Overview:

Prostate cancer is the second most common cancer in men (skin cancer is the more common). About one in ten men will be *diagnosed* with prostate cancer in their lifetime. Many others have the condition but will never be diagnosed with it, dying from other causes; only 10% of men diagnosed with prostate cancer die from it. A key risk factor for prostate cancer is age. It is estimated that approximately 10% of men in their 50s have the condition; this rises to 40% for men in their early 70s, and to over 70% of men in their 80s. Most men who reach their 90s are assumed to have prostate cancer.

The severity of prostate cancer is measured by *stage* and *grade*: stage refers to tumor size and spread; grade indicates how aggressive the cancer is. The cancer grade identifies cell types being "well differentiated" (similar to non-cancerous cells) or "poorly differentiated" (very different from non-cancerous cells). Lower grades (I & II) are indicated for less aggressive cell types; grades III and IV are reserved for more aggressive, poorly differentiated cell types. Sometimes prostate cancer is rated with a Gleason score. Low grade (Grade I & II) cancers have Gleason scores of six or less. Gleason scores of seven and higher are high grade cancers (Grade III +). The most favorable survival/cure rates are for cancers that are detected early, are still small, slow growing, with cells that are very similar to healthy prostate cells; these cancers are identified by a low stage and grade.

Prostate cancer is typically suspected by abnormal *Digital Rectal Exam* during an annual physical or via the *Prostate Specific Antigen (PSA) blood test*. Most insurance companies now routinely test the blood of proposed insured males over age 50 for their level of PSA. Due to more reliable PSA testing, the rate of prostate cancer detection is steadily rising.

PSA is produced only by prostate cells; a certain level of PSA is normal for healthy men. Physicians look for the total amount of PSA present relative to the total size of the prostate. A healthy prostate cell is known to produce "X" amount of PSA whereas an abnormal (possibly cancerous) prostate cell may generate PSA with a factor of up to ten times *greater*. Thus, as cancer cells multiply, the *total level of PSA* relative to a normal (expected) level of PSA should rise. This is measured as the level of *PSA density*. Similarly, an *abnormally high rate of PSA increases over time* may hint at possible prostate cancer. The rate of this increase is referred to as *PSA velocity*. Note that an enlargement of the prostate is typical of the aging process. An increase of PSA by as much as .75 to 1 ng/ml per year is considered unremarkable. However, a rate of increase higher than this, especially over a period of more than a year, may indicate prostate cancer and warrants further evaluation. High PSA levels often indicate cancer. About 2/3 of males with a PSA of 10 or higher will show cancer with biopsy. Current research has generated the following guidelines for the evaluation of PSA test findings:

Age based reference ranges for *acceptable,* **normal** **PSA levels:**	**Age 40 - 49** up to 2.5 ng/ml **Age 50 - 59** up to 3.5 ng/ml	**Age 60 - 69** up to 4.5 ng/ml **Age 70 +** up to 6.5 ng/ml
PSA Density: this is a measure of total PSA in relation to prostate size. A lower density is better.	This number is obtained by dividing the PSA by the size of the prostate gland from an ultrasound report. A value greater than 0.20 will be treated as suspicious for cancer.	
PSA Velocity: measure of PSA changes over time. The faster the rise, the higher the velocity, the more cancer is suspect.	An increase in the PSA levels greater than 0.75-1.00 ng/ml per year is of concern, especially if the value is steadily rising over a period of a year or more (wide fluctuations being a more likely indicator of non-malignant prostate irritation or prostatitis).	
Free/Unbound PSA: free PSA is NOT bound to protein. High levels of PSA bound to protein can be an indicator for cancer.	Levels of free PSA less than 20% of the total PSA is a possible indicator for cancer. High levels of free (unbound) PSA indicate a lower likelihood of cancer.	

Impact on Life Underwriting:

Prostate cancer is most frequently treated with surgical removal, radiation, and/or chemotherapy. Other therapies, including castration for certain early stage/grade cancers, are also used. Some elderly patients with low stage/grade cancers decide to forgo any treatment due to the potential side effects (which can include incontinence and impotence).

