

# Assessing the impact and safety of Home IntraVenous Antibiotic Treatment (IVAT) for children with cystic fibrosis

<b>Submission date</b> 11/06/2010	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 28/06/2011	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 16/12/2019	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

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**Additional identifiers****Protocol serial number**

4495

**Study information****Scientific Title**

Assessing the impact and safety of home intravenous antibiotic treatment (IVAT) for children with cystic fibrosis: a non-randomised observational study of risk within a therapeutic process

**Acronym**

HIVAT

**Study objectives**

1. Examine the consequences of delivering intravenous antibiotic treatment (IVAT) to children with cystic fibrosis (CF) at home
2. The clinical consequences for the child and the psychological consequences for both the carer and the child
3. The long-term aim of the project is to provide a framework to support families with this complex healthcare procedure at home

**Hypotheses:**

The routine burden of treatment high carer burden during the 14-day period that IVAT is delivered at home will be associated with:

1. Deficits in emotional, psychological and relational well-being for the carer and the child
2. Errors in the delivery of the IVAT
3. Reduced adherence to treatment
4. An augmentation of these effects over time rather than their habituation

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

West Midland MREC approved on the 7th August 2008 (ref: 08/H1208/11)

**Study design**

Non-randomised observational validation of investigative/therapeutic process

**Primary study design**

Observational

## **Study type(s)**

Quality of life

## **Health condition(s) or problem(s) studied**

Cystic fibrosis, respiratory disease

## **Interventions**

1. Quantitative inquiry: A within-group prospective study of risk will compare high burden periods, indexed by the delivery of intravenous antibiotic therapy (IVAT) at home with moderate burden when routine treatments are administered
2. Longitudinal statistical modelling techniques will determine:
  - 2.1. If high burden is related to disordered mood, reduced adherence and adverse events, 2.2. Whether negative outcomes habituate or augment over time
3. Analyses of repeated measures from individual carer/child dyad will be cast in a growth curve framework
4. Inductive inquiry: Within this quantitative framework a sub-sample of carer/child dyads will be selected for micro-level idiographic exploration of their lived experience of delivering and receiving home-based IVAT
5. The research questions will be open-ended:
  - 5.1. What is it like for a mother to administer a course of IVAT to her child at home?
  - 5.2. What is it like for a child to receive IVAT at home from his or her mother?
6. The quantitative and qualitative findings will be integrated for a description of the carer/child experience
7. Home IVAT: Complex healthcare treatment (intravenous antibiotic treatment) delivered by lay caregivers in the community
8. Follow up length: 12 months

## **Intervention Type**

Other

## **Phase**

Not Applicable

## **Primary outcome(s)**

Adverse event score: untoward occurrences during routine T1 and IVAT time T2

## **Key secondary outcome(s))**

1. Adherence: during routine treatment T1 and IVAT treatment T2
2. Disordered mood (depression and anxiety) in caregivers: Routine treatment T1 and IVAT treatment T2

## **Completion date**

28/05/2010

## **Eligibility**

### **Key inclusion criteria**

1. Children aged 13 years or under
2. Confirmed diagnosis of CF for at least one year
3. Caregiver has opted to conduct the IVAT procedure him or herself at home
4. Target gender: male and female

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Child

**Upper age limit**

13 years

**Sex**

All

**Total final enrolment**

45

**Key exclusion criteria**

1. Caregivers administering end-of-life care
2. Profound mental, physical or social problems involving statutory services

**Date of first enrolment**

11/03/2009

**Date of final enrolment**

28/05/2010

**Locations****Countries of recruitment**

United Kingdom

England

**Study participating centre**

**Academic Child Mental Health Unit**

Liverpool

United Kingdom

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# Sponsor information

## Organisation

Royal Liverpool Children's NHS Trust (UK)

## ROR

<https://ror.org/00p18zw56>

# Funder(s)

## Funder type

Hospital/treatment centre

## Funder Name

Alder Hey Children's Hospital (UK)

## Funder Name

National Institute for Health Research (NIHR) (UK) - Research for Patient Benefit (RfPB) programme (ref: PB-PG-0706-10381)

# Results and Publications

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes