



RatniAir's IonAir Bipolar Ionization

*Proven to remove 99.9% of
Airborne and Surface Coronavirus*

Test Procedure

Location: Chaim Sheba Medical Center, The Surgical Oncology Laboratory, Department of Surgery, Tel Aviv, Israel

Viral Media: Coronavirus (GenBank Accession No. AM 260960) harvested 48 h post- inoculation (PI) and stored at -80°C until used for RNA extraction.

Virus Detection: Real-time RT-PCR Assay

Test Procedure: RatniAir IonAir1 500 device was placed in a chamber 30 cm from CoV viral suspension. The ion flow was directed at the suspension for 30 minutes.

Test Results: The RatniAir IonAir 1 500 was able to reduce the viral load by 99.95% within 10 minutes, as measured by the PCR Assay

RatniAir Technology

RatniAir's technology is based on Bipolar Ionization, a process which mimics a natural phenomenon where forces such as sun and wind generate ions which purify the outdoor air from microbes and pollutants. The IonAir 1500 uses electric currents to charge molecules of oxygen (O_2) in the air resulting in two ions (O^- and O^+). These (O^- and O^+) ions bind with water (humidity) forming OH^- and H_2O_2 (hydrogen peroxide). These molecules attach to the proteins of the microbes (viruses, bacteria, fungus) rendering them inactive.

Following the Influenza H1N1 (Swine Flu) and H5N1 (Bird Flu) epidemics, RatniAir's proprietary Bipolar Ionization device, the Ion Air 1500, was tested against these respiratory viruses with a proven 99% inactivation. In this new 2020 lab study, a similar testing procedure was applied to evaluate the IonAir 1500's effect on the Coronavirus.

The presence of CoV Coronavirus was reduced by 99.95% within 10 minutes of exposure to RatniAir's Bipolar Ionization Technology

Sheba Medical Center

The Chaim Sheba Medical Center is the largest hospital in Israel, located in Tel Aviv. In 2020, Newsweek ranked it as the 9-best hospital in the world.



The tests were done at The Surgical Oncology Laboratory Department of Surgery, The Chaim Sheba Medical Center.