#### The new prisma STARS: SOFT & SMART

#### **BreathCaring Solidity**

There when you need HER. Now.





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### **BreathCaring Solidity.**

#### Discover the new generation of our CPAP/APAP device.

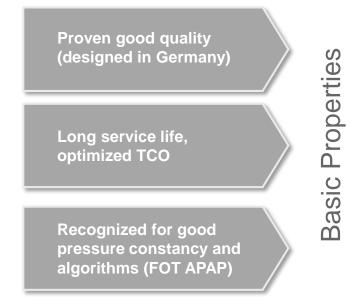
You'll make the right treatment choice with prisma SOFT or prisma SMART!

The design for which prisma is known promises to deliver trusted quality. All our products are pragmatically designed for real-life use. For we always develop to satisfy our partners' requirements. We come up with state-of-the-art devices that feature reliability, intuitive use and economical operation.





### **Special Features**



"The CPAP/APAP with the best price/performance ratio on the market"





# In brief: prisma SOFT and prisma SMART

The all-rounders of OSAS therapy



- Quality (sound, pressure, algorithms, service life) at wellknown level for prisma devices
- Modern design, usability rigorously tested and optimized
- Titration still possible via prismaLAB
- Proven comfort features such as softPAP, mask feedback, autoSTART, softSTART



Two different APAP dynamics

- For every patient the most suitable therapy -



#### What is new? Very clear, highly visible Large LCD screen display of different kinds of Easy-to-understand information Standard The right therapy for every 2-step APAP patient Dynamic User quickly understands the menu. No hidden Simple, clearly structured User-friendly/GUI menu content, no unnecessary displays Standardized connections, Compatible with existing User-friendly/ prismaLINE accessories accessories; titration can handling can be used be done with prismaLAB

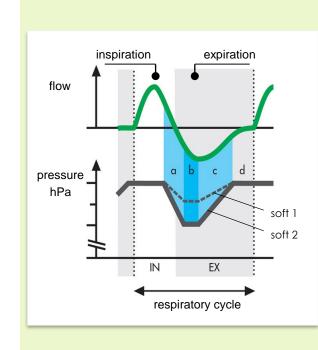


#### **More Comfort Improves Compliance**

#### softPAP 1 and 2 in CPAP and APAP

With pressure reduction during early phase of exhalation: especially for patients who find it unpleasant or difficult to exhale against positive pressure.

With pressure increase in time at the end of critical end-expiration phase to prevent obstructive events.





#### softPAP

	softPAP 1	softPAP 2	
Current Pressure	Reduction		
≤ 8hPa	-1.0hPa	-2.0hPa	
≤ 12hPa	-1.3hPa	-2.5hPa	
≥ 12hPa	-1.6hPa	-3.0hPa	



### **More Comfort Improves Compliance**

#### prismaAQUA humidifier

- Simple handling, easy to clean
- Starts automatically when therapy begins
- Automatically switches off when no water is available
- 400 ml capacity



Remove cover



Connect the humidifier



Open the humidifier



#### The world of prisma accessories

#### can be expanded in all directions.

- Integrated humidifier **prismaAQUA** (WM 29680)
- Choice of tube systems: breathing tube, 19 mm (WM 24445)
   Optional: autoclavable tube system 19 mm (WM 24667), external heated tube system HYBERNITE Superday (WM 29045)
- Filter:

Pollen filter (set of 12 WM 29652) / Bacteria filter (WM 24476)





### **Expert Settings Menu**

- Hold down **Menu button** and **softSTART button** together for several seconds.
- To call up the settings menu, press the button.







### Algorithms in prisma SOFT and prisma SMART

New with 2 APAP dynamics: for every patient the most suitable therapy







### **Proactive APAP Regulation**

# Challenge: Compromise between stable, therapeutically effective pressure and lowest pressure possible

- Overly rapid / extreme reduction in pressure leads to renewed severe obstructions and arousals.
- Overly rapid / extreme increase in pressure in response to mild obstructions leads to high mean pressures or high pressure variability (quick, renewed pressure reduction).
- Inadequate increase in response to severe obstructions leads to longer phases with pressures below therapeutically effective levels.



