

CDDF Multi-stakeholder Workshop

Innovative oncology trial designs

Rosa Giuliani Guy's and St' Thomas NHS Foundation Trust

CDDF ANNUAL CONFERENCE Changing paradigms to accelerate oncology drug development 5 - 7 February 2024



Disclaimer

-Speaker, consultancy, advisory role (non remunerated)
Apogen, Roche, Mylan, Lilly, Pfizer, Novartis, Medicines for Europe, mAbxience, European Access
Academy (EAA)

-Speaker (fee) Astra Zeneca, EAA

-Research funding paid to Institution: MSD; Novartis,

-Other roles

Co-chair of the Healthcare Professional Working Party of the European Medicines Agency (EMA), 2022-2025

Member of the EMA Cancer Medicine Forum

Former core member of the EMA Scientific Advisory Group-Oncology (2012-2021) Past Director of the ESMO Public Policy (2020-2022)

Cancer Drug Development Forum (CDDF) member
EAA faculty member
Access to Oncology Medicines Coalition (ATOM) advisory group member
European Coalition for Access to Comprehensive Genomic Profiling (ECGP) member

Changing paradigms to accelerate oncology drug development



Genuine and open multistakeholder-discussion



Scientific Committee:

- -Stefan Symeonides (CDDF, UK);
- -Rosa Giuliani (UK)
- -Jeannette Borregaard (Genmab, DK)
- -Lada Leyens (Roche, CH)
- -Rachel Giles (International Kidney Cancer Coalition, NL)

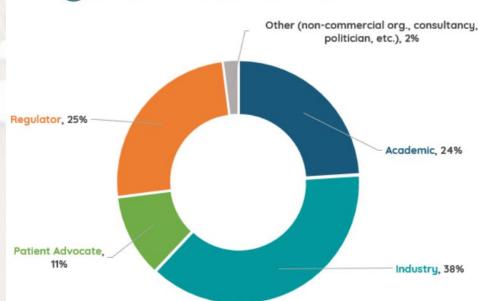
SESSION 1: Endpoints for innovative clinical trials

SESSION 2: Innovative trial designs and estimands

SESSION 3: Towards patient-centric evidence generation

SESSION 4: Practicalities on innovative clinical trials







The workshop addressed a range of topics, from novel and surrogate endpoints, patient-reported outcomes and harnessing real-world data, to novel statistical designs and methods.

With the ultimate goal of designing trials in Europe that are more Efficient

Adaptive

Informative

Inclusive

Fit for purpose: ask the right questions, obtain the answers within a reasonable amount of time, and are robust enough for regulators/HTA/payers to take into account

HOW innovative trials should look like, and HOW they can be PRIORITISED and IMPLEMENTED within Europe

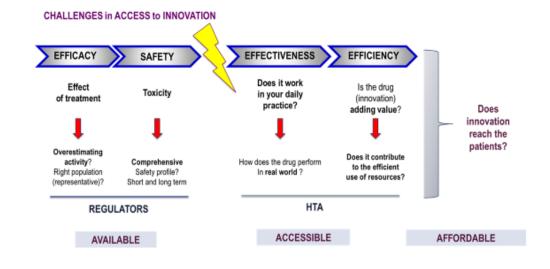
SESSION 1: ENDPOINTS FOR INNOVATIVE CLINICAL TRIALS

KEY TAKEAWAYS

- It takes **8-10 trials to validate a surrogate endpoint**; there are no novel validated surrogate endpoints at this time.
- Distinct early- and late- endpoints for conditional approvals may be considered e.g. ORR.
- Ensure maturity of data e.g. for PFS to imply OS.
- Patient-meaningful endpoints are considered at the individual level for quality and robustness; it is accepted that they may not be statistically powered.
- -Tension between "acceleration" in regulatory approval and "deceleration" in HTA/payer validation
 -MCBS



- Harmonise HTA, regulatory, and patient needs.
- Artificial Intelligence will likely revolutionise endpoints, but will require confirmation and validation.



