

Polysomnography Report

Unknown Institution

Total Recording Time: 6 hours 22 minutes (382 minutes)

Lights Off Clock Time: 2025-06-20 23:00 Lights On Clock Time: 2025-06-21 5:22

Patient Information

Name: PE250467, 1®ÀÏÈ£ Date of Birth: 1973-03-07

ID: 55282757 Age: 52 year(s)

Address: Gender: Male
City: Height: 1.71 m
Zip Code: Weight: 82.0 kg

E-Mail: BMI: 28.0

Phone:

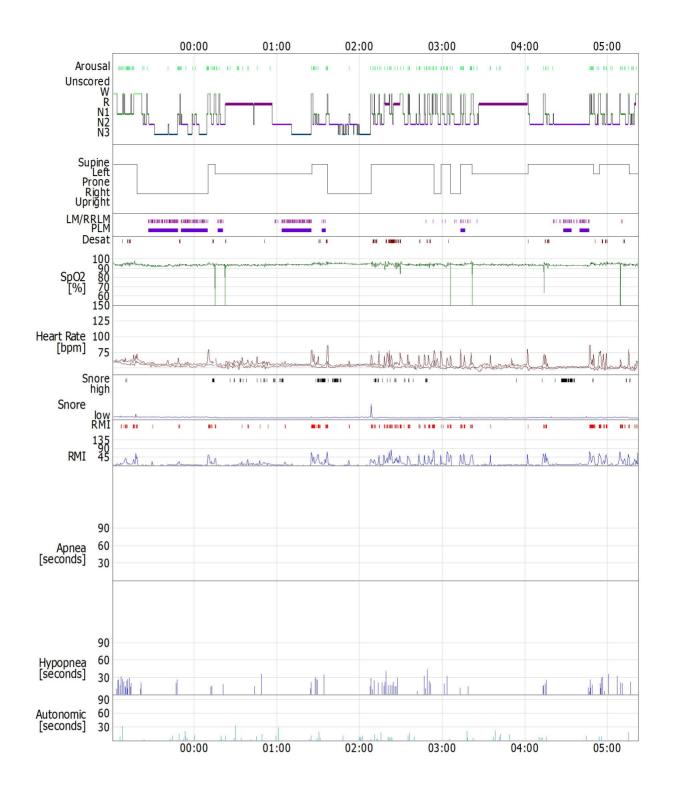
Sleep Summary

Total Recording Time:	382.0 minutes	Apnea + Hypopnea (A+H):	78	13.8 / h
Sleep Period:	378.5 minutes	Obstructive Apnea:	0	0.0 / h
Wake After Sleep Onset:	40.0 minutes	Central Apnea:	0	0.0 / h
Total Sleep Time:	338.5 minutes	Mixed Apnea:	0	0.0 / h
Sleep Onset:	3.5 minutes	Hypopnea (All)	78	13.8 / h
Sleep Efficiency:	88.6 %	Obstructive Hypopnea:	-	-
Number of Awakenings:	41	Central Hypopnea:	-	-
Sleep Latency to N1:	3.5 minutes	Mixed Hypopnea:	-	-
Sleep Latency to N2:	22.5 minutes	RDI:	17.2	
Sleep Latency to N3 (SWS): Stage R Latency from Sleep	30.5 minutes	Oxygen Desaturation Events (OD):	38	6.7 / h
Onset:	78.5 minutes	Snore Time:	31.3 minutes	9.3 %
		Limb Movement:	193	34.2 / h
		PLMS:	169	30.0 / h

PE250467, 1®ÀÏÈ£, 55282757 Polysomnography Report
Printed: 2025-07-07 13:37 Page 1 / 10 Study Date: 2025-06-20



Summary Graph





Sleep Information

	N1	N2	N3	R	Wake
Minutes:	58.5 min	149.0 min	52.5 min	78.5 min	43.5 min
% of TST	17.3 %	44.0 %	15.5 %	23.2 %	-
% of Sleep Period	15.5 %	39.4 %	13.9 %	20.7 %	10.6 %

Arousal Statistics

	Number	Index		Number	Index
Arousals	0	0.0	Spontaneous Arousals	48	8.5
Apnea Arousals	0	0.0	Hypopnea Arousals	38	6.7
LM Arousals	2	0.4	PLM Arousals	6	1.1
Desaturation Arousals	0	0.0	Snore Arousals	1	0.2
Respiratory Arousals	22	3.9	RERA	19	3.4
User Defined Arousals	0	0.0	Total Arousals	136	24.1



