Therapeutics Advisory Panel for Pandemic (TAPP) Operating Model

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OVERVIEW

The Therapeutics Advisory Panel for Pandemic (TAPP) concept addresses the necessary assets, systems and processes needed to effectively triage large numbers of repurposed and novel drugs into a platform trials system. It is a cooperative approach that ensures key partners from across the scientific research and healthcare sectors are linked and focused on delivering effective treatments that reach patients faster and safely. This operating model will address only the set up and operation of a TAPP and will not address whether the TAPP is the optimum tool for this function. This operating manual may be used in conjunction with a set of standard operating procedures collated as part of UK-CTAP legacy.

BACKGROUND

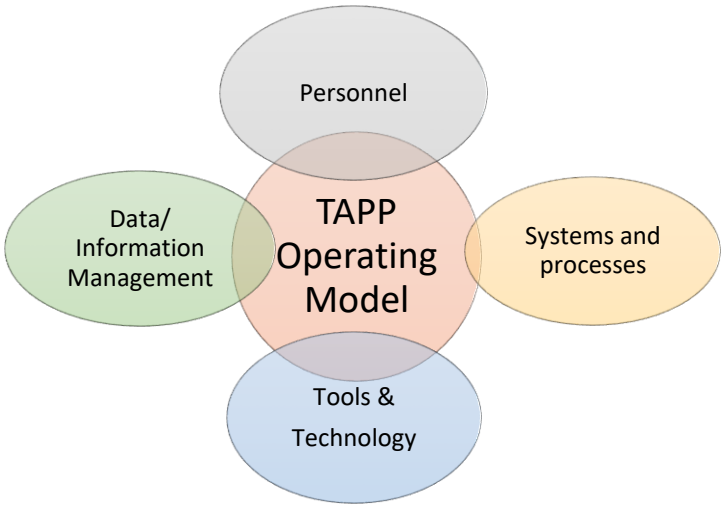
The TAPP concept is based on the operating model adopted by the UK COVID-19 Therapeutics Advisory Panel (UK-CTAP) (Chinnery et al., 2021)[1]. The model evolved over the course of the COVID-19 pandemic. The TAPP model embraces lessons learned in the process of delivering and evaluating the effectiveness of UK-CTAP. It is an agile working model that is optimised for speed of decision making by providing unbiased due diligence, transparent and independent scientific evaluation of therapeutics. UK-CTAP was widely praised as a highly effective trial candidate prioritisation system[2]

PURPOSE

The TAPP offers three layers of independent consideration and assessment of candidate compounds. The triple layer structure looks to mitigate any unconscious bias brought about by familiarity or expertise within the TAPP and its secretariat.

ASSETS

The TAPP requires:



[1] Chinnery, P.F., Bonnet, M., Cave, A., Hofer, M.P., Lamb, A., McConkey, G.A., Medcalf, N., Smith, S.P., Tsakok, T., Watson, R., Webster, S.,& You T (2021). Choosing drugs for UK COVID-19 treatment trials. Nature Reviews Drug Discovery. http://doi: 10.1038/d41573-021-00203-7.

[2] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/992762/100_Days_Mission_to_respond_to_future_pandemic_threats__3_.pdf

Personnel

1. Therapeutics Advisory Panel for Pandemic Chair

The Panel Chair is appointed by a relevant authority. The chair has responsibility and accountability for chairing the scientific prioritisation panel for prioritisation of candidate compounds.

2. Therapeutics Advisory Panel for Pandemic

The TAPP make recommendations for inclusion in priority trials.

The Therapeutics Advisory Panel (TAPP) should be constituted of senior scientific figures with no vested interests[3] covering a broad range of expertise. This expertise should as a minimum span clinical experience, drug development, drug trials design and implementations, relevant disease pathology, clinical pharmacology. This panel should use their expertise to ensure that drugs recommended to trial form a coherent and suitably broad portfolio. The breadth of the portfolio recommendations should offer a number high potential mechanism of action in therapeutics treatment rather than addressing a narrow mechanism of action in exceptional depth.

An indicative panel terms of reference is at Annex I.

3. Subject Matter Expert Subgroups

The Subject Matter Expert Subgroups (herewith Subgroups) consider compounds and offer expert advice to the TAPP.

Subgroups should be chaired by a member of the TAPP who is not an expert in the subject matter. The exact breakdown of the subgroups is in the gift of the TAPP Chair on the advice of the TAPP. Suggestions for the breakdown include along pharmacology lines (eg, antivirals, antibiotics or anti-inflammatory), disease phase (eg, prophylaxis, community, hospitalised, ICU or post discharge sequalae).

