

Smarter Studies
Global Impact
Better Health



MAMS platform protocols: Patient engagement in STAMPEDE and beyond

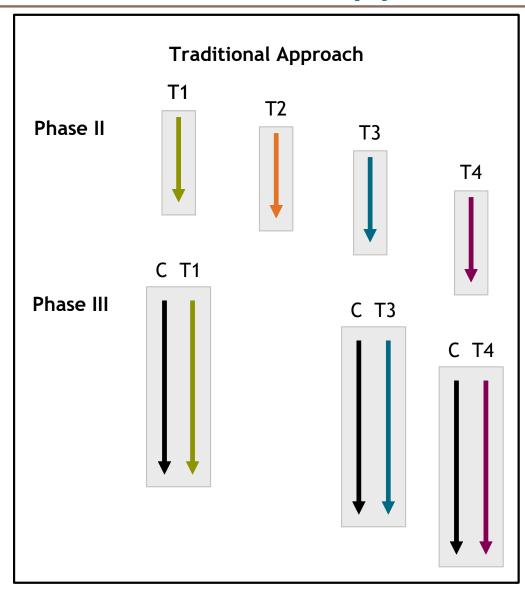
Professor Matthew Sydes
MRC CTU at UCL
Institute of Clinical Trials and Methodology
London, UK

Patient Engagement Open Forum 09-Dec-2021 (Version 2.00)

Need For New Approaches To Design

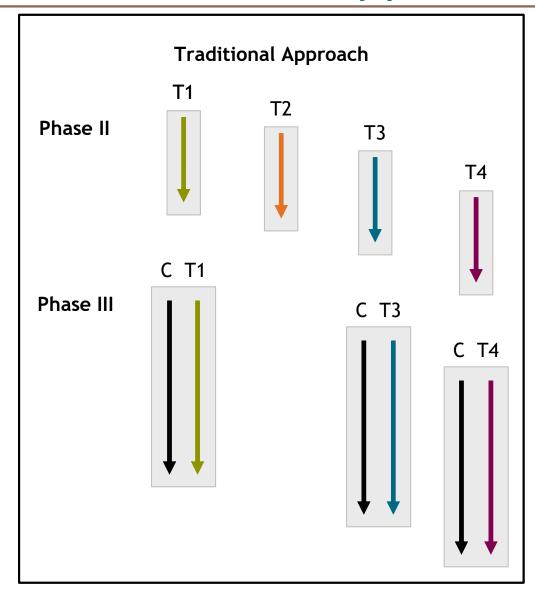
- Many approaches worthy of testing
- Each take years to confirm clinical benefit (if any!)
- Traditional designs don't cope well

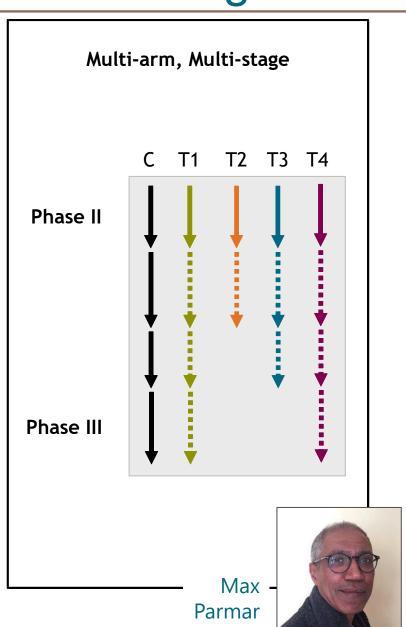
Need For New Approaches To Design



- Many approaches worthy of testing
- Each take years to confirm clinical benefit (if any!)
- Traditional designs don't cope well

Need For New Approaches To Design

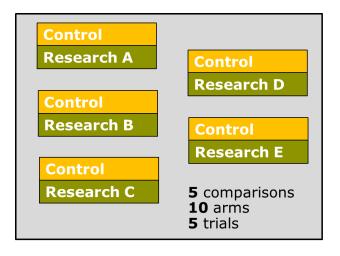


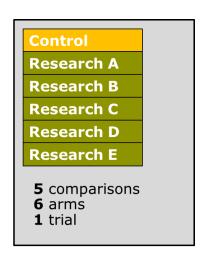


Multi-Arm Multi-Stage (MAMS) Approach

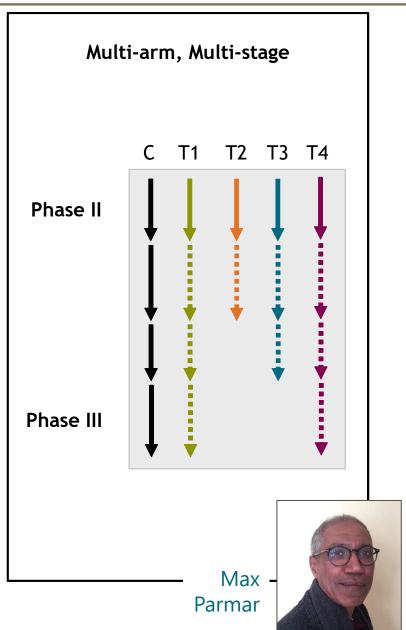
Multi-arm

Test many relevant approaches





- Use fewer resources
- Cost per comparison is much less
- Less bureaucracy



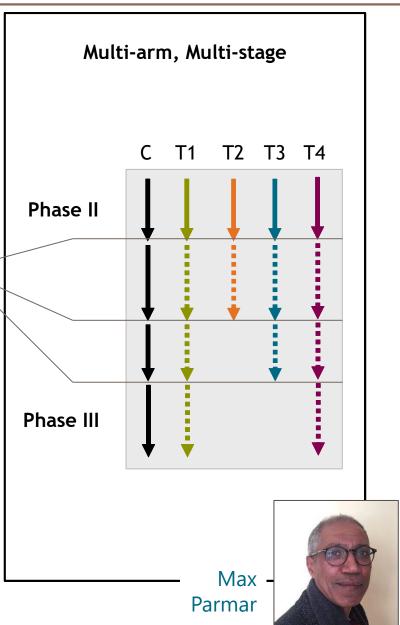
Multi-Arm Multi-Stage (MAMS) Approach

Multi-arm

Test many relevant approaches

Multi-stage

- Using interim lack-of-benefit analyses
- Ask if reasons to continue to investigate an approach?



