# **SPRING 2020**



# Welcome to our Spring newsletter

Welcome to our Spring 2020 Newsletter. These are difficult and strange times, as we fight the terrible Coronavirus. Our family are into the 6th week of being in lock-down, with no end in sight. Thankfully we are all in good health, and remaining reasonably sane !

In this edition, we bring you 17 more stories and quotes from SoeMac Users, in their words. We also bring an interesting article from a recent edition of the LA Times and a project we are working on in connection with Covid-19. Sam Grimwood at the University of Derby is conducting research with COPD sufferers, and there is a link for you all to participate in his survey.

In July 2017, SoeMac was registered as a Medical Device, Class I. In October 2019, the industry regulator, the MHRA, told us that we couldn't call SoeMac a medical device until we had sufficient clinical evidence, and couldn't refer to the SoeMac helping with peoples' medical conditions. Working with the University of Derby, and Nottingham University Hospitals, and with funding from the medical institutions, Medilink, and the AHSN, we are ready to run our Clinical Study, but Coronavirus has halted this. So we must remain patient, and wait, and not use any medical terminology in relation to SoeMac.

Neil Stentiford

# **Dr Tadros**



Dr Tadros presenting to 200 Respiratory professionals at the Alexandria Thoracic Association (ASA) in November 2019

In the past six months, I have twice visited Dr Tadros in Egypt. He is an amazing man, and is doing research with the SoeMac and many of his patients.

His focus is with Respiratory sufferers, and with Chronic Wounds, for example Diabetic Foot Ulcers. Initial results are very promising.

# **Research Survey**



Sam Grimwood at the University of Derby is seeking volunteers to complete his survey on COPD sufferers.

He is doing two surveys, the first for COPD sufferers, and the second for Carers. Everyone can join in.

You'll need to access it on your computer, tablet or phone at this link **https://tinyurl.com/yd5radbe** It will take approximately 20 minutes, so make a cup of tea before you start. At the end of it, you can enter a free draw to win one of 10 Amazon vouchers, as a thankyou for helping with Sam's PhD research. You can email him any questions at **s.grimwood@derby.ac.uk** 

# How a discovery that brought us Viagra could help those battling the coronavirus – Melissa Healy, LA Times – 5th April 2020

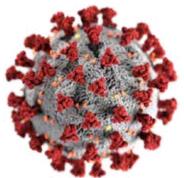
# Los Angeles Times

Inhaled nitric oxide appeared to kill the coronavirus that caused severe acute respiratory syndrome, or SARS, and it might work on COVID-19 as well. Nitric oxide is a gas with a pretty enviable medical resume. Its discovery gave rise to a treatment that snatches thousands of 'blue babies' – newborns starved of oxygen by a heart defect – from the jaws of death every year. Later, research into the gas's knack for relaxing blood vessels led to the development of the world's best-known little blue pill – the erectile dysfunction drug Viagra.

In 1992, the journal Science named nitric oxide 'molecule of the year'. And in 1998, UCLA pharmacologist Louis J. Ignarro shared a Nobel Prize in medicine for uncovering nitric oxide's role as a 'signaling molecule in the cardiovascular system'. Nitric oxide may not be done yet. The colorless, odorless gas, inhaled through a mask or even from a small 'flute', is now being tested as an experimental treatment for COVID-19. It may also prove helpful in protecting healthcare workers on the front line of the pandemic from getting sick.

At hospitals in Boston, Alabama, Louisiana, Sweden and Austria, researchers have launched a clinical trial to test inhaled nitric oxide in patients with mild to moderate cases of COVID-19. The trial will test whether the gas can drive down the number of patients who end up needing breathing assistance from a mechanical ventilator, a piece of equipment that's in critically short supply. For about 30 minutes

two or three times a day, study participants assigned to the trial's active arm will inhale a high dose of nitric oxide through a mask. A control group will go without the gas.





In Italy, where the gas was used under more haphazard conditions, the treatment appeared to dramatically boost oxygen levels in the blood of COVID-19 patients, said Dr. Lorenzo Berra, the critical-care specialist

at Massachusetts General Hospital who is leading the new trial. But it'll take more rigorous testing to clarify how much nitric oxide helps, he said. A proposed second trial, still under scrutiny by a research panel at Massachusetts General Hospital, would enroll healthcare workers who are routinely exposed to patients with COVID-19 and are themselves at high risk of infection. For 10 to 15 minutes at the start and end of every shift, doctors and nurses would tug on a handheld device and inhale a high dose of nitric oxide.

In humans, nitric oxide is naturally generated by 60 trillion cells that line our blood vessels, and by some brain cells as well. It helps regulate blood pressure, engulfs invading toxins, prevents platelets in the blood from forming clots, and signals that food has arrived. But sometimes, a supplemental supply is needed.

When inflammation, emphysema or a disease attacks the lungs, the large blood vessels and tiny capillaries that deliver oxygen constrict. Inhaled nitric oxide relaxes those vessels, increasing the transfer of oxygen to the blood and easing the heart's workload.

In 2004, researchers at the University of Leuven in Belgium discovered yet another property of nitric oxide: it killed coronaviruses. More specifically, it killed the coronavirus that leapt from bats to humans and sparked the 2003 epidemic of severe acute respiratory syndrome, the disease better known as SARS. In African green monkey cells that had been infected with the SARS coronavirus, an organic nitric oxide compound cut the virus's ability to replicate in half. A year later, Swedish scientists confirmed the finding and found that the higher the dose, the better the gas worked to shut the SARS virus down.

