Case study 2: University Hospitals Birmingham NHS Foundation Trust

RENAL CELL CARCINOMA (RCC) PATHWAY REDESIGN:

LEARNINGS FROM INTRODUCING ADJUVANT THERAPY TO THE RCC PATHWAY

KEYTRUDA (pembrolizumab) as monotherapy is indicated for the adjuvant treatment of adults with renal cell carcinoma at increased risk of recurrence following nephrectomy or following nephrectomy and resection of metastatic lesions (for selection criteria, please see Summary of Product Characteristics).[1]

Please refer to the Summary of Product Characteristics and risk minimisation materials before making prescribing decisions.

This is an MSD promotional resource for UK healthcare professionals only.

This case study was developed alongside healthcare professionals involved in the kidney cancer service at UHB NHS FT. It has been funded by MSD. The healthcare professionals involved received honoraria. The contents of the case studies reflect these healthcare professionals' opinion and are not necessarily reflective of those of their Trust.

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MSD

KEYTRUDA® (pembrolizumab)

THE UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST RENAL CANCER SERVICE

A **tertiary referral centre** for renal cancers

Approximately **2-3 patients per week** undergo **nephrectomies** and are referred to the oncology MDT

~5 patients were on **adjuvant KEYTRUDA treatment** at time of interview

KEYTRUDA Implementation for adjuvant therapy:[2]

Patients with renal cell carcinoma at increased risk of recurrence following nephrectomy or nephrectomy and resection of metastatic lesions underwent post-surgery surveillance under the **urological surgical team**

THE NEED FOR PATHWAY OPTIMISATION

The introduction of KEYTRUDA adjuvant therapy for renal cell carcinoma provided an opportunity for service redesign

The UHB NFT have experienced a substantial increase in the number of patients with RCC requiring their services, in line with UK-wide increasing kidney cancer incidence rates since the 1990s[3] and the impact of COVID-19 on diagnosis and treatment, resulting in backlogs and delays.[4]

With the introduction of adjuvant KEYTRUDA, eligible patients require treatment administration in chemotherapy clinics as well as regular reviews for one year in the acute urological oncology clinic.

RECOMMENDATIONS

AT A GLANCE

Planning

Involve the pharmacy team and MDT early in the pathway development process

Staffing

Match staff skills to patient needs to ensure optimal skill mix

Service

Organise clinic timings to provide the most efficient pathway for patients and clinics

In-depth recommendations are available further on in this document

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WHO IS INVOLVED IN DELIVERING THE ADJUVANT RCC THERAPY SERVICE?

DELIVERING THE ADJUVANT RCC THERAPY SERVICE:

- Renal oncology surgeon: refers patients into service and provides initial advice on adjuvant therapy
- Consultant medical oncologist: identifies suitable patients in MDT meetings and sees patients in clinic
- Kidney cancer specialist nurses: provides continuity for the patient across surgical and oncology clinics, and provides initial advice on adjuvant therapy
- Chemotherapy nurses: administer KEYTRUDA treatment
- Clinical pharmacist in oncology: sees patients in clinic
- Registrars: sees patients in clinic

THE MULTI-DISCIPLINARY TEAM (MDT):

- Consultant urologists
- Medical oncologists
- Clinical oncologists
- Kidney cancer specialist nurses
- Other specialist nurses
- Pharmacists
- Urology specialist radiologists
- MDT co-ordinators
- Directorate and pharmacy managers
- Pathologists
- Radiologists

KEY CONSIDERATIONS BEFORE RCC ADJUVANT THERAPY SERVICE REDESIGN

from The University Hospitals Birmingham NHS Foundation Trust

Planning

- Familiarise yourself with the existing pathway, and identify steps which are prone to bottlenecks that cause delays
- Identify teams and **roles outside the oncology department** who may also need to be involved or notified
- Be prepared to **redesign the service for efficiency** in the future as patient numbers grow

Development

- Organise an educational meeting for the whole team, ideally with a speaker from a centre who has already set up the service
- Identify the **decision-makers of the MDTs** who will refer to your service and build links with them
- Use **business cases** to communicate the resource requirements and service changes to key stakeholders such as service managers

Communication

- **Communicate your plans** with key MDT members and pharmacy colleagues **early in the planning process**
- Discuss the pathway with the **surgical and consultant teams** so they can identify potential patients.
- Communicate and forge links with **MDTs in neighbouring trusts** who could refer patients to the service to prevent any patients from missing out on adjuvant treatment. This will include ensuring that any potential patients are referred in a timely manner

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HOW WAS THE ADJUVANT RCC THERAPY PATHWAY DESIGNED?

