

## TCT@ACC-i2: Invasive and Interventional Cardiology

### GENDER DIFFERENCES IN CARDIAC SYMPTOMS 30 DAYS AFTER PRIMARY PCI FOR ANTERIOR MYOCARDIAL INFARCTION: INSIGHTS FROM INFUSE-AMI

Poster Contributions

Poster Sessions, Expo North

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**Background:** It is unclear whether gender differences exist in cardiac symptoms after percutaneous coronary intervention (PCI) for ST-segment elevation myocardial infarction (STEMI).

**Methods:** The INFUSE-AMI trial randomized patients with anterior STEMI due to proximal or mid left anterior descending occlusion to intracoronary abciximab delivered via the ClearWay™ RX catheter vs no abciximab, and to manual thrombus aspiration with the Export® catheter vs no aspiration. We compared 30-day infarct size on cardiac magnetic resonance imaging in women and men. We also analyzed the 30-day rates of self-reported angina (Canadian Cardiovascular Society; CCS scale) and heart failure (HF; NYHA scale) by gender.

**Results:** Among 452 patients, 118 (26.1%) were female and the average age was 61 years. Women were older than men and more often had hypertension, hyperlipidemia, and heart failure. Women experienced a greater delay from symptom onset to hospital arrival (median 137.4 vs 106.8 min,  $P<0.0001$ ) and in door-to-device time (median 60 vs 51.6 min,  $P=0.04$ ) than men. The post-procedure and 30-day outcomes in both groups are shown in Table 1.

**Conclusions:** In this trial, women experienced more angina (CCS I) and dyspnea (NYHA I-III) in the first month after primary PCI despite state of the art interventions and similar reperfusion success and infarct size. Whether these differences are related to baseline characteristics, disease perception or underlying microvascular disease in women deserves further study.

Table 1. Gender differences in outcomes after primary PCI

	Women (%)	Men (%)	P-Value
Aspiration performed with Export® catheter	50.0	52.4	0.65
Thrombus successfully retrieved after aspiration	86.4	77.5	0.14
Intracoronary abciximab infused via ClearWay™ RX catheter	78.4	83.2	0.35
Post-PCI Myocardial Blush Grade 3	67.8	70.0	0.68
>70% ST Resolution 60 min post-PCI	56.9	50.3	0.24
<b>30-day Follow-up</b>			
Infarct Size – percent of total left ventricular mass	16.0	16.4	0.74
Left ventricular ejection fraction (median)	52.7	49.2	0.02
Any Angina	16.2	8.3	0.02
Angina CCS I	14.3	5.1	0.002
Angina CCS II	1.0	2.2	0.89
Angina CCS III	0.0	0.3	1.00
Angina CCS IV	1.0	0.0	0.25
HF NYHA I	71.0	84.1	0.004
HF NYHA II	25.0	15.6	0.03
HF NYHA III	3.0	0.3	0.05
HF NYHA IV	1.0	0.0	0.25
Cardiac mortality	5.1	2.1	0.09
Reinfarction	0.0	0.3	0.56
Target Vessel Revascularization	0.9	1.2	0.77