

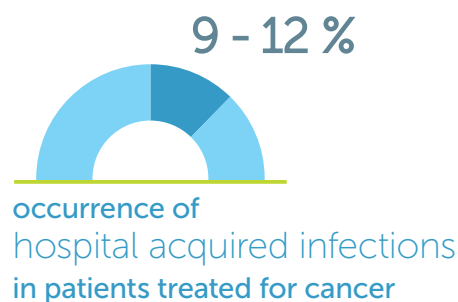
Genano Application Note

Protecting hematology and oncology patients against infections

Patients undergoing blood disease or cancer treatments, such as chemotherapy, radiation therapy or stem cell transplantation, are particularly susceptible to infections.

These patients can contract bacterial, fungal and viral infections from organisms that are innocuous for healthy individuals. In addition, they are highly prone to antibiotic-resistant pathogens causing hospital-acquired infections.

In immunosuppressed patients, infections may evolve rapidly, and their manifestation in the patient can be unusual – and therefore detected late. Hospital-acquired infections lead to a prolonged in-patient length of stay, increased use of antibiotics, inefficient use of resources and, most importantly, unnecessary human suffering.



incident nosocomial infections per 1000 neutropenic days



* Review: Kamboj et al., Lancet Oncol 2009; 10: 589–97.

Small pathogens may be suspended in air as small particles, aerosols, or dust and remain infective over time and distance. High-quality air hygiene is an powerful way to protect immunocompromized patients from infections during and after treatment. However, standard fiber filtration (HEPA) systems are not sufficient to prevent airborne transmissions and more technologically sophisticated solutions are needed.

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GENANO'S ADVANTAGES

- 1** Eliminates all microbes and collects particles down to $0.003\ \mu\text{m}$ size.
- 2** Removes gases and odours with an effective active carbon collector.
- 3** Cost-effective maintenance with no disposable filters.

PATIENT PROTECTION with Genano air purifiers



NANOSCALE INFECTION CONTROL

Genano air purifiers are an efficient way to reduce airborne infectious agents near immunocompromised patients.

Genano's core advantage is the **ability to remove airborne microbes of all sizes** - down to nanometer scale. Compared to standard HEPA filters, Genano's purification performance is a 100 times better in terms of particle size. In addition, Genano also **eliminates the microbes** instead of just collecting them.

Genano purifiers prevent the transmission of pathogens and improve hospital hygiene in critical areas.



CONTINUOUS CIRCULATION & PURIFICATION

Genano air purifiers are designed to continuously recycle and purify indoor air.

The standalone units are easy to move around, and can be relocated according to the situation.

Also pressurized isolation rooms can be built using Genano.



INNOVATIVE FILTER-FREE TECHNOLOGY

The unique patented Genano Technology® is based on co-operation between the process of ionization and electrostatic attraction of particles. It cleans the air from particulate matter of all sizes.

In addition, Genano air purifiers are equipped with high-surface-area active carbon collectors that remove gaseous substances.

Genano technology provenly removes

Acinetobacter
Aspergillus niger
Bacillus cereus
Bacillus subtilis var.
niger
Candida albicans

Enterobacter
Escherichia coli
Klebsiella
Micrococcus luteus
Pseudomonas
aeruginosa

Saccharomyces cerevisiae
Serratia marcescens
Staphylococcus aureus
Streptomyces