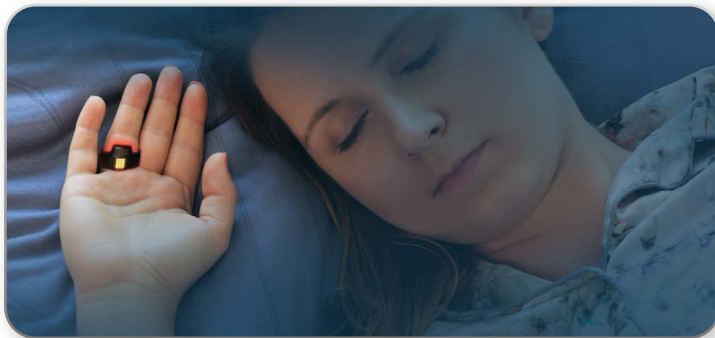# O_{two} Fellow

OXYMETRY
PAR EXCELLENCE

Screening

- ✓ Oxymetry / ODI
- ✓ Heart rate
- ✓ Snore
- ✓ Position
- ✓ Pleth signal – autonomic arousal
- ✓ Activity
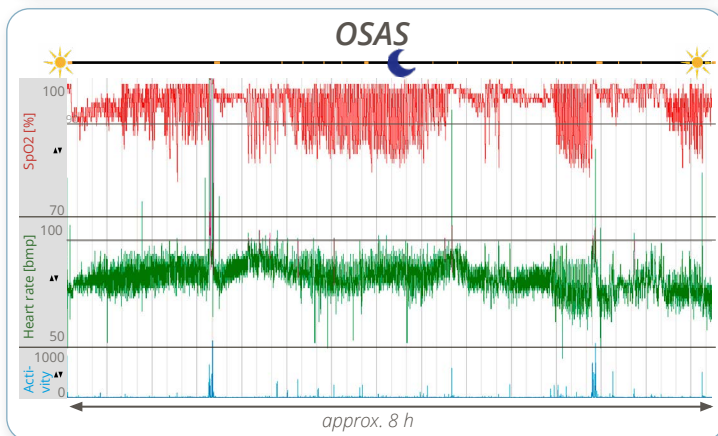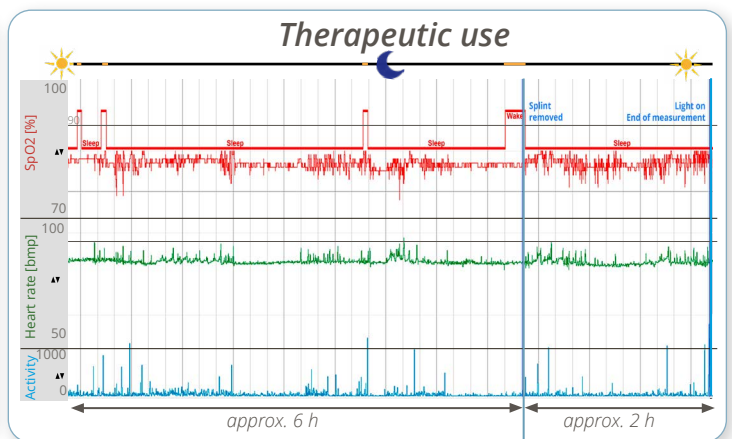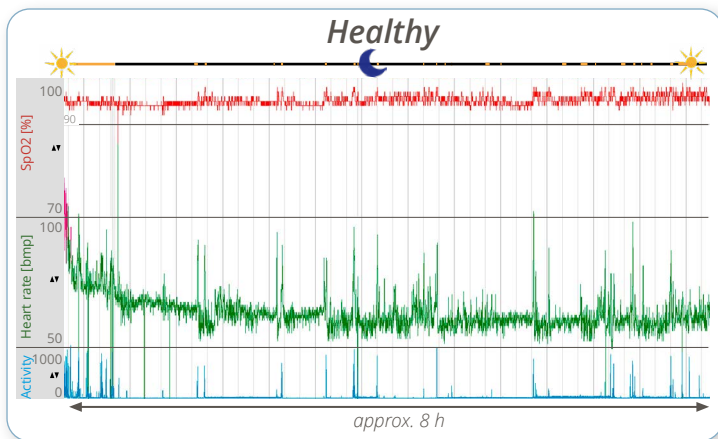
Therapy control

