SCA CLINICAL PRACTICE GUIDELINE FOR PROSTATE CANCER

Original Guideline date: March 2002
Update(s): October 2004, October 2008

1. General Information

Objective

To provide the health care professionals with current guidelines and recommendations for the management of prostate cancer in Saskatchewan.

Procedure

- A prostate cancer symposium was held in Saskatchewan to discuss management update. There was multidisciplinary attendance by urologists, medical oncologists, radiation oncologists, GP oncologists, pathologists, nursing staff, pharmacists, and epidemiologist.
- Nine presenters did a literature search to collect the most recent data.
- In addition, three guest speakers were invited, a radiation oncologist from Alberta discussed the Alberta guidelines, a urologist from Manitoba discussed the role of cryotherapy and HIFU (High Intensity Focused Ultrasound), and a medical oncologist from Ontario discussed the role of chemotherapy and bisphosphonates in the management of metastatic hormone-refractory prostate cancer.
- The American Urological Association and the European Urological Association guidelines were also discussed.
- The topics of “early diagnosis and screening” and follow-up guidelines were not discussed in detail but were touched upon in some presentations. Therefore, the guidelines will be circulated to the oncologists and urologists for a consensus for the next update. Feedback will be requested from other health care professionals dealing with prostate cancer patients, especially the family physicians and palliative care services. Their comments may be used for further update.
- The consensus decisions in this guideline were obtained from the physicians attending the Update Symposium. These are 5/6 radiation oncologists in Regina including the regional leader, 4/6 radiation oncologists in Saskatoon including the regional leader, 4/6 medical

oncologists in Regina, 3/6 medical oncologists in Saskatoon, the Provincial Leader of Medical Oncology, two GP oncologists (one from Regina and one from Saskatoon), seven urologists from across the province, one pathologist from each of Regina and Saskatoon, the Vice President of Population Health, the Vice President of Care Services Clinical, as well as the three guest speakers. In addition, there was very valuable contribution from the Provincial Manager of Pharmacy, oncology pharmacists, the provincial leaders of nursing and radiation therapy, other nursing and radiation therapy staff.

Background

Prostate cancer is the most common male cancer and the second leading cause of male cancer death in Saskatchewan. Its incidence has risen because of the aging population and the introduction and increasing use of the prostatic specific antigen (PSA) test in the late 1980s to early 1990s. In Saskatchewan, it is estimated that 890 new patients will be diagnosed with prostate cancer in 2008 and 230 will die of it. The estimated 2008 age-adjusted incidence rate in the province is 153/100,000 and the age adjusted mortality rate is 35/100,000 **(1), (2).**

2. Screening and Early Detection

There is no formal screening program for prostate cancer in Canada since the value of screening in reducing prostate cancer mortality has not been proven. However, digital rectal examination (DRE) and PSA are not uncommonly done by the family physicians as part of the annual medical check-up. If screening is done, both DRE and PSA should be performed **(3)**. Screening may be justifiable in men with high risk of developing prostate cancer e.g. first degree relative with prostate cancer. There are no established modifiable risk factors **(4)**.

Healthy men between the age of 50 and 70 years should be made aware of prostate cancer screening, and the risks and benefits should be discussed with them. Screening should be made available to them based on their informed decision.

3. Diagnosis

Standardized pathology "synoptic reporting"

1. Needle biopsies

- comment on the adequacy of the specimen, number of cores (six cores preferable) from each side of the gland
- absence/presence of carcinoma
- an estimate of the amount of tumour (length of positive core in mm, location, number of positive cores) from each side separately
- histologic type
- histologic grade (Gleason grades 1-5 out of 5; Gleason score, which is the sum of the two most prevalent grades)
- presence of lymphatic, vascular or perineural invasion
- invasion into or through prostatic capsule
- presence of prostatic intraepithelial neoplasia (PIN), grade

2. Transurethral resection of prostate (TURP)

Should include the above information as well as an estimate of the percent of prostatic tissue involved with carcinoma.

