



Regulatory considerations for IMI/IHI projects

Guide for applicants and project
consortia



History of changes

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1 Purpose of this guide

Delivering project results that have an impact on the research and innovation ecosystem, on patients and health systems, and on Europe's competitiveness is key to Innovative Health Initiative (IHI).

Research projects funded under the Innovative Medicines Initiative (IMI) and now under IHI are generating results/outputs that facilitate the development of health technologies¹ and/or healthcare solutions² responding to unmet public health needs. These results/outputs (e.g. novel tools/methodologies, biomarkers/endpoints, patient reported outcomes) may impact on health-related decision-making processes, including decision-making processes by regulatory authorities.

To ensure the full potential of these results/outputs and their uptake, their development needs to meet the regulatory standards required in order to be implemented in formal regulatory pathways and ultimately address patients' and public health needs.

Applicants and project consortia are expected to consider the full potential of their projects' results/outputs, including the potential impact on the regulatory framework. To achieve this, consortia should consider at an early stage of the project the potential regulatory impact in order to build a strategy plan to deliver the planned outputs likely to require future regulatory endorsement. This is to ensure that the type and level of evidence generated will meet the regulators' standards and expectations and so support their use in the regulatory decision-making.

This document is designed to raise awareness of applicants and project consortia on regulatory aspects to be considered when preparing a proposal and during project implementation. It is particularly relevant for those research topics/projects that contribute to regulatory science and whose results are intended to be for regulatory use. The document also provides an overview of existing opportunities for regulatory support services and processes to assist applicants and consortia in their planning for engagement with regulators. It focuses particularly on services and processes available at the European Medicines Agency (EMA)³ and the US Food and Drug Administration (FDA), including the EMA qualification procedure and FDA qualification program for regulatory acceptance of tools to be used for research and development into pharmaceuticals.

Disclaimer

The document is intended for guidance only and is in no way comprehensive. For instance, it covers mainly the regulatory support services provided by medicines regulators (EMA, FDA, national competent authorities) for the development of tools that facilitate the development of innovative medicines and associated technologies. While engaging with the competent authorities for medical devices regulators is possible at national level, there are fewer processes established to interact at European level.

For more information on all the regulatory and scientific support services available, applicants and project consortia are invited to consult the respective regulatory agencies' websites, or to contact them directly.

Please note that this guide complements but in no way replaces the IHI JU Work Programme and the Horizon Europe Model Grant Agreement which are legally binding.

This document will be updated as needed.

¹ As per the [IHI Strategic Research and Innovation Agenda](#), health technology means a medicinal product, a medical device or medical and surgical procedures as well as measures for disease prevention, diagnosis or treatment used in healthcare.

² As per the [IHI Strategic Research and Innovation Agenda](#), healthcare solutions refer to a medical product, ancillary service or tool used either alone or in combination in order to address a specific healthcare need, be it a medical need or an organisational need.

³ Although legally speaking, EMA is not a regulator, for the purpose of this document, we refer to EMA as a regulator for the sake of simplicity.

2 Summary of key points to consider

The below table summarises the key regulatory considerations that applicants and project consortia should be aware to help with the preparation of the proposal and project implementation for those research topics/projects generating results that may be acceptable for use in a regulatory context. More information on all of these points can be found in the following chapters.

