

Senhance<sup>®</sup> Surgical System:  
A Real World  
Perspective

# Our commitment to Surgeon Ergonomics

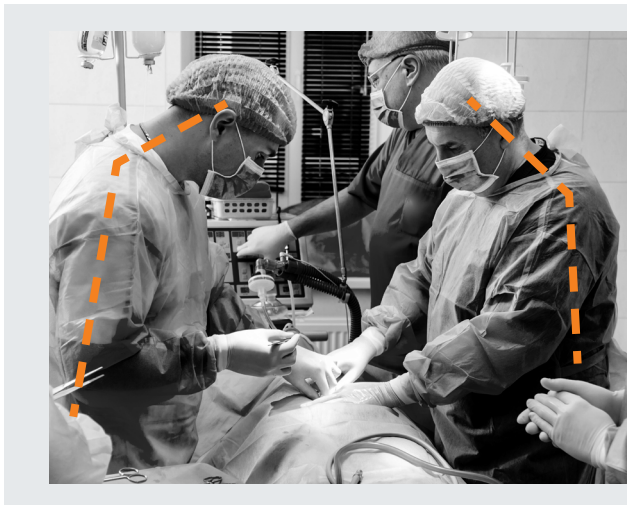


## Could you be more comfortable while operating?

While the patient benefits of minimally invasive surgery are well established, this approach brings new challenges for surgeons. **87% of laparoscopic surgeons suffer from performance related symptoms.**<sup>13</sup> It costs a hospital an estimated \$500k - \$1 million to replace a surgeon.<sup>1</sup>

## Which would you choose?

Even when surgeons report any knowledge of the importance of ergonomics during laparoscopic surgery, only **60% applied any ergonomic principles in their surgical practice.**<sup>13</sup>



It's inevitable that poor surgeon ergonomics will occur during surgery to execute certain tasks.

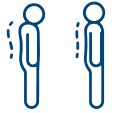


Per a recent survey, 56% of current robotic surgeons report physical symptoms or discomfort following prolonged and repeat usage.<sup>9</sup> According to Body Part Discomfort scores, current robot consoles can induce a severe neck strain due to the viewing angle.<sup>21</sup>



The Senhance System closely mimics an ideal operating position with its ergonomically designed surgeon chair.

# Our commitment to Surgeon Ergonomics



## Could you feel better operating?

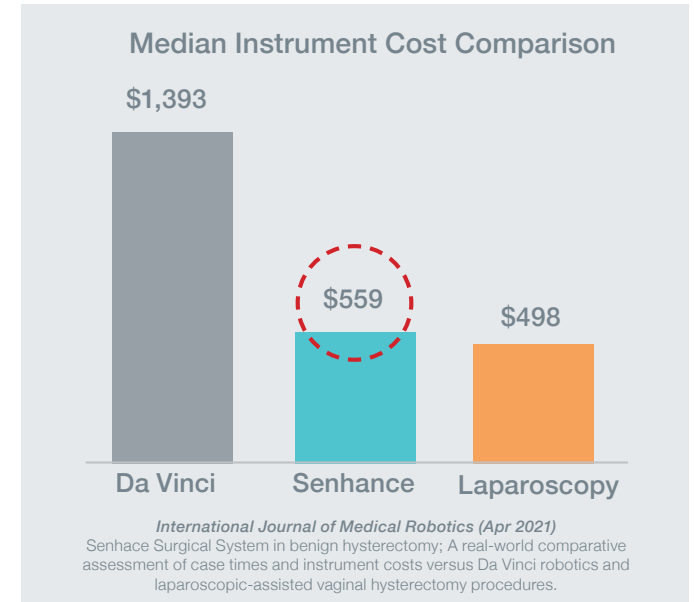
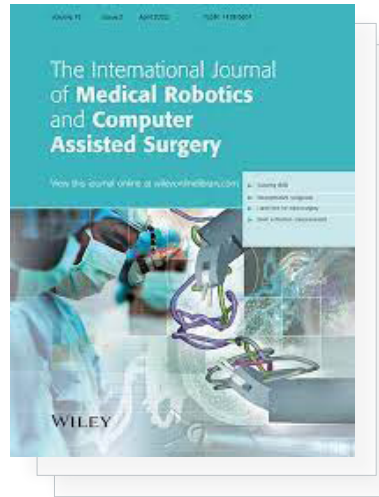
In addition to anecdotal reports of surgeons working more comfortably in the seated position of Senhance with less neck pain or less fatigue<sup>17</sup>, **performance may be negatively impacted while in a standing position**, compared with a seated position, particularly with fine motor coordination.<sup>19</sup>



