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Title: COPD: Acute exacerbation (AE) and hospitalization rate (HR) in patients with different serum surfactant protein D (SPD) level

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Body: Aim To evaluate whether and in which extent SPD have influence on the AE and hospitalization rate in patients with COPD. Study population 26 patients with stable COPD, GOLD stage II-IV, made the study sample. Methods SPD was evaluated in serum by ELISA (Hycult Biotech, Netherlands) for all patients. AE (including AE, required systemic corticosteroids (SCS) and antibiotic (AB) prescription) and HR during 12 months were evaluated retrospectively by analysis of patient's medical documentation. Results In accordance with SPD level all patients were divided on two groups: 12 patients with SPD < 600 ng/ml (Group I) and 14 – with SPD ³ 600 ng/ml (Group II). Both groups were similar regarding to sex, age, FEV1, smoking status and basic therapy. One or more AE during the year were found in 7 (58.33%) patients of Group I and 12 (85.71%) – of Group II. The data from patient's medical documentation analysis are performed in the table 1.

Group	AE (M±m, cases per	AE with SCS (M±m, cases	AE with AB (M±m, cases	HR (M±m, cases per
	year)	per year)	per year)	year)
I	1.04±0.27	1.01±0.18	0.75±0.22	1.02±0.47
II	2.35±0.34*	2.17±0.35*	1.98±0.54\$	1.68±0.34#

*p <0.01; \$p<0.05; #p 0.05

Conclusions 1. COPD patients with high SPD had higher AE rate and required more frequent both SCS and AB prescription. 2. SPD did not influence on HR in patients with COPD, GOLD stage II-IV.