An indicative subgroup terms of reference is at Annex II.

4. Head of Operations and Governance (HOG)

The HOG is responsible for the timely progression of compounds through the triage process and ensuring the independence, transparency and integrity of the TAPP process. As such the HOG leads the TAPP Secretariat.

The HOG is a non-scientific role delivering the business of the TAPP, answerable to the Panel Chair. This role is critical in the management of the running of the TAPP, allowing the Chair and Panel Members to concentrate on the scientific rationale for inclusion. The role may include programme management, stakeholder management and operations management.

5. Head of Due Diligence (HoDD)

The HoDD is responsible for the timely, rigorous and unbiased delivery of the scientific due diligence. The HoDD is a scientific role responsible for scientific rigour in the preparation of high-quality unbiased briefs[4] to the Subgroups and Panel. This role is critical in ensuring that balanced and unbiased briefs capture the state of knowledge and proposed rationales.

[3] It is acknowledged that to get the highest level of expertise there will at times be conflicts of interest that will need to be managed. It is important to surface these conflicts of interest and manage them appropriately to ensure the independence of the panel and subgroups.
[4] It is important to note that these briefs must be prepared rapidly and there is a balance to be struck between rigour and expedience in establishing the state of knowledge regarding a specific compound or drug class.

6. TAPP Secretariat

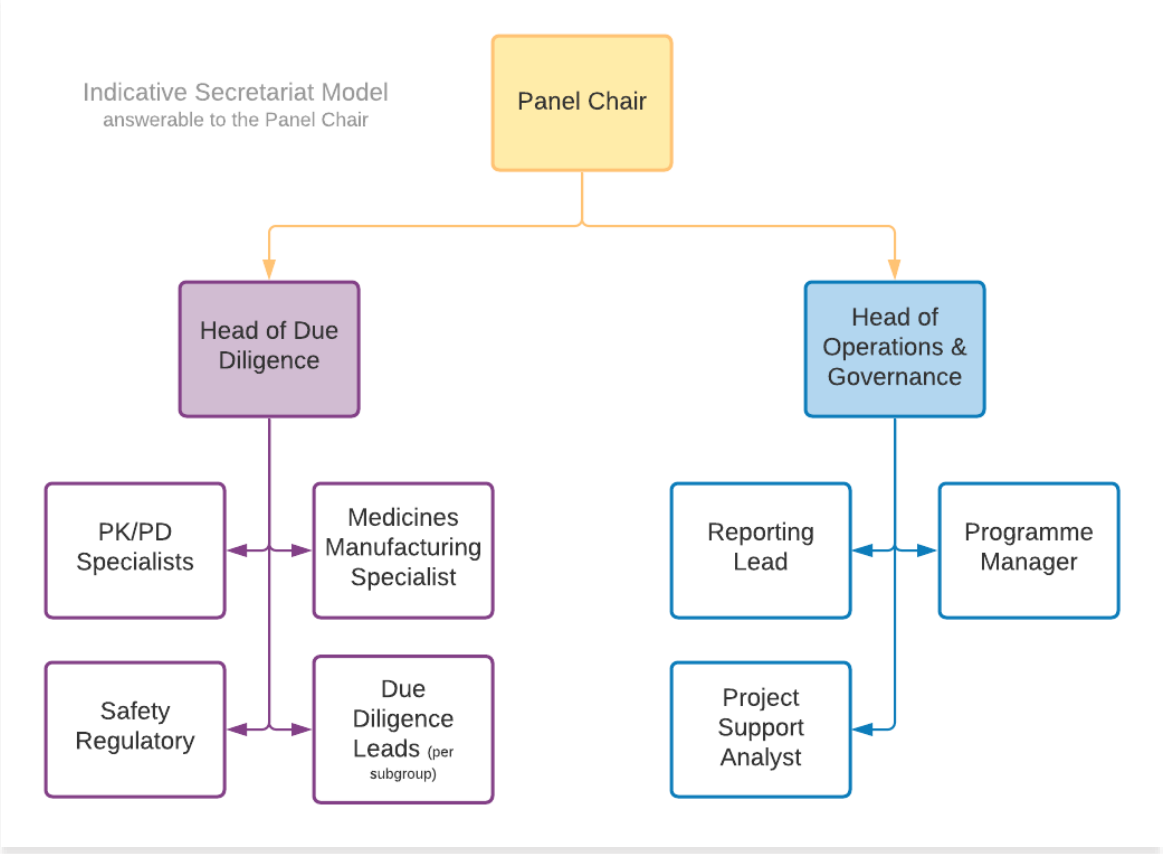


Fig1. The size and scale of the secretariat will be governed by the volume of submissions to the TAPP process.

