

## 74 5. Estimated nocturnal sleep impairment in patients with COPD in daily life and its association with daytime physical activity

Table X Quartiles of night sleep variables and corresponding LS-means of the daytime actigraphy measures.

Total night sleeping time (TNST )					
Quartiles (min)	$Q_1 < 347$	$347 \leq Q_2 < 416$	$416 \leq Q_3 < 480$	$Q_4 \geq 480$	<i>p-trends</i>
STEPS (#)	4952	4882	4759	4503	0.08
TDST (% awake time)	2.26	1.76	1.75	1.59	0.08
TIME VL (% awake time)	73.42	73.45	73.22	74.01	0.75
TIME L (% awake time)	15.3	15.61	15.64	15.13	0.91
TIME MV (% awake time)	7.42	7.77	7.97	7.79	0.33
Number of nocturnal sleeping bouts (NNSB)					
Quartiles (#)	$Q_1 < 2$	$2 \leq Q_2 < 3$	$3 \leq Q_3 < 4$	$Q_4 \geq 4$	<i>p-trends</i>
STEPS (#)	5136	4874	4664	4484	0.08
TDST (% awake time)	1.71	1.91	1.94	1.79	0.75
TIME VL (% awake time)	72.78	73.32	73.60	74.25	0.08
TIME L (% awake time)	16.00	15.45	15.35	15.08	0.08
TIME MV (% awake time)	8.18	7.83	7.60	7.39	0.08
Average duration of nocturnal sleeping bouts (DNSB)					
Quartiles (min)	$Q_1 < 86$	$86 \leq Q_2 < 136$	$136 \leq Q_3 < 225$	$Q_4 \geq 225$	<i>p-trends</i>
STEPS (#)	4559	4759	4861	4987	0.08
TDST (% awake time)	1.97	1.82	1.89	1.70	0.33
TIME VL (% awake time)	74.05	73.40	73.55	72.98	0.33
TIME L (% awake time)	15.06	15.56	15.32	15.81	0.33
TIME MV (% awake time)	7.39	7.76	7.74	8.12	0.33
Sleep efficiency					
Quartiles (%)	$Q_1 < 71$	$71 \leq Q_2 < 82$	$82 \leq Q_3 < 91$	$Q_4 \geq 91$	<i>p-trends</i>
STEPS (#)	4524	4758	4798	5111	0.08
TDST (% awake time)	2.01	1.81	1.82	1.73	0.33
TIME VL (% awake time)	73.32	73.50	73.43	72.62	0.08
TIME L (% awake time)	14.89	15.41	15.54	15.98	0.08
TIME MV (% awake time)	7.24	7.76	7.76	8.30	0.08
Time awake during time in bed after the first sleeping onset (WASO)					
Quartiles (min)	$Q_1 < 57$	$57 \leq Q_2 < 104$	$106 \leq Q_3 < 165$	$Q_4 \geq 165$	<i>p-trends</i>
STEPS (#)	5076	4967	4687	4355	0.08
TDST (% awake time)	1.75	1.88	1.87	1.89	0.33
TIME VL (% awake time)	73.02	73.11	73.59	74.23	0.08
TIME L (% awake time)	15.84	15.56	15.35	15.01	0.08
TIME MV (% awake time)	8.03	7.98	7.71	7.29	0.08

Daytime actigraphy measures: STEP = Steps performed; TDST = Total Day Sleeping Time, TIME VL = Time spent in Very Light activity, TIME L = Time spent in Light activity, TIME VM = Time spent in Moderate-to-Vigorous activity.  $Q_i$  = i-th quartile. Data in the table are expressed as least-square means or percentage of wake time. *p-trends* between quartiles evaluated by Spearman's correlation.