UNIVERSITÉ
CLAUDE BERNARD LYON – 1

INSTITUT FEDERATIF de RECHERCHES
LAENNEC

CENTRE NATIONAL DE LA RECHERCHE
SCIENTIFIQUE

December,5th 2007

Laboratoire de Virologie et Pathologie Humaine – **FRE CNRS 3011**
Faculté de Médecine RTH Laennec
Ref. : DE091-2007

The effectiveness of BioZoneTM technology in destroying human parainfluenza virus type 3 (hPIV-3)

Introduction: This report depicts the results of tests performed to measure the effectiveness of BioZone technology in destroying airborne human parainfluenza type 3 virus (C243 strain, ATCC VR-93).

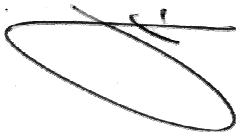
Method: The tests were performed by CNRS Lyon FRE 3011 in biosafety level 3 laboratory under Dr Vincent Moules and Dr Olivier Terrier authorities.

Purified C243 human parainfluenza type 3 viruses (109.3 TCID50/mL) were sprayed as an aerosol into an inlet leading into a purification chamber. The first samples were collected from the inlet before the aerosol entered the purification chamber. In the chamber, the virus aerosol was subjected to UV light and/or photo plasma based BioZone technology, after which the second samples were collected from the outlet.
The viral titer of all samples has been determined by limit dilution assay (LLCMK2 cells, ATCC CCL-7) and using the “Reed and Muench” statistical method.
The test was performed seven times, varying the active components of BioZone technology every time.

Notes: Sampling was performed twice (from the inlet) before the virus aerosol entered the chamber and twice (at the outlet) after the virus aerosol had passed though the chamber
When testing the BioZone unit, the virus aerosol was only subjected to photo plasma and not to the UV light.

Results: The tests show that BioZone technology destroys the strain of human parainfluenza type 3 virus used, reaching up to 5,0 logs reduction rate in less than 0.44 seconds.

Professeur Bruno LINA



Docteur Vincent MOULES

Rue Guillaume Paradin 69372 Lyon Cedex 08, France. Tél: 33 (0) 4 78 77 87 11 – Fax : 33 (0) 4 78 77 87 51 – Courriel : catherine.berthet@adm.univ-lyon1.frr