

THYROID CARCINOMA TREATMENT REGIMENS (Part 1 of 2)

Clinical Trials: The NCCN recommends cancer patient participation in clinical trials as the gold standard for treatment.

Cancer therapy selection, dosing, administration, and the management of related adverse events can be a complex process that should be handled by an experienced healthcare team. Clinicians must choose and verify treatment options based on the individual patient; drug dose modifications and supportive care interventions should be administered accordingly. The cancer treatment regimens below may include both U.S. Food and Drug Administration-approved and unapproved indications/regimens. These regimens are only provided to supplement the latest treatment strategies.

These Guidelines are a work in progress that may be refined as often as new significant data becomes available. The NCCN Guidelines® are a consensus statement of its authors regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult any NCCN Guidelines® is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient's care or treatment. The National Comprehensive Cancer Network makes no warranties of any kind whatsoever regarding their content, use, or application and disclaims any responsibility for their application or use in any way.

Primary Treatment¹

Note: All recommendations are Category 2A unless otherwise indicated.

Papillary Carcinoma

Total thyroidectomy or lobectomy plus isthmusectomy (category 2B).

Post-surgical therapy may include radioiodine treatment, external beam radiation therapy, or adjuvant radioiodine ablation.

For bone metastases, bisphosphonate or denosumab therapy may be considered.

Follicular Carcinoma

Total thyroidectomy if invasive cancer, metastatic cancer, or patient preference, or lobectomy/isthmusectomy.

Post-surgical therapy may include radioiodine treatment, external beam radiation therapy, embolization of metastasis, adjuvant radioiodine ablation, clinical trial for progressive disease, small molecule kinase inhibitor (sorafenib, axitinib, pazopanib, sunitinib, or vandetanib), or systemic therapy if trial not available.

For bone metastases, options above and bisphosphonate or denosumab therapy may be considered.

Hürthle Carcinoma

Total thyroidectomy if invasive cancer, metastatic disease, or patient preference.

Post-surgical therapy may include radioiodine treatment, adjuvant radioiodine ablation, or external beam radiation therapy.

For bone metastases, bisphosphonate or denosumab therapy may be considered.

For clinically progressive or symptomatic disease, consider surgical resection +/- external beam radiation therapy of metastasis, clinical trial for non-radioiodine-sensitive tumors, small molecular kinase inhibitor (lenvatinib, sorafenib, axitinib, pazopanib, sunitinib, or vandetanib), or systemic therapy.

Medullary Carcinoma

Total thyroidectomy with therapeutic or adjuvant external beam radiation therapy.

Locoregional:

- » Surgical resection +/- external beam radiation therapy
- » Consider external beam radiation therapy
- » For unresectable disease that is symptomatic or structurally progressive, consider vandetanib 300mg orally once daily² or cabozantinib 140mg orally once daily (max 180mg daily)³ until disease progression (Category 1)^{4,5}

Symptomatic distant metastases:

- » Clinical trial is preferred
- » Vandetanib or cabozantinib (Category 1)³⁻⁵
- » Small molecular kinase inhibitor (sorafenib, axitinib, pazopanib, or sunitinib) if vandetanib or cabozantinib are not available, appropriate, or if disease progresses³⁻⁷
- » Dacarbazine (DTIC)-based chemotherapy⁸
- » External beam radiation therapy for focal symptoms
- » For bone metastases, bisphosphonate or denosumab therapy may be considered.

Asymptomatic, distant metastases

- » Observation or resection, ablation if structurally progressive disease

continued

THYROID CARCINOMA TREATMENT REGIMENS (Part 2 of 2)

Primary Treatment¹ (continued)

Anaplastic Carcinoma

Locally resectable or unresectable local tumor +/- distant disease—clinical trial preferred.

Consider external beam radiotherapy and/or concurrent chemotherapy. (Concurrent chemoradiation regimens: paclitaxel/carboplatin, paclitaxel, cisplatin or doxorubicin⁹; Chemotherapy regimens: paclitaxel/carboplatin, paclitaxel¹⁰ or doxorubicin¹¹)

Treatment of Metastatic Disease Not Amenable to RAI Therapy

For progressive and/or symptomatic, radioactive iodine-refractory papillary, follicular, or Hürthle carcinoma, consider lenvatinib 24mg PO once daily or sorafenib 400mg PO twice daily.^{12,13}

References

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