## What do experts think about us?

Abu Dhabi Stem Cells Center, UAE







Through these short conversations, we try to understand what our customers think about us. Today we are going to the United Arab Emirates to discuss with M. Andres Escobar (Biomedical Engineer at **Abu Dhabi Stem Cells Center - ADSCC**) about his activities at the first-of-its kind center in UAE. ADSCC is a specialist healthcare center focused on cell therapy and regenerative medicine techniques, as well as delivering cutting-edge research on stem cell therapy in the region.

The Center was founded in March 2019 to meet growing domestic and regional demand for highly specialized medical services and treatments. ADSCC is equipped with the latest technologies, medical devices which are unique to the region, and a team of internationally recognized doctors who work hand-in-hand with researchers. They are also currently using our Ultra-Low Freezers and our Blood Bank Refrigerators.

- **A. Could you please explain the daily activities of the ADSCC?** We are mainly focusing on pioneering research for clinical purposes related to stem cells, such as regenerative medicine, cell therapy, bone marrow transplant, and photoactivation, which is the procedure by which we aim to activate the cells from the patient with the instruments that we have. Our specialties include immunology, hematology, clinical stem cell therapy, molecular biology, immunotherapy, orthopedics, and urology. I am also in charge of all the plasma management. While part of it is used to manufacture medicines, the other is treated and sent back to Luxembourg to be used in transfusions. Furthermore, I am the contact point for the different stakeholders.
- **B. In which circumstances would you need cold storage?** All the time. Cold storage is needed for all our activities. We use some of the units to store medications and the samples obtained

## Ultra-Low Freezer

U 501

from the research that we develop. The units are also being used to store consumables and reagents. Everything that is being used to perform the procedures required during the research that we perform at the center goes through cold storage.

*C. Which products did you buy from B Medical Systems? For which purpose?* We already have some U501 ultra-low temperature freezers and B501 blood bank refrigerators, but we have also ordered nine additional units, eight BF261s and one U501.

The cold chain products are used depending on the procedure. We use them for storing biological specimens and patients' samples, cell extracts, consumables, reagents, blood components, bone marrow and more.

**D.** Which characteristics of our products do you like the most? Can you please talk about the performances of our units? We really appreciate the stability of the units and temperature uniformity. The temperature inside is very stable. These units are under very heavy-duty challenges every day. So, they must endure a lot of usage from the end-user like the opening of the doors frequently, changing the parameters, constant readings, etc. Sometimes, the units also have to endure power outages. We also have a lot of humidity. Despite all these, the unit works very well. I have an engineering background and I have never seen units work this well under such heavy-duty conditions.

An important thing for the cold chain, refrigerators, or ultra-low freezer is the ability to maintain temperature and how can they recover if I open the door or if I switch them off and switch them back on. These performance factors are very good for the B Medical Systems units. The systems can recover very quickly. Let's say the temperature went up by 8-9°C during the door opening. The temperature goes down to set point in 15mins. It's a very good recovery. We map the temperature using 9 sensors inside the unit. The variation is less than 1°C which is very remarkable considering that we are measuring 9 different points. They can hold the temperature for some time if there is a power outage. The insulation and sealing of the units are very strong so that they can very hold the temperature for quite some time until we have fixed the electrical issue.



**E.** How are you using B Medical Systems' products and how do they benefit your institution? We use them every day to store research samples, blood bags, small tubes, vials, etc. We are benefitting very much from the reliability of these units. The temperature uniformity, door opening, recovery, hold over time, everything. We have never faced any sample integrity issues due to variations in the temperature inside the units, and we use these units heavily on a day-to-day basis. It is a top-of-the-line system. They are very strong, and we are very happy.

## F. Have you found in B Medical Systems a trustworthy partner? Yes, very much.



Blood Bank Refrigerator

B 501

- **G. How did you learn about B Medical Systems?** I came to know about B Medical Systems through your supplier.
- **H. How long have you been a B Medical Systems' customer?** Since December 2019. That is when we received the first shipment for the units, after which we had some time to test the products and to check their quality and all this kind of stuff from our side. And we decided to continue with the brand based on the performances of the units. If that was not the case, we would have otherwise already changed supplier by now.
- *I. Are you satisfied with the equipment?* Yes of course, we are very happy with the units. That is why we have ordered even more of them!
- J. Would you recommend B Medical Systems? I would.

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