

Gupta N, LeGoff J, Chamat S, Mercier-Delarue S, Touzelet O, Power UF, Kazatchkine MD, Simon F, Lacroix-Desmazes S, Bayry J and Kaveri SV. (2013). Affinity-purified respiratory syncytial virus antibodies from intravenous immunoglobulin exert potent antibody-dependent cellular cytotoxicity. *PLoS ONE* 8: e69390.

Mixed infections are one of the major therapeutic challenges, as the current strategies have had limited success. One of the most common and widespread conditions of mixed infection is respiratory syncytial virus-mediated pathology of the respiratory tract in children. There is a dire need for the development of novel therapeutic approaches during mixed infections. Therapeutic intravenous immunoglobulin preparations, obtained from plasma pools of healthy donors have been used in immune deficiencies. This study was thus designed to characterize the functional efficacy of RSV-specific antibodies in IVIg. To explore the functional ability of these affinity-purified RSV-specific antibodies, the antibody-dependent and complement dependent cytotoxicity was determined using peripheral cells of healthy donors. This study demonstrates the existence of highly potent RSV-specific antibodies in IVIg preparations and provides the basis for the use of IVIg as broad-spectrum protective shield to RSV-infected children during mixed infections.