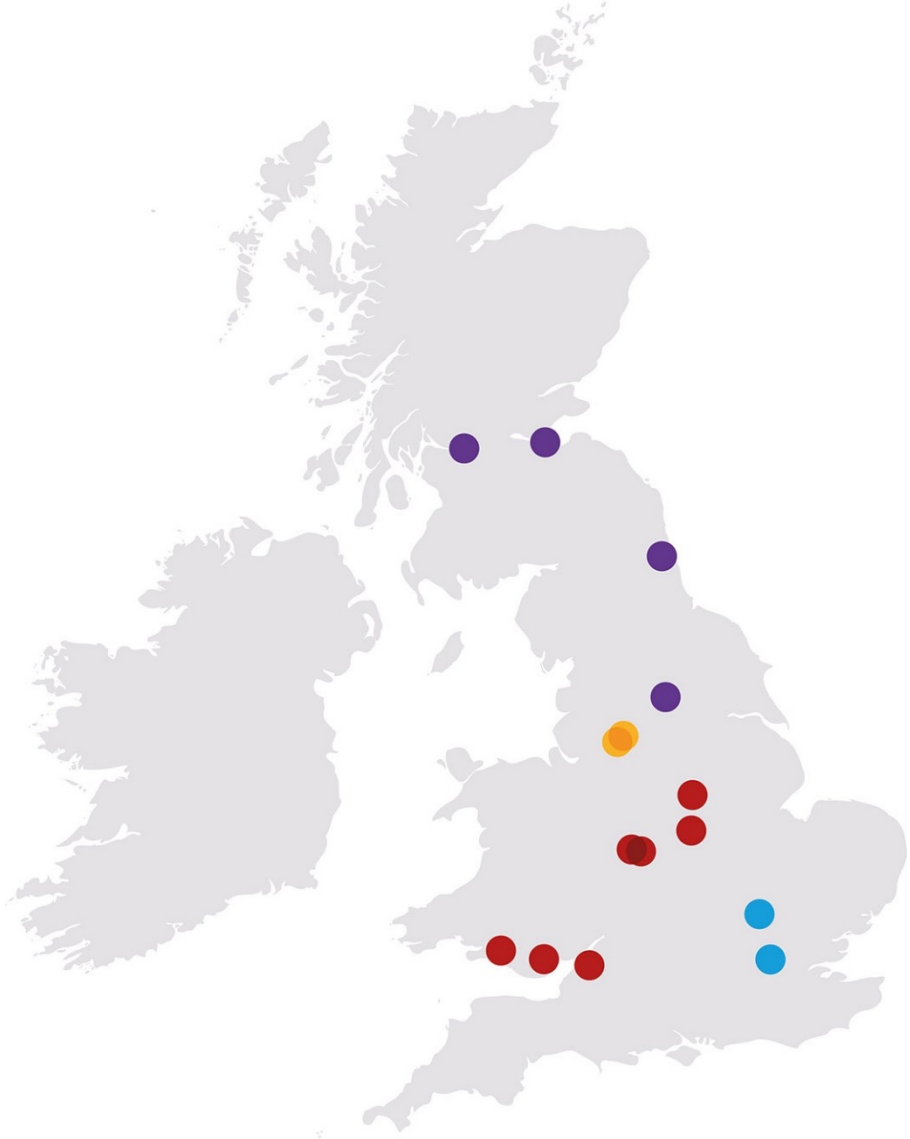
Advanced Therapy Treatment Centres

How can we use past & current experience to inform future best practice and ensure system readiness for routine ATMP clinical adoption?



Roundtable summary
1st November 2021

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CATAPULT Cell and Gene Therapy

Introduction

On 1st November 2021, representatives from across the UK cell and gene therapy community came together to discuss the UK's leadership in cell and gene therapy and how this experience can be leveraged to inform future best practice and ensure system readiness for routine ATMP clinical adoption.

This document summarises the key findings and conclusions from the workshop. Further detail is included as part of an Appendix.

