ESCAPE
KEY FINDINGS

Recent studies have demonstrated the superiority of retrievable stents over previous generation thrombectomy devices. The recently reported MR CLEAN study was the first randomized trial to widely use this technology and reported clinical benefit of endovascular treatment in patients with proximal intracranial occlusion. The ESCAPE Trial sought to prove that selected patients using CT and CTA with rapid endovascular treatment using modern endovascular techniques is an efficacious treatment for patients with acute ischemic stroke.

An investigator-initiated, multi-center, prospective, randomized, open-label, blinded-endpoint (PROBE) study in ischemic stroke patients. Patients were allocated 1:1 to endovascular treatment plus guideline-based care (intervention) vs. guideline-based care alone (control).

### GUIDELINE-BASED CARE

- **LESS THAN 5% LOSS TO FOLLOW UP**

### INDEPENDENT DATA REVIEW

<table>
<thead>
<tr>
<th>THOSE WHO UNDERWENT ENDOVASCULAR THERAPY (n=151)</th>
<th>THOSE WHO RECEIVED RETRIEVABLE STENTS (n=130)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STENT RETRIEVER DEVICE</strong></td>
<td><strong>SOLITAIRE™ DEVICE</strong></td>
</tr>
<tr>
<td>130/151 (86.1%)</td>
<td>100/130 (77%)</td>
</tr>
<tr>
<td><strong>OTHER ENDOVASCULAR DEVICE</strong></td>
<td><strong>OTHER STENT RETRIEVER</strong></td>
</tr>
<tr>
<td>23/151 (13.9%)</td>
<td>30/130 (23.1%)</td>
</tr>
</tbody>
</table>

23%
BASELINE CHARACTERISTICS WERE SIMILAR IN THE TWO TREATMENT GROUPS:

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>CONTROL</th>
<th>INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of randomized subjects</td>
<td>150</td>
<td>165</td>
</tr>
<tr>
<td>Age (year) - Median (IQR)</td>
<td>70 (60-81)</td>
<td>71 (60-81)</td>
</tr>
<tr>
<td>Female sex - no. (%)</td>
<td>79 (52.7)</td>
<td>86 (52.1)</td>
</tr>
<tr>
<td>Baseline NIHSS score - Median (IQR)</td>
<td>17 (12-20)</td>
<td>16 (13-20)</td>
</tr>
<tr>
<td>History of hypertension - no. (%)</td>
<td>108 (72.0)</td>
<td>105 (63.6)</td>
</tr>
<tr>
<td>History of diabetes mellitus - no. (%)</td>
<td>39 (26.0)</td>
<td>33 (20.0)</td>
</tr>
</tbody>
</table>
| Onset to randomization (min) - Median (IQR)         | 172 (119-284) | 169 (117-285)
| Treatment with IV alteplase - no. (%)               | 118 (78.7) | 120 (72.7)   |
| Location of occlusion on CTA - no./total no. (%)    |           |              |
| · ICA with involvement of the M1-MCA segments        | 39/147 (26.5) | 45/163 (27.6) |
| · M1-MCA or all M2-MCA segments                      | 105/147 (71.4) | 111/163 (68.1) |
| · Single M2-MCA segment                              | 3/147 (2.0) | 6/163 (3.7)  |

STUDY RESULTS:

<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>CONTROL</th>
<th>INTERVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary outcome: mRS score at 90 days (n=311)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mRS 0-2 at 90 days - no./total no. (%)</td>
<td>43/147 (29.3)</td>
<td>87/164 (53.0)</td>
</tr>
<tr>
<td>NIHSS 0-2 at 90 days - no./total no. (%)</td>
<td>31/134 (23.1)</td>
<td>79/153 (51.6)</td>
</tr>
<tr>
<td>TICI score 2b-3 at final angiogram - no./total no. (%)</td>
<td>N/A</td>
<td>113/156 (72.4)</td>
</tr>
<tr>
<td>Death - no./total no. (%)</td>
<td>28/147 (19.0)</td>
<td>17/164 (10.4)</td>
</tr>
<tr>
<td>Symptomatic intracerebral hemorrhage - no. (%)</td>
<td>4 (2.7)</td>
<td>6 (3.6)</td>
</tr>
</tbody>
</table>

STUDY CONCLUSION:
Among acute ischemic stroke patients with proximal vessel occlusion, small infarct core and moderate-to-good collaterals, rapid endovascular treatment improved functional outcomes and reduced mortality.