

Table E-1. Baseline all subjects characteristics

Normal No.	Sex	Age (year)	Height (m)	Weight (kg)	BMI (Kg/m ²)	FVC (L)	FVC %pred	FEV1 (L)	FEV1% (pred)	FEV1/FVC (%)	mMRC	EMGdi-max (uv)
1	M	54	1.6	54.0	20.8	3.2	95.9	2.5	92.2	78.0	0	131.7
2	F	57	1.6	70.0	27.0	2.9	91	2.5	95.7	84.7	0	84.8
3	M	63	1.7	59.5	20.6	3.5	96.7	2.8	98.6	80.0	0	129.3
4	M	40	1.8	85.0	25.4	5.0	102.4	4.3	107.7	86.1	0	200.1
5	M	62	1.7	57.0	19.0	4.2	110.6	3.2	107.0	76.0	0	123.9
6	M	66	1.6	54.0	20.6	3.3	100	2.5	97.0	75.2	0	247.3
7	M	62	1.7	74.0	25.9	3.9	107.1	3.1	110.0	79.6	0	200.3
8	M	62	1.7	68.0	24.1	3.1	88.5	2.4	85.0	75.8	0	118.3
9	M	59	1.6	58.0	24.1	2.5	85.2	2.0	86.1	81.5	0	145.1
10	M	49	1.7	57.0	20.4	4.0	105.6	3.2	102.0	79.1	0	102.7
11	M	52	1.7	61.0	20.1	3.6	86.8	2.9	86.9	80.6	0	175.0
12	M	71	1.5	47.0	19.8	2.2	113.9	1.7	109.1	78.5	0	214.2
Mean		58.1	1.7	62.0	22.3	3.5	98.6	2.8	98.1	79.6	0	156.1
SD		8.3	0.1	10.4	2.8	0.8	9.6	0.7	9.2	3.4	0	50.3
COPD No.	Sex	Age (year)	Height (m)	Weight (kg)	BMI (Kg/m ²)	FVC (L)	FVC %pred	FEV1 (L)	FEV1% (pred)	FEV1/FVC (%)	mMRC	EMGdi-max (uv)
1	M	76	1.55	51.5	21.4	2.38	96.0	1.23	65.5	51.5	2	131.3
2	M	64	1.62	50.0	19.1	3.06	96.8	1.40	56.0	45.6	1	136.5
3	M	67	1.6	51.0	19.9	2.57	86.9	1.26	55.0	49.2	2	102.9
4	M	58	1.56	43.0	17.7	2.20	73.8	0.61	25.2	27.6	3	123.9
5	M	33	1.68	72.0	25.5	2.72	63.8	0.78	21.7	28.7	3	241.5
6	M	58	1.65	53.5	19.7	3.49	100.5	1.36	49.0	39.0	1	183.4
7	M	62	1.71	54.0	18.5	2.53	68.3	0.98	33.5	38.6	1	134.5
8	M	61	1.56	49.0	20.1	1.87	61.1	0.49	20.1	26.3	2	112.2
9	M	67	1.62	43.0	16.4	2.06	66.8	0.63	26.3	30.7	3	185.5
10	M	50	1.68	70.0	24.8	2.53	64.3	1.14	36.2	57.6	2	359.8
11	M	67	1.63	49.0	18.4	1.94	59.0	0.58	23.0	29.9	0	271.6
12	M	60	1.72	55.0	18.6	2.65	71.1	1.21	41.1	45.7	2	107.7
13	M	66	1.58	40.0	16.0	2.91	96.0	1.31	55.0	45.0	1	155.9
14	M	65	1.7	70.0	24.2	1.71	47.8	0.59	21.0	34.3	2	231.7
15	F	69	1.5	46.0	20.4	1.82	97.9	1.08	70.9	59.1	1	98.2
16	M	56	1.65	43.0	15.8	1.46	41.4	0.56	20.0	38.2	2	148.9
17	M	65	1.57	51.0	20.7	2.22	79.3	0.73	33.0	32.8	2	150.2
18	M	73	1.58	53.0	21.2	1.01	37.0	0.64	30.9	63.8	3	288.9
19	M	61	1.76	63.0	20.3	3.71	92.8	1.53	48.5	41.1	1	195.8
Mean		62.0	1.6	53.0	19.9	2.4	73.7	1.0	38.5	41.3	1.8	176.9