3. Radical prostatectomy

- absence/presence of carcinoma
- size of carcinoma (at least 2, preferably 3 dimensions)
- location within the prostate
- Gleason grades and score
- presence of PIN, grade
- presence of lymphatic, vascular or perineural invasion
- presence of extracapsular extension, location, extent (into vs. through the capsule)
- status of resection margins, extent and location of involvement
- seminal vesicle involvement
- number of lymph nodes examined, number involved, laterality, extent of involvement, presence of extranodal extension.

Standardized Radiology Reporting

1. Reports from CT scans of the pelvis

- size of prostate in 3 dimensions
- presence of obvious extracapsular extension, seminal vesicle involvement
- evidence of invasion of local structures, e.g. bladder, rectum, pelvic sidewall
- pelvic lymph nodes: number, size, location, presence of necrosis
- presence of bony metastasis, location

2. Reports from transrectal ultrasound (TRUS) examinations

- size of the prostate in 3 dimensions, estimated volume
- presence, location, size of any intraprostatic lesions, appearance (benign vs. malignant)
- evidence of extracapsular extension, seminal vesicle invasion
- number of core biopsies taken and location.

4. Staging

Patients are staged using the AJCC (2002) staging system **(5)**.

AJCC STAGING SYSTEM (2002)

Primary tumour (T) and Pathologic Tumour Size (pT)

Tx: Unable to assess

T0: No evidence of primary tumour

T1: No tumour palpable or visible on imaging

T1a: incidental finding in up to 5% of TURP specimen

T1b: incidental finding in more than 5% of TURP specimen; Gleason score less than 6.

T1c: tumour identified by needle biopsy (e.g. because of an elevated PSA)

T2: Tumour confined within the prostate

T2a: involves up to one-half of one lobe

T2b: involves more than one-half of one lobe

T2c: involves both lobes

T3: Tumor extends through capsule and/or seminal vesicle(s)

T3a: extracapsular extension (unilateral or bilateral)

T3b: invasion of seminal vesicle(s)

T4: Tumor is fixed or invading adjacent structures, including bladder neck, external sphincter, rectum, levator muscles, pelvic wall

pT1: *There is no pathologic T1 classification*

pT2: Organ confined

pT2a: Unilateral, involving one-half of one lobe or less

pT2b: Unilateral, involving more than one-half of one lobe but not both lobes

pT2c: Bilateral disease

pT3: Extraprostatic extension

pT3a: Extraprostatic extention. Positive surgical margin should be indicated by an R1 descriptor (residual microscopic disease)

pT3b: Seminal vesicle invasion

pT4: Invasion of bladder, rectum

Regional lymph node (N) metastasis (pelvic lymph nodes **distal** to the bifurcation of the common iliac arteries) ***and Pathologic Node Involvement (pN)***

NX: Regional lymph nodes cannot be assessed; not accessed surgically

N0: No regional lymph node metastasis on pelvic node dissection

N1: Regional lymph node metastases on pelvic node dissection

Distant lymph node metastasis is classified as M1a (see below)

pN0: No positive regional lymph nodes

pN1: Metastasis in regional lymph node(s)

Distant metastasis (M)

MX: Unable to assess

M0: No distant metastasis

M1: Distant metastasis

M1a: Non-regional lymph node(s)

M1b: Bone(s)

M1c: Other site(s) with or without bone disease

5. Pre-Treatment Evaluation

Staging investigations include (but may not be limited to) the following:

- History, physical examination, including DRE.
- CBC, BUN, creatinine, ALP, liver function tests, PSA (prior to DRE), urinalysis.
- Biopsies of the prostate, with TRUS if available.
- CXR optional.
- Bone scan for patients with any of the following: PSA greater than or equal to 20; stage T3 or greater; Gleason score 8-10; or unexplained bony symptoms or signs**(3)**. The use of bone scans in patients not meeting these criteria will be individualized.
- Pelvic lymph node staging in selected patients, e.g. those with an estimated risk of involvement of at least 15% (includes PSA greater than or equal to 20, or Gleason score 8-10, or T3-4, or PSA more than10 but not more than 20 and Gleason score of 7)**(6)**. This may be done with laparoscopic lymph node sampling or CT, although the latter is less sensitive. Patients treated with radical prostatectomy usually have a pelvic lymph node sampling at the time of surgery except in low risk group where it is not necessary.

