OMICS International
conferenceseries.com

Chee Gee See, J Mol Biomark Diagn 2015, 6:4
http://dx.doi.org/10.4172/2155-9929.C1.025

Proteomic strategies to overcome tumor resistance to oncology targeted medicines

Chee Gee See
Proteome Sciences, UK

The identification of genomic targets in cancer pathways has opened up a whole vista of personalised medicine development in recent years. The fast-tracking of such targets from discovery to drug launch has been truly astonishing, as exemplified by the 2007 initial discovery of the EML4-ALK oncogene to the 2011 FDA approval of Pfizer's targeted ALK+Xalkori for NSCLC. Whilst these advances are nothing short of brilliant, resistance to such targeted pathways indicate the pitfalls of single target or canonical pathway approaches. Resistance to targeted therapies has emerged as one of the greatest challenges to the personalised medicine approach. To even begin to tackle the issue of resistance, a complete picture of both the canonical and non-canonical signalling pathways in tumor biology is required. Such a complete molecular profile is now possible and this would indicate if our drug is hitting the target and also what alternative pathways the tumor might be engaging to bypass the effects of the drug. Author will present data from proteomics-based strategies to identify global signalling pathways and will demonstrate how this strategy aids decision making on the effectiveness of the targeted oncology drug and in optimizing potential combinatorial options to combat resistance. These strategies and how they are implemented clinically will be discussed. This strategy represents a very innovative and eminently actionable clinical approach to tumor resistance.

Biography

Chee Gee See is the Director of Personalised Medicine at Proteome Sciences, a company providing high end mass-spectrometry based biomarker discovery and clinical utility tools, uniquely positioned to engage with pharma partners in our quest for personalised medicines. He was previously the clinical Biomarker and Experimental Medicine Leader at Roche fo 5 years. He was the BEML for the Phase III pivotal TOGA study where Herceptin was trialled for the new indication of gastric cancer. He was also a BEML for CVD, CNS and immunology so his range and awareness of disease areas and their clinical development challenges is both deep and broad. He also spent 11 years at GSK where he was a genetics expert covering 3 key therapeutic areas in preclinical research within Genetics Research Europe. Prior to industry, he spent 6 years in post-doctoral academia at the University of Birmingham and University College London, most notably in the Human Genome Mapping Project. He also has dual specialist expertise as a consultant in regulatory affairs and value-based drug pricing, reimbursement and market access. He looks forward to engaging with like-minded professionals during this conference.

cheegee.see@proteomics.com

Notes: