰	TVR	COPD, CVA, A.FIB	IV	-	MViV	26 mm- Sapien	Transapical	None
93	Cerillo et al ⁴⁰	-	CHF, A.FIB	III	-	MViV	29 mm- Sapien	Transapical	None
94	Cerillo et al ⁴⁰	-	CKD	IV	-	MViV	26 mm- Sapien	Transapical	None
95	Cerillo et al ⁴⁰	-	NIDDM	III	-	MViV	26 mm- Sapien	Transapical	None
96	Cerillo et al ⁴⁰	TVR	MIDDM, A.FIB	III	-	MViV	26 mm- Sapien	Transapical	None
97	Cerillo et al ⁴⁰	AVR	CHF, A.FIB	IV	-	MViV	26 mm- Sapien	Transapical	None
98	Cerillo et al ⁴⁰	AVR	A.FIB	II	-	MViV	26 mm- Sapien	Transapical	None
99	Cerillo et al ⁴⁰	AVR, CABG	-	IV	-	MViV	26 mm- Sapien	Transapical	None
100	Cerillo et al ⁴⁰	-	CVA, A.FIB	IV	-	MViV	26 mm -Sapien	Transapical	None
101	Cerillo et al ⁴⁰	CABG	-	III	-	MViV	29 mm- Sapien	Transapical	None
102	Cerillo et al ⁴⁰	AVR,TVR	CKD	III	-	MViV	26 mm- Sapien	Transapical	None
103	Cerillo et al ⁴⁰	-	CVA, A.FIB, CKD	III	-	MViV	29 mm- Sapien	Transapical	None
104	Cerillo et al ⁴⁰	-	CHF	III	-	MViV	26 mm- Sapien	Transapical	None
105	Cerillo et al ⁴⁰	-	CHF	IV	-	MViV	23 mm- Sapien	Transapical	None
106	Cerillo et al ⁴⁰	-	COPD	III	-	MViV	29 mm- Sapien	Transapical	None
107	Nachum et al ⁴¹	CABG	-	IV	Regurgitation	MViV	26 mm-Sapien	Transapical	None
108	Nachum et al ⁴¹	CABG	-	IV	Regurgitation	MViV	29 mm-Sapien	Transapical	None
109	Nachum et al ⁴¹	-	-	IV	Regurgitation	MViV	26 mm-Sapien	Transapical	None
110	Nachum et al ⁴¹	-	-	IV	Regurgitation	MViV	29 mm-Sapien	Transapical	None
111	Nachum et al ⁴¹	CABG	-	IV	Regurgitation	MViV	26 mm-Sapien	Transapical	None
112	Nachum et al ⁴¹	CABG	-	IV	Regurgitation	MViV	26 mm-Sapien	Transapical	None
113	Nachum et al ⁴¹	-	-	IV	Stenosis	MViV	26 mm-Sapien	Transapical	None
114	Nachum et al ⁴¹	-	-	IV	Stenosis	MViV	26 mm-Sapien	Transapical	None
115	Nachum et al ⁴¹	-	-	IV	Mixed	MViV	25 mm-Sapien	Transapical	None
116	Mick et al ⁴²	-	COPD,A.FIB, CVA	III	Regurgitation	MViV	23 mm-Sapien XT	Transapical	embolization and

									re-intervention MVIV using left atrial approach
117	Salun et al ⁴³	-	-	-	Regurgitation	MViV	29 mm-Sapien 3	Transapical	None
118	Rudzinski et al ⁴⁴	-	A,FIB, CKD, CVA	III	Stenosis	MViV	26 mm- Sapien 3	Transseptal	None
119	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	23 mm- Sapien	Transapical	Valve embolization converted to open surgery
120	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	26 mm- Sapien	Transapical	Valve embolization converted to open surgery
121	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	23 mm- Sapien	Transapical	None
122	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	26 mm- Sapien	Transseptal	None
123	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	None
124	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	None
125	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	23 mm- Sapien XT	Transseptal	None
126	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	None
127	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	26 mm- Sapien XT	Transseptal	None
128	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	26 mm- Sapien XT	Transseptal	None
129	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	29 mm- Sapien XT	Transseptal	None
130	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	Valve thrombosis treated with anticoagulation
131	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	None
132	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien 3	Transseptal	None
133	Eleid et al ⁴⁵	-	-	III	Mixed	MViV	29 mm- Sapien 3	Transseptal	None
134	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	29 mm- Sapien 3	Transseptal	None
135	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	29 mm- Sapien 3	Transseptal	None
136	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien 3	Transseptal	None
137	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien 3	Transseptal	None
138	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	26 mm- Sapien	Transseptal	None
139	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	None
140	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	29 mm- Sapien XT	Transseptal	None

