professional should, however, stay with the individual for the length of the infusion because of the risk of serious side effects, such as anaphylaxis.

The following are considerations for switching from IVIG to SCIG administration:

- Extreme prematurity (mainly infants born before 30 weeks)
- DiGeorge (22q11.2 deletion) syndrome
- Jacobsen syndrome

**Side Effects:** Although IVIG has been safely and effectively administered since the early 1980s, IVIG can cause adverse effects, both localized and systemic. Systemic reactions to IVIG infusion occur in approximately 3% to 15% of individuals receiving treatment. The side effects are usually self-limiting and can be avoided by decreasing the rate of the infusion, good hydration, and/or making sure that the product is at room temperature when it is infused.

Individuals may be at increased risk for developing an adverse reaction if they have never received IVIG, have active infections or pre-existing conditions (such pneumonia or bronchiectasis), or are switching products. Individuals with a history of migraine headache may be at risk for a post-infusion headache reaction. The prescriber of the therapy can modify IVIG dosing by decreasing the rate of infusion or adding other medications to the prescription. Medications such as acetaminophen, diphenhydramine, non-steroidal anti-inflammatory drugs, or corticosteroids can help prevent side effects during and after an infusion. It is important to know, however, that repeated use of corticosteroids used to manage IVIG side effects may lead to long-term problems associated with repeated steroid use. While IVIG brands differ by manufacturer, the listed side effects are virtually identical on each package insert. Some common infusion reactions are headache, nausea, fever, chills, flushing, wheezing, vomiting, backache, muscle aches, joint aches, or chest tightness. Side effects experienced during an infusion of Ig are almost always related to the rate of the infusion, such as infusing too fast, or relate to the temperature of the product. Stopping or slowing the infusion is usually the only intervention needed to alleviate these symptoms. Sometimes a switch in product is successful in alleviating these side effects as some may simply tolerate one brand better than another.

Some side effects can happen up to 72 hours after an infusion of Ig. These delayed symptoms are not usually associated with the rate of infusion. Some rare side effects include:

- Aseptic meningitis (inflammation of the meninges, the membranes that surround the brain and spinal cord) has been seen up to 72 hours after infusion of IVIG and may be more prevalent in people with a history of migraine headaches. Hydrating prior to IVIG may protect from this side effect. It is important to note that every person who develops a post-infusion headache does not necessarily have aseptic meningitis. A prescriber should be notified if the individual experiences severe headaches that do not respond to standard medications such as acetaminophen or non-steroidal anti-inflammatory drugs, like ibuprofen.

- Anaphylaxis is very rare and may be associated with anti-IgA IgE antibodies (there are no labs that can test for these IgE antibodies) in some people who have totally absent IgA. The role of anti-IgA antibodies in causing anaphylaxis in people with IgA deficiency receiving Ig