

eTable 3. Comparison with alternate techniques for automated diagnosis of OSA

Device	Ref	Characteristics	SCOPER	#	≥ 5 n/h			≥ 15 n/h		
					AUC	Sen	Spe	AUC	Sen	Spe
Sunrise	-	Fully automated Wireless	S ₃ P ₂ E ₄ R ₅	376	95	91	94	93	92	84
WristOx 3100	1	Fully automated Wireless	O ₁	154	-	89	94	-	88	90
Remmers sleep recorder	2	Fully automated	O _{1x} P ₂ R ₅ A _x	94	85	75	81	91	63	96
APNiA	3	Fully automated	S ₃ C ₄ O ₁ P ₂ E ₄ R ₂	28	96	88	73	97	70	94
NOX T3	4	Fully automated	S ₃ O _{1x} P ₂ E ₁ R ₂ A _x	32	-	100	70	-	92	85
Somnocheck	5	Semi-automated	C ₄ O _{1x} P ₂ R ₂ A _x	121	96	96	65	91	81	83
SleepView	6	Semi-automated	C ₄ O _{1x} R ₂ A _x	93	92	80	95	92	87	85
ARES Unicorder	7	Semi-automated	S ₃ C ₄ O ₂ P ₂ E ₃ R ₂ A ₁	92	-	98	84	-	92	95
Stardust II	8	Semi-automated	C ₄ O _{1x} P ₂ E ₄ R ₂	80	95	95	62	95	86	78
Watch PAT200	9	Semi-automated Wireless	S ₃ C ₂ O _{1x}	75	91	96	43	92	92	77
Sonomat	10	Semi-automated Contactless	E ₄ A ₂	60	94	94	77	97	88	91

Caption: The following table compares the performances and characteristics of the presently reviewed device with 10 comparators, reviewed in Mendonça et al. (2018). The following criteria were used to select comparators: a) the level of evidence is qualified as I or II, as per Flemons et al.'s criteria (2003); b) the quality of evidence is

qualified as ‘a’ or ‘b’, as per Flemons et al.’s criteria (2003); c) the analysis for the test method is at least semi-automated; d) the device is commercially available; e) polysomnography is the reference method; f) similar cut-offs were tested (5 and 15 n/h) and sensitivity and specificity are reported. The application of these criteria led to the selection of 10 devices. Unlike most of the reviewed comparators, the Sunrise system relies on a single-channel recording. The system was validated on the largest sample and supported by fully automated analysis with no manual intervention. Abbreviations: Ref, reference; #, number of patients in the population studied; AUC, area under the ROC curve; Sen, sensitivity; Spe, specificity.