LivaNova Cannulae

ProtekDuo+™

Veno-Venous Cannula

ProtekDuo+™

Veno-Venous Cannula

The **ProtekDuo+** dual-lumen cannula is inserted percutaneously via the right internal jugular vein.
The proximal side ports drain blood from the right atrium while the distal outflow port returns blood to the main pulmonary artery, thereby reducing right ventricular preload and wall stress.

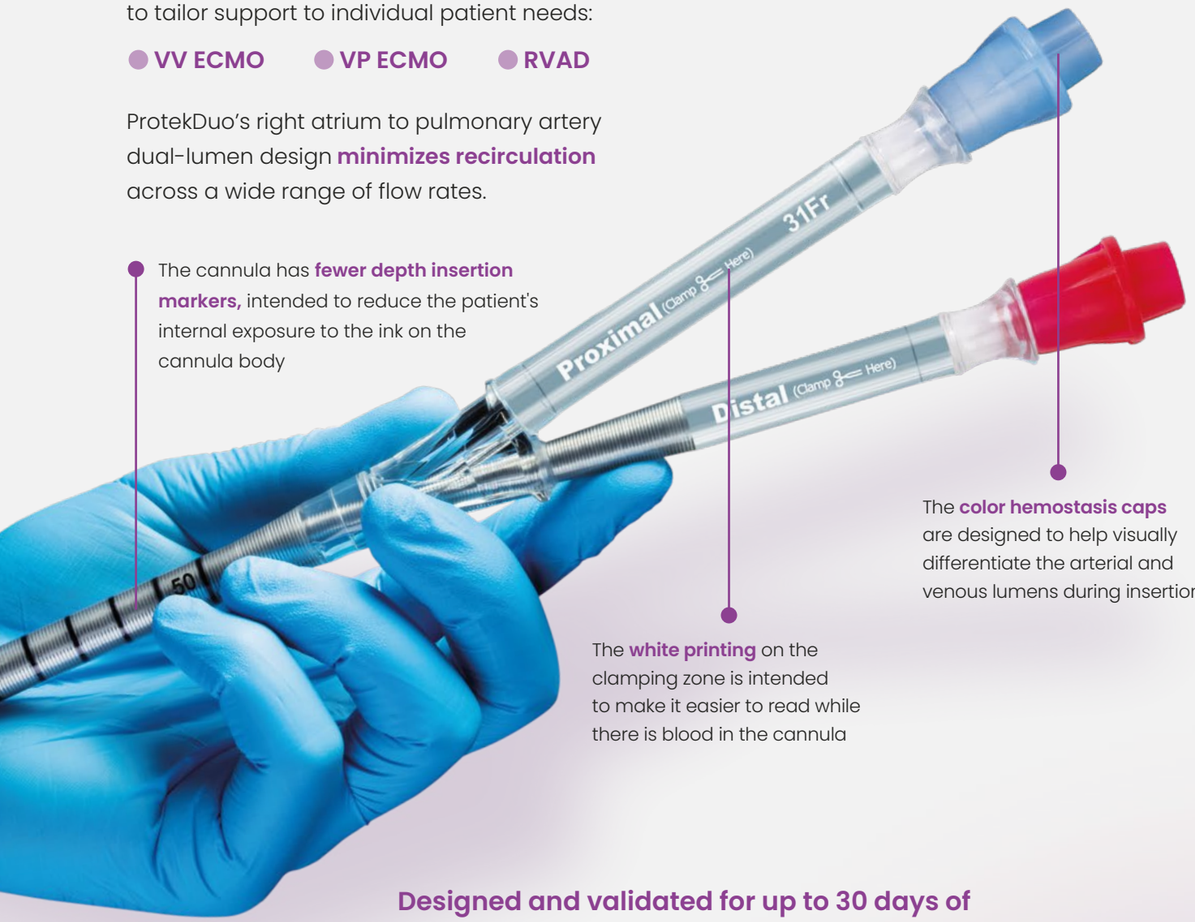
Its design enables multiple configurations to tailor support to individual patient needs:

● **VV ECMO** ● **VP ECMO** ● **RVAD**

ProtekDuo's right atrium to pulmonary artery dual-lumen design **minimizes recirculation** across a wide range of flow rates.