6. Treatment

6.I. Localized Prostate Cancer (T1-T4 N0M0)

Localized prostate cancer has a wide variety of biological behaviors ranging from an indolent slowly progressive to a more aggressive rapidly progressive disease. There are 3 risk categories derived from the Canadian Consensus initially published by the Radiation Oncologists **(7)** and later adopted by the Canadian Urologists **(8)**.

Treatment options are based on the following risk categories:

Low Risk	Intermediate Risk	High Risk
T1 – T2b **and** Gleason score less than or equal to 6 **and** PSA less than or equal to 10	T2c **and/or** Gleason score 7 **and/or** PSA greater than10 but less than or equal to 20	Any one of the following: T3 or higher **and/or** Gleason score greater than or equal to 8 **and/or** PSA greater than 20

6.1.1. Low Risk Disease (stage T1-2b, Gleason less than or equal to 6, PSA less than or equal to 10)

Depending on patient age, life expectancy, comorbidity and patient preference, management options may include the following:

1. Active Surveillance

This may be a suitable option for young fit men. It should follow a specific protocol **(9),(10), (11)**.

- PSA every 3 months for 2 years and 6-monthly thereafter.
- DRE every 6 months.
- Re-biopsy every 3 years or earlier if PSA doubling time (dt) greater than 3 and less than 10 years.
- Active curative treatment should be commenced if:
    - PSAdt becomes less than 3 years based on minimum of 3 values, or
    - the finding of Gleason 4 or 5 pattern on re-biopsy, or
    - disease progression to stage T3.

2. Watchful Waiting

More suitable for elderly patients with a life expectancy of less than 10 years, or younger patients who have significant co-morbidity.

- DRE and PSA every 6 months.
- Active treatment is initiated only at the development of symptomatic disease. This treatment could be hormonal therapy alone (medical or surgical castration), localized palliative radiotherapy for bone metastasis, palliative radiotherapy to the prostate in case of symptomatic local invasion or hematuria, or TURP for bladder neck obstruction or hematuria.

3. Radical Prostatectomy (RP)

- Generally restricted to patients not more than 70 years of age and with a minimum 10-year life expectancy.
- Retropubic or laparoscopic approach.

- Pelvic lymph node sampling or dissection is not necessary in low risk patients.
- A nerve sparing approach should be attempted, if possible, in patients who are still potent and have small volume disease.

4. Radiotherapy

a. External Beam Radiotherapy (EBRT)

- No androgen deprivation therapy (ADT).
- 3 Dimensional Conformal Radiation Therapy (3D-CRT) planning or Intensity-Modulated Radiation Therapy (IMRT).
- GTV = prostate alone.
- Fiducial marker insertion (insertion of 3-5 gold seeds for prostate localization during radiotherapy) is considered the standard of care and should be offered to all patients especially if dose escalation is used (greater than 7400 cGy).
- Dose recommended is 7400 – 7800 cGy at 200 cGy daily fractions.
- Patients should be recruited to available clinical trials where possible e.g. radiation dose hypofractionation studies.

b. Brachytherapy

i. High Dose Rate (HDR)

Selected patients may be treated with a temporary HDR implant followed by external beam RT to the prostate area.

ii. Low Dose Rate (LDR)

- There is no prostate brachytherapy program with permanent radioactive seed implant available in Saskatchewan which results in hardship for patients wishing to pursue this treatment having to travel out of province. The group recommends that this treatment option should be available locally to Saskatchewan patients.
- **Eligibility:** Prostate volume less than 50cc. If 50-65cc, consider short course of hormonal cytoreduction to reduce gland size. If greater than 65cc usually not eligible. Patients with one prior TURP may be considered, more than one TURP is not eligible.