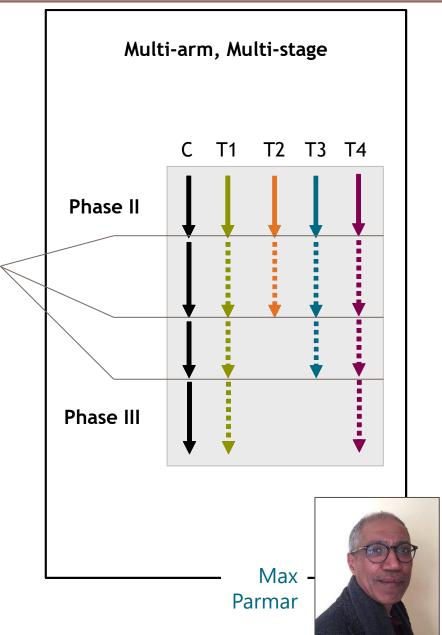
Multi-Arm Multi-Stage (MAMS) Approach

Multi-arm

Test many relevant approaches

Multi-stage

- Using interim lack-of-benefit analyses
- Ask if reasons to continue to investigate an approach?











Platform ("Master" or "Living") Protocols

- Protocols addressing many research questions in one administrative trial structure
- New important questions added later ("living" protocols)
 - eg into multi-arm trials
- Stratified trials testing biomarker-directed therapies in same disease ("master protocols")























STAMPEDE

Systemic Therapy in Advancing or Metastatic Prostate Cancer: Evaluation of Drug Efficacy

A multi-arm multi-stage randomised controlled trial

Version: 19.0

Date: 01-June-2018

MRC CTU AT UCL ID: PR08

ISRCTN #: ISRCTN78818544
NCT #: NCT00268476
EUDRACT #: 2004-000193-31
CTA #: 00316/0026/001-0001
MREC #: 04/MRE07/35

Authorised by:

Name: Professor Nicholas D James

Role: Chief Investigator & Comparison CI for

"Abiraterone comparison"

Signature:

Name: Matthew Sydes
Role: Trial Statistician

Signature:



Clinical setting

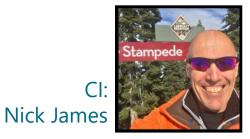
- Prostate cancer, metastatic or high-risk non-metastatic
- Initiating long-term hormone therapy

Testing setting

- Late stage, phase III
- Single randomisation

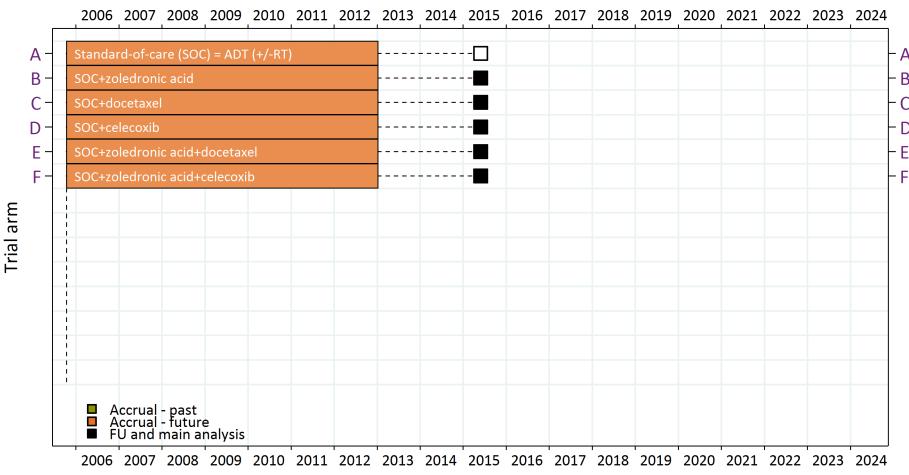


Originator: Max Parmar



→ Multi-arm element

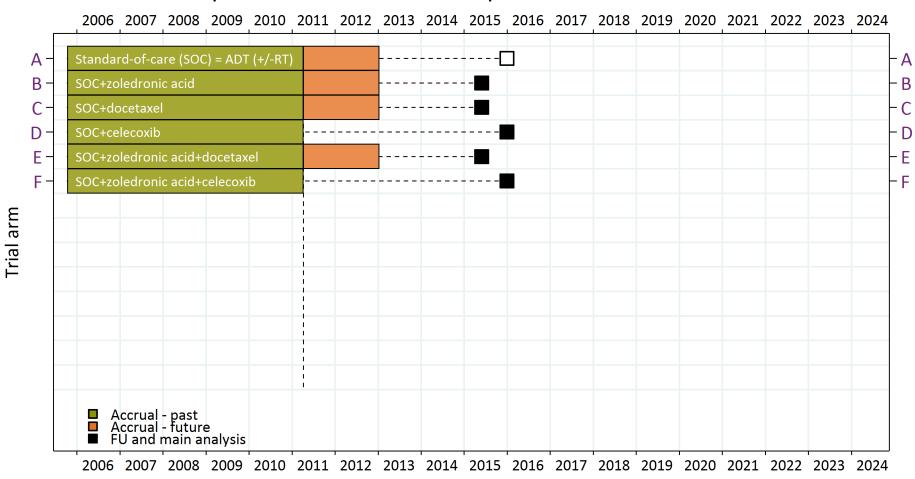
STAMPEDE – Oct-2005 – Accrual Opens



Oct-2005: Pilot phase accrual opens in limited sites

→ Multi-stage element

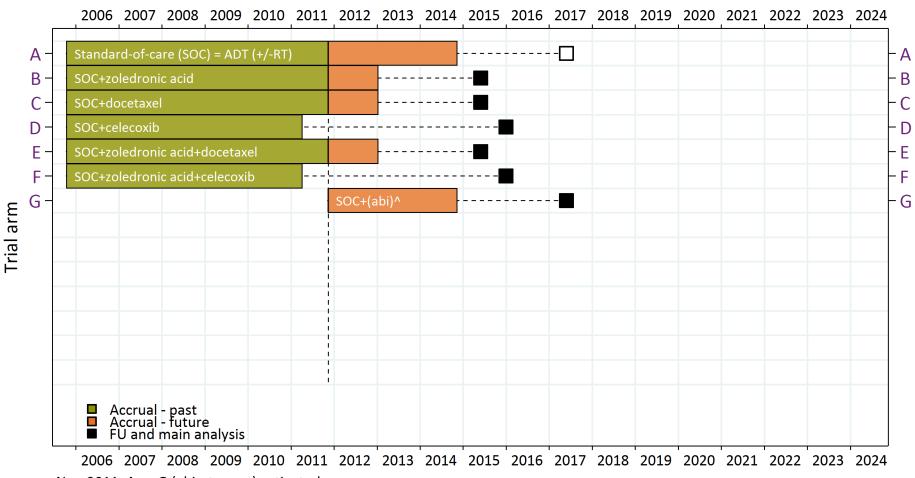
STAMPEDE – Apr-2011 – Recruitment stops to 2 arms for lack-of-benefit



