Not long ago, prostate cancer surgery—even the high-tech robotic kind—required hospitalization. Now, new robotic technology is allowing some patients to have surgery on an outpatient basis, says Isaac Kim, M.D., PhD, MBA, medical director of robotic surgery at Monmouth Medical Center (MMC), chief of the Division of Urology at Rutgers Robert Wood Johnson Medical School and chief of urologic oncology at Rutgers Cancer Institute of New Jersey. To commemorate Prostate Cancer Awareness Month this September, Dr. Kim explains which patients can benefit from this cutting-edge technology.

How is this new robotic technology different from older versions?
The “conventional” robot, which is manipulated by a surgeon, has four arms that require four separate incisions, or “ports.” Two additional ports are necessary for assistance. They enable the bedside surgeon or assistant to see better and pass and remove needles. With the new robot-assisted surgery device, called da Vinci SP (Single Port), the four arms do their work through one port (a single incision), plus an “assistant” port. This technology allows surgeons to work in smaller, tighter spaces.

Currently, the da Vinci SP device is being used to perform ear, nose and throat (ENT) procedures like tonsillectomies as well as radical prostatectomies (removal of the prostate—a walnut-sized gland that produces fluid that carries sperm—to treat prostate cancer).

How do patients benefit from “single port” robotic surgery?
Since there is only one robotic port, the required surgical space is small. Theoretically, this translates into decreased pain and lower complication rates. Specific to prostate cancer surgery, SP allows the physician to avoid the space that contains the bowel. As a result, the risk of decreased bowel function requiring hospitalization is negligible. Accordingly, patients who are stable may be discharged to their homes about four hours after surgery.

Who is a good candidate for this type of surgery?
Patients with Stage I or II (low to intermediate risk) prostate cancer are the ideal candidates. These patients have cancers that are confined to the prostate. Patients who require surgery to remove one or more lymph nodes to determine whether the cancer has spread are usually better off with multiport robotic surgery.

Is this technology widely available?
No. MMC is the first hospital in central and southern New Jersey and the 11th in the nation to purchase this technology. We are committed to bringing the newest, most advanced medical technology to the area.

Can a single-port robot be used to perform other procedures?
The SP robot is currently approved for urologic and ENT procedures, but it’s anticipated that the application will expand to gynecologic and general surgeries in the near future.