**PROJECT TITLE:**

Covid-19 Vaccines Analysis

**PROBLEM DEFINITION:**

Nearly every aspect of society in the world has been severely affected by COVID-19. Rapid growth in disease cases has led to extensive planning needs.  COVID-19 vaccines have been a new hope during the uncertainties of this pandemic. But this is confused with numerous challenges

**Abstract:**

COVID-19 has severely affected almost every aspect of society worldwide. During the uncertainties of this pandemic, COVID-19 vaccines were a new hope. In particular, Covid's monitoring of the information, big data analysis played a major role. What started as the basic use of big data analysis is the core component of worldly initiatives Therefore, based on enlightening experiences of big data application for fighting the pandemic, this research focuses on the ethical objectives to be promoted in vaccine delivery, assessing the potential effect of big data analytics on reaching these goals by enabling people to receive a digital passport or certificate.

**LITERATURE SURVEY:**

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| Title | Methodology | Outcome |
| Mental distress, COVID19 vaccine distrust and vaccine hesitancy in South Africa: A causal mediation regression analysis | 1. COVID19 pandemic 2. a single-stranded RNA virus 3. Lymphocytes, monocytes, macrophages, | In the face of these major challenges, the following immediate and long-term measures for the identification and mitigation of risks that could compromise access to safe and effective COVID-19 population-based vaccines should be considered by the Member States. |
| Evaluation of CBC in Different Vaccines Types of COVID-19 | 1. vaccines induce higher granulocyte 2. analytics of Data Science | The study also reveals that males and females exhibit varied immune responses to different COVID-19 vaccines and natural immunization, and these variations may be attributed to vaccine composition, mechanisms of action, immune response variability, and timing of the research. |
| Efficacy of COVID vaccinations in patients with chronic lymphocytic leukemia. | 1. Chronic lymphocytic leukemia 2. Cilgavimab-Tixagevimab administration | We show that detectable antibodies after vaccination decrease risk for infection. Moderna appears to have greater efficacy, with more patients having positive antibody titers and a lower risk of developing COVID19. |
| Signals of Cardiovascular Issues with COVID19 Vaccines in VAERS | 1. FDA Vaccine Adverse Event Reporting System 2. GPS-enabled thermal sensors 3. Big data analysis | While signals of these events are higher for COVID19 than other vaccines, the incidence rates are comparable to the normally expected rate for non-vaccinated individuals. |

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