

### What is a biologic drug?

Biological medicines (biologics) contain active substances from a biologic source such as living organisms or their cells. They are used to treat many diseases and medical conditions including anemia, diabetes, psoriasis, and some forms of cancer. Biologic drugs are in general a lot larger and more complex than chemically produced pharmaceutical drugs. Insulin is an example of a biologic drug.

### What is a biosimilar?

A biosimilar is a drug that has been shown to be highly similar to a biologic drug that has already been authorized for sale. Biosimilars are approved based on a thorough comparison to a reference biologic drug and may enter the market after the expiration of the reference drug's patent protection.

### Are biosimilars different from generic drugs?

Biosimilars are not the same as generic drugs. Generic drugs are small molecules that are chemically synthesized and contain identical medicinal ingredients to their brand name reference product. Due to the size, complexity, and natural variability of biologic drugs, and because they are made in living cells rather than with chemicals, a biosimilar and its reference biologic drug can be shown to be similar, but not identical.

### What is Semglee?

Semglee is a long-acting insulin analogue that is the approved biosimilar for insulin glargine (Lantus). It is used to treat patients with diabetes. Semglee has been proven to be as safe and effective as Lantus and provide the same health outcomes in humans. We expect that it will have similar health outcomes in animals, but this has yet to be proven. It is still important to be aware that individual patient variation can occur.

### What side effects should I watch for when switching to Semglee?

Adverse effects with Semglee are similar to those observed with all other insulin products. Clients should watch for signs of hypoglycemia including loss of appetite, extreme lethargy, lack of coordination, weakness, and seizures. Your pet's food and water consumption should be watched on a daily basis and if the amount changes significantly, you should contact your veterinarian as soon as possible. Blood glucose levels should also be monitored throughout the first week of initiation and spot checked twice a month to ensure the medication is working appropriately.

