Clinical and Research Advancements in Corona Virus

Abstract

In case of global pandemic corona virus disease 2019, clinical trials and research are assessing efficacy and safety for clinical patients for treating covid-19 as, it is evolving at unprecedented rate, by tracking clinical trials done and avoiding duplication efforts and phase2 clinical trials evaluate new therapeutics and by including investigational therapeutic effort on synthetic monoclonal antibodies (mAbs) for treating disease. Trials designed to elaborate test multiple different kind of monoclonal antibody treatment.

Keywords: Corona Virus, Antibody

Introduction

The clinical trials are conducted at specific hospitals and researchers around the world, including international network of strategic initiatives in Global HIV trials, and National Institute of Allergy and Infectious Disease (NIAID) as it take part of national institute of health. Two staged phase 3 designs are done, if a treatment appears to be safe and potent in first stage after review approved by independent data and safety monitoring board then it proceeds to 2nd stage testing, any investigational therapeutics are known to be unsafe then the trial is dropped. The trials like ACTIV-3 study starts from investigational monoclonal antibody identified from blood sample of Covid patient. Around approximate number of volunteers are hospitalized having mild to moderate covid symptoms, then patients are given iv infusions of antibodies or saline placebo infusion, then accordingly after 5 days the symptoms are seen as, there will be need of supplemental oxygen and ventilation. For about 90 days there will be regular examination and tested periodically for their response to investigational therapeutics, accordingly after their test results the data is checked whether to implement in larger number of population or not. If the results are safe and effective then it is injected to another batch, and some patients who are severely ill or patients with organs dysfunction are even tested and supervised for 14 days. Then upon results the trial is continued or withdrawal, Informed consents are signed by patients after a proper discussion about the treatment and procedure which they will be undergoing.

1. Eligibility criteria are checked by testing blood tests and physical tests.
2. Covid-19 advancements done– knowledge about how covid-19 spreads and how can it be preventable.
3. Steroids can help to check excessive inflammation done by virus and also used to prevent in blood clots.
4. Using of convalescent plasma- donated by covid patients-check whether it can help others to fight virus.
5. Knowledge about children if infected with covid-19 may get disorders like MIS-C.
6. New study has raised an event of showing that interferon can increase risk of life threatening bacterial infections in lungs.

Conclusion

COVID-19 has impacted many public health and healthcare systems world widely; this condition impacted mainly researchers, trial sponsors and research organizations of clinical trials, tracked with emerging findings from randomized clinical trials and checking their safety. , tolerability and efficacy of antibodies given. Convalescent plasma therapy is meant to good alternative for prevention of covid-19 disease, with intensive care unit implemented with best practice; expedite clinical researchers, and following regulatory guidelines, and dynamic strategic and risk assessment is needed for conducting ongoing clinical trials. By adopting new approaches and understanding indicators helps in trial sites development and be beneficial in coming generations.