The single-site internal jugular access of ProtekDuo+ facilitates upper-body VV ECMO strategies, enabling awake ECMO, early mobilization and rehabilitation.

The use of ProtekDuo+ in VV ECMO is associated with reduced bleeding and ischemic complications compared to multi-cannula approaches.



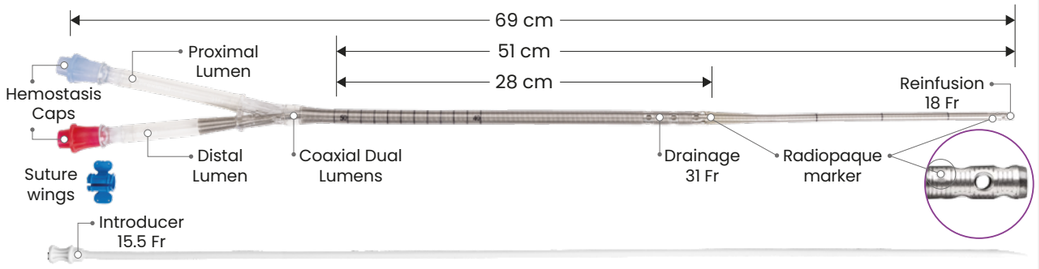
- The cannula has **fewer depth insertion markers,** intended to reduce the patient's internal exposure to the ink on the cannula body
- The **white printing** on the clamping zone is intended to make it easier to read while there is blood in the cannula
- The **color hemostasis caps** are designed to help visually differentiate the arterial and venous lumens during insertion

Designed and validated for up to 30 days of temporary extracorporeal circulatory support.

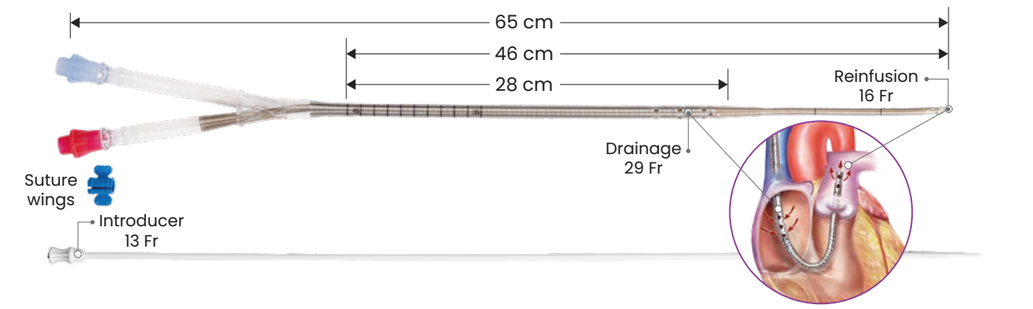
Product specifications

	Catalog #	Size	Components
ProtekDuo+ 29 Fr	5150-4629EU	• Proximal Lumen: 29 Fr x 28 cm • Distal Lumen: 16 Fr x 46 cm	• One 29 Fr ProtekDuo+ Veno-Venous Wire Reinforced Cannula, with radiopaque tip markers • One 13 Fr Introducer • Two suture wings
ProtekDuo+ 31 Fr	5150-5131EU	• Proximal Lumen: 31 Fr x 28 cm • Distal Lumen: 18 Fr x 51 cm	• One 31 Fr ProtekDuo+ Veno-Venous Wire Reinforced Cannula, with radiopaque tip markers • One 15.5 Fr Introducer • Two suture wings