<p style="text-align: center;">Applicants at the proposal stage</p>	<p style="text-align: center;">Consortia during the project implementation</p>
<p>Regulatory objective</p> <p>Does the topic text indicate that the project outcomes are expected to aim for regulatory acceptance or have a regulatory impact? Read the call topic text carefully!</p>	<p>Regulatory objective</p> <p>Implement timely activities to achieve the expected outcomes and regulatory objective. Monitor carefully and update as necessary the activities generating data to be used to achieve the objective, including timelines, and ensure alignment with the plan for regulatory interaction.</p>
<p>Regulatory landscape</p> <p>Understand the regulatory landscape and identify the regulatory authorities relevant to the topic and your proposal.</p>	<p>Awareness of the consortium</p> <p>Raise awareness of the whole consortium on the regulatory aspects; consider organising training to ensure engagement of all project partners. Check whether the consortium has the necessary regulatory expertise.</p>
<p>Regulatory strategy and interaction plan</p> <p>Outline an initial regulatory strategy and interaction plan.</p>	<p>Regulatory strategy and interaction plan</p> <p>Flesh out the regulatory strategy and interaction plan and update it as needed.</p>
<p>Regulatory expertise</p> <p>Consider whether you need and have the necessary regulatory expertise in your consortium.</p>	<p>Data management plan (DMP)</p> <p>Tailor your Data Management Plan (DMP) to your regulatory strategy.</p>
<p>Interactions with regulatory agencies</p> <p>Get familiar with the appropriate support services/processes offered by regulatory authorities for interaction.</p>	<p>Interactions with regulatory agencies</p> <p>Select the entry channel for engaging with regulators; initiate interaction as early as feasible.</p>
<p>Resources</p> <p>Consider the need for having appropriate resources, budget, and define timing of activities in the workplan to pursue the regulatory strategy and interaction plan with the regulatory authorities</p>	<p>Sustainability</p> <p>Elaborate the sustainability plan to ensure the maintenance of the data after the end of the project, and their use to complement additional data generated for regulatory purpose and/or regulatory interaction.</p>
	<p>Sharing experience</p> <p>Consider sharing your experience and lessons learned on the development of tools for potential regulatory science applications and regulatory interactions that could be relevant to other project consortia and regulatory agencies.</p>

3 Introduction

Many of the research projects funded under IMI and now IHI are contributing to the advancement of regulatory science by fostering the development of novel methodologies relevant for the development, evaluation or use of medicines, vaccines or medical technologies, and as such will generate outputs/results that may have an influence on regulatory decision-making.

Example of such novel tools/methodologies include:

- methodologies/tools to improve clinical trials / clinical investigations / the performance studies of innovative health technologies and their combination;
- biomarkers, endpoints, clinical outcome assessments, patient reporting tools;
- modelling and simulation tools;
- pre-clinical tools (e.g. safety biomarkers), models to facilitate early go/no go decisions.

To ensure the translation of novel tools/methodologies and their potential implementation for the development of health products and regulatory decision-making for the benefits of patients, it is important that consortia are well-informed about the regulatory framework and the relevant key regulatory requirements. This will maximise the chances of research outputs being turned into impactful innovations that meet regulatory standards, and so could achieve regulatory acceptance, subsequently be used by other researchers/developers, and ultimately reach patients. This will also increase the awareness of the research outputs as well as help ensuring their sustainability.

For instance, if a novel method has obtained a regulatory qualification by EMA and/or FDA, it means that this method is acceptable from a regulatory perspective for application in a specific research and development context (the so-called “context of use”) based on a formal regulatory process evaluating the scientific merit of the evidence provided. As the qualification opinion is publicly available, such a method can then be used within this specific context by other researchers/developers in their development of healthcare products and integrated in regulatory review.

Applicants should carefully read the topic text while preparing their proposals and consider the objective of the topic/proposal and at which stage of the health innovations/solutions development lifecycle the outputs may have impact. For instance, if a biomarker is to be used in the exploratory phase of development, it may not require regulatory acceptance. However, if it is anticipated already that the project results/outputs could help the development and the evaluation of health technologies (i.e. medicinal products, medical devices, in vitro diagnostics (IVD), procedures etc.) as well as making better-informed regulatory decisions, applicants should proactively build their research plan in such a way that it could enable future regulatory acceptance/qualification of their results/outputs.

Evidentiary standards required for project results to be utilised in regulatory decision making are high. It requires therefore careful and significant work in identifying, defining, and developing a clear regulatory strategy and interaction plan from the start. It is important that this is planned in the workplan to start early after the start of the project. Early interaction with regulatory agencies is essential to obtain valuable feedback on the proposed strategy, for instance to develop and test the methodology. To this end, regulatory agencies, like national competent authorities, the EMA and FDA, offer support services to researchers.

The regulatory strategy and interaction plan will need to be updated as necessary during project implementation. For instance, the workplan may also have to be readjusted with respect to the data generating activities further to interactions with regulators.

Considering the knowledge and experience that regulators have with a range of methodologies and their applications in research and development, consortia may also think of consulting them. For instance, to complement any systematic literature review conducted by a consortium, a consultation with regulators as stakeholders might be helpful to gather further insight on the subject matter.