A thought-leadership document will also be produced that recommends that a UK Government-led 'National Vision on Cell and Gene Therapies' should be developed to set out the actions that will be taken to retain the UK's position as a world leader on ATMPs.

Organisations in attendance:

- Advanced Therapy Treatment Centre Network representatives
- Anthony Nolan
- Astellas
- Autolus
- Bristol Myers Squibb
- Cell and Gene Therapy Catapult
- Genetic Alliance
- GSK
- Human Tissue Authority
- Incisive Health
- Janssen
- Kite Gilead
- NHS England & NHS Improvement
- NHS National Services Scotland
- NHS Specialist Pharmacy Services
- NHS Wales
- Novartis
- Scottish National Blood Transfusion Service
- University of Birmingham

Contents

Executive summary

Overview

1. The UK is a global leader in the provision of ATMPs and a number of early successes have contributed to this

2. A series of outstanding challenges and areas for improvement need to be addressed to ensure the UK stays at the forefront of ATMP delivery. These fall broadly within three themes:
   - Developing the UK's clinical trials and adoption capability
   - Assisting delivery and scalability (earlier horizon scanning, service capacity, and patient engagement)
   - Resolving commercial barriers to adoption (health technology assessment (HTA) and affordability)

3. Using the roundtable discussion as a key input, a separate thought leadership document has been developed that sets out recommendations for the future of ATMP adoption in the UK in the form of a 'national vision' for ATMPs

The UK is already a global leader in the provision of ATMPs

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Participants overall agreed the following have enabled the UK to make swift progress on delivering certain ATMPs to patients to date.

Early stakeholder engagement

- Collaboration and partnership working between NICE, NHS commissioners, providers and industry have contributed to early and swift progress.
- The UK made CAR T available in a matter of weeks after EMA approval.

Efficient site selection and set up

- Some developers have found site selection and set up for ATMPs can be fast and efficient, given the right circumstances.
- Developers worked collaboratively with providers at an early stage in order to support and train staff.

Speed of access

- The NHS has shown foresight and flexibility by ensuring service specifications have been made available in a timely way, enabling sites to be operationalised quickly.
- HTA and commercial discussions were conducted in a timely manner.

Above successes are largely associated with CAR T products (which have benefitted from the availability of managed access mechanisms and the CDF), and two gene therapies for rare diseases (which benefitted from HSTE routing); although other ATMPs faced challenges.

Further insights on the UK's global leadership position can be found from slide 11.

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Recommended solutions to address outstanding challenges and ensure patients have access to future ATMPs

Participants discussed a range of challenges facing ATMP adoption and delivery in the UK before identifying and considering a series of suggested recommendations to overcome them and ensure the UK stays at the forefront of ATMP delivery.

Outstanding challenges	Recommended solution identified
Developing the UK's clinical trial and adoption capability	• Infrastructure gaps mapped to consider how they can be addressed • Investment in training and education to prepare the workforce for ATMPs • Increased investment in the UK research environment to set up clinical trials more quickly to accelerate data generation
Assisting delivery and scalability	• Sufficient workforce and service planning undertaken • Horizon scanning of commercialised therapies to be properly resourced • Patient engagement to be improved and greater investment in support services
Resolving commercial barriers to adoption	• HTA methods adapted to accommodate the uncertainty posed by ATMPs • Risk-sharing approaches to reimbursement considered • Data collection, infrastructure and registry systems optimised and invested in to provide real world data

Further detail on these recommendations can be found from slide 13.

Creating a national ‘vision’ for cell and gene therapies

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To build on the UK’s early successes and to address outstanding challenges, participants agreed that the ATTC IAG will develop a thought-leadership document that calls for the development of a Government-led national ‘vision’. This thought-leadership piece will:

- Take a holistic view of the UK’s progress to date in the delivery of ATMPs and its capability to expand patient access to advanced therapies.
- Make recommendations on the actions that need to be taken across the system to address constraints relating to capacity, infrastructure and reimbursement.
- Propose an action plan for industry, Government, regulators, national and local NHS organisations and HTA bodies to work together deliver the strategy

The UK’s global leadership in cell and gene therapy

The delivery of CAR T has been a major success in the UK

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The group concluded that the UK's CAR T experience clearly demonstrated the UK's global leadership in cell and gene therapy.

