### TABLE 1 - Results from Imaging and Stress Test Model Adjusted for Clinical Factors

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR</th>
<th>95% CI</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Enrollment, years</td>
<td>0.95</td>
<td>0.51 - 1.79</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Male</td>
<td>2.35</td>
<td>1.47 - 3.76</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Exclusion of SE prior CADG in 144 Nuclear</td>
<td>0.87</td>
<td>0.54 - 1.42</td>
<td>0.461</td>
</tr>
<tr>
<td>Exclusion of SE with non-study CTA in 228 Nuclear</td>
<td>1.23</td>
<td>0.77 - 1.97</td>
<td>0.396</td>
</tr>
<tr>
<td>Pts with LM not present (42) and (LM &lt; Mean Predicted 2.050) N=1533</td>
<td>1.56</td>
<td>0.72 - 1.33</td>
<td>0.275</td>
</tr>
<tr>
<td>Exclusion of CMR participants 167 N=121</td>
<td>1.27</td>
<td>0.72 - 1.17</td>
<td>0.260</td>
</tr>
</tbody>
</table>

### RESULTS

- Of the 5146 patients included—see flow diagram below (mean age: 63 years, male: 74%), 414 (8%) had LM disease. Predictors of LM disease are shown in the Table 1. The models were weakly predictive of LM disease (C index 0.643 for clinical model, 0.671 for clinical + stress model)
- Table 2 indicated that the optimum models that predicted the probability of ≥50% LM as <2.5% taking individual stress testing factors into account were always female, such as women with SE determined number of ischemic segments <5 or stress SPECT summed stress score <10

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### PREDICTION OF LEFT MAIN DISEASE USING CLINICAL AND STRESS TEST PARAMETERS

**METHOD**

- Pts enrolled in the ISCHEMIA trial who underwent exercise ECG (ExECG), stress single-photon-emission-tomography (SPECT) or stress echocardiography (SE) and coronary computed tomography angiography (CCTA) were evaluated.
- Pts were enrolled based on local determination of moderate or severe ischemia
- Those with prior CABG were excluded
- Multivariate modeling was used to identify predictors of ≥50% LM disease stenosis ("LM disease"), first without and then with stress testing parameters included in the model.
- A low average model-predicted probability of ≥50% LM by using the multivariate model described above was used to identify subgroups with an average model-predicted probability less than 2.5%

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**INTRODUCTION**

- Detection of flow-limiting left main (LM) coronary artery disease (CAD) has both prognostic and therapeutic implications
- Stress testing is the most common method to detect obstructive CAD
- However stress markers of LM CAD remain unclear
- The aim of the study is to identify markers of LM CAD using clinical and stress testing parameters

**RESULTS**

**METHOD**

- The following variables were used to define subgroups: Sex, age (categorized as <55, 55-65, 65-75, ≥75); prior MI; stress mode (Nuclear, ECHO and CCTA); Multivessel CAD (nuclear and SPECT) taking individual stress testing factors into account and severity of disease (SPECT ischemia defined as segments categorized as IS 0, IS 1, IS 2, IS 3). TID (Transient ischemic dilation in the LV) on ECHO; Maximum ST Depression in Any Lead on ECG (categorized as ≥2, ≥3, ≥4, ≥5, ≥6, ≥7, ≥8, ≥9, ≥10 mm).

**CONCLUSIONS**

- In patients with moderate or severe ischemia on stress testing, clinical and stress testing parameters were weakly predictive of LM disease on CCTA
- SE-detected TID and ST depression during ETT provided incremental information independent of clinical and other stress modality specific parameters for the prediction of LM disease
- Subgroups with a probability of at least 97.5% for no significant LM disease were always female, such as women with SE determined no of ischemic segments <5 or stress SPECT summed stress score <10