Translational Clinical Biology

eISSN 2330-2135

JOURNAL HOME PAGE AT WWW.VEDICJOURNALS.COM

EDITORIAL

DOI: http://dx.doi.org/10.14259/tcb.v1i1.75

Translating Mechanistic Knowledge of Diseases in Clinical Treatment

Translational Clinical Biology (TCB) is a platform that aims to move mechanistic knowledge of diseases acquired through basic science to its application in clinics and community. The goal is to bridge preclinical investigational work in the area of biomedical research with health outcome research. This will be achieved by promoting integration of genomic, proteomics and whole systems biology with population-based studies. TCB will provide a peer-reviewed platform for investigators in diverse disciplines who aim to translate bench-side discoveries into practice. Through TCB we aim to foster improved patient prognosis and cure by encouraging healthy exchange of ideas in all the disciplines of biomedical research among basic scientists and healthcare providers.

There are a number of areas in basic research, which if applicable, is believed to substantially improve the current treatment paradigm. However, it is unfortunate that these successful findings at the molecular levels have not been able to be translated in to clinical practice. For example, the recent surge of biomarkers research in past decades indicates that approaches to managing diseases are tailored to provide a true personalized medicine that will transform patient treatment. However, the clinical utility of many biomarkers are limited and only few are used routinely in clinics. There are a number of factors that affect why biomarkers research has not been able to be translated in the clinics. Lack of appropriate assays, poor experimental design, incomplete biomarkers signature and lack of focus to translate actionable biomarkers are few to blame. Biomarker discovery needs robust analytical methods, most appropriate assays, improved patient selection and a more complete understanding of the actionable biomarkers signature suitable for successful clinical development. Another challenging area is multidrug resistance (MDR) reversal in cancer chemotherapy, which has remained the biggest hurdle in successful chemotherapy. In spite of number of successful molecular interventions, MDR reversal strategy has failed in clinical trials. Similarly, substantial information is available on systems biology and drug pharmacokinetics-pharmacodynamics [PK/PD] behavior; however, to translate this knowledge into therapeutic interventions for patients is still a challenge in a number of disease areas. We believe that to bridge this gap from bench work to successful clinical treatment, traditional barriers between basic and clinical researchers in biomedical research need to be addressed to move forward toward finding new therapeutics for patients in need.

I am confident that TCB will soon become a premier venue and platform for basic and translational scientists alike to move information rapidly and effectively into improved patient care. We intend to attract the best articles that have broader significance in the area of clinical biology; we believe that commitment to rapid, constructive and fair review process is paramount. Papers are and will be selected for publication in TCB on the basis of their importance and broad interest to scientists engaged in moving the science forward by finding applications in a diverse range of investigations in multiple biological systems. To that end, we will be continually adding distinguished senior editors, editorial board members and experts as scientific reviewers, nationally and internationally to reflect the many disciplines from basic research to clinical practice, to conduct peer review and help publish those articles that refine our current understanding at the patient leveland advance the biomedical research. We also plan to periodically add exciting new features and sections to facilitate easier access to articles, and provide forums for sharing rapid international preclinical and clinical information to reflect biomedical advances.

Translating bench-to-bedside applicability i.e. utilizing in vitro, in-vivo, and clinical findings that have direct clinical implications in improving our understanding of disease processes, we aim to foster translation of novel diagnostic and innovative therapeutic discoveries through TCB. We believe the future of biomedical research holds great promise. We want to take this opportunity to extend my invitation to our readers, authors and reviewers to join us, and the distinguished scientists who serve as editors and editorial board members of TCB to pursue through this journal our ultimate goal of finding new cures by increasing our understanding of important disease processes and translating basic scientific findings into therapeutic interventions for individual patients.

Amit K Tiwari, PhD

Editor-in-Chief
Translational Clinical Biology

Srinivas V Koduru, PhD

Founder, CEO and Managing Editor
Vedic Research Inc. USA

Visit us @ www.vedicjournals.com : DOI: http://dx.doi.org/10.14259/tcb.v1i1.75