KEYTRUDA was approved by the Trust Medicines Management Committee. The medical oncologist engaged with consultant and pharmacy colleagues regarding the new pathway, then they approached the Multi-Disciplinary Team (MDT) to discuss the potential pathway.

The Birmingham adjuvant RCC therapy pathway

Surgical team | Oncology team | Chemotherapy team

≤12 weeks[5]

What has changed?

Rather than undergoing post-surgery surveillance with the surgical team, patients who are suitable for adjuvant RCC therapy are now referred into the oncology clinic for treatment initiation and follow up.

The skill mix used to support clinics was changed, shifting away from consultants and towards clinical nurse specialists (CNSs), pharmacists and physician associates, as appropriate depending on where the patients were in the treatment pathway and their needs.

Clinic appointments are arranged to coincide with blood tests required for administration, to reduce the number of appointments needed.

Patients are reviewed every 6 weeks for one year. Reviews may include blood tests and/or scans

KEYTRUDA is now administered to adults as the recommended dose of 400 mg every 6 weeks as an intravenous infusion over 30 minutes.[1]

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WHAT EDUCATION AND TRAINING WERE IMPLEMENTED TO FACILITATE THE NEW PATHWAY?

Clinical educational needs will depend on the workforce familiarity with KEYTRUDA due to its use in other types of cancer

- The **specialist kidney cancer nurse** was educated and provided with advice to **enable a brief discussion post-operatively**, while the patient was still under the care of the surgical team. This discussion introduced the treatment and the reason for their oncology referral, and centred around providing reassurance
- **The surgical team were provided with education to be able to have an initial discussion with the patients prior to their referral to the oncology team**

COMMUNICATION

Considered the most important aspect of successful pathway implementation

1. Ensure that the importance of timing is communicated across the entire process, so that suitable patients can be fast-tracked and can receive KEYTRUDA treatment within 12 weeks of surgery[5]
2. Alongside clear communication about the need and implementation of the pathway within the oncology department, discussions with the MDT and wider staff groups was essential
3. Peripheral sites were made aware of the need to fast-track potential adjuvant RCC therapy patients due to the importance of starting the treatment within 12 weeks of surgery[1]

Communicating the risk of recurrence, and the purpose of adjuvant RCC therapy with KEYTRUDA to PATIENTS is a key component of success:

"...When people see a referral from oncology, the first thing they think is: 'Oh, God, they haven't got all my cancer, I'm going to die.' And so [the kidney cancer specialist nurse] needs to just ***educate the patient a little bit in the peri-surgical period,*** *so that they're not terrified by that thought."*

Consultant medical oncologist

"It's a new conversation. And you do have to practice it. I check on a Sunday night, my new patients for the Monday so I prep them. And on the train on the way in I was mentally preparing the conversation I was going to have with them, ***how was I going to get across the potential benefits, potential risks, and the uncertainties around adjuvant treatment?"***

Consultant medical oncologist

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WHAT CHANGES TO THE SERVICE ARE NEEDED OR EXPECTED IN THE FUTURE?

1. As the number of referrals and patients in general are expected to increase in the future, strategies will be required to free up capacity. This includes use of **telephone appointments**
2. **Optimising skill mix** is expected – utilising cross-cover members of staff and ensuring work is delegated appropriately, freeing up more senior or clinically-focused staff to see patients while other staff take on more operational roles
3. It is expected that **specialist nurses** will be increasingly utilised in the future with a view to them leading clinics independently
4. **Physical and digital aide memoires** may be produced and distributed throughout referring MDTs. The aide memoires would contain eligibility criteria for KEYTRUDA adjuvant therapy and a summary of the treatment

WHAT WOULD YOU RECOMMEND TO ANOTHER CENTRE ESTABLISHING A NEW ADJUVANT RCC THERAPY PATHWAY IN PLACE?

