

## Appendix I

### FACTT Algorithm: Composite Protocol- Version 2

| Intravascular Pressure  |         |                   |         | MAP<br>< 60 mm Hg<br>or on:<br>dopamine >5<br>mcg/kg/min or<br>any dose of<br>another<br>vasopressor.<br><br>Consider<br>correctable causes<br>of shock first.  | MAP ≥ 60 mm Hg AND off vasopressors<br>(Dopamine ≤ 5 mcg/kg/min is <i>not</i> a vasopressor)     |   |   |   |   |   |  |  |
|---|---------|-------------------|---------|---|--|---|---|---|---|---|--|--|
| CVP   |         | PAOP <sup>G</sup> |         |   | Average UOP < 0.5 ml/kg/hr   |   | Average UOP ≥ 0.5 ml/kg/hr  |   |   |   |  |  |
| Conservative  | Liberal | Conservative      | Liberal |   | Ineffective Circulation<br>C.I. < 2.5<br>OR<br>Cold & mottled<br>with capillary refill<br>>2 sec | Effective Circulation<br>C.I. ≥ 2.5<br>OR<br>Absence of<br>ineffective circulation criteria | Ineffective Circulation<br>C.I. < 2.5<br>OR<br>Cold & mottled<br>with capillary refill<br>> 2 sec | Effective Circulation<br>C.I. ≥ 2.5<br>OR<br>Absence of<br>ineffective circulation criteria |   |   |  |  |
| <b>Range I</b>  |         |                   |         | <p style="text-align: center;">Cell number</p> <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 50px; text-align: center;">&gt; 13</td> <td style="width: 50px; text-align: center;">&gt; 18</td> <td style="width: 50px; text-align: center;">&gt; 18</td> <td style="width: 50px; text-align: center;">&gt; 24</td> </tr> </table> <p style="text-align: center;">1</p> | > 13   | > 18  | > 18  | > 24  | <p style="text-align: center;">KVO IV      <b>3</b></p> <p>Dobutamine<sup>A</sup></p> <p>Furosemide<sup>B,1,2,4</sup></p> | <p style="text-align: center;">KVO IV      <b>7</b></p> <p>Furosemide<sup>B,1,2,4</sup></p> | <p style="text-align: center;">KVO IV      <b>11</b></p> <p>Dobutamine<sup>A</sup></p> <p>Furosemide<sup>B,1,3,4</sup></p> | <p style="text-align: center;">KVO IV      <b>15</b></p> <p>Furosemide<sup>B,1,3,4</sup></p>   |
| > 13  | > 18    | > 18              | > 24    |   |  |   |   |   |   |   |  |  |
| <b>Range II</b>   |         |                   |         |   |  |   |   |   |   |   |  |  |
| <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 25px; text-align: center;">9-13</td> <td style="width: 25px; text-align: center;">15-18</td> <td style="width: 25px; text-align: center;">13-18</td> <td style="width: 25px; text-align: center;">19-24</td> </tr> </table>        |         |                   |         |   | 9-13   | 15-18   | 13-18   | 19-24   | <p style="text-align: center;">KVO IV      <b>4</b></p> <p>Dobutamine<sup>A</sup></p>                                     | <p style="text-align: center;">KVO IV      <b>8</b></p> <p>Furosemide<sup>B,1,2,4</sup></p> | <p style="text-align: center;">KVO IV      <b>12</b></p> <p>Dobutamine<sup>A</sup></p>                                     | <p style="text-align: center;">KVO IV      <b>16</b></p> <p>Furosemide<sup>B,1,3,4</sup></p>   |
| 9-13  | 15-18   | 13-18             | 19-24   |   |  |   |   |   |   |   |  |  |
| <b>Range III</b>  |         |                   |         |   |  |   |   |   |   |   |  |  |
| <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 25px; text-align: center;">4-8</td> <td style="width: 25px; text-align: center;">10-14</td> <td style="width: 25px; text-align: center;">8-12</td> <td style="width: 25px; text-align: center;">14-18</td> </tr> </table>          |         |                   |         |   | 4-8  | 10-14   | 8-12  | 14-18   | <p style="text-align: center;">Fluid bolus<sup>C</sup>      <b>5</b></p>  | <p style="text-align: center;">Fluid bolus<sup>C</sup>      <b>9</b></p>                    | <p style="text-align: center;">Fluid bolus<sup>C</sup>      <b>13</b></p> <p>Liberal: KVO IV</p>                           | <p style="text-align: center;">Liberal: <b>17</b></p> <p>KVO IV</p> <p>Conservative: <b>18</b></p> <p>Furosemide<sup>B,1,3,4</sup></p> |
| 4-8   | 10-14   | 8-12              | 14-18   |   |  |   |   |   |   |   |  |  |
| <b>Range IV</b>   |         |                   |         |   |  |   |   |   |   |   |  |  |
| <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 25px; text-align: center;">&lt; 4</td> <td style="width: 25px; text-align: center;">&lt; 10</td> <td style="width: 25px; text-align: center;">&lt; 8</td> <td style="width: 25px; text-align: center;">&lt; 14</td> </tr> </table> |         |                   |         |   | < 4  | < 10  | < 8   | < 14  | <p style="text-align: center;">Fluid bolus<sup>C</sup>      <b>6</b></p>  | <p style="text-align: center;">Fluid bolus<sup>C</sup>      <b>10</b></p>                   | <p style="text-align: center;">Fluid bolus<sup>C</sup>      <b>14</b></p> <p>Liberal: Fluid bolus<sup>D</sup></p>          | <p style="text-align: center;">Conservative: <b>19</b></p> <p>KVO IV</p> <p>Conservative: <b>20</b></p>                                |
| < 4   | < 10    | < 8               | < 14    |   |  |   |   |   |   |   |  |  |

