

Letter to the Editor

Important Roles of Angptl4 in Cancer

Linga VG*

Pathology, Center for Cancer Research, UTHSC, USA

***Corresponding author:** Vijay G Linga, Pathology, Center for Cancer Research, UTHSC, USA**Received:** June 27, 2016; **Accepted:** June 28, 2016;**Published:** June 30, 2016

Letter to the Editor

The two studies with large population and robust clinical data identified many variants of ANGPTL4 and their association with lower risk of coronary artery disease [1,2]. ANGPTL4 protein has many functions like lipid and glucose metabolism, angiogenesis, tumorigenesis, kidney diseases, energy homeostasis, wound healing and cell differentiation [3]. The N terminal end of the protein is coiled - coiled region involved in the lipid metabolism [3]. The C terminal end of the protein fibrinogen-like domain involved in vascular permeability, and regulates ROS (reactive oxygen species) level to promote tumorigenesis [3]. In both studies there are inactivating mutations at the fibrinogen-like domain of ANGPTL4, implying possible decreased risk for cancer. Even though the ANGPTL4 is not a initiator of cancer, it has very important role in tumor grade [4], cancer invasion [3], cancer metastasis [3], poor survival [4] and as diagnostic marker [5]. In both large studies there is opportunity to better characterize the role of ANGPTL4 and its variants in cancer.

References

1. Dewey FE, Gusarova V, O'Dushlaine C, Gottesman O, Trejos J, Hunt C, et al. Inactivating Variants in ANGPTL4 and Risk of Coronary Artery Disease. *N Engl J Med.* 2016; 374: 1123-1133.
2. Myocardial Infarction Genetics and CARDIoGRAM Exome Consortia Investigators. Coding Variation in ANGPTL4, LPL, and SVEP1 and the Risk of Coronary Disease. *N Engl J Med.* 2016; 374: 1134-1144.
3. Zhu P, Goh YY, Chin HF, Kersten S, Tan NS. Angiopoietin-like 4: a decade of research. *Biosci Rep.* 2012; 32: 211-219.
4. Garner JM, Ellison DW, Finkelstein D, Finkelstein D, Ganguly D, Du Z, et al. Molecular Heterogeneity in a Patient-Derived Glioblastoma Xenoline Is Regulated by Different Cancer Stem Cell Populations. *PLoS one.* 2015; 10.
5. Verine J, Lehmann-Che J, Soliman H, Feugeas JP, Vidal JS, Mongiat-Artus P, Belhadj S. Determination of angptl4 mRNA as a diagnostic marker of primary and metastatic clear cell renal-cell carcinoma. *PLoS One.* 2010; 5.