6.1.2. Intermediate Risk Disease (stage T2c and/or Gleason 7 and/or PSA greater than10 but less than or equal to 20)

Treatment options are:

1. Watchful Waiting

A reasonable option for patients with life expectancy less than 10 years and PSA less than 15 ug/L and/or Gleason score 7. Patients who have limited life expectancy may be offered early or delayed androgen blockade.

2. Radical Prostatectomy (RP)

- In patients with 10 or more years life expectancy, usually not more than 70 years of age, with no extraprostatic extension on the core biopsy, with low risk of positive margin.
- Preferred option with localized tumors in patients with significant lower urinary tract symptoms (LUTS), or with contraindication to radiotherapy e.g. inflammatory bowel disease, collagen vascular disease or previous pelvic radiotherapy.
- Open or laparoscopic surgical approach with pelvic lymph node dissection. If there are grossly positive pelvic lymph nodes, RP may not be completed, but in case of microscopic disease the RP should be completed.
- A nerve sparing approach should be avoided on the side of the lesion or with significant apical disease.
- Neoadjuvant androgen deprivation therapy (ADT) is not routinely recommended. Although it decreases the risk of negative margin by 50%, there is no evidence it improves local control, biochemical disease free survival, disease free survival or overall survival.

3. Radiotherapy

a. External Beam Radiotherapy (EBRT)

- Neoadjuvant and concurrent androgen deprivation therapy with LHRH agonist for 2-6 months prior to EBRT along with initial oral antiandrogen for 2-4 weeks. Anti-androgen should start at the same time or shortly before (but not after) LHRH

agonist. ADT may be omitted for low-intermediate risk (PSA less than15 ug/L and Gleason score less than or equal to 7) especially if dose escalation is used.

- 3-Dimensional Conformal Radiotherapy (3D-CRT) with dose escalation, or IMRT. Fiducial markers for daily prostate localization should be used.
- Dose escalation to 7800 cGy in 39 fractions over 8 weeks. May limit the dose to 7400 cGy if fiducial markers localization is not used.

b. Brachytherapy

i. High Dose Rate (HDR)

Selected patients may be treated with a temporary HDR (1200-43000 cGy/hour) afterloading implant as a boost with external beam RT to the prostate area.

ii. Low Dose Rate (LDR)

Selected patients with low intermediate risk may be eligible. These are patients with PSA greater than10 ug/L but not more than 15 ug/L **AND** Gleason score less than or equal to 6, or patients with PSA 10 or less **AND** Gleason score 7. These patients are also treated with neoadjuvant androgen deprivation therapy for 3 months prior and 3 months after the prostate seed implant. The prostate volume should be less than 50cc. Patients with one prior TURP may be considered, more than one TURP is not eligible.

4. Cryosurgery

- Still not well established as other options.
- Available only in a few centers. Not available in Saskatchewan. Under certain circumstances, patients may be referred to other centers for consideration of cryotherapy.
- Selected patients may be eligible when:
    - Patients with T1-T3 tumors with erectile dysfunction who do not want radical prostatectomy.
    - Local external beam radiation failures.
    - Brachytherapy failures.
    - Poor candidacy for other treatments (patient age and health, prior pelvic radiation, TURP, T3 prostate cancer).

- Prostate volume less than 50 cc, PSA less than 20 and any Gleason score.

Contraindications for Cryotherapy

- Prior TURP with a large tissue defect.
- Significant symptoms of urinary obstruction prior to treatment.
- Large prostate size (complete ablation of glands larger than 50 cm is difficult, prostate volume may be reduced with neoadjuvant hormonal treatment).
- History of abdominoperineal resection for rectal cancer.
- Rectal stenosis, or other major rectal pathology.

