**Invasive Treatment of ST-Elevation Acute Coronary Syndrome in Russian Hospitals is Predominantly Used in Lower Risk Patients**

**Session** PCI: Procedural Considerations, Risk Factors and Complications

**Abstract Poster Session**

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**Introduction.** Inhospital mortality of patients with ST-elevation (STE) acute coronary syndrome (ACS) in Russia is generally very high while it is reported to be low in patients subjected to primary percutaneous coronary interventions (pPCI) in invasive institutions. **Hypothesis.** Low mortality in STEMI patients treated with pPCI is at least partially explained by selection of patients with lower risk. **Methods.** To test this hypothesis we studied data from two independent Russian prospective ACS registries which were organized upon initiative of their participants - RECORD (2007-2008 years, 18 hospitals from 13 cities) and RECORD-2 (2009-2011 years, 7 hospitals from 7 cities). **Results.** There were 967 STEACS patients included in both registries (≥ 65 years - 41%, Killip class ≥ II - 21%). Hospitals with ability to apply invasive treatment (invasive hospitals) recruited 79% of patients. The rate of pPCI was 36% (in invasive hospitals - 46%). Rates of pPCI in invasive hospitals in patients aged ≥ 65 and < 65 years were 33% and 54%, respectively (p<0.0001); in patients with Killip class ≥ II and I - 34% and 49%, respectively (p=0.002); in patients with high and non-high risk of inhospital death according to GRACE score - 35% and 51%, respectively (p<0.0001). Overall inhospital mortality was 11%. Rates of death in patients aged ≥ 65 and < 65 years were 21% and 5%, respectively (p<0.0001), in patients with Killip class ≥ II and I - 32% and 6%, respectively (p<0.0001). Among patients aged 65 years and older inhospital mortality was significantly lower in those treated with pPCI than in patients treated without pPCI (11% and 23%, respectively, p=0.01). Among patients aged < 65 years there was no significant difference in hospital mortality between patients subjected and not subjected to pPCI (5% in both groups, p=0.8). **Conclusions.** Data from limited size independent Russian ACS registries RECORD and RECORD-2 show that in high risk patients with STEACS (≥ 65 years old, Killip ≥ II, high risk by GRACE score) rate of pPCI was significantly lower than in non-high risk patients. However association of pPCI with lower hospital mortality was found only in patients aged ≥ 65 years.

**Disclosure(s)** A.D. Erlikh, None; N.A. Gratsiansky, None.

**Keywords** Acute coronary syndromes, Percutaneous coronary intervention, Myocardial infarction, STEMI, Quality of medical care