141	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	29 mm- Sapien XT	Transseptal	None
142	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	None
143	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	26 mm- Sapien XT	Transseptal	None
144	Eleid et al ⁴⁵	-	-	III	Mixed	MViV	26 mm- Sapien 3	Transseptal	None
145	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien 3	Transseptal	None
146	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	None
147	Eleid et al ⁴⁵	-	-	III	Stenosis	MViV	26 mm- Sapien XT	Transseptal	None
148	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	None
149	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	23 mm- Sapien XT	Transseptal	None
150	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	26 mm- Sapien XT	Transseptal	None
151	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViV	29 mm- Sapien XT	Transseptal	None
152	Tada et al ⁴⁶	-	A.FIB	-	Regurgitation	MViV	23 mm-Sapien XT	Transapical	None
153	HE et al ⁴⁷	TVR	CKD, A.FIB	III	Mixed	MViV	29 mm-Sapien 3	Transapical	None
154	Herrmann et al ⁴⁸	CABG, TVR	A.FIB, COPD	III	Stenosis	MViV	29 mm-Sapien XT	Transseptal	None
155	Schaefer et al ¹³	-	P.HTN	III	Regurgitation	MViR	29 mm- Sapien XT	Transapical	None
156	Schaefer et al ¹³	-	P.HTN	III	Regurgitation	MViR	23 mm- Sapien XT	Transapical	None
157	Schaefer et al ¹³	-	-	III	Regurgitation	MViR	29 mm- Sapien XT	Transapical	None
158	Schaefer et al ¹³	-	P.HTN	III	Regurgitation	MViR	23 mm- Sapien XT	Transapical	None
159	Wunderlich et al ⁴⁹	-	CHF	III	Regurgitation	MViR	29 mm- Sapien XT	Transseptal	None
160	Maisano et al ⁵⁰	-	A.FIB	IV	Regurgitation	MViR	25 mm- Melody	Transapical	None
161	Attizzani et al ⁵¹	TVR	-	III	Mixed	MViR	29 mm- Sapien XT	Transapical	None
162	Attizzani et al ⁵¹	TVR		-	Regurgitation	MViR	26 mm- Sapien XT	Transapical	None
163	Latib et al ⁵²	-	-	IV	-	MViR	29 mm- DFM	Transapical	None
164	Latib et al ⁵²	-	-	IV	-	MViR	27 mm- DFM	Transapical	failure of implantation, retrieved and converted to surgery
165	Latib et al ⁵²	-	-	IV	-	MViR	25 mm- DFM	Transapical	None
166	Latib et al ⁵²	-	-	IV	-	MViR	25 mm- DFM	Transapical	None
167	Latib et al ⁵²	-	-	IV	-	MViR	29 mm- DFM	Transapical	None

168	Latib et al ⁵²	-		IV	-	MViR	27 mm- DFM	Transapical	None
169	Latib et al ⁵²	-	-	IV	-	MViR	29 mm- DFM	Transapical	failure of implantation
170	Latib et al ⁵²	-	-	IV	-	MViR	29 mm- DFM	Transapical	None
171	Lauterbach et al ⁵³	-	CKD, PAD, CAD	IV	Regurgitation	MViR	25 mm- Lotus	Transapical	None
172	Lauterbach et al ⁵³	CABG	CKD, A.FIB, CAD	IV	Regurgitation	MViR	27 mm-Lotus	Transapical	None
173	Wilbring et al ⁵⁴	TVR	IDDM, CKD, PVD	-	Regurgitation	MViR	26 mm- Sapien XT	Transapical	None
174	Eleid et al ⁴⁵	-	-	III	Mixed	MViR	26 mm- Sapein XT	Transseptal	None
175	Eleid et al ⁴⁵	-	-	III	Stenosis	MViR	23 mm- Sapien XT	Transseptal	None
176	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViR	29 mm- Sapein XT	Transseptal	embolization converted to open surgery
177	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViR	26 mm- Sapien XT	Transseptal	None
178	Eleid et al ⁴⁵	-	-	III	Stenosis	MViR	29 mm- Sapien 3	Transseptal	None
179	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViR	29 mm- Sapien 3	Transseptal	None
180	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViR	29 mm- Sapien XT	Transseptal	embolization converted to open surgery
181	Eleid et al ⁴⁵	-	-	III	Stenosis	MViR	26 mm- Sapien XT	Transseptal	None
182	Eleid et al ⁴⁵	-	-	III	Regurgitation	MViR	23 mm- Sapien XT	Transseptal	None
183	Pfeiffer et al ⁵⁵	CABG	CHF	-	Mixed	MViR	23 mm- Sapien XT	Transapical	None

Abbreviations: AVR: Aortic valve replacement, A.FIB: Atrial Fibrillation, CABG: Coronary artery bypass graft, CAD: Coronary artery disease, CHF: Congestive heart failure, CKD: Chronic Kidney disease, CVA: Cerebrovascular accident, COPD: Chronic obstructive pulmonary disease, DFM: Direct flow medical, GI: Gastrointestinal, HD: Hemodialysis, IDDM: Insulin dependent diabetes mellitus, MViv: Mitral valve-in-valve, MVIR: Mitral valve-in-ring, PVD: Peripheral vascular disease, TAVR: Transcatheter aortic valve replacement, TVR: Tricuspid valve replacement

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