Underwriting assessments depend on the stage and grade of the cancer, the type of treatment selected, and the time elapsed since the date of last treatment. Most underwriters prefer surgical removal of the prostate ("to cut is to cure") to other forms of therapy. Some medical directors are willing to make offers immediately following surgical removal of a prostate with a low stage and grade cancer. Treatment by means other than surgical removal of the prostate often requires a two to three year postponement with regular follow up cancer screening. In some older men, slow growing prostate cancers may be insurable without treatment at low tables.

A PSA of 0 should be in evidence within two to three weeks following surgical removal of the prostate; a PSA level of 1 ng/ml is typical for successful radiation treatment. Use of chemotherapy can indicate that the attending oncologist detected spread beyond the prostate and thus often leads to higher ratings. The following table is approximate for *low grade* cancers treated with complete surgical removal of the prostate and without indication of spread. High grade cancers, Grades III and IV or those with a Gleason scale of 6 and higher, are typically rate one stage higher (for example, a high grade tumor staged as A2 would likely be postponed for 1 to 3 years and then offered with a flat extra of $10 for an additional five years as indicated for stage B1 cancers). It would be helpful if the pathology report could be obtained prior to underwriting so that an approximate premium can be determined. SB 04/13/2001

Stage	Typical Characteristics	Possible Underwriting Action for Low Grade (or has Gleason < 6)
A - A1	Cancer only found in one area of the prostate.	*Possible std. rates shortly after treatment*
A2	Cancer cells found in many areas of the prostate.	*Possible std. w/ flat extra of $5 - $7/$1,000 for 5 yrs; or Table 4.*
B1 - B2	Tumor detectable by exam; confined to prostate.	*PP 1 to 3 yrs, then possible std with flat extra of $10/$1,000 for 5 yrs*
C1 - C2	Evidence of cancer spread to beyond the prostate.	*PP 5 years, then possible std with flat extra of $15/$1,000 for 5 yrs*
C2, D +	Cancer has spread to lymph nodes or beyond.	*Risk generally not insurable on a single life basis.*

Agent: Phone: Fax:

Proposed Insured Name: _____ ❒ M   ❒ F   Date of Birth: _____
Face Amount: _____ Max. Premium: $_____/year   ❒ UL   ❒ WL   ❒ Term   ❒ Survivorship
Do you currently smoke cigarettes?   ❒ Y   ❒ N   If no, did you ever smoke: ❒ Never ❒ Quit (Date): _____
Do you currently use any other tobacco products (e.g. cigars, pipe, snuff, nicotine patch, Nicorette gum...): ❒ Y   ❒ N
If Yes, please provide details: _____
When did you last use any form of tobacco: _____ (Month) _____ (Year) Type used last: _____

(1) a) Please provide date of diagnosis: _____ b) Please provide date of last treatment: _____

(2) What was the Stage of the cancer diagnosed (this information should be contained in the pathology report)?

   ❒   A1   ❒ A2   ❒   B1   ❒   B2   ❒ C1 ❒ C2   ❒ D1   ❒ D2   ❒ Recurrent

(3) What was the Prostate Cancer's Gleason Score? _____ or What was the Prostate Cancer's Grade? _____

(4) a) Please give the result and date of the last PSA test prior to treatment (if any): _____ (result) _____ (date)

*   b) Please give the result and date of the most recent PSA test: _____ (result) _____ (date)*

(5) How has the Prostate Cancer been treated?

    ❒   Observation Only   ❒   Transurethral prostatectomy (TURP)   ❒ Radical Prostatectomy   ❒ Biological Therapy
    ❒   Radiation Therapy   ❒   Hormone Therapy   ❒ Castration (physical)   ❒ Castration (chemical)

(6) Has the proposed insured taken any medications to treat the cancer in the past and/or is he currently taking any medications?

Name of Medication (Prescription or Otherwise)	Dates used	Quantity Taken	Frequency Taken

(7) Has there been any evidence of recurrence?

    ❒   No   ❒   Yes Details: _____

_____

(8) Does the proposed insured have any other medical conditions? If yes, please describe:

_____

_____

_____

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