6.1.3. High Risk Disease (stage T3 or T4 and/or Gleason 8-10 and/or PSA greater than 20)

Treatment options are:

1. **Radical radiotherapy with neoadjuvant, concurrent and adjuvant androgen deprivation therapy (ADT)**
   - for patients with good performance status.
   - neoadjuvant ADT with luteinizing hormone-releasing hormone (LHRH) agonist for 2-6 months plus initial oral non-steroidal antiandrogen for 2-4 weeks, concurrent LHRH agonist with radiotherapy, and subsequent adjuvant LHRH agonist for 2-3 years **(12), (13).**
   - the duration of ADT may be individualized depending on the balance between toxicity and potential benefit. Patients on long term ADT (greater than or equal to 6 months) should be put on daily vitamin D 800 IU plus calcium 1500 mg, and serum cholesterol should be monitored by the oncologist or the family physician. A baseline bone density with DEXA scan should be considered.
   - 3D-Conformal Techniques or IMRT should be used to minimize morbidity **(14).** The prostate and pelvic nodes are treated to a dose of 44 to 50 cGy **(15), (16)** with a boost to the prostate +/- seminal vesicles to a total dose to the prostate of at least 7000-7400 cGy.

2. **Radical prostatectomy**
   - may be considered for selected young patients with less than or equal to T3a and grossly negative pelvic lymph nodes.

- the risk of positive margin and its consequences should be discussed with patients.

3. **HDR brachytherapy**
   - may be used for boost of prostate dose in selected patients.

4. **Cryosurgery**
   - **<u>may</u>** be considered in selected patients as in the cryosurgery section above.

5. **Androgen Deprivation Therapy (ADT)**
   - early ADT alone or with prostate only radiotherapy in patients with multiple co-morbidities or limited life expectancy, or patients who refuse the above treatment.
   - delayed ADT is less likely considered.
   - ADT alone or with local palliative radiotherapy for T4.
   - TURP for obstructive symptoms or bleeding.

6.1.4. Post-radical Prostatectomy Radiation Therapy

- Indications: positive resection margin, capsular penetration (pT3a), or seminal vesicle involvement (pT3b) **(17),(18).**
- Postoperative radiotherapy to the prostate fossa starts within 4 months after surgery.
- Dose: 6000-6600 cGy in 180-200 cGy daily fractions.
- ADT may be considered if high (greater than1.0 ug/L) or rapidly rising PSA.

6.2. Metastatic Prostate Cancer (Any T, N1 or M1)

1. **Androgen Deprivation Therapy (ADT)**

   - Usually started early after the diagnosis of metastasis. Continuous rather than intermittent ADT is the standard of care so far. Delayed ADT until symptoms occur may be suitable for patients with multiple co-morbidities and a short life expectancy **(19).**
   - Intermittent ADT is less costly and more tolerable, and it may be as effective as continuous treatment in certain subgroups.

- ADT can be achieved surgically with bilateral orchiectomy, or biochemically with LHRH (luteinizing hormone-releasing hormone) agonists.
- Side effects from both approaches include loss of libido, impotence, hot flashes and depressed mood. Some medical approaches can be associated with breast swelling and/or tenderness. Longer-term side effects can include anemia, osteoporosis with increased risk of bone fractures, changes in lipid profile and loss of muscle mass.
- The goal of medical treatment is to reduce testosterone to castrate levels. This can be achieved with an LHRH agonist (e.g. leuprolide, goserelin or buserelin).
- LHRH agonists can cause an initial testosterone surge resulting in a clinically apparent flare reaction in 5 to 10% of patients. This can be prevented by lead-in therapy with a non-steroidal anti-androgen, e.g. flutamide, nilutamide and bicalutamide, for 2-4 weeks, starting at the time of, or just before, the first LHRH-A injection.
- Non-steroidal anti-androgens are not recommended as monotherapy **(16)**. There is no proven benefit from the routine addition of non-steroidal anti-androgen medications following orchiectomy **(20)**.
- Patients who have initially responded to an LHRH agonist or orchiectomy, but then have PSA or clinical progression, may benefit temporarily from the addition of an oral anti-androgen, but these medications should then be stopped when the PSA again begins to rise.
- Possible side effects of non-steroidal anti-androgens include diarrhea, breast swelling and tenderness and liver function test abnormalities. Patients on long-term non-steroidal anti-androgens should have monitoring of liver function tests.

