University Hospitals Bristol NHS
NHS Foundation Trust

From vaccines to vaginas:

The different impacts of research on clinical services

Natalie Fineman

30 November 2016

Impact…

‘A Marked effect or influence’….

BRASS

10 November 2012 Last updated at 08:02

Babies to get 'gut bug vaccine'

COMMENTS (369)

By James Gallagher
Health and science reporter, BBC News

Babies in the UK are to be vaccinated against a tummy bug which causes tens of thousands of cases of vomiting and diarrhoea each year.

Rotavirus infection is rarely fatal in the UK.

The Department of Health said the vaccine would be offered from September 2013 and would be given in two doses after two and three months.

It is expected to cost £25m a year to vaccinate 840,000 children a year. However, the government believes cutting the number of cases will save the NHS £20m.

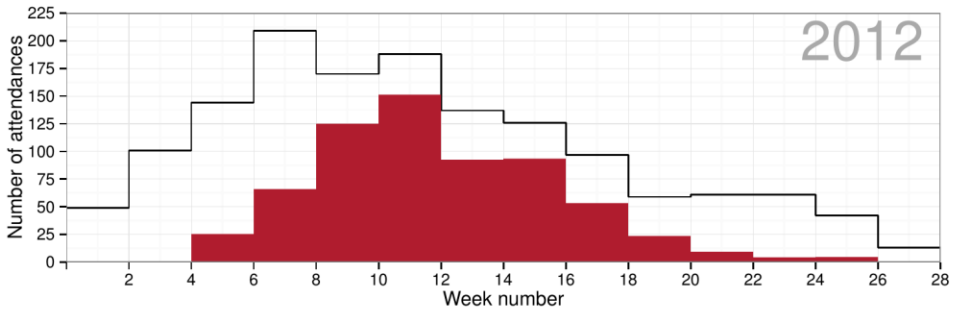
Prof David Salisbury, Director of Immunisation, DoH: "We expect this will save around £20m"

The bug is very infectious and causes about 140,000 cases every year in the under-fives. About 14,000 will need hospital treatment.

Experts believe that vaccination would cut the number of cases in half and lead to 70% fewer hospital visits.

Rotavirus..

- Most common cause of gastroenteritis in children
- Pre vaccine approximately 130,000 children visited GP yearly with rotavirus in England and Wales
- Pre vaccine- 12,700 admissions per year
- Vaccine- Introduced July 2013 in primary infant schedule (oral vaccine)
- Seasonal – Winter and spring- increase winter pressures in NHS
- Prevention better than cure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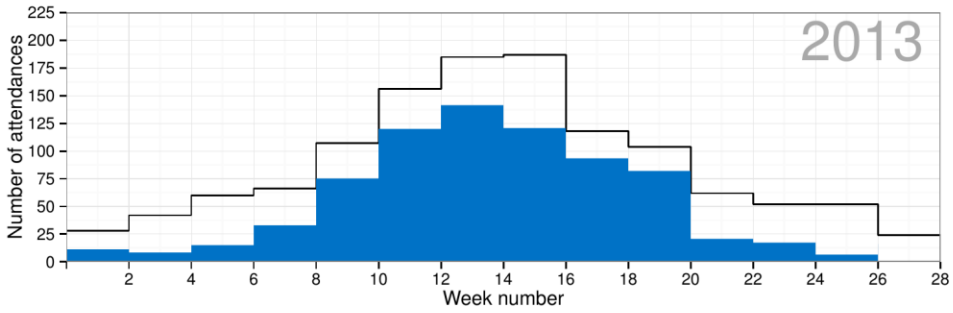
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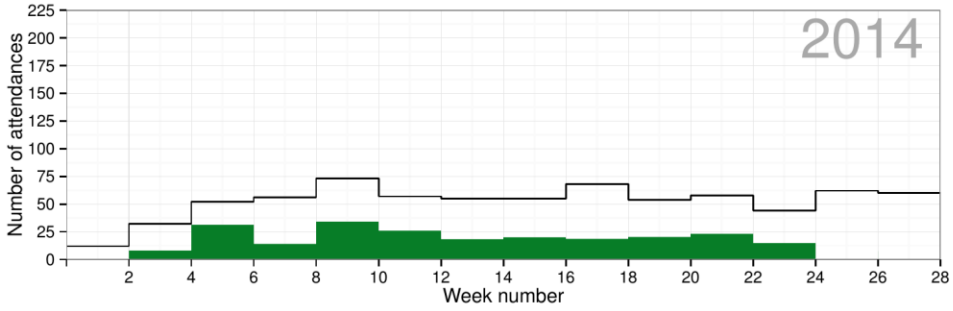
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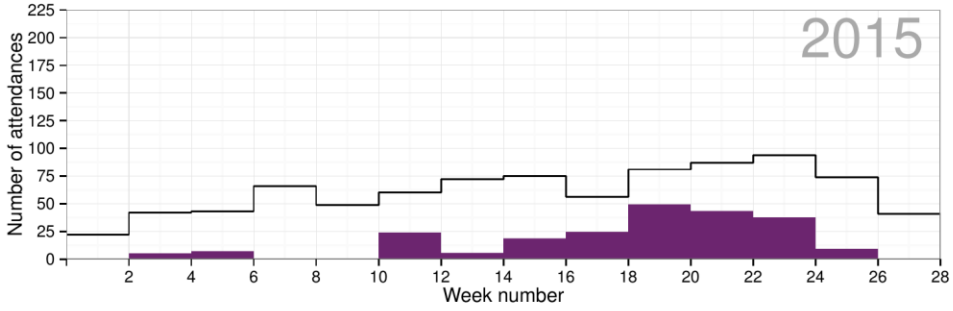
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Contents lists available at ScienceDirect

