## Formulations 2021 Pharmacovigilance 2021

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September 15-16, 2021 WEBINAR

Chaitanya N. Hiremath, Int J Drug Dev & Res 2021, Volume 13



### Chaitanya N. Hiremath

APOD vision, Inc., USA

# APOD based evaluation of drug safety and prioritization of investigational drugs

Abbreviated Profile of Drugs (APOD) is a simple, instantaneous, and empowering prediction method for drug discovery. It facilitates decision-making and prioritization of the investigational treatments. The laboratory techniques used to determine drug safety are time-consuming. The telltale signs of drug safety are in the actual makeup of the drug itself. APOD uses the drug's chemical properties for a mathematical model to predict its pharmacokinetic properties. In this approach, the drugs are classified as: strong, moderate, and weak. It is done using the APOD score which is a pair of numbers that represents benefit and risk presented by a drug. Drugs with only strong and moderate safety profiles can be repurposed for COVID-19 or any other disease targets. The existing effective drugs with weak safety profiles can be modified into effective drugs with moderate/strong profiles through the insights from the APOD fingerprint and difference APOD, even before the molecule is synthesized. The APOD method provides advancement in the field of drug discovery by unifying all properties in the fingerprint, making any property comparisons possible with uniform representation, and integrating pharmacokinetic insights into drug design.



Figure 1: Graphical-APOD representation of a recalled drug

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#### **Biography**

Dr. Chaitanya Hiremath is a distinguished drug discovery scientist, educator, advisor, mentor, reviewer, founder, and inventor, specializing in Bioinformatics and Cheminformatics. He was a senior fellow at Harvard Medical School and a visiting scientist at Massachusetts Institute of Technology. As a former associate-professor of bioinformatics, apart from research, mentoring, and teaching, he has served as a Chief-Coordinator of Bioinformatics Program at a national level, managing all aspects of this program across five centers. Dr. Hiremath has developed the BIIG problem-solving method with a goal of improving science education worldwide. Dr. Hiremath has designed the World Flag and is the founder of a non-profit organization SEALOEarth.