

# Oncological Treatment Guidelines for Thyroid Cancer

## **Pathway of Care**

Kent & Medway Cancer Collaborative

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## **1.0 INTRODUCTION**

- This document has been written to provide guidance on the treatment of thyroid cancer in the Kent & Medway Cancer Collaborative
- Radiotherapy schedules are as defined in the Kent Oncology Centre Quality System Clinical Protocols.
- All patients will be considered for entry into a clinical trial (see appendix A).
- See network chemotherapy prescribing proformas for details of chemotherapy / anti-cancer regimens.
- All new patients should be discussed in the Thyroid multidisciplinary team meeting.
- Please note, some of the drugs/doses recommended within this document are outside of the U.K. licensed marketing authorisation.
- NB: Patients with NTRK gene fusion may be considered for entrectinib or larotrectinib in line with commissioning criteria.

## 2.0 DIFFERENTIATED THYROID CANCER

This group includes papillary and follicular carcinomas (and their variants).

#### 2.1 Radical Treatment

• Surgery

#### 2.2 Adjuvant Treatment

- Radioactive iodine ablation is appropriate for the majority of patients following thyroidectomy.
- External beam radiotherapy may be considered for those (of any age) with macroscopic residual disease and those aged >60 with microscopic residual disease at primary surgery. Neck irradiation may be considered for selected patients with recurrent nodal disease.
- Further radioactive iodine treatment is indicated for those with recurrent or metastatic disease, particularly where this has been shown to take up iodine.

#### 2.3 Palliative Treatment

Radiotherapy may be beneficial to those with metastatic disease, particularly in bones or brain.

Sorafenib may be considered for inoperable or metastatic disease that is refractory to radioiodine.

Lenvatinib for the treatment of metastatic or inoperable locally advanced differentiated thyroid cancer (papillary or follicular or Hurthle cell type) after radioactive iodine.

NB: the patient should be naïve to both lenvatinib and sorafenib unless either the patient was previously enrolled in the company's lenvatinib compassionate access scheme or the patient has had to discontinue sorafenib within 3 months of starting sorafenib because of toxicity

Sequential use of sorafenib and then lenvatinib (and vice versa) is only funded if the patient has to discontinue one of these agents because of intolerance within 3 months of its start and if the disease has not progressed whilst the patient is on that agent. The use of sorafenib after disease progression on or after lenvatinib is not funded and vice versa.

Selpercatinib for RET fusion positive non-medullary thyroid cancer, following prior treatment with sorafenib and/or lenvatinib.

Chemotherapy may be considered for selected patients with metastatic disease unresponsive to radioactive iodine treatment.

• Epirubicin 100mg /m<sup>2</sup> 3 weeks up to 6 cycles

## 3.0 ANAPLASTIC CARCINOMA

Most anaplastic carcinomas are inoperable at presentation and the majority of patients are >70 years of age.

#### 3.1 Radical Treatment

In the few patients where disease is resectable to proceed with surgery.

For unresectable disease, radical radiotherapy may be considered, with concurrent chemo-radiotherapy in <u>selected patients</u>.

- Cisplatin 100mg/m<sup>2</sup> every 3 weeks for 2-3 cycles during radiotherapy
- Cisplatin 40mg/m2 weekly during radiotherapy

#### 3.2 Adjuvant Treatment

Post-operative radiotherapy is indicated following radical surgery. Concurrent chemo-radiotherapy may be considered in selected patients.

- Cisplatin 100mg/m<sup>2</sup> every 3 weeks for 2-3 cycles during radiotherapy
- Cisplatin 40mg/m<sup>2</sup> weekly during radiotherapy

#### 3.3 Neo- Adjuvant Treatment

For selected patients PS 0-1 with unresectable anaplastic carcinomas:

 Standard treatment of Docetaxel 75mg/m<sup>2</sup> + Cisplatin 75mg/m<sup>2</sup> (or carboplatin AUC 5) every 3 weeks for 2-4 cycles should be considered.

Also consider testing for NTRK, ALK fusion and RET mutations.

#### 3.4 Palliative Treatment

Radiotherapy to thyroid and neck may improve neck swelling, tracheal compression and dysphagia.

Radiotherapy may be beneficial for those with metastatic disease. Chemotherapy may be considered for patients with metastatic or recurrent disease, subject to age and performance status.

