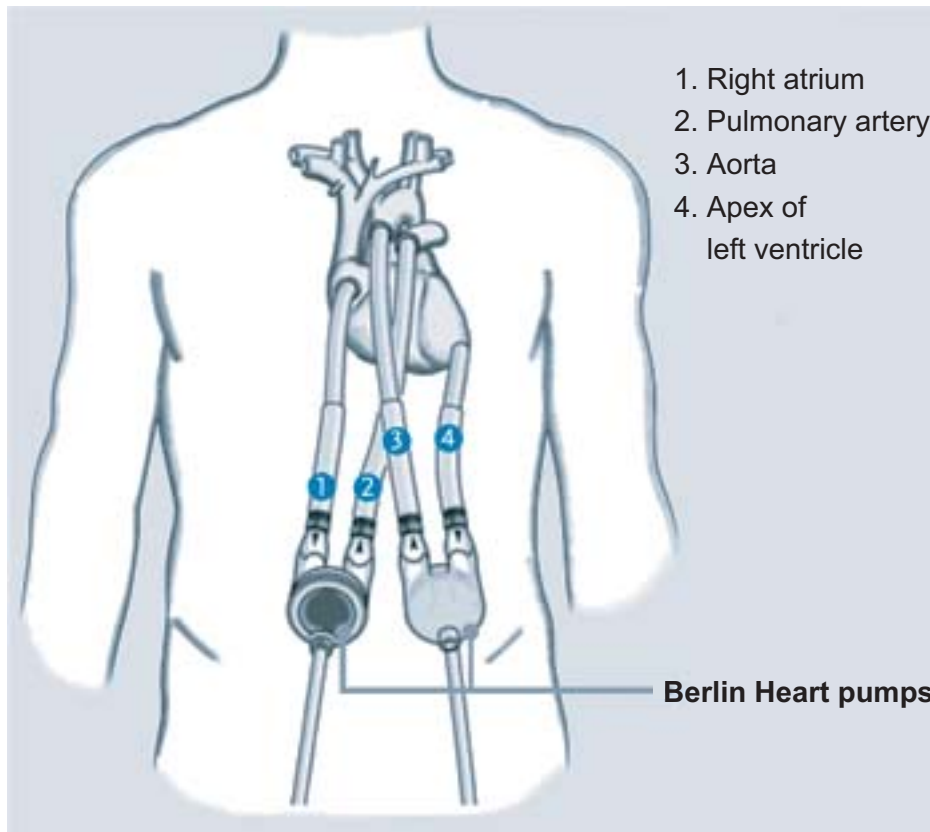




The Berlin Heart



1. The deoxygenated blood flows from the body into the right atrium.
2. Since the right ventricle is not able to pump blood into the lungs, the blood goes into the Berlin Heart (diagram #1).
3. The blood is pumped out of the Berlin Heart and goes into the pulmonary artery (diagram #2) and into the lungs.
4. Once the blood is oxygenated in the lungs, it flows into the left atrium of the heart.
5. Since the left ventricle is not able to pump the blood into the aorta, the blood goes from the left ventricle into the Berlin Heart again (diagram #4).
6. The Berlin Heart pumps blood through the aorta (diagram #3) and into the body.

The driving unit rhythmically pumps air into and out of the air chamber of the pump. Consequently the membrane vaults either in the direction of the air or the blood chamber, causing an overpressure or negative pressure and allowing blood to move through it.