The 4 Must-Follow Steps to Validate Technology

**Step 1: Lab Validation (aka Lab “Studies”)**
Validated in an independent, 3rd party, GLP-certified microbiology laboratory. Uses the technology in the manner intended by the manufacturer to confirm. Results are presented as a % reduction in the pathogen or as a “log reduction”. Results have to be consistent across a large number of tests.

**Step 2: Hospital Environment Testing**
Involves an actual room with a known infection, to evaluate the disinfection technology on true pathogen load. Clear sampling protocols: consistent collection methods, number of samples, analysis process.

**Step 3: Peer Reviewed Publication of Environment Testing**
Requires multiple, highly qualified, impartial scientists (peers) to review new findings before they are considered truly valid. Research methods must be thorough and repeatable. Currently conducted by journals with teams of specialists to examine submitted studies and complete the “peer review” process.
Surviving peer review and getting published is the process that takes your theory, testing, and results and establishes them as scientific fact. Strict adherence to ethical guidelines. No expression of opinions, only facts.

**Step 4: Published Peer Reviewed HAI Rate Reduction Studies**
Peer reviewed published outcome studies often take a long time to assess, just like Westchester Medical Center’s 22-month study recently published in the American Journal of Infection Control.

This step is achieved when disinfection technology can actually achieve a measurable, statistically significant HAI rate reduction. To achieve this, the results from a study are examined through the same lens as Step 3, as well as: While many disinfection technologies have achieved steps 1 and 2, and a few have even achieved publication, Xenex remains the only UV disinfection system with several published outcome studies in multiple peer reviewed journals.

HAI rates – not just numbers of infections but the frequency of infections per patient days. Other interventions – were there any other programs or tools being used that may actually be responsible for the improved outcomes, like hand-washing initiatives?

At an independent lab, we’ve validated Xenex’s efficacy on over 2200 samples of the most common hospital pathogens, including C. diff and MRSA.