KEY TAKEAWAYS

- When designing clinical trials, it is essential to precisely define the
 objective of the trial, formulate the research question in a clear way and
 consider the population as well as the research context when selecting the
 most appropriate study design. Study design, outcomes collected and
 analysis methods need to be predefined and allow answering of the
 research question formulated.
- Good planning from the start and writing the protocol in a clear way that
 provides clear arguments for the selected design is essential both for
 standard and innovative design. This also applies to the good reporting of
 clinical trials.
- Adaptive trial methodology can be used to increase the efficiency of clinical trial designs and has been applied successfully in the early-phase setting.
- Innovation of methodology should not be for its own sake, its added value should be in facilitating the answering of the research question.
- The estimands framework is an essential framework for all future studies, to ensure the design starts by focusing on the research question and frames the five components (population, endpoints, summary measure, treatment conditions, and handling of intercurrent events) clearly. This subsequently guides data collection and statistical analysis.
- The estimands framework should be used for scientific advice and other interactions with regulators. It requires a cross-functional approach and input from other experts beyond statisticians.
- • The estimands framework affects all aspects of clinical trial design, conduct and analysis and should become the norm in future conversations on clinical trials. We need all experts to adopt it.

SESSION 2: INNOVATIVE TRIAL DESIGNS AND ESTIMANDS



- Ensure any conversation on clinical trial innovation starts with asking "What is the scientific question?"; define the estimand and select the methods to fit the question and the context.
- Share more examples and learnings from the use of adaptive trial designs as well as the use of the estimands framework to increase awareness and adoption.
- Encourage and enable cross-stakeholder and cross-functional collaboration on estimands, especially in non-statistical fora.
- Provide **training to iDMCs and ethics committees** to understand innovative trial designs and the estimands framework.

SESSION 3: TOWARDS PATIENT-CENTRIC EVIDENCE GENERATION

KEY TAKEAWAYS

- Patient Preference Data (PPD) can impact a wide range of decisions, from clinical development to regulatory approval, access/reimbursement and individualized treatment decision-making: it is not just about clinical efficacy!
- Stakeholders should work together to define, incorporate and collect PPD without duplicating efforts. Patient involvement is essential (e.g. design and analysis).
- External Control ARM (ECA) trials are alternatives to a trial internal control arm and can be considered when RCTs are unethical, unfeasible or lack equipoise (e.g rare indications / molecular subgroups, significant unmet medical need, limited treatment options, paediatric indications).
- They are not a shortcut and definitely not a low-burden effort: they
 require a convincing rationale that an RCT is not feasible, large highquality quality and complete databases, a strong design and analytical
 plan, and they are less able to detect small/moderate differences. Draft
 FDA guidance is in place.
- ·High burden to demonstrate that the ECA meets the bar for valid treatment comparison.
- Pragmatic trials are meant to inform decision-makers, enhance generalizability by enrolling a population relevant to the decision in practice, and streamline data collection or measure a broader range of outcomes.
- Extensive, multidisciplinary/multistakeholder discussions, including regulatory guidance, are key to their design (feasibility and clinical context), conduct (operational and logistic aspects) and ultimate success.



- Data and endpoints (PPD) that are meaningful to patients should be at the centre of every clinical trial, so appropriate and regular collection of PPD should be an integral part of trial design, as per other endpoints (OS, PFS, RR). The original clinical trial is the best time to collect and make good use of PPD.
- ECA trials represent a resource, particularly in certain domains, however hybrid randomized designs (e.g. phase II single arm and registrational phase III with hybrid control arm[SS1] [GR(2]) may provide more robust results to support drug approval and reimbursement.
- Pragmatic trials are instrumental in increasing generalizability, granting appropriate flexibilities and offering access to trials to a higher number of patients willing to participate. Constant dialogue with regulators and HTA bodies is key.

SESSION 4: PRACTICALITIES ON INNOVATIVE CLINICAL TRIALS

KEY TAKEAWAYS

- Rational combination therapies aim to maximise efficacy and overcome resistance. But there are important practical mechanistic and regulatory considerations for trial design (contribution of components), and its preclinical package (activity, interaction), that can differ between the FDA and EMA. Cellular therapies may open new challenges.
- For rare cancers (and rare subtypes), we need to identify and engage with
 the population, minimise heterogeneity, and work in collaborative networks.
 Regulators understand that size constraints inevitably limit Phase 3 endpoints.
 Surrogate end-points can be important and higher uncertainty must be
 expected while maximising the robustness of the data and external validation.
 www.rarecancerseurope.org has established consensus recommendations.
- Platform studies improve the efficiency of trials with shared design, documentation, reference appendices, populations, selection, costs/contracting, data, biomarkers and even control arms. However, practicalities and planning ahead are essential for central deliverability, site manageability and patient accessibility. Simplicity, where possible, is key. Master protocols effectively run multiple trials through one document and need to align their data delivery/cleaning/analysis, and handle evolving arms and populations.
- Updates to ICH E6 (GCP) and E8 (General Considerations for Clinical Studies)
 are designed to improve the design, conduct and value of clinical trials.
 Ethics, scientific approach and patient involvement are the general underlying
 principles. Stakeholder (participant and investigator) involvement, in a
 quality continuum, using a proportionate and efficient risk-based approach,
 aims to better focus efforts on ensuring that results support useful decisionmaking.