SD		9.2	0.1	9.5	2.7	0.7	19.9	0.3	16.3	11.2	0.9	72.1
Overlap No.	Sex	Age (year)	Height (m)	Weight (kg)	BMI (Kg/m ²)	FVC (L)	FVC %pred	FEV1 (L)	FEV1% (pred)	FEV1/FVC (%)	mMRC	EMGdi-max (uv)
1	M	59	1.68	73.0	25.9	1.94	53.8	1.23	43.0	63.5	1	146.2
2	M	52	1.58	60.0	24.0	2.52	77.7	1.42	53.6	56.5	2	208.1
3	M	55	1.69	69.0	24.2	1.51	40.1	0.85	28.2	56.3	1	253.8
4	M	76	1.6	74.0	28.9	2.34	81.7	1.25	57.4	53.2	2	196.7
5	M	49	1.67	69.0	24.7	1.81	50.2	1.15	39.8	63.5	2	323.6
6	M	73	1.7	70.0	24.2	2.03	56.6	1.38	50.3	67.8	1	200.7
7	M	60	1.63	62.0	23.3	2.50	74.9	1.56	58.6	62.5	2	152.9
8	M	64	1.54	66.5	28.0	1.61	59.1	0.86	39.8	53.5	2	147.1
9	M	72	1.59	50.0	19.8	2.47	88.4	1.59	73.9	64.2	2	228.2
10	M	71	1.65	52.0	19.1	3.34	105.8	1.88	77.5	56.2	1	106.8
11	M	65	1.8	61.0	18.8	2.62	62.1	0.98	29.9	37.4	1	140.2
12	M	55	1.67	54.0	19.4	2.27	62.1	1.51	51.2	66.3	1	162.5
13	M	65	1.63	48.0	18.1	1.85	57.9	0.80	31.8	43.0	2	182.3
14	M	49	1.64	67.0	24.9	3.37	92.7	1.92	64.4	56.9	1	207.2
15	M	75	1.65	61.0	22.4	1.84	60.1	0.83	36.0	45.2	2	147.4
16	M	44	1.72	91.0	30.8	3.06	72.8	0.82	23.8	26.8	2	272.6
Mean		61.5	1.7	64.2	23.5	2.3	68.5	1.3	47.5	54.6	1.6	192.3
SD		10.2	0.1	10.8	3.8	0.6	17.4	0.4	16.2	11.4	0.5	56.6
OSA No.	Sex	Age (year)	Height (m)	Weight (kg)	BMI (Kg/m ²)	FVC (L)	FVC %pred	FEV1 (L)	FEV1% (pred)	FEV1/FVC (%)	mMRC	EMGdi-max (uv)
1	M	58	1.68	65.0	23.0	4.02	108.9	3.34	112.9	83.1	0	166.0
2	M	60	1.75	86.5	28.2	3.62	90.0	2.92	91.5	80.6	0	183.0
3	M	53	1.75	93.0	30.4	4.59	104.0	3.84	108.0	83.7	0	140.0
4	M	61	1.72	93.0	31.4	3.92	97.0	3.23	101.0	82.4	0	140.0
5	M	49	1.62	57.0	21.7	2.77	97.3	1.73	70.9	62.4	0	196.0
6	M	44	1.68	75.0	26.6	4.56	112.0	3.99	118.5	87.5	0	195.2
7	M	40	1.75	84.5	27.6	5.93	131.4	4.73	126.6	79.7	0	163.5
8	M	49	1.6	70.0	27.3	3.90	108.0	3.00	100.0	76.8	0	254.6
9	M	51	1.72	55.0	18.6	3.43	84.1	2.91	88.0	85.0	0	123.0
10	M	74	1.66	64.0	23.2	2.72	86.9	2.14	90.0	78.7	0	106.9
11	F	61	1.54	51.0	21.5	2.21	100.0	1.72	93.4	78.0	0	156.0
12	M	58	1.61	70.0	27.0	2.92	91.0	2.47	96.0	84.7	0	162.0
13	M	57	1.7	77.0	26.6	3.32	88.0	2.54	84.0	76.4	0	219.3
14	F	66	1.55	68.0	28.3	2.28	101.0	1.99	106.0	87.0	0	120.6
Mean		55.8	1.7	72.1	25.8	3.6	100.0	2.9	99.1	80.4	0	166.2
SD		8.9	0.1	13.5	3.7	1.0	12.6	0.9	14.6	6.3	0	40.8

