Pitching

Breathing Management

Experiences & Devices

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Lowenstein PRISMA VENT 40

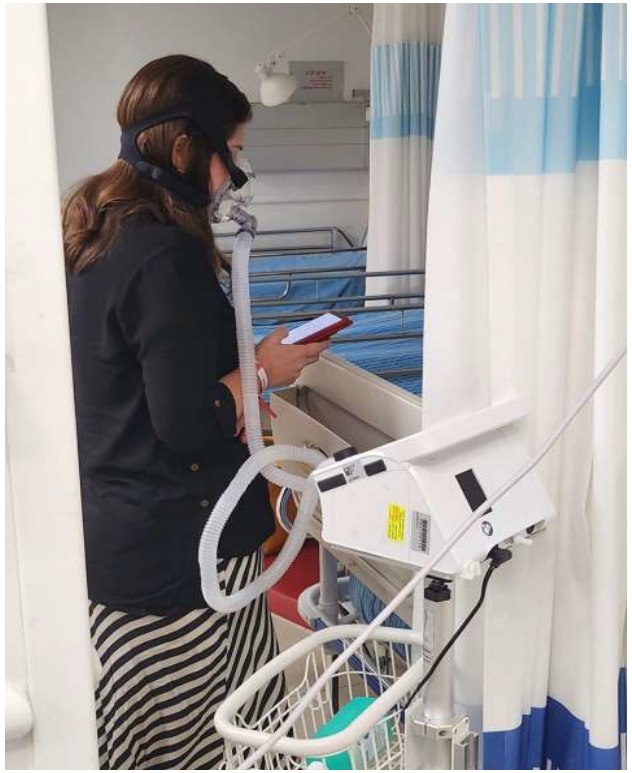
The prisma VENT40 from Löwenstein Medical impresses with its versatile feat
being.

Technical specifications

Product class as per MDR (EU) 2017/745	IIa
Dimensions in cm (W x H x D):	21.8 x 17.5 x 21.8
Weight	2.4 kg
Weight of internal rechargeable battery (for variant with battery)	0.63 kg
Maximum air flow at 20 hPa	> 220 l/min
Operating time of internal rechargeable battery with the following settings: T mode, f = 20 /min, Ti = 1 s, PEEP = 4 hPA, Vt = 800 ml Passive lungs: Resistance R = 5 hPa (l/s); Compliance C = 50 ml/hPa	> 10 hours
IPAP pressure range	4 – 40 hPa ±1.2 hPa (±8% of setting)
PEEP pressure range	4 – 25 hPa ±1.2 hPa (±8% of setting)

Ti/Ti max Ti min, Ti max, Ti timed	0.5 s – 4 s 0.2 s – 4 s auto (only Ti timed)
Respiratory rate	0 – 60 breaths/min
Target volume	100 ml – 2000 ml
Trigger levels - Inspiration - Expiration	 1 (high sensitivity) to 8 (low sensitivity) 95% to 5% of maximum flow in steps of 5%
Pressure increase speed	Level 1: 100 hPa/s Level 2: 80 hPa/s Level 3: 50 hPa/s Level 4: 20 hPa/s
Pressure decrease speed	Level 1: 100 hPa/s Level 2: 80 hPa/s Level 3: 50 hPa/s Level 4: 20 hPa/s max: slow pressure adjustment
Maximum allowed flow with oxygen supply	15 l/min

