

obstructive pulmonary disease (COPD), peripheral artery disease, lower ejection fraction (EF) and lower estimated glomerular filtration rate. In laboratory examination, patients with high fibrinogen level had higher Hs-CRP and NT-proBNP levels. Patients in high fibrinogen group were more ACS, had higher syntax score and more LM and/or three-vessel disease incidence (Table 1).

The 2-year all-cause mortality was 1.2%. Patients in high fibrinogen group had significantly higher mortality rate ( $p=0.020$ ). Kaplan-Meier analysis revealed all-cause mortality rate was higher in high fibrinogen group (Log-rank  $p=0.022$ ). Multivariable COX regression analysis showed fibrinogen was significantly associated with all-cause mortality (HR 1.339, 95% CI: 1.109–1.763,  $p=0.005$ ) (Fig. 1).

**Conclusion:** This study found that elevated baseline serum fibrinogen levels were associated with 2-year all-cause mortality after PCI.  $\langle fib \leq 3.58 \text{ mmol} \rangle$

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## P5579

### Predictors of No-reflow in Primary PCI patients with novel insight on thrombus aspiration

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**Background:** Primary PCI (P-PCI) with no-reflow (NR) has been previously associated with worse outcomes.

**Objectives:** We aimed to identify the prevalence of NR in patients with ST elevation myocardial infarction (STEMI) undergoing P-PCI in the current era and its predictors with short term outcome.

**Methods:** This prospective study enrolled 310 consecutive STEMI patients underwent P-PCI. Patients were divided into 2 groups: patients with normal flow and others with NR whose (final TIMI flow  $<3$  in the absence of coronary dissection or spasm) compared for demographic, procedural characteristics, ST resolution and short term outcomes.

**Results:** 293 patients were finally included. NR was observed in 91 (31.06%) patients. The occurrence of NR was associated with higher mortality (25.3% vs. 3%,  $P=0.003$ ) compared to patients with normal flow. Multivariate logistic regression analysis showed that high thrombus burden (thrombus grade  $\geq 4$ ), reference luminal diameter  $\geq 3$  mm, symptoms to first medical contact time  $\geq 4$ h, anterior infarctions and syntax score  $\geq 19$  were independent predictors of NR. Using thrombus aspiration was found to be protective against NR only in patients with high thrombus burden which was associated with mortality reduction.

#### predictors of no reflow

Predictors	Uni-variate logistic regression			Multi-variate logistic regressions		
	P value	Odds ratio	95% CI	P value	Odds ratio	95% CI
Age $\geq 60$	$<0.032^*$	1.73	(1.1–2.86)	0.99	0.99	(0.41–2.43)
Female gender	$<0.016^*$	1.94	(1.13–3.36)	0.11	2.27	(0.83–6.3)
Symptoms-FMC $\geq 4$ h	$<0.001^{**}$	6.91	(3.39–14.1)	0.001 <sup>**</sup>	7.79	(2.45–24.8)
Anterior infarctions	$<0.001^{**}$	2.84	(1.63–4.9)	0.002 <sup>**</sup>	5.95	(1.942–18.24)
Initial TIMI $\leq 1$	$<0.007^{**}$	4.40	(1.51–12.8)	0.13	0.23	(0.04–1.6)
Syntax score $\geq 19$	$<0.001^{**}$	6.89	(3.6–13.2)	0.001 <sup>**</sup>	6.51	(2.26–18.78)
Lesion length $\geq 21$	$<0.001^{**}$	2.82	(1.54–5.2)	0.93	1.04	(0.36–3.04)
RLD $\geq 3$ mm	$<0.001^{**}$	16.78	(5.93–47.5)	0.000 <sup>**</sup>	31.06	(7.94–121.5)
High thrombus burden modified TIMI $\geq 4$	$<0.001^{**}$	45.84	(16.1–130.3)	0.000 <sup>**</sup>	58.76	(15.23–226.7)
Direct stenting	$<0.001^{**}$	0.12	(0.03–0.4)	0.83	0.86	(0.23–3.26)

FMC = first medical contact; TIMI = thrombolysis in myocardial infarction; RLD = reference lumen diameter.

**Conclusion:** In the contemporary era of P-PCI, NR is more likely to occur in patients with high thrombus burden presenting late and is still associated with marked increases in adverse outcomes. Thrombus aspiration can prevent NR in patients with high thrombus burden.