4 Considerations for applicants when preparing their proposals

4.1 Regulatory objective

Read carefully the call topic you wish to apply to and consider whether there is any regulatory objective(s) or if the project results are expected to be acceptable for regulatory use, e.g. are applicants expected to pursue the regulatory acceptance/qualification of the project outputs? Are the results/outputs expected to be used for regulatory purposes, for instance for regulatory decision-making in the context of development of health products (e.g. medicinal products, imaging biomarkers, medical devices). If they are, it is important that as applicants you bear this in mind when preparing your proposal. In this way the concept and methodology proposed will generate solid evidence to deliver tangible scientific outputs.

If the call topic is not so explicit, depending on the angle you propose as applicants to address the topic, the expected results/outputs may still be of regulatory relevance. You should keep this in mind when preparing the proposal.

Similarly, it is important that you anticipate any future development of an expected project's result (e.g. a novel methodology) and its future potential use in the development of healthcare products even if after the end of project. This may influence your approach and methodology to generate the results during project implementation. For instance, to evaluate a candidate biomarker, assays need to be developed and early testing will be necessary. These early results are not likely to be at a stage appropriate for engagement with regulators, so a regulatory strategy and interaction plan may not be needed. However, it may be beneficial to anticipate future work that would be needed to seamlessly build on data generated by the project towards potential use in the development of healthcare products (e.g. imaging biomarkers).

At every stage of your research, it is crucial that you consider measures to ensure the generation of high-quality data for instance via the use of relevant standards and in this way, ensure data quality and reproducibility.

4.2 Regulatory landscape

It is important you understand the regulatory context and the objective to be addressed relevant to your proposal. This is especially important in the rapidly evolving field of science and of technology convergence. There may be complex situations where different legislations apply. For instance, for integrated healthcare solutions, i.e. innovative solutions integrating various technologies, it would be important to take on board the interplay of the medicines/medical devices/IVD regulations and the role of the different regulators. At this stage, the pathway you would have to follow may not be clear. Nonetheless being aware of the applicable regulatory framework and the relevant regulatory authorities will help you to prepare the proposal and define the regulatory strategy and interaction plan.

4.3 Regulatory strategy and interaction plan

Having a regulatory strategy and interaction plan will help your consortium to achieve its goals. When you submit your proposal, only an initial outline is expected. However, a fully-fledged regulatory strategy and interaction plan would be recommended in the early days of the project to help the consortium with the implementation of the workplan. To facilitate this, you are encouraged to consider including a deliverable related to a refined regulatory strategy and interaction plan within around 6 months of the project start.

4.4 Regulatory expertise within the applicant consortium

You should carefully consider the need of having the appropriate regulatory expertise in your consortium. This is important not only to help considering the regulatory objective, understanding the regulatory landscape, and developing the regulatory strategy and interaction plan (points 4.1 to 4.3 above), but also for leading future interactions with regulatory agencies, including the preparation of briefing documents. Industry beneficiaries from pharma, biotech, vaccines, and medical technologies companies are usually familiar with the regulatory environment and are experienced in interacting with regulatory agencies. As such industry partners (IHI JU private members, their constituent and affiliated entities) could consider providing such expertise as part of their in-kind contribution.

The participation of regulators in applicant consortia is also welcome as a way to benefit from their regulatory knowledge, experience and insights to steer the project. It is important to note that several regulatory agencies have developed guidance on their possible participation in research consortia.

For instance the EMA has defined [criteria](#) to decide whether or not to participate in a particular project.

The EU Heads of Medicines Agencies have released [guidance](#) to research / project teams on considerations prior to requesting the involvement of national competent authorities in research projects.

The FDA Center for Drug Evaluation and Research (CDER) and Center for Biologics Evaluation and Research (CBER) have an established [process](#) for their staff to engage in consortia and public private partnerships discussions when the project objectives are viewed to be valuable to their mission, and where their staff have the potential to aid the consortium or PPP in achieving the objectives.

It is important to remember that having regulators in the consortium will not replace, but will be complementary to, formal interactions with regulatory agencies using the various procedures in place.

4.5 Interactions with regulatory agencies

In line with the strategy and interaction plan, it is important to reflect in your workplan relevant tasks related to interactions with regulators at appropriate timepoints. The type of interactions and procedures envisaged to get regulatory and scientific support on the development of novel methodologies will depend on their nature and the maturity of the project. In all cases, early engagement is recommended, using the appropriate services offered by regulatory authorities.