Apr-2011: AS2 -- celecoxib arms (D & F) stop recruitment TSC accepted IDMC recommendation. See James (2012) Lancet Oncol

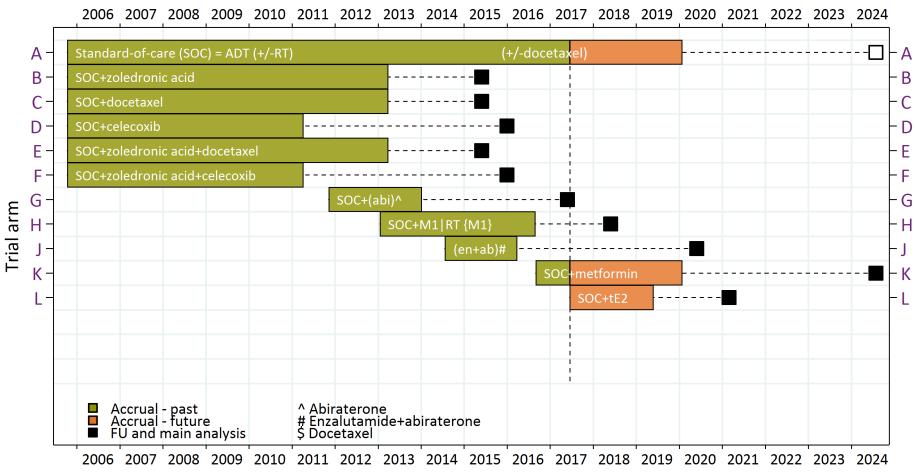
→ Platform element

STAMPEDE – Nov-2011: "Abiraterone comparison" initiated



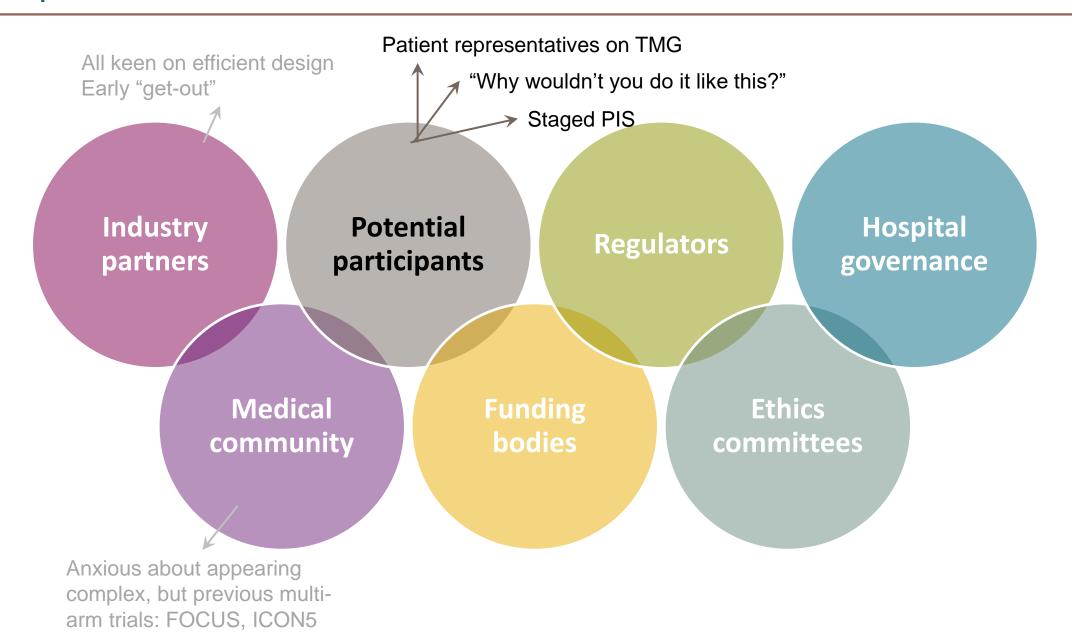
Nov-2011: Arm G (abiraterone) activated

STAMPEDE – Recent activity



Include randomisation of tE2 patches for meta-analysis with PATCH Q2-2017: launch of tE2 comparison