# Our commitment to Responsible Economics



Responsible economics is something we take seriously at Asensus, particularly since health spending has been on the rise and even outpacing economic growth in recent decades in some regions.<sup>12</sup> **The Senhance System produces lower median instrument costs than Da Vinci and is comparable to standard laparoscopy**, primarily due to the use of reusable instruments.<sup>4</sup> This cost benefit translates globally as lower procedure cost than Da Vinci has been demonstrated in multiple regions and across a variety of procedures and specialties.<sup>4, 6, 7, 10</sup>



In addition to the direct procedure cost element of healthcare economics, an indirect benefit can be recognized with a redistribution of responsibilities for the OR team. **With the Senhance System, dedicated staff to manually hold the camera is not required, freeing up a valuable resource to perform other tasks in the OR.** In one study it was noted that Senhance procedures can be completed with an operating surgeon and a nurse, avoiding the need for a surgical assistant in the OR.<sup>16</sup>



# Our commitment to Advancing Surgery



## Flexibility in your workflow

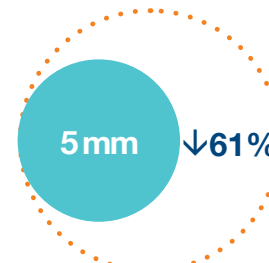
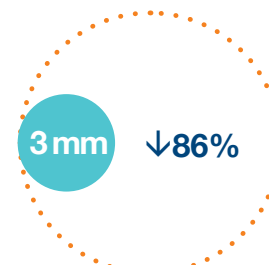
The Senhance System enables a hybrid approach with ability to transition seamlessly between robotics to laparoscopy utilizing the same trocars.<sup>20</sup>

## You make choices every procedure to optimize patient outcomes – keep what works for you

It is important that surgeons maintain the ability to choose what works best for them and for the patient. At Asensus, we want surgeons to feel comfortable using the trocars, staplers, camera systems, ESU, etc. they prefer.<sup>20</sup>

## Minimize your incision with Ø3mm trocars

Incision size, which is directly related to trocar size, may influence likelihood of a port-site hernia.<sup>3, 8</sup> With the Senhance System, trocars as small as 3mm in diameter can be used – reducing the footprint by 86% compared to traditional laparoscopic 8mm instruments. Manipulating the trocar at the incision in laparoscopic surgery could also result in enlargement of the incision causing tearing of the tissues in the abdominal wall and ultimately increasing the risk of an incisional hernia.<sup>5</sup> Manipulation at the fulcrum with Senhance may play an important role in minimizing tissue trauma. The fulcrum point on the Senhance system is designed to be maintained within +/-10mm from its original location, which could be a contributing factor to tissue trauma.<sup>15</sup>



Senhance  
instrument footprint

Traditional 8 mm robotic  
instrument footprint



# Our commitment to Advancing Surgery



## TRUST™ in clinical evidence

Asensus is committed to data, supporting a surgeon's evidence-based surgical decision making. The TRUST™ registry is the foundation of this data-backed approach producing multi-specialty procedural evidence from thousands of procedures.<sup>18</sup>

## Direct line of sight to what's most important

Communication in the OR has been noted as an important factor in ensuring a successful and optimized OR experience. However, a recent survey of OR staff found that **93% of respondents indicated OR noise interfered with team communication, hearing, and focus.**<sup>2</sup> It has been described that communication failures occurred in as many as 30% of team exchanges. Of these, approximately a third resulted in effects which jeopardized patient safety.<sup>11</sup>

The physically open cockpit is designed to enable the surgeon to maintain a holistic view of both the surgical field and the operating room, while directly communicating with the OR team.<sup>14</sup>



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CMC-001-00005.000- 03.2023