Bushra Ateeq, Ph.D.
Associate Professor
Senior Fellow, Wellcome Trust/ DBT India Alliance
Department of Biological Sciences & Bioengineering
Indian Institute of Technology Kanpur
Kanpur-208016, U.P., INDIA

To,

Date: 18th September 2021

The Peer Review Committee,
Office of Sun Pharma Science Foundation,
Hansalaya Building, 15-Barakhamba Road,
Connaught Place, New Delhi

Ref: Declaration of the contribution on the reference papers for the "Sun Pharma Research Award – 2021 for Medical Sciences-Basic Research".

Dear Committee members,

This is to confirm that both the reference papers, "Androgen deprivation upregulates SPINK1 expression and potentiates cellular plasticity in prostate cancer" published in ***Nature Communications*** (2020), and "Transcriptional network involving ERG and AR orchestrates Distal-less homeobox-1 mediated prostate cancer progression" published this year in ***Nature Communications*** (2021) were conceptualized, designed and directed by me, and I am the sole corresponding author on both of these studies. I also declare that the research work under reference for the Sun Pharma Research Awards – 2021 has not been chosen or given any award in the past.

The research work included in these articles was hypothesized and proposed by me for my Intermediate Fellowship, Wellcome Trust/DBT India Alliance (2013-19) and SERB core research grant (2015-18). In 2013, when I started by own independent research group at IIT Kanpur, my PhD students at that time, namely, Ritika Tiwari and Nishat Manzar (co-first authors on *Nature Communications, 2020*) and Sakshi Goel (first author on *Nature Communications, 2021)* started working on these projects as per outline proposed in the grant applications. They were involved in performing *in vitro* experiments, acquisition, analysis and interpretation of the data with my assistance. Since, all of these three PhD students were new at that time, therefore, some of the critical experiments such as generating stable knockdown cell lines and their validation, cell-based assays, and mice xenograft experiments and castration surgeries were performed by me.

Dr. Palanisamy and his team (Ms. Shannon Carskadon and Dr. Nilesh Gupta) at the Henry Ford Health System, Detroit, are co-authors on both papers, they have been instrumental in providing the prostate cancer specimens tissue microarray (TMA), and for doing immunostaining on the Ventana-Roche Diagnostics platform. Since, this study suggests the role of SPINK1 in neuroendocrine prostate cancer, which is highly aggressive form, although less prevalent and challenging to treat. Therefore, we collaborated with Dr. Himisha Beltran and her group at the Weill Cornell Medical College, New York, currently relocated to Dana Farber, Boston. She is a medical oncologist, and an expert in neuroendocrine prostate cancer, and was instrumental in

Email: bushra@iitk.ac.in Tel: +91 512 2594083 (Office) Fax: +91 512 2594010

providing access to her RNA-Seq data as well as three neuroendocrine prostate cancer patients' specimens (*Nature Communications, 2020*). This collaboration was highly desirable for advancing this study, because getting well-characterized neuroendocrine prostate cancer specimens from the King George's Medical University, Lucknow or AIIMS, New Delhi was extremely challenging.

We also collaborated with Dr. Amina Zoubeidi, from Vancouver Prostate Centre, University of British Columbia, to get access to her enzalutamide-resistant prostate cancer cell lines that she generated in castrated mouse model. Prof. Matti Poutanen from University of Turku, Finland, who is an expert in androgen biosynthesis and metabolism in prostate cancer, kindly provided castration resistant tumor specimens generated orthotopically in immunodeficient mice treated long-term with enzalutamide or apalutamide (ARN-509). Unfortunately, at time of revision of this paper, our mice facility at IIT Kanpur was shut down due an infection in the colony. Therefore, Dr. Dipak Datta from CSIR-Central Drug Research Institute, Lucknow was kind to allow us to use their facility and resources for the additional mouse xenograft experiment. This experiment was planned and executed by me, especially tumor implantation and castration surgeries, while tumor measurement and daily drug treatment was done by Dr. Datta and his students. Despite all these collaborative efforts which were instrumental for the success of this work, the entire study was conceived, developed and directed by me, and I am the sole corresponding author on it.

*For **Nature Communications (2021)*** study, Dr. Palanisamy and his team was again instrumental in providing the prostate cancer specimens tissue microarray (TMA), and performing immunostaining on the Ventana-Roche Diagnostics platform. Dr. Colm Morrisey provided the TMA for the metastatic castration resistant prostate cancer patients. While Mohammad Asim shared reagents for androgen signaling experiments. All the mice xenograft experiments and Bone metastases experiments were performed by me. Overall, the entire study was conceived, developed and directed by me, and I am the sole corresponding author on this study.

Sincerely,

Bushra Ateeq