

# THE IMPORTANCE OF PLASMA AS A “LIFE-SAVING” DRUG

## The Nexus EVO MD line for the safe storage of your plasma

Plasma is used to produce, through industrial separation and fractionation processes, plasma-derived medicines, some of which represent real “life-saving” drugs for many pathologies such as immunodeficiencies or neuropathies.

The main plasma derivative is represented by immunoglobulins, antibodies purified from plasma, essential to keep alive patients suffering from primary immunodeficiencies, a group of more than 250 pathologies in which the immune system loses, totally or partially, its functionality, failing to produce antibodies.

Immunoglobulins are used in many other diseases such as severe forms of neuropathy disabling. Thanks to immunoglobulins these patients can walk again and have a normal life.

Other important plasma derivatives are **albumin**, a plasma protein produced by liver cells administered due to failure of the patient’s body to produce antithrombin, a glycoprotein that acts on the coagulation of the patient’s blood. Then there are factors VII and VIII, the latter used in rare diseases called hemophilia A, factor IV, used in hemophilia B type, XIII, and many others. There are many fields of use of blood products and all of these need regular donations.

Because hyperimmune or enriched plasma units can be frozen before distribution, the connection between hospitals, blood centers, and the plasma industry must follow impeccable strategies. Only with **low temperatures**, we can slow down the effects of the chemical-physical reactions that degrade the biological substance.

### NEXUS EVO MD LINE

Working temperature:  $-40^{\circ}\text{C}$  e  $-80^{\circ}$



Nexus EVO MD Vertical version



Nexus EVO MD Horizontal version

Angelantoni Life Science can offer useful solutions to overcome the problem of conservation and provide a line of Class IIa Medical Device-certified devices, according to **Directive 93/42**.

The Plasma must be **frozen** to adequately preserve the labile factors it contains, such as factor VIII, essential for the clotting process.

This step is subject to **EU Recommendation R (95) 15**, which requires us to reach **-30°C** at center of the bag in less than 60 minutes.

The need to obtain as much data to validate the process results in sampling cycles and increasingly massive analyses, therefore the inevitable collection of an increasing number of samples.

All samples must be stored temporarily, precisely because of the problems mentioned previously. The storage temperature of the processed plasma is **-40°C** which allows the stability of the product without alter its biological qualities for a medium/long storage period.



**BIOGUARD:**  
Maximum security  
in the access

**Rack version**

**Drawers version**

## **NexusSlim 810 EVO**

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