## FACTT ALGORITHM: CVC Conservative

| Central Venous Pressure (mmHg) | MAP < 60 mm Hg or on: dopamine >5 mcg/kg/min or any dose of another vasopressor<br><br>Consider correctable causes of shock first. | MAP ≥ 60 mm Hg AND off vasopressors (Dopamine ≤ 5 mcg/kg/min is <i>not</i> a vasopressor)       |  |  |  |
|--------------------------------|--|---|--|--|--|
|                                |  | Average UOP < 0.5 ml/kg/hr  |  | Average UOP ≥ 0.5 ml/kg/hr   |  |
|                                |  | Ineffective Circulation<br>Cold & mottled with capillary refill >2 sec (all 3 criteria present) | Effective Circulation<br>Absence of ineffective circulation criteria | Ineffective Circulation<br>Cold & mottled with capillary refill > 2 sec (all 3 criteria present) | Effective Circulation<br>Absence of ineffective circulation criteria |
| > 13                           | 1*   | KVO IV<br>Dobutamine <sup>A</sup><br>Furosemide <sup>B,1,2,4</sup>                              | <b>3</b>   | KVO IV<br>Furosemide <sup>B,1,2,4</sup>  | <b>7</b>   |
|                                |  | KVO IV<br>Dobutamine <sup>A</sup>   | <b>4</b>   | KVO IV<br>Furosemide <sup>B,1,2,4</sup>  | <b>8</b>   |
| 9-13                           | Vasopressor <sup>F+</sup><br>Fluid bolus <sup>F</sup>  |   |  | KVO IV<br>Dobutamine <sup>A</sup>  | <b>12</b>  |
| 4-8                            | 2  | Fluid bolus <sup>C</sup>  | <b>5</b>   | Fluid bolus <sup>C</sup>   | <b>9</b>   |
| < 4                            |  | Fluid bolus <sup>C</sup>  | <b>6</b>   | Fluid bolus <sup>C</sup>   | <b>10</b>  |
|                                |  |   |  | Fluid bolus <sup>C</sup>   | <b>13</b>  |
|                                |  |   |  |  | <b>18</b>  |
|                                |  |   |  | Furosemide <sup>B,1,3,4</sup>  |  |
|                                |  |   |  |  | <b>20</b>  |
|                                |  |   |  | KVO IV   |  |
|                                |  |   |  | GOAL CELL  |  |