## P5580

### Chronic obstructive pulmonary disease and smoking modify the periprocedural complications profile in patients undergoing percutaneous coronary interventions

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**Introduction:** The relationship between chronic obstructive pulmonary disease (COPD) and periprocedural complications of percutaneous coronary interventions (PCIs) is influenced by several factors. There are limited and conflicting data regarding periprocedural complications of PCI in patients with COPD.

**Purpose:** We aimed to investigate the association of COPD as well as complication type and rate in patients undergoing PCI.

**Methods:** Data were prospectively collected using the Polish Cardiovascular Intervention Society national registry (ORPKI) on all PCIs performed in Poland between January 2015 and December 2016. COPD was present in 5,594 of the 221,187 patients undergoing PCI. We assessed the frequency and predictors of periprocedural complications of PCI.

**Results:** Patients with COPD were older ( $70.3 \pm 9.9$  vs.  $67 \pm 10.8$  years;  $p < 0.05$ ). We noted 145 (2.6%) of periprocedural complications in the COPD group and 4,121 (1.9%) in the non-COPD group ( $p < 0.001$ ). The higher incidence of periprocedural complications in the COPD patients was mainly attributed to cardiac arrests ( $p=0.001$ ), myocardial infarctions ( $p=0.002$ ) and no-reflows ( $p < 0.001$ ). COPD was not an independent predictor of all periprocedural complications. On the other hand, COPD was found to be an independent predictor of increased risk of no-reflow (odds ratio [OR] 1.447, 95% CI 1.085–1.929;  $p=0.01$ ; Figure 1A), and at the same time of the decreased risk of periprocedural allergic reactions (OR 0.117, 95% CI 0.016–0.837;  $p=0.03$ ; Figure 1B).

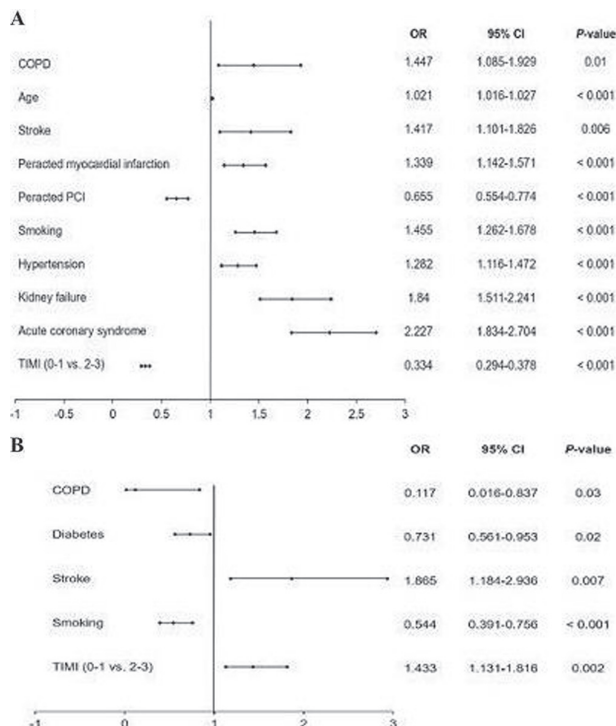


Figure 1

**Conclusions:** The periprocedural complication rate is higher in the COPD group as compared to the non-COPD group in the overall group of patients undergoing PCI. Among the periprocedural complications with the largest contribution of this proportion we may find cardiac arrests, myocardial infarctions and no-reflows. COPD was not an independent predictor of periprocedural complications in the overall group of patients undergoing PCI. Whereas COPD and smoking were found to be independent predictors of decreased periprocedural rate of allergic reactions and increased rate of periprocedural no-reflows.

## P5581

### Self-expandable sirolimus-eluting stents for the treatment of the unprotected left main: propensity score-matched comparison with second generation drug-eluting stents

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**Background:** Sirolimus-eluting, self-expandable Stentys stents (SES) may represent a valuable option for the treatment of the unprotected left main (ULM). In conditions where the choice of the appropriate stent-size may prove challenging, particularly in the presence of relevant caliber variations from the ULM to the side branches, SES may offer some advantages over conventional second-generation