The commitment and enthusiasm of all partners across the system enabled patients in the UK to benefit from CAR T, with the UK being the first health system in Europe to make them available.

HTA bodies, particularly NICE, acted speedily to approve CAR T and were open to engagement early on. Commercial arrangements facilitated by the CDF and HSTE routing have also been a key enabler of flexibility for newer advanced therapies.

Early and meaningful engagement across the system was crucial to initial success. This included early engagement between developers, regulators, HTA bodies, national NHS organisations and local NHS providers.

Site selection for ATMPs, and the onboarding of these sites by national NHS organisations, was carried out effectively. Developers were able to work collaboratively with sites on training and contracting.

NHS commissioners worked with flexibility and at speed to develop interim service specifications to rapidly adopt CAR T therapies.

The National CAR T Clinical Panels were key to fast patient identification, rapid approval and referral to treatment.

Ensuring system readiness for future ATMP clinical adoption

Ensuring system readiness for future ATMP clinical adoption

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Challenges and opportunities identified in relation to the future clinical adoption of ATMPs fall under three key themes:

1

Developing the UK's clinical trials and adoption capability

ATMPs are expected to become increasingly common in the UK over the next few years.

2

Assisting delivery and scalability

ATMPs are disruptive, highly complex and challenging to administer.

3

Resolving commercial barriers to adoption

ATMPs pose unique challenges for HTA and commissioning.

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1 Developing the UK's clinical trials and adoption capability

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Physical infrastructure constraints:
Accelerating ATMP adoption will carry significant investment costs for the system as more sites will need to develop the relevant expertise and capability to deliver treatment, such as storage requirements and support with accreditation. Some regions are further ahead than others in the development of their delivery infrastructure.

Solution: National work focused on capacity planning across the system needs to be carried out to map infrastructure gaps, consider how they can be addressed and build local/regional leadership in ATMP delivery.

HCP understanding and experience:
Knowledge about ATMPs is limited. This can pose problems in respect of early patient identification, timely referrals to treatment and expanding treatment MDTs. Looking to the future, as more products come to market, there is an increasing need to upskill HCPs to build the necessary knowledge and expertise in the workforce.

Solution: Further investment in training and education is required to prepare the workforce for ATMPs, eg through integrating ATMPs into the curriculum for HCPs.

Clinical trial set-up and delivery:
The attractiveness of the UK's clinical trial environment risks being eroded due to the large costs involved, delays associated with site selection, contracting and patient enrolment, workforce capacity to support trials, and delays resuming trial activity post-COVID-19. Clinical trials are vital for patient outcomes and building workforce expertise.

Solution: Increased investment in the UK clinical trials environment is needed so that trials can be set up and patients enrolled more quickly, ensuring the UK remains a competitive place to run ATMP clinical trials. Trial site and delivery site selection should also be better aligned to improve efficiency and predictability.

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2

Assisting delivery and scalability

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Limitations on service and workforce capacity:
Capacity in the system will need to keep pace with product approvals. At present, there are challenges with workforce, apheresis and outpatient capacity and contracting requirements. Some pressures have also been compounded by COVID-19, such as ITU bed availability and HCPs' capacity.

Solution: Sufficient planning will be needed to avoid overstretching already burdened NHS staff. Contracting requirements should be standardised and service pinch points need to be addressed to increase throughput.

Readiness for future service transformations:
Waiting for new products to be approved before considering how they are integrated into existing pathways or service reconfigurations can cause delay. Manufacturing and supply chain processes are currently lengthy and complex and take time to be scaled up. Similarly, UK screening programmes often lag behind advances in treatment and late diagnosis is causing delays in patient access.

