

Angiogenesis molecular pathways involved into non small cell lung cancer behavior

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and pathologic mechanisms of angiogenesis. EGFR activation also may influence the VEGFR activity and nowadays acquired an important role in target therapies management. For those reasons, it will be discussed on this topic angionenics mechanisms regarding VEGF and EGFR pathways, highlight the currently angiogenic potential biomarkers, and also focus the clinical implications of this knowledge.

Lung cancer is one of the most aggressiveness cancers in the worldwide. It is the most important cause of cancer's related death in the United States of America and Europe. Many factors as smoke status, occupational diseases, radon exposure are considered as involved in lung cancer risk. Non small cell lung cancer (NSCLC) account about 85% of all lung cancer subtypes. As occur in others cancer, angiogenesis play main role in NSCLC carcinogenesis steps. It is regulated by complex mechanisms regarding cell signaling toward draw stream regulation PIK3-Akt, Ras-raf-MEK-ERK pathways and cell surface receptors, such as vascular endothelial growth factor receptor (VEGFR) and epidermal growth factor receptor (EGFR). Currently, VEGF ligands are considered the main drive of this process comprising six members: VEGF-A, -B, -C, -D, and -E and placental growth factor (PlGF). VEGF-A is the most important member and it is responsible for physiologic

Biography

Dr. Ramon Andrade de Mello works in Department of Medical Oncology at Oncology Portuguese Institute of Porto Francisco Gentil and he is Assistant Professor of the Department of Medicine of the University of Porto, Portugal. Dr. de Mello performs both basic and clinical research on angiogenesis, internal medicine and lung cancer regarding his PhD thesis and also has an active office working. He is the author of many articles, chapters and comments on basic and clinical research. He presented more than 40 papers in congresses and conferences in many countries, such as Brazil, Portugal, and Spain. His member of American Society of Clinical Oncology, European Society of Clinical Oncology, Portuguese Society of Oncology and Brazilian Society of Internal Medicine. Currently, he lives at Porto, Portugal.