Vaccine

journal homepage: www.elsevier.com/locate/vaccine

Quality of life impacts from rotavirus gastroenteritis on children and their families in the UK

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A Randomised Controlled Trial of the Clinical Effectiveness, SafetY and Cost Effectiveness of Adalimumab in Combination with MethOtRExate for the Treatment of Juvenile Idiopathic Arthritis Associated Uveitis (SYCAMORE)

Professor Athimalaipet Ramanan, Paediatric Rheumatologist, Bristol Royal Hospital for Children

Athimalaipet V Ramanan[1], Andrew D Dick[2], Andrew McKay[3], Ashley P Jones[3], Paula R Williamson[3], Sandrine Compeyrot-Lacassagne[4], Ben Hardwick[3], Helen Hickey[3], Dyfrig Hughes[5], Patricia Woo[4], Diana Benton[1], Clive Edelsten[4] and Michael W Beresford[6], on behalf of the SYCAMORE Investigators.

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Arthritis Research UK
University Hospitals Bristol NHS Foundation Trust
CTRC Clinical Trials Research Centre
NIHR Health Technology Assessment programme funded project

Disclosures

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- This project was funded by Arthritis Research UK (grant reference number 19612)

Arthritis Research UK

University Hospitals Bristol NHS
NHS Foundation Trust

CTRC
Clinical Trials Research Centre

NIHR Health Technology Assessment programme funded project

Background

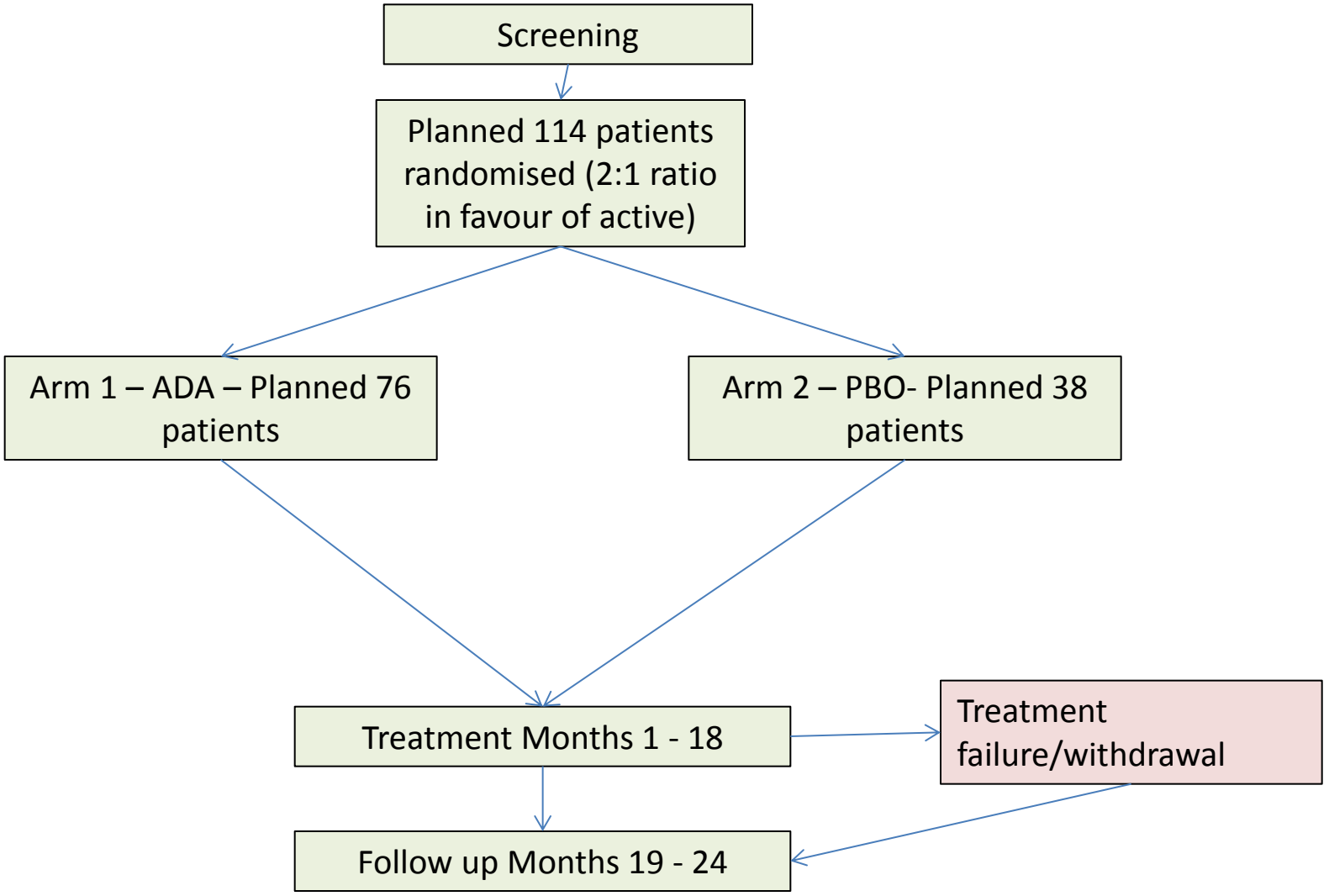
- Methotrexate (MTX) is well established as the first-line disease modifying agent in the management of JIA
- There have been no prospective randomised placebo-controlled trials of MTX or steroid regimens in JIA-associated uveitis
- Significant proportion have refractory uveitis in spite of optimal therapy with MTX
- RCTs of Adalimumab in JIA showed a significant clinical response

Arthritis Research UK
University Hospitals Bristol NHS Foundation Trust
CTRC Clinical Trials Research Centre
HTA NIHR Health Technology Assessment programme funded project

Primary Objective

- To compare the clinical effectiveness of adalimumab in combination with MTX (ADA) versus MTX alone (PBO), with regard to controlling disease activity in refractory uveitis associated with JIA.

