

Challenges in Exploratory Clinical Research

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CLINICAL PHARMACOLOGY UNIT

Eufemed, Lyon; 15-17th May 2019

What we are used to...



<u>Phase I:</u> small cohorts healthy volunteers <u>Phase II:</u> relative small patient cohorts <u>Phase III:</u> large patient cohorts <u>Phase IV:</u> postmarketing



Increasing complexity of early clinical trials through innovation, new techniques and adaptive trial designs

- Implementation of study specific and safety related biomarkers;
- Introduction special procedures (CSF, biopsy, different types of fluid sampling);
- Implementation and use of novel technologies, wearables and devices (e.g. smartphone applications, etc.);
- Adaptive trial design.







Bringing patient into early phase clinical trials

- More combination protocols (including SAD, MAD and patient parts)
- Need for early patient data readout in order to reduce timelines and costs
- Patients are treated by Health Care Pofessional (HCP), who often work in hospital environment
- Majority of hospitals are still in a learning cycle to expand there clinical trial expertise to include phase 1 trials
- There is an urgent need for increased patient engagement;
 - for example by contacting patient organisations, exploring options on social media, etc.







COLOGY

Roadblocks



Trial related

Complex

Strict phase 1 I/E criteria leading to high screening failure

Patient related

No therapeutic benefit

Limited Proximity phase 1 facility

Limited knowledge

Investigator related

No therapeutic benefit

Often placebo controlled

No phase 1 capacity

Limited scientific interest

Less publication possibilities

Less compensation

Limited in time

Redirecting Phase 1 patient trials to hospitals and patients

Patient Centric

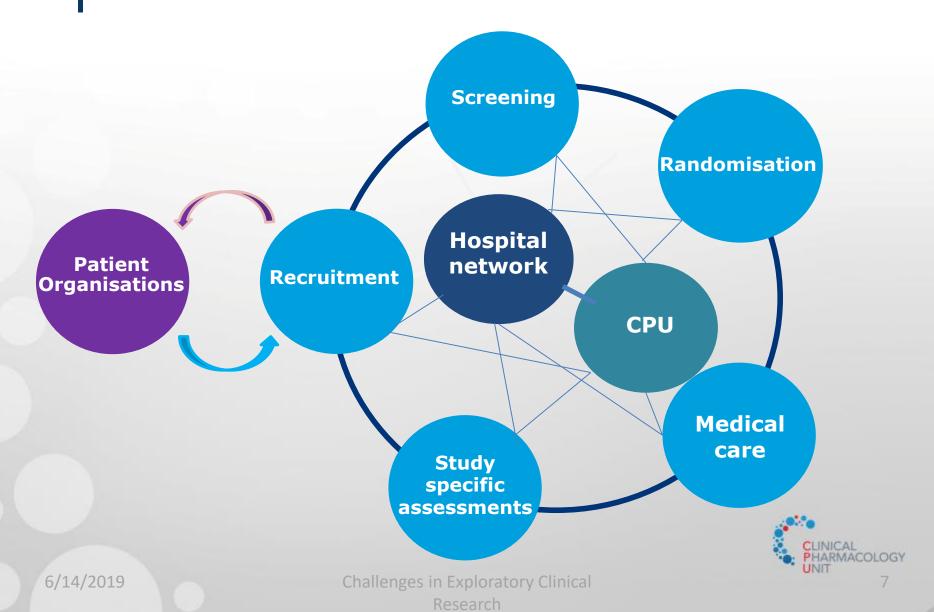
- ➤ Responsible HCP always involved;
- ➤ Trials nearby home, reducing travelling time;
- ➤ Possibility of home vists.