Table E-2. Oxygen desaturation during wakefulness and sleep

Normal Subjects	Resting SaO2 (%)	Mean SaO2 (%)	Mini SaO2 (%)	TST (h)	sao2<90% (min)	TB90%	AHI	
1	96.3	96.1	91.0	6.8	-	-	-	1
2	98.4	97.8	93.1	5.7	-	-	-	4.4
3	96.2	96.4	91.0	4.0	-	-	-	1.4
4	97.9	98.4	95.0	4.4	-	-	-	0.4
5	98.0	97.1	96.0	3.2	-	-	-	0.3
6	98.1	97.7	90.0	3.5	-	-	-	2.6
7	99.0	97.8	92.2	5.9	-	-	-	2.4
8	98.0	97.5	94.6	5.2	-	-	-	0.5
9	99.3	99.2	97.5	2.8	-	-	-	3.3
10	98.8	98.6	96.6	3.1	-	-	-	0.9
11	98.3	97.8	93.1	2.2	-	-	-	1.6
12	97.1	96.7	92.6	3.2	-	-	-	0
Mean	98.0	97.6	93.6	4.2	-	-	-	1.6
SD	1.0	0.9	2.4	1.4	-	-	-	1.4

COPD Subjects	Resting SaO2 (%)	Mean SaO2 (%)	Mini SaO2 (%)	TST (h)	sao2<90% (min)	TB90%	AHI	
1	97.1	96.0	92.2	5.2	-	-	-	2.2
2	99.0	98.4	96.1	2.2	-	-	-	0.0
3	97.1	96.1	91.9	6.5	-	-	-	2.4
4	93.1	91.4	79.9	5.6	42.9	12.8	-	0.2
5	96.2	94.9	78.9	9.1	13	2.4	-	1.6
6	98.2	96.6	93.2	1.9	-	-	-	0.6
7	96.6	96.1	94.1	5.9	-	-	-	4.8
8	94.9	94.4	91.2	1.4	-	-	-	0.5
9	95.4	94.8	90.2	5.3	-	-	-	1.0
10	97.2	96.9	92.2	5.8	-	-	-	4.7
11	96.3	96.8	95.1	3.1	-	-	-	0.0
12	98.3	98.2	96.0	3.9	-	-	-	4.0
13	97.9	97.8	95.1	1.4	-	-	-	1.0
14	95.7	95.1	91.0	5.7	-	-	-	3.9
15	97.3	96.8	93.0	3.4	-	-	-	1.8
16	97.6	95.8	81.9	3.2	6.0	3.1	-	2.8
17	98.4	97.9	94.3	4.9	-	-	-	0.4
18	96.0	95.2	84.8	3.9	1.0	0.43	-	2.0
19	97.2	95.3	91.2	6.1	-	-	-	3.0
Mean	96.8	96.0	90.6	4.4	15.7	4.7	-	1.9
SD	1.4	1.6	5.3	2.0	18.8	5.5	-	1.6

Overlap Subjects	Resting SaO2 (%)	Mean SaO2 (%)	Mini SaO2 (%)	TST (h)	sao2<90% (min)	TB90%	AHI	HYP/OSA
1	95.7	94.4	89.0	4.7	0.21	0.1	60.3	73/213
2	97.2	95.9	94.0	2.1	-	-	21.7	45/1
3	98.3	97.2	96.1	1.6	-	-	19.4	30/2
4	98.3	95.9	89.2	2.0	0.15	0.0	38.9	52/24
5	98.0	97.2	95.1	3.7	-	-	29.0	97/11
6	98.4	97.5	91.5	4.0	-	-	33.3	124/8
7	96.9	95.9	83.8	6.9	1.20	0.3	9.5	60/6
8	97.3	95.9	91.0	4.2	-	-	6.4	24/3
9	96.2	95.1	93.1	3.4	-	-	15.4	52/0
10	99.0	98.0	96.3	3.8	-	-	7.3	26/2
11	94.4	92.8	85.9	4.0	2.20	1.4	13.8	55/0
12	96.5	96.2	94.1	4.7	-	-	21.7	103/0
13	94.7	93.2	88.0	3.6	0.08	0.1	14.6	51/2
14	98.1	96.6	89.6	8.3	0.25	0.1	9.6	80/0
15	97.1	95.3	84.8	2.5	1.24	0.9	10.6	26/0
16	97.1	96.4	93.3	2.2	-	-	16.5	36/0
Mean	97.1	95.8	90.9	3.9	0.76	0.4	20.5	
SD	1.3	1.4	3.9	1.8	0.81	0.5	14.1	

