NHS
Kent and Medway
Cancer Collaborative

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 /m² 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 selected patients.

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

3.3 Neo- Adjuvant Treatment

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

- Standard treatment of Docetaxel 75mg/m^2 + Cisplatin 75mg/m^2 (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/m² + Doxorubicin 60mg / m^2 3 weekly up to 6 cycles
- TP (or alternatively TCarbo if clinically appropriate): docetaxel 75mg/m^2 plus cisplatin 75mg/m^2 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: http://www.KMCC.nhs.uk

7.0 GLOSSARY

Acronyms in common usage throughout KMCC documentation

BNF	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

LSESN	London & South East Sarcoma Network
MFT	Medway Foundation Trust
MTW	Maidstone & Tunbridge Wells NHS Trust
NHS	National Health Service
NMP	Non-medical prescriber
NPSA	National Patient Safety agency
NOG	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)*
PoC	Pathway of Care *(Network agreed disease site specific clinical guidelines)*
QEQM	Queen Elizabeth the Queen Mother Hospital, Margate (EKHUFT)
QoL	Quality of life
QSIS	Quality service information system
QST	Quality Surveillance Team
RAT	Research and Trial Group *(Permanent sub-group of the DOGs with a specific responsibility for taking forward the clinical trials agenda)*
RMH	Royal Marsden Hospital
RNOH	Royal National Orthopaedic Hospital
SACT	Systemic Anti-Cancer therapy
SACT regimen	Systemic Anti-cancer prescription on the electronic prescribing system
SACT protocol	Systemic Anti-cancer protocol on KMCC website
TTO	Treatment to take home
QVH	Queen Victoria Foundation Trust Hospital East Grinstead
UCLH	University College Hospital London
WHH	William Harvey Hospital, Ashford (EKHUFT)
WK	West Kent

8.0 DOCUMENT ADMINISTRATION

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Principle author	Nick Rowell
Co-author(s)	Caroline Waters
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Enquiries:	Caroline Waters, Collaborative Pharmacist, KMCC

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