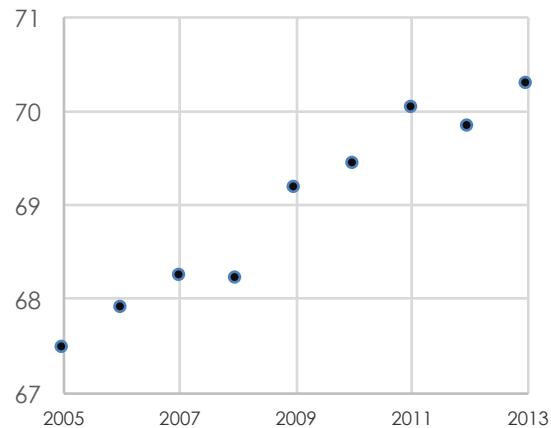
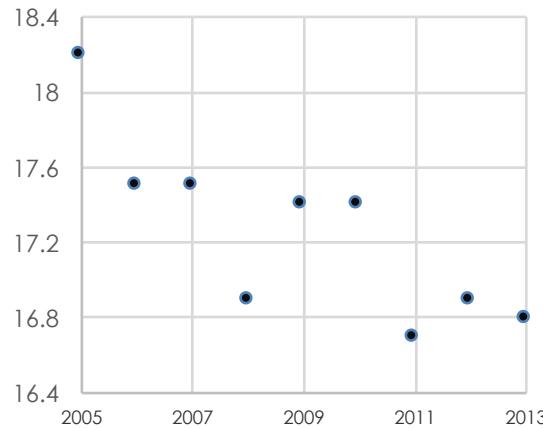


Figure 1: A) Annualised percentage of patients undergoing PCI in England and Wales with a history of coronary artery bypass surgery (CABG),  $p<0.001$  for trend; B) Annualised rates of coronary perforation rates in patients with a history of CABG,  $p=0.001$  for trend.

