

The First line of “Defence”:

“Breathe Free” — a non invasive solution to provide symptomatic relief from “COVID 19”



A Product By **DIV/LABS**

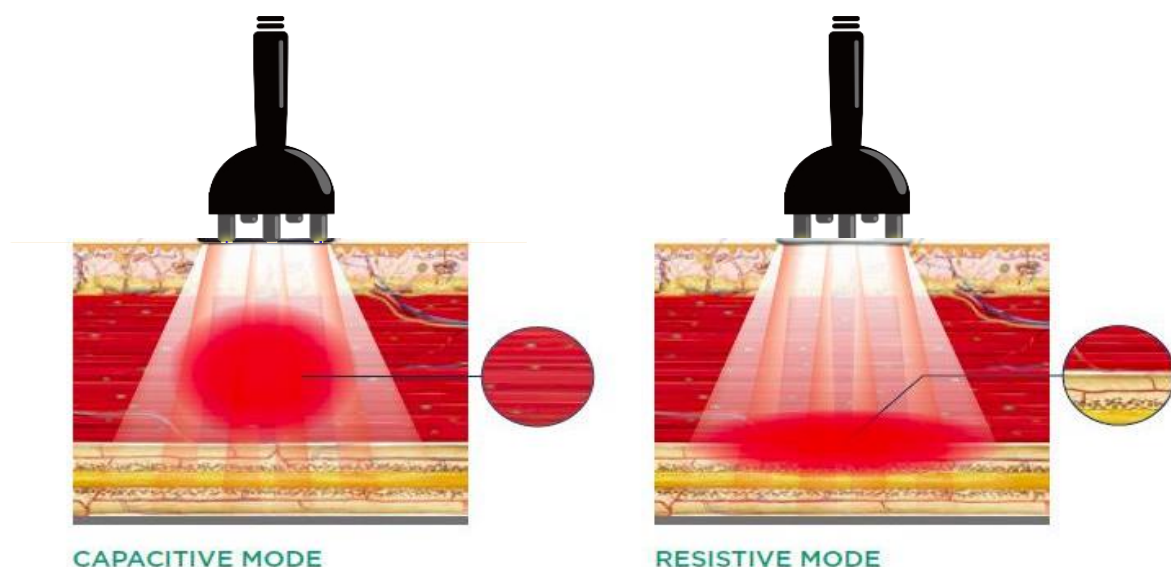
INTRODUCTION

Divlabs “BREATHE FREE” Radiofrequency Therapy System distributes high frequency thermal energy into the desired area of the lungs which leads to selective muscular hyperthermia.

Thanks to this mechanism patients who are infected by different viral infection **including COVID 19** experience instant symptomatic relief, reduced nerve irritation, reduction of the inflammation of the air sacs and inflammatory material and reduced chance of developing pneumonia . This modality can be effectively used as the first line of defence before the patient actually reaches to a level to be put on the ventilator.

The use of this modality would ease the patient load and can cut down the need of the ventilators by 30-40%.

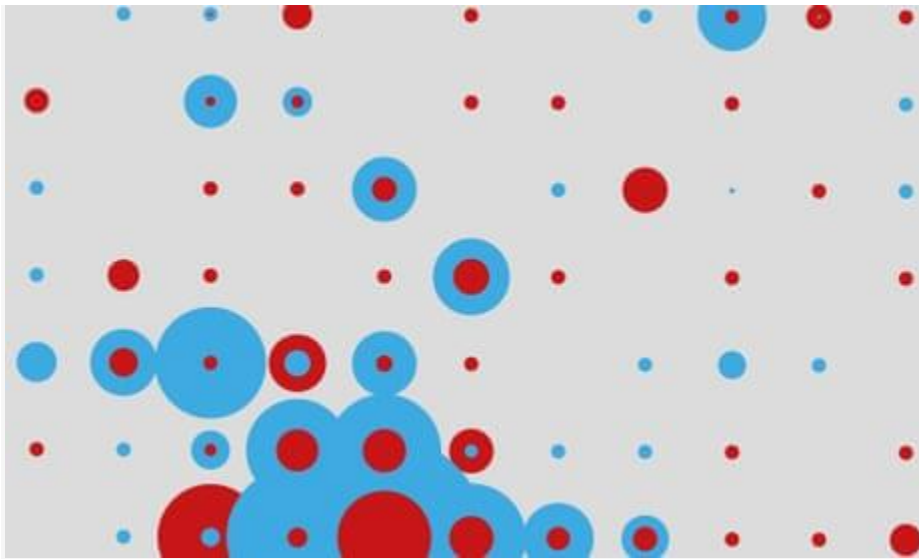
Modality - The 3D RF Radiofrequency Therapy provides precise and effective treatment at different layers of the muscles in the lungs effected by bronchitis, asthma and different viral infections. The fractional mode focuses the therapy into superficial **muscle** layers. The continuous mode targets tissue with higher impedance for deeper muscular insertions.



