**SUPPLEMENTARY MATERIAL**

**Supplementary Methods**

Equations for previously created population pharmacokinetic model of milrinone utilized for simulation purposes.

$$CL \left(\frac{L}{h}\right)=15.9\*\left(\frac{WT \left(kg\right)}{70} \right)^{0.75}\*\left(\frac{PMA \left(wks\right)^{1.12}}{(67.7^{1.12}+PMA \left(wks\right)^{1.12})}\right)\*(\frac{CrCl\left(\frac{\frac{mL}{min}}{1.73m^{2}}\right)}{117})^{0.522} $$

$$V \left(L\right)=32.2\*(WT (kg)/ 70)$$

Where CL is systemic clearance, WT is weight, PMA is postmenstrual age, CrCl is creatinine clearance, and V is volume of distribution.