- ✓ Regular recording of oximetry for improved compliance, especially in the adjustment period
- ✓ Recording of the entire night of sleep, even beyond therapy use time
- ✓ Additional control of basal SpO_2 and ODI

PAP therapy	Mandibular protrusion splint (MPS)

Healthy

approx. 8 h

OSAS

approx. 8 h

Therapeutic use

approx. 6 h · approx. 2 h

With MPS:
ODI: 7,1 /h

MPS removed:
ODI: 17,8 /h

SOMNO
medics

- ◆ **Oxygen saturation (SpO$_2$, %):**
  - Desaturations: drops in oxygen ≥ 4 % , duration ≥ 8 s (adjustable parameters) ⇨ ODI
  - Basal SpO$_2$: diffusion disorder / alveolar hypoventilation

- ◆ **Heart rate (HR, bpm):**
  - Heart rate beat to beat
  - Nocturnal HR Fluctuation (NHRF): ≥ 8 bpm, duration 3-30 s
  - Dipping: drop in HR during sleep > 10 % (analog to blood pressure)
  - Brady- / tachycardia

- ◆ **Plethysmography:**
  - Autonomic arousal: sleep fragmentation
  - Cardiac circulation time: detection of cardiac dysfunction

- ◆ **Position:**
  - Upright / reclined – supine or side

- ◆ **Actigraphy:**
  - Sleep-wake detection: the relationship of events to sleep
  - Time in bed (TIB)

- ◆ **Snore:**
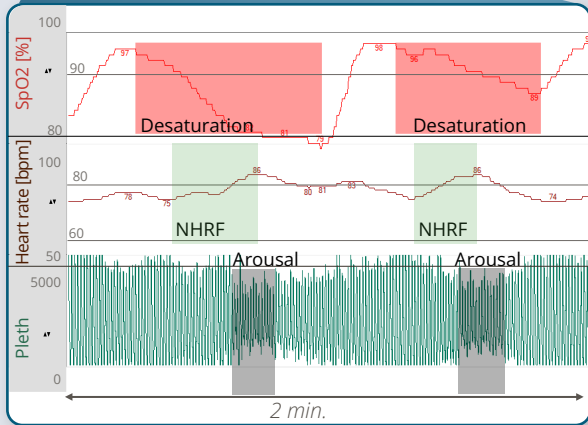 - Episodic snoring, in % Total Sleep Time (TST)

Measurement process

① Continuous recording of measurement data, transfer to smartphone via Bluetooth

② Data available in the cloud immediately after the end of measurement
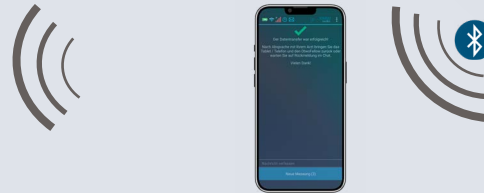
③ Measurement data

2 min.

④ Summary report

Oxygen saturation (SpO$_2$)

Basal SpO$_2$ [%]	97
Time < 90 % [min]	0,1
ODI [1/h]	8
Min. SpO$_2$ [%]	88
Circulation time [/sec]	23,3
Hypoxic Burden [% min/h]	29,7

Heart rate

Mean value [bpm]	58
Min/Max [bpm]	49/86
Tachycardia [min]	0,0
Bradycardia [min]	0,0
with hypoxia [min]	0,0
Dipping [%]	-12
NHRF [/h]	11

Autonomic Arousals

Arousal [1/h]	7,3
Arousal with desaturation [1/h]	0,0
Sleep fragmentation [% TST]	15

Snoring analysis

Snore epis. [% TST]	2,0

Detailed report

TECHNICAL DATA

Sizes	S, L, XL. Integrated spring for optimum fit
Weight	10 g
Data transfer	via Bluetooth to smartphone; from smartphone via WLAN / 5G to the cloud
Power supply	Li-Ion battery, charging via USB adapter or charging box with built-in battery (optional)
Duration	11 hrs., charging duration < 2 hrs.

SCOPE OF DELIVERY

O$_{two}$Fellow incl. charger, smartphone incl. app and cloud access

SOMNO *medics*

SOMNOmedics AG | Am Sonnenstuhl 63 | D-97236 Randersacker
Tel.: +49 (931) 3590940 | info@somnomedics.eu | www.somnomedics.eu