Planning

- Involve the **pharmacy team** early on in the pathway development process – especially for tasks that require attention to detail and accuracy
- Identify the needs of peripheral sites that will refer into the tertiary centre and work with them to **understand potential delays** in the referral process

Staffing

- Examine the skills required for each role within the pathway and **match them to the skillsets available to you** to ensure optimisation of clinic time
- Invest in **training and development of staff** to develop their roles so they can be used to optimise the skill mix in the department. For example, developing pharmacists or nurses to prescribe and run clinics independently

Service

- Consider developing a **fast track referral process** utilising local knowledge from MDTs
- Consider ways to provide **continuity** for patients as they move through different departments - e.g. presence of the same specialist nurse throughout their surgical journey and in oncology clinics
- Consider ways to reduce the impact of treatment and follow up appointments on **patients' time and travel** – e.g. administering treatment on a six-weekly basis, or timing clinics close to treatments and using the opportunity to take bloods
- Monitor the amount of time spent on these patients and submit a **business case** for service/pathway change if it becomes unmanageable

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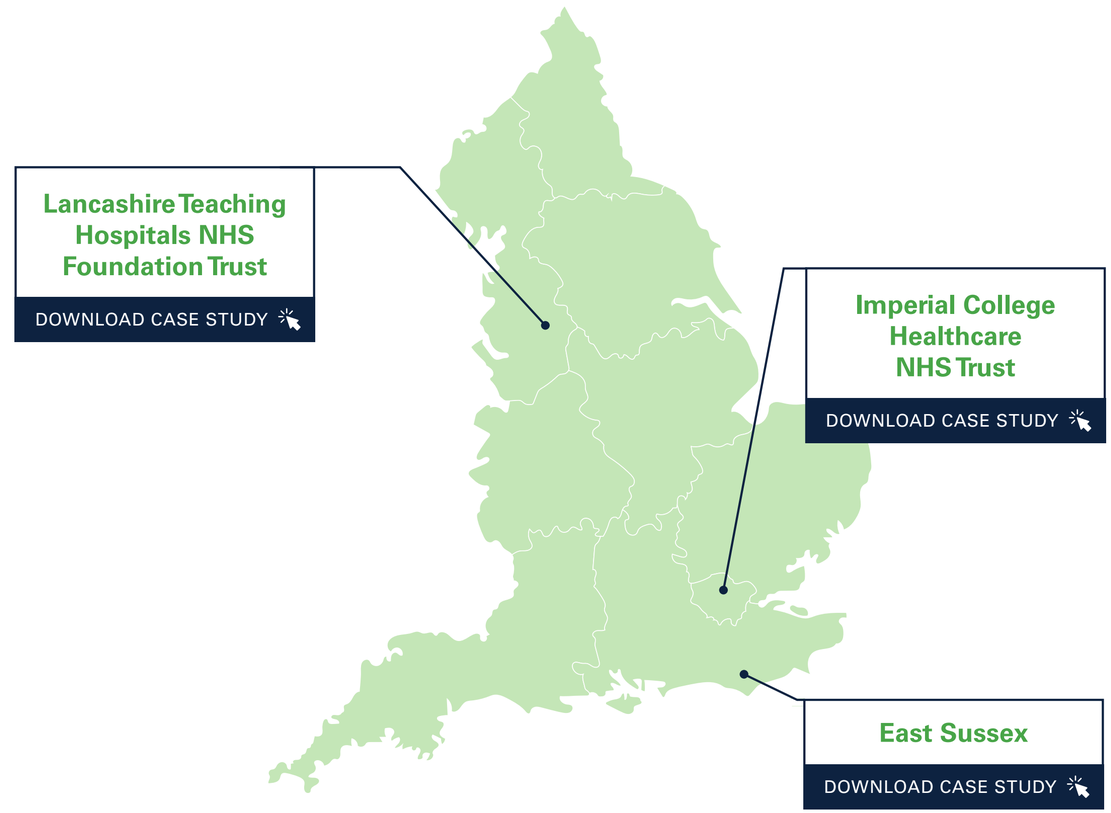

For more information on the case studies, or to discuss your own pathway, please contact your local **MSD Oncology Therapy Lead**

Click here to visit our MSD connect website to access more resources to support in RCC pathway redesign and patient care

Click here to request further information by contacting our MSD Oncology Mailbox

REFERENCES

1. KEYTRUDA (pembrolizumab) Summary of Product Characteristics.
2. NICE. 2022. Pembrolizumab for adjuvant treatment of renal cell carcinoma. Technology appraisal guidance [TA830].
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5. Choueiri, T. K. *et al.* (2021). Adjuvant Pembrolizumab after Nephrectomy in Renal-Cell Carcinoma. New England Journal of Medicine, **385**(8), 683-694. https://doi.org/10.1056/NEJMoa2106391

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