Groups to convince



Information tailored to everyone

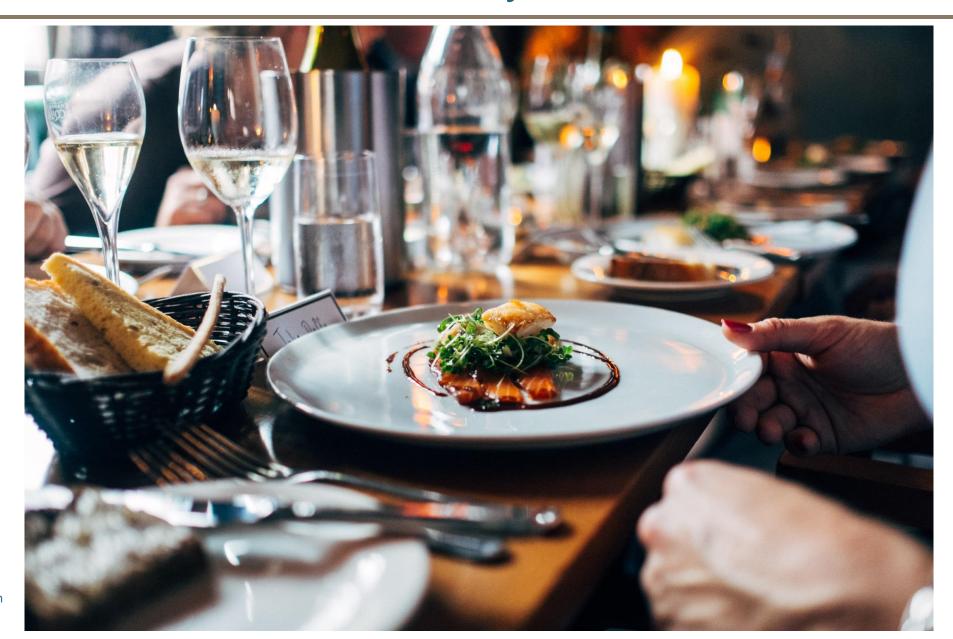


Photo: Jay Wennington Source: Unsplash

Groups to convince

Home Participants ✓ Centres ✓ Committees ✓ Media ✓ Contact Us ✓

STAMPEDE: Patient Information Sheets (PIS)		
What PIS?	Content	Who should read it?
General Patient Information Sheet - Part 1 & 2 (Version 18)	Overview of why the study is being done and what it involves. Details of study conduct and oversight	Everyone interested in taking part
Treatment Arm-Specific patient information sheet (PIS) Arm A (Version 12) Arm K (Version 4) Arm L (Version 3)	Details of treatment associated with each arm of the study	Everyone allocated to the specific treatment
Additional Research Studies Patient Information Sheet (Version 15)	Details of quality of life study and other optional studies	Everyone interested in taking part

Structured PIS



Part One

What is STAMPEDE?

taking part?

Will I need extra tests?

Where can I find out more

How will my treatment be different if

What will need to do if I take part?

What are the possible disadvantages of

Further information about taking part

If you have any questions about this study,

please talk to your doctor or nurse

STAMPEDE General Participant Information Sheet - Parts 1 and 2

STAMPEDE TRIAL

General information to help you decide if you would like to join a study called STAMPEDE

- This leaflet includes general information. about a study called STAMPEDE.
- . Your doctor has explained to you the invited you to participate in this study
- . Please read this information carefully If you wish. Take time to decide whether or not you would like to take part.
- . If you decide not to take part, this will not affect the care you set from your
- This leaflet is in two parts: we sugge that you read Part One first and if you are interested in taking part, continue
- . If you decide to take part there are m treatments you may receive and
- . In this leaflet, the term "study" is used,

How will your data be stored and collected?

your medical records for this research study in

Your hospital will use your name, NHS numbe

and contact details to contact you about the research study, and make sure that relevant.

ndividuals from UCL and regulatory

organisations may look at your medical and

essurch records to check the accuracy of the

name, postcode and NHS number to UCL along

with the information collected from you and

the information will not be able to identify yo

and will not be able to find out your name. NH

about you from this study for at least 25 years

Your hospital will keep identifiable info

UCL will collect information about you, for

Corner Exploration and Asshala Service

(NCRAS). This information will include your runse, postcode and NHS number and health

information. This health information is research as a special category of information as defined I the General Data Protection Regulation (GDPR).

We will use this information to track your long

Where information could identify you, the

information will be held securely with stric

arrangements about who can access the

after the study has finished.

information about the study is recorded for you

accordance with our instructions.

V18LB Jul-2018 General STAMPEDE PIS Parts 1 & 2

When you agree to take gart in a research

and in other organisations. These

organisations may be universities, NHS

search in accordance with relevant

islation, ethics and NHS research policy

We won't share information with others that

exearch, and cannot be used to contact you

or to affect your care. It will not be used to

a risk that you can be identified your data

will only be used in research that has been

study, the information about your health and

Page 1 of B

1 What is STAMPEDE?

STANDEDE (Systemic Therapy in Advancing or Metastatic Prostate Cance Evaluation of Drug Efficacy) is a clinical study. STANPEDE aims to identify new treatments for prostate cancer.

Part One: I am considering taking part

2 How are new treatments tested?

treatment is better than another is by carrying out a type of research called a

A randomised controlled trial compares tw and a control group who receive the existing 'standard' treatment. If you take part in the study, a computer will randomly allocate vo study, a computer will randomly affocate yo to attendment group. This allows a fair comparison between the new treatment as the existing treatment group to see which one works best.

We have called the men who receive standard treatment alone Treatment Group A (the control group). The control group act as the comparison for the research group and is the way the study can assess the research treatment. This is a very importan nures the results are reliable.

has compared 9 different treatment approaches so far. Over 9,000 people have joined the study so far and we expect to

V1ILD Jul-2018 General STAMPEDE PIS Parts 1 & 2

How will my treatment be different if I take part?

ncludes harmone treatment (to suppress estasterone), and may also include adiotherapy and chemotherapy.

receive standard radiotherapy or themotherapy. Your doctor will talk to you about what your treatment will involve There are currently 3 treatment groups that

men may be allocated to. These include the control group who receive standard treatment and two rewarch groups who eculve extra or alternative research to Treatment Group K will receive metformi as well as standard treatment. All men cated to Treatment Group L will receive mone patches (transdermal cestradio) given as injections or implants. Here is a brief summary of these research

Metformin is a diabetic treatment that cancer growth and help prevent some of the side effects of hormone treatment Daly man without dishates can inte nent Group K, therefore all me wishing to take part must have a blood test to check for diabetes first.

Hormone matches containing transferm alternative form of hormone therapy STAMPEDE is looking at whether s, or better than standard bor group, but men should switch from

of the sturk. The trial is designed our and

What will happen to the results of the

We will make a summary of results as on the STAMPEDE website

We will also communicate with you about years for us to know whether the treatmen sains testad impress life expectures. We You can ask your doctor for a copy of any publication. Your identity and any personal details will be kept confidential. No named information about you will be published in any report of this study.

used in future research. If you say no you will still be able to participate in STAMPEDE 1 Further information about taking part

Can I stop taking part after I have joined the

or any part of it at any time and without giving a reason. But you must talk to your ady doctor or name first. They can advise

is to control your cancer and help you feel well for as long as possible. If your doctor

would still ask that your medical team update us about your progress. This longer

You can also see publicle-available information about the study, including results, published on www.clinicaltrials

Who is organising and funding the study?