2. Chemotherapy

- Patients with symptomatic hormone refractory prostate cancer may be referred to a medical oncologist for a discussion about the pros and cons of chemotherapy.

3. Radiotherapy

- Selected patients with T1-3N1M0 with microscopic lymph node metastasis seen on pelvic lymph node biopsy/dissection may be treated similar to high risk patients (neoadjuvant ADT followed by radical radiotherapy with concurrent ADT then adjuvant ADT for 2-3 years).

- Palliative radiotherapy to the prostate area may be appropriate for symptomatic loco-regional disease among patients who have not previously received radical RT to this area. Common indications include pain and bleeding.
- Treatment volume and time-dose-fractionation are individualized.
- Indications for palliative radiotherapy to sites of distant metastatic disease include (but are not limited to) bone pain, spinal cord compression and lymphatic obstruction.

6.3. Metastatic Hormone-Refractory Prostate Cancer (MHRPCa)

1. Chemotherapy

- Improves overall survival, disease control, symptom palliation and quality of life.
- **Regimen**: Docetaxel (Taxotere) plus prednisone q3 weeks **(D3P)** x 10 cycles (30 weeks).
    - **D3P**: Docetaxel 75 mg/m^2 IV q3 weeks, plus Prednisone 5 mg PO BID. Dose reduction to 50 mg/m^2 may be used in elderly patients.
- If the above regimen could not be used, other regimens may be used for symptom control but without survival benefit e.g.
    - **Weekly Taxotere** if there is trouble with bone marrow function.
    - **Mitoxantrone** 12 mg/m^2 d1 plus **Prednisone** 5 mg PO BID daily q3 weeks.
- **Second Line Chemotherapy:**
    - After Mitoxantrone: Docetaxel
    - After Docetaxel: Retry Docetaxel, or less likely Mitoxantrone, or experimental drugs on clinical trial.
    - Continue with LHRH-A but discontinue antiandrogen.
- Retreat with Docetaxel 6-10 cycles for disease progression in previous responders if progression after 3-6 months.

2. Bisphosphonate Therapy (Zoledronic Acid)

- **Zoledronic acid** reduces skeletal related events in men with hormone refractory prostate cancer and bone metastasis **(21)** (Level 1 evidence).
- Dose: 4 mg IV q3 weeks for 2 years.
- Watch renal function, creatinine clearance before each dose, stop Zoledronic acid if clearance less than 30 mL/min.
- Dental clearance before starting Zoledronic acid to reduce the risk of osteonecrosis of the jaw.

3. Strontium-89 (Metastron)

- Sr-89 is a radioisotope that may be administered as an outpatient procedure through nuclear medicine departments. It is not recommended for routine use but it may be effective in the following situations:
    i. Metastatic prostate cancer to bone in multiple sites, causing severe pain not relieved by conventional treatment with radiation therapy (RT), hormones or chemotherapy.
    ii. Adequate bone marrow reserve, platelet count greater than100.
    iii. No impending spinal cord compression.

7. Follow-up

7.I. Follow-up Investigation/Monitoring

The purpose of post-treatment follow-up of prostate cancer patients is to:

- allow early diagnosis of recurrent disease in patients who may be amenable to salvage treatment (e.g. post-prostatectomy radiation therapy, Cryotherapy, or rarely, post-radiation therapy prostatectomy) or to early androgen withdrawal
- monitor for acute and late side effects of treatment
- provide outcome information for the treating oncologist or urologist.

Although it would be ideal, it is not usually possible for all follow-up to be done by the treating oncologist. As a result, most patients will be referred back to their family physician or urologist for continuing follow-up, at some point after the treatment of their cancer is completed.

