Your connection to apheresis versatility

Connect with the outcomes you’re looking for

You put a great deal of hard work and dedication into caring for your patients. At CaridianBCT, we’d like to help. Which is why we created our COBE Spectra Apheresis System, offering flexible solutions in cell therapy, therapeutic apheresis and transfusion medicine. The Spectra system is the most widely used platform in its field, and we’re continuing to find ways to enhance its performance. The Spectra system continues to set new standards, with sophisticated algorithms that tailor procedures to the physiology of both donor and patient.
Expanding therapeutic applications

No matter what your needs, we deliver solutions that will link you to the right therapy outcomes.

We’ve changed the way you deliver patient care

One of the Spectra system’s greatest advantages lies in unique technology that lets you perform a variety of automated collection procedures on one platform.

Think back to how apheresis was performed a decade ago. The Spectra system has changed apheresis from a cumbersome, manual process into a system with unique technology and process control, backed by CaridianBCT customer support.

Now you can choose between different procedures and options as the need arises. Spectra’s procedural flexibility lets you use the machine in different departments of your blood center or hospital, making it cost-effective. Plus having all procedures on one platform means less training for staff, which helps increase your operation’s efficiency.

A history of “firsts”

Over the years, the Spectra system has been first in many areas, all leading to the consistency and process control you need.

For example, the Spectra system was the first centrifugal separation device to introduce therapeutic plasma exchange (TPE) with automated fluid balance and anticoagulant (AC) management controls.

We led the way with sophisticated algorithms that tailor therapeutic procedures and donations to the patient’s and donor’s total blood volume, as well as their hematocrit and platelet precounts. We were the first with procedure results screens to aid in process control and consistency.

CaridianBCT also pioneered the unique LRS® chamber, with technology that allows online, process-controlled leukoreduction. No other company offers a technology platform with online process control for leukoreduction during platelet collection.

In short, Spectra is the tried, tested, reliable way to assure results.
Your connection to cell therapy

Patients and procedures are unique. With our numerous procedure choices, you can provide solutions for all sorts of patient types. The Spectra system’s flexible interface control and flow rate options allow you to customize each procedure to match your specific patient needs.

The automatic (Spectra AutoPBSC®) protocol offers hands-free options for busy centers by performing stem cell collection* automatically. It also allows low extracorporeal volumes (ECVs) for small patients.

Our mononuclear cell (MNC)* program offers customized control for independent command over MNC collections. Also, it’s ideal for large-volume leukapheresis, so you can obtain the high yields and transplantation doses needed for patient care.

The Spectra system has the flexibility to collect donor granulocytes* and lymphocytes, as well as perform bone marrow processing (BMP). Automated procedure controls help reduce the risk of cross-cellular contamination of collections and enhance safety by minimizing donor and patient platelet loss.

Today, the Spectra system is the tried and true leader in stem cell therapy.

Cell therapy – Spectra collects it all
Autologous or allogeneic peripheral blood stem cells
Bone Marrow
Mononuclear cells
Granulocytes

*Polymorphonuclear cells, such as granulocytes, and mononuclear cells, such as stem cells, for transfusion are not biological products licensed by the US Food & Drug Administration. CaridianBCT makes no claims for the efficacy of these products.
Your connection to therapeutic apheresis

Clearly, the Spectra system is the most flexible therapeutic apheresis system on the market today. It all starts with process control, which monitors pump rates, fluid balances, volumes and AC management for enhanced safety. The Spectra system’s built-in algorithms accommodate each patient’s total blood volume and hematocrit, while its effective procedures can be delivered with minimal operator intervention. This frees you and your staff to focus on your patients, not on the technology.

Therapeutic plasma exchange (TPE)

Proof of our trusted leadership is the fact that most TPE procedures in the world today are performed on Spectra systems. The system removes diseased elements, autoantibodies, alloantibodies and immune complexes in a variety of conditions. You get customized performance based upon the patient’s characteristics. And as a result of low platelet losses on plasma exchanges and low ECV, patient safety and outcomes are optimized.

Red blood cell exchange (RBCX)

We built the Spectra system with more automated capabilities in RBCX procedures than ever before. Enter the known patient information and desired result, and the system automatically controls fluid and red cell mass balance to match the desired outcomes. You can remove diseased red blood cells or perform red cell depletions — efficiently and accurately.

More therapeutic functions

In addition to its many other functions, the Spectra system also performs WBC and platelet depletions, and lymphoplasma exchange, making it even more flexible in a therapeutic environment.
Your connection to transfusion medicine

Exclusive LRS technology for platelets allows online process control for leukoreduction

At CaridianBCT, we engineered the Spectra system to cost-effectively provide high-quality leukoreduced platelet and plasma† products.

The flexibility of the system allows you to choose between therapeutic needs or transfusion medicine requirements. Precise procedure controls reduce costs and increase your productivity.

The Spectra system provides a clear advantage in quality and process control. With LRS platelets, you can easily confirm that a transfusable, prestorage leukoreduced product has been successfully collected.

And since the system can provide double platelet products (DPPs) from a single donor, you can efficiently collect two single-donor platelet transfusions during one apheresis procedure.

Connect to quality and safety

During our development and evolution of Spectra, we’ve always kept the comfort and safety of donors and patients a top priority. We worked hand-in-hand with customers like you to make sure the Spectra system provides the highest-quality blood product.

Better outcomes start here

Hospitals around the world use the Spectra system for the collection of high-quality blood products, collected efficiently and accurately.

