

Introducing Gene Therapy Trials into an NHS Trust

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Why?

- Our Trust is highly research active with a number of specialist hospitals.
- Our NIHR Manchester Clinical Research Facility were being asked about their capacity to conduct Gene Therapy trials.
- Our clinicians are seeing them as a viable treatment option where none currently exist.
 - Rare genetic conditions (Eye)
 - Stem cell therapies
 - Haemophilias



Understanding the requirements



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Biosafety

- Safety notices
- + The regulation of specified animal pathogens
- + Infections at work
- Blood-borne viruses
- Genetically modified organisms (GMOs)
 - What are GMOs?
 - Who is responsible for GMO (CU) Regulations?
 - GMOs and the law
 - + GMO Notifications
 - + Resources

Genetically Modified Organisms (Contained Use)

This site provides information on working with genetically modified organisms (GMOs) in contained use facilities. Contained use means the work stays within a research laboratory or a biotechnology production facility and not released into the environment.

- ▶ Who is responsible for the GMO (CU) Regulations?
- ▶ What do the current GMO (CU) regulations require?



▶ What are GMOs?

New GMO 2014 Regulations

The Genetically Modified Organisms (Contained Use) Regulations 2014 come into force on 1 October 2014.

▶ GMO 2014 Regulations

GMO Toolbox talk

Genetically Modified Organisms (Contained Use) presentation.

▶ GMO Toolbox Talk 

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Regulations, Guidance and sample documents

- Genetically Modified Organisms (Contained Use) Regulations 2014 and Deliberate release regulations.
- The SACGM Compendium of guidance part 6: Guidance on the use of genetically modified microorganisms in a clinical setting.
- Terms of reference for the University of Manchester Genetic Modification Safety Committee were obtained.
- Sample Risk Assessments were obtained from more experienced Trusts.

Understanding the requirements



People

- A meeting was held with The Christie Hospital's Quality lead who acts as their Biological Safety Officer and advice sought on systems.
- A meeting was held with the University of Manchester Biological Safety Officer to provide comparison.
- Teleconference with UCL personnel, who were sponsoring one of the proposed trials.

What did we need to do?



- Check Register (Genetically Modified Organisms Public Register Report)
- Contact HSE (responsible authority)
- Set up a Genetic Modification Safety Committee (GMSC)
- Obtain Trust Board support
- Identify stakeholders in conducting GT trials

Competent Authorities

- Who is responsible for the regulations varies between the devolved nations
- Check below to see the competent authority for you.
<http://www.hse.gov.uk/biosafety/gmo/whos-responsible.htm>
- For England the Health and Safety Executive (HSE) and the Secretary of State for the Department for Environment, Food and Rural Affairs (DEFRA) act jointly.

Registration

- Registered updated details with HSE
 - Contact,
 - Premises within Trust and
 - New GMSC arrangements
- Under contained use regulations
 - Class 1 trials this is sufficient
 - Class 2 trials and above, notification to HSE

GMSC set-up

- Identified members
- Identify staff with relevant expertise
- How would the decision be made?
 - Risk assessment form



GMSC

- In our Trust we have a monthly Early Phase Safety Committee (EPSC) which assesses whether high-risk (Phase 1) trials can be safely conducted onsite.
- The EPSC contained most of the relevant staff members/expertise needed for the GMSC, to avoid duplication
 - Expanded the EPSC by adding a consultant clinical scientist (virology) as a GM advisor.
 - Added questions about GMO product pathways (receipt, storage, preparation, transportation and waste) to the risk assessment

Strategic Support

- Presented intention paper to Trust Research Governance Committee
 - Board level committee chaired by Medical Director
 - Agreed to initially limit GT trials accepted to containment class 1 and 2 whilst building expertise
 - Agreed to develop Trust Code of Practice for GT trials
- Paper discussed at Operational Management Group (Divisional Managers across Trust for Hospitals and Clinical Support Departments)
 - Assisted in engaging stakeholders across the Trust

Code of Practice (CoP)

- Two remits
 - How-to guide for research teams
 - Raise Awareness that GT trials are happening at the Trust
- Identified departments to feed into the CoP including: Occupational Health, Infection Control, Waste Management, Clinical Research Facility, Stem Cell Laboratory, Pharmacy, Laboratories, Radiology and Pathology.
- Met with key individuals
- Code of Practice published on Trust intranet

Embedding into Trust

- Training and awareness raising
- Widening the personnel in clinical departments with the expertise
- Reflecting on lessons learned from each trial



Next steps.....

New members on EPSC

Funding in place to increase expertise across Trust

Further funding for pharmacy requirements

Lessons Learned

- Time and effort
- Ask the sponsors!
- Important to get Board/senior management support because while some departments engage really well (waste management), others need pressure applied.
- Don't assume paragraphs in a Code of Practice equate to practical departmental procedures.
- Engage ground level staff.
- Realise it is an ongoing process and you will learn with every trial.

Summary

