

# Lytbot Pulsed UV Disinfection System

An Innovative and Effective Weapon Against Superbugs

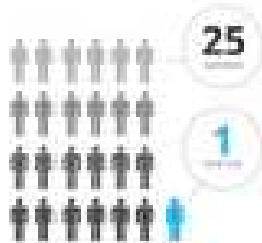
Eliminates Pathogens in Seconds with Proven Pulsed Broad-Wavelength with UVC

## UV Devices Complement Manual Disinfection

- ✓ Up to 78% of hospital surfaces still harbor pathogens after manual disinfection<sup>1</sup>
- ✓ In case of *C. difficile*, a patient is 2.5x more likely to acquire the pathogen if the room's prior occupant was infected<sup>2</sup>

1 in 25 patients will acquire an HAI during their hospital stay (CDC) ...

... of those who get an HAI, 1 in 9 patients will unfortunately die



## Current UV Devices Are Not Viable Options

- ✓ Many companies currently offer surface disinfection solutions made with mercury bulbs to generate UV-C light
- ✓ Bulbs contain mercury which is Hazardous and Toxic
- ✓ If a bulb breaks, the hazards associated with its absorption include eye and skin burns, blurred or double vision, headaches, nausea<sup>3</sup>
- ✓ Mercury systems need over 45 min. to eliminate *C. diff* in a patient room
- ✓ Capital costs for UV Disinfection Devices can be \$100,000+ for most healthcare facilities without including service and support fees



*"UV devices can add an extra layer of assurance when it comes to terminal cleaning; reaching areas of the healthcare environment that may otherwise be missed or insufficiently addressed due to human error."*<sup>4</sup>

<sup>1</sup>Eckstein, BC et al. Reduction of Clostridium Difficile and vancomycin-resistant Enterococcus contamination of environmental surfaces after an intervention to improve cleaning methods, 21 June 2007; BMC Infectious Diseases 2007, 7:61

<sup>2</sup>Shaughnessy, MK et al. Evaluation of hospital room assignment and acquisition of Clostridium difficile infection. Infection Control & Hospital Epidemiology, 32 (2011), 201-206.

<sup>3</sup>US Food & Drug Administration

<sup>4</sup>Infection Control & Clinical Quality "Bridging the gap: Establishing UV claims for emerging pathogens" S. Snow. February 2015.

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## Lytbot Technology

- ✓ **3, 5, 10 minute Cycles**- Simple cycles are 25-40% faster than competitors
- ✓ **Maxpulse Technology**- High flash rate = increased disinfection efficacy against a variety of pathogens
- ✓ **Targeted Disinfection**- Engineered reflector amplifies energy to high touch surfaces where 80-90% of pathogens hide

## Lytbot Works Differently than Mercury UV Systems

- 1) UVC damages DNA, creates thymine dimers, eliminating pathogen ability to perform its cellular function
- 2) Pulsed UV Disintegrator - full spectrum pulsed UV light sends billions of high energy photons causing cells to overheat and rupture

## Pulsed Xenon UVC Lytbot Advantages

- ✓ No mercury, no dangerous microwaves
- ✓ Hands free, chemical free
- ✓ Easily maneuvered by one person
- ✓ Increased efficiency, lower HAI rates
- ✓ Cost efficient subscription purchase



## Lytbot Is Much More Efficient Than Other UV Systems

System	Pathogen	Distance	Cycle Time	% Reduction
Mercury UVC	C.diff	4 ft	5 min	40.0% <sup>5</sup>
Lytbot	C.diff	5 ft	5 min	98.4% <sup>6</sup>
Lytbot	MRSA	6 ft	2.6 min	100.0% <sup>6</sup>

According to Resinova Labs (Dr. Hardwich, Washington, DC)