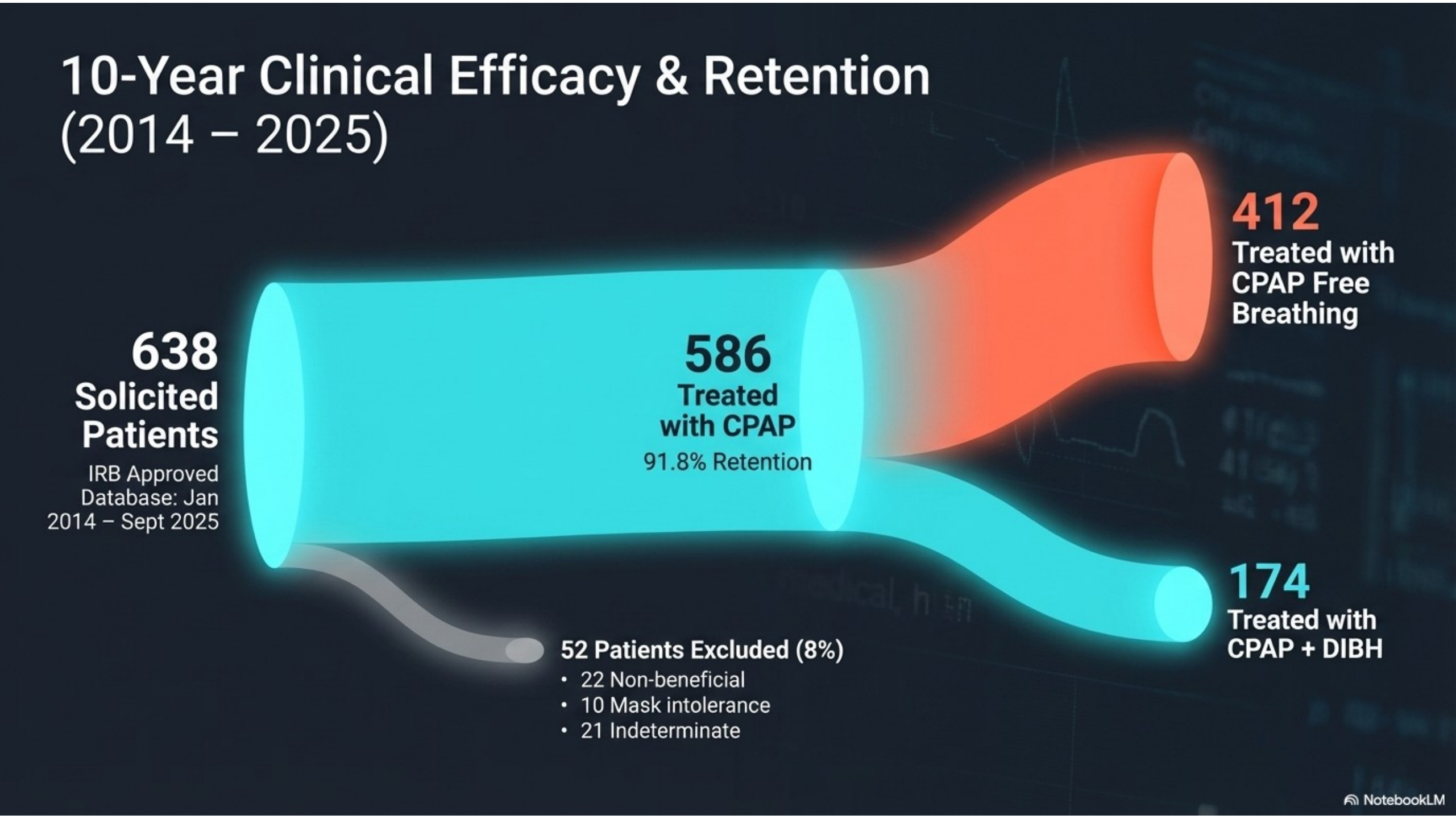
Lowenstein Prisma S40



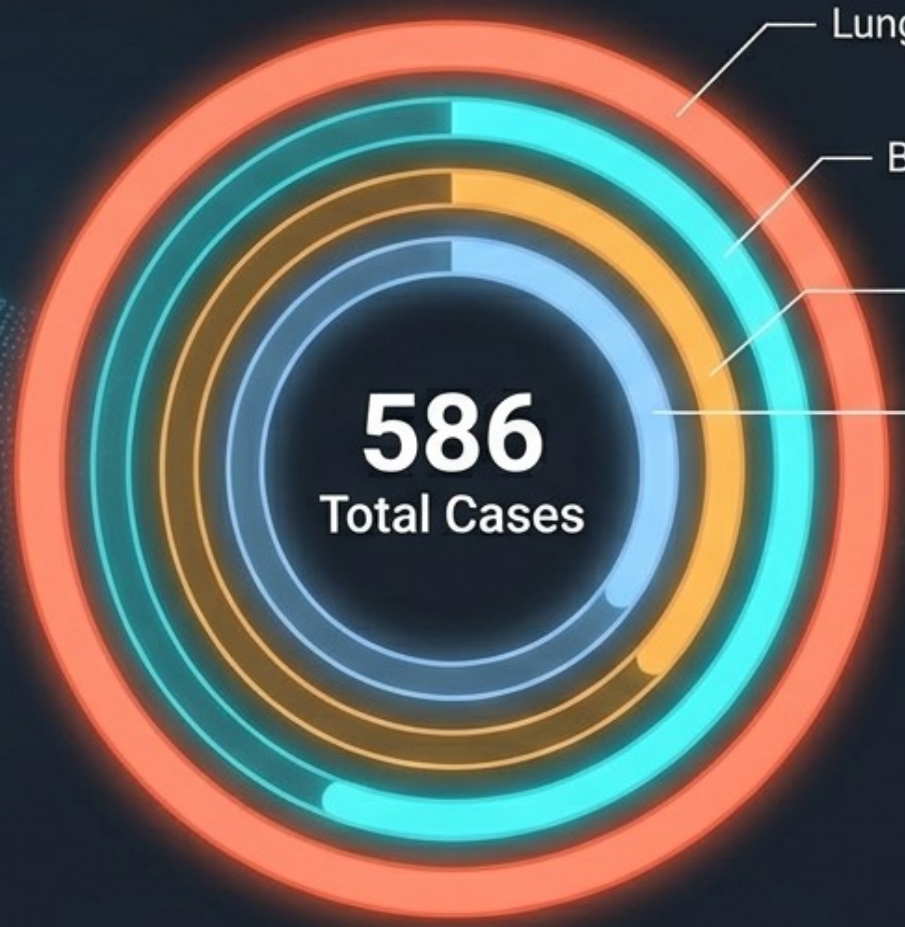
Time sequence prior to sim. or treatment

Rampup	Gradual pressure until 15cm H2O	**10**	Optimal pressure 15cm H2O	**25**	Optimal pressure 15cm H2O	**35**
Patient Location	Nursing station		Nursing station - Linac waiting area		Radiation Treatment	

10-Year Clinical Efficacy & Retention (2014 – 2025)



Treatment Profiles: Anatomy & Fractionation



Two ablation cases represent single fraction delivery for malignant cardiac arrhythmia.

