You can use this nomogram for applicable results if you have received no hormone or radiation therapy for prostate cancer. If you are receiving either form of therapy for your prostate cancer, the results of this nomogram will not be accurate.

Results produced by this tool are based on data from patients treated at MSK — a large research institution with surgeons who perform a high volume of prostate cancer procedures. All results must be understood in the context of each patient's specific treatment plan. Patients and caregivers using this tool should discuss the result with the patient's physician.

To gather the information required to use this nomogram, use our worksheet .

Enter Your Information

Disqualifying Treatments

If you are receiving hormone or radiation therapy for prostate cancer — if you answer "yes" to either of the following two questions — the results of this nomogram will not apply to you.

Have you gotten hormone therapy (e.g., Lupron, Taxotere, Casodex, Eulexin, or Zoladex) for prostate

cancer before surgery OR plan to get it after surgery (i.e., adjuvant therapy)?

Yes No

Have you gotten radiation therapy for prostate cancer before surgery OR plan to get it after surgery (i.e., adjuvant therapy)?

Yes No

General Information

Please note: This dynamic nomogram summarizes the benefits of treatment in men with life expectancy greater than ten years. The calculations are based on data from men who survived ten to 15 years following treatment. (You can calculate your life expectancy here, as well as your risk of dying from prostate cancer *if it is left untreated*.)

▸ What is a dynamic nomogram?

Most medical prediction models come from published studies based on fixed groups of patients. The statistical formulas for these models therefore do not change as new information becomes available. In contrast, the "dynamic" model used here — with the exception of the calculation for survival probability — draws on data from more than 10,000 prostate cancer patients treated at MSK. The model is updated several times a year as the MSK database accumulates new data, with more recent patients given more weight in the statistical analysis than patients treated many years ago. As a result, the statistical formula for the model changes slightly over time.

More on risk prediction based on dynamic models.

How old are you?

years (20 to 99)

What was your PSA level from the laboratory report before your biopsy that found the cancer?

ng/mL (0.1 to 100)

▸ What if I don't have these results?

If you don't have the results of the laboratory report from before your biopsy, insert your most recent PSA level following your biopsy.

Note: If you have received hormones, radiation, or any other therapy for your cancer, the PSA level following these treatments will not be applicable.

Gleason Pattern & Score Information

To use this nomogram successfully, you will need to know your primary and secondary Gleason pattern numbers.

- How are Gleason patterns/scores determined?

  Physicians characterize the aggressiveness of prostate cancer using the Gleason scoring system, which provides an estimate of the cancer's potential to grow and spread to other parts of the body. The pathologist determines the Gleason pattern (also referred to as the grade) based on how closely the cells of the gland resemble those of a normal prostate. All the cores of tissue taken during a biopsy are examined by a pathologist, who assigns a pattern number to the largest area of cancer in each core (known as the primary Gleason pattern number), and a second pattern number to the next most common area (known as the secondary Gleason pattern number). The two pattern numbers added together are the Gleason score. If more than one biopsy core contains cancer cells, the patient's overall Gleason score is determined by the core with the highest Gleason score.

What was the primary Gleason pattern number taken from the biopsy pathology report?

Select primary Gleason

What was the secondary Gleason pattern number taken from the biopsy pathology report?

Select secondary Gleason

What was the biopsy Gleason score?

The score is calculated automatically from the sum of the primary and secondary Gleason pattern numbers.

Clinical Tumor Stages

Clinical tumor stage is determined by digital rectal examination and does not include stages determined by imaging studies.

What was your clinical tumor stage, using the AJCC Version 7/2010 Staging System?

Select 2010 clinical tumor stage

Note: Although it is possible to be stage TX or stage T4, this nomogram is not applicable for these stages.

- More on clinical tumor stage

  The global standard in prostate cancer staging is the TNM Staging System, which uses tumor, lymph node, metastasis (TNM) classifications to describe the extent of cancer in a patient's body. T describes the size of the tumor and whether it has invaded nearby tissue; N describes whether regional lymph nodes are involved and, if so, how extensively; and M describes whether distant metastasis (spread of cancer from one body part to another) is present.

  The system is maintained by the Union for International Cancer Control (UICC) and the American Joint

Committee on Cancer (AJCC) and is updated periodically, most recently in 2009/10 (Version 7).

The following are clinical tumor stages for prostate cancer from the 2010 edition. These stages are listed on the pathology report.

- TX: cannot evaluate the primary tumor
- T0: no evidence of tumor
- T1: tumor present, but not detectable clinically or with imaging studies
  - T1a: tumor was incidentally found in less than 5% of prostate tissue resected (for other reasons)
  - T1b: tumor was incidentally found in more than 5% of prostate tissue resected
  - T1c: tumor was found in a needle biopsy performed following an elevated serum PSA result
- T2: the tumor can be felt (palpated) on examination, but has not spread outside the prostate
  - T2a: the tumor is in half or less than half of one of the prostate gland's two lobes
  - T2b: the tumor is in more than half of one lobe, but not both
  - T2c: the tumor is in both lobes
- T3: the tumor has spread through the prostate capsule (If the tumor has spread only part-way through, it is still T3.)
  - T3a: the tumor has spread through the capsule on one or both sides
  - T3b: the tumor has invaded one or both seminal vesicles
- T4: the tumor has invaded other nearby structures

Biopsy Cores

Information on cores taken at biopsy is optional. The nomogram can provide predictions without this information if not available. However, using this information, the nomogram can provide more refined predictions. The nomogram will provide predictions incorporating the biopsy cores data if both number of positive and number of negative cores are entered. If number of positive cores and/or number of negative cores are not entered, the nomogram will provide predictions without information on cores taken at biopsy.

How many positive (cancerous) cores were taken during biopsy?

cores (1 to 20)

How many negative (noncancerous) cores were taken during biopsy?

cores (0 to 20)

▸ What if I have more than 20 negative cores?

The data for this nomogram were developed from a cohort of patients with 20 or fewer negative cores. The calculation for more than 20 negative cores will be based on the upper limit of 20.

What percentage of the biopsy samples taken were positive?

%

(Result is calculated automatically using the numbers entered in preceding two fields.)

Clear