

# Plasma transfusion for acute covid-19 patients is willful ignorance of latent varicella zoster virus (VZV) reactivation forewarning threats.

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## Abstract

Plasma transfusion should never be used as child's play as the dire consequences of the plasma transfusion exercise can trigger a re-virulence of VZV at any point of time with failing immunocompetence of the body of a plasma transfusion recipient and catastrophic impacts of any negligent blood transfusion with and without the knowledge of the plasma transfusion recipient through willful ignorance perhaps or failing memory.

## Present day plasma transfusion for acute covid-19 patients is willful ignorance of latent varicella zoster virus (VZV) reactivation forewarning threats (decades after initial exposure)

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Immunisation with antibodies has been in practice as a life saving measure in the last century (Rajam et al., 2010). Clinically termed as 'Convalescent blood product', CBPs are plasma collection from a viral or bacterial infection - recovered patients who has immunity developed against those pathogens (Marano et al., 2016). As CBPs can efficiently neutralise viruses and or bacteria in the blood stream (Burnouf and Seghatchian, 2014), this technique successfully treated influenza A (H1N1) virus (Hung et al., 2011). Very recently, CBPs did combat the Ebola virus also (Brown et al., 2018; Garraud, 2017). This age COVID-19 pandemic recovered antibodies has the capability to prevent and also treat SARS-COV2 virus (Maxmen, 2020).

Biologically, to permit convalescent plasma (CP) transfusion for dire COVID-19 patients, firstly, convalescent subjects ought to meet donor selection plasma criteria and comply national health requirements and standard routine procedures. Secondly, multi-criteria decision-making (MCDM) for the most suitable CP and the prioritization of covid-19 applies (Albahri et al., 2020). We should vividly reminisce the Herpes zoster (HZ) and the reactivation of latent varicella zoster virus (VZV) occurring decades following initial exposure. It is well understood that plasma or immunoglobulins should always be used as a last resort (Chen et al., 2020).

## References:

- G. Rajam, et al., An augmented passive immune therapy to treat fulminant bacterial infections, *Recent Pat Anti infect Drug Discov* 5 (2) (2010) 157–167.
- G. Marano, et al., Convalescent plasma: new evidence for an old therapeutic tool? *Blood transfusion, Trasfusione del sangue* 14 (2) (2016) 152–157.
- T. Burnouf, J. Seghatchian, Ebola virus convalescent blood products: where we are now and where we may need to go, *Transf. Apheresis Sci.* 51 (2) (2014) 120–125 .

I.F. Hung, et al., Convalescent Plasma Treatment Reduced Mortality in Patients With Severe Pandemic Influenza A (H1N1) 2009 Virus Infection, *Clinical Infect. Diseases* 52 (4) (2011) 447–456 .

J.F. Brown, et al., Anti-Ebola Virus Antibody Levels in Convalescent Plasma and Viral Load After Plasma Infusion in Patients with Ebola Virus Disease, *J. Infect. Dis.* 218 (4) (2018) 555–562.

O. Garraud, Use of convalescent plasma in Ebola virus infection, *Transf. Apheres. Sci.* 56 (1) (2017) 31–34.

A. Maxmen , How blood from coronavirus survivors might save lives, *Nature* (2020) .

E.F.Chakravarty,2016. Incidence and Prevention of Herpes Zoster Reactivation in Patients with Autoimmune Diseases, *Rheum Dis Clin N Am*, Elsevier Inc. <http://dx.doi.org/10.1016/j.rdc.2016.09.010>.

L. Chen, et al., Convalescent plasma as a potential therapy for COVID-19, *Lancet Infectious Diseases* 20 (4) (2020) 398–400.

O.S. Albahri, J.R. Al-Obaidi, A.A. Zaidan, A.S. Albahri, B.B. Zaidan, M.M. Salih, A.Qays, K.A. Dawood, R.T. Mohammed, K.H.Abdulkareem, A.M. Aleesa, A.H. Alamoodi, M.A. Chyad, C.Z.Zulkiffi 2002. Helping doctors hasten COVID-19 treatment: Towards a rescue framework for the transfusion of best convalescent plasma to the most critical patients based on biological requirements via ml and novel MCDM methods, *Computer Methods and Programs in Biomedicine* 196, 105617.