

Appendix 1 (as supplied by the authors): Key features of the circadian rhythm sleep-wake disorders diagnosed in this study

Circadian Disorder	Characteristic sleep pattern	Main clinical features	Epidemiology	Treatment
Delayed sleep-wake phase disorder	Delayed main sleep episode (usually by at least two hours) relative to the socially desired or required sleep time.	<ul style="list-style-type: none"> • Sleep initiation insomnia and difficulty with waking when sleep schedule is socially imposed, but significantly improved sleep when sleep schedule is freely chosen. • Excessive sleepiness in the morning. • Risk for the development of mood disorders. 	<ul style="list-style-type: none"> • Usually starts in adolescence. • Prevalence in general population: 0.17% - 1.53% • 5-10% of individuals with chronic insomnia in sleep clinics 	<ul style="list-style-type: none"> • Strategically timed oral melatonin based on DLMO^{c,ad,a} • Post-awakening light therapy in conjunction with behavioral treatment ^{c,ad}
Advanced sleep-wake phase disorder	Advanced main sleep episode (at least by two hours) relative to the socially desired or required sleep time	<ul style="list-style-type: none"> • Inability to stay awake until the socially desirable time in the evening and inability to remain asleep until a socially desirable wake time. 	<ul style="list-style-type: none"> • Approximately 1% of the general population has advanced sleep phase • Prevalence of advanced sleep-wake phase disorder in the general population and in sleep clinic insomnia samples is 	<ul style="list-style-type: none"> • Evening light therapy

		<ul style="list-style-type: none"> Excessive sleepiness in the evening. 	unknown but thought to be rare.	
Irregular sleep-wake rhythm disorder	Irregular sleep episodes typically shorter than 4 hours; total 24 h sleep duration can be normal.	<ul style="list-style-type: none"> Insomnia at night and excessive sleepiness during the day. 	<ul style="list-style-type: none"> Described in neuro-developmental and neuro-degenerative disorders and after TBI. 	<ul style="list-style-type: none"> Light therapy in elderly patients with dementia Melatonin ^{c,}_{ad}
Note: TBI: traumatic brain injury; DLMO: dim light melatonin onset; c: children; ad: adolescents; a: adults				

Reference

- Auger RR, Burgess HJ, Emens JS, Deriy LV, Thomas SM, Sharkey KM. Clinical Practice Guideline for the Treatment of Intrinsic Circadian Rhythm Sleep-Wake Disorders: Advanced Sleep-Wake Phase Disorder (ASWPD), Delayed Sleep-Wake Phase Disorder (DSWPD), Non-24-Hour Sleep-Wake Rhythm Disorder (N24SWD), and Irregular Sleep-Wake Rhythm Disorder (ISWRD). An Update for 2015: An American Academy of Sleep Medicine Clinical Practice Guideline. *Journal of clinical sleep medicine : JCSM : official publication of the American Academy of Sleep Medicine*. 2015;11(10):1199-236.