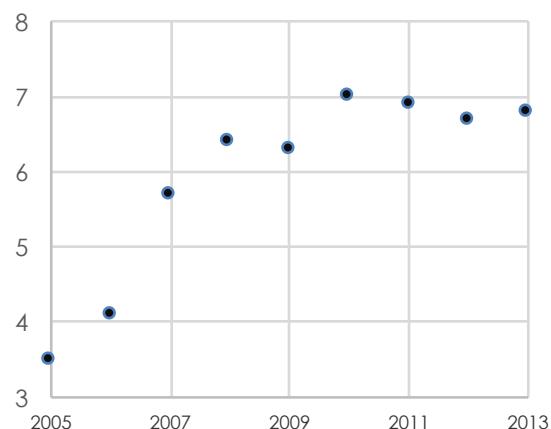
Age



Female



Previous stroke



CTO attempt

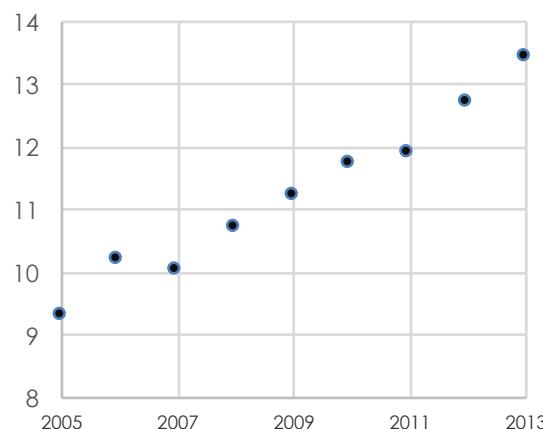
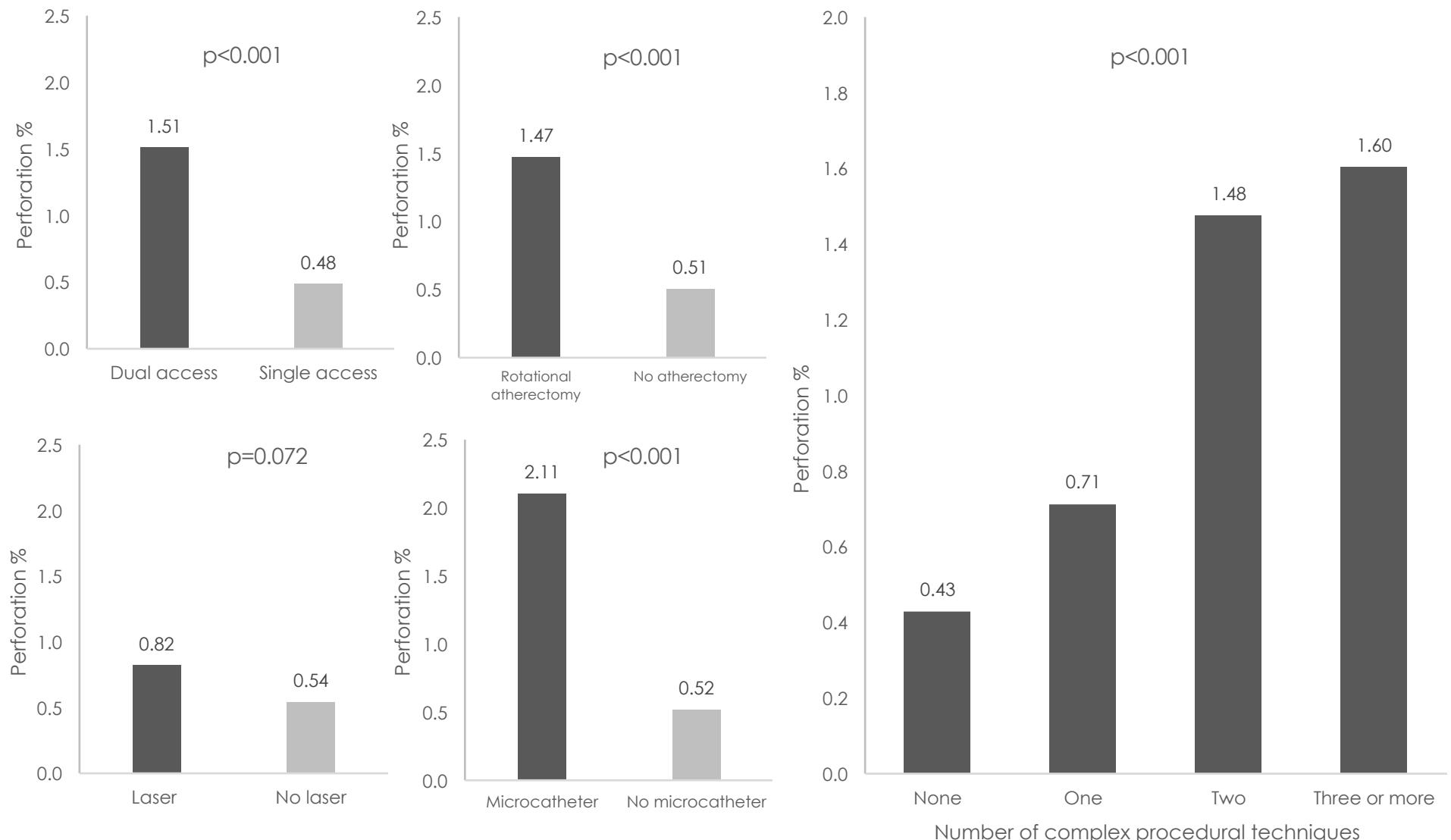


Figure 2: Characteristics associated with perforation in patients undergoing PCI with a prior CABG plotted over time (2005 to 2013); p<0.001 all trend



**Figure 3:** Left and centre panels - incidence of coronary perforation indexed for complex strategy (dual vs. single arterial access, use or not of rotational atherectomy, use or not of laser atherectomy and use or not of a micro-catheter), p value for comparison within each strategy; Right panel – incidence of coronary perforation with number of complex PCI strategies used (dual access, micro-catheter, laser or rotational atherectomy, penetration catheter, IVUS or CrossBoss), p value for trend.

