

## **Supplementary File 1:**

### **Differential response of pentanal and hexanal exhalation to supplemental oxygen and mechanical ventilation in rats**

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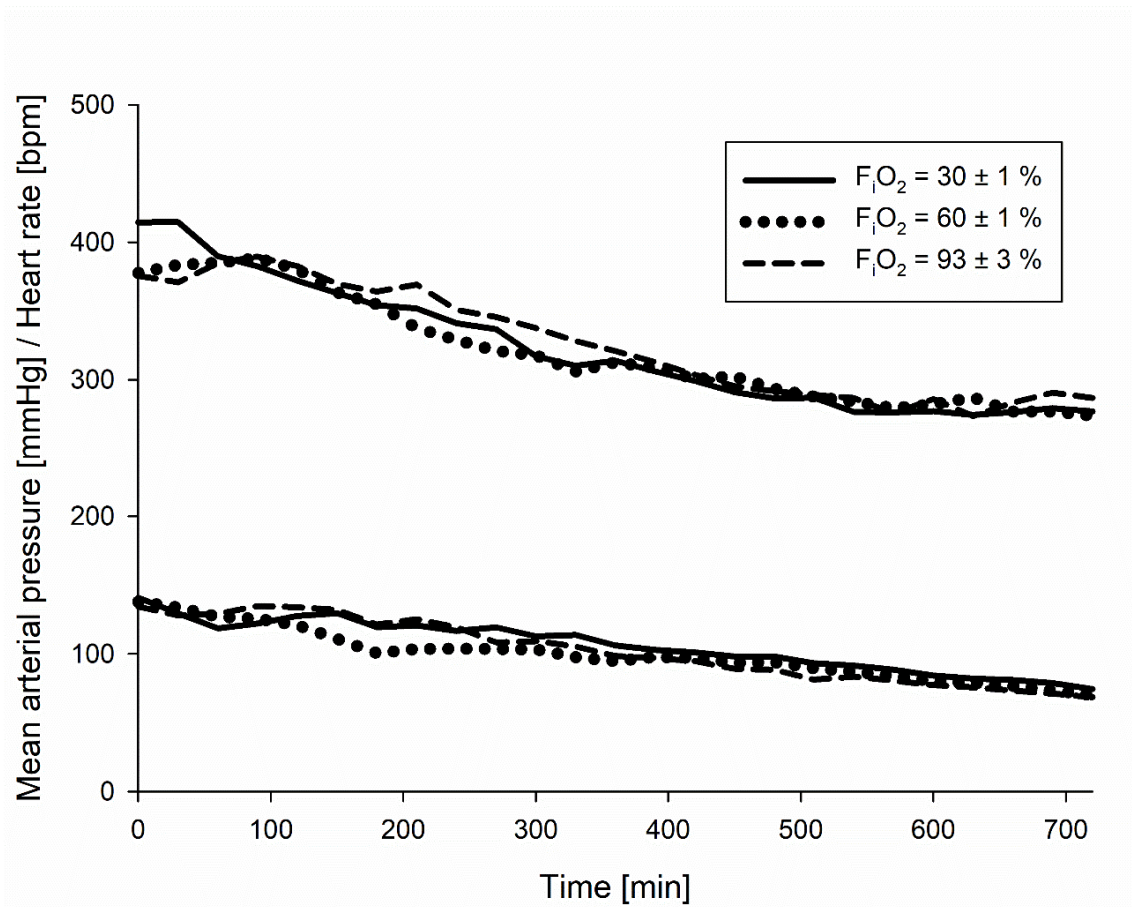
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**Figure S1:** Vital parameters

Upper curves represent heart rate and lower curves represent mean arterial pressure. Data presented as medians per groups.

