**Introduction.** Among the modern methods of treatment of patients with drug-resistant tuberculosis a major and most effective is a comprehensive antimycobacterial chemotherapy using anti-TB drugs of first, second-line and a spare group of drugs, which retained the sensitivity of Mycobacterium tuberculosis. The therapeutic effect of treatment is aimed at suppressing the propagation of tuberculosis mycobacteria and their destruction in the body of the patient. Then we can start the adaptation mechanisms for activation of reparative processes and the creation of conditions in the patient's clinical recovery. According to unified clinical protocols of medical care "Tuberculosis" (Ministry of Health of Ukraine № 620 from 04.09.2014 years) the inclusion of patients with drug-resistant pulmonary tuberculosis chemotherapy regimen to one of the second-line anti-TB drugs cycloserine or terizidone compulsory.

**Objective** – to compare the efficacy and tolerability of chemotherapy in patients with drug-resistant pulmonary tuberculosis using in complex treatment terizidone and cycloserine in the intensive phase of treatment.

**Materials and Methods.** To compare the efficacy and tolerability of chemotherapy using in complex treatment of cycloserine and terizidone in the intensive phase of treatment, patients with drug-resistant pulmonary tuberculosis were divided into 3 groups: 2 main groups (the first group consisted of 50 patients who applied to the treatment regimen cycloserine and the second group consisted of 79 patients who applied to the treatment regimen terizidone) and control group (87 patients who used the same chemotherapy regimens without the use in treatment of cycloserine and terizidone). Since the resistance profiles of all the groups of patients with drug-resistant pulmonary tuberculosis were similar, and the modes of treatment for TB is almost no different, except cycloserine and terizidone that were used in the study group. Group comparisons were identical to each other in age and sex, the severity of a specific process. The research results are processed with modern methods of analysis on a personal computer using the Statistical Package licensed program «STATISTICA for Windows 6.0» (Stat Soft Inc., № AXXR712 D833214FAN5).

**Results.** Patients with drug-resistant pulmonary tuberculosis receiving cycloserine frequency of bacteriological was highest (94%), thus improving the efficiency of treatment by 21.2%, and when used in the complex treatment of bacteriological terizidone the frequency was 88.6%, which increased the effectiveness of treatment 16.2%. Patients that are used in modes of treatment for TB and cycloserine terizidone compared with the control group were determined following changes. In patients receiving cycloserine healing in the lung destruction achieved in 60% of cases that were significantly more 2-fold (p <0.001); average healing time of destruction has been reduced by 0.4 months; resolution and focal infiltrative changes in lung was achieved by 13% higher (84%). When used in complex treatment terizidone healing rate of degradation in
the lung was 56.9%, which is significantly higher than 2-fold (p <0.001); average healing time of destruction did not differ from the control group and accounted for (5,9 ± 0,2) months; resorption of focal and infiltrative changes in the lungs achieved 14.9% higher (86.1%). No significant difference in efficacy between the treatment of chemotherapy regimens to include comprehensive treatment of TB drugs and cycloserine terizidone not established. The frequency of bacteriological when using cycloserine was 5% higher than with terizidone. Such cure rates as average terms of bacteriological, healing rate of degradation and disappearance of clinical and laboratory signs were identical.

**Conclusions.** Application in complex treatment of patients drug-resistant tuberculosis and TB drugs cycloserine and terizidone in the intensive phase of treatment has allowed to increase the effectiveness of treatment by 21.6% and 16.2%, respectively. Terizidone found 100% satisfactory tolerability and cycloserine - 98%. TB drugs, such as cycloserine and terizidone in the complex treatment of patients with drug-resistant pulmonary tuberculosis clinically effective and favorable tolerability, indicating the validity of their inclusion in chemotherapy regimens, which are sensitive Mycobacterium tuberculosis.