

Review on Artificial Intelligence in Pharmacovigilance: Opportunities and Challenges

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Abstract: *Due to the clever gathering and reporting of individual case safety reports, as well as the increased awareness and involvement of patients and healthcare professionals, the number of suspected adverse event reports in the PV database has grown exponentially. The PV case processing cycle starts with data collection, data entry, initial checking completeness and validity, coding, medical assessment for causality expectedness, severity, and seriousness, subsequently submitting report, quality checking followed by data storage and maintenance. Artificial intelligence (AI) in health care has been very impressive in specialties that rely heavily on the interpretation of medical images. The focus should be a collaborative approach of technical expertise (people) combined with intelligent technology (processes) to augment human talent that meets the objective of the PV system and benefit all stakeholders. AI technology should enhance human intelligence rather than substitute human experts. This review describes the benefits and the outstanding scientific, technological, and policy issues, and the maturity of AI tools for full automation in the context to the Indian health-care system.*

Keywords: Artificial Intelligence, Individual case safety reports processing, Pharmacovigilance