Apnea/Hypopnea Statistics

Respiration	Number	%	A or H/h	Supine	Non-Supine	Mean [seconds]	Longest [seconds]
Apnea	0	0.0	0.0	0	0	0.0	0.0
Obstructive	0	0.0	0.0	0	0	0.0	0.0
Central	0	0.0	0.0	0	0	0.0	0.0
Mixed	0	0.0	0.0	0	0	0.0	0.0
Hypopnea (All)	78 1	0.00	13.8	69	9	20.3	43.7
Obstructive	-	-	-	-	-	-	-
Central	-	-	-	-	-	-	-
Mixed	-	-	-	-		-	
RDI				35.5	5.0		
Total	78		13.8	69	9	20.3	43.7

Respiration	Number in REM	REM Index	Number in NREM	NREM Index
Apnea	0	0.0	0	0.0
Obstructive	0	0.0	0	0.0
Central	0	0.0	0	0.0
Mixed	0	0.0	0	0.0
Hypopnea (All)	12	9.2	66	15.2
Obstructive	-	-	-	-
Central	-	-	-	-
Mixed	-	-	-	-
RDI		9.2		19.6
Total	12	9.2	66	15.2

Apnea-Desaturation Relation

Desaturation	Apnea	Obstructive	Central	Mixed	Hypopnea	Total
>90%	0	0	0	0	35	35
81-90%	0	0	0	0	8	8
71-80%	0	0	0	0	0	0
61-70%	0	0	0	0	0	0
51-60%	0	0	0	0	0	0
<50%	0	0	0	0	0	0
Total	0	0	0	0	43	43

Snoring Statistics

Snoring Time: 31.3 minutes

Relative Snoring Time: 9.3 %

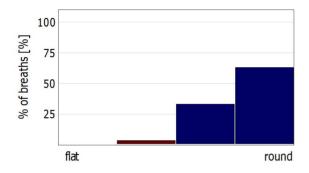
Number of Snoring Episodes: 60

Average Snoring Episode Duration: 0.5 minutes
Longest Snoring Episode: 4.3 minutes

PE250467, 1®ÀÏÈ£, 55282757 Polysomnography Report
Printed: 2025-07-07 13:37 Page 4 / 10 Study Date: 2025-06-20



Flattening Statistics



Number of breaths detected 364

Breaths below threshold 13 3.6%

SpO₂ Statistics

% Mean Oxygen Saturation: 93.8 Saturation < 90%: 0.2 minutes 0.1 % Lowest Oxygen Saturation: 0.88 % Saturation < 80%: % Average Desaturation: Saturation < 70%: % 3.8 %

Average Oxygen Saturation during wake: 94.1 %
Average Oxygen Saturation during REM: 93.5 %
Average Oxygen Saturation during NREM: 93.8 %

Desaturation Statistics

Position	Number	OD/h	Average OD Fall [%]	Average OD [%]
Total	38	6.7	3.8	91.9
Supine	34	15.1	3.8	91.9
Non-Supine	4	1.2	3.3	91.3

Desaturation		Cumulative		Cumulative
<u>Fall</u>	Number	Number	OD/h	OD/h
Total	38	38	6.7	6.7
<5%	31	38	5.5	6.7
5%-9%	6	7	1.1	1.2
10%-20%	1	1	0.2	0.2
>20%	0	0	0.0	0.0

Desaturation Low Point	<90%	<85%	<80%	<70%	<60%	
Number	2	1	0	0	0	
OD/h	0.4	0.2	0.0	0.0	0.0	

PE250467, 1®ÀÏÈ£, 55282757 Printed: 2025-07-07 13:37



Heart Rate Statistics

	Mean [bpm]	(¡¾STD) [bpm]	Min [bpm]	Max [bpm]
Total	54.1	5.6	26.4	145.4
Supine	54.1	6.3	26.9	143.7
Non-Supine	54.1	5.0	26.4	145.4
REM	54.0	3.8	33.1	117.6
NREM	53.3	4.4	26.4	142.1

