Introduction. One of the most frequent complications of diabetes mellitus in men is erectile dysfunction (ED). The incidence of ED in men with diabetes is 35-90% according to different authors. The severity of ED in these patients is associated with duration of diabetes, presence of chronic diabetes complications (angiopathy, neuropathy), comorbid conditions (obesity, arterial hypertension, androgen deficiency, dyslipidemia) and age. ED leads to a deterioration in the quality of life of men. Inhibitors of PDE-5 (IPDE-5): sildenafil, vardenafil and tadalafil are the drugs of choice for the treatment of ED. Purpose – to study the effectiveness and safety of treatment of erectile dysfunction inhibitor of phosphodiesterase type 5 in men with type 2 diabetes mellitus.

Material and methods. The study involved 89 men aged 39-69 years, patients with type 2 diabetes mellitus and ED with diabetes duration of 1-12 years were examined in a state of compensate diabetes, glycated hemoglobin average they constituted 7.3 ± 1.1. IPDE-5 administered on a background of diabetes compensation and testosterone therapy for patients with symptoms of testosterone deficiency. The study efficacy IPDE-5 in men with type 2 diabetes mellitus, carried the scheme receiving the drug on demand: 100 mg sildenafil, 20 mg vardenafil and 20 mg tadalafil 40-60 minutes before sexual intercourse, not more than 2 times a week for 3 months: 26 patients treated with tadalafil 21 patient – vardenafil and 42 patients – with sildenafil. The effectiveness of the therapy was evaluated by the results of the questionnaire International index of erectile function (IIEF).

Results. Sildenafil 100 mg once on a "on demand» was 42 for men aged 46-65 years (mean age 57 ± 8.4 years), patients with type 2 diabetes mellitus. Diabetes duration of 5 years occurred in 12 patients 5-10 years – 8, more than 10 years – 12 patients. Application sildenafil 100 mg "on demand" to the sexual act for 12 weeks led to the likely growth rate domain "Erectile function" at 10.54 points. Sildenafil was effective in 76.2% of patients. Tadalafil 20 mg administered to 26 men aged 39-64 years (mean age 54.6 ± 6.1 years), patients with type 2 diabetes mellitus and under subcompensation ED. Diabetes duration of 5 years were 9 patients 5-10 years – 7 more than 10 years – 10 patients. Growth indicator "erectile function" in the dynamics tadalafil treatment was 9.81 points. Efficacy of tadalafil was 73.1%. Vardenafil 20 mg used for traditional on-demand scheme in 21 men aged 41-69 years (mean age 56.7 ± 9.1 years) with type 2 diabetes mellitus in the stage subcompensation and complaining of ED. Diabetes duration of 5 years were 3 patients 5-10 years – 10 over 10 years – 8 patients. Administration of vardenafil led to the likely improvement in "Erectile function" to an average of 25.22 ± 1.80 points. Efficacy of vardenafil in our patients was 76.2%. Adverse reactions such as facial flushing, nasal congestion, headache, and scratchy throat occurred in 14.3% of patients who used sildenafil, 11.5% - 14.3% and tadalafil -
vardenafil. Side effects were mild and did not require discontinuation of acceptance of the drug.

**Conclusions.** The study confirmed the high efficiency three IPDE-5 as the first-line drugs in the treatment of ED in men with diabetes mellitus. All three drugs used in maximum doses, since lower doses are not always sufficiently effective. All patients with reduced levels of total testosterone in the blood replacement therapy should be prescribed drugs to achieve levels of testosterone within the normal hormone fluctuations. Further study of the effects IPDE 5 of diabetes in men with type 2 diabetes mellitus to improve their effectiveness.