

Journal of Pharmaceutical Advanced Research**(An International Multidisciplinary Peer Review Open Access monthly Journal)**Available online at: www.jparonline.comR
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0**Human Trial on COVOID - 19 Drugs: An Updates****Hiralal Prasad**

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ABSTRACT: Coronaviruses possess a distinctive morphology, the name being derived from the outer fringe, or “corona” of embedded envelope protein. Members of the family *Coronaviridae* cause a broad spectrum of animal and human diseases. Coronaviruses are many different kinds, causing disease. A newly identified coronavirus, SARS-CoV-2, has caused a worldwide pandemic of respiratory illness, called COVID-19. COVID-19 vaccine produced a dual immune response in people aged 18 to 55. We are seeing a good immune response in almost everybody. Oxford COVID-19 vaccine trial shows it induces strong antibody and T-cell immune responses for up to 56 days after administering into the Human body.

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INTRODUCTION:

Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness ^[1]. The best way to prevent and slow down transmission is to be well informed about the COVID-19 virus, the disease it causes and how it spreads. Protect yourself and others from infection by washing your hands or using an alcohol based rub frequently and not touching your face ^[2].

Keywords: Human trial, SARS-COV-2, COVOID-19, Vaccine, Remdesivir, Plasma Therapy.

CORONA INFECTION STATISTICS IN INDIA:**Total confirmed cases, active cases, recoveries and deaths:**

By July 26, 2020 in India, the total number of infections that are confirmed cases in India was about 14 Lakhs. More than forty thousand people died due to COVID-19. Now the infection is serious in India. Per day about forty to fifty thousand people are getting infected. Almost all the states of India are infected by Corona Virus. In the world about two million people are getting infected by the coronavirus. About 2 lakhs people have died due to COVID-19. About 209 countries are infected by this virus. The highest infection as well as death has been noted in the USA, followed by Brazil and India [3].

GLOBAL SITUATION ON VACCINE DISCOVERY AGAINST COVID-19:**Oxford COVID-19 Vaccine Trial:**

The coronavirus vaccine created by the University of Oxford appears safe and has shown a protective immune response in hundreds of people who got the shot in an early trial, scientists announced on Monday after the first phase of human trials.

COVID-19 vaccine produced a dual immune response in people aged 18 to 55. We are seeing good immune response in almost everybody, being told by Dr. Adrian Hill, director of the Jenner Institute at Oxford University, told Associated Press.

He added that the vaccine triggers both arms of the immune system, and added that it also produces neutralizing antibodies - the molecules that are key to blocking infection.

The results during the Oxford COVID-19 vaccine trial show it induces strong antibody and T-cell immune responses for up to 56 days after administering it. The report said T-cells are crucial for maintaining protection against the virus for years.

Oxford university, the other vaccines which show promise of an early breakthrough include United States' Moderna Inc's vaccine, expected to commence the third and the final phase of human trials on July 27 [4-6].

Industrial news on Corona Vaccine:

Pfizer and BioNTech to start human trials of COVID-19 vaccine. BioNTech SE and Pfizer Inc; have announced that the German regulatory authority, the Paul-Ehrlich-Institut, has approved the Phase 1/2 clinical trial for BioNTech's BNT162 vaccine program to prevent COVID-19 infection. BioNTech and Pfizer are jointly

developing BNT162. The trial is the first clinical trial of a COVID-19 vaccine candidate to start in Germany, and is part of a global development program. Pfizer and BioNTech will also conduct trials for BNT162 in the United States upon regulatory approval, which is expected shortly [7].

Vaccine Trial:

In vaccine trial, Vaccine is injected in a healthy person and after 28 day samples are collected and live coronavirus are input in this sample and seen the response of virus if the virus are not multiplied than COVID-19 trial pass [8,9].

Phase-1:

In phase 1 Clinical trial in animals and observe the activity and response of coronavirus. Animals pass the phase 1 trial then enter in phase 2 trial.

Phase-2:

In Phase 2 Human clinical trial vaccines are injected in the lowest dose intramuscular or fixed dose one healthy person and he was at the hospital where no immediate side-effects were observed the next day onwards we will be administering the proposed vaccine to other volunteers. In phase 2 minimum 100 healthy volunteers are needed.

