

Advances in Aerosol Therapy

Melissa Abrahamson, RRT

UNIVERSITY OF MINNESOTA
MEDICAL CENTER
 FAIRVIEW

Breath Actuated Nebulizer

- BAN produces aerosol only in response to your inspiratory maneuver
- Less waste
- Improved dose assurance
- Uncomplicated design

UNIVERSITY OF MINNESOTA
MEDICAL CENTER
 FAIRVIEW

Breath Actuated Nebulizer



UNIVERSITY OF MINNESOTA
MEDICAL CENTER
FAIRVIEW

Aerogen

- On Q aerosol generator
- Active vibrating mesh micro pump
- No additional airflow to the ventilator circuit
- Nebulizes all of the medication

UNIVERSITY OF MINNESOTA
MEDICAL CENTER
FAIRVIEW

Aerogen



UNIVERSITY OF MINNESOTA
MEDICAL CENTER
FAIRVIEW

Flolan

- Pulmonary vasodilatation
- Decrease PA pressures
- Improve oxygenation
- Improve right heart function

UNIVERSITY OF MINNESOTA
MEDICAL CENTER
FAIRVIEW

ARDS



UNIVERSITY OF MINNESOTA
MEDICAL CENTER
FAIRVIEW

Inhaled Nitric Oxide

- Toxic pollutant until 1987
- Treatment for ARDS and PHTN
- Pulmonary vasodilator
- Improves oxygenation
- Discontinue/wean cautiously

UNIVERSITY OF MINNESOTA
MEDICAL CENTER
FAIRVIEW

INO max



UNIVERSITY OF MINNESOTA
MEDICAL CENTER
FAIRVIEW

Case studies with INO

- Patients with ARDS and uses of INO
- Redistribution of blood flow in the lungs
- Reduced the blood pressure in the arteries surrounding lungs
- Improved oxygen levels

UNIVERSITY OF MINNESOTA
MEDICAL CENTER
FAIRVIEW

Case studies with Flolan/INO

- Salvage therapy
- H1N1
- Refractory hypoxemia
- ARDS