Introduction: Psoriasis is a common inflammatory disease with unknown pathogenesis. Serum markers are commonly used to find out pathogenesis, and treatment response in psoriasis. We aim to specify serum levels of IL-1, IL-4, IL-8, IL-17, IL-37, IFN-γ, CXCL-1 in psoriasis patients and determine effect of phototherapy on this markers.

Material and Methods: We included 30 patients with psoriasis (16 female, 14 male, age: 18-76) and 30 healthy controls (16 female, 14 male, age: 18-75). We selected control group with similar age, gender and body mass index. Psoriasis patients were treated with narrowband UVB phototherapy. Venous blood samples were taken after 10-12 hours and, parameters were measured in all patients.

Results: There was no statistically significant difference between control and psoriasis groups in terms of insulin resistance, presence of hypertension, body mass index, and serum parameters (p>0.05).

There were no statistically significant difference between pre and post treatment values of psoriasis group of IL-1 (pre-treatment: 0.38 ± 0.35 pg/ml, post-treatment: 0.35 ± 0.31 pg/ml), IL-4 (pre-treatment: 16.05 ± 17.79 pg/ml, post-treatment 18.31 ± 30.09 pg/ml), IL-8 (pre-treatment: 2.79 ± 2.04 pg/ml, post-treatment: 2.93 ± 1.84 pg/ml), IL-17 (pre-treatment: 2.93 ± 3.1 pg/ml, post-treatment: 3.11 ± 2.88 pg/ml), IL-37 (pre-treatment: 97.29 ± 243.24 pg/ml, post-treatment: 103.9 ± 264.59 pg/ml), IFN-γ (pre-treatment: 16.92 ± 68.13 pg/ml, post-treatment: 18.26 ± 76.36 pg/ml), CXCL1 (pre-treatment: 177.39 ± 72.7 pg/ml, post-treatment: 182.37 ± 84.48 pg/ml) values.

Discussion: In our study effect of phototherapy found to be limited on systemic inflammatory parameters and phototherapy is considered to be a suitable treatment in mild to moderate
psoriasis patients because of the low inflammation severity in these patients.