OSA Subjects	Resting SaO2 (%)	Mean SaO2 (%)	Mini SaO2 (%)	TST (h)	sao2<90% (min)	TB90%	AHI	HYP/OSA
1	97.2	96.0	81.9	8.3	0.0	0.5	30.2	57/194
2	96.2	95.3	85.8	4.2	0.5	0.3	7.6	27/5
3	96.5	95.1	88.2	5.2	0.25	0.4	42.0	109/109
4	97.1	97.1	82.8	3.9	0.0	0.2	8.0	31/0
5	97.8	98.1	91.0	3.4	0.4	0.0	12.6	31/12
6	96.3	95.7	80.8	5.7	0.20	19.6	61.0	7/341
7	97.4	94.8	80.9	7.9	0.2	0.3	54.9	10/422
8	95.9	95.2	88.9	4.6	0.0	8.6	13.4	28/35
9	97.2	96.7	94.0	2.9	8.4	0.0	39.8	23/19
10	96.0	93.0	59.0	8.9	0.03	2.0	34.0	99/160
11	98.0	98.0	89.0	5.3	19.6	0.5	13.8	15/20
12	98.0	97.6	93.1	7.0	0.49	0.0	10.4	59/0
13	96.2	96.0	91.0	6.0	0.01	0.0	18.9	25/54
14	97.4	97.2	88.1	4.7	0.25	1.5	11.8	39/16
Mean	96.9	96.1	85.3	5.6	2.2	2.4	25.6	
SD	0.7	1.4	8.7	1.8	5.5	5.4	18.0	

note: TB90%, Oxygen saturation less than 90%

Table E-3. Diaphragm EMG, ventilation, End-tidal CO₂ during Wakefulness and NREM sleep in normal subjects and patients with COPD alone and patients with OSA alone and patients with overlap syndrome

