

AcuPebble® SA100

The first medical device to obtain the CE mark for the automated diagnosis of Obstructive Sleep Apnoea



Clinically validated diagnosis

AcuPebble SA100 automated sleep apnoea diagnosis was validated in a powered clinical trial at the NHS Royal Free Hospital in London.

- ▶ Validated diagnosis **equivalent to ambulatory gold-standard** (multi-channel polygraphy followed by manual specialist interpretation).
- ▶ Validated **AHI and ODI based diagnoses** for both 3% and 4% desaturation criteria with high accuracy (94% PPV, 98% NPV).



Patient-friendly design

- ▶ **Easy to use:** as simple as peeling off an adhesive and putting it on.
- ▶ **Non-invasive:** allows patients to have a more natural sleep at home.
- ▶ **No training required:** avoids unnecessary trips to the clinic.



Cost-effective solution

- ▶ **Accurate automatic diagnosis:** more tests with the same resources.
- ▶ **Simple and fast:** no need to train patients; reduced waiting times.
- ▶ **Reliable:** reduces invalid tests that must be repeated.

Easy home testing with remote physician access

AcuPebble sensor

2.9 cm diameter
1.7 cm height
Weight 7 gr



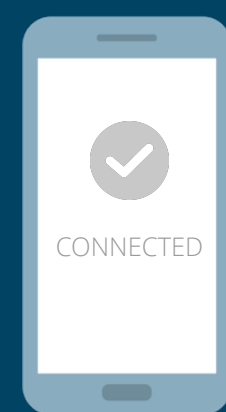
Patient

Fix to neck exterior
using medical adhesive



Mobile

Wireless data transfer to
nearby mobile device



Cloud

Data transfer and
analysis (3G+ or Wi-fi)



Doctor

Remote access to patient's
results via web app



Reduce the burden for patients with remote testing

- ▶ The device can be sent to patients by post, avoiding unnecessary trips.
- ▶ Less time off work needed, reducing the associated socio-economic impact.
- ▶ No risk of contagion, as the sensor can either be disposed of or easily disinfected.

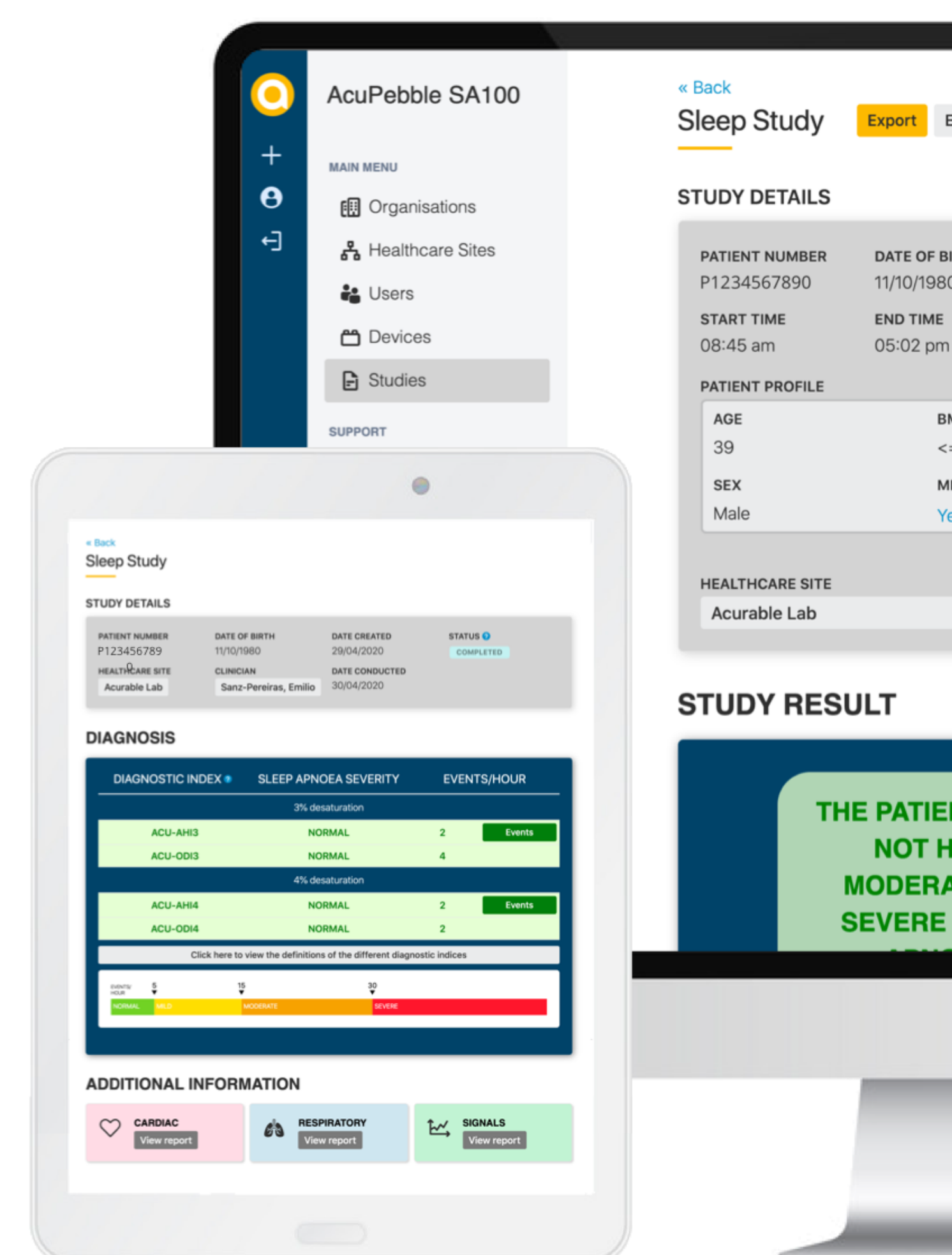
Detailed sleep study report

DIAGNOSIS DETAILS

- ▶ Overall diagnosis (test result and severity).
- ▶ AHI obtained from flow reductions and 3% desaturation (as per current AASM criteria).
- ▶ AHI obtained from flow reductions and 4% desaturation.
- ▶ ODI using 3% desaturation and 4% desaturation.
- ▶ All parameters obtained from estimation of sleep time.

ADDITIONAL INFORMATION

- ▶ Classification of events.
- ▶ Respiratory and cardiac features analysis.



contact@acurable.com



<https://acurable.com>



Acurable Ltd., 5-7 Cranwood St,
London EC1V 9EE, UK

CE
0068