- Combination and platform studies would benefit from guidance such was developed for rare cancer studies.
- Please read ICH E8 (R1) and E6 (R3) together and please respond to the ICH E6 (R3) GCP consultations by 30th September. Note ICH E6 Annex 1, with Annex 2 drafting underway.
- Explore how to address the accessibility of patient information sheets and the consent process within Europe.
- Explore how to support training of ethics committees and IDMCs.



RATIONAL DRUG DEVELOPMENT

CANCER TYPE/
MOLECULAR TARGET

-MECHANISMS
Of PROGRESSION/
RESISTANCE
-TIME

PATHWAYS

Spatial and temporal HETEROGENEITY

PATIENTS SELECTION

TARGETS

DRIVERS

VS

PASSENGERS

BIOMARKERS

Access to test

STUDY DESIGN

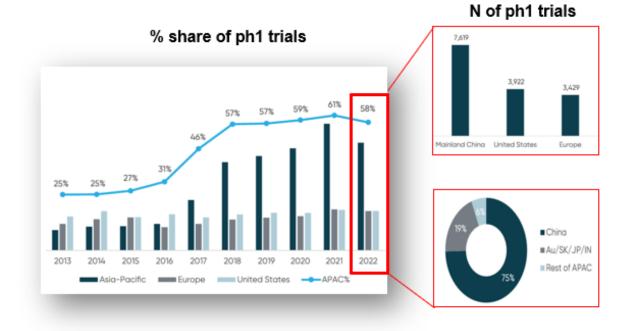
CLINICAL DEVELOPMENT
TAILORED TO MOLECULAR
PHENOTYPES

INNOVATIVE TRIALS

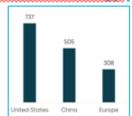
Complexity of study design

10-y of (early) drug development looks at East!

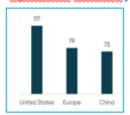
Ph1 activated in 2018-2022



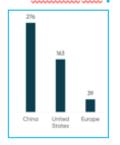
Immunoncology ph1



Bi-specific MABs ph1



Cell-based Th ph1





Novotech (CRO) Report on phase 1 trial (Jan 2023)







ACT EU Clinical Trials Analytics Workshop

25-26 January 2024





Launched in 2022: Accelerating Clinical Trials in the EU

ACT EU was partly a response to COVID to get **bigger** trials off the ground **faster**

As the programme formed there were natural categories:

- GCP
- Methodologies
- Clinical trials regulation



Where should we discuss data about clinical trials?

ACCESS TO INNOVATION and CANCER CARE CDDF Conference DRUG DEVELOPMENT/EVIDENCE GENERATION



-Trial population not representative (incl/excl criteria)

- -Not inclusive (race, social status, age, urban areas...)
- Dose optimisation
- -Place in therapy (what proceeds and follows the cancer medicine in study)

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Medical devices?

MODERN, INCLUSIVE, REFLECTING THE PT POPULATION THAT WILL BE TREATED POST-APPROVAL



RELEVANCE OF engagement **POLITICAL DRIVE**





Early interaction

COLLABORATION (LIFE CYCLE)

Political driving engine



Pharmaceutical Strategy for Europe rmaceuticals - safe and affordable medicines (new EU strategy

Conquering Cancer: Mission possible Interim report of the Mission Board

5 - 7 February 2024





Happy to continue the discussion

- Rosa.giuliani@gstt.nhs.uk
- rosa.giuliani2@nhs.net
- · rosagiuliani@gmail.com
- https://www.linkedin.com/in/rosagiuliani
- @RosGiuliani



Highlights of the Discussion

 Please provide highlights of the discussion in bullet points and also present multi-stakeholder perspectives discussed if applicable

- Point 1
- Point 2
- Point 3
- Point 4



Take-home Message

- Please provide take-home messages in three to four bullet points and present multi-stakeholder perspectives discussed during the meeting
- Point 1
- Point 2
- Point 3
- Point 4



Next Steps

- Considering the discussion, please provide next steps to be taken in bullet points
- Point 1
- Point 2
- Point 3