

Plenary Lecture

57th Annual Convention of Chemists (ACC) - Indian Chemical Society (ICS)
Recent Trends in Chemical Sciences (RTCS 2020)

Small Molecules Mediated trans-differentiation of Pluripotent Stem Cells to Neuron like Cells: The Implication to Neurological Disorders

Prabhat Arya and Javed Iqbal*

Founder and Chairman

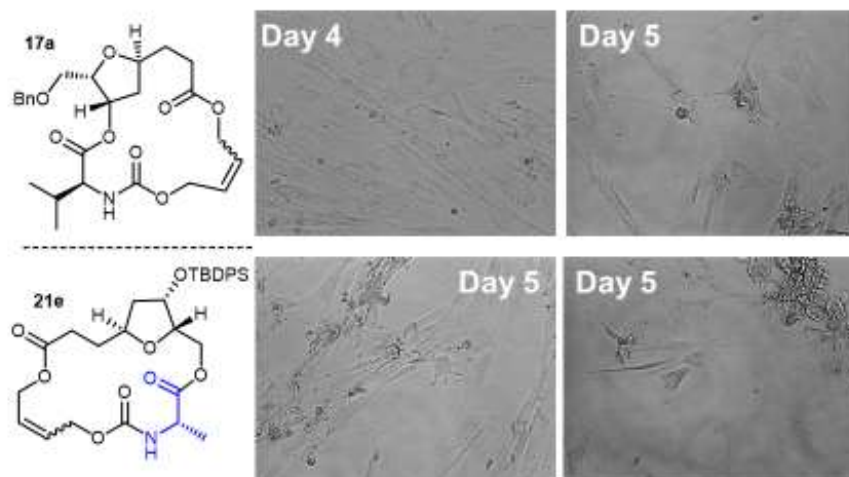
Renovis Laboratories LLP, Hyderabad and

Peptomedica Biotech Pty Ltd, Melbourne, Australia

Abstract:

Small molecule promoted trans-differentiation of stems cells have now become attractive tool to study disease mechanisms on a human background and have the potential to provide access to personalized medicines. I will briefly describe our neurodifferentiation protocol using small molecules that very efficiently promote neural induction from induced pluripotent stem cells (iPSC) lines from patients with Parkinson's and Alzheimer diseases. The advantage of this approach is that all patient-specific iPSC lines tested in this study were successfully trans-differentiated into the neural lineage. The approach described here promises to pave way to address issues related to neurological disorders.

Small Molecule-directed Differentiation of Stem Cells to Neuron-like Cells



Plenary Lecture
57th Annual Convention of Chemists (ACC) - Indian Chemical Society (ICS)
Recent Trends in Chemical Sciences (RTCS 2020)

Bio-Sketch of Speaker

Javed Iqbal

Professor of Chemistry &
Founder and Chairman
Renovis Laboratories LLP, Hyderabad and
Peptomedica Biotech Pty Ltd, Melbourne, Australia
email: prof.javediqbal@gmail.com

Homepage: www.profjavediqbal.com



Professor (Organic Chemistry): Indian Institute of Technology (IIT), Kanpur

Senior Vice President (Drug Discovery): Dr Reddy's Laboratories Ltd, Hyderabad

Director: Regional Research Laboratories (CSIR), Trivandrum

Global Head (Medicinal Chemistry): Dr Reddy's Laboratories Ltd, Hyderabad

Distinguished Research Scientist: Dr Reddy's Laboratories Ltd, Hyderabad

Director (Hyderabad): Dr Reddy's Institute of Life Sciences