The role of the TAPP secretariat is to ensure the TAPP has accurate and up to date briefs on promising therapeutics. The secretariat is also responsible for ensuring that the business of the panel is run appropriately including, programme management, the management of conflicts of interest, legal matters (such as NDA or contracts). To this extent it divides into two complimentary teams: due diligence and governance. Between the teams they ensure the TAPP is both well informed and well governed. The ultimate quality of output and credibility of the TAPP will rely on the quality and expertise of these teams. The size of these teams will be dependent on both available resource and the nature of the pandemic the TAPP is addressing.

Systems and processes

An ecosystem of triage, trials and funding is required to ensure the effectiveness of the TAPP. It is both important for the TAPP to understand the context into which they are recommending and important for trials investigators to know the context of recommendation. Equally as the natural history of a disease course emerges it is imperative to have a clear route to identifying and commissioning trials. These systems need to be interoperable so that promising compounds can seamlessly make the journey from identification to trial.

1. Open Submission System

The open submission system is an effective way of leveraging the full breadth of the scientific community, both academic and industrial, on identifying promising therapeutic compounds. It creates a single point of entry into an integrated triage and trials system. The figure below shows how UK-CTAP used an open submission system to feed into their triple layered structure that ensured independence. It also highlights the documentary output at each stage, in terms of high-quality comprehensive briefs and records of decision.

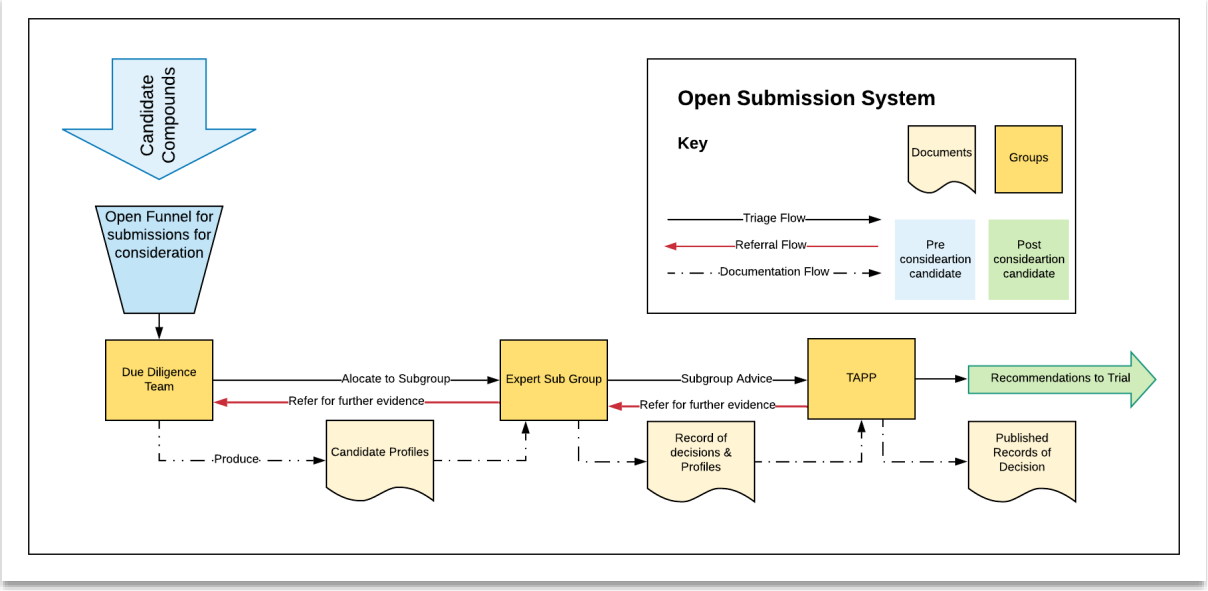


Fig2. Represents the flow of candidate drugs, and associated documentation through the TAPP process.

2. Integrated Triage and Trial Platform System

Recommendations are powerless unless they land in an integrated trial landscape. The trial landscape must be able to progress promising therapeutics in all stages of development. A system that does not embrace all phases concurrently risks creating a crippling lack of candidates to move to phase 3 and 4. The figure below highlights the need for real-time feedback from a range of trials and studies to inform optimised decision making by the TAPP.

