

Comparing CyberKnife and Radical Prostatectomy

CyberKnife for Prostate Cancer

Radical Prostatectomy for Prostate Cancer

Type of Procedure

No incision - delivers high-dose-rate (HDR) radiation from outside the body to treat cancer inside the body

Surgery (may not be appropriate for patients of advanced age or those who have multiple medical conditions); may be traditional surgery or minimally invasive surgery using da Vinci® Surgical System

Hospital Stay

Outpatient treatment - no hospital stay

Hospital stay

Anesthesia

No anesthesia

General anesthesia

Accuracy/Damage to Surrounding Tissue

Sub-millimeter accuracy that protects surrounding structures and tissues

Removes the entire prostate and nearby lymph nodes while trying to spare muscles and nerves that control urination and sexual function

Recovery/Side Effects

No recovery time; patient quickly resumes normal activities

Pain associated with surgery; risk of infection; post-operative recovery time; erectile dysfunction; radiation therapy usually required after surgery

Outcomes

Research at the Seattle Cyberknife Center and elsewhere are showing excellent PSA responses and low rates of recurrence. Longer follow-up is needed to confirm these findings.

High cure/survival rates in favorable-risk patients.