## FACTT Algorithm: CVC Liberal

| Central Venous Pressure (mmHg) | MAP<br>< 60 mm Hg<br>or on: dopamine<br>>5 mcg/kg/min or<br>any dose of<br>another<br>vasopressor<br>Consider correctable<br>causes of shock first. | MAP ≥ 60 mm Hg AND off vasopressors<br>(Dopamine ≤ 5 mcg/kg/min is <i>not</i> a vasopressor)                 |  |  |  |  |  |
|--------------------------------|---|--|--|--|--|--|--|
|                                |   | Average UOP < 0.5 ml/kg/hr   |  |  | Average UOP ≥ 0.5 ml/kg/hr   |  |  |
|                                |   | Ineffective Circulation<br><br>Cold & mottled<br>with capillary refill<br>>2 sec<br>(all 3 criteria present) | Effective Circulation<br><br>Absence of ineffective circulation criteria | Ineffective Circulation<br><br>Cold & mottled<br>with capillary refill<br><2 sec<br>(all 3 criteria present) | Effective Circulation<br><br>Absence of ineffective circulation criteria |  |  |
| > 18                           | 1 *   | KVO IV<br>Dobutamine <sup>A</sup><br>Furosemide <sup>B,1,2,4</sup>   | 3  | KVO IV<br>Furosemide <sup>B,1,2,4</sup>  | 7  | KVO IV<br>Dobutamine <sup>A</sup><br>Furosemide <sup>B,1,3,4</sup> | KVO IV<br>Furosemide <sup>B,1,3,4</sup> 15 |
|                                |   | Vasopressor <sup>F</sup><br>Fluid bolus <sup>F</sup>   | 4  | KVO IV<br>Dobutamine <sup>A</sup>  | 8  | KVO IV<br>Dobutamine <sup>A</sup>                                  | KVO IV<br>Furosemide <sup>B,1,3,4</sup> 16 |
| 10-14                          | 2   | Fluid bolus <sup>C</sup>   | 5  | Fluid bolus <sup>C</sup>   | 9  | Fluid bolus <sup>C</sup>   | 17<br><i>GOAL CELL</i>                     |
| < 10                           |   | Fluid bolus <sup>C</sup><br>Vasopressor <sup>F</sup>   | 6  | Fluid bolus <sup>C</sup>   | 10   | Fluid bolus <sup>C</sup>   | 14<br>Fluid bolus <sup>D</sup> 19          |

Algorithm Version 2, rev. 10/12/2000  
FACTT Study Version II  
ARDSNet Study 05

NOTE: numbers in upper right hand corner of each cell = cell numbers; superscripts refer to footnotes that may modify instructions.

## FACTT ALGORITHM: PAC Conservative

| Pulmonary Artery Occlusion Pressure (mm Hg) | CVP (mm Hg)<br>Use only if PA occlusion pressure unobtainable | MAP < 60 mm Hg or on: dopamine >5 mcg/kg/min or any dose of another vasopressor.<br><br>Consider correctable causes of shock first. | MAP ≥ 60 mm Hg AND off vasopressors<br>(Dopamine ≤ 5 mcg/kg/min is <i>not</i> a vasopressor)                |   |  |   |
|---|---|---|---|---|--|---|
|   |   |   | Average UOP < 0.5 ml/kg/hr  |   | Average hr UOP ≥ 0.5 ml/kg/hr  |   |
|   |   |   | Ineffective Circulation<br>C.I. < 2.5<br>(or cold & mottled with capillary refill >2 sec if CI unavailable) | Effective Circulation<br>C.I. ≥ 2.5<br>(or absence of ineffective circulation criteria if CI unavailable) | Ineffective Circulation<br>C.I. < 2.5<br>(or Cold & mottled with capillary refill > 2 sec if CI unavailable) | Effective Circulation<br>C.I. ≥ 2.5<br>(or absence of ineffective circulation criteria if CI unavailable) |
| >18   | >13   | 1*  | KVO IV<br>Dobutamine <sup>A</sup><br>Furosemide <sup>B,1,2,4</sup>  | <b>3</b>  | KVO IV<br>Furosemide <sup>B,1,2,4</sup>  | <b>7</b>  |
|   |   |   | KVO IV<br>Dobutamine <sup>A</sup>   | <b>4</b>  | KVO IV<br>Furosemide <sup>B,1,2,4</sup>  | <b>8</b>  |
| 13-18                                       | 9-13  | Vasopressor <sup>F+</sup><br>Fluid bolus <sup>F</sup>   |   |   | KVO IV<br>Dobutamine <sup>A</sup>  | <b>12</b>   |
| 8-12  | 4-8   | 2   | Fluid bolus <sup>C</sup>  | <b>5</b>  | Fluid bolus <sup>C</sup>   | <b>9</b>  |
| <8  | <4  |   | Fluid bolus <sup>C</sup>  | <b>6</b>  | Fluid bolus <sup>C</sup>   | <b>10</b>   |
|   |   |   |   |   | Fluid bolus <sup>C</sup>   | <b>13</b>   |
|   |   |   |   |   |  | <b>18</b>   |
|   |   |   |   |   |  | Furosemide <sup>B,1,3,4</sup>   |
|   |   |   |   |   |  | <b>20</b>   |
|   |   |   |   |   |  | KVO IV<br><br><i>GOAL CELL</i>  |