31 Fr ProtekDuo+™ Cannula

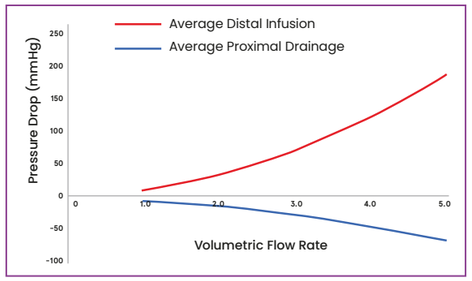


29 Fr ProtekDuo+™ Cannula



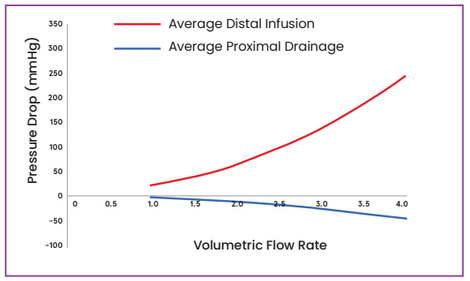
31 Fr - max flow 5 LPM

31 Fr ProtekDuo+ Cannula Pressure Flow Curve



29 Fr - max flow 3.9 LPM

29 Fr ProtekDuo+ Cannula Pressure Flow Curve



Note: graphs depict pressure drops collected in room temperature water

Clinical References:
Brewer et al 2024; Capoccia et al 2024; John et al 2024; Oliveros et al 2021; El Banayosy et al 2022; Kremer et al 2020; Usman et al 2024; Harano et al 2022; Ritter et al 2023

ProtekDuo+™
Important Safety Information

Indications for use

The ProtekDuo+ cannula sets are intended only for use in patients requiring ECLS support with large enough venous access to accommodate the 29 Fr or 31 Fr cannula. Patient condition will vary from healthy (but with high risk of a pulmonary and/or cardiac event) to critically ill, potentially near death. The cannula serves as an essential component of an extracorporeal life support system. The system is deployed to support critically ill patients where other treatment options have failed and continued clinical deterioration is expected or the risk of death is imminent.

Intended Purpose

ProtekDuo+ Cannula sets are single use devices intended for percutaneous drainage and reinfusion of blood to supplement right ventricular cardiac output with or without the use of supplemental extracorporeal membrane gas exchang.

Potential adverse effects that may be associated with venous cannulation include the following:
Injury to or perforation of the myocardial wall with or without cardiac tamponade; Thrombus formation; Particulate or air embolism; Myocardial infarction; Pulmonary embolism; Cardiac arrhythmias such as atrial fibrillation, heart block, sinus bradycardia and ventricular tachycardia or fibrillation; Congestive heart failure or pulmonary edema; Atrial/ventricular septal defect, transient or persistent, with or without hemodynamic compromise; Vascular injury with or without the need for surgical intervention; Blood loss requiring fluid replacement or transfusion of blood products; Infection; Allergy or anaphylactic reaction to contrast media or device components; Respiratory arrest; Renal failure; Death; Failure to traverse the vascular system; Hemolysis; Pneumothorax; Neurological dysfunction, Ischemic stroke, Superior Vena Cava Syndrome: characterized by cyanosis, edema, and neurologic sequelae, resulting from venous occlusion.

The devices should be used by qualified and skilled personnel, able to follow the indications and instructions for use contained in the information provided by the manufacturer. Please contact us through our website (www.sorinmanuals.com) to receive instructions for use containing full prescribing information including indications, contraindications, warnings, precautions and adverse events.

www.livanova.com/cannulae/en-gb

ETHICAL COLLABORATION IN HEALTHCARE CERTIFIED
Licensed by Eucomed

CODE OF ETHICS SUPPORTER AdvaMed

Legal Manufacturer:
Sorin Group Italia S.r.l.
Via Statale 12 Nord, 86
41037 Mirandola (MO) Italy

CE 2797

welcome to your new life LivaNova

www.livanova.com

Date of preparation: January 2026

CP-2500474