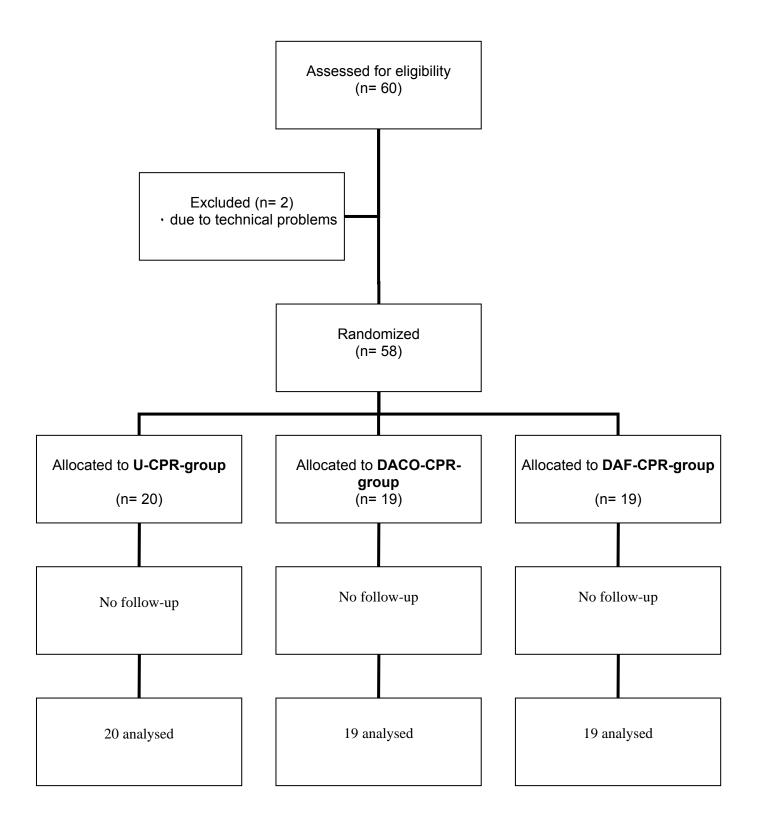
CONSORT Flow Diagram



Supplemental tables

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|------|------|----------------------------|---------------------------|------------------------------|
| CPR | 16 | 40.6 | 13.0 | 0.92 | 0.71 | |
| CO-CPR | 16 | 41.0 | 12.2 | 0.92 | | 0.64 |
| T-CPR | 18 | 38.8 | 15.8 | | 0.71 | 0.64 |

Tab. 1 : Results compression depth in mm.

| | n | MEAN | SD | % | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|--------|-------|------|----------------------------|---------------------------|------------------------------|
| CPR | 16 | 79.88 | 99.1 | 27.2 | 0.0445 | 0.0555 | |
| CO-CPR | 16 | 219.16 | 257.9 | 42.8 | 0.0445 | | 0.546 |
| T-CPR | 18 | 174.53 | 171.7 | 49.0 | | 0.0555 | 0.546 |

Tab. 2 : Results compression depth less than 40 mm.

| | n | MEAN | SD | % | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|--------|-------|------|----------------------------|---------------------------|------------------------------|
| CPR | 16 | 157.06 | 181.0 | 53.5 | 0.513 | 0.098 | |
| CO-CPR | 16 | 206.0 | 248.7 | 40.2 | 0.513 | | 0.041 |
| T-CPR | 18 | 69.58 | 99.2 | 19.5 | | 0.098 | 0.041 |

Tab. 3 : Results compression depth 40 - 50 mm.

| | n | MEAN | SD | % | p-value: CPR vs. CO- CPR | p-value: CPR vs. T- CPR | p-value: CO-CPR vs. T- CPR |
|------------|----|--------|-------|----------------|--------------------------------|-------------------------------|----------------------------------|
| CPR | 16 | 56.59 | 139.0 | 19.3 ± 10.7 | 0.549 | 0.283 | |
| CO- CPR | 16 | 86.95 | 153.1 | 17.0 ± 9.4 | 0.549 | | 0.628 |
| T-CPR | 18 | 112.42 | 159.5 | 31.5 ± 37.3 | | 0.283 | 0.628 |

Tab. 4 : Results compression depth 50 - 60 mm.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|--------|--------|----------------------------|---------------------------|------------------------------|
| CPR | 16 | 293.53 | 179.99 | 0.001 | 0.214 | |
| CO-CPR | 16 | 512.11 | 180.07 | 0.001 | | 0.003 |
| T-CPR | 18 | 356.53 | 84.54 | | 0.214 | 0.003 |

| | n | MEAN | SD | % | p-value: CPR vs. CO- CPR | p-value: CPR vs. T- CPR | p-value: CO-CPR vs. T- CPR |
|------------|----|-------|-------|----------|--------------------------------|-------------------------------|----------------------------------|
| CPR | 16 | 38.89 | 74.4 | 13.2±7.4 | 0.282 | 0.455 | |
| CO- CPR | 16 | 86.79 | 168.2 | 16.9±9.4 | 0.282 | | 0.136 |
| T-CPR | 18 | 23.0 | 45.5 | 6.5±7.6 | | 0.455 | 0.136 |

Tab. 6: Results compressions without correct release.

