Application Techniques in Cardiac Surgery

Aortic Aneurysm
- Clamp and depressurize vessel prior to BioGlue application
- Dry the target site to ensure optimal adherence of BioGlue to the target tissue
- Prime the applicator tip and apply a thin layer of BioGlue that extends 1 cm in either direction of the suture line
- Wait 2 minutes for BioGlue to completely polymerize before pressurizing the anastomosis
- Complete the final anastomosis, and again apply a thin layer of BioGlue to prevent suture line bleeding
- Wait 2 minutes before re-establishing systemic blood flow

Aortic Valve Replacement
- Cover the coronary buttons with moist gauze prior to application of BioGlue
- Prime the applicator tip and apply a thin layer of BioGlue to a dry, depressurized vessel
- Apply slight tension to the graft during BioGlue application to mimic the position of the graft once systemic flow has been re-established
- Do not allow excess BioGlue to pool around the base of the valve
- Always allow 2 minutes for the full polymerization of BioGlue before manipulating the anastomosis

Type A Aortic Dissection
Distal Repair
- Insert gauze into the true lumen to re-approximate layers of the aorta
- Obliterate false lumen by applying a 2 mm thick and 2 cm deep layer of BioGlue
- Use caution to avoid over-filling the false lumen
- After 2 minutes inspect lumen and carefully remove any excess BioGlue
- Repaired aorta may be further reinforced with felt strips if desired
- Once graft has been sewn in place, seal anastomosis with a thin layer of BioGlue to prevent suture line bleeding

Proximal Repair
- Cover aortic valve leaflets with moist gauze prior to BioGlue application
- Obliterate false lumen by applying a 2 mm thick and 2 cm deep layer of BioGlue
- Use caution to avoid over-filling the false lumen
- After 2 minutes inspect lumen and carefully remove any excess BioGlue
- Repaired aorta can be further reinforced with felt strips if preferred

Key Application Techniques
1. Dry the target site to ensure optimal adherence of BioGlue to target tissue
2. Clamp and depressurize vessels prior to applying BioGlue to targeted anastomoses
3. Prime the applicator tip to ensure proper mixing of the components
4. Switch from Cell Saver® to wall suction to prevent BioGlue from entering the pump system
5. Apply a thin layer of BioGlue directly onto the suture line to prevent suture line bleeding
6. Wait 2 minutes before pressurizing the anastomoses to allow for full BioGlue polymerization