Effect of COVID-19

When people with Covid-19 develop a cough and fever, this is a result of the infection reaching the respiratory tree – the air passages that conduct air between the lungs and the outside.

The lining of the respiratory tree becomes injured, causing inflammation. This in turn irritates the nerves in the lining of the airway. Just a speck of dust can stimulate a cough.



But if this gets worse, it goes past just the lining of the airway and goes to the gas exchange units, which are at the end of the air passages.

If they become infected they respond by pouring out inflammatory material into the air sacs that are at the bottom of the lungs.

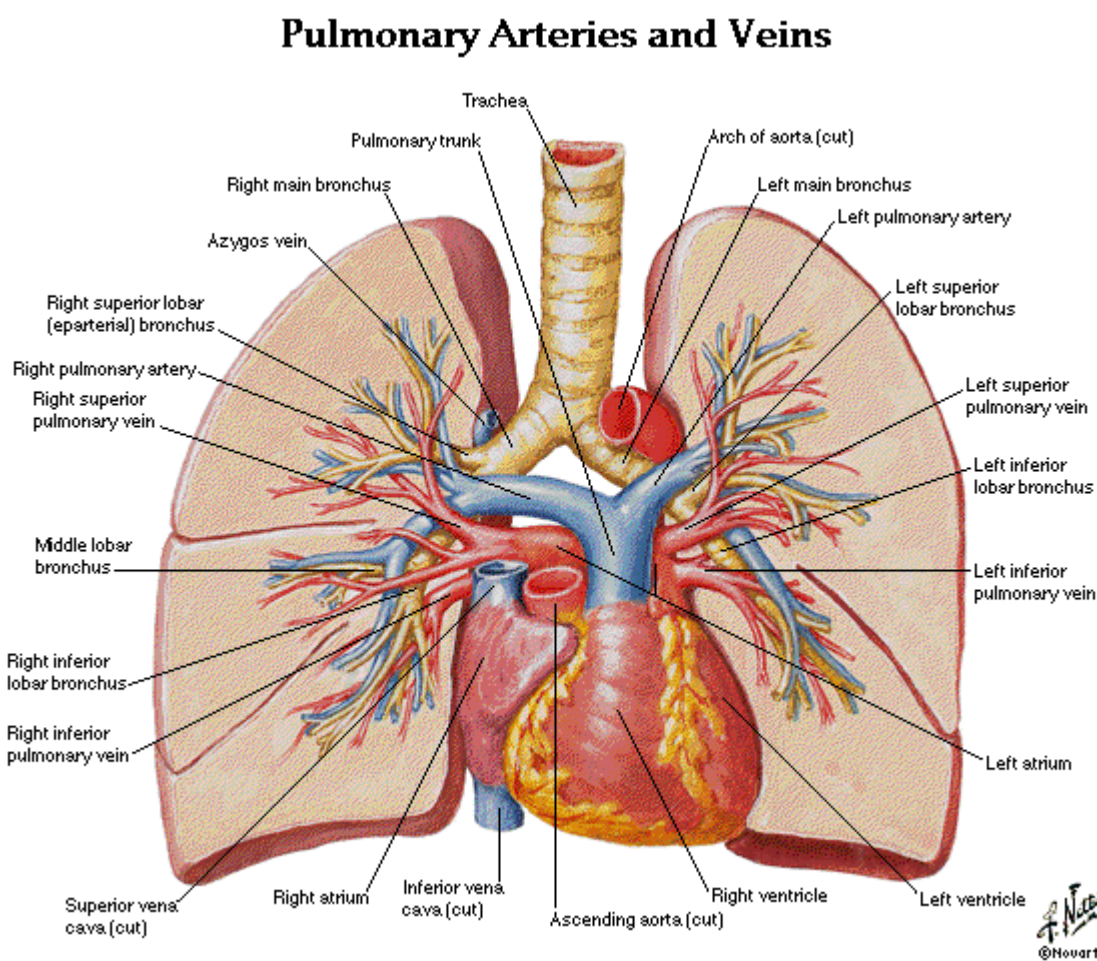
If the air sacs then become inflamed, it causes an “outpouring of inflammatory material [fluid and inflammatory cells] into the lungs and ends up with pneumonia.