Treatment Schedule



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SYCAMORE: Efficacy Results

- The trial was stopped early after 90 patients had been randomised, as interim efficacy analysis met the pre-specified statistical stopping guidelines

- Total of 34 treatment failures
  - 16 treatment failures in 60 patients on adalimumab
  - 18 treatment failures in 30 patients on placebo

SYCAMORE: Conclusions

- Largest trial of its kind in JIA-associated uveitis
  - First controlled trial to have assessed the impact of biologic therapy in JIA-associated uveitis
- Interim analysis met the pre-specified statistical stopping guidelines
- Positive treatment effect in favour of adalimumab
- Safety profile was consistent with the known adalimumab safety profile

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Ramanan AV, et al. ACR 2015 (3L)

NHS England

- Interim guidance - funding drug for this indication until complete publication of trial results

SYCAMORE

- **Chief Investigators**
- Prof Athimalaipet Ramanan (University of Bristol)
- Prof Michael Beresford (University of Liverpool)

- **Sponsor**
- University Hospitals Bristol NHS Foundation Trust

- **Funders**
- NIHR HTA
- AR-UK

- **Trial Conduct and Analysis**
- Co-ordinating centre – Clinical Trials Research Centre (CTRC), University of Liverpool

Arthritis Research UK

University Hospitals Bristol NHS Foundation Trust

CTRC Clinical Trials Research Centre

NIHR Health Technology Assessment programme funded project

Acknowledgments

Special thanks to all the children, adolescents and families who took part in SYCAMORE

Arthritis Research UK
University Hospitals Bristol NHS Foundation Trust
CTRC Clinical Trials Research Centre
NIHR Health Technology Assessment programme funded project

IMPACT…..

‘The action of one object coming forcibly into contact with another’….

Imox

imox

A multi-centre, blinded, randomised study comparing intramuscular Syntocinon, Syntometrine and Carbetocin for prevention of post partum haemorrhage after vaginal birth

AIMS

To compare **Carbetocin**, **Syntometrine** and **Syntocinon** when administered **intramuscularly** after **vaginal birth** to prevent primary post-partum haemorrhage, in order to directly compare their:

- Clinical effectiveness
- Maternal side effects
- Overall cost

Primary outcome measure

Proportion of participants requiring additional uterotonic drugs

Why not estimated blood loss?

- *Inaccurate*
- *Blood loss from tears etc*
- *Prompt treatment of atonic uterus may reduce blood loss. EBL then not representative of how well prophylactic drug worked.*

Getting everyone on board

Involve key people early:

- Labour ward leads: obstetric/midwifery/anaesthetic
- Other areas:
  - Antenatal clinic
  - Day Assessment Unit
  - Antenatal ward
  - Community
- Pharmacy (Clinical Trials Pharmacist)
- Research & Innovation department!
  - GCP trainers…

IMox specific training sessions

Aimed at clinical staff on:

- Labour ward (midwives/doctors/MCA)
- Day assessment unit
- Antenatal ward
- Community staff

Drop-in sessions held over a 2-3 week period (& ongoing)

Also a chance to complete:

- Trials signature and delegation log
- CVs

Recruitment- where and when

- Initial information can be given by community midwives or at scan appointments from 20 weeks.
- Information given in other hospital based locations such as day assessment unit, induction suite, ante natal clinics.
- Process in place to ensure hospital and community based midwives are aware if information has been given.
- Consent is performed by hospital research midwives and nurse.
- Consent numbers differ from women randomised to trial

CDS- What happens there….

- Eligibility check of pre consented potential participants
- Continuing check of consent
- Randomisation of IMP/Prescription
- Administration of IMP
- Drug accountability
- Documentation- initial CRF completion (detailed)
- Discharge to ward/home as per usual clinical practice
- Study packs left in pre designated location to be collected by research team

IMPACT

- TRAINING- continuous- rotating staff both clinical and midwifery
- Collaboration with clinical staff in all obstetric departments including community
- IMOX specific research staff- turnover and re- training
- Committed team who have dealt with multiple operational challenges
- Largest Ctimp trial in obstetrics in St Michael's
- Has inspired interest in research midwifery/nursing
- Integrating research and clinical care
- Don't mention the fridge……

St Michael's- recruitment

- 1105 women approached
- 265 recruited (consented and randomised)
- 262 consented but excluded during labour
- Training …..ongoing
- Incentives (bribery- of staff, not patients!)
- Updates from research team to clinically based staff

- Any questions?