Many EU national competent authorities have initiated specific support activities for scientific interaction and have built up innovation offices with close links to local innovators, to facilitate early dialogue with universities, research institutes, hospitals, consortia and local small enterprises. The support tools offered by national competent authorities include but are not limited to: informal innovation office meetings, e.g. orientation meeting, kick-off meetings, early regulatory advice; formal scientific advice; clinical trial application advice; regulatory/procedural advice; qualification advice; and health technology assessment advice. Some national competent authorities also offer training programmes, lectures, workshops and webinars to academic developers, covering various regulatory/legislation topics, aspects of good practice, as well as more specific areas of drug development such as quality, non-clinical and clinical development.

For more information, please refer to the [Comprehensive Inventory \(CI\) developed by the STARS consortium to assist European academic drug developers in finding support on regulatory affairs](#).

An overview of the opportunities for interaction with the EMA and FDA is annexed to this document.

4.6 Resources

Pursuing a regulatory objective will require time, work, and resources, e.g. for preparing briefing documents to interact with regulators. Therefore, as applicants you should ensure you allocate appropriate resources in your proposal's workplan in terms of person-months as well as budget to conduct these activities, including interactions with regulatory agencies using existing support services. These resources can be adjusted during project implementation. Some regulatory support services offered by regulatory agencies attract fees, and the fees depend on the type of submitter (e.g. academic, SMEs). For this reason, you should consider putting aside a certain proportion of budget to plan for the costs of regulatory interactions. Costs incurred to cover regulatory fees can be eligible costs under IMI and IHI.

5 Recommendations to consortia during project implementation

5.1 Awareness of the consortium

Some beneficiaries of your consortium may not be familiar with the regulatory principles, and may not know that before an output could be used in the regulatory framework and deployed in real life, it needs to meet certain regulatory standards. To ensure that the whole consortium is engaged with a common goal, all partners of the consortium should understand why it is useful for the project to engage with regulatory authorities. Furthermore, it is important that all are made familiar with the regulatory context, the terminology, and the potential relevant regulatory pathways to follow. Knowledge and understanding of regulatory aspects can help to increase the efficiency and success of your project.

Such elements and pathways could be presented together with the regulatory strategy and interaction plan at an early meeting of the project. Organising a training for the whole consortium could be considered, preferably done by someone with regulatory experience who may be responsible for leading the regulatory strategy. This is particularly important since interactions with regulatory agencies will require collaborative effort and input from various members of the consortium with different expertise (clinical, statistical, technical, regulatory, etc.).

5.2 Regulatory strategy and interaction plan

At the start of your project, finalise your regulatory strategy and interaction plan.

The regulatory strategy and interaction plan is a living document and should be updated whenever there has been an interaction with a regulatory agency by the project team, and/or whenever needed to ensure that as data are acquired, they will be adequate to achieve the regulatory objective.

It should be remembered that regulatory procedures such as the EMA qualification of novel methodologies for medicines development and the FDA qualification programmes takes time and may be complex.

5.3 Data Management Plan

A detailed Data Management Plan (DMP) for making the data/research outputs findable, accessible, interoperable and reusable (FAIR) is required for all projects as a deliverable by month 6, and should be revised during the project implementation. A template for the DMP is provided under the reporting templates in the Funding & Tenders Portal Reference Documents (Project reporting templates) [page](#).

When developing your DMP, remember to tailor it to your regulatory strategy. For instance, it is critical to use data standards and criteria for quality and reliability of the data generated or collected to ensure their full potential in a regulatory context and that they are fit-for-purpose. Example of standards or guidance documents are listed under section 6 “Reference documents”.

Furthermore, it is important to consider aspects such as:

- the types of data generated that may be used for interactions with regulators and where they reside;
- the governance of the data, and their use after the end of project funding, especially in cases where more data would need to be generated to provide additional evidence to pursue the full qualification of the tool/methodology.

This is particularly relevant in view of the duration of IMI/IHI projects. It is highly likely that after the end of your project, access to data would still be necessary to continue interactions with regulators. Additionally, several regulatory qualification opinions by EMA and FDA require continued access to data to support the use of the methodology in medical product development after the opinion is issued (e.g. active databases and registries).

