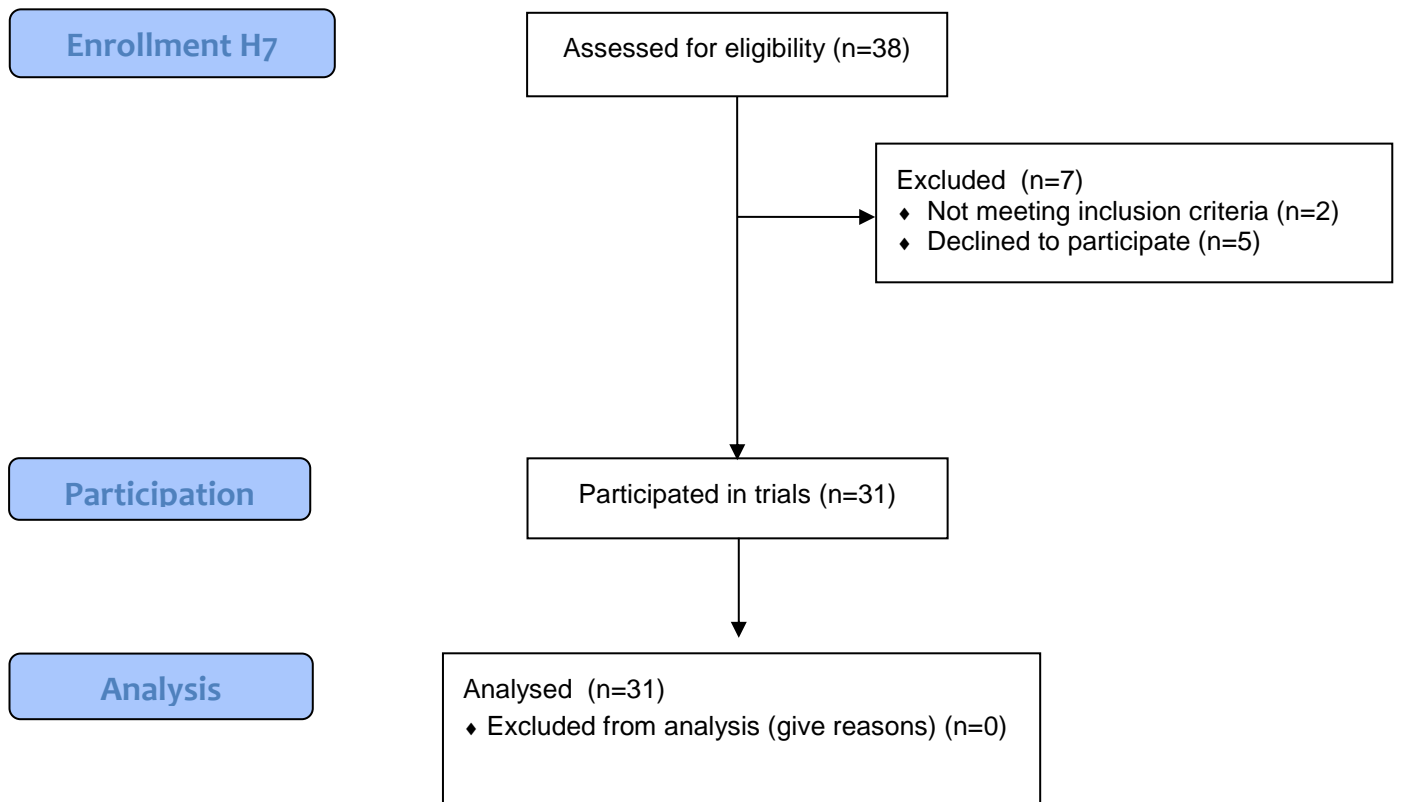


## Participant Flow



## Enrollment H8

Assessed for eligibility (n=38)

Excluded (n=9)  
♦ Not meeting inclusion criteria (n=6)  
♦ Declined to participate (n=3)

## Participation

Participated in trials (n=29)

## Analysis

Analysed (n=29)  
♦ Excluded from analysis (give reasons) (n=0)

## Baseline characteristics

**Table 1:** Baseline characteristics for participants in sub study H7. All values are presented in mean (SD), unless otherwise is specified.

