

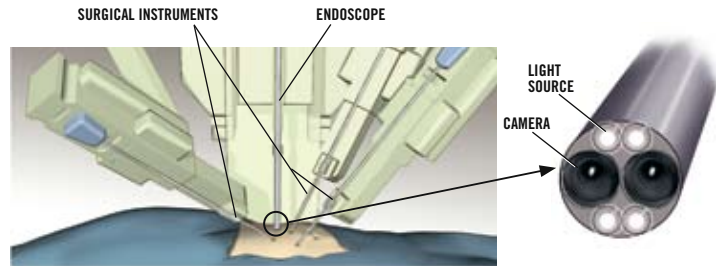


PHOTO COURTESY OF INTUITIVE SURGICAL

THE DA VINCI ROBOT The growing popularity of the da Vinci Surgical System resulted from its ability to perform minimally invasive surgery with less pain, less blood loss, and an overall faster recovery time. As the leader in robotic surgery, da Vinci is used for a variety of procedures, including gastric bypass, hysterectomy for gynecologic cancer, mitral valve repair, and prostatectomy for prostate cancer.



1 **IN TRADITIONAL prostate surgery**, surgeons make an 8- to 10-inch incision on the lower abdomen versus **da Vinci's five 1- to 2-centimeter incisions**, which result in less blood loss.



2 **PORTS ABOUT** the size of a pinky finger are placed through the incisions. The central port holds the camera [endoscope] and three arms hold surgical instruments. The surgeon's hands guide two of the instrument arms, while the third arm holds tissues out of the way. **The camera has an optic for each eye, creating a three-dimensional, highly magnified** [up to 15 times its normal size] image of the surgical field. This magnification allows for a better view of—and therefore a better chance of sparing—surrounding nerves that are crucial for continence and sexual function.

WHAT THE SURGEON DOES:

3 **THE SURGEON** leads the procedure from a console a few feet away from the patient. **The hand controls provide precise direction of the surgeon's movements**, filtering out hand tremors and translating large hand movements to micro-movements.

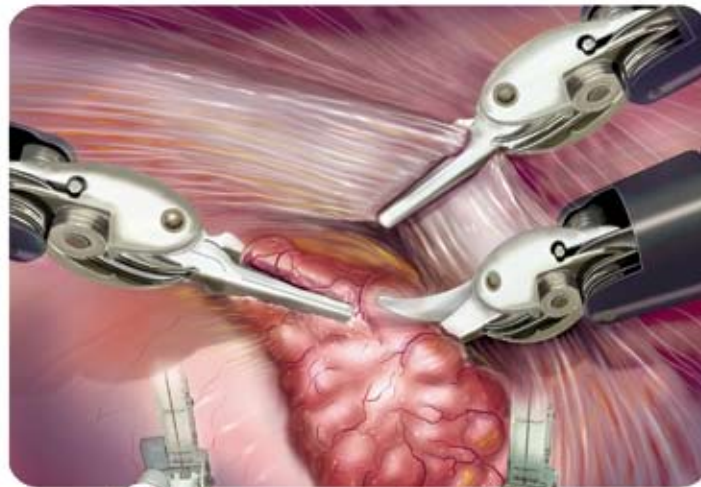
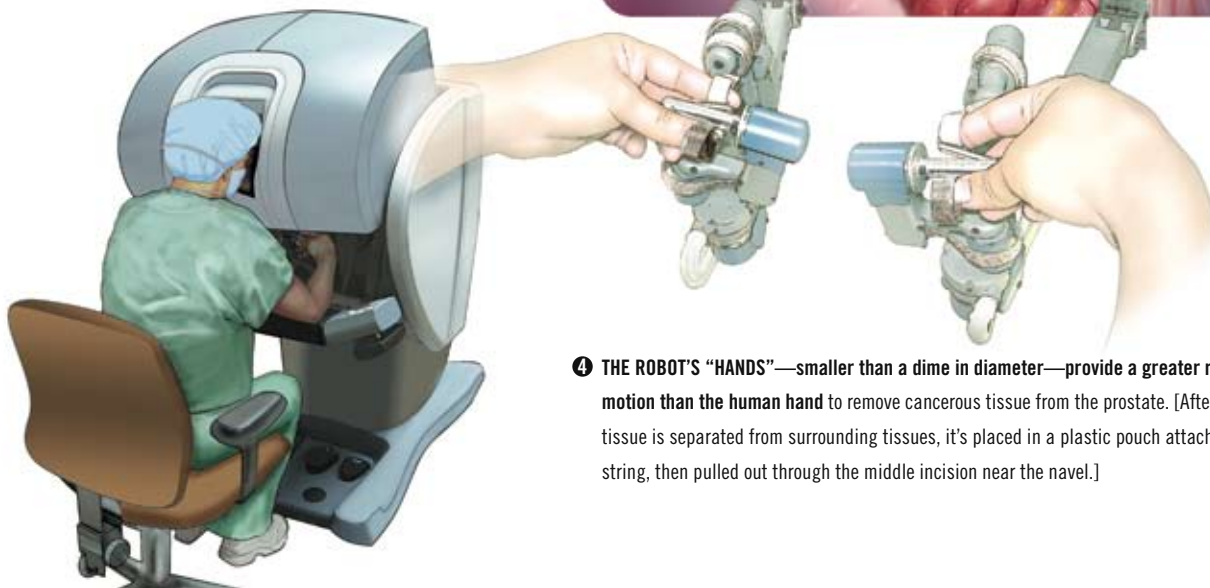


ILLUSTRATION BY ERIN MOORE



4 **THE ROBOT'S "HANDS"**—smaller than a dime in diameter—provide a greater range of motion than the human hand to remove cancerous tissue from the prostate. [After the tumor tissue is separated from surrounding tissues, it's placed in a plastic pouch attached to a string, then pulled out through the middle incision near the navel.]