

Joint Press Release of the DKTK/DKFZ and the University of Duisburg-Essen

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DKTK Essen /Düsseldorf: Essen Physicians Receive Prize for Best Studies on Carcinogenesis and Cancer Treatment

Two scientists of the German Cancer Consortium (DKTK) have received the highest award by the Oncology in Internal Medicine Working Group (AIO) of the German Cancer Society. The physicians Wilfried Eberhardt and Jens Siveke of the medical faculty of the University of Duisburg-Essen (UDE) at the West German Tumor Center (WTZ) of the University Hospital of Essen (UK Essen) are receiving the award for “best scientific publication” and “best clinical study” for their research on lung and pancreatic cancer.

Pancreatic cancer is considered one of the most aggressive forms of cancer. Particularly the so-called Pancreatic Ductal Adenocarcinoma (PDAC) is barely treatable, since the tumor cells quickly become resistant to available medication. A research team led by Professor Jens Siveke, in cooperation with Stanford University, has now succeeded in describing a new epigenetic treatment strategy for the PDAC. Epigenetic mechanisms are involved in the regulation of genes and cellular processes in tumors, without altering the DNA sequence (e.g. via mutations). For the study, published in the journal *Nature Medicine*, Jens Siveke received the AIO Science Award for the best publication on “preclinical/experimental cancer research.” With the help of the genome editing tool CRISPR/CAS9 and certain inhibitors, the scientists were able to reprogram the tumor cells so that they would become susceptible to therapeutics again. “Due to the strong anti-tumor effect of a combination therapy with two epigenetically effective medications we are confident that we have found a promising new approach for the treatment of pancreatic cancer,” said Jens Siveke happily. Professor Siveke has this year assumed a DKTK professorship for Translational Oncology of Solid Tumors at the University Clinic of Essen. As for the next step, the scientists wish to test this new operating principle in clinical studies, in order to identify the tumors for which it is best suited.

For the second time now, the AIO award for the “best publication in clinical cancer research” has gone to Dr. Wilfried Eberhardt. The specialist for internal medicine, hematology, and oncology at the West German Tumor Center of the University Hospital of Essen and his colleagues were recognized for the study ESPATÜ, one of the largest Phase III studies of patients with locally advanced non-small cell lung cancer. The study was financed by the German Cancer Aid. Every year, 52,000 people in Germany develop lung and bronchial cancer. Through a combination of intensified chemotherapy with a simultaneous chemoradiation therapy, as well as surgery, the scientists were able to successfully treat over 40% of their patients in the long term. “The publication is based on more than 25 years of close interdisciplinary work with the Clinic of Internal Medicine (Tumor Research), the Clinic for Radiation Therapy of the University Clinic of Essen and the Department of Thorax Surgery of the Ruhrland Clinic,” emphasized Eberhardt, leader and principal author of the study. “The comprehensive data will also help us adjust future therapy plans more individually to patients.”

Together with three other colleagues from Heidelberg, Oldenburg, and Frankfurt, Wilfried Eberhardt will also be receiving the award for “most innovative study in solid oncology.” With that, the AIO jury is recognizing the whole conception and management of the CRISP Register study of Advanced Non-small Cell Lung Carcinomas. In the next six years, more

than 8000 patients are to be analyzed with regards to the therapy process, diagnostics, and quality of life.

Prof. Dr. Martin Schuler, director of the Internal Medicine (Tumor Research) of the University Hospital of Essen and speaker of the DKTK partner site Essen/Düsseldorf, is also excited about these awards: "The recognition of the extraordinary research efforts of two of our scientists reaffirms the University Clinic of Essen's strategy of connecting experimental and clinical cancer research to the benefit of the patient. Prof. Siveke and Dr. Eberhardt have achieved this in an exemplary fashion."

The prize was awarded in Berlin on the 18th of November as part of the 13th AIO Fall Congress of the German Cancer Society. The AIO Science Award is given out annually to recognize innovative work in the field of internist oncology on the topics of pathogenesis, pathophysiology, diagnostic and prognostic factors, as well as the therapy of malignant, solid tumors. Further information on the Science Award can be found under www.aio-portal.de.

A photo for the press release can be downloaded at:

<http://www.dkfz.de/de/presse/pressemitteilungen/2016/bilder/Eberhardt-Siveke-4.jpg>

The AIO Award winners. From the left: Dr. Wilfried Eberhardt, Prof. Jens Siveke

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* The German Cancer Consortium (DKTK) is a joint long-term initiative involving the German Federal Ministry of Education and Research (BMBF), participating German states and the German Cancer Research Center (DKFZ) and was established as one of six German Health Research Centres (DZGs). As DKTK's core center the DKFZ works together with research institutions and hospitals in Berlin, Dresden, Essen/Düsseldorf, Frankfurt/Mainz, Freiburg, Munich, Heidelberg and Tübingen to create the best possible conditions for clinically oriented cancer research. The consortium promotes interdisciplinary research at the interface between basic research and clinical research, as well as clinical trials for innovative treatments and diagnostic methods. Another key focus of the consortium's work is on developing research platforms to speed up the application of personalized cancer treatments and to improve the diagnosis and prevention of cancer.

More information is available at www.dktk.org

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Faculty of Medicine of the University of Duisburg-Essen

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