	All (n=31)
Female sex, n (%)	16 (52)
Age, years (mean, SD)	18-66 (40.6, 10.4)
Height, cm	175 (11)
Weight, kg	72.2 (12.1)

**Table 2:** Baseline characteristics for participants in sub study H8. All values are presented in mean (SD), unless otherwise is specified.

	All (n=29)
Female sex, n (%)	11 (38)
Age, median years (range)	41 (19-62)
Body mass index, kg/m <sup>2</sup>	23.4 (2.5)
VO2max, L/min	51.3 (8.2)
<b>Measurement, % of predicted</b>	
FEV1 <sup>a</sup>	102.9 (11.8)
VCmax <sup>b</sup>	101.4 (11.5)
FEV1/VCmax	79.6 (5.9)
R5Hz <sup>c</sup>	101.6 (29.3)
R20Hz <sup>d</sup>	116.3 (29.9)
X5Hz <sup>e</sup>	198.2 (NA)
Z5Hz <sup>f</sup>	99.79 (26.30)

<sup>a</sup>FEV1: Forced expiratory volume in the first second (L)

<sup>b</sup>VCmax: Vital capacity (L)

<sup>c</sup>R5Hz: Resistance at 5 Hertz (kPa/(L/s))

<sup>d</sup>R20Hz: Resistance at 20 Hertz (kPa/(L/s))

<sup>e</sup>X5Hz: Lung reactance at 5 Hertz (kPa/(L/s))

<sup>f</sup>Z5Hz: Respiratory impedance at 5 Hertz (kPa/(L/s))

## Outcome measures

**Table 3:** Primary outcome measures for participants in sub study H8. Dynamic spirometry and impulse oscillometry performed on 29 healthy subjects exposed to -15°C for 50 minutes at two separate occasions. Data presented as mean (SD).

	Rest			Exercise			P-value**
	Pre	Post	P-value*	Pre	Post	P-value*	
FEV <sub>1</sub> <sup>a</sup>	4.29 (0.77)	4.19 (0.74)	< <b>0.001</b>	4.30 (0.78)	4.24 (0.76)	<b>0.012</b>	0.171
VC <sub>max</sub> <sup>b</sup>	5.43 (1.10)	5.34 (1.06)	< <b>0.001</b>	5.43 (1.11)	5.41 (1.08)	0.469	0.083
FEV <sub>1</sub> /VC <sub>max</sub>	79.6 (5.91)	79.0 (5.61)	0.064	79.6 (5.77)	78.9 (6.19)	0.152	0.829
R5Hz <sup>c</sup>	0.306 (0.089)	0.307 (0.080)	0.883	0.308 (0.075)	0.314 (0.069)	0.508	0.703
R20Hz <sup>d</sup>	0.296 (0.078)	0.298 (0.078)	0.694	0.297 (0.073)	0.305 (0.067)	0.199	0.526
X5Hz <sup>e</sup>	-0.070 (0.024)	-0.072 (0.024)	0.529	-0.073 (0.024)	-0.066 (0.022)	<b>0.023</b>	<b>0.028</b>
Z5Hz <sup>f</sup>	0.301 (0.082)	0.308 (0.080)	0.310	0.304 (0.073)	0.310 (0.070)	0.436	0.904
Fres Hz <sup>g</sup>	10.286 (2.286)	10.578 (2.180)	0.441	10.617 (2.163)	10.668 (2.877)	0.890	0.680

<sup>a</sup>FEV<sub>1</sub>: Forced expiratory volume in the first second (L)

<sup>b</sup>VC<sub>max</sub>: Vital capacity (L)

<sup>c</sup>R5Hz: Resistance at 5 Hertz (kPa/(L/s))

<sup>d</sup>R20Hz: Resistance at 20 Hertz (kPa/(L/s))

<sup>e</sup>X5Hz: Lung reactance at 5 Hertz (kPa/(L/s))

<sup>f</sup>Z5Hz: Respiratory impedance at 5 Hertz (kPa/(L/s))

<sup>g</sup>Fres: Resonant frequency

\* Changes within exposures

\*\* Change between exposures

## Adverse events

There were no adverse events associated with this trial.