Pharmacodynamic interaction of remifentanil and dexmedetomidine on depth of sedation and tolerance of laryngoscopy

M.A.S. Weerink et al.

Supplemental Digital Content 2 - Specifications of used devices and software

<table>
<thead>
<tr>
<th>Device Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>Vital signs monitor</td>
<td>IntelliVue MP70® Patient Monitor, Philips, Amsterdam, Netherlands</td>
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<tr>
<td>Hemodynamic monitor</td>
<td>EV1000® Monitor with FloTrac® sensor, Edwards Lifesciences, Irvine, California, USA</td>
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<tr>
<td>Respiratory monitoring and ventilator</td>
<td>Zeus Infinity® CS00 ventilator, Dräger Medical, Lübeck, Germany</td>
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<tr>
<td>Infusion pumps</td>
<td>Alaris ® GH (Software V2.3.6)</td>
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<tr>
<td></td>
<td>CareFusion, Rolle, Switzerland (Pumps were controlled by a computer running RUGLOOP II software with incorporated PKPD-models)</td>
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<tr>
<td>Electroencephalography</td>
<td>BrainAmp® DC32 amplifier, Easycap® Electrode input box and cap, Brain Products GmbH, Gilching, Germany</td>
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<td></td>
<td>SedLine® EEG, PSI-2 algorithm, Masimo, Irvine, California, USA</td>
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<tr>
<td>Pinch gauge</td>
<td>SAEHAN® Hydraulic Pinch Gauge, Saehan Medical, Changwon-si, South Korea</td>
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<tr>
<td>Laboratory analyses</td>
<td>EDTA Vacutainers: BD, Franklin Lakes, NJ, United States</td>
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<td></td>
<td>Centrifuge: Labofuge 400R, Heraeus Holding GmBh, Hanau, Germany</td>
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<td></td>
<td>Spectrometer: Xevo triple quadrupole mass spectrometer, Waters Corporation, Milford, Massachusetts, USA (in multiple reaction monitoring mode)</td>
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</table>
### Data Collection

<table>
<thead>
<tr>
<th>Computer</th>
<th>Advantech® POC-W212</th>
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</thead>
<tbody>
<tr>
<td>Data-Logging software</td>
<td>RUGLOOP II</td>
</tr>
<tr>
<td>Data-Logging software</td>
<td>Demed Engineering, Temse, Belgium</td>
</tr>
<tr>
<td>ADC-software</td>
<td>Masimo, Irvine, California, USA</td>
</tr>
<tr>
<td>BrainVision® Recorder</td>
<td>Brain Products GmbH, Gilching, Germany</td>
</tr>
</tbody>
</table>

### Data analyses

#### Modelling

- NONMEM® (version 7.3)
  - Icon Development Solutions, Hanover, Maryland, USA
- Perl-speaks-NONMEM® (PsN)\(^1\) and Pirana\(^2\) as back and/or front-end to NONMEM®.

#### GOF and data visualization:

- R\(^*\)
  - R Foundation for Statistical Computing, Vienna, Austria
- R-packages for graphics: ggplot2\(^3\) and plotly\(^4\)

### References: