

# ADDRESSING RESPIRATORY COMPROMISE. THE PRODIGY STUDY.

## ABOUT THE STUDY<sup>1</sup>

**P**rediction of **O**pioid-induced respiratory **D**epression In patients monitored by capno**G**raph**Y**

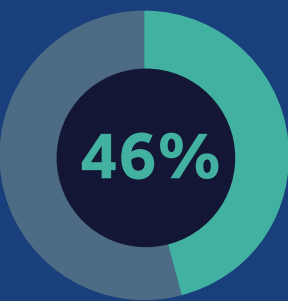
- 1,495 patients enrolled, data from 1,335 patients analyzed
- Blinded Microstream™ capnography and Nellcor™ pulse oximetry data used to determine respiratory depression episodes, based on predefined criteria
- Endpoints included 3 or more continuous minutes of alarm violations for all parameters, excluding apnea



- 16 sites
- International multi-center prospective study
- Medtronic-sponsored

## ABOUT THE PROBLEM

Respiratory depression is common



**46% of patients receiving opioids on the general care floor experience respiratory depression<sup>1</sup>**



Respiratory depression episodes (RDEs) are costly — for both hospitals and patients

Patients with ≥1 RDEs were more likely to experience an adverse event (AE) that required action.<sup>1</sup>

- Relative risk of 1.36 for AE requiring prolonged hospitalization
- Relative risk of 2.46 for AE requiring rescue, including rapid response team activation



Even without serious adverse events, the mean cost for high-risk patients with respiratory depression is \$6,448 higher than for high-risk patients without RDEs.<sup>2</sup>

Mean hospital length of stay was three days longer in patients with ≥ 1 RDE.<sup>1</sup>

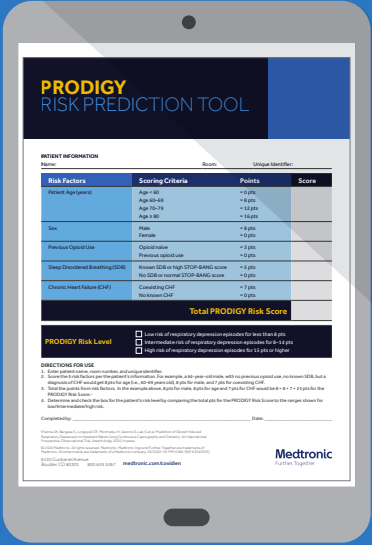


## ABOUT MITIGATING THE RISK

The PRODIGY Risk Prediction Tool

**Validated scoring tool** to help identify patients at risk for opioid-induced respiratory depression

BASED ON FIVE EASY-TO-OBTAIN VARIABLES				
Age	Sex	Opioid naïve	Sleep disordered breathing	Chronic heart failure
1	2	3	4	5



1. Khanna AK, Bergese S, Jungquist CR, et al. Prediction of opioid-induced respiratory depression on inpatient wards using continuous capnography and oximetry: an international prospective, observational trial. *Anesth Analg*. 2020; In press.  
2. Saager L, Jiang W, Khanna A, et al. Respiratory depression on general care floors increases cost of care: results from the PRODIGY trial. American Society of Anesthesiologists Abstract Publication 2019.

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