

NITROX BREATHING FOR THE HYPERBARIC PHYSICIAN AND NURSE;

**enables a full hyperbaric oxygen treatment to the
intensive care patient while keeping the option of a direct
ascent**



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NITROX

- Mixture of nitrogen and oxygen
- Usually > 21 kPa oxygen (21 = surface air)
- Used by professional and recreational divers > 50 years, to prolong time at depth

NITROX IN HBO, WHY ?

– PATIENTS

Tight schedule

Breathing gas

Problem

Surgery, dialysis, diagnostics

Oxygen

Oxygen side effects

– STAFF

Breathing gas

Problem

Chamber air

Decompression Sickness

NITROX IN HBO, WHY ?

- Conflict of interests:

PATIENTS – maximum pressure as **long** as possible

STAFF – minimum pressure as **short** as possible

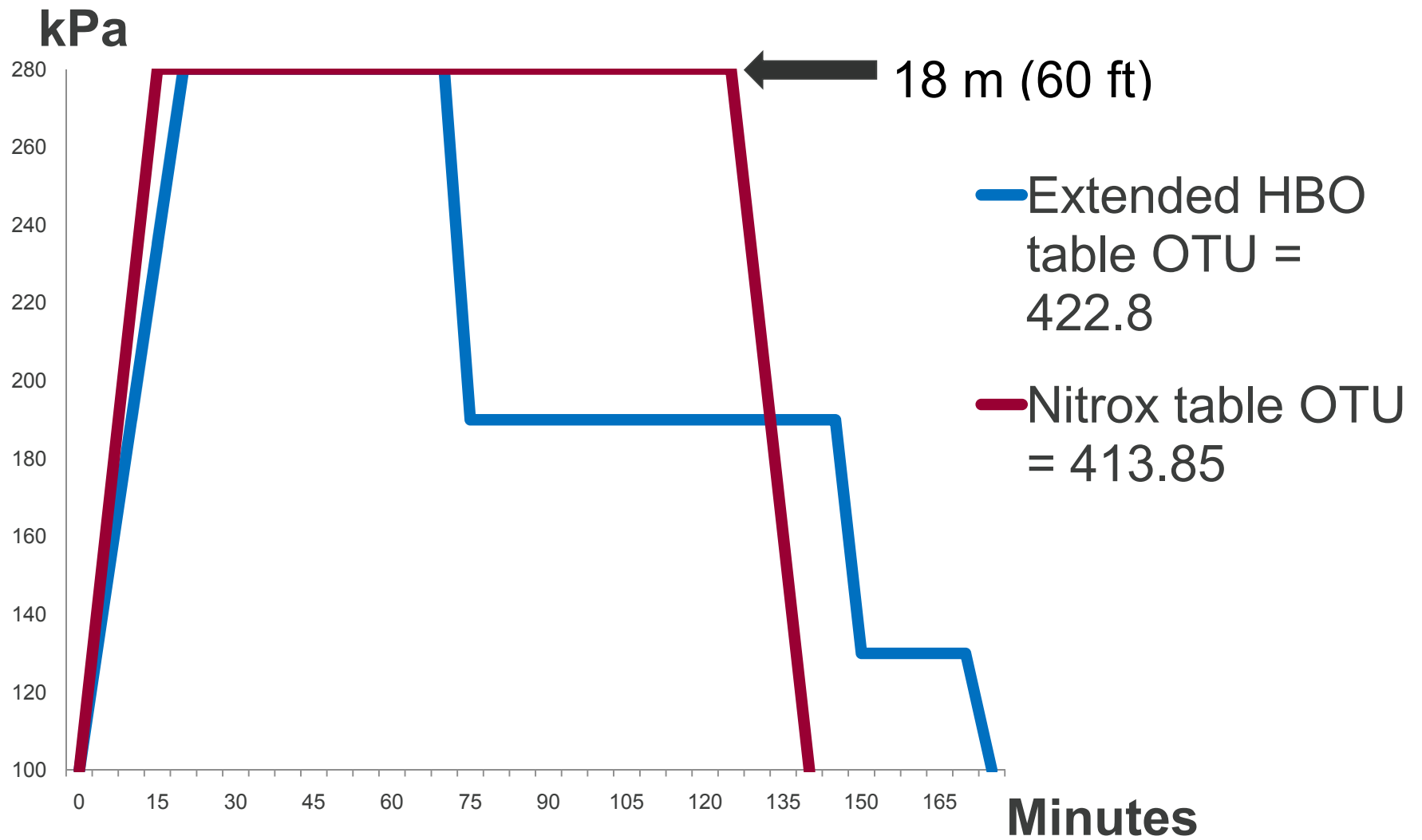
- Allow direct ascent at all times

Our Experience

- Nitrox 50 / 50 (60.5 % oxygen)
169 kPa oxygen at 18 m (~60 ft) dive
= pure oxygen at 7 m (~21 ft) dive
= nitrogen in air at 4 m (~13 ft) dive
- Hospital system
- 15 Nitrox / 10 min chamber air
- Take advantage of "slots" in patient schedule



Example of profiles used



OUR EXPERIENCE 2007-2009

Nitrox treatment tables	Patients Total	Intensive Care patients	Staff inside
89	31	20	62

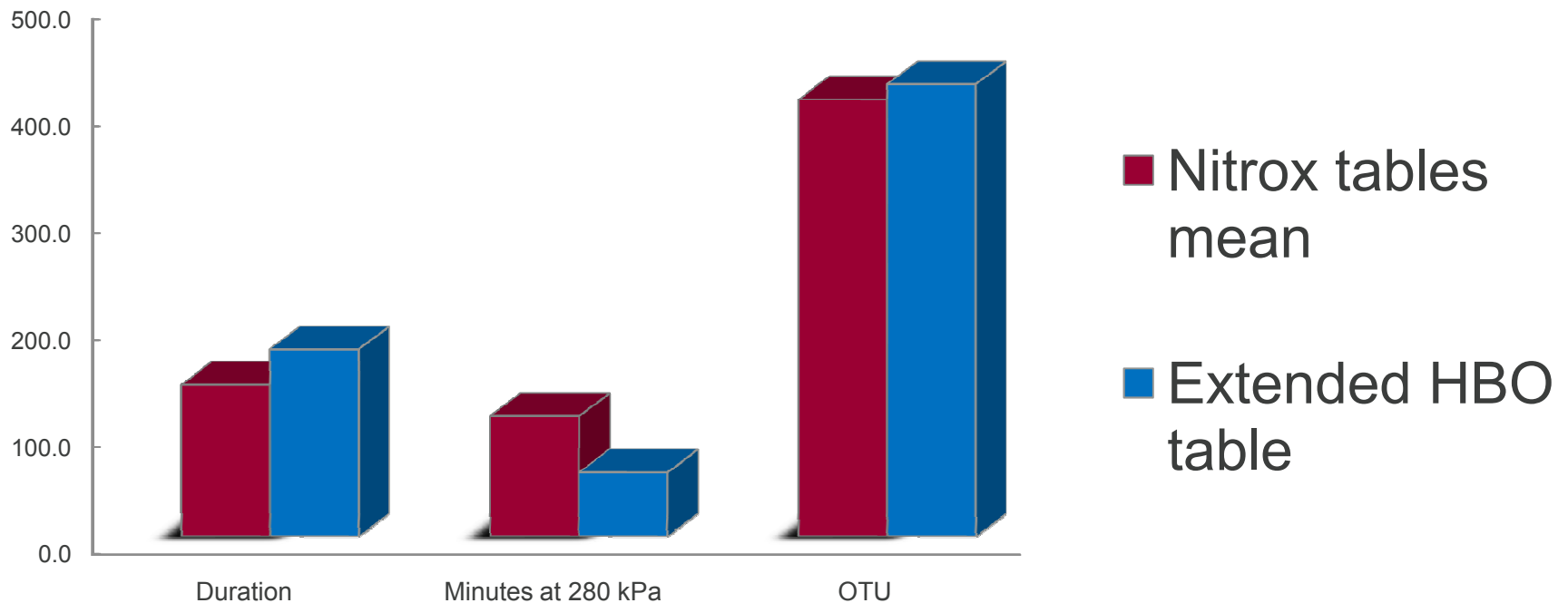
OUR EXPERIENCE

OTU = Oxygen Toxicity Units

Scoring to appreciate risk of lung complications

Limits time at pressure for patients

Minutes / OTU



OUR EXPERIENCE

No complications for patients

Minor discomforts reported by staff anonymously
(masks and hoses)



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