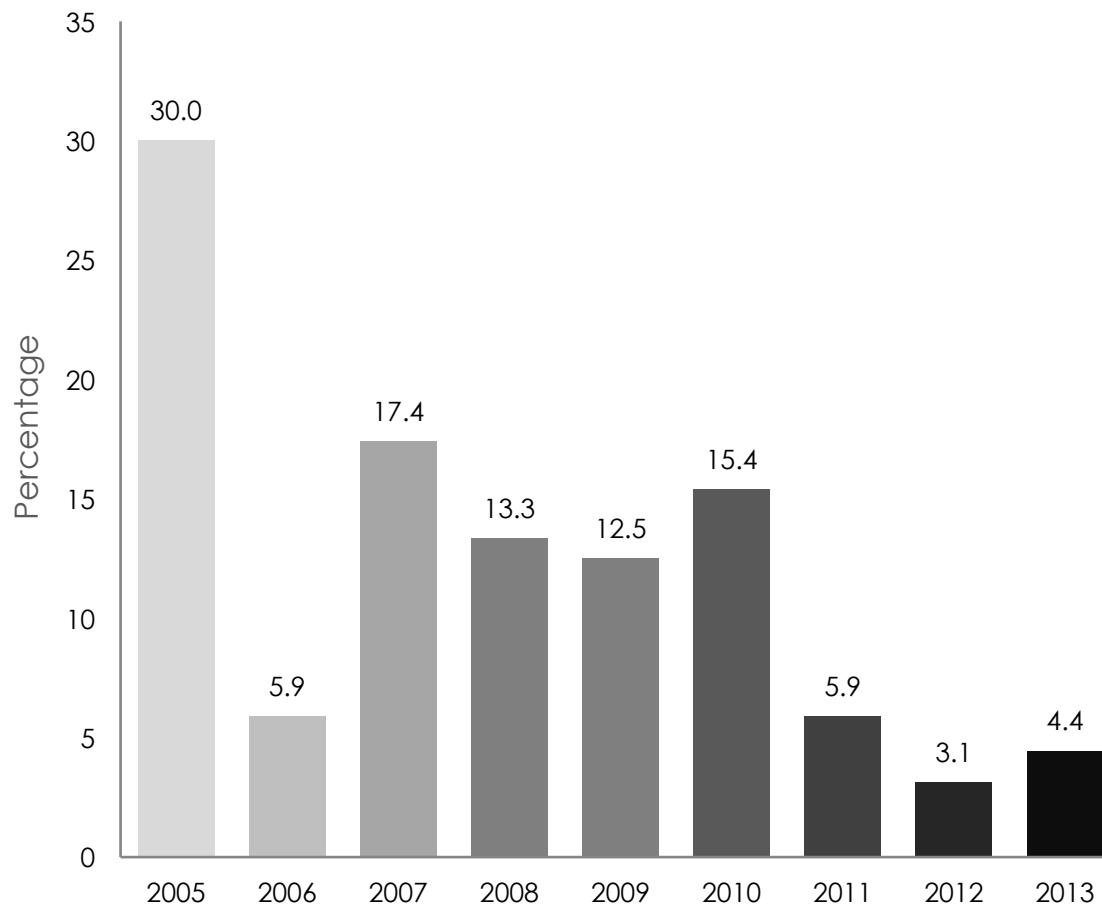
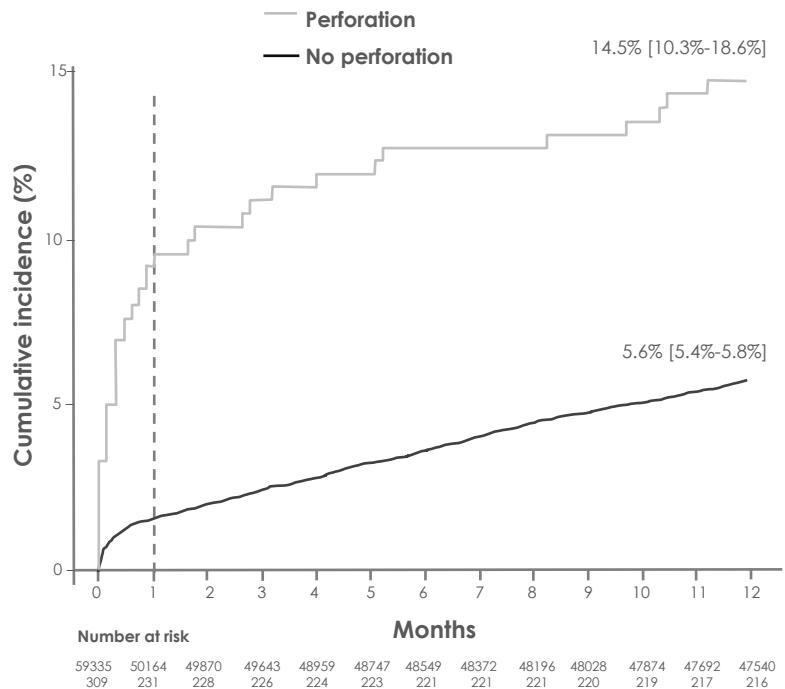
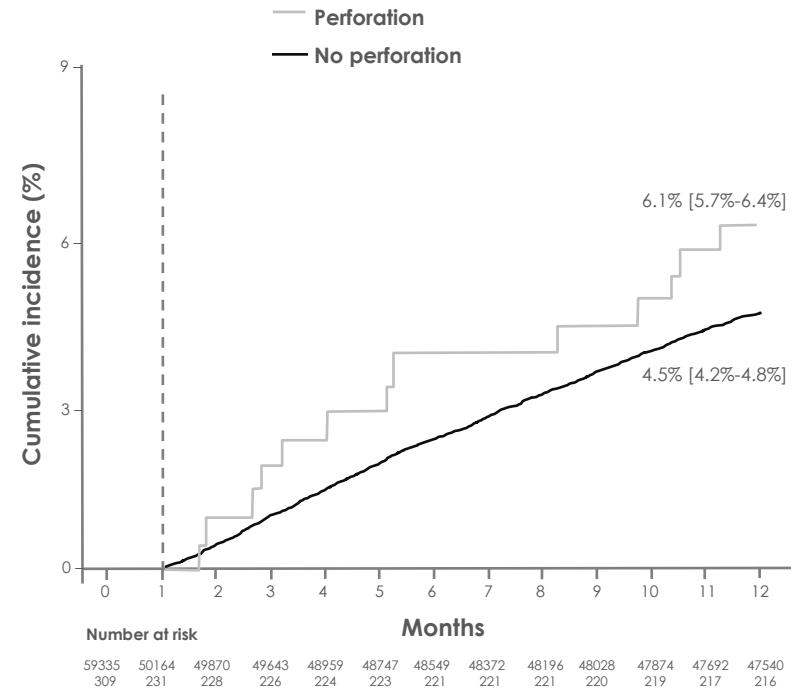


Figure 4: Annualised mortality for patients with coronary perforation during PCI in patients with a history of CABG 2005-2013 ( $p=0.005$  for trend).

A



A



**Figure 5:** A) Unadjusted Kaplan Meier plots for mortality by perforation status to 12-months; B) IPTW adjusted Kaplan Meier plots for mortality by perforation status for perforation survivors from 30 days to 12-months compared to non-perforation survivors from 30-days to 12-months.