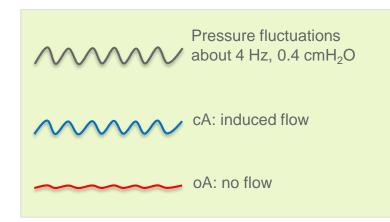
## FOT in all modes: The best way to identify different types of apnea

- The automatic CPAP pressure regulation requires reliable information about apnea. When obstructive apnea is detected, the CPAP device increases pressure to prevent further obstructions.
- In CPAP mode the information about apnea is essential for the user to determine whether the treatment is running well or if **settings or even the mode should be changed**.



### **FOT: Functionality**

- With the help of Forced Oscillation Technology (FOT), our CPAP and APAP therapy devices reliably distinguish between obstructive and central apnea.
- FOT is a sensitive process that uses the resulting air flow and pressures to measure the resistance and obstructions in the upper airways and then responds accordingly.



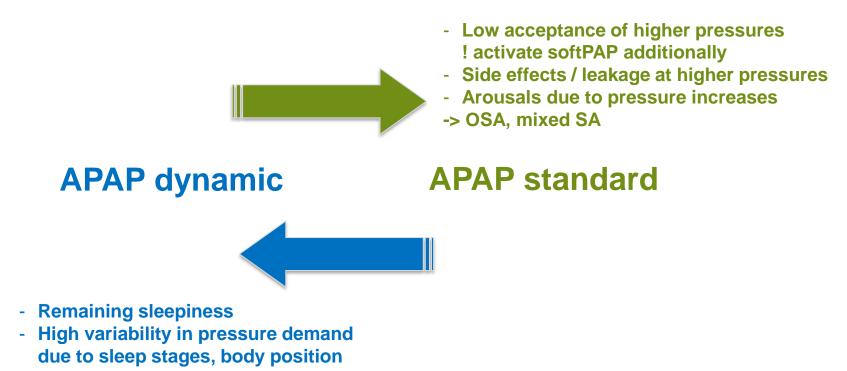


## **APAP settings: standard vs. dynamic**

Select your preferred autoCPAP principle



prisma SMART



-> OSA, UARS



### APAP settings: standard vs. dynamic

Select your preferred autoCPAP principle



Maximum normalization of inspiratory flow shape and prevention of snoring

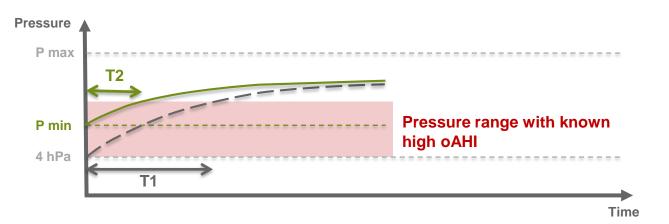
Safe prevention of severe events with cautious further increase to minimize side effects, optimize acceptance



#### **APAP settings: P min** Reasons to increase minimum pressure



prisma SMART



#### Patients with generally high pressure demand

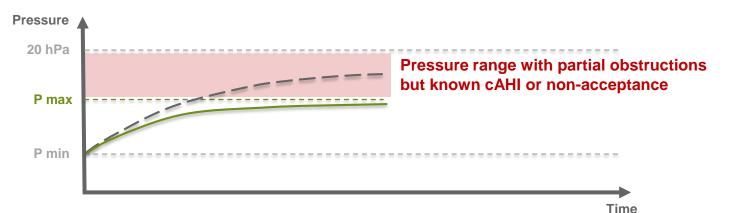
- Shorter time with high oAHI (T2 vs. T1) -> lower residual AHI
- Higher importance if critical pressure range has to be passed several times a night due to multiple therapy starts
- -> Elevated AHI at lower pressure can be detected in pTS therapy analysis or in P(S)G report
- -> Additional softSTART can help to fall asleep easier



#### APAP settings: P max Reasons to decrease maximum pressure



prisma SMART



Patients with significant impairment at higher pressures - even in a range with residual obstructive events

- Leakage or non-compliance related to pressure
- Central events / glottic apneas related to pressure
- -> Pressure complications can be detected in pTS therapy analysis or in P(S)G report



