DATA ON THE ANTIFUNGAL EFFECT OF THIENOPYRIMIDINES Idoumghar W., Vlasov S. *National University of Pharmacy, Kharkiv, Ukraine* pharmchem.vlasov@gmail.com

Introduction. Pathogenic fungi use the macroorganism for their growth and development, and it is fungal infections that are difficult to treat due to their sufficient resistance to antifungal drugs. Also, therapy in some cases involves removal of the affected parts and a combination of local and internal methods of applying antifungal agents or their combinations. Fungal infections are especially problematic for patients with reduced immunity (for example, HIV patients) and young children. Considering such facts, the problem of creating new antifungal agents is undoubtedly important. Moreover, in this case, the focus on small heterocyclic systems, such as thienopyrimidine, is appropriate. An important problem in this case is determining the novelty of the idea of scientific research, which can be found out by analyzing published data.

Aim. Based on the analysis of new relevant literature data on the antifungal activity of thienopyrimidine derivatives, form a strategy for further microbiological research.

Materials and methods. Methods of literature search data analysis and methods of induction and deduction, forming conclusions.

Results and discussion. Based on the analysis of literature sources, compounds with high antifungal activity were found in the experiment in a number of thienopyrimidine derivatives. compound **1** showed antifungal activity against *Candida albicans* close to fluconazole. Tetrazole **2** with a free NH group showed high antifungal activity against *Candida albicans*. The antifungal activity of compound **3** against *C. albicans* was 50% of that of fluconazole.



Conclusions. The analysis of literature data showed that thienopyrimidine derivatives are important compounds in the development of promising antifungal agents, and the research of new derivatives of this class of heterocycles for this type of activity is expedient.