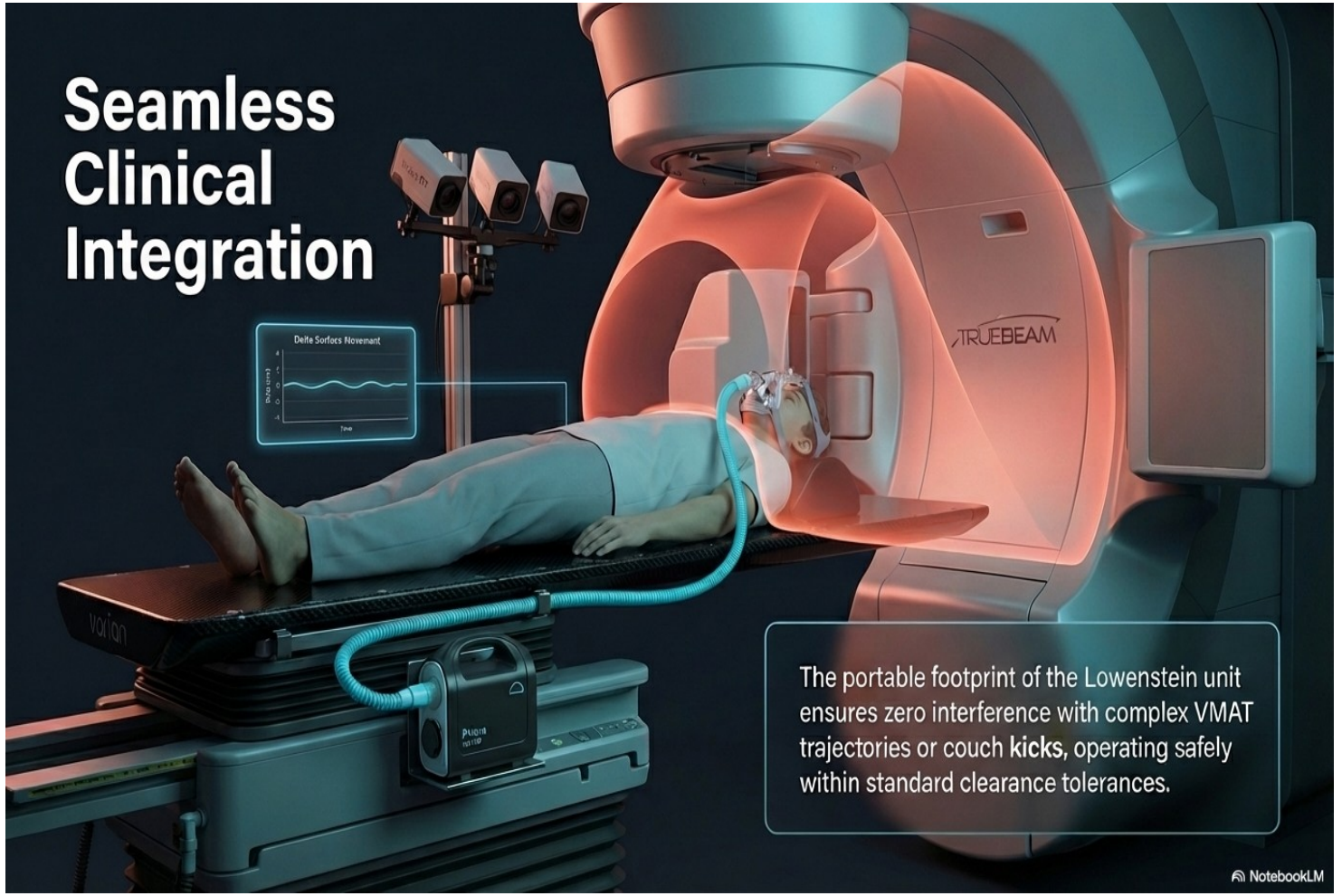
Room Air , FB and if >1cm , CPAP+DIBH

Gradual ramp up of CPAP

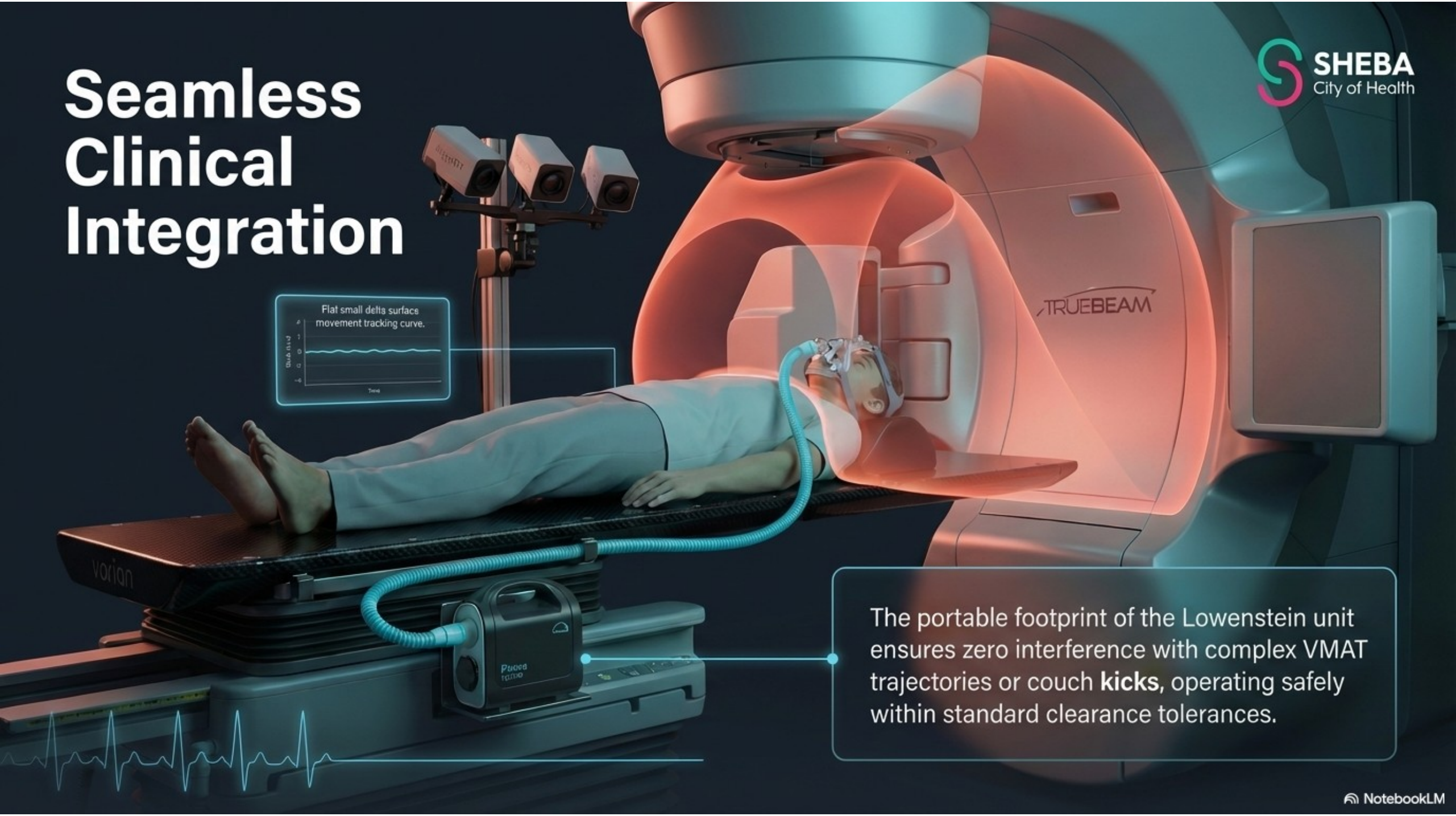
- Manual or Automatic program
- Starting pressure 7.5 cm H2O and each 2 minutes increase by 2.5 cm to a maximum pressure of 15 cm H2O

Future

- Integration with Linac
- Integration with surface imaging
- AI controller for optimal internal fixation



Seamless Clinical Integration



Hardware Profile: Löwenstein prisma VENT40

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1

Portable Design

2.4 kg footprint operates safely within standard TrueBeam clearance tolerances.

2

High Capacity

>220 l/min maximum air flow, capable of up to 40 hPa pressure.

3

Uninterrupted Power

Internal rechargeable battery supporting >10 hours of operation.

The Radiotherapist's Interface

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Brilliant Display: 1
Large, high-contrast dark-mode interface designed for quick readability in low-light bunkers.

2 360° Easy Turn Dial:
Tactile encoder dial allows rapid, gloved navigation of menus without complex keypads.

3
Pre-Configured Programs:
Dedicated program keys (Prog 1|2|3) allow instant selection of physician-prescribed settings.

The Acclimation Protocol

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Automated Ramp-Up: Seamlessly guides the patient to therapeutic pressure prior to VMAT delivery, ensuring zero panic or discomfort.