Solution: Horizon scanning of commercialised therapies needs to be properly resourced, with insights used by NHS commissioners and industry to identify and prepare for service, screening and manufacturing and supply chain reconfiguration. Newborn screening for rare diseases also needs to be expanded to facilitate earlier access to treatment.

Holistic patient care and support:
Whilst ATMPs will bring many benefits for patients, they can also be associated with a high treatment burden, adverse events and the need for long-term follow-up. Patient engagement on safety and efficacy of ATMPs should be better supported through the treatment pathway. Patient voice and experience must also be embedded into services.

Solution: Patient engagement to improve knowledge of ATMPs needs to be improved so that patients understand the realities of treatment with ATMPs. Services that support patients, such as genetic counselling, require investment to improve holistic care.

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3 Resolving commercial barriers to adoption

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HTA uncertainty:
ATMPs tend to have small and very specific patient populations and the short-term trial data used as part of HTA submissions makes it difficult to meet the high burden of proof on clinical effectiveness required by HTA bodies, particularly around length of benefit.

Solution: Developers should engage early with HTA bodies to understand how their products will be assessed, HTA bodies should apply economically and clinically justified methods that capture the value of ATMPs while also providing value for the NHS.

Affordability and sustainability:
ATMPs tend to have a high upfront cost and, in the short-term, these costs are not displaced elsewhere in the care pathway. The system costs of delivering ATMPs, such as enhanced after care and monitoring, are also significant. This creates affordability concerns for the NHS and places pressure on budgets (at least in the short-term).

Solution: Risk-sharing approaches to reimbursement, such as outcomes-based and annuity agreements, should be considered that enable access whilst ensuring sustainability and value for money.

Data availability:
Across the NHS, huge amounts of data are collected about patients' conditions, treatment and outcomes. This resource is valuable for improving clinical care and understanding the real-world clinical effectiveness of treatment. However, this data is often fragmented, inconsistently captured and not comprehensive at the time of HTA assessment.

Solution: Existing data collection, data infrastructure and registry systems need to be optimised and invested in, and data on ATMPs shared more effectively across the system, for the purpose of clinical care and reimbursement. This should be done in a way which avoids increasing the burden on HCPs.

Appendix – Summary of panel discussion

The UK government has invested in a supportive ecosystem for ATMP development and delivery – but this is only the start of the journey

Progress to date

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The UK is a world leader of ATMPs. The UK is well placed to capitalise on the opportunities of the future.

Collaborative working. The close collaboration and partnership working between NHS commissioners, providers and industry has contributed to the clinical adoption of CAR T. This collaboration has been ambitious and meaningful.

Speed of access. To date, site identification and accreditation for CAR T delivery has been swift, contributing to faster patient access. Payers, HTA bodies and regulators worked collaboratively to accelerate access. Recent reforms, like the Innovative Licensing and Access Pathway (ILAP), are a clear demonstration of the UK's continued ambition.

Priorities for the future

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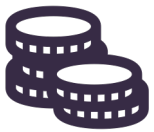
Capacity. Work should be carried out collaboratively by national and local NHS organisations to increase delivery capacity in the NHS in line with the growth in demand anticipated from the increasing number of ATMPs coming to market. Treatment centres must be properly resourced to manage growing patient numbers.

Standardisation. Strict regulatory requirements exist to deliver ATMPs. Currently, standards and requirements can vary between products. Differing parts of the system need to work together to standardise contracting requirements in order to reduce the burden on NHS services and ensure more efficient access within routine care. Ideally, this work should be carried out internationally.

Data. The NHS system, with wider stakeholder collaboration and input, needs to improve the accessibility of real world data. A network of data sources already exists which could be better utilised in support of real world evidence generation and reporting – in order to improve routine clinical practice, support market access and long-term efficacy claims.



HTA. ATMPs present significant HTA challenges, given the immaturity of the data available at the time a product is assessed and the typically small patient populations these treatments are licensed for. Work is needed to look at how HTA bodies and industry, along with payers and MHRA, can better manage uncertainty and share risk, taking into consideration that ATMPs are often administered once with high upfront cost.

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