## Kidney Cancer

### Statistics

<table>
<thead>
<tr>
<th>NIH SEER Statistics</th>
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<tbody>
<tr>
<td>- 4% of all new cancer cases</td>
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<tr>
<td>- 2.3% of all cancer deaths</td>
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<tr>
<td>- 75.6% five-year relative survival rate (2011 – 2017)</td>
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<td>- 8th most common type of cancer</td>
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<td>- Median age of diagnosis is 64 years old[^1]</td>
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### Risk Factors

- Smoking
- Obesity
- Hypertension
- Chronic renal failure
- Chemical exposure[^2]
- Kidney transplantation
- Previous renal cell carcinoma diagnosis
- Family history of renal cancer[^3]

### Signs and Symptoms

- Hematuria
- Back pain
- Flank mass
- Fatigue
- Weight loss
- Anemia
- Fever
- High serum calcium[^4]
For patients undergoing active surveillance, imaging and assessment of renal function is performed every 6 months for two years, followed by annual screens.

Signs of complication or disease relapse following a partial or radical nephrectomy can include cachexia, anemia, or elevated platelet count.

Common immunotherapy side effects include rashes, flu-like symptoms, and stomach issues.
Kidney Cancer

Physical Therapist’s Role

** Educate  
- Role of physical activity in decreasing risk of developing kidney cancer\(^{10}\)
- Use of motivational interviewing to address modifiable risk factors\(^{11}\)

** Intervene  
- Identify and treat patient’s treatment related impairments
- Exercise has proven effective for the management of cancer related fatigue\(^{12}\)

** Screen  
- Signs and symptoms of kidney cancer and make timely referral to a physician
- Post-operative complications and treatment related side effects

** Educate  
- Physical activity can decrease mortality risk in renal cell carcinoma survivors\(^{13}\)
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Takeaways

1. PTs can educate on the role of physical activity in decreasing risk of developing kidney cancer.

2. PTs can educate patients on the risk factors associated with kidney cancer and address modifiable risk factors within scope of practice.

3. PTs can screen for the signs and symptoms of kidney cancer and make appropriate and timely referrals to a physician.

4. PTs can educate kidney cancer survivors on the positive effects of physical activity for decreasing overall mortality risk.


