# Distal vs. Non-distal Lesions in Patients with Unprotected Left Main Coronary Artery Stenosis Treated by PCI: Dose Location Matter?

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**Background and Objectives:**

PCI is an increasingly utilized mode of revascularization of patients with unprotected left main coronary artery disease (ULMCA). Distal left main (DLM) interventions are more technically challenging compared with non-distal LM (NDLM) interventions. We sought to compare the twelve months cumulative risk of major adverse cardiac events (MACE) of patients with DLM with those of NDLM disease.

**Methods:**

We identified 182 consecutive patients who underwent PCI in ULMCA. Patients were divided according to location of their LM lesion, DLM, 81 patients vs. NDLM, 101 patients. Patients with cardiogenic shock were excluded. Outcome parameters included: Cardiac mortality, MI, repeated target vessel revascularization (TVR), CABG and MACE at 12 months after the index procedure.

**Results:**

The baseline clinical characteristics were similar in both groups. Patients with DLM disease had higher rates of two or three vessel disease (77% NDLM, vs. 92% DLM, p=0.09). DES use was not significantly different in NDLM and DLM locations (60% vs. 72%, p=0.1). There were similar rates of cardiac mortality (6.7% NDLM vs. 14.9% DLM, p=0.07), MI (4% vs. 0%, p=0.07), CABG (2% vs. 5%, p=0.3) and TVR (8.9% NDLM vs. 7.9% in DLM, p=0.8). DES deployment significantly and similarly reduced the TVR rates in both locations as compared with BMS use (4.9% NDLM vs. 5.2% DLM, p=0.9). There was no difference in the MACE rates (19.8% NDLM vs. 27.2% DLM, p=0.7)

**Conclusions:**

Patients with DLM and NDLM lesions have similar short term outcome despite more extensive CAD. DES use in ULMCA is effective in reducing short term TVR rate unrelated to lesions location.