### **Two APAP Dynamics**

#### You have the choice of two different

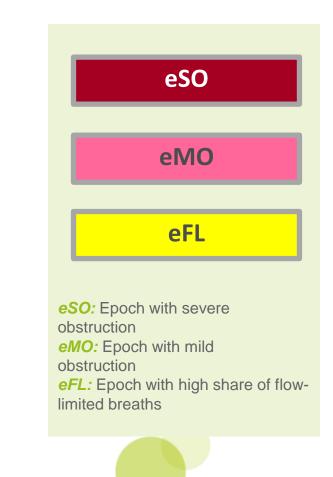
#### settings for APAP management

Std (Standard):	Standard: APAP regulation of prismaLINE. Apnea and hypopnea are treated effectively. The device also responds to snoring, flattening and RERAs.	<b>Target:</b> Mean pressures and leakages are kept as low as possible.	
dYn (Dynamic):	<i>Dynamic:</i> Stronger and faster reaction to snoring and flattening. Breathing is more rigorously normalized.	<b>Recommendation:</b> For patients who benefit from higher pressures.	
	Will be implemented in the whole portfolio with a next FW U		



#### Standard APAP: Algorithm Details

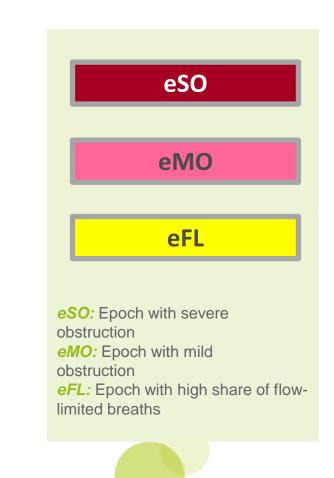
- Objective of the epoch principle: adjustment time to new pressure
- An epoch = 2 minutes
- Pressure change at end of epoch
- obstructive Hypopnea (oH) and obstructive Apnea (oA): immediate reaction, up to two times within an epoch
- eSO events: oA, oH,
   Snoring > 8 breaths in the epoch
- eMO events: RERA,
   Snoring > 4 breaths in the epoch





#### **Dynamic APAP: Algorithm Details**

- Objective of the epoch principle: adjustment time to new pressure
- An epoch = 2 minutes
- Pressure change at end of epoch
- Immediate reaction, up to two times within an epoch, to snoring (after 6 breaths), obstructive Hypopnea (oH) and obstructive Apnea (oA)
- eSO events: oA, oH, Snoring > 6 breaths in the epoch
- eMO events: RERA, Snoring > 3 breaths in the epoch





### **APAP: Algorithm Details**

- Pressure range (Pmax-Pmin) is divided into four quartiles
- Dynamic reactions depend on pressure range

 Example: Pmax 18 hPa, Pmin 10 hPa 1st Q: 10-12 hPa 2nd Q: 12-14 hPa 3rd Q: 14-16 hPa

4th Q: 16-18 hPa

	eSO	eMO*	eFL*	
			Std	dYn
1 <sup>st</sup> Quartile	1.5hPa	1.0hPa	0.5hPa	0.5hPa
2 <sup>nd</sup> Quartile	1.0hPa	1.0hPa	hPa	0.5hPa
3 <sup>rd</sup> Quartile	1.0hPa	0.5hPa	hPa	0.2hPa
4 <sup>th</sup> Quartile	0.5hPa	0.5hPa	hPa	hPa

Pressure increase depends on event

\* max. Increase 4 hPa above eSO pressure



## **Positioning prisma STARS (OSAS)**

**Best Handling, Known Algorithms** 

Segment	Device	Differences	
Premium Segment (e.g. private patient)	prisma20A, prisma20C	<ul> <li>Most intuitive way of handling: touch</li> <li>Integrated heating tube</li> <li>Inspirational breathing support</li> <li>Humidifier level 7</li> <li>FOT / CSR</li> </ul>	
Typical, classic OSAS segment	prisma SOFT, prisma SMART	<ul> <li>LCD</li> <li>softPAP-Level 1-2 (exhalation relief)</li> <li>Humidifier level 5</li> <li>FOT / CSR</li> <li>2 APAP dynamics</li> </ul>	
Exclusively quote driven / tender	SOMNObalance, SOMNOsoft 2	Micro LDC     softPAP Level 1-2 (exhalation relief)     OPP	



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