The apparon of the trial is the Medical Clinical Trials Unit at University College London (MRC CTU at UCL). You can find ou

Research UK as well as several companies including Clovis Oncology, Sanofi, January,

This study has been projected by uthorised by the Medicines and Healthcare contacts Segulators Asserts (MISSE) on seel as by an independent NHS Research Ethics committee and each hospital's Research as Development Office. Patients affected by prostate cancer were involved in the prisinal design of the main STANPEDE study and patient representatives are still involved in

been approached or treated during the study, please talk to your study doctor or nurse. If you are still unhappy, or you wish to make a complaint, please use the normal

study, or you are harmed because of someone's negligence, then you may be able to take leval action. If you believe this to be and then contact the STAMPEDE team at WRC CTU at UCL in writing.

about the treatments you receive during the study. If this happens, your study doctors will tell you about it and talk with you about whether you want to continue with

V18.0 Jul-2018 General STAMPEDE PIS Parts 1 & 2

advantages of taking part?

any of the groups that they are eligible to join. On average, for every 3 men joining to study, 2 will be allocated to Treatment. art in this study, but we cannot guarantee this. We hope that the new treatments will Group A (the control group), 1 to Treatmen help control prostate cancer better than the Where it can be accessed some people in don't know this for sure which is why it is being testing in this study. se offered abinaterone instead of themotherapy. Your doctor will discuss this

t is possible that the results may not help sy individually but the information we get

disadvantages of taking part?

ferent or extra side effects. The most mon unwanted side effects are scribed in the Treatment Specif

Do I have to take part in the study?

If you think you might be interested in taking that you medical team can assess how you re responding to treatment and update th

transdermal pestradiol (hormone patches) you will need to have some extra blood test

alternative matches soon after borroom

All participants will be randomly allocated

with you. If you receive abiraterone as part

of your standard treatment this will mean

Treatment Groups you may be suitable for

you will then be randomly allocated to any

opiked at other treatments (Groups B, E, D,

E, F, G, H and J]. It is no longer possible to

are already known and you can find out

www.atarepedetrial.org or by asking your research team

4 What will I need to do if I

more on the study website

take part?

these. Further details about these

specific putient information sheets.

V1ILD Jul-2018 General STAMPEDE PIS Parts 1 & 2

should check with your company before agreeing to take part.

1) Where can I find out more?

information leaflets available for you to read

available via the trial website

might have and talk to your doctor or

Thank you for taking the time to consider

www.starspedetrial.org

taking part.

Page 3 of 8

Part Two: I would like to know more

8 Will I need extra tests?

will need to have a blood test to check this

and therefore it is possible that this will be picked up early. This will enable you to receive appropriate advice and treatment. Should you have diabetes, you will not be able to join the metformin treatment group.

If you are allocated to Treatment Group L. (transdernal pestradiol) you may need a extra blood test to check your hormone

sugar and cholesterol levels. These are checked more regularly than they might be in standard clinical practice because we wan to find out if the treatments being tested help present problems like diabetes or raise cholesterol from developing. These extra tests can be checked at the same time as routine blood tests but may require you to with you when this is needed.

Will I need extra hospital visits?

treatment your medical team will need to keep the STANPEDE researchers updated at

V18.0 Jul-2018 General STAMPEDE PIS Parts 1 & 2

Page 4 of B

Albirbauer Treatment Group you join this

onths for the next 2 years and then every 6

northy. Drice you've been part of the studor Syears the research team will only need in review your progress once a year. lowever, if you are receiving metformin or

ransdermal pestradiol, you will need to

tiend more regularly in order to pick up

10 How will my personal information be used?

No. STABBUILDE sturks along to test if different

puncil is the sporsor for this study, based in

the United Kingdom. University College London (UCL), through the WRC Clinical Trial Centre at UCL, will be using information from

you and your medical records in order to

betake this stock and will not us date

formation and using it properly. UCL will

four rights to access, charges or recoveryou

rder for the research to be reliable and

ights, we will use the minimum personally

ou can find out more about how we use

curate. If you withdraw from the study, we

5 years after the study has finished

re especiancy. The Medical Research

to the study is l emation about d you want to kno ke part and may be e part and may b

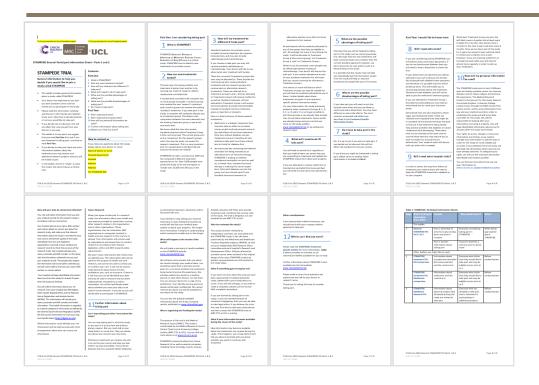
ody are invited to cigating in

V18.0 Jul-2018 General STAMPEDE PIS Parts 1 & 2

V18.0 Jul-2018 General STAMPEDE PIS Parts 1 & 2

V18.0 Jul-2018 General STAMPEDE PIS Parts 1 & 2

Structured PIS



To be presented on local headed paper

To be presented on local headed paper







STAMPEDE General Participant Information Sheet - Parts 1 and 2

STAMPEDE TRIAL

General information to help you decide if you would like to join a study called STAMPEDE

- This leaflet includes general information about a study called STAMPEDE.
- Your doctor has explained to you that you have prostate cancer and has invited you to participate in this study.
- Please read this information carefully and discuss it with friends and relatives if you wish. Take time to decide whether or not you would like to take part.
- If you decide not to take part, this will not affect the care you get from your doctors in any way.
- This leaflet is in two parts: we suggest that you read Part One first and if you are interested in taking part, continue to read Part Two.
- If you decide to take part there are more information leaflets about the treatments you may receive and additional research projects that you will be invited to join.
- In this leaflet, the term "study" is used, this means the same thing as a clinical trial.

Contents

Part One

- 1 What is STAMPEDE?
- 2 How are new treatments tested?
- 3 How will my treatment be different if I take part?
- 4 What will I need to do if I take part?
- 5 What are the possible advantages of taking part?
- 6 What are the possible disadvantages of taking part?
- 7 Do I have to take part?

Part Two

- 8 Will I need extra tests?
- 9 Will I need extra hospital visits?
- 10 How will my personal information be used?
- 11 Further information about taking part
- 12 Where can I find out more?