Normal		EMG _d %max		V _I (L)		V _T (L)		V _T /EMG _d		RR(bpm)		ETCO ₂ (%)		
No.	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM
1	13.0	13.7	7.0	5.6	0.53	0.46	0.75	0.62	13.3	12.2	5.2	5.3		
2	7.3	7.6	7.6	8.0	0.39	0.39	0.77	0.74	19.5	20.5	4.6	4.8		
3	14.2	11.6	9.3	6.4	0.55	0.43	0.65	0.62	16.9	15.0	4.6	4.9		
4	6.7	7.0	9.7	10.5	0.52	0.64	0.91	1.07	18.8	16.4	4.4	4.6		
5	13.8	18.8	6.9	7.0	0.46	0.42	0.58	0.39	15.1	16.5	4.7	5.1		
6	17.4	11.1	7.5	7.2	0.50	0.46	0.53	0.77	15.0	15.6	4.5	4.8		
7	9.3	11.4	12.5	9.0	0.74	0.61	1.08	0.72	16.9	14.8	4.7	5.0		
8	13.0	14.7	7.3	7.0	0.39	0.40	0.45	0.40	18.4	17.5	4.8	5.1		
9	19.4	14.3	7.9	8.1	0.55	0.68	0.48	0.82	14.4	12.0	5.3	5.5		
10	10.9	10.0	9.5	7.7	0.45	0.52	0.72	0.91	21.0	14.8	5.0	5.6		
11	11.8	14.8	7.7	7.1	0.49	0.48	0.68	0.53	15.7	14.9	4.9	5.0		
12	13.9	11.8	7.4	6.9	0.47	0.40	0.71	0.73	15.8	17.1	4.7	4.8		
Mean	12.6	12.2	8.3	7.5	0.50	0.49	0.69	0.69	16.7	15.6	4.8	5.0		
SD	3.7	3.3	1.6	1.3	0.09	0.10	0.18	0.20	2.3	2.3	0.3	0.3		
COPD		EMG _d %max		V _I (L)		V _T (L)		V _T /EMG _d		RR(bpm)		ETCO ₂ (%)		
No.	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM
1	47.1	33.7	12.0	8.8	0.56	0.44	0.23	0.25	21.3	20.0	4.4	4.4		
2	15.7	11.2	6.3	7.1	0.52	0.43	0.66	0.77	12.1	16.5	4.6	4.5		
3	40.1	23.3	9.3	4.2	0.50	0.24	0.24	0.21	18.7	17.2	4.1	4.2		
4	33.4	18.3	10.8	6.2	0.58	0.31	0.40	0.39	18.8	19.9	4.9	5.0		
5	44.2	31.9	8.8	5.7	0.53	0.39	0.17	0.17	16.8	14.6	5.6	5.8		
6	11.7	9.6	9.8	7.9	0.61	0.47	0.97	0.92	16.1	16.7	4.7	4.9		
7	26.6	20.6	6.1	5.3	0.42	0.33	0.29	0.30	14.5	16.2	4.5	4.5		
8	63.4	39.8	9.0	7.5	0.47	0.42	0.15	0.21	19.2	17.9	5.6	5.6		
9	26.4	20.8	7.5	4.1	0.44	0.23	0.39	0.25	17.0	18.1	4.6	4.6		
10	23.7	20.5	11.1	8.1	0.62	0.46	0.37	0.32	18.0	17.8	4.6	4.6		
11	37.8	31.9	7.8	6.5	0.40	0.35	0.22	0.22	19.5	18.5	4.8	4.7		
12	29.5	39.6	5.7	4.2	0.38	0.29	0.23	0.13	15.1	14.5	4.9	4.7		
13	13.2	23.4	6.9	6.1	0.39	0.40	0.74	0.43	17.6	15.3	4.2	4.3		
14	30.1	17.5	9.4	6.8	0.45	0.32	0.21	0.26	21.0	21.2	4.3	3.8		
15	25.1	19.8	5.2	4.9	0.26	0.23	0.23	0.26	19.7	20.9	4.3	4.3		
16	34.1	27.5	7.3	6.9	0.30	0.32	0.20	0.27	24.2	21.4	3.8	3.6		
17	26.7	18.4	11.6	9.6	0.69	0.57	0.51	0.61	16.8	16.8	3.8	3.5		
18	20.9	16.0	10.1	7.7	0.40	0.48	0.36	0.57	25.1	15.9	3.9	4.4		
19	10.0	12.8	8.4	6.5	0.47	0.36	0.75	0.44	17.8	18.3	4.3	4.4		
Mean	29.5	23.0	8.6	6.5	0.47	0.37	0.39	0.37	18.4	17.8	4.5	4.5		
SD	13.3	8.9	2.0	1.5	0.11	0.09	0.23	0.21	3.1	2.1	0.5	0.6		
Overlap		EMG _d %max		V _I (L)		V _T (L)		V _T /EMG _d		RR(bpm)		ETCO ₂ (%)		
No.	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM
1	49.0	54.7	6.5	7.2	0.37	0.29	0.10	0.07	17.5	24.5	5.3	4.9		
2	23.1	25.2	6.6	3.9	0.35	0.25	0.25	0.16	19.1	15.7	4.4	4.0		
3	28.1	23.5	12.3	6.7	0.70	0.43	0.36	0.27	17.5	15.5	4.7	4.9		
4	58.3	53.8	7.3	7.9	0.41	0.44	0.10	0.11	17.7	18.0	4.4	4.3		
5	21.0	18.2	11.4	7.9	0.64	0.48	0.44	0.38	17.7	16.5	4.5	4.2		
6	31.3	16.7	6.9	4.6	0.41	0.34	0.19	0.29	16.7	13.5	4.9	4.9		
7	17.1	12.9	10.1	7.7	0.59	0.47	0.56	0.58	17.2	16.5	4.5	4.6		
8	48.9	33.4	10.4	8.6	0.47	0.41	0.14	0.19	22.3	20.9	4.6	4.9		
9	18.2	23.3	7.3	5.8	0.43	0.32	0.47	0.27	17.2	18.2	4.0	4.0		
10	12.3	12.2	7.3	6.7	0.48	0.49	0.76	0.77	15.2	13.7	6.7	7.0		
11	14.9	22.0	9.7	5.3	0.52	0.26	0.57	0.19	18.6	20.4	4.8	4.9		
12	17.1	19.5	8.3	4.0	0.48	0.23	0.52	0.22	17.3	17.2	3.8	3.4		
13	25.4	29.2	4.9	3.4	0.30	0.21	0.25	0.15	16.3	16.2	-	-		
14	14.0	13.0	8.6	7.2	0.49	0.41	0.52	0.47	17.5	17.6	4.0	4.2		
15	58.7	55.3	6.6	3.1	0.35	0.23	0.10	0.07	18.8	13.8	-	-		
16	30.9	24.2	7.9	7.8	0.55	0.45	0.20	0.20	14.4	17.4	5.4	5.2		
Mean	29.3	27.3	8.3	6.1	0.47	0.36	0.35	0.28	17.6	17.2	4.7	4.7		
SD	15.8	14.7	2.0	1.8	0.11	0.10	0.21	0.19	1.7	2.9	0.7	0.8		
OSA		EMG _d %max		V _I (L)		V _T (L)		V _T /EMG _d		RR(bpm)		ETCO ₂ (%)		
No.	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM	Wakefulness	NREM
1	10.4	19.6	8.1	6.9	0.53	0.48	0.79	0.38	15.3	14.2	5.9	6.0		
2	18.2	24.5	11.5	5.1	0.76	0.36	0.48	0.17	15.3	14.1	5.4	5.8		
3	7.0	44.7	14.2	11.3	0.71	0.61	1.09	0.15	20.1	18.4	4.2	4.6		
4	8.6	9.3	7.5	8.3	0.47	0.47	0.58	0.54	16.2	17.8	3.8	3.5		
5	14.9	19.6	7.8	7.0	0.35	0.35	0.42	0.31	22.1	20.1	-	-		
6	13.5	32.8	7.5	7.0	0.62	0.49	0.61	0.20	12.3	14.4	3.8	3.5		
7	9.5	16.8	6.2	6.5	0.33	0.37	0.41	0.26	18.7	17.5	5.2	5.5		
8	14.9	18.1	6.5	6.1	0.51	0.39	0.49	0.31	12.7	15.7	3.9	3.5		
9	7.6	11.2	4.9	4.6	0.35	0.32	0.85	0.52	13.8	14.6	4.4	4.4		
10	17.5	26.4	7.6	4.2	0.31	0.22	0.28	0.13	20.1	15.8	4.8	5.5		
11	11.1	25.9	4.5	4.1	0.31	0.31	0.55	0.24	14.3	13.2	4.5	4.6		
12	13.9	17.3	6.7	6.1	0.34	0.31	0.35	0.26	19.4	19.6	4.7	4.7		
13	12.9	17.3	11.6	7.2	0.68	0.50	0.69	0.38	17.1	14.4	4.9	5.1		
14	38.9	44.1	7.8	4.4	0.51	0.31	0.19	0.10	15.2	14.1	3.2	3.7		
Mean	14.2	23.4	8.0	6.3	0.48	0.39	0.56	0.28	16.6	16.0	4.5	4.6		
SD	7.9	10.8	2.7	1.9	0.16	0.10	0.24	0.13	3.0	2.3	0.8	0.9		

Note: ETCO₂, End-tidal CO₂; -, Data missed

Table E-4. Diaphragm EMG (EMG_{di}), Tidal volume (V_T) during wakefulness, stable breathing/snoring during stage 2 and hypopnea event at stage 2 in patients with overlap syndrome

Overlap Subjects	EMG_{di} (%max)			V_T (l)		
	wakefulness	stable	hypopnea	wakefulness	stable	hypopnea
1	49.0	54.7	48.1	0.372	0.292	0.085
2	23.1	25.2	25.4	0.348	0.246	0.154
3	28.1	23.5	35.3	0.704	0.435	0.218
4	58.3	53.8	52.8	0.414	0.437	0.140
5	21.0	18.2	14.8	0.642	0.476	0.349
6	31.3	16.7	12.1	0.413	0.343	0.170
7	17.1	12.9	22.8	0.589	0.465	0.253
8	48.9	33.4	39.1	0.466	0.412	0.152
9	18.2	23.3	18.1	0.425	0.320	0.227
10	12.3	12.2	12.9	0.484	0.489	0.256
11	14.9	22.0	18.7	0.520	0.260	0.109
12	17.1	19.5	20.2	0.480	0.230	0.091
13	25.4	29.2	24.2	0.301	0.211	0.100
14	14.0	13.0	12.6	0.489	0.410	0.292
15	58.7	55.3	46.2	0.353	0.228	0.170
16	30.9	24.2	28.8	0.552	0.448	0.200
Mean	29.3	27.3	27.0	0.472	0.356	0.185
SD	15.8	14.7	13.4	0.111	0.100	0.076

Figure E-1

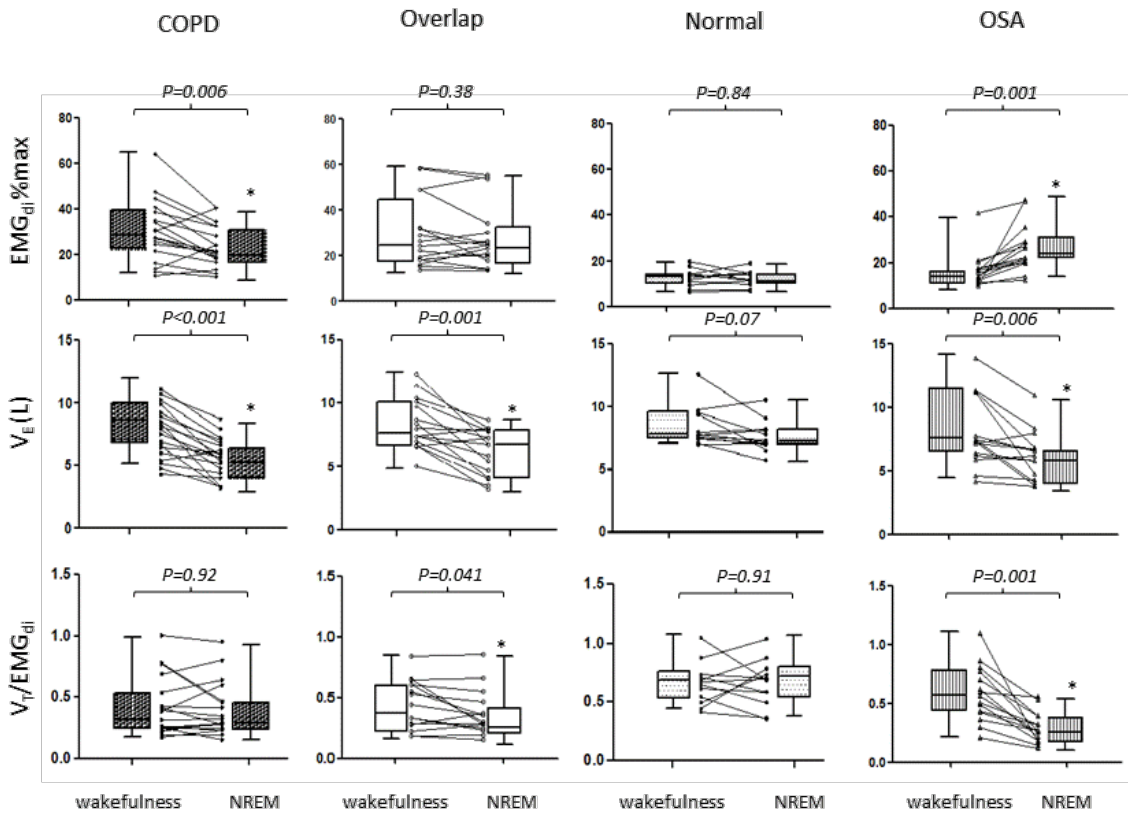


Figure E-1: EMG_{di} %max (upper panel), Ventilation (middle panel) and the V_T/EMG_{di} (lower panel) during wakefulness and NREM in patients with COPD alone, overlap syndrome, OSA and in normal subjects. Each line represents an individual subject.