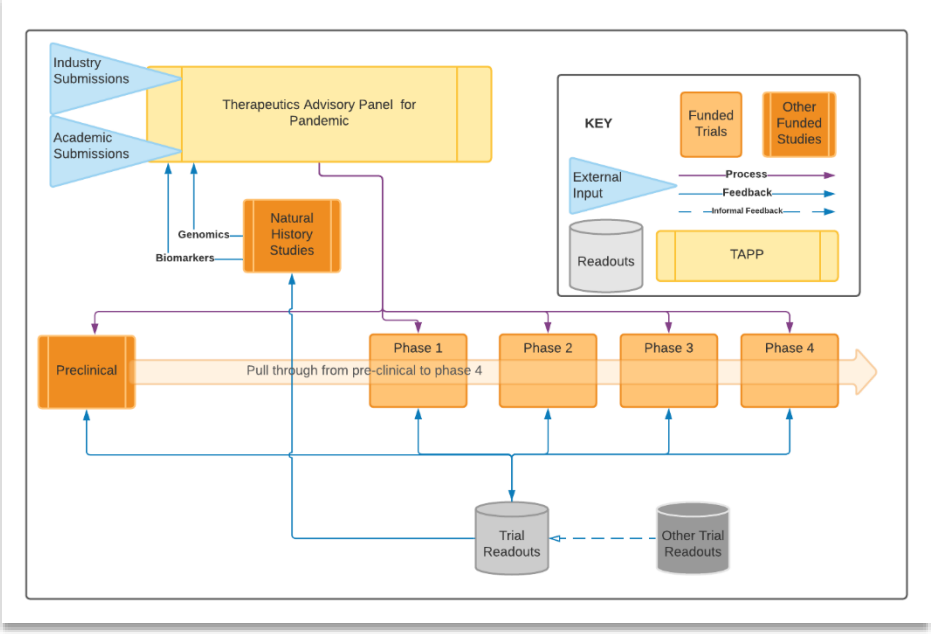


Fig3. Represents the necessary integration between trial phases, preclinical and natural history studies. NB it does not represent that within a trial phase there may be a need to have trials in different clinical settings, such as community, hospitalised, ICU, nosocomial etc. It is important that the trial landscape is developed iteratively to fit the natural history of any disease.

3. Trial and Study Funding Systems

The trial and funding function is critical to the success of a TAPP and integrated trials platforms. As a pandemic develops and the understanding of a disease's pathology increases the need for new trials and studies will become pressing. It is essential that the funding mechanisms required to commission, or extend trials are clear and expedient.

It is likely that an existing trials funder will need to fund additional trials due to the logistical, financial and reporting functions required to appropriately manage grants. Therefore, it is the funders systems which will determine the detail of how trial and study funding systems work. However, it is recommended that the following parameters are clear at the outset of any TAPP.

- Who is responsible for funding additional trials or studies, and which phases of trial?
- What budget is available for additional trials?
- What is the process for the TAPP to recommend additional trials?
- What is the process for approval of such recommendations?
- What are the timelines for all such processes?

Tools and technology

4. Open Portal

To harness the breadth of a national, or international scientific community it is essential to have an open portal into which industry, academia and an informed public can make recommendations. This could be as simple as an email address and an editable submission form or as complex as a database and an adaptive questionnaire.

The open portal should give everybody the opportunity to submit to the TAPP, but equally set a bar for the necessary scientific rationale.

A number of key questions might be considered during the triaging process:

a. At what stage of development is the compound?
b. Is the proposed drug/compound currently a licensed medicine?
c. Is the drug/compound licensed elsewhere?
d. Has the proposed drug already shown preliminary efficacy in the relevant disease?
e. What are the compounds' therapeutic target(s) and its mechanism of action?
f. Is there a credible link between the therapeutic target(s) and the relevant disease?
g. Is the drug's safety profile suitable for trials?
h. Are there existing credible trials due to read out in the near future?

An Indicative triage parameters document is at Annex III.

A sample questionnaire is at Annex IV.

Data and Information Management:

The programme will produce large amounts of data as a result of rigorous scientific due diligence and assurance activities. Successful data management is the key conduit leading to proficient decision making and selection of propitious therapeutics for the treatment.

It is therefore recommended that below principles are adopted for implementing good data management practices within the programme:

1. Sharing and transparency: To ensure transparency and openness, the programme will intend to publish the right data. This will require an understanding of the politics and sensitivities of data publication in your jurisdiction. The panel may wish to publish on a dedicated website which will be simple to understand and meet regulatory accessible requirements.

2. Data control: With the large amounts of information being processed in parallel a data management system is required to ensure that all the data and information required to process candidate compounds is managed appropriately. The database should provide a holistic view of the data landscape ensuring single definitive source for information. It will enable sustainable usage of data, compile clear audit trails and fully comply with all

relevant regulatory standards. The database will be agile and scalable to meet the evolving demands of the programme without affecting cost and quality.