How to contact us

If you have any questions about this study, please talk to your doctor or nurse:

Name of doctor or nurse

Hospital Department

Hospital

Address

Address

Tel: XXXXXXXXX XXX

Slides from PPI rep – David Matheson

PPI and STAMPEDE – what do we do?

- Members of the Trial Management Group and various working groups
 - · Input into prioritising and defining questions
 - Input into oversight and TMG
 - Input into interpretation and dissemination, inc. co-author abstracts and papers
 - Commenting / advising on communications with trial participants
- Review all patient interface documentation
 - Consent forms keeping layout as simple and understandable as possible
 - Patient information sheets paying special attention to avoiding cognitive overload
 - Lay summaries emphasising clarity and ease of comprehension without compromising content





Slides from PPI rep – David Matheson

PPI a

- Mem
 - Inp
 - Ing
 - Ing
 - Co
- Review
 - Co
 - Pat
 - Lav

C



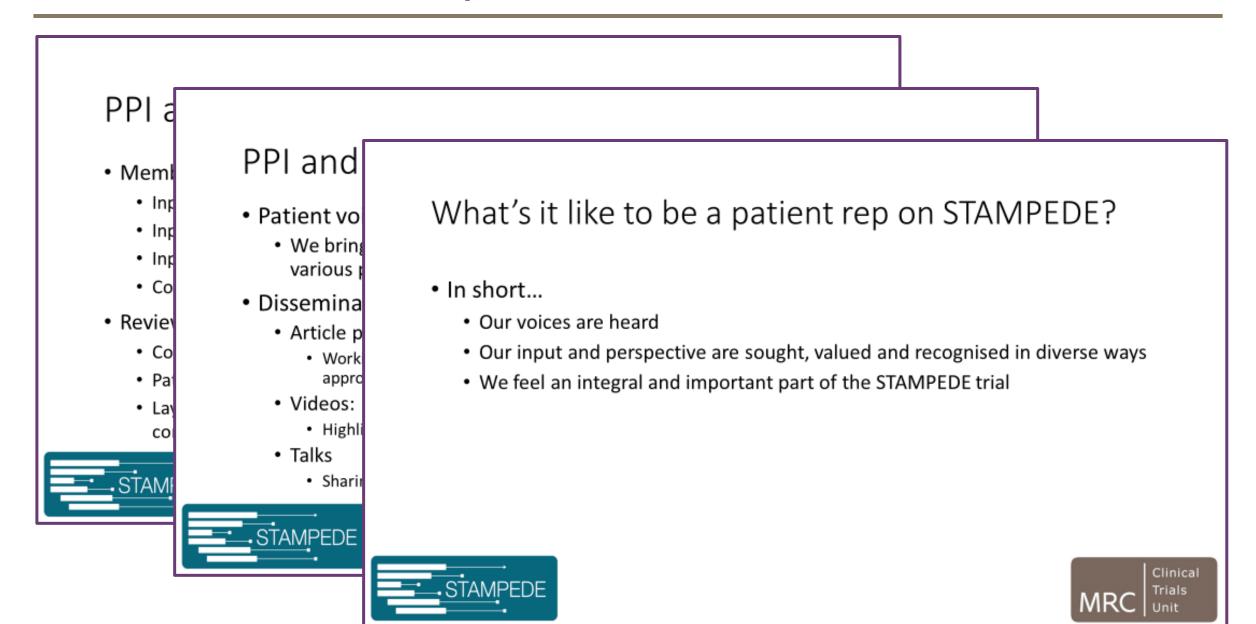
PPI and STAMPEDE – what do we do?

- Patient voice
 - We bring back to the TMG concerns, observations and thoughts from the various patient groups and bodies we work with elsewhere
- Dissemination
 - · Article production:
 - Working with the other authors to collate and interpret data, and to edit, review, and approve the final draft of articles and other outputs
 - Videos:
 - · Highlighting and explaining results and what they mean from a patient perspective
 - Talks
 - Sharing findings with lay groups and offering a patient perspective to professional groups

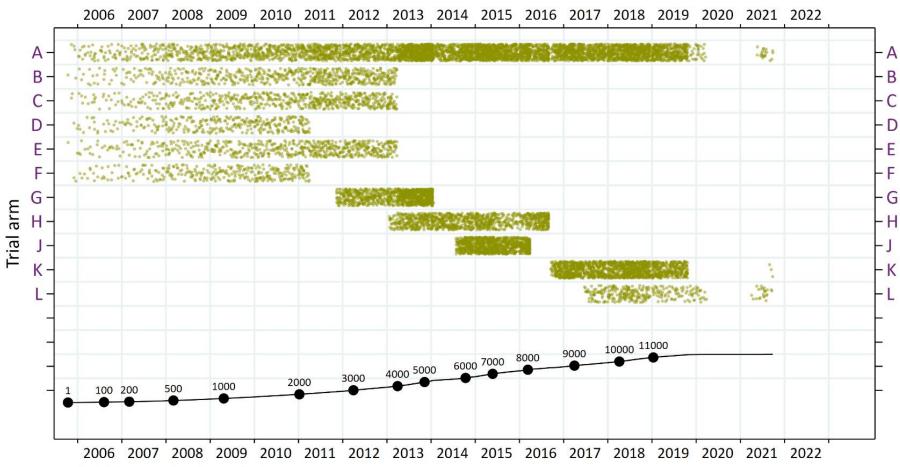




Slides from PPI rep – David Matheson

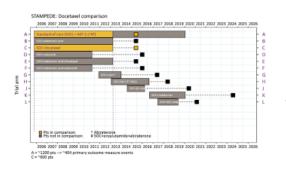


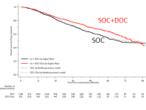
STAMPEDE – Accrual over time



Each dot is one patient recruited Jittering applied so dates are not exact

Practice-changing findings 1: SOC+DocP vs SOC





HR (95%CI) 0.78 (0.66, 0.93) P-value **0.006**

 Recruitment:
 Oct-2005 to Mar-2013
 Patients:
 1184 SOC

 Reported:
 ASCO 2015
 592 SOC+DocP

Published: Lancet 2016 Allocation ratio: 2:1

doi: 10.1016/S0140-6736(15)01037-5 doi: 10.1016/S1470-2045(15)00489-1

Jan-2013 to Sep-2016

ESMO 2018

Lancet 2018

doi: 10.1016/S0140-6736(18)32486-3

Recruitment:

