

Please "Respect" Every Vial of Vaccine!

As of now, monkeypox has been reported in more than 80 countries around the world, with more than 24,000 confirmed cases. The World Health Organization has warned that a vaccine could be the key to contain the outbreak. Since then, there have been long queues of people at monkeypox vaccination centers across the US to be vaccinated with the monkeypox vaccine. Some people started queuing up in early hours of the morning to be vaccinated as soon as the vaccine became available.



However, according to French media reports on August 9, the cold chain within the Edison monkeypox vaccination center in the 13th district of Paris was interrupted in earlier August, forcing people who received monkeypox vaccines during the interruption period to be vaccinated again. This is because these precious vaccines may have failed due to improper cold chain management.

From production to transportation, vaccines should be refrigerated or frozen all the time before being inoculated into patients, and any temperature fluctuations or an interruption in the cold chain may affect their effectiveness. If so, how could we detect such interruptions or failures in time, and could we get notification to avoid such vaccine losses?

This question could be perfectly solved by Haier Biomedical RTMD device. Compatible with most existing equipment, this device achieves remote monitoring of high and low temperature, door opening and closing function to name a few. Additionally, it can also record and detect automatically, send real-time alarms, and deliver intelligent management to ensure vaccine safety.



As the World Health Organization spokeswoman Margaret Harris pointed out, we can only ensure vaccines are safe and effective in containing the monkeypox outbreak. This means that we should focus our attention on cold chain management.

As a global manufacturer and supplier of complete cold chain solutions, Haier Biomedical has developed a comprehensive vaccine solution. This solution could ensure that the vaccine is always refrigerated and or frozen if required in specialized equipment throughout the entire process from manufacture, storage, transportation, monitoring to the final inoculation of vaccines to ensure they are effective and safe.



During this global pandemic, every vial of vaccine should be "respected". Haier Biomedical's complete vaccine solution ensures vaccine safety in all aspects, representing Haier's contribution to the global immunization effort.

How is Umbilical Cord Blood Stored?

You must have heard of cord blood, but what do you really know about it?

Cord blood is the blood that remains in the placenta and umbilical cord after the birth of your baby. It contains some hematopoietic stem cells (HSCs), a group of self-renewing and self-differentiating cells that can grow into various mature blood cells.



When cord blood is transplanted into patients, the hematopoietic stem cells contained in it differentiates into new, healthy blood cells and rebuilds the patient's hematopoietic system. Such precious hematopoietic stem cells, if properly stored, can be used to cure some troublesome blood, metabolic and immune diseases, such as leukemia and lymphoma.

U.S. researchers announced on April 15 that scientists appeared to have successfully cured a mixed-race woman infected with acquired human immunodeficiency virus (HIV) using umbilical cord blood. Now the virus could not be detected in the body of the woman, who thus become the third patient and the first female in the world to recover from HIV.



There are about 40,000 clinical cases in which cord blood is used around the world. This means that cord blood has been extending help to many families.

However, cord blood is not available for immediate use, and almost all cord blood is stored in cord blood banks in major cities. A major proportion of the blood lose its original function due to improper storage and contamination and are therefore discarded before it is used for medical treatment.

Umbilical cord blood needs to be stored in liquid nitrogen at -196 degrees Celsius to ensure that cell activity is not compromised, and the cell thus remains effective when used for medical purposes. This means that cord blood should be stored in liquid nitrogen tanks.

The safety of the liquid nitrogen tank is central to the effectiveness of the umbilical cord blood as it determines whether the -196°C low temperature environment can be maintained. The Haier Biomedical Biobank series are safe to store umbilical cord blood and consistently provides a stable environment for storing hematopoietic stem cells.



Its vapor-phase storage prevents cross-contamination, protecting the effectiveness and safety of cord blood; its excellent temperature uniformity provides a stable storage environment at a temperature of -196°C. Its splash-proof function offers a safer guarantee for the operation process, thus comprehensively ensuring the safety and effectiveness of umbilical cord blood.