The lungs that become filled with inflammatory material are unable to get enough oxygen to the bloodstream, reducing the body’s ability to take on oxygen and get rid of carbon dioxide.

“That’s the usual cause of death with severe pneumonia”.

Benefits of 3D RF “Breath Free” system

NERVE & MUSCLE RELAXATION - The precise and aimed effect of the Targeted Radiofrequency Therapy on the hypertonic muscle fibres & nerves causes their immediate relaxation thus reducing the inflammation . The effect of myorelaxation is primarily based on vasodilation, which occur immediately during the therapy and is responsible for higher supply of nutrients into the tissue and effect of “Phrenic Nerve” relaxation is due reinnervation properties of the oscillating high frequency RF waves.



REDUCTION OF THE INFLAMMATION OF THE AIR SACS

The improvement of tissue metabolism is a natural and valuable secondary outcome of the RF therapy. It leads to reducing the inflammation of the air sacs .

REDUCTION OF INFLAMMATORY MATERIAL

The walls of the arterioles are enlarged and the precapillary sphincters relaxed, allowing increased local blood perfusion. This leads to an increase of the lymphatic processes (drainage) and subsequently causes reduction of the pulmonary oedema and inflammatory material in the lungs thus reducing the chance of developing the pneumonia.

SYPTOMAIC RELIEF

The principal effect of the Targeted Radiofrequency Therapy—results in reduced airway nerve irritation, causes muscle relaxation, reducing the inflammation of the air sacs, oedema and inflammatory material , increasing the body's ability to take in the oxygen and get rid of carbon dioxide and **reducing the chances of severe pneumonia**



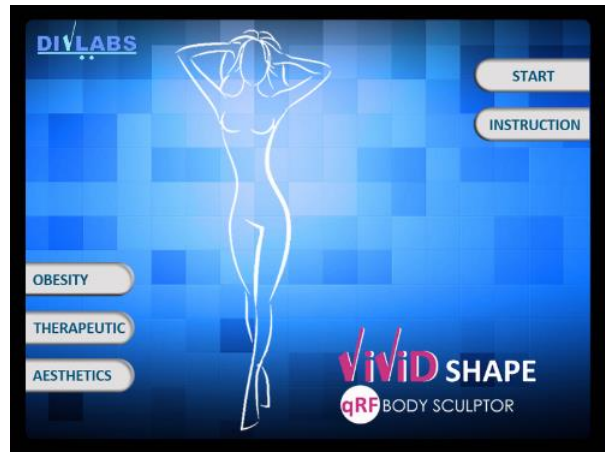
IMPORTANT PRECAUTIONS

When using medical equipment, basic safety precautions should always be followed, including the following:

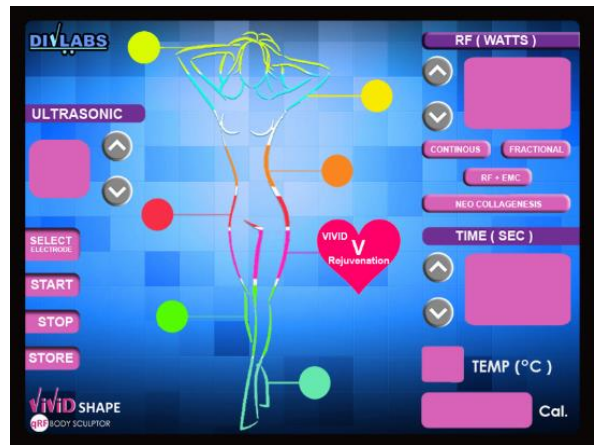
- Kindly read through the instructions before using this equipment and keep this booklet in a safe place.
- Connect the machine only to an earthed mains safety socket. The voltage on the machine rating plate must correspond with that of your mains.
- To protect against risk of electrical shock, do not immerse the cord, plug or electrodes in water or any other liquids.
- Do not let the cords or electrodes hanging over the edge of the table or touch hot surfaces.
- Never leave the machine unattended when in use.
- Close supervision is necessary when being used.
- The machine should be operated in a cool moisture free environment.
- The electrode cable should be fastened properly.
- Do not operate the machine with a damaged cord or electrode. In case it is dropped or damaged in any manner get it repaired or use a new one.
- The touch screen should be handled with care, and kept away from moisture.
- Unplug the machine when not in use, before taking off or plugging in the electrodes.
- The machine should be operated by trained therapists only.

“Follow Following Steps to switch on the RF delivery”

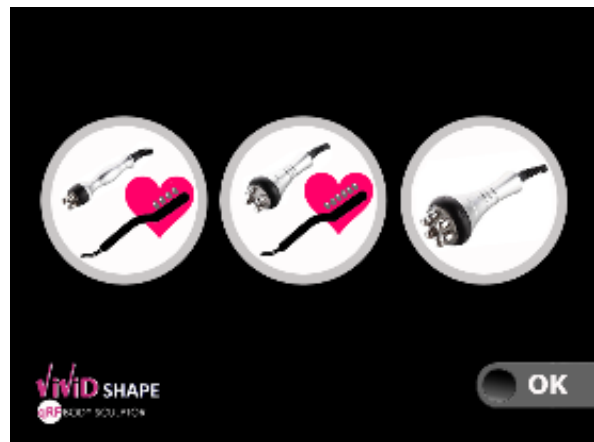
- Switch on the machine
- Select THERAPEUTIC
- Select Start



- Click on select electrode



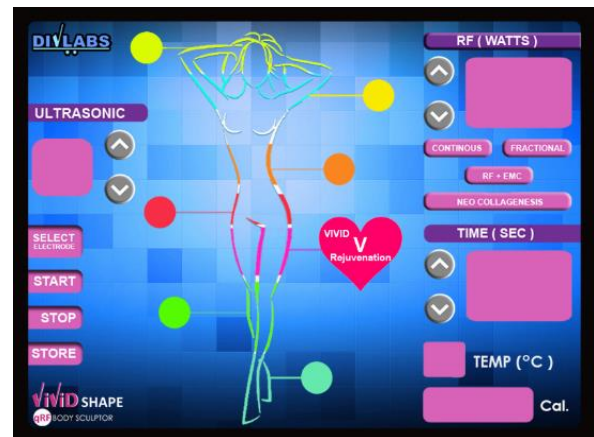
- Select Electrode to be used



- Select the body part for therapy
- Select Continuous- RF (Watts)
- Press Store

Maintain firm contact with the Skin surface

- PRESS “START”