Because the Spectra system lets you customize procedures to fit your needs, it gives you flexibility in cell therapy, therapeutic apheresis and transfusion medicine. You also benefit from customer support, from initial implementation to ongoing consultation.

At CaridianBCT, we stand ready to be your valued partner. And the Spectra system is a vital part in making our partnership with you a strong and lasting one.

†Study results show that residual white blood cell counts are consistently less than 1 x 10^6 WBC per plasma product. (Data on file, CaridianBCT).
Spectra Single Needle Return Flow Controller
expands collection and therapeutic application by storing and returning blood in single needle procedures. Cat # 951-000-000

Seal Safe System
combined with the thermal insulation sleeves on the COBE Spectra disposable sets, enhances operator safety by allowing the operator to both seal and cut the tubing. Cat # 957-000-000

Astotherm® Plus 220
provides increased donor and patient comfort during apheresis by warming blood and fluids. Cat # AP220NA

Spectra Desk or Shelf
add more utility to your Spectra system. The desk converts the centrifuge cover into an angled desk for reading and writing. Constructed of tough anodized aluminum, the desk is easy to secure and remove, with no screws or fastenings needed.

Or, choose a folding shelf which provides an additional lateral work surface. The shelf locks in position during use and can be folded down during transport. Cat # 955-400-000 (shelf) Cat # 959-100-000 (desk)

Spectra portability options provide maximum flexibility in your day to day operations.
• Portability cart • Quick release IV pole holder • Spectra cover
### Spectra Apheresis System

The Spectra Apheresis System is designed to enhance your therapeutic apheresis and collection process. It is the world leader in stem cell and platelet collections, leukapheresis, therapeutic plasma exchange and cytoreduction. The Spectra Apheresis System is an extremely versatile system that can meet all of your apheresis needs.

<table>
<thead>
<tr>
<th>Weight</th>
<th>1.6 kg (3.6 lb.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Dimensions</td>
<td>185 mm (7.3 inches) Width: 262 mm (10.3 inches) Depth: 46 mm (1.8 inches)</td>
</tr>
<tr>
<td>Ambient Operating Temperature</td>
<td>18°C to 27.5°C (64°F to 81°F) to maintain maximum blood temperature below 42°C (107°F)</td>
</tr>
<tr>
<td>Ambient Operating Humidity</td>
<td>8% to 80% RH, noncondensing</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>0°C to 60°C (32°F to 140°F)</td>
</tr>
<tr>
<td>Safety Certifications</td>
<td>CSA, C22.2 No. 125 IEC, 601.1</td>
</tr>
<tr>
<td>Line Voltage</td>
<td>110±15% Vac., 47 to 63 Hz 220±15% Vac., 47 to 63 Hz 240±15% Vac., 47 to 63 Hz</td>
</tr>
<tr>
<td>Input Line Current</td>
<td>4 A RMS at 115 Vac. 1.5 A RMS at 220/240 Vac.</td>
</tr>
<tr>
<td>Tubing Set Volume</td>
<td>42 ml</td>
</tr>
<tr>
<td>Safety Certifications</td>
<td>CSA, C22.2 No. 125 IEC, 601.1</td>
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### Astotherm Plus 220 Blood and Fluid Warmer

Astotherm Plus 220 blood and fluid warmer provides increased donor and patient comfort during apheresis. The Astotherm Plus 220 warms the blood and/or replacement fluid prior to return. Visible and audible signals assure safety both for the medical staff and patient or donor.

<table>
<thead>
<tr>
<th>Weight</th>
<th>2.9 kg (6.4 lb.)</th>
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<tbody>
<tr>
<td>Physical Dimensions</td>
<td>145 mm (5.7 inches) Width: 135 mm (5.3 inches) Depth: 295 mm (11.6 inches)</td>
</tr>
<tr>
<td>Line Voltage</td>
<td>115±15% -10% Vac., 47 to 63 Hz 220±15% Vac., 47 to 63 Hz 240±15% Vac., 47 to 63 Hz</td>
</tr>
<tr>
<td>Input Line Current</td>
<td>4 A RMS at 115 Vac. 1.5 A RMS at 220/240 Vac.</td>
</tr>
<tr>
<td>Tubing Set Volume</td>
<td>42 ml</td>
</tr>
<tr>
<td>Safety Certifications</td>
<td>UL-C Listed, CE0124 Splash-proof per IEC, 601-1</td>
</tr>
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### Seal Safe System

The Seal Safe System is a compact, portable unit that seals like a typical RF welder. In addition, the seal safe system cuts tubing when used with the thermal insulation sleeves on the COBE Spectra Apheresis System disposable tubing set. No more tearing, snapping or crimping the tubing. The Seal Safe System takes operator safety and convenience to a new level.

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<th>Weight</th>
<th>1.6 kg (3.6 lb.)</th>
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<td>Physical Dimensions</td>
<td>185 mm (7.3 inches) Width: 262 mm (10.3 inches) Depth: 46 mm (1.8 inches)</td>
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<td>Safety Certifications</td>
<td>CSA, C22.2 No. 125 IEC, 601.1</td>
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### Spectra Single Needle Return Flow Controller

Spectra Single Needle Return Flow Controller expands collection and therapeutic applications by storing and returning blood in a single needle procedure.

<table>
<thead>
<tr>
<th>Weight</th>
<th>3.4 kg (7.5 lb.)</th>
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</thead>
<tbody>
<tr>
<td>Physical Dimensions</td>
<td>238 mm (9.37 inches) Width: 194 mm (7.63 inches) Depth: 298 mm (11.75 inches)</td>
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