Timeline for Corona Vaccine Trials

Abstract
Coronavirus disease (2019) has become global pandemic disease with top threat to human health in 2019, there is a race going between vaccine makers to develop covid-19 vaccines, as vaccine development is a typical longest thing to develop with safety and efficacy, to meet challenges. There’s been urgent need for therapeutic counter measure for rapid developing virus for controlling the outbreak, first case of Covid was firstly seen In December, from then there are variable attempts to get and generate suitable vaccine in labs. The fastest vaccine trial had been done is corona vaccine with large trials, vaccine made by Pfizer and Biotech have done firstly tested immunization and got approved for vaccine for emergency use. From years there been trials going on related to corona virus which causes SARS – severe acute respiratory syndrome and efforts have paid off spectacularly.

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Introduction
Vaccine consists of viral proteins and disables form of virus itself, which stimulate body's immune defenses against liver virus, earlier first two vaccines in which efficacy announced in clinical trials used only a string of mRNA with lipid coated, once this mRNA get inside of human body it produce protein which acts as antigen triggering immune responses, vaccine done by laboratories have made spike protein which land on human cell membrane by allowing virus to invade cell. Third DNA vaccine showed efficacy in third phase trial done by Astra Zeneca by university of oxford in UK, they used vector to hold genetic material of SASRS- CoV-2 spike protein. The main part of development comes to testing then developing vaccine, there been many test going on animals and then in humans. These human phases require three phases to show efficacy and safety, and by going through results of clinical trial phases 3 they have positive results of human testing.

Dosing Approved on Clinical Trial
At present both mRNA vaccine have done use of 2- dose schedule taken either of 21 days or 28 days, only the half immunity been granted against Covid, first one week the dose efficacy is around half of it and then around second week it goes up to 89% with rising efficacy at third dose, The DNA vaccine Oxford-AstraZeneca vaccine first dose were scheduled to be in 28 days in phases of second and third trial with highest efficacy.

Administration
The Covid -19 vaccine series contain age group of around 16 to plus year in Pfizer and biotech, children, adolescent and pregnant women out of this age group should not get vaccination done. Covid-19 vaccine series contain two doses administered intramuscularly – Pfizer-biotech have 30 micro gram, 0.3 ml each, in three weeks–(21) days apart. Moderna mRNA vaccine schedule of two doses – 100 microgram, 0.5 ml each. With 28 days apart. People are not scheduled to receive second dose earlier i.e. 3 week – for Pfizer – biotech, second dose taken within grace period of 4 days earlier than date considered for second dose are considered valid but dose should not be administered as close to interval, It can be administered up to six week -42 days after first dose, and second dose if given beyond these timeline, it can be considered then there is no need to restart it again .No booster dose is established, beyond the two- primary doses.

Symptoms
There may be symptoms like fever, allergic, nausea, headache, for theses antipyretic, analgesic, anti-histamine and some other anti-emetic drugs are given

Conclusion
Improvement in public health and development of new laboratories vaccines to prevent furthermore deadly pandemic diseases, 70% -80% of vaccine acceptance is done and by achieving efficacy and potency assuring that vaccine is proven clinically and proved to be taken by human being.