



Research Questions

- ☐ Why does this develop?
- ☐ How do people have immunity pre-vaccine?
- ☐ What are the mechanisms? What are the subtypes? Why do some people evolve to CVID?
- ☐ Additional/upgraded vaccines?
- ☐ Molecular Mimicry?

Clinical Update: Ig Replacement

TABLE XIII. Currently available immunoglobulin products and their properties

Route/product	Dosage formulation	Diluent	Refri- geration required?	Filtration required?	Osmolality (mOsm/L)	Sodium	pH	IgA (µg/mL)	Stabilizer or regulator	Pathogen inactivation/ removal*
IV										
Bivigam	10% Liquid	NA	Yes	No	Not Available	0.100-0.140 mol/L	4.0-4.6	≤200	Glycine	FP, S/D, NF
Carimune NF	Lyophilized	0.9% sodium chloride, sterile water, 5% dextrose	No	No	498 (3%), 690 (6%), 882 (9%), 1074 (12%) 192 (3%), 384 (6%), 576 (9%), 768 (12%) 444 (3%), 636 (6%), 828 (9%), 1020 (12%)	0.01 mEq/mL (3%), 0.02 (6%), 0.03 (9%), 0.041 (12%) None None	6.6	720	Sucrose	DF, pH 4, pH 4/pepsin, NF

Guiding principle issue

Indication of immunoglobulin therapy

Diagnoses

Frequency of immunoglobulin treatment

Dose

IgG trough levels

Site of care

Route

Product

Perez et al. Update on the use of immunoglobulin in human disease: A review of evidence *JACI* 139 (3) 2017.