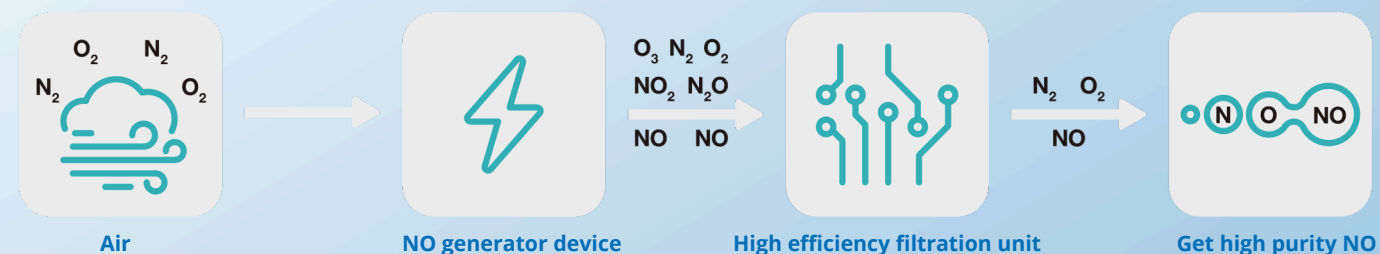


VNG Medical Innovation- Nitric Oxide



VNG iNO therapy device using air as the source and adopting innovative technology of high-voltage electric shock to instantly obtain the required high-purity NO gas. Featured with small size, light weight and mobile stand equipped, our device is portable and easy to move. Comparing to traditional cylinder No gas, ours new technology truly solve clinical pain points and difficulties, letting people carefreely breath.

Advantages of VNG iNO Therapy Device

Instantly access

Using air as the gas source, obtain required concentration of NO gas through "high-voltage discharge" anytime and anywhere.

Intelligent measurement and control

Real-time monitor the NO/NO₂ concentration in case it exceeds the safe value. Flexible setting the treatment time and concentration.

User friendly design and work flow

12.1-inch full touch screen, graphical user interface, and clear operating instructions.

Safer to use

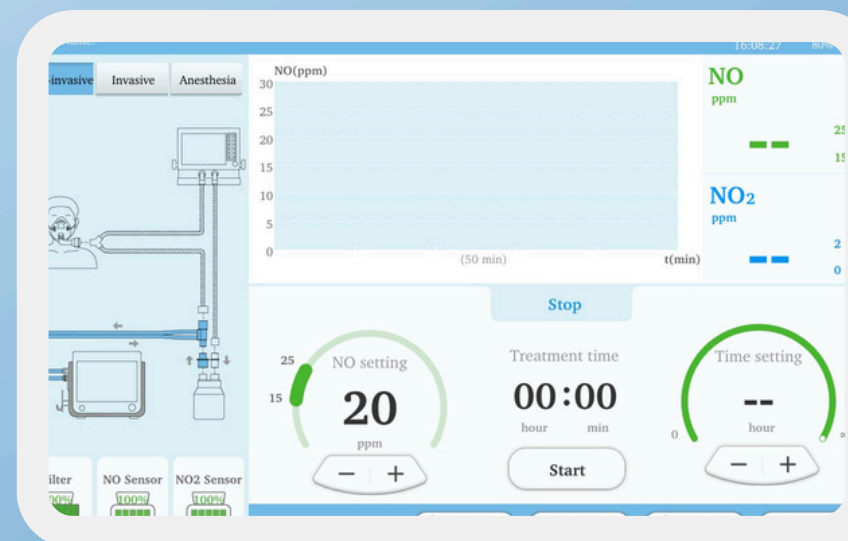
The built-in HEPA filter removes particulate matter and NO_x, instantly delivering high purity NO.

Low cost

Without high-value consumables for high frequency replacement, it is conducive to the popularization of clinical treatment and beneficial to patients.

**INSTANT ACCESS
CAREFREELY BREATHE**

iNO Nitric Oxide Therapy Device iNO Smart+



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Nobel Prize for the Discovery of Nitric Oxide as a Transient Cellular Signal

In 1998, Robert F. Furchgott, Louis J. Ignarro and Ferid Murad discovered that nitric oxide can dilate blood vessels. This significant discovery earned the three medical scientists the Nobel Prize in Medicine.

The discovery of NO as a signaling molecule in the cardiovascular system not only explains the mechanism of action of the classic medicine nitroglycerin, but also opens up new paths for the diagnosis and treatment of various diseases. This discovery has lift some medicine research up to a new era.



Robert Fuchgot



Luis Ignaro



Ferid Murad

Physiological Effects of Nitric Oxide

01

Promote the outflow of calcium ions and dilate vascular smooth muscles, thereby reducing non-internal and external shunts

02

Improve ventilation-blood flow ratio and quickly correct hypoxemia

03

Reduce pulmonary vascular resistance and pulmonary artery pressure, and increase blood oxygen saturation

04

The biological half-life of NO is only 3-5 seconds, so it only affects the pulmonary circulation and does not affect the systemic circulation.

Clinical Application

01



Persistent Pulmonary Hypertension Of The Newborn(PPHN)

02



Acute Respiratory Distress Syndrome(ARDS) /Acute Lung Injury(ALI)

03



Secondary to chronic obstructive pulmonary disease (COPD) (PPHN)

04



Acute Vascular Reaction Test (AVT)

05



Pulmonary Arterial Hypertension(PAH)

06



Pulmonary Hypertension After cardiac surgery

Industrial Status



Difficult to obtain

Medical grade NO gas is difficult to obtain, transport, store and replace.



Costly to use

Clinical treatments requiring large NO inhalation, which make the comprehensive cost very high.



Insecure purity

Most NO cylinder gases are of industrial grade which usually have impurities since high-concentration NO can easily react with the O₂ of the ventilator to produce NO₂ that is harmful to the human body.



Difficult to use

The size and weight of the NO cylinder gas is too large to install and move, and it's difficult to use for operator unless be trained.

Technology Development

Cylinder Gas Supply



- Gas production and transportation was restricted
- Frequently replacement
- Dangerous and expensive

Electrochemical catalysis



- Requiring additional high-pressure air
- Need consumables, high cost for long-term use
- Having chemical waste, not eco-friendly

Airborne High Voltage Electrocutation



- The most advanced mainstream technology
- Air is the source, zero use cost
- Safe and reliable, plug to use immediately