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PRESS RELEASE – FOR IMMEDIATE RELEASE

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Burns units combat superbug outbreaks with HPV disinfection bundle.

A bundle of infection control measures using the latest hydrogen peroxide vapour (HPV) disinfection technology has significantly reduced the incidence of nosocomial MRSA and *Acinetobacter baumannii* in one of Europe's leading burns units.

Work conducted at Saint-Antoine Hospital in Paris, France by Dr Frederic Barbut and his team has recently been published in a leading scientific journal. It demonstrates the effectiveness of regular HPV disinfection of rooms following discharge of patients known to be affected by multidrug-resistant bacteria. The Saint-Antoine Hospital burns unit is one of two major reference burns centres in Paris. It had an ongoing problem with *Acinetobacter* infections when it experienced a major MRSA outbreak in 2007. This led to the closure of the unit in July 2008.

As a result, the entire unit was decontaminated using Bioquell's HPV technology and an infection control bundle (ICB) was implemented when the unit was reopened in September 2008. The ICB comprised regular HPV disinfection of the rooms following discharge of patients colonized or infected by multidrug-resistant organisms (MDRO), pre-emptive cohort isolation of newly admitted patients before being proven culture negative and cohorting of colonized or infected patients. In addition, two air disinfection systems were installed in the corridors of the unit and improvements made to material storage.

HPV disinfection was shown to be effective at significantly reducing environmental contamination (bacterial and fungal) from surfaces and the air within the unit and eliminating pathogens from the environment. The ICB stopped the MRSA outbreak, and resulted in a significant reduction in the incidence of nosocomial MRSA (89.3%) and *A. baumannii* (88.8%). It also prevented further outbreaks of these organisms in the burns unit.

Commenting on this research, James Salkeld head of healthcare at Bioquell said, "Interestingly, results showed that surfaces were still contaminated with *Acinetobacter*, *E. coli* and *S. aureus* including MRSA, after standard terminal cleaning and before HPV treatment. *Aspergillus* was also isolated from the air before HPV was used."

"Bioquell's HPV disinfection process eliminated pathogens from the environment and significantly reduced total bacterial surface counts as well as fungal air and surface counts on both a room and unit scale. In fact, no pathogens were isolated from surfaces or any air samples after our HPV decontamination."

The latest research will be published in the next 'Burns' journal (October) but is already available online at [http://www.burnsjournal.com/article/S0305-4179\(12\)00225-2/abstract](http://www.burnsjournal.com/article/S0305-4179(12)00225-2/abstract).



Notes to editors

The research paper abstract entitled "Reducing the spread of *Acinetobacter baumannii* and methicillin-resistant *Staphylococcus aureus* on a burns unit through the intervention of an infection control bundle" by Barbut F, Yezli S, Mimoun M, Pham J, Chaouat M, Otter JA. can also be accessed online at <http://www.ncbi.nlm.nih.gov/pubmed/22884127>.

About Bioquell

Bioquell specialise in the design, manufacture and application of complete bio-decontamination solutions for airborne and surface contamination in the healthcare, life sciences, food production and defence sectors. Bioquell's unique hydrogen peroxide vapour (HPV) bio-decontamination technology has been used across the globe to eradicate problematic bacteria, viruses and fungi, throughout a wide range of applications. Deployment of Bioquell's HPV process provides residue-free, safe and repeatable sterilisation of rooms, buildings, equipment and sensitive electronics. It is a clear alternative when replacing traditional decontaminants such as formaldehyde or chlorine-based products.

Bioquell also provides bespoke chemical, biological, radioactive and nuclear (CBRN) filtration equipment for different applications in the defence industry. This equipment is complemented by integral air conditioning systems and auxiliary power units. For more information, please visit www.bioquell.com.

For more information

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