COVID 19 MATHEMATICS AND STATISTICS

Subjects: Others | Biophysics
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In this approach we will summarise the the last three publications highlighting the key mathematical approach like Exponential F (x) to further exponential –Gaussian F (x) and finally the Linear Combination of Atomic Orbital (LCAO) ie a hybridised SP orbital overlapping to Remdesivir (Drug) –Covid19 approach.
.Sigmoid Statistics or Logistics regression is a method to applied to Infection fatality rate (IFR) the most important epidemological parameters is also under consideration .

Covid19   Sp Hybridisation   LCAO   Pharmacokinetics   Exponential Function

Gaussiun   Remdesivir   IFR   Logistic regression

Approach -1 : In the first one we have analysed the microbial Ist - Order growth kinetics where Exponential phase is most important. This sharp exponential phase is the main cause of virulent spreading of viral infection .
Approach -2 : In the 2nd one we have reviewed the entire growth kinetics pattern to a more appropriate manner similar to Exponential – Gaussian F (x) relationship which points out the more prominent part of the short stationary phase or infinitesimally small linear relationship followed by sudden down to declining or recovery phase with a negative slope of linearity .It is also termed as Pseudo-Gaussian contour curve.

Approach – 3 : In the 3rd one we will correlate the LCAO approach to Pharmacokinetic Phenomenon. The Remdesivir is approved as the most effective drug (WHO) – This drug Binds with Covid19 antigen SARS –COV -2 as compared to Sp Hybridised Drug – Antigen Linear overlap stabilising the complex.

.Aproach 4.The IFR is a special case of CFR where number of deaths to be considered as total number of deaths due to symptomatic as well as asymptomatic infection within the same population per unit time .The model equation can be correlated as X (Age) = Sigmoid f [Y (IFR)] . A sharp rise of S is observed we.f 46 yrs and the IFR is more probable w.e.f. 70 yrs for symptomatic and asymptomatic pateints .
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