Cardiac Events

Heart Rate					
Average Heart Rate during Sleep:		53.44	bpm		
Highest Heart Rate during Sleep:		142.12	bpm		
Highest Heart Rate during Recording:		145.42	bpm		
Lowest Heart Rate during Sleep:		26.43	bpm		
Lowest Heart Rate during Recording:		26.43	bpm		
Arrhythmias					
Asystole:	0		Longest Pause	sec	
Sinus Tachycardia:	0	High	est Heart Rate		bpm
Narrow Complex Tachycardia:	0	High	est Heart Rate		bpm
Wide Complex Tachycardia:	0	High	est Heart Rate		bpm
Bradycardia:	0	Lowe	est Heart Rate:		bpm
Atrial Fibrillation:	0				
Other Arrhythmia:	0				

PE250467, 1®ÀÏÈ£, 55282757 Printed: 2025-07-07 13:37



PLM Statistics

			During PLM	
All EMG.Tibialis	Number	Index	Number	Index
LM/RRLM	193	34.2	169	30.0
LM with Arousals	0	0.0	0	0.0
RRLM	0	0.0	0	0.0
LM with no association	193	34.2	169	30.0
LM/RRLM during N1	15	15.4	10	10.3
LM/RRLM during N2	95	38.3	76	30.6
LM/RRLM during N3	83	94.9	83	94.9
LM/RRLM during R	0	0.0	0	0.0

	Total		Mean Duration	Minimum Duration	Maximum Duration
	Number	Index	[seconds]	[seconds]	[seconds]
LM/RRLM	193	34.2	1.6	0.5	5.8
LM/RRLM in PLM	169	30.0	1.5	0.5	4.6
PLM-sequences	8	1.4	641.9	166.5	1290.7

Position Statistics

	Index time			
Position	[minutes]	Relative [%]	Transitions	A+H/h
Supine	135.1	39.9		30.7
Left	116.0	34.3		2.6
Prone	0.0	0.0		-
Right	87.4	25.8		2.7
Upright	0.0	0.0		-
Unknown	0.0	0.0		-
Total	338.5	100.0	15 (2.7/h)	

Respiratory Data Integrity

Flow: 100.0 %

Percentage of time with no artifacts. Low values, less than $% \left(1\right) =\left(1\right) \left(1\right)$

SpO2: 100.0 % 90%, normally indicate bad or low signal quality.

Pulse: 99.9 %

Scoring Information

Scorer Name: ±èÅÂÈ£ Scoring Date: 2025-06-21 05:43:26

Scoring Palette: Sleep Scoring

Comments:

PE250467, 1®ÀÏÈ£, 55282757 Polysomnography Report
Printed: 2025-07-07 13:37 Page 7 / 10 Study Date: 2025-06-20



Recording Information

Trace: A1 (Signal: EEG-A1)

Trace: C3-A2 (Signal: EEG-C3-A2)
Trace: C4-A1 (Signal: EEG-C4-A1)
Trace: F3-A2 (Signal: EEG-F3-A2)
Trace: F4-A1 (Signal: EEG-F4-A1)
Trace: O1-A2 (Signal: EEG-O1-A2)
Trace: O2-A1 (Signal: EEG-O2-A1)

Trace: Chin (Signal: EMG.Submental-Chin)
Trace: LEG-L (Signal: EMG.Tibialis-Leg.Left)
Trace: LEG-R (Signal: EMG.Tibialis-Leg.Right)

Trace: RE (Signal: EOG-E2)
Trace: IO (Signal: EOG-IO)
Trace: SO (Signal: EOG-SO)

Trace: Position_DR (Signal: Pos.Angle-Gravity)
Trace: Pulse (Signal: Pulse.Averaged-Probe)

Trace: Plethysmogram (Signal: Pulse.Pleth-Probe.RD)
Trace: Flow_DR (Signal: Resp.Flow-Cannula.Nasal)

Trace: Thermistor (Signal: Resp.FlowTemp-Thermistor.NasalOral)

Trace: Thorax (Signal: Resp.Movement-Inductive.Thorax)

Trace: Phase_DR (Signal: Resp.Phase-Inductive)
Trace: RMI_DR (Signal: Resp.RMI-Inductive)

Trace: Snore_DR (Signal: Resp.Snore-Cannula.Nasal)

Trace: SpO2 (Signal: SpO2.Averaged-Probe)

Trace: SpO2-Quality_DR (Signal: SpO2.Averaged-Quality)

PE250467, 1®ÀÏÈ£, 55282757 Printed: 2025-07-07 13:37 Polysomnography Report Study Date: 2025-06-20

Page 8 / 10



Analysis Criteria

Respiratory Analysis Profile: SMC PLM Analysis Profile: SMC

Report Profile: smc

Body position detection:

Changes in position lasting less than 5.0 s are not considered valid.