Investigator Centric

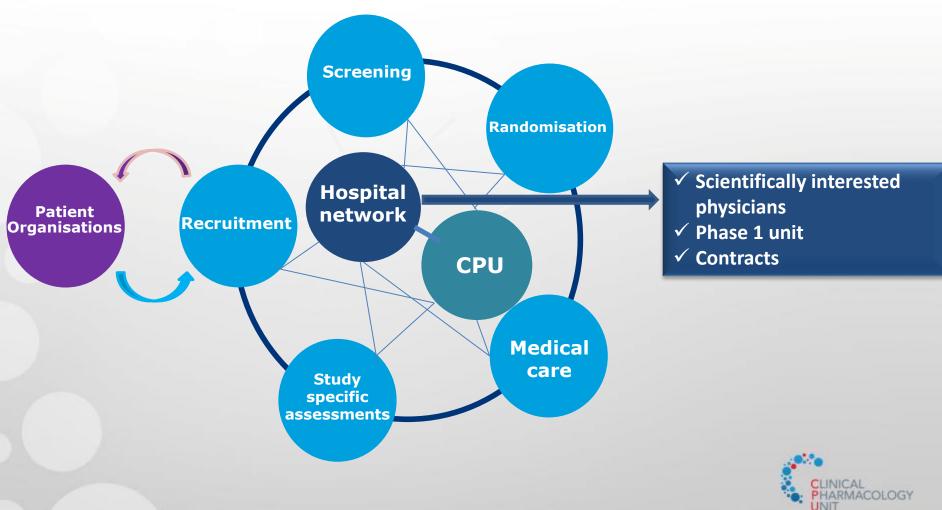
- ➤ Always individual contact with research physician of CPU;
- ➤ Early involvement in I/E criteria;
- ➤ PI role or recruiting role;
- ➤ Different levels of support (logistical, administrative, trial execution);
- ➤ Possibility to support at any location;
- Contracts in place to speed up timelines.



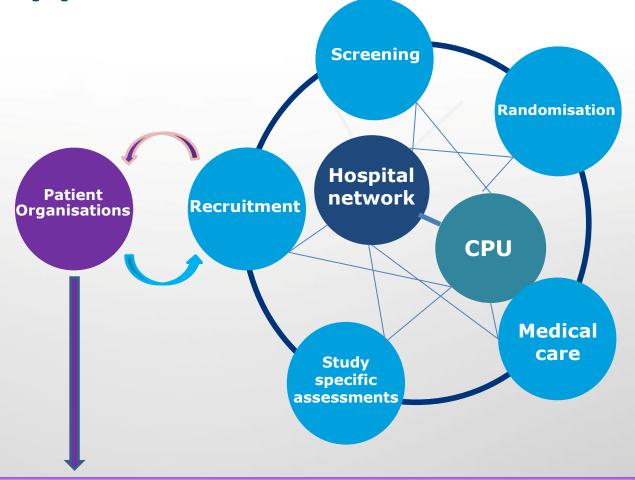
Patient trials: Flexible trial execution



| Patient trials: Need for hospital networks



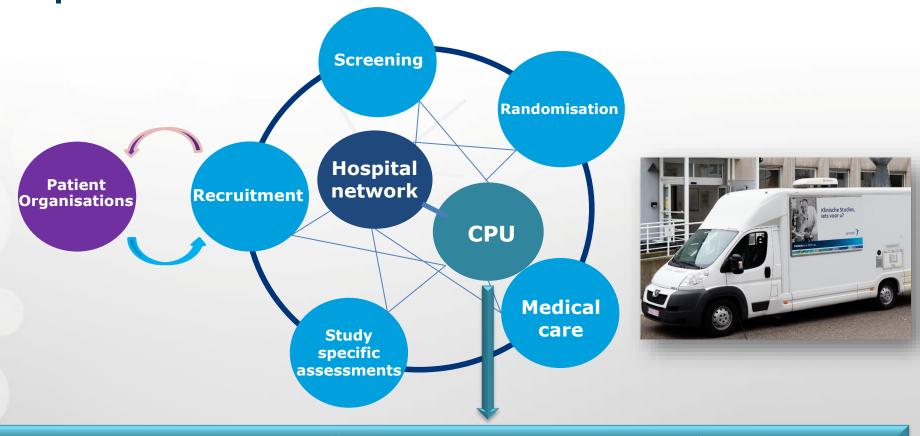
Support at different levels



Recruitment can be supported by recruitment officers and contact with patient organisation

