

Supplemental Table 1. Standard ranges of heart rate and blood pressure according to age derived from the literature and used in the pediatric intensive care unit

| Age | Heart Rate, bpm | Blood Pressure, mmHg | |
|----------------|-----------------|----------------------|-----------|
| | | Systolic | Diastolic |
| <12 months | 80 - 180 | 72 - 104 | 37 - 56 |
| 1 - <2 years | 80 - 180 | 80 - 113 | 46 - 79 |
| 2 - <3 years | 60 - 150 | 80 - 113 | 46 - 79 |
| 3 - <4 years | 60 - 140 | 80 - 113 | 46 - 79 |
| 4 - <5 years | 60 - 140 | 80 - 115 | 47 - 79 |
| 5 - <6 years | 60 - 140 | 80 - 115 | 47 - 79 |
| 6 - <7 years | 60 - 140 | 80 - 115 | 47 - 79 |
| 7 - <8 years | 60 - 140 | 83 - 122 | 52 - 83 |
| 8 - <9 years | 60 - 140 | 83 - 122 | 52 - 83 |
| 9 - <10 years | 60 - 140 | 83 - 122 | 52 - 83 |
| 10 - <11 years | 50 - 120 | 83 - 122 | 52 - 83 |
| 11 - <12 years | 50 - 120 | 95 - 136 | 58 - 88 |
| 12 - <13 years | 50 - 120 | 95 - 136 | 58 - 88 |
| 13 - <14 years | 50 - 110 | 100 - 127 | 55 - 77 |
| ≥14 years | 50 - 110 | 100 - 127 | 55 - 77 |

bpm: beats per minute; mmHg: millimeter of mercury

Standard ranges vary in the literature. Standard ranges were derived from [14-21].

Supplemental Table 2. Physicians' individual patient adjustments of the standard ranges

| | Frequency of affected patients, <i>n/N</i> | Frequency of affected patients, % |
|--|---|--------------------------------------|
| Heart rate: Adjustment of the lower limit of the standard range of heart rate | | |
| 0 - 10 bpm | 25/315 | 7.9 |
| 11 - 20 bpm | 15/315 | 4.8 |
| Heart rate: Adjustment of the upper limit of the standard range of heart rate | | |
| 0 - 10 bpm | 23/315 | 7.3 |
| 11 - 20 bpm | 22/315 | 7.0 |
| 21 - 30 bpm | 19/315 | 6.0 |
| Blood pressure: Adjustment of the lower limit of the standard range of systolic blood pressure | | |
| 10 - 20 mmHg | 45/315 | 14.3 |
| Blood pressure: Adjustment of the lower limit of the standard range of diastolic blood pressure | | |
| 10 - 20 mmHg | 45/315 | 14.3 |

bpm: beats per minute; mmHg: millimeter of mercury

There was no adjustment of the upper limit of the standard ranges of systolic or diastolic blood pressure.

Supplemental Table 3. Assessment of the causal relationship between administered drugs with the potential to lead to hemodynamic alterations and actually occurring hemodynamic alterations with respect to the different frequency classifications according to the database search

| | | WHO-UMC causality criteria | Increased heart rate <i>n/N (%)</i> | Decreased heart rate <i>n/N (%)</i> | Increased blood pressure <i>n/N (%)</i> | Decreased blood pressure <i>n/N (%)</i> |
|--|----------|----------------------------|--|--|--|--|
| Frequency classification of drugs according to databases | Common | Certain | 0/3419 (0.0) | 0/429 (0.0) | 0/930 (0.0) | 0/1185 (0.0) |
| | | Probable | 3/3419 (0.1) | 2/429 (0.5) | 0/930 (0.0) | 7/1185 (0.6) |
| | | Possible | 869/3419 (25.4) | 31/429 (7.2) | 407/930 (43.8) | 413/1185 (34.8) |
| | | Unlikely | 182/3419 (5.3) | 8/429 (1.9) | 48/930 (5.2) | 70/1185 (5.9) |
| | Uncommon | Certain | 0/3419 (0.0) | 0/429 (0.0) | 0/930 (0.0) | 0/1185 (0.0) |
| | | Probable | 0/3419 (0.0) | 0/429 (0.0) | 0/930 (0.0) | 0/1185 (0.0) |
| | | Possible | 571/3419 (16.7) | 31/429 (7.2) | 111/930 (11.9) | 268/1185 (22.6) |
| | | Unlikely | 70/3419 (2.1) | 13/429 (3.0) | 10/930 (1.1) | 33/1185 (2.8) |
| | Rare | Certain | 0/3419 (0.0) | 0/429 (0.0) | 0/930 (0.0) | 0/1185 (0.0) |
| | | Probable | 4/3419 (0.1) | 0/429 (0.0) | 2/930 (0.2) | 1/1185 (0.1) |
| | | Possible | 1375/3419 (40.2) | 247/429 (57.6) | 291/930 (31.3) | 310/1185 (26.2) |
| | | Unlikely | 345/3419 (10.1) | 97/429 (22.6) | 61/930 (6.5) | 83/1185 (7.0) |

WHO-UMC: World Health Organisation-Uppsala Monitoring Center