- Efficient high flow ( 10 to $15 \mathrm{~L} / \mathrm{min}$ )
- 240 mL reservoir
- Up to 8 hours of nebulization at $10 \mathrm{~L} / \mathrm{min}$
- Optimal 2-3 $\mu \mathrm{m}$ particles
- High aerosol output (up to $50 \mathrm{~mL} / \mathrm{hr}$ )


## MiniHEART-HiFlo <br> High Output Nebulizer

- Efficient Hi-Flo (8mL/min)
- 30 mL reservoir
- 1 hour of nebulization at $8 \mathrm{~L} / \mathrm{min}$
- Optimal 2-3 $\mu \mathrm{m}$ particles
- Ideal for Emergency Department


## UniHEART" <br> - Low flow nebulizer (2 to $4 \mathrm{~L} / \mathrm{min}$ ) <br> - 10 mL reservoir <br> - Over 2 hours of nebulization at $2 \mathrm{~L} / \mathrm{min}$ <br> - IV port for easy refill <br> - Optimal 2-3 $\mu \mathrm{m}$ particles <br> - Ideal for Emergency Department <br> MiniHEART-LoFlo ${ }^{\oplus}$ Low Flow Nebulizer

- Efficient low flow (1 to $2 \mathrm{~L} / \mathrm{min}$ )
- 30 mL reservoir
- Over 3 hours of nebulization at $2 \mathrm{~L} / \mathrm{min}$
- IV port for easy refill
- Optimal 2-3 $\mu \mathrm{m}$ particles
- Ideal for patients on ventilator


## Guidelines for Preparing Hourly Doses

Use the guidelines below ( $\pm 20 \%$ ) for one hour of nebulization. Example using HEART: For prescribed dose of $10 \mathrm{mg} / \mathrm{hr}$ @ 15L/min flow - Add 2 mL medicine $(5 \mathrm{mg} / \mathrm{mL})$ to 48 mL saline for $50 \mathrm{~mL} / \mathrm{hr}$ output. For multiple hours of operation, multiply by the number of hours desired. If the flow is reduced to $10 \mathrm{~L} / \mathrm{min}$ on this solution, the dose is reduced to $6 \mathrm{mg} / \mathrm{hr}$. These guidelines are no substitute for the good clinical judgment of the user.

## HEART ${ }^{\oplus}$

| Flow Rate $=$ Output | $10 \mathrm{~L} / \mathrm{min}=30 \mathrm{~mL} / \mathrm{hr}$ |  |  | $15 \mathrm{~L} / \mathrm{min}=50 \mathrm{~mL} / \mathrm{hr}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Dose $(\mathrm{mg} / \mathrm{hr})$ | 5 | 10 | 15 | 5 | 10 | 15 |
| Medicine $5 \mathrm{mg} / \mathrm{mL}(\mathrm{mL})$ | 1 | 2 | 3 | 1 | 2 | 3 |
| Saline $(\mathrm{mL})$ | 29 | 28 | 27 | 49 | 48 | 47 |
| D |  |  |  |  |  |  |

Dose ( $\mathrm{mg} / \mathrm{hr}$ ) decreased after Reducing flow from 15 to $10 \mathrm{~L} / \mathrm{min}$

| 3 | 6 | 9 | 5 | 10 | 15 |
| :--- | :--- | :--- | :--- | :--- | :--- |

## MiniHEART-HiFlo

| Flow Rate $=$ Output | $8 \mathrm{~L} / \mathrm{min}=20 \mathrm{~mL} / \mathrm{hr}$ |  |  |
| :--- | ---: | ---: | ---: |
| Dose $(\mathrm{mg} / \mathrm{hr})$ | 5 | 10 | 15 |
| Medicine $5 \mathrm{mg} / \mathrm{mL}(\mathrm{mL})$ | 1 | 2 | 3 |
| Saline $(\mathrm{mL})$ | 19 | 18 | 17 |

## UniHEART" ${ }^{\text {² }}$



| Flow Rate $=$ Output | $2 \mathrm{~L} / \mathrm{min}=4 \mathrm{~mL} / \mathrm{hr}$ |  | $4 \mathrm{~L} / \mathrm{min}=9 \mathrm{~mL} / \mathrm{hr}$ |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Dose $(\mathrm{mg} / \mathrm{hr})$ | 5 | 10 | 15 | 5 | 10 | 15 |
| Medicine $5 \mathrm{mg} / \mathrm{mL}(\mathrm{mL})$ | 1 | 2 | 3 | 1 | 2 | 3 |
| Saline $(\mathrm{mL})$ | 3 | 2 | 1 | 8 | 7 | 6 |

## MiniHEART-LoFlo ${ }^{\oplus}$

| Flow Rate $=$ Output | $2 \mathrm{~L} / \mathrm{min}=8 \mathrm{~mL} / \mathrm{hr}$ |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Dose $(\mathrm{mg} / \mathrm{hr})$ | 2.5 | 5 | 7.5 | 10 | 12.5 | 15 |
| Medicine $5 \mathrm{mg} / \mathrm{mL}(\mathrm{mL})$ | 0.5 | 1 | 1.5 | 2 | 2.5 | 3 |
| Saline $(\mathrm{mL})$ | 7.5 | 7 | 6.5 | 6 | 5.5 | 5 |