3. Data quality[1]: To ensure database contains high-quality data, it should be able to identify duplicate information before creating new records. Good quality data will improve the accuracy of analytical reporting and provide actionable insights for making high-impact decisions. The programme will follow data quality best practices such as:
    - establishing role-based permissions for access control and accountability.
    - establishing data integrity by ensuring accuracy and consistency of data throughout its lifecycle.
    - regularly reviewing and improving data by identifying errors, gaps and issues.

4. Ethical storage and sharing: The data will be collected, handled and stored ethically and sensitively for privacy, political and commercially sensitive reasons.

[1] Data Principles - Office for National Statistics (ons.gov.uk)

Annex I – TAPP Terms of Reference

1. Background

National platform clinical trials investigating the efficacy and safety of Phase 1, 2 and 3 therapeutic candidates in hospitals and prophylaxis candidates in community settings require objective, scientific recommendations of candidates.

The Therapeutics Advisory Panel for Pandemics (TAPP) is formed of a group of experts with no vested interests from relevant backgrounds who have broad expertise covering key areas.

TAPP considers specialist advice from its subgroups with expertise in therapeutically important areas.

TAPP Subgroup due diligence: The main panel of TAPP assimilates advice across the subgroups and presents final recommendations to the Chief Investigators of the trial platforms who have ultimate responsibility for the delivery of the trials.

2. Overall Responsibilities of TAPP

In assessing a candidate compound TAPP considers the following:

a. At what stage of development is the compound?
b. Is the proposed drug/compound currently a UK licensed medicine?
c. Is the drug/compound licensed elsewhere?
d. Has the proposed drug already shown preliminary efficacy in the treatment of [disease]?
e. What are the compounds' therapeutic target(s) and its mechanism of action?
f. Is there a credible link between the therapeutic target(s) and [disease]?
g. Is the drug's safety profile suitable for trials?
h. Are there existing credible trials due to read out in the near future?

The panel may rely on the comprehensive briefs developed by the TAPP Secretariat's due diligence team, use the briefs as a basis for further reading, or may bring their own expertise and experience to panel.

TAPP will take a portfolio approach to making recommendations, in that it should seek to recommend a broad range of mechanisms of action to ensure we have the best possible chance of finding an effective therapeutic.

3. Mode of Operation

The panel should meet sufficiently regularly to provide timely recommendations on candidates to trial but may convene for ad hoc urgent considerations including via email if agreed that this is necessary.

A Record of Decisions (RoD) will be produced by the TAPP secretariat. A process for approval to sign off the document will be followed to ensure its accuracy. However, a pending approval of a finalised set of RoDs will not delay the advice of subgroups to the main TAPP panel, or a subsequent recommendation to the trial PIs for inclusion in a publicly funded trial.

A panel is considered quorate if the chair plus two members are in attendance. Consideration should also be given to any institutional conflict of interest arising from the balance of panel members parent organisations.

4. Membership

Member name	Member affiliations

5. Conflicts of Interest & Confidentiality

A conflict of interest form must be completed by all TAPP members.

The first agenda item of each meeting is a declaration of likely conflicts of interest. Conflicts of interest will be managed by the chair. TAPP members will be expected to recuse themselves from decisions where they are conflicted.

As the TAPP members have access to privileged information to advise and recommend respectively, members acknowledge the confidential nature of the briefing documents and record of decisions and do not share documents outside of TAPP except with the written consent of the Programme's Head of Operations and Governance.

Panel members will be expected to sign and abide by non-disclosure agreements to satisfy proposers that they will not lose any commercial advantage.

TAPP may be subject to Freedom of Information (FOI) requests. In this case, the TAPP Secretariat will work with the FOI team to provide an appropriate response.

6. Role of TAPP Secretariat

The TAPP will be supported by a UKRI-led secretariat.

The secretariat will compromise of a due diligence team and a programme management team:

- The Due diligence team will be responsible for the triage of candidate compounds. They will research and develop high quality briefs to inform the discussion of TAPP and the associated subgroups.

- The Programme Management team will provide governance leadership and organise the meetings and support all logistical arrangements. Meeting arrangements will include scope for remote participation.

The secretariat will take minutes of TAPP meetings. These will go to the Chair, TAPP members and back to the Chair for review before approval by TAPP at the following meeting.

7. Publication

The membership of TAPP will be published and updated periodically to reflect any changes in the membership details.

Annex II – TAPP Subgroup Terms of Reference

1. Background

National platform clinical trials investigating the efficacy and safety of Phase 1, 2 and 3 therapeutic candidates in hospitals and prophylaxis candidates in community settings require objective, scientific recommendations of candidates.

