**Current Status Of Transcatheter Mitral Valve Repair: New Technology And Techniques**

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**CONCLUSIONS**

Although percutaneous repair was less effective at reducing mitral regurgitation than conventional surgery, the procedure was associated with superior safety and similar improvements in clinical outcomes.

![MitraClip Systematic Review](image)

**MitraClip Systematic Review**

**MitraClip vs Surgery 30 Day Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>Death</th>
<th>Stroke</th>
<th>Bleeding</th>
<th>Hospital Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>MitraClip</td>
<td>6.6%</td>
<td>3.3%</td>
<td>4.4%</td>
<td>16.2%</td>
</tr>
<tr>
<td>Surgery</td>
<td>8.2%</td>
<td>3.2%</td>
<td>10.2%</td>
<td>31.8%</td>
</tr>
</tbody>
</table>

21 studies
Philip F et al, Cathet Cardiovasc Intervent 84:581, 2014

**Freedom From Mortality & Reintervention**

![Freedom From Mortality & Reintervention](image)

**Reduction in LV Volumes at 5 Years**

**EVEREST II RCT**

Despite residual MR with MitraClip, LV remodeling still persists after 5 years

![Reduction in LV Volumes at 5 Years](image)
Septal Lateral Annular Dimensions
EVEREST II RCT All Treated Patients - MitraClip Group (N=178)

MitraClip Clip Delivery System
Approved October 24, 2013

**Indication for Use:**
The MitraClip Clip Delivery System is indicated for the percutaneous reduction of significant symptomatic mitral regurgitation (MR ≥ 3+) due to primary abnormality of the mitral apparatus [degenerative MR] in patients who have been determined to be at prohibitive risk for mitral valve surgery by a heart team, which includes a cardiac surgeon experienced in mitral valve surgery and a cardiologist experienced in mitral valve disease, and in whom existing comorbidities would not preclude the expected benefit from reduction of the mitral regurgitation.

DMR Pre vs Post 2 Clips

MitraClip RCTs in Functional MR

1348 patients
Heart failure and FMR
MitraClip vs. GDMT or MV Surgery
- COAPT – 300/430 70%
- MITRA-FR – ~145/288 (50%)
- RESHAPE-HF-2 – 43/420 (10%)
- MATTERHORN (vs MVS) – 4/210 (4%)

Percutaneous Annuloplasty Trial Outcome Measures
Percutaneous Mitral Repair
Conclusions

- Low 30 day mortality, short stay & high discharge to home rates in high risk population
- Residual MR ≥2+ in half, ≤2+ in 75-85%
- Improved LV dimensions & volumes to 5 years
- No annular dilatation with MitraClip
- Improved symptoms and exercise capacity
- TMVR developing rapidly