Published:

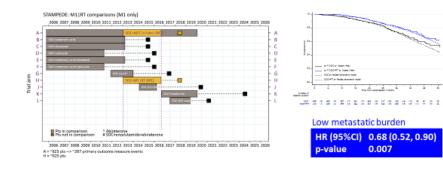


Radiotherapy to the primary tumour for newly diagnosed,

P()

metastatic prostate cancer (STAMPEDE): a randomised
controlled phase 3 trial

Practice-changing findings 3: SOC+RT vs SOC

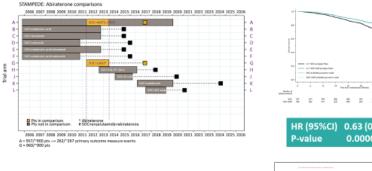


Patients: 1029 SOC

Allocation ratio: 1:1

1032 SOC+DocP

Practice-changing findings 2: SOC+AAP vs SOC



Allocation ratio: 1:1

 Recruitment:
 Nov-2011 to Jan-2014
 Patients:
 957 SOC
 SOC 960 SOC+AAP

 Reported:
 ASCO 2017

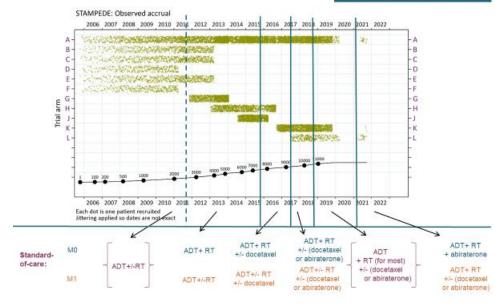
doi: 10.1016/S0140-6736(15)01037-5 doi: 10.1016/S1470-2045(15)00489-1

NEJM 2017

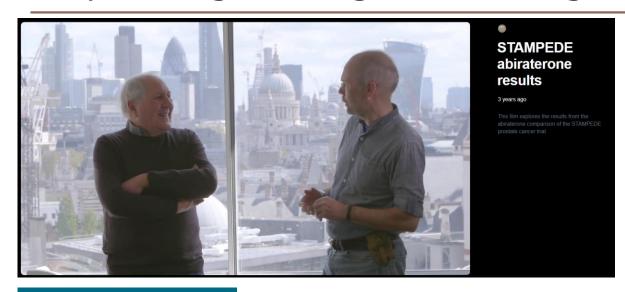
HR (95%CI) 0.663 (0.52, 0.766)
P-value 0.00000115

SOC+AAP

STAMPEDE by 2021: Updated standard-of-care 5 times



Explaining findings and design



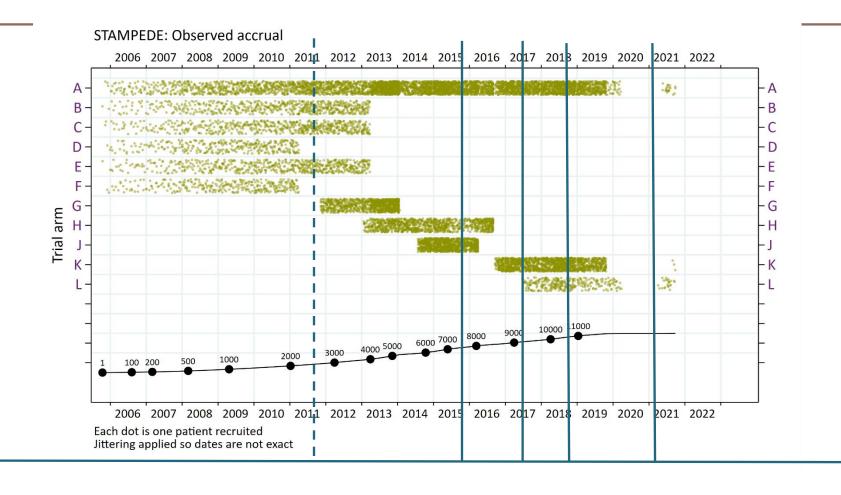
https://vimeo.com/220031463

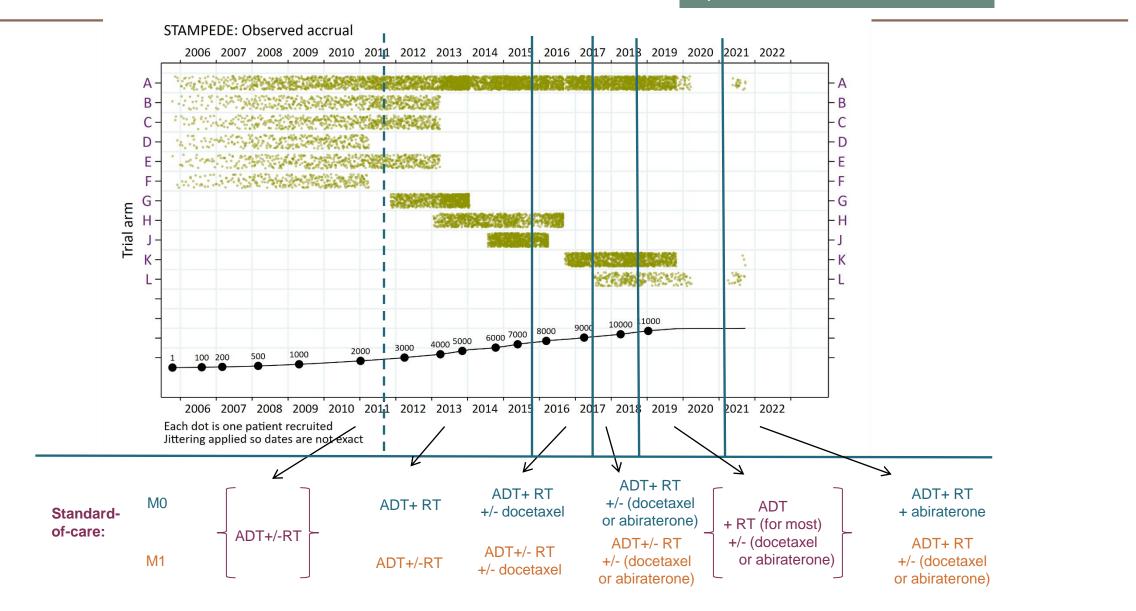
https://vimeo.com/171900048



https://vimeo.com/335419982







Sharing Experiences of MAMS Platform Protocols



Initial statistical in implementing MAMS

doi: 10.1186/1745-6215-10-39



& adding arms

doi: 10.1186/1745-6215-13-168



Max Parmar



doi: 10.1177/1740774517725697

Data management services

Trial management conduct experiences



Riya Francesca **Bathia** Schiavone

doi: 10.1186/s13063-019-3216-8

conduct experiences







Dom Hague

Forthcoming

~50 recommendations from 15 platform trials at 8 UK CTUs to be submitted end December 2021