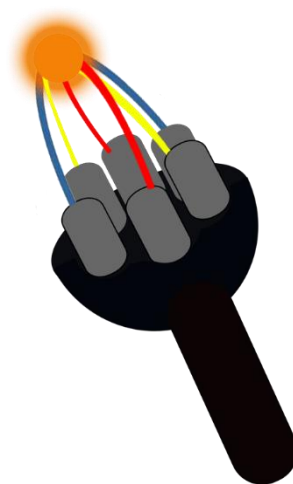
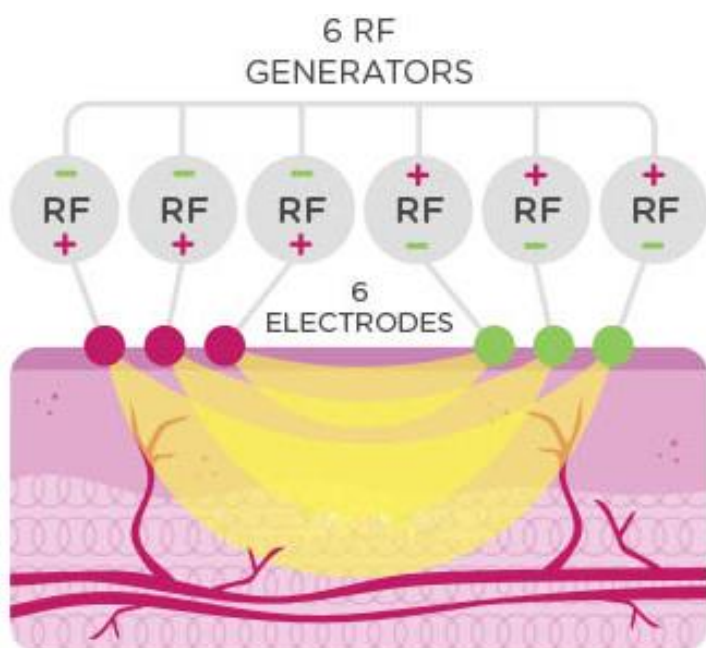
Treatment Protocol of 3D RF “Breath Free” system

- Proper Patient counseling is Required
- Patient preparation
- Depending on the area being treated (Neck and thoracic (Front or back) of the chest) a “treatment grid” should be drawn over the treatment area to assist the therapist in navigating whilst delivering the RF energy; helping to assure an even application of the RF.
- Apply a lubricating gel over the area to be treated which acts as an additional barrier between the surface layers of your skin and the handpiece of the device, mainly to avoid skin chafing.
- Maintain a firm contact of the electrode with the skin surface and switch on the RF delivery
- The electrode is continuously moved in circular motions or forming an 8 shape.
- Around 3 sets of 300 seconds each are delivered to the marked area, with slow and continuous movement of the electrode.
- Patient’s comfort/tolerance level to be questioned time to time and stop the RF delivery if patient is uncomfortable. Reduce the set RF watts by 20 and resume the therapy.
- Repeat the circular movements in each cycle after pressing OK then START
- Total energy delivery time :15 minutes over the Target Area
- The duration of the therapy may vary depending on the area and the extent of respiratory disorder.
- Once completed the affected area should be gently massaged in circular motions.

MECHANISM OF “3D RF Technology”



RF(Radio Frequency) Energy has an inherent property of heating a biological tissue and because of high frequency (0.5-2 MHz) its effect on the biological tissue is thermal and not electrical. “3D RF” technology creates a “Hot spot” at a focussed area. It is an array of 6 indifferent electrodes creating a multi level therapeutic field due to mechanical movement around the target area and the temperature is controlled by the impedance feedback mechanism.



ADVANTAGES

- Treatments can be done much like a soothing massage so no extensive training or specialised medical professionals are required.
- The deep heat feels wonderful on most patients and delivers placebo effect as well.
- It's a 100% non invasive procedure and many patients can self use it on themselves thus reducing the risk of infection to medical staff.
- Development is under way to treat 4-5 patients from one equipment.
- Reduces the burden on extensive medical facilities like ICU, Ventilators and trained medical staff.
- RF delivery electrodes are economical, reusable and are easily sterilizable.
- As the technology is 100% indigenous and is made from locally available spare parts so the whole equipment cost is quite economical and is easier to produce in big quantity.
- Corona is not here to go so easily so this tech can be commercialised easily as this product shall become a household commodity in the times to come like home appliances.

DIVLABS HEALTHCARE PVT. LTD.

Innovation that leads to success

Corporate Identity No.-
U33112DL2012PTC231943

GST no.07AAECD1377L1ZG

An ISO 13485:2016 company

European CE Certified products

"ZED" certified by Govt. of India

Plot no.17, 1st Floor, Togan Pura Sec.-9, Dwarka
New Delhi -110077 INDIA
Tel: 9811259555

E-mail: ceo.divlabs@gmail.com

URL : www.divlabsindia.com