HELIOS Klinikum Berlin-Buch

HELIOS Klinikum Berlin-Buch Schwanebecker Chaussee 50 · D-13125 Berlin

To Whom It May Concern

Klinik für Interdisziplinärer Onkologie Sarkomzentrum Berlin-Brandenburg

Chefarzt: PD Dr. med. P. Reichardt

peter.reichardt@helios-kliniken.de; Sarkomzentrum.berlin-buch@helios-kliniken.de

Tel. 030/9401-54800 Fax 030/9401-54809

Commerzbank Kto Nr. 405 075 19 00 BLZ 120 800 00

Berlin, 09th of January 2017

Dear Madam or Sir,

as the foreign supervisor of Yerzhan Seipolovich Zhunussov, I want to state the following: For me it has been a pleasure to supervise Mr. Zhunussov on his PhD thesis. He has proven to be a reliable and devoted PhD-student who is able to think scientifically and is able to express his ideas on medical topics. He is highly motivated and looks for perfection in his medical studies.

As his foreign supervisor I was more than happy to be able to offer him the opportunity to do a part of his work in Germany. He visited the Department of Cardiology of the HELIOS Klinikum in Bad Saarow: During his stay he could include 42 German patients into his study and was able to present his preliminary results to the staff and discuss potential implications for the daily practice with them. Besides that he was also able to integrate into the team very well and took part in cardiological examinations and therapeutic methods like echocardiography, coronarangiography and electrophysiological examinations.

As his foreign supervisor, I want to mention that Mr. Zhunussov is very professional to work with. He can either work independently or as member of a team. Together we have already published joint publications.

In general I would like to say that Mr. Zhunussov is very motivated, curious about new developments in pharmacology and medicine in general and a quick learner. I strongly believe that he will defend his PhD-thesis successfully and I want to recommend him for further research projects and clinical work.

Yours sincerely,

Bitz, MD PhD

HELIOS Klinikum Berlin-Buch Klinik für Interdisziplinäre Onkologie Sarkomzentrum Berlin-Brandenburg Dr. med Ulrich Bitz Oberarzt

Schwanebecker Chaussee 50 - 13125 Berlin



HELIOS Klinikum Berlin-Buch

HELIOS Klinikum Berlin-Buch Schwanebecker Chaussee 50 · D-13125 Berlin

To Whom It May Concern

Klinik für Interdisziplinärer Onkologie Sarkomzentrum Berlin-Brandenburg

Chefarzt:

PD Dr. med. P. Reichardt

peter.reichardt@helios-kliniken.de; Sarkomzentrum.berlin-buch@helios-kliniken.de

Tel. 030/9401-54800 Fax 030/9401-54809

Commerzbank

Kto Nr. 405 075 19 00 BLZ 120 800 00

Berlin, 09th of January 2017

REVIEW

of the foreign scientific consultant, Doctor of Medicine, Professor Ulrich Christoph Bitz for the thesis of the PhD-candidate Zhunusov Yerzhan Seipolovich on the topic "Drug monitoring of antiaggregants in patients with high risk of restenozation of coronary arteries" submitted for the degree of Doctor of Philosophy (PhD) in the speciality 6D110400 - Pharmacy

The thesis of PhD-candidate Zhunusov Yerzhan Seipolovich covers the efficient pharmacological support of patients with acute coronary syndrome with the existing risks of restenozation of coronary arteries. This is a highly relevant problem for healthcare in Kazakhstan and worldwide.

In the thesis the author conducted a marketing analysis of the pharmaceutical market of antiaggregants on a regional level, studied the structure and intensity of medicine prescriptions, conducted a pharmacoeconomic analysis of the stated regimens pharmacotherapy in acute coronary syndrome. The material in the thesis is presented in compliance with the internal logic, careful

work is observed in each section, the accuracy of the obtained results is confirmed by statistical indicators using modern methods of statistical data processing.

The results of the scientific paper have been presented at national and international conferences and have also been published in scientific literature, including journals indexed in Scopus (Georgian Medical News) and Thomson Reuters (Thrombosis Research, Impact Factor 2.320) databases.

During the foreign internship in the Department of Cardiology of "HELIOS Klinikum Bad Saarow" (Germany), the PhD-candidate Ye.S. Zhunusov was able to familiarize with the clinical and scientific work of the department. Moreover, he studied the features of pharmacological support of clinical departments in general and pharmacotherapy of 42 patients with acute coronary syndrome in special. During the internship, several consultations were conducted, the main sections and the preliminary results of the thesis were discussed, which resulted in the scientific publication in "Georgian Medical News" that was prepared together with the PhD-candidate and included in SCOPUS database.

While working on the thesis, Ye.S. Zhunusov has proved himself as a proactive, creative researcher and qualified specialist.

The thesis of Ye.S. Zhunusov "Drug monitoring of antiaggregants in patients with high risk of restenozation of coronary arteries" covers the important and relevant topic, and is the complete scientific research, and can be recommended for the public defense.

This review is given to be submitted to the Dissertation Council.

Ulrich Christoph Bitz, MD PhD

l. Atz

HELIOS Klinikum Berlin-Buch Klinik für Interdisziplinäre Onkologie Sarkomzentrum Berlin-Brandenburg Dr. med Ulrich Bitz Oberarzt Schwanebecker Chaussee 50 - 13125 Berlin