The Therapeutics Advisory Panel for Pandemics (TAPP) is formed of a group of experts with no vested interests from relevant backgrounds who have broad expertise covering key areas.

TAPP considers specialist advice from its subgroups with expertise in therapeutically important areas.

TAPP Subgroup: The main panel of TAPP assimilates advice across the subgroups and presents final recommendations to the Chief Investigators of the trial platforms who have ultimate responsibility for the delivery of the trials.

2. Overall Responsibilities of TAPP

In assessing a candidate compound TAPP considers the following:

1. At what stage of development is the compound?
2. Is the proposed drug/compound currently a UK licensed medicine?
3. Is the drug/compound licensed elsewhere?
4. Has the proposed drug already shown preliminary efficacy in the treatment of [disease]?
5. What are the compounds' therapeutic target(s) and its mechanism of action?
6. Is there a credible link between the therapeutic target(s) and [disease]?
7. Is the drug's safety profile suitable for trials?
8. Are there existing credible trials due to read out in the near future?

The panel may rely on the comprehensive briefs developed by the TAPP Secretariat's due diligence team, use the briefs as a basis for further reading, or may bring their own expertise and experience to panel.

TAPP will take a portfolio approach to making recommendations, in that it should seek to recommend a broad range of mechanisms of action to ensure we have the best possible chance of finding an effective therapeutic.

3. Mode of Operation

The panel should meet sufficiently regularly to provide timely recommendations on candidates to trial but may convene for ad hoc urgent considerations including via email if agreed that this is necessary.

A Record of Decisions (RoD) will be produced by the TAPP secretariat. A process for approval to sign off the document will be followed to ensure its accuracy. However, a pending approval of a finalised set of RoDs will not delay the advice of subgroups to the main TAPP panel, or a subsequent recommendation to the trial PIs for inclusion in a publicly funded trial.

A panel is considered quorate if the chair plus two members are in attendance. Consideration should also be given to any institutional conflict of interest arising from the balance of panel members parent organisations.

4. Membership

Member name	Member affiliations

5. Responsibilities of the TAPP Subgroups

Subgroups have been formed under TAPP to bring specialist knowledge to inform the decision making of the TAPPTAPP.

- [TAPP Leadership should populate with relevant subgroups]

The subgroups have responsibility for considering candidate compounds and offering expert advice to TAPP.

The subgroups should meet sufficiently regularly to provide timely advice but may convene for ad hoc urgent considerations including via email if agreed that this is necessary.

A subgroup is considered quorate if the chair plus two members are in attendance. Consideration should also be given to any institutional conflict of interest arising from the balance of panel members parent organisations

6. (Subgroup name) Subgroup Membership

Member	Member Affiliation
Chair	

7. Conflicts of Interest & Confidentiality

A conflict of interest form must be completed by all subgroup members.

The first agenda item of each meeting is a declaration of likely conflicts of interest. Conflicts of interest will be managed by the chair. The subgroup members will be expected to recuse themselves from decisions where they are conflicted.

As the subgroups have access to privileged information to advise and recommend respectively, members acknowledge the confidential nature of the briefing documents and record of decisions and do not share documents outside of TAPP except with the written consent of the Programme's Head of Operations and Governance.

The subgroup members will be expected to sign and abide by non-disclosure agreements to satisfy proposers that they will not lose any commercial advantage.

The subgroups may be subject to Freedom of Information (FOI) requests. In this case, the TAPP Secretariat will work with the FOI team to provide an appropriate response.

8. Role of TAPP Secretariat

The TAPP will be supported by a UKRI-led secretariat.

The secretariat will compromise of a due diligence team and a programme management team:

- The Due diligence team will be responsible for the triage of candidate compounds. They will research and develop high quality briefs to inform the discussion of TAPP and the associated subgroups.

- The Programme Management team will provide governance leadership and organise the meetings and support all logistical arrangements. Meeting arrangements will include scope for remote participation.

The secretariat will take minutes of subgroup meetings. These will go to the Chair, subgroup members and back to the Chair for review before approval by TAPP at the following meeting.

9. Publication

The membership of TAPP will be published and updated periodically to reflect any changes in the membership details.

Annex III - TAPP Triage Parameters

Purpose

The purpose of this paper is to outline how the triage process for prioritization enables the independence of the TAPP panel.

Background

An independent Therapeutics Advisory Panel for Pandemics (TAPP), advises on what treatments should be proposed for testing through national trials. The panel is formed of a group of experts with no vested interests from relevant backgrounds who have broad expertise covering key issues.

