**Appendix**

**Table S1** Peripheral chemoreceptors sensitivity in healthy and disease – results from available studies

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Author & year of pub.** | **N** | **Age** | **PChsS assessed with transient hypoxia** | **PChsS assessed with progressive hypoxia** | **PChsS** **assessed with** **steady-state hypoxia** | **Percent of subjects with PChs oversensitivityg** |
|  |  |  | [L/min/SpO2%] | [L/min/SpO2%] | [L/min/SpO2%] |  |
|   |   | mean | ±SD | mean | ±SD | mean | ±SD | mean | ±SD |  |  |
|   |   |   |   |   |   |   |   |  |  |  |  |
| **Healthy** |   |   |   |   |   |   |   |  |  |  |  |
| Edelman *et al*. (1973) [1] | 6 | 23-37e | 0.32 | ±0.17 | - | - | - | - | 0% (0/6) |  |
| Shaw *et al*. (1982) [2] | 18 | 19-32e | 0.23 | ±0.11 | 0.44 | ±0.41 | - | - | 10% (1/10) | c |
| Chua & Coats (1995) [3] | 14 | 55 | ±12 | 0.29 | ±0.22 | - | - | - | - | 7% (1/14) |  |
| Steinback & Poulin (2007) [4]  | 10 | 26 | ±4 | - | - | - | - | 0.601.8 | ±0.27a,f±0.71b,f |  | - |
| Giannoni *et al*. (2008) [5] | 12 | 65 | ±3 | - | - | 0.35 | ±0.21 | - | - |  | - |
| Koehle *et al*. (2009) [6] | 5 | 30 | ±9 |  |  |  |  | 1.32 | b |  | - |
| Niewinski *et al*. (2013) [7] | 16 | 54 | ±6 | 0.2 | ±0.26 | - | - | - | - | 6% (1/16) |  |
| Paleczny *et al*. (2014) [8] | 71 | 45 | ±17 | 0.39 | ±0.37 | - | - | - | - | 8% (6/71) |  |
| Pfoh *et al*. (2016) [9] | 20 | 25 | ±5 | 0.44 | ±0.31 | - | - | 0.321.23 | ±0.27a±0.72b | 10% (2/20) | d |
| Tubek et al. (2016) [10] | 26 |  58 | ±12 |  0.34 | ±0.28  |  - | -  | - | - | 4% (1/26) |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| **Heart Failure** |   |   |   |   |   |   |   |  |  |  |  |
| Ponikowski *et al*. (2001) [11] | 80 | 58 | ±9 | 0.69 | ±0.5 | - | - | - | - | 34% (27/80) |  |
| Giannoni *et al*. (2008) [5] | 60 | 60 | ±8 | - | - | 0.74 | ±0.46 | - | - | 40% (24/60) |  |
| Niewinski *et al*. (2013) [7] | 34 | 62 | ±11 | 0.66 | ±0.45 | - | - | - | - | 44% (15/34) |  |
|   |   |   |   |   |   |   |   |  |  |  |  |
| **Hypertension** |   |   |   |   |   |   |   |  |  |  |  |
| Tubek et al. (2016) [10] | 40 |  58 | ±11 |  0.83 | ±0.5  |  - | -  | - | - | 38% (15/40) |  |
| Narkiewicz et al. (2016) [12] | 15 |  52 | ±4 | 0.44 | ±0.15 |  - | - | - | - |  | - |
|   |   |   |   |   |   |   |   |  |  |  |  |
| apoikilocapnic hypoxia, bisocapnic hypoxia, cdata from reproducibility of progressive hypoxic test substudy (N=10), ddata from transient hypoxia method, erange of age, fresult in L/min/ScO2%, where ScO2 is blood saturation calculated from PETO2, ppercent of subjects with PChsS exceeding mean+2SD measured in healthy/control groupPChsS – peripheral chemoreceptors sensitivity |

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