- Dabrafenib and trametinib for locally advanced inoperable BRAFV600-mutated disease (unlicensed trust policy regarding the use of unlicensed treatments must be followed).
- Cisplatin 90mg/m<sup>2</sup> + Doxorubicin 60mg / m<sup>2</sup> 3 weekly up to 6 cycles
- TP (or alternatively TCarbo if clinically appropriate): docetaxel 75mg/m<sup>2</sup> plus cisplatin 75mg/m<sup>2</sup> or carboplatin AUC 5 every 3 weeks (2-4 cycles)
- Selpercatinib for RET fusion positive anaplastic thyroid cancer with no previous TKI therapy.

## 4.0 MEDULLARY CARCINOMA OF THYROID

Medullary carcinoma of the thyroid commonly presents with locally advanced disease. A proportion of patients have a positive family history of medullary thyroid cancer.

#### 4.1 Radical Treatment

• Surgery

#### 4.2 Adjuvant Treatment

• Post-operative radiotherapy may be considered for those with macroscopic or microscopic residual disease following surgery either as primary treatment or for recurrent disease.

#### 4.3 Palliative Treatment

- Radiotherapy may be beneficial for those with recurrent or extensive disease in the neck or for those with metastatic disease.
- Appropriate chemotherapy may be considered for those with recurrent or metastatic disease.
- Potential benefit from treatment with octreotide may be assessed by prior imaging with labelled octreotide.
- Cabozantinib for the treatment of locally advanced, unresectable or metastatic medullary carcinoma of the thyroid (funding approval required).
- Selpercatinib for RET mutant medullary thyroid cancer, following prior treatment with cabozantinib or vandetanib.

## 5.0 APPENDIX A: CLINICAL TRIALS

Refer to the local research team who will provide on request an orientation handbook, list of current trials and associated trial protocols and summaries.

Contact numbers			
MTW – Clinical Trials Office	01622 225 033		
Darent Valley Hospital – Clinical Trials Office	01322 428 100 ext 4810		
Medway Hospital – Clinical Trials Office	01634 825 094		
East Kent Hospitals – Clinical Trials Office:			
Solid Tumours (excluding Gynae)	01227 866 393		

## 6.0 PERSONNEL AND CONTACT INFORMATION

A comprehensive, up to date list of MDM contact details can be found on the KMCC website via the following link: <u>http://www.KMCC.nhs.uk</u>

### 7.0 GLOSSARY

Acronyms in common usage throughout KMCC documentation

BNF	Dritich National Formuland		
	British National Formulary		
BOPA	British Oncology Pharmacist Association		
CNB	Cancer Network Board		
COSHH	Control of substances hazardous to health regulations.		
CYP	Children & Young People (in relation to the IOG)		
DCCAG	Diagnostic Cross Cutting Advisory Group		
DOG	Disease Orientated Group (NSSG/TSSG/TWG)		
DVH	Darent Valley Hospital		
DGT	Dartford and Gravesham NHS Trust		
EK	East Kent		
EKHUFT	East Kent Hospitals University Foundation Trust		
EPS	Electronic Prescribing System		
FP10(HNC)	Prescriptions issued by hospital doctors for dispensing in the community		
GP	General Practitioner		
HoP	High Level Operational Policy		
IOSC	Improving Outcomes: A Strategy for Cancer		
IV	Intravenous		
K&C	Kent & Canterbury Hospital, Canterbury, (EKHUFT)		
KMCC	Kent & Medway Cancer Collaborative		
KMCRN	Kent & Medway Cancer Research Network		
KOMS	Kent Oncology Management System		

London & South East Sarcoma Network		
Medway Foundation Trust		
Maidstone & Tunbridge Wells NHS Trust		
National Health Service		
Non-medical prescriber		
National Patient Safety agency		
Non Surgical Oncology Group		
(Permanent oncologist sub group of the DOGs with a specific responsibility for		
chemo/rad pathways and advice to the DOG, Network and GEOGRAPHICAL		
LOCATIONs on new drugs)		
Pathway of Care		
(Network agreed disease site specific clinical guidelines)		
Queen Elizabeth the Queen Mother Hospital, Margate (EKHUFT)		
Quality of life		
SIS Quality service information system		
Quality Surveillance Team		
Research and Trial Group		
(Permanent sub-group of the DOGs with a specific responsibility for taking		
forward the clinical trials agenda)		
Royal Marsden Hospital		
Royal National Orthopaedic Hospital		
Systemic Anti-Cancer therapy		
Systemic Anti-cancer prescription on the electronic prescribing system		
ACT regimenSystemic Anti-cancer prescription on the electronic prescribing systemACT protocolSystemic Anti-cancer protocol on KMCC website		
O Treatment to take home		
A Queen Victoria Foundation Trust Hospital East Grinstead		
CLH University College Hospital London		
HH William Harvey Hospital, Ashford (EKHUFT)		
West Kent		

## 8.0 DOCUMENT ADMINISTRATION

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