## FACTT ALGORITHM: PAC Liberal

|   |  | Pulmonary Artery Occlusion Pressure (mm Hg)           | MAP < 60 mm Hg or on: dopamine >5 mcg/kg/min or any dose of another vasopressor.<br>Consider correctable causes of shock first. | MAP ≥ 60 mm Hg AND off vasopressors<br>(Dopamine ≤ 5 mcg/kg/min is <i>not</i> a vasopressor)                |   |  |   |    |   |    |
|---|--|---|---|---|---|--|---|----|---|----|
|   |  |   |   | Average UOP < 0.5 ml/kg/hr  |   | Average UOP ≥ 0.5 ml/kg/hr   |   |    |   |    |
| Pulmonary Artery Occlusion Pressure (mm Hg) | CVP (mm Hg)<br><i>Use only if PA occlusion pressure unobtainable</i> |   |   | Ineffective Circulation<br>C.I. < 2.5<br>(or cold & mottled with capillary refill >2 sec if CI unavailable) | Effective Circulation<br>C.I. ≥ 2.5<br>(or absence of ineffective circulation criteria if CI unavailable) | Ineffective Circulation<br>C.I. < 2.5<br>(or cold & mottled with capillary refill > 2 sec if CI unavailable) | Effective Circulation<br>C.I. ≥ 2.5<br>(or absence of ineffective circulation criteria if CI unavailable) |    |   |    |
| >24   | >18  | 1*  | KVO IV<br>Dobutamine <sup>A</sup><br>Furosemide <sup>B,1,2,4</sup>  | 3   | KVO IV<br>Furosemide <sup>B,1,2,4</sup>   | 7  | KVO IV<br>Dobutamine <sup>A</sup><br>Furosemide <sup>B,1,3,4</sup>  | 11 | KVO IV<br>Furosemide <sup>B,1,3,4</sup> | 15 |
| 19-24                                       | 15-18  | Vasopressor <sup>F+</sup><br>Fluid bolus <sup>F</sup> | KVO IV<br>Dobutamine <sup>A</sup>   | 4   | KVO IV<br>Furosemide <sup>B,1,2,4</sup>   | 8  | KVO IV<br>Dobutamine <sup>A</sup>   | 12 | KVO IV<br>Furosemide <sup>B,1,3,4</sup> | 16 |
| 14-18                                       | 10-14  | 2   | Fluid bolus <sup>C</sup>  | 5   | Fluid bolus <sup>C</sup>  | 9  | Fluid bolus <sup>C</sup>  | 13 | 17<br><i>KVO IV<br/>GOAL CELL</i>       |    |
| <14   | <10  | Fluid bolus <sup>F</sup><br>Vasopressor <sup>F</sup>  | Fluid bolus <sup>C</sup>  | 6   | Fluid bolus <sup>C</sup>  | 10   | Fluid bolus <sup>C</sup>  | 14 | Fluid bolus <sup>D</sup>                | 19 |