SUCCESS AND FAILURE: THE PARADOX OF ANTIANGIOGENIC THERAPY AFTER 10 YEARS. ROOM FOR IMPROVEMENT?

Aims & Scope:
The initial enthusiasm raised by this agent class was soon lost when the initial improvements in progression-free survival did not translate into overall survival benefit, demonstrating that acquired resistance was a major therapeutic problem alike with other oncology agents. It is time to revisit the topic to avoid falling in past mistakes in drug development.

We aim to show how new research has shed light on the understanding of the complexity of angiogenesis, uncovering many new pro-angiogenic axis, and how angiogenesis research is now linked with cancer metabolism. We will review the benefits and drawbacks of current methods assessing antiangiogenic drug resistance and discuss the implication of VEGF pathway inhibition on metastatic disease progression. Finally, we will show how these findings are being translated into novel clinical trials: novel agents under development and potential biomarkers will be reviewed; emerging conceptual strategies (targeting the endothelium and strategies directed towards enhancing the vascular network) will be covered.

Keywords:
Antiangiogenics, cancer metabolism, biomarkers, tumor endothelium, angiogenesis models, new drugs.

Subtopics:
Editorial: Past, present and future in antiangiogenic development: agent specific effect and therapeutic implications (Miguel Quintela-Fandino)
Antiangiogenic resistance: Novel angiogenesis axes uncovered by antiangiogenic therapies research (Oriol Casanovas and cols)
Antiangiogenic resistance and cancer metabolism: opportunities for synthetic lethality (Adrian Harris, Miguel Quintela-Fandino and Cols)
Tailoring models for specific clinical situations (John Ebos and Cols)
Future directions: Novel antiangiogenic drugs and adequate clinical implementation (Manuel Hidalgo and cols)
Future directions: Targeting the endothelial compartment (Michael Simons)
Future directions: Enhancing the vascular network as an anticancer strategy (Manuel Hidalgo and Cols)
Future directions: Antiangiogenics, hypoxia and SREBP: role of FAS inhibitors (Ramon Colomer, Maria José Bueno)

Schedule:
Manuscript submission deadline: Sept 2014
Peer Review Due: Oct 2014
Revision Due: Nov 2014
Notification of acceptance by the Guest Editor: Nov 2014
Final manuscripts due: Nov 2014