



# NOL™ MONITORING

## CONFIDENT PAIN MANAGEMENT

- ✓ REDUCE PAIN
- ✓ PERSONALIZE ANALGESIA
- ✓ IMPROVE PATIENT OUTCOMES

# NOL™ TECHNOLOGY

Accurate, continuous and noninvasive nociception (pain response) monitoring for personalized analgesic treatment



## PATIENTS VARY IN THEIR ANESTHETIC REQUIREMENTS.<sup>1</sup>

Without objective monitoring, how can you get it right?



In patients under general anesthesia, nociception and analgesia are assessed indirectly through changes in heart rate and blood pressure - which are not sufficiently sensitive or specific.<sup>2,3</sup>

As a result, **insufficient or excessive analgesia may be administered**, potentially leading to postoperative pain, complications, delayed recovery, and associated costs.<sup>4,5,6</sup>

## THE ANALGESIA MANAGEMENT CHALLENGE



UP TO **50%**

of surgical patients suffer from moderate to severe post-operative pain.<sup>5</sup>



UP TO **10%**

of opioid naïve post-surgical patients become chronic opioid users.<sup>7</sup>



UP TO **12%**

of surgical patients suffer from opioid-related adverse effects leading to:<sup>6</sup>



**extra** days of hospitalization



**extra** cost per patient

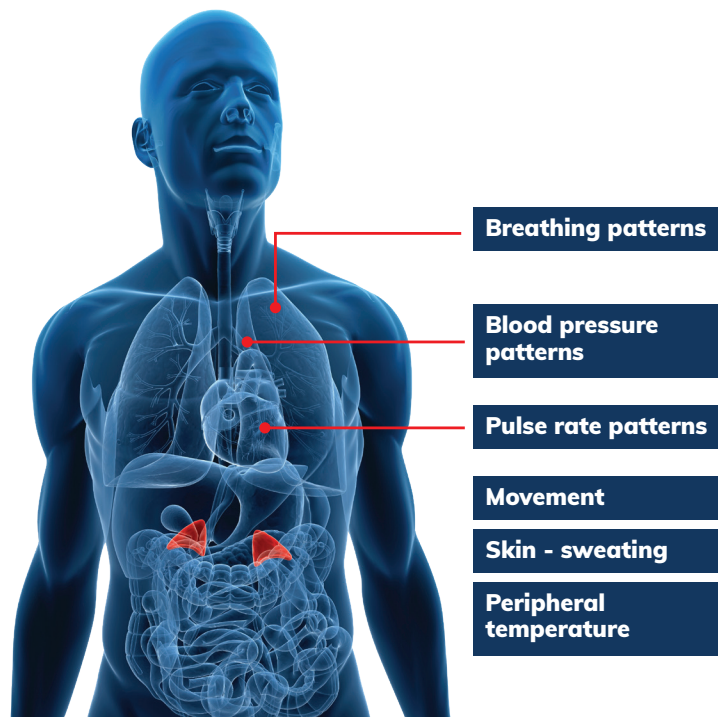


**Increase** in re-admissions

## NOL REFLECTS THE PATIENT'S NOCICEPTIVE STATE

By analyzing autonomous nervous system-related patterns, the NOL-Nociception Level Index<sup>®</sup> reflects the impact of stimuli, and the effect of analgesic treatment.

The NOL-Nociception Level Index<sup>®</sup> is a multiparameter composite of physiological signals based on artificial intelligence technology and a proprietary sensor platform.



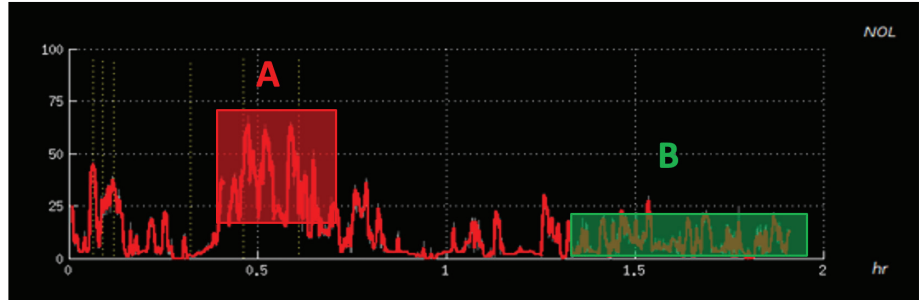
# NOL™ VISUALIZES NOCICEPTION

Multiparametric physiological data is acquired using a reusable finger probe and single-use sensor.

AI technology allows the clinician to tailor analgesia to meet the patient's needs.

**A** NOL trend **above 25** is indicative of nociceptive response

**B** NOL trend **below 25** is indicative of adequate nociception-antinociception balance



The NOL technology and the threshold of 25 have been clinically validated in adult anesthetized patients

## THE BENEFITS OF NOL-GUIDED ANALGESIA



Smoother procedures and better outcomes <sup>7,8</sup>



Personalized opioid dosing <sup>7,8,9</sup>



Supporting opioid-sparing anesthesia <sup>10</sup>



Supports multimodal and regional analgesia <sup>11</sup>

## NOL GUIDED ANALGESIA HAS BEEN SHOWN TO REDUCE POSTOPERATIVE PAIN IN CLINICAL STUDIES

**33%**

Less postoperative pain <sup>7,8</sup>

**70%**

Reduction in severe postoperative pain<sup>12</sup>

**6x**

Less likely to experience severe pain<sup>12</sup>

# PMD-200™ MONITOR | PRODUCT SPECIFICATIONS

PMD-200™ Monitor	
Dimensions	9.45 x 7.6 x 5.9in (24 x 19.3 x 15cm)
Weight	7.7 lbs (3.5 kg)
Regulatory Approvals	USA, Europe, Canada, Israel, Brazil, South Africa, UAE
User Interface Language	English, Danish, Dutch, Finnish, French, German, Italian, Norwegian, Portuguese, Romanian, Spanish, Swedish, Greek
Finger Probe	
Reusable	
Dimensions	Finger Probe + Cable: 106.3in (270cm)
PVC free, Latex free, Biocompatible	
Sensor	
Single use only	
PVC free, Latex free, Biocompatible	
Connectivity	
Connectivity to Philips™ through Intellibrige™ and Mindray™ through Benelink™ interface.	
Connectivity through serial port (RS-232) with third parties optional.	

**The NOL-Nociception Level Index® provides clinicians with a valuable decision support tool to objectively assess and manage analgesia.**

*The PMD-200 is intended for use as an adjunct monitor.*

*Our product does not process any PHI and we cannot identify a natural person from the physiological data that is recorded by the device.*

## REFERENCES

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