| | n | MEAN | SD | % | p-value: CPR vs. CO- CPR | p-value: CPR vs. T- CPR | p-value: CO-CPR vs. T- CPR |
|------------|----|-------|------|-----------|--------------------------------|-------------------------------|----------------------------------|
| CPR | 16 | 45.88 | 35.3 | 15.6±8.7 | 0.815 | 0.732 | |
| CO- CPR | 16 | 53.74 | 26.6 | 10.5±5.8 | 0.815 | | 0.935 |
| T-CPR | 18 | 57.05 | 30.8 | 16.0±18.9 | | 0.732 | 0.935 |

Tab. 7: Results compressions with wrong hand position.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|------|------|----------------------------|---------------------------|------------------------------|
| CPR | 16 | 35.6 | 24.2 | 0.001 | 0.178 | |
| CO-CPR | 16 | 65.5 | 22.4 | 0.001 | | 0.003 |
| T-CPR | 18 | 44.5 | 10.8 | | 0.178 | 0.003 |

Tab. 8: Results compressions per minute (1/min).

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|------|------|----------------------------|---------------------------|------------------------------|
| CPR | 18 | 2.16 | 2.49 | 0.006 | 0.196 | |
| CO-CPR | 19 | 0.21 | 0.89 | 0.006 | | 0.038 |
| T-CPR | 19 | 1.20 | 1.71 | | 0.196 | 0.038 |

Tab. 9: Results ventilation (I/min).

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|-------|-------|----------------------------|---------------------------|------------------------------|
| CPR | 18 | 13.83 | 17.56 | 0.016 | 0.119 | |
| CO-CPR | 19 | 1.79 | 7.59 | 0.016 | | 0.137 |
| T-CPR | 19 | 6.11 | 9.34 | | 0.119 | 0.137 |

Tab. 10: Results ventilation attempts with more than 600 ml tidal volume.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|-------|-------|----------------------------|---------------------------|------------------------------|
| CPR | 18 | 22.44 | 23.46 | 0.001 | 0.372 | |
| CO-CPR | 19 | 0.11 | 0.45 | 0.001 | | >0.001 |
| T-CPR | 19 | 16.89 | 9.20 | | 0.372 | >0.001 |

| Tab. 11: Results ventilation attempts with less than 500 ml tidal volume. |
|---|
|---|

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|------|------|----------------------------|---------------------------|------------------------------|
| CPR | 18 | 1.17 | 2.03 | 0.0493 | 0.146 | |
| CO-CPR | 19 | 0.11 | 0.45 | 0.0493 | | 0.237 |
| T-CPR | 19 | 0.37 | 0.81 | | 0.146 | 0.237 |

Tab. 12: Results ventilation attempts with 500 - 600 ml tidal volume.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|-------|-------|----------------------------|---------------------------|------------------------------|
| CPR | 18 | 37.44 | 18.33 | >0.001 | 0.006 | |
| CO-CPR | 19 | 2.0 | 8.49 | >0.001 | | >0.001 |
| T-CPR | 19 | 23.26 | 5.02 | | 0.006 | >0.001 |

Tab. 13: Results total number of ventilation attempts.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|-------|------|----------------------------|---------------------------|------------------------------|
| CPR | 16 | 273.4 | 82.7 | >0.001 | 0.157 | |
| CO-CPR | 16 | 99.8 | 70.7 | >0.001 | | >0.001 |
| T-CPR | 18 | 240.1 | 39.6 | | 0.157 | >0.001 |

Tab. 14: Results over all no-flow-time in seconds.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|------|------|----------------------------|---------------------------|------------------------------|
| CPR | 16 | 55.0 | 12.9 | >0.001 | 0.144 | |
| CO-CPR | 16 | 21.3 | 14.4 | >0.001 | | >0.001 |
| T-CPR | 18 | 49.1 | 8.5 | | 0.144 | >0.001 |

Tab. 15: Results over all no-flow-time in %.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|-------|------|----------------------------|---------------------------|------------------------------|
| CPR | 16 | 25.1 | 21.0 | >0.001 | >0.001 | |
| CO-CPR | 16 | 55.2 | 22.2 | >0.001 | | >0.001 |
| T-CPR | 18 | 101.2 | 39.2 | | >0.001 | >0.001 |

Tab.16: Results initial no-flow-time in seconds.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|------|-----|----------------------------|---------------------------|------------------------------|
| CPR | 16 | 5.4 | 4.5 | >0.001 | >0.001 | |
| CO-CPR | 16 | 12.1 | 5.4 | >0.001 | | 0.001 |
| T-CPR | 18 | 20.7 | 8.1 | | >0.001 | 0.001 |

Tab. 17: Results initial no-flow-time in %.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|------|-----|----------------------------|---------------------------|------------------------------|
| CPR | 20 | 30.2 | 7.5 | 0.269 | 0.423 | |
| CO-CPR | 19 | 26.9 | 7.4 | 0.269 | | 0.869 |
| T-CPR | 19 | 27.4 | 9.5 | | 0.423 | 0.869 |

Tab. 181: Results age of participants in years.

| | n | MEAN | SD | p-value: CPR vs. CO-CPR | p-value: CPR vs. T-CPR | p-value: CO-CPR vs. T-CPR |
|--------|----|------|-----|----------------------------|---------------------------|------------------------------|
| CPR | 20 | 6.5 | 6.8 | 0.673 | 0.769 | |
| CO-CPR | 19 | 5.6 | 5.5 | 0.673 | | 0.473 |
| T-CPR | 19 | 7.2 | 7.7 | | 0.769 | 0.473 |

Tab. 19: Results time after last basic life support course in years.