"The story ended there," Berra said. The SARS epidemic was quashed in eight months, and "nobody tested anymore". But Berra didn't forget that if a new coronavirus ever started targeting people's lungs, he had a gas on hand that might treat the resulting disease on two fronts – by strengthening the lungs under attack and blocking the virus' ability to sustain its assault.

This winter, as he watched the new coronavirus known as SARS-CoV-2 spread across the globe, Berra dusted off those studies, talked to the companies that supplied nitric oxide in tanks, and readied his plan. A total of 240 subjects are expected to enroll in the trial of patients with mild to moderate cases of COVID-19. The follow-on study of healthcare workers aims to include 470 people. When used at high levels, as is planned in the trials proposed by Berra, the gas will require close monitoring of hemoglobin levels to avert the development of methemoglobinemia, a condition in which red blood cells fail to bond to oxygen. In such cases, Berra said, the dose can be lowered and hemoglobin will quickly revert to normal.

# **Hot News**

We have just applied for an Innovate UK grant to fund a Study with Nottingham University Hospitals to assess whether SoeMac helps patients' recovery having been discharged from hospital, following Covid19.

Evidence suggest that the recovery process is difficult, with people experiencing breathlessness, low blood oxygen levels, fatigue, cognitive or psychological issues, and severe physical deconditioning.

In theory SoeMac can help with many of these, and aid recovery, and we hope to run the Study to investigate these possibilities in detail.

We believe SoeMac helps the body produce endogenous NO, and there are scientific papers to support this theory. The next step is to demonstrate this.

# Your stories

# Andrea – Macular Degeneration

I am writing to you as today something amazing happened. My mom who has a detached retina in one eye and wet macular degeneration in the other, is just back from the hospital, and the eye doctor said that something of a miracle happened. Basically her retina was reattached and the wet macular degeneration was improved so much that no more intraocular injection are necessary. To be honest with you, I am not sure if this is solely the effect of your two machines, which she started using a little bit more than a month ago, but anyway it is amazing.

# MS – Sleep

I have started using the SoeMac. I am happy with the experience – I enjoy sleeping. Maybe it is psychological, I do not know. It is really interesting.

# **Roger – Breathing**

I have serious breathing issues, and was finding night times difficult. The SoeMac device has brought me greatly improved peaceful nights and I take it on holiday with me. Definitely worth the investment.

# P – Sleep

My 65 year old friend has suffered with a blocked nose for many years, but now she is able to breathe smoothly at night.

# **Thomas – Breathing**

After just two days I see a noticeable difference. This unit is fantastic I plan on telling many others about this product, it is expensive, but results appear to be fantastic.

#### Yvonne's Dad – Breathing

This has really made a big difference for my dad and aided him a lot with his breathing.

#### **Rosemary – Breathing**

I bought this for my daughter who has the most awful chest infections. We keep it running all day, and it has made a huge difference to her x

#### Barbara – Breathing

Barbara called me for a chat. What's amazing is the improvement she has made in the past month. She was getting ready for a lung reduction operation, which is majorly serious. Anyway, when she saw her Consultant this week, he was astonished at her progress, and said she no longer needs the operation. She told me he seemed genuine and asked her all about what she'd been doing. Barbara told him all about the SoeMac, and he said "what's that – never heard of it ".

# TJ – Sleep

I live a very busy life as I am a business owner and my work is very demanding, hence the quality of sleep is so important for me. Since I got SoeMac, I feel a huge difference in the quality of my sleep, it is so much better; I no longer take a long time to fall asleep (even after a very demanding day) and I feel so much more refreshed when I wake up, and the energy level is great during the day also. I now travel with SoeMac everywhere I go.

# **Debbie – Breathing**

Here is my Little Mac as I call my invaluable SoeMac. I have very bad breathing, and Little Mac helps ease this immensely. Also, it calms me and gives me a good night's sleep. Just a wonderful machine. Please service and send back to me soon, as it will be greatly missed.

# Margaret – Breathing

This lovely little machine.

# Wilf – Sleep

I have been sleeping with two SoeMac machines near my head – I'm convinced they work.

# Pam – Breathing

My husband and I both have respiratory issues. Additionally, he has sleep apnea and is unable to tolerate CPAP. We both awaken refreshed, and have bought a SoeMac each. We love it.

# Catherine – Fatigue

Many thanks for agreeing to service my SoeMac machine. I have been using it for at least four years, so it's probably time for a service. I have been battling with Chronic Fatigue, and I am sure SoeMac has helped me greatly, and the lovely humming noise is so comforting.

# Janet – Snoring

My sister used SoeMac for more than one year. Her son's serious snoring problem has improved a lot. Surprisingly, the plant in the bedroom, next to the SoeMac, has grown healthy !

# **CM** – Breathing

I have been using the Pro for several days now and these are my impressions so far. During the session and even after, I experienced different sensations through the body mostly through the chest and stomach but even in the legs and the arms. Very interesting. Those sensations are somewhat difficult to describe but they resemble a tingling, or an energy flow.

It seems that the sessions have a positive impact initially on the lungs. My impression is that using the mask, it is stronger than the using the canula. I feel I need some period of acclimatisation to the Pro, because the effects are rather strong, and one has to find a suitable level to suit ones individual needs and capabilities.

There is a need for drinking more water. During the sessions I tried a strength test with my fists and realised that I am becoming stronger. I feel more energised and I have less need to sleep. Several shorter sessions seem better accepted by the body, than one longer session.

# Andrew – Breathing

SoeMac is that good, it's like I do not have COPD and I can walk six miles and not even know it, whereas before I could not walk to the end of the street. Thankyou.

For more testimonials about SoeMac, please visit our website at **www.soemac.com** If you'd like to share your SoeMac story with us, email to: info@soemac.com





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