The panel will take specialist advice from subgroups with expertise in therapeutically important areas. These areas may change as more is known about the disease, its progression and its complications, and as knowledge of the most effective treatments is advanced.

The final decision on which treatments will be included in publicly funded national trials will lie with the trials' Chief Investigators, who have ultimate responsibility for the delivery of the trials.

The TAPP is supported by a secretariat. This secretariat conducts due diligence on proposals. The triage process outlines how an independent view is maintained throughout prioritisation to subgroups and panels.

Triage Process

Initial Triage

The TAPP due diligence team assesses products awaiting triage in order to assign a prioritisation for ongoing consideration.

Drug prioritisation considerations:

2. A number of key questions are considered during the triaging process:
    a. At what stage of development is the compound?
    b. Is the proposed drug/compound currently a licensed medicine?
    c. Is the drug/compound licensed elsewhere?
    d. Has the proposed drug already shown preliminary efficacy in the relevant disease?
    e. What are the compounds' therapeutic target(s) and its mechanism of action?
    f. Is there a credible link between the therapeutic target(s)and the relevant disease?
    g. Is the drug's safety profile suitable for trials?
    h. Are there existing credible trials due to read out in the near future?
3. Existing pending trials should not lower the prioritization for consideration but should be noted in briefs to TAPP for their consideration in prioritization for trial.
4. There is no expectation for the due diligence team to deprioritise because the cost of a treatment may be too high;
5. Where a class review has been requested by a subgroup or panel the due diligence team may include all drugs in that class irrespective of whether those compounds have been submitted.

Additionally, a subgroup or TAPP may request the prioritisation of a candidate to be increased.

The priority scale:

The priority scale indicates the urgency for consideration by a subgroup or TAPP. All priorities have a prefix of the relevant subgroup.

The due diligence team assign candidates into the appropriate subgroup(s) and rating from the following:

1 High* - for the *very next* subgroup meeting.

1 High - needs to go to a meeting as soon as possible.

2 Medium – interesting but higher priorities to go to panel, further investigation potentially needed.

3 Medium-low – evidence submitted gives low level of confidence for potential MoA, further investigation potentially needed.

4 Low – evidence submitted gives low level of confidence for potential MoA.

5 Lowest priority - MoA does not seem relevant, insufficient evidence to review.

Administrative Categories

The programme team will set-up regular review meetings with Due Diligence team to assign categories from the following:

Duplicate - check both duplicate and current versions as info can be spread across both – the due diligence team identify and acknowledge duplicates. The label is a reminder that although one profile is labelled a duplicate, relevant information may still be held in the profile.

Out of Remit – the submission is outside of the TAPP remit. Upon CTAP's agreement that potential treatment is out of remit, it will be marked as 'CTAP considered' and a non-aligned email sent to the proposer. If CTAP disagree, it would be re-triaged.

Awaiting triage – If a treatment is flagged as of being of interest to a group but there is no decision on its triaging level yet.

Pending existing trial read out/surveillance/further due diligence – this means the treatment is still under consideration with the due diligence team because a subgroup or CTAP have asked for more work/surveillance on a therapeutic.

In trial before CTAP convened or added into trial investigators outside of CTAP

Past the triage stage - Once the compound has been to a subgroup or panel and there is no request for further due diligence or trial monitoring.

Past the triage stage (archived) – For products that have been discussed at CTAP and are not currently prioritised for the available trial platforms. A 'deprioritised' email response is sent from the programme team to the proposer.

Independent Triage Confirmation

Subgroup chairs receive an automated email following triage with the drug list, prioritisation level and meeting date and can raise via a TAPP general email if a product needs to be prioritised differently or allocated into a different meeting.

“Failsafe” Triaging

Each month the due diligence team will meet to discuss if the archived/deprioritised/low priority products should be re-prioritised due to new information.

UK Research and Innovation

UK-CTAP

Annex IV - UK-CTAP Proposal Form

UK-CTAP is the Therapeutics Advisory Panel for COVID-19. Please complete all applicable fields, you have the option to attach additional material including graphs and infographics at the bottom of this form. If you attach documents please note in the form which document relates to which question. The attachment is not intended as a substitute for filling the form; triage will be performed on the basis of the answers contained in the form.

Questions marked with an asterisk are mandatory for proposers to complete.

Name of compound*:

Name of proposer*:

Company name (if applicable):

Phone:

Email*:

1. What is the scope of this submission? *

Please select all that apply.

- ☐ Pre-exposure Prophylaxis
- ☐ Post-exposure Prophylaxis
- ☐ Treatment Phase 1 Safety and Tolerability and Phase 2a
- ☐ Treatment Phase 2
- ☐ Treatment Phase 3
- ☐ Post-hospital care

2. Please classify the submission according to UK-CTAP Subgroup. *

Please select one choice. Please note we reserve the right to change the category recommendation during due diligence.