**Table S1:** Results of blood gas analysis

	Group 1 (Inspiratory oxygen fraction: 30%)				Group 2 (Inspiratory oxygen fraction: 60%)				Group 3 (Inspiratory oxygen fraction: 93%)			
Time	1 h	3 h	6 h	12 h	1 h	3 h	6 h	12 h	1 h	3 h	6 h	12 h
<b>pH</b>	<b>7.46</b> 7.42-7.47	<b>7.45</b> 7.43-7.48	<b>7.44</b> 7.4-7.46	<b>7.4</b> 7.37-7.43	<b>7.42</b> 7.4-7.44	<b>7.42</b> 7.42-7.44	<b>7.44</b> 7.41-7.45	<b>7.39</b> 7.36-7.41	<b>7.43</b> 7.41-7.45	<b>7.43</b> 7.39-7.47	<b>7.42</b> 7.38-7.43	<b>7.37</b> 7.29-7.42
<b>pCO<sub>2</sub></b> [mmHg]	<b>41</b> 39-44	<b>35</b> 34-37	<b>35</b> 32-37	<b>36</b> 33-38	<b>44</b> 41-45	<b>39</b> 36-41	<b>39</b> 34-40	<b>40</b> 37-41	<b>45</b> 42-46	<b>39</b> 38-40	<b>37</b> 36-41	<b>39</b> 38-42
<b>pO<sub>2</sub></b> [mmHg]	<b>147</b> 137-162	<b>158</b> 150-166	<b>161</b> 149-170	<b>154</b> 123-165	<b>276</b> 268-282	<b>269</b> 227-282	<b>262</b> 238-280	<b>235</b> 214-269	<b>402</b> 378-413	<b>385</b> 371-420	<b>393</b> 337-432	<b>362</b> 285-433
<b>Hb</b> [g/dL]	<b>13.2</b> 12.6-13.8	<b>11.6</b> 10.7-11.9	<b>10.8</b> 10.1-10.9	<b>10.2</b> 9.2-10.6	<b>12.9</b> 12.1-13.8	<b>11.8</b> 11.5-12	<b>10.8</b> 10.3-11.4	<b>9.8</b> 9.6-10.6	<b>12.8</b> 12.4-13.5	<b>11.9</b> 11.2-12.4	<b>10.9</b> 10.5-11.7	<b>9.5</b> 9.1-10.8
<b>sO<sub>2</sub></b> [%]	<b>97</b> 97-98	<b>98</b> 97-98	<b>98</b> 97-98	<b>98</b> 97-98	<b>98</b> 98-100	<b>99</b> 98-100	<b>99</b> 98-100	<b>99</b> 99-100	<b>99</b> 99-99	<b>99</b> 99-99	<b>99</b> 99-99	<b>99</b> 98-99
<b>K<sup>+</sup></b> [mmol/L]	<b>4.5</b> 4.4-4.6	<b>3.9</b> 3.7-4.2	<b>3.9</b> 3.7-4.2	<b>4.6</b> 4.3-4.7	<b>4.8</b> 4.3-4.8	<b>4.2</b> 3.9-4.4	<b>4.2</b> 3.9-4.4	<b>4.2</b> 3.8-4.6	<b>4.5</b> 4.2-4.8	<b>4.1</b> 3.7-4.6	<b>4.3</b> 3.8-4.6	<b>4.5</b> 4-5.2
<b>Na<sup>+</sup></b> [mmol/L]	<b>141</b> 141-141	<b>145</b> 143-146	<b>144</b> 143-147	<b>142</b> 141-143	<b>142</b> 140-143	<b>147</b> 144-147	<b>147</b> 145-150	<b>146</b> 142-147	<b>141</b> 141-143	<b>144</b> 142-144	<b>143</b> 141-146	<b>142</b> 139-145
<b>Ca<sup>2+</sup></b> [mmol/L]	<b>1.1</b> 1-1.2	<b>1.1</b> 1.1-1.2	<b>1.1</b> 1.1-1.2	<b>1.2</b> 1.1-1.2	<b>1.2</b> 1.1-1.3	<b>1.2</b> 1.2-1.2	<b>1.2</b> 1.1-1.2	<b>1.2</b> 1.1-1.2	<b>1.3</b> 1.2-1.3	<b>1.2</b> 1.1-1.3	<b>1.1</b> 1.1-1.2	<b>1.1</b> 1.1-1.2
<b>Glucose</b> [mg/dL]	<b>136</b> 126-145	<b>125</b> 121-133	<b>120</b> 112-124	<b>101</b> (96-108)	<b>130</b> 123-140	<b>127</b> 116-139	<b>124</b> 104-129	<b>102</b> 98-108	<b>141</b> 131-143	<b>132</b> 124-147	<b>123</b> 115-128	<b>97</b> 95-114
<b>Lactate</b> [mmol/L]	<b>0.3</b> 0.2-0.5	<b>0.7</b> 0.6-1	<b>0.7</b> 0.5-0.9	<b>0.5</b> 0.2-0.5	<b>0.5</b> 0.4-0.6	<b>0.9</b> 0.5-1.3	<b>0.9</b> 0.6-1.3	<b>0.6</b> 0.5-0.6	<b>0.3</b> 0.1-0.4	<b>0.7</b> 0.5-0.8	<b>0.7</b> 0.5-0.9	<b>0.4</b> 0.3-0.5
<b>BE</b> [mmol/L]	<b>4.4</b> 3.5-6.2	<b>1.5</b> -0.6-2.3	<b>-1.2</b> -3-0.1	<b>-2.6</b> -4.3-(-1.1)	<b>3.8</b> 3-4.6	<b>1.1</b> -0.4-2	<b>0.4</b> -0.5-1.8	<b>-1.3</b> -2.8-(-0.7)	<b>5.6</b> 3.2-6.6	<b>1.5</b> 0.1-3.3	<b>-0.6</b> -2.1-1.2	<b>-2.7</b> -5.6-0.5
<b>HCO<sub>3</sub></b> [mmol/L]	<b>28</b> 27-29	<b>26</b> 24-27	<b>24</b> 23-25	<b>23</b> 21-24	<b>27</b> 27-28	<b>25</b> 24-26	<b>25</b> 24-26	<b>24</b> 22-24	<b>29</b> 27-30	<b>26</b> 25-27	<b>24</b> 23-26	<b>22</b> 20-25

*Data presented as medians and interquartile ranges.*