the quartile ranges for each sleep quality indicator together with the corresponding least-square average of the daytime actigraphy measures. Spearman's rank correlation is used to calculate the p-trends between the quartiles for each daytime actigraphy measure.

As shown in Figure 34A, the number of steps performed during the day decreased as the number of sleeping bouts and the minutes spent awake after the sleep onset increased. Patients who had their sleep characterized by long sleeping bouts and high sleep efficiency had a significantly higher number of steps on the following day. Patients who slept more than 480 minutes (Q_4) performed a smaller number of steps than the other patients, but no significant differences were found if the number of steps of each patient is divided by the time spent awake (data not shown). As presented in Figure 34B, the time spent in very light activities was higher in patients who slept more and it increased with sleep fragmentation and time spent awake after the sleep onset. Patients with lower sleep efficiency and shorter sleeping bouts spent more time in very light activities. Patients with a higher number of sleeping bouts per night, shorter sleeping bouts, lower sleep efficiency and longer time spent awake during the night spent less time in light (Figure 34C) and moderate-to-vigorous (Figure 34D) physical activities. Patients who slept more during the night spent less time in light activities, while less time in moderate-to-vigorous was spent by those who slept less during the night.