

Letter to the Editor

Important Roles of Angptl4 in Cancer

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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 ANGPLT4, 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

- 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.
- 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.
- 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.
- 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.