

Medtronic

SimuForm™ Annuloplasty Ring

Designed for excellent results

The SimuForm ring provides a targeted semi-rigid posterior remodeling while offering a flexible saddle shape to accommodate anterior motion during the cardiac cycle. A flexible anterior aspect of a mitral ring increases leaflet coaptation and curvature,¹⁻³ reduces annular forces,^{3,4} and reduces leaflet and chordal stresses.⁴⁻⁶

The SimuForm platform demonstrates to be highly effective for preventing systolic anterior motion (SAM) after mitral valve repair.⁷

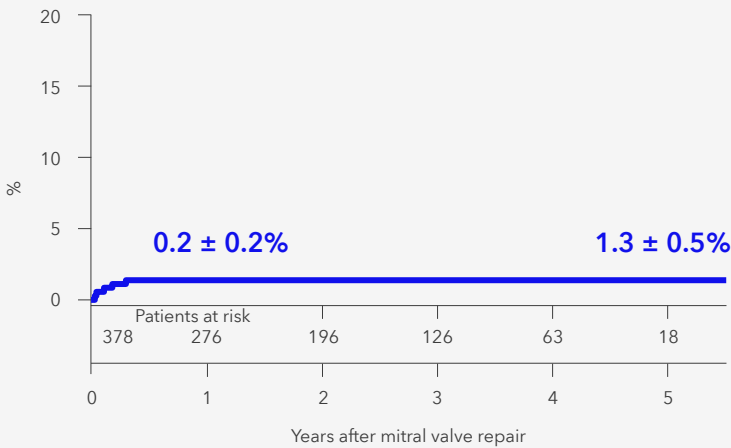
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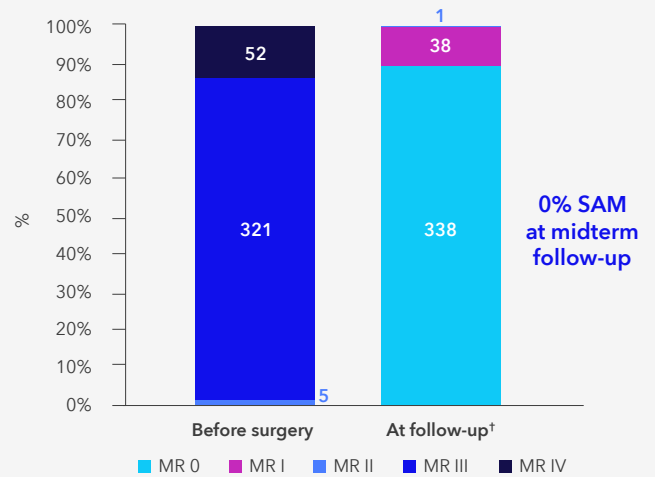
Designed like no other

Changes shape dynamically during the cardiac cycle – from flexible saddle in systole to flat, planar shape in diastole.

Cumulative incidence of reoperation



Degree of mitral valve regurgitation



Results from a single-center, retrospective analysis show that the SimuForm platform:⁷



Demonstrates excellent survival rates – 99.7% ± 0.2% at one year and 90.8% ± 4.6% at five years



Shows high repair success rate with very low rates of reoperation at midterm follow-up with conventional and minimally invasive access



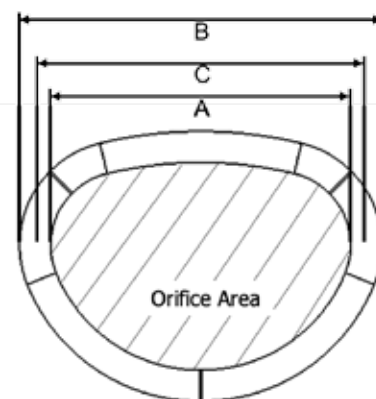
Effectively reduces the risk of recurrent mitral valve regurgitation



Minimizes the risk of SAM – 0 cases reported after mitral repair at midterm follow-up

SimuForm™ ring product information

Size (mm)	Product codes	"A" (mm)	"B" (mm)	Orifice area (mm ²)	Stiffener assembly inner diameter (mm)
24	7800RR24	23.1	31.0	290	24.6
26	7800RR26	25.0	32.9	340	26.5
28	7800RR28	26.9	34.9	390	28.5
30	7800RR30	28.9	36.8	460	30.4
32	7800RR32	30.7	38.7	480	32.3
34	7800RR34	32.7	40.6	560	34.2
36	7800RR36	34.6	42.6	640	36.2
38	7800RR38	36.6	44.5	730	38.1
40	7800RR40	38.5	46.4	810	40.0



A: Inner ring diameter
B: Outer ring diameter
C: Inner stiffener diameter

SimuForm ring ordering information

Order number	Components and accessories
T7800P	SimuForm accessory tray
7800PS	Set of 9 SimuForm polysulfone sizers
7686	Annuloplasty handle (216 mm length)
7686L	Annuloplasty handle (254 mm length)
7686XL	Annuloplasty handle (373 mm length)

Note: SimuForm was initially named Simulus.

References

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- Jimenez JH, Liou SW, Padala M, et al. A saddle-shaped annulus reduces systolic strain on the central region of the mitral valve anterior leaflet. *J Thorac Cardiovasc Surg.* December 2007;134(6):1562-1568.
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See the device manual for detailed information regarding the instructions for use, indications, contraindications, warnings, precautions, and potential adverse events. For further information, contact your local Medtronic representative and/or consult the Medtronic website at www.medtronic.eu.

For applicable products, consult instructions for use on www.medtronic.com/manuals.
 Manuals can be viewed using a current version of any major internet browser.
 For best results, use Adobe Acrobat® Reader with the browser.

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