



**OCENA ŚRÓDOKRESOWA DOKTORANTA SZKOŁY DOKTORSKIEJ  
W UNIwersYTECIE PRZYRODNICZYM WE WROCŁAWIU**

Przeprowadzona dnia 5 września 2024 r.

przez Komisję ds. oceny śródkresowej w dyscyplinie weterynaria w składzie:

Przewodniczący: prof. dr hab. Łukasz Adaszek, Uniwersytet Przyrodniczy w Lublinie

Członkowie:

1. dr hab. Michał Załęcki, prof. uczelni, Uniwersytet Warmińsko-Mazurski w Olsztynie
2. dr hab. Magdalena Żmigrodzka, Szkoła Główna Gospodarstwa Wiejskiego w Warszawie

<b>Imię i nazwisko doktoranta:</b>	<b>Desiye Tesfaye Tegegne</b>
Promotorzy:	dr hab. Błażej Poźniak, prof. Uczelni
Temat rozprawy doktorskiej:	The development of an <i>in vitro</i> pharmacokinetic-pharmacodynamic model of catheter-associated urinary tract infections related to bacterial biofilm

<b>I. Ocena postępów w realizacji indywidualnego planu badawczego:</b>
Ocena Komisji: Pozytywna/negatywna
Uzasadnienie oceny: The research of PhD student concern the catheter –associated urinary tract infection. This is an important problem in veterinary medicine, that should be studied in details. Mr Tegegne did a bibliographic search for the project, and started to prepare scientific papers. He also improved his laboratory skills in the field of microbiology, developed a dynamic flow catheter model for biofilm studies, and performed the full characterization of a bacterial strains responsible for urinary tract infection, as well as selected <i>E. faecalis</i> for further studies. Currently Mr Tegegne performs the assessment of the effects of stimulated pharmacokinetic profiles of model drugs on biofilm in dynamic flow model Work on doctoral dissertation proceeds smoothly and at the moment there is no risk of failure to complete the doctoral dissertation in the scheduled time The doctoral student is the co-author of one published paper (from the JCR list – not directly related to the PhD study), as well as he had an oral presentation during the International Conference in Athens in 2024. He conducts her PhD research in cooperation with Department

of Food Hygiene and Consumer Health Protection, Department of Polymer Engineering and Technology, and Hirszfeld Institute of Immunology and Experimental Therapy.

## **II. Ocena realizacji programu kształcenia, stanu zaawansowania badań naukowych i postępu prac w przygotowaniu rozprawy doktorskiej:**

Ocena Komisji:  
Pozytywna/negatywna

### **Uzasadnienie oceny:**

The research carried out by the PhD student will help to better understand the nature of catheter- associated urinary tract infections, as well as may be helpful in developing the schemes to prevent these infections .

Progress in the completion of the doctoral dissertation is about 60%

So far PHD student did a bibliographic search for the project, and is preparing the review paper on biofilm related infections.

Mr. Tegegne completed most of the task from PBD, the others are in progress

The doctoral student is the author of one review paper submitted for publication. He has actively participated in one conference, and took part in many workshops for vets.

He conducts his PhD research in cooperation with the Department of Food Hygiene and Consumer Health Protection, Department of Polymer Engineering and Technology, and Hirszfeld Institute of Immunology and Experimental Therapy. The Commission has assessed positively the implementation of the tasks assumed in the IPB schedule so far.

## **III. Rozmowa z doktorantem**

Ocena Komisji:  
Pozytywna/negatywna

### **Uzasadnienie oceny:**

The PhD student presents the results of his research in a clear manner. He properly justifies the purpose of conducting it and logically draws conclusions from the obtained results. He planned the research system properly, thanks to which the obtained results can be used not only in veterinary medicine, but can also be transferred to the field of human medicine in the future.

## **OCENA KOŃCOWA**

Pozytywna/negatywna

### **Uzasadnienie oceny: (min. 500 znaków)**

The aim of the study is to better understand the nature of catheter- associated urinary tract infections. Mr Tegegne prepared the scanning electron images of the biofilm and identified the best model medium for flow conditions. As we can see, the research is carried out with the use on new techniques. Its results can be transferred in the future to the field of human medicine, and may have an impact on the improvement of therapy of both, human, as well as animal patients.

Work on doctoral dissertation proceeds smoothly and at the moment there is no risk of failure to complete the doctoral dissertation in the scheduled time. The Commission has assessed positively the implementation of the tasks assumed in the IPB schedule so far.

Podpisy członków komisji:

1.  .....

2.  .....

3.  .....