3. At what stage of development is the compound? *

Please select all that apply. Please note that data can be attached in PDF or MS Office formats at the bottom of this form.

- ☐ In vitro efficacy data
- ☐ In vivo efficacy data
- ☐ Non clinical toxicology
- ☐ First in human safety and tolerability
- ☐ Exploratory clinical trials
- ☐ Confirmatory clinical trials

4. Is the proposed drug/compound currently a UK licensed medicine? *

5. Is the drug/compound licensed elsewhere?

6. Has the proposed drug already shown preliminary efficacy in the treatment of COVID-19? *

7a. Is this compound being tested in any other clinical trials for the treatment of COVID-19?

Please provide details and trial identifiers (e.g. clinicaltrials.gov or EudraCT).

7b. Trial Link

Please include the link to the trial information if possible (e.g. clinicaltrials.gov or EudraCT).

8. What are the compounds' therapeutic target(s) and its mechanism of action? *

Please provide as much evidence as possible supported by key references.

9a. Is there a credible link between the therapeutic target(s) and COVID-19? *

Please discuss the expression/availability of the therapeutic target in the context of disease progression.

9b. At what stage of disease, based on the WHO ordinal scale for clinical improvement, would the product likely be administered? *

10. What is the expected level of target engagement, physiological response or disease modulation that is necessary for the COVID-19 treatment of ?

11. For compounds that have not been used in humans or previous clinical trials, is preclinical pharmacokinetics and distribution data available?

Please provide data or reference to animal plasma and tissue pharmacokinetics data along with a brief description of methods (dose, dosing interval, analytical method). Please attach PDFs at the foot at the form as necessary.

12. Please provide a rationale for dose selection. *

If available, provide details of pharmacometric assessments relative to in vitro or in vivo defined target exposures.

13. What is the compound's route of administration, and does this differ from its currently licensed route? *

If possible, please provide data or reference to human pharmacokinetics data. Please attach PDFs at the foot at the form as necessary.

14. Please provide details on any non-clinical efficacy data with relevance for the COVID-19?

Please include details of cell systems employed, multiplicity of infection, preincubation duration, concentration range tested, concentration of protein/serum and resulting EC90 data (or equivalent for non-antiviral medicines).

15. Please provide details of any clinical efficacy data supporting application of the drug for COVID-19 (either in terms of the pathogenesis of the disease and/or its complications).

If clinical efficacy data from another indication is reported, please discuss the relevance of this data for the disease.

16a. Which clinical efficacy end point should be evaluated in the context of the proposed drug and its mechanism of action in COVID-19 *

Please select all that apply.

- ☐ Mortality
- ☐ Recovery
- ☐ Hospital discharge
- ☐ Respiratory failure
- ☐ Need for oxygenation or mechanical ventilation
- ☐ Time-to-intubation
- ☐ Hospitalisation
- ☐ Duration of hospital stay
- ☐ ICU admission
- ☐ Time-to-improvement
- ☐ Severity scores (SOFA)
- ☐ Other

16b. Why have you chosen this clinical endpoint? *

If you selected 'other' for question 16a please explain the clinical endpoint you have chosen.

17. Is there any GLP toxicology data available? Please provide a summary of GLP toxicology data relevant to the intended route of administration and duration of exposure.

18. What is the product's safety profile? *

Please include information on the risk of drug drug interactions and outline any risk mitigation strategies.

19. What is the product availability – for trial and in terms of patient numbers which could be treated in the UK?

20. What is the stage of manufacturing and likely scalability of production and supply?
Please include details of active pharmaceutical ingredient (API), finished pharmaceutical product (FFP) specifications, known and potential impurities, stability data supporting a reasonable shelf-life for clinical evaluation (P.T.O), and considerations for downstream scale up if needed.

21. Please provide details of any considerations/concerns for the proposed therapy regarding its administration in the community or in a clinical trial by healthcare staff.
(e.g. special training, logistics, devices)

22. Please provide any other information you feel is relevant to the compound/drug assessment.

Data Consent *
By selecting yes, you are agreeing to the collection, retention and sharing of data for the purpose of progressing this submission through TAPP and, if appropriate, into publicly funded trials.

Publishing of Recommendations
If your proposal is recommended into trial, TAPP would publish its decision for transparency. If you have a legitimate case for not publishing, please attach a document outlining your reasons. This will not affect the progress of your proposal.

- [ ] I understand and accept this
- [ ] I understand but I have attached a document out lining my reasons for not publishing.