Phase-3:

In phase 3 Human clinical trial vaccines are given a minimum of 1000 healthy volunteers and check the response of corona virus and data are recorded. This is the final stage of clinical trial, after the administration of vaccine healthy people present in hospital and all facilities required protecting if any types of side effects are observed.

Many Countries are going on Clinical Trial Phase update [10-13]:**In India COVID-19 trial:**

All India Institute of Medical Science, New Delhi, India, conducting several clinical trials on human beings to find out the COVID Vaccines. Bharat Biotech's ICMR, NIV (National Institute of Virology) is conducting Human clinical trials, COVAXIN for COVID-19. Oxford University, India, passed phase 2 clinical trials and Phase 3 are running the final stage of covid19 trial. Ahmedabad-based Zydus Cadila is also conducting COVID-19 Trial in Phase-1/2. The Vaccine name is ZyCoV-D. The Uttar Pradesh: CDRI to start clinical trial of Umifenovir for covid19 treatment. In Pune, the

testing is going on among 5 cities on Ashwagandha to treat COVID-19. The Glemark Gets DCGI Approval for Favipiravir (FabiFlu2 00mg). This drug is being used in UAE, Russia for mild patients. Other Indian Pharma companies carrying research on developing drugs for COVID-19 are Cipla and Hetro (Get NOD for REMDESIVIR Launch). The Hetero Pharma found one brand drug Covifor (Remdesivir 100 mg).

Chinna:

The Institution, Henan Provincial Center for Disease Control and Prevention, Wuhan Institute of Biological Products; China National Pharmaceutical Group (Sinopharm) discovered Vaccine name Inactivated vaccine (Phase 3). Sinovac Research and Development Co, sponsored the Sinovac, CoronaVac (Phase 3). Tongji Hospital; Wuhan, sponsored CanSino Biologics Vaccine name-Ad5-nCoV (Phase-2). Henan Provincial Center for Disease Control and Prevention sponsored Beijing Institute of Biological Products; China National Pharmaceutical Group (Sinopharm) Vaccine name-BBIBP-CorV (Phase-1/2). Duke-NUS Medical School, sponsored Arcturus Therapeutics and Duke-NUS Medical School Vaccine-LUNAR-COV19 (Phase-1/2).

United Kingdom:

The University of Oxford, the Jenner Institute Sponsor - The University of Oxford; AstraZeneca; IQVIA Vaccine name-AZD1222 (Phase 2/3).

Multiple study sites in Europe and North America:

The Europe and North America sponsor- Pfizer, BioNTech Vaccine name-BNT162 (Phase-1/2).

London:

Imperial College London is working on vaccine on name-Self-amplifying RNA vaccine (Phase-1/2).

United State of America:

Center for Pharmaceutical Research, Kansas City. Mo.; University of Pennsylvania, Philadelphia sponsor - Inovio Pharmaceuticals Vaccine name-INO-4800 (Phase-1).

Washington:

Kaiser Permanente Washington Health Research Institute Sponsor-Moderna Vaccine name –mRNA-1273 (Phase-2).

Houston, United State of America:

Gilead Science Ceo Daniel O'day. The head of the maker of Remdesivir an anti-viral shown to reduce recovery times in COVID-19 patients.

German:

The German is working on the CureVac Vaccine-mRNA – based vaccine (Phase-1).

TREATMENT OF COVID-19:

The following drugs are used for management of COVID-19 that are Hydroxychloroquine (400 mg first Day 2 Tablets morning and evening, next 6 days 1 Tablet after breakfast), Vitamin-D (Tablet for 7 days after breakfast), Zinc Sulphate (For 7 days after dinner), Vitamin-C (For 7 days 3 time a day), in case of higher fever - Paracetamol (Tablet 650 mg 5 days, 2 Tablet morning and evening), in case of Throat pain or Runing nose - Cetirizine (Tablet 10 mg , 5 days morning and evening) and in case of cough (Syrup Bro-Zedex,5 days 10 ml 3 time a day). The other treatments are Azithromycine (500 mg OD), Zinc Sulphate (500 mg OD) and Vitamin-C (BD) [14].

CONCLUSION:

In Human Trial on COVID-19, the drugs are use on the basis of symptoms. Many patients are curing after use some drugs and get better result. Many Industries pass the COVID-19 trial phase -2 like Oxford University and many industries try to develop COVID-19 vaccine to fight Coronavirus Disease.

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