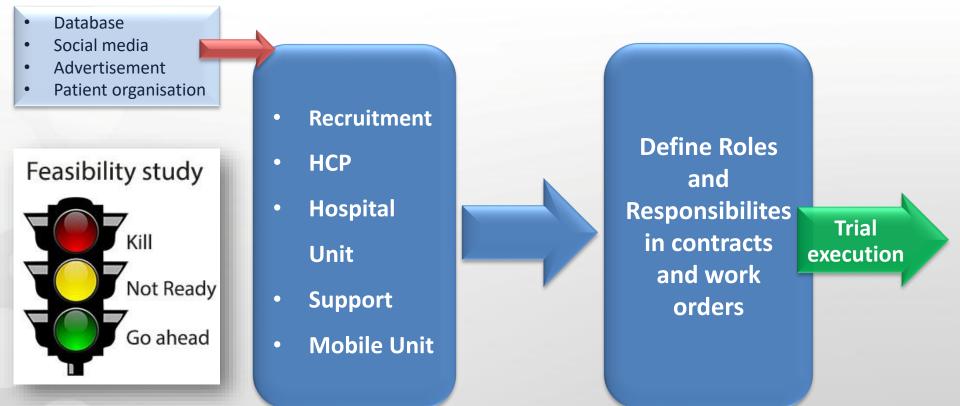


Approaches to support patient trials



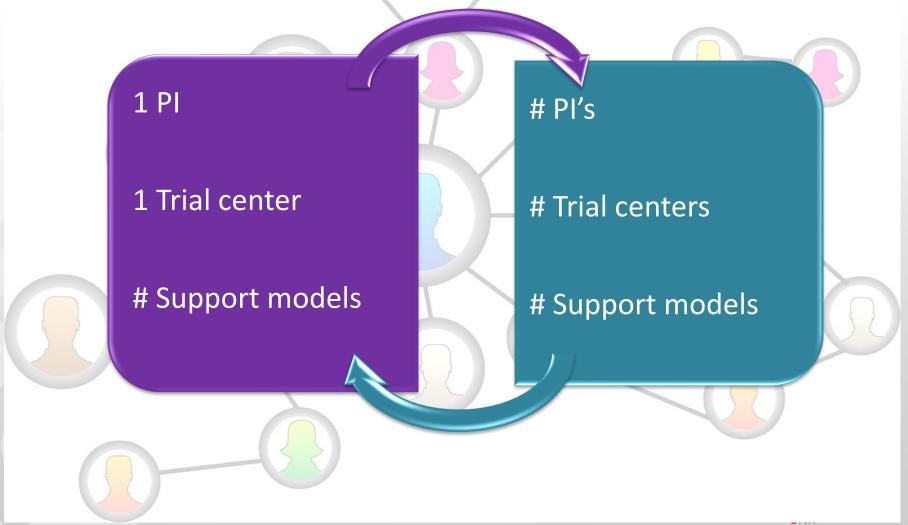
- Patient trials can be conducted at different sites and settings with the quality of Phase 1 trials.
- Mobile unit equipped with Medical and Lab equipment (centrifuges, fridges, freezers, scales, ...) and an electronic Data Capture system
- Support can vary from providing validated equipment to full trial conduct

Critical selection points during feasibility





Studies are investigator centric and tailor made



Trial designs - HCP in the role of PI

Trial execution at Hospital site

- Logistical, administrative support and performing of trial assessments
- HCP can act as a recruiter only and/or perform Trial specific assessments (as defined in R&R)
- Possible use of mobile Unit

HCP in the role of PI

Trial execution at CPU

- HCP: referral only or perform trial specific assessments (as defined in R&R)
- CPU: Full Trial execution



Trial designs - CPU in the role of PI

Trial execution at Hospital Site

- Logistical, administrative support and performing of trial assessments
- HCP can act as a referral and perform Trial specific assessments (as defined in R&R)

Trial execution at CPU

CPU assumes the role of PI

- HCP: referral only or perform trial specific assessments at CPU (as defined in R&R)
- CPU: Full Trial execution



Key Messages

- World of clinical trials is changing
 - High need of quick early patient data
 - Cost & timeline reduction
- Recruitment and trial execution in early patient trials is challenging
- Building HCP network is crucial for recruitment
- Patient centricity is mandatory
- Move towards investigator centricity





Thank you

