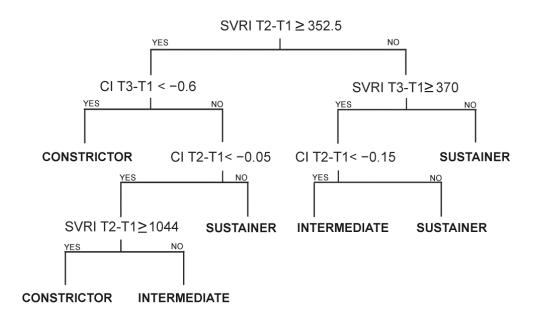
Additional file 1. Practical rule for clustering. Classification rule tree as based on the head-up tilt –induced changes in systemic vascular resistance index (SVRI, dyn\*s/cm<sup>5</sup>\*m<sup>2</sup>) and cardiac index (CI, ml/min/m<sup>2</sup>). T1 stands for supine values (average of the 5<sup>th</sup> minute of the recording), T2 and T3 for the head-up tilt values (average values of the 8<sup>th</sup> and 10<sup>th</sup> minutes of the recording, respectively).



## **Contingency table showing the agreement between the clustering procedures**. Analyses

performed with hierarchical clustering (columns) and practical rule (rows) in the original data (A) and in the validation data (B). Numbers in bold font represent subjects who were classified into the same cluster with both methods.

	Hierarchical clustering		
Practical rule	Constrictor	Intermediate	Sustainer
A. Original data (N=470)			
Constrictor	108	9	0
Intermediate	1	126	4
Sustainer	0	4	218
B. Validation data (N=30)			
Constrictor	6	1	0
Intermediate	0	4	1
Sustainer	0	1	17

## Practical classification rule and validation

The statistical practical rule for clustering was based on head-up tilt -induced changes in SVRI and cardiac index. When we tested the contingency between the hierarchical clustering above and the classification rule, only 18 (3.8%) of the 470 subjects were misclassified using the practical rule. All misclassified subjects were shifted out from, or into, the intermediate cluster, i.e. no misclassifications between the extreme clusters were observed. In the validation data obtained with additional 30 participants (recorded after the analysis of the results of the above 470 subjects), altogether 3/30 subjects (10%) were misclassified using the rule, and none of the subjects were shifted between the extreme clusters.