A. Post- Radical Radiotherapy

- 3-6 months after radiation therapy, to ensure acute side effects have settled (with the radiation oncologist). PSA is optional at this time.
- Every 6 months for at least 5 years. Initially with the radiation oncologist (RO), later transferred back to the family physician.
- History & physical, digital rectal exam, and PSA should be monitored at each visit.
- Patients may require renewal of their hormonal prescriptions.
- Other investigations (e.g. bone scans, prostate biopsies) only if clinically indicated or if required by a clinical protocol.

- Patients with biochemical and/or clinical recurrence may qualify for a clinical trial, and this should be discussed with the oncologist. **Biochemical recurrence** after radical radiotherapy is defined as three consecutive PSA rises from the nadir (lowest PSA level after radiation therapy) with a minimum value of 0.5 ug/L (ASTRO definition) **(22)**. The nadir is typically achieved in 12-24 months after radiation therapy.
- PSA "bounce" may occur 1-3 years after prostate brachytherapy with temporary rise of PSA greater than or equal to 4 ug/L.
- Long-term complications following radiation therapy are rarely severe but may include:
    - Urethral stricture may be seen in those who have had a transurethral resection of the prostate (TURP) or other urethral surgery prior to radiation therapy.
    - Urinary incontinence is very unusual (less than 1%).
    - Changes in bowel habit and minor ano-rectal bleeding are common.
    - Impotence can be a long term side effect. This may be treated with medications or intracorporal injections as appropriate for each individual patient.
    - Patients with chronic cystitis should be referred back to the urologist.
    - Patients with severe ano-rectal bleeding or chronic proctitis should be seen by a surgeon or GI specialist.
- Patients should be referred back to the Cancer Centre if their PSA rises to about 5ug/L to assess their eligibility for salvage therapy (e.g. cryosurgery, RP, ADT) or clinical trials.

B. Post- Radical Prostatectomy (RP)

- Follow-up will be at the discretion of the treating urologist.
- PSA is recommended at least every 6 months, but no other investigations are advised unless clinically indicated.
- Patients with clinical and/or biochemical recurrence may be referred to the cancer clinic for consideration of radiotherapy or for an opinion on systemic treatment.
- **Biochemical recurrence after RP** is defined as a persistently detectable PSA level at any time after surgery, or two successive increases to a level greater than 0.3 ug/L.

C. Known Metastatic Disease

Patients who are on hormonal treatment or chemotherapy, and/or who are receiving palliative radiotherapy, will be followed at the cancer clinic as needed to assess the effectiveness of treatment. Otherwise, follow-up will be left in the hands of the referring physician(s).

See PSA01 HH-Follow-up Guidelines – Prostate Cancer for additional information.

7.2. Criteria for referral to the Saskatchewan Cancer Agency

- **Radiation oncology**
  - New histologic diagnosis of localized prostate cancer (from TURP, needle biopsy etc.).
  - Clinical (local or distant) or biochemical recurrence after previous radical radiotherapy or radical prostatectomy.
  - Symptomatic local or metastatic disease.

- **Medical oncology**
  - Clinical or biochemical progression while on systemic treatment.

8. Supportive Care

Consider psychosocial needs, symptom management and additional resources.

In Saskatchewan, there are designated communities where specially trained nurses administer the analog injections through the Community Oncology Program of Saskatchewan (COPS). Patients on treatment are referred to the COPS Centre nearest their home community. Occasionally when patients are unable to travel, family physicians are asked to administer the analog injections. The cancer centre will make arrangements with the family physician when such exceptions occur.

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DISCLAIMER

This guideline represents the view of the Saskatchewan Cancer Agency, which was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgment. Nonetheless, any person seeking to apply or consult the practice guideline is expected to use independent medical judgment in the context of individual clinical circumstances or seek out the supervision of a qualified clinician.

Updating the Guideline

This guideline will be updated as needed, and information about the progress of any update will be posted on the Saskatchewan Cancer Agency website.