Ethics Committee workshops

Home > About us > Committees and services > Research Ethics Service and Research Ethics Committees >

Research Ethics Committee – Standard Operating Procedures

Last updated on 2 Aug 2021

Under the UK Health Departments <u>Governance Arrangements for Research Ethics Committees (GAfREC)</u>, each <u>Research Ethics Committee (REC)</u> within the <u>Research Ethics Service</u>, is required to adopt Standard Operating Procedures (SOPs) approved by or on behalf of its appointing authority. The REC is required to act in accordance with its SOPs and is ultimately accountable to its appointing authority for its governance in this respect.

7.5.1 of the Standard Operating Procedures for Research Ethics Committees came into effect from 2

www.hra.nhs.uk/about-us/committeesand-services/res-and-recs/researchethics-committee-standard-operatingprocedures/

> www.ctu.mrc.ac.uk/ourresearch/methodology/conduct/practic al-implementation-of-new-trialdesigns/

About News Our Research Studies Patients & Public Education & Capacity Building Careers Reviewing platform protocols: Proposed guidelines for research ethics committees The review of platform protocols, both initially and at amendment is critically important. Sharing of information can be complex. Matt Sydes and Lou Brown ran a series of regional workshops for REC members in the UK, which informed a report to the Health Research Authority (HRA). HRAs updated SOPs (due to be published Q2-2021) is expected to Hugh Davies, Research Ethics Advisor for HRA and chair of Oxford A REC, has written a blog entry on reviewing platform protocols, building out from our workshop recommendations, which can be found at the link below The Challenges of Running Platform Trials The potential efficiencies of asking multiple questions in a single protocol are increasingly understood. This could be achieved using any or all of the following: . a multi-arm multi-stage (MAMS) design to ask multiple questions from the start . a platform (or "living") protocol to later add in new questions in a structured wa a biomarker-stratified design to ask questions for multiple subsets of patients with a shared screening process. Our new papers focus on the operational considerations in undertaking such designs, drawing particularly on MRC CTU at UCL's extensive experience with the STAMPEDE and FOCUS4 trials The first paper by Schiavone et al focuses on issues that trial managers or trial coordinators might have in running the operational side of these trials. The second paper by Hague et al focuses on issues that data managers, data scientists and programmers might have in The third paper by Morrell et al draws out the experiences of central trials unit staff in running these trials

http://www.reviewingresearch.com/pl atform-trials/



REVIEWING PLATFORM TRIAL PROTOCOLS: GUIDANCE FOR RECS

01-Mar-2021

Professor Matthew Sydes, MRC Clinical Trials Unit at UCL

ETTING

Compiex adaptive design trials are becoming more common. Platform trials are a type of adaptive trial where new research questions (called companisons) can be incorporated into an ongoing diricula trial protocol in a structured way. This is more practically efficient than opening a new, separate trial which would often compete for the same patients, hampening polls trials, or delive one of the trials. The sharing of resources across companisons brings efficiencies compared to separate protocols. Where appropriate, a shared control are thorough the control of the co

The incorporation of a new comparison into an existing protocol can be done by amendment. This is simpler than a new application and means that the new comparison should be activated at sites more quickly than for a new, standalone trial, which should lead to faster initial recruitment.

Examples from MRC CTU at UCL of platform trial protocols that have added comparisons include: (1) STAMPEDE, a MAMS platform protocol in prostate cancer in which added comparisons involves the incorporation of a new research arm and extension of recruitment to a shared control arm (2) ECCUSA, a stratified medicine platform trial protocol in colorectal cancer in which added comparisons involve the incorporation of both new research and control arms for a specified

subset of patients defined by a biomarker signature

(3) RAMPART, a MAMS platform protocol in renal cancer which has been designed with the intention of addition and company companions.

Examples in other disease areas include the <u>RECOVERY</u> and <u>PRINCIPLE</u> trials for treatment of the SAR-Cov-19 infection. These nationally prioritised studies needed to move at an unparalleled speed and may not set the precedent for other trials but the same principles apply to them.

...opwcuo

The Health Research Authority has been an ally to the implementation of new and efficient designs. For U.R. Research (Hick. Committees have been exposed to pladform potrocity, but these will become increasingly common as the methods are embraced, NRR, for example, has been champloing efficient designs and list site ballotmor protocol amongst them. Therefore, NRR invited Professors Brown and Sydes to no 60 to 90 minutes workshops on adding a comparison to an ongoing platform that plar protocol at five regional training meeting for Research Ethes Committees in 2019 and 2020. These were held in Leicester (Sep-2019), York (Oct-2019), Onford (Oct-2020), Londor (Feb-2020) and Manchester (Mar-2020).

The workshops involved presentations on the benefits and challenges of adding comparisons into ongoing protocols and guided group discussions on issues specific to ethics review. Training session attendees included some members of RECs who had reviewed a number of these platform protocols

Short Report at www.ctu.mrc.ac.uk/medi a/1948/guidance_for_rec s_2021-03-01_v1.pdf

Conclusions

PPI involvement in clinical trial is important & helpful to production of high-quality, relevant trials

MAMS platform trials are a key tool in efficiently improving outcomes for patients & the public

Good PPI involvement in MAMS platform trials is key



Smarter Studies
Global Impact
Better Health



MAMS platform protocols: Patient engagement in STAMPEDE and beyond

Professor Matthew Sydes
MRC CTU at UCL
Institute of Clinical Trials and Methodology
London, UK

Patient Engagement Open Forum 09-Dec-2021 (Version 2.00)