RELEASE ACTIVE ANTIBODIES TO HUMAN INTERFERON GAMMA

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Introduction

Release active antibodies to human interferon gamma (IFN-γ) known as Anaferon is a drug that acts as an immunomodulator and antiviral agent. It exerts its antiviral effect through induction of IFN-α/β and its immunomodulatory effect via induction of IFN-γ. [1]

Mechanism of Action

Affinity-purified rabbit polyclonal antibodies to recombinant human interferon gamma were manufactured in accordance with current European Union requirements for Good Manufacturing practice in a mixture of homeopathic dilutions[5]. The mechanism of action of this novel concept is its ability to regulate the functional activity of endogenous interferons. Anaferon acts on IFN-γ and its receptor resulting in macrophage and NK-cell activation leading to lysis and apoptosis of infected cells. It also stimulates T effector cells, Th1 responses and increases concentrations of IgG and secretory IgA. Anaferon also acts by increasing expression of IFN-α/β and related interleukins (IL-2, IL-4, IL-10), to ensure effective antiviral protection without risk of resistance.[2,3,5]

Its potential use for COVID -19 is during the acute phase. The virus triggers active endogenous interferon production. Anaferon triggers molecular and conformational changes and enhances production of IFN-γ and α via positive feedback. Thus, during “peak” viral infections a far larger amount of activated IFN-γ and α molecules are activated and bound to its receptors[7].

Clinical Studies

The spectrum of clinical studies is for therapy and prevention of viral infections. These include influenza A and B, adenovirus, respiratory syncytial virus, rhinovirus, parainfluenza, herpes 1 and 2. Some viruses that caused diarrhea like enterovirus, rotavirus, calicivirus and coronavirus were also studied.[1,2,3,4,6]

Currently, there are no studies on the use of Anaferon for COVID-19.

Adverse Effects

There were no adverse effects related to the drug in clinical trials. Special precautions to patients with galactose intolerance, lactase deficiency and glucose-galactose malabsorption due to the presence of lactose in the drug. [1,2]

Recommended Dose

The dose has not yet been established for COVID-19. However, as treatment for viral upper respiratory infections the orodispersal tablet is given as follows: within the first day, the drug should be taken every 30 minutes for the first 2 hours, then 3 additional times with regular intervals (total of 8 tabs). From day 2-5, the drug is taken three times a day.[7]

Conclusion

There is no available evidence as to the use of Anaferon in COVID-19.

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