As liquid nitrogen tanks are applied in more and more fields, Haier Biomedical has launched a one-stop and full-volume liquid nitrogen tank storage solution for all scenarios. Different liquid nitrogen tanks are matched with different scenarios according to your needs, thus saving more time and offering more convenience.

A Vision Behind Plasma Separators

Starting in April, young children with mysterious cases of acute liver inflammation began to attract scientific and media attention in the United Kingdom and elsewhere around the world. Most would recover, some after liver transplants, however, loss of life sadly did occur.



Physicians could find no evidence in the children of viruses that typically cause hepatitis, but researchers homed in on an unexpected suspect: adenovirus, a family of cold-causing viruses common in kids. Unfortunately, we are unable to cure these children with the virus.

There is a modern plasma separator designed to separate different blood components according to their densities and viscosities. Plasmapheresis is a medical procedure in which blood is extracted, and then returned into human body after plasma is separated from blood cells.



This technology has set some experts thinking: is it possible that a future medical device could be used to "separate" and "replace" viruses and thus remove pathogenic substances and cure diseases as a plasma separator does?

This conjecture may become a permanent research theme in life science in the future. We believe such a device will be made available soon. Now we need to focus our attention on Haier Biomedical's plasma separator, a mature product that has already been put into application.



What lies at the heart of the Haier Biomedical plasma separator is "plasmapheresis", which is mainly used in two scenarios:

- Plasmapheresis Center. The plasmapheresis center is intended to separate apheresis plasma to be used as an albumin-like raw material.

- Medical treatment. For example, a plasma separator can be employed to collect apheresis plasma from patients recovering from coronavirus. Such plasma contains antibody that can be used for patients with autoimmune diseases.

In addition, the Haier Biomedical plasma separator has been upgraded on the basis of traditional plasma separators. It uses intelligent interconnection methods to ensure that the separation process is completely traceable, thus improving the safety and security for the donor in the following ways:

- The data and identity protection system collects information regarding ID cards, faces, fingerprints, and bar codes to ensure that reformation about the donor and recipient is correct.

- Data can be automatically processed, saving precious time, and reducing pressure for medical staff.

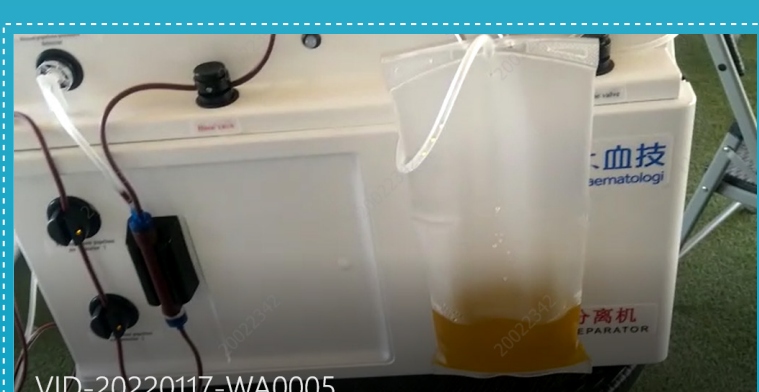
- The separator will emit an alarm sound and corresponding text prompt in case of any mishandling of anticoagulant. If this occurs, the system is unable to carry out the next operation, thus avoiding any accident that endangers the safety of the plasma donor.

- The comprehensive monitoring surveillance system monitors the plasma collection process in an all-directional multi-angle way.

Haier Biomedical's Plasma Separator Safeguards Blood Safety!

As one of the supporting equipment to produce medical and biological products, the plasma separator plays an important role in plasma collection and separation in plasma stations and hospitals.

Since the acquisition of Chongqing Sandaweiyi, Haier Biomedical has further explored market resources both at home and abroad, upgraded the ecological layout of blood safety, and improved the ability to serve user scenarios. In 2022, Haier Biomedical won the first plasma separator order in Nigeria, followed by another one in Tanzania.



With professional technology and reliable product quality, Haier Biomedical has successfully opened the African market and won the trust of stakeholders and partners, taking blood solutions to a higher level. Haier Biomedical will continue to expand industrial channels to deliver more innovative and new products to the world.