Desaturation Analysis

An oxygen desaturation event was detected when the oxygen saturation fell by at least 3.0%. The fall was not allowed to last longer than 120 seconds. The plateau before the rise had to be shorter than 20 seconds and the slope of the rise had to be faster than 0.3% each second. All desaturations events that fell below 50.0% were excluded as artifacts.

Respiration effort stop detection:

A respiration effort stop was detected where intersecting effort stops were found in both belts. Abdomen method:

A respiration effort stop was detected when the amplitude of a 5.0 second(s) interval of the signal dropped below 20% of the reference amplitude.

The reference amplitude was calculated as the mean value of the amplitudes found in a period of 120 seconds preceding the signal drop.

All events lasting longer than 120 seconds were excluded.

Thorax method:

A respiration effort stop was detected when the amplitude of a 5.0 second(s) interval of the signal dropped below 20% of the reference amplitude.

The reference amplitude was calculated as the mean value of the amplitudes found in a period of 120 seconds preceding the signal drop.

All events lasting longer than 120 seconds were excluded.

Snoring detection:

Minimum number of snores needed to create a snoring period are 3. Snoring periods are merged into one if the interval between them was less than 10.0 s. Snoring periods are allowed to continue through movement periods.

Pulse artifact detection:

An artifact was scored in the Pulse trace where Pulse values below 25 or above 250 were found.

LM Analysis:

Traces Used: LEG-L, LEG-R

Non EMG-envelope traces with sampling frequencies higher that 20 Hz are band pass filtered (low: 10 Hz, high 45 Hz), rectified and downsampled to 20Hz before analysis.

LMs have duration in the range of 0.5~s - 10.0~s. The baseline is active and calculated dynamically through the whole night. LM events exceed amplitude of 8.0~times baseline and are lower than 300.0~times baseline. LMs are merged into one if the interval between them is less than 5.0~seconds. LM events may be scored 0.0~seconds into wake.

PLM Analysis:

Traces Used: LEG-L, LEG-R

PLMs consist of 4 or more LMs with intervals greater than 5.0 seconds and less than 90.0 seconds. LMs associated with arousals are discarded from PLM detection. LMs associated with apneas are discarded from PLM detection. PLMs can overlap wake periods.

Arousal is associated with LM if it starts 0.5 seconds before and 0.5 seconds after the LM. Apnea is associated with LM if it 10.0 seconds before and 0.0 seconds after the LM.



Automatic detection of events:

Events were not detected during movement period or 10.0 seconds after a movement period or during wake if present.

Following event(s) were not used in the report because they occurred in the period described above: 7 Desaturations,

Index Time = Analyzed Time - (Movement Time(+ interval of no events) + Wake Time). The Index Time is derived from the total Analyzed Time minus the total Movement (and interval of no events) and Wake (if present) Time values.

Valid pulse interval is from 25.0 bpm to 150.0 bpm but not during artifacts. Values excluded from pulse spanned 0.0 minutes.

Valid SpO2 interval is from 50.0~% to 100.0~% but not during artifacts. Values excluded from SpO2 spanned 0.2~minutes.

Sleep Efficiency is calculated from Total Sleep Time/Total Recording Time.

Sleep onset is calculated as the duration from analysis start (Lights off) to the first epoch of Sleep.

Latency to stage N1 is calculated from analysis start (lights off) until 30.0 seconds of consecutive N1 sleep.

Latency to stage N2 is calculated from analysis start (lights off) until 30.0 seconds of consecutive N2 sleep.

Latency to stage N3 is calculated from analysis start (lights off) until 30.0 seconds of consecutive N3 sleep.

Latency to Stage R is calculated from sleep onset until 30.0 seconds of continuous R sleep.

Event Removal:

Following events removed due to movement or artifact: 1 LM(s) and 0 PLM(s).