The DMP should be updated as needed along with the regulatory strategy and interaction plan.

5.4 Interactions with regulatory authorities

Identify the possible entry channels for engaging in dialogue with relevant regulatory agencies. Select the best applicable regulatory procedures offered by the regulatory agencies depending on the stage of the project and the feedback needed. Depending on the support services selected there may be fee associated and there may be different fee depending on the submitter.

Develop a timeline for engagement with regulators and include a mechanism for obtaining regulatory input as early as possible in the project. It is important to factor in your workplan the timing from receiving feedback from the regulatory agencies which may depend on the type of procedure selected as well as the agency. Initiate interaction as early as possible.

While one partner of the consortium may lead the engagement process, make sure that the actual interactions with the regulatory authorities are done jointly by public and private partners in a collaborative effort. This joint activity contributes to strengthening the regulatory knowledge, awareness and skills notably of the public partners who may be less familiar.

Remember also that interactions are likely to be iterative and resource-intensive.

5.5 Sustainability plan

Given the typical duration of funding for IMI/IHI projects and the typical time needed to define, obtain and summarise data for regulatory purposes, make sure you define a sustainability plan so that the data are readily available following completion of the project and can be used subsequently to complement additional data generated (refer also to the DMP).

Consider securing access to all materials including data generated during the project to ensure that they can be used to support future regulatory submission.

5.6 Sharing experience

Achieving regulatory acceptance of project results can be a complex, comprehensive and laborious process, so as consortia you are encouraged to share your experiences and lessons learned. These may provide valuable information relevant to other consortia as the guidance and framework documents from regulatory agencies may not cover all considerations. It also provides valuable feedback to regulatory agencies on users' experience with their procedures. A number of IMI projects have already shared their experience (see section 6).

5.7 Regulatory strategy and interaction plan

The regulatory strategy and interaction plan is a document that outlines what you intend to support, e.g. the development of a new methodology, how that data will be obtained, and how it will be used to support regulatory endorsement submissions. While there is no defined structure for the regulatory strategy and interaction plan, the following elements should be considered:

- Description of the way the expected project result (e.g. novel methodology/tool) is envisaged to be used, its purpose, and if data to be generated are intended to be used for regulatory purposes.
- Proposed context of use (CoU), i.e. the manner and purpose of use of the methodology/tool. The CoU is a concise description of how the methodology/tool will be specifically used and the medical product development-related purpose of the use; this should be defined at an early stage as it will guide aspects of the workplan to generate the evidence demonstrating the use of the proposed methodology in the defined context. The rationale and the context of use are essential in defining the strategy and validation plan towards regulatory qualification. This includes critically discussing existing data, technical / operational aspects, assumptions for the data generation and modelling process, a rationale for the methodological approach to establish / validate the proposed context of use. An example of context of use is "Predictive biomarker to enrich for enrolment of a subgroup of asthma patients who are more likely to respond to a novel therapeutic in Phase 2/3 clinical trials"⁴.
- A development plan for the novel methodology, i.e. for generating and collecting robust data to support the context of use (e.g. standards for data, procedures for data access, plan for aggregation of data, etc.). Consider having a proper analytical validation plan (e.g. issues about sensitivity, specificity, reproducibility etc.), clinical validation plan (e.g. proper design of the study to generate robust data), and statistical analysis plan (e.g. statistical methods to analyse data).

Evidentiary requirements will mainly be driven by the proposed context of use and cannot be generalised.

⁴ <https://www.fda.gov/drugs/biomarker-qualification-program/context-use>

6 Reference documents

Below are links to several relevant documents. Please note that this list is not exhaustive.

EU legislative framework and guidance

The European Commission website provides information and links:

- requirements and procedures for marketing authorisation, as well as the rules for monitoring authorised products, which are primarily laid down in Directive 2001/83/EC and in Regulation (EC) No 726/2004.
All EU legislation in the area of medicinal products for human use is listed in Volume 1 of "The Rules Governing Medicinal Products in the European Union" (https://health.ec.europa.eu/medicinal-products/eudralex/eudralex-volume-1_en)
- on issues that are relevant for the implementation of the MDR and IVDR [Medical Devices - Topics of Interest \(europa.eu\)](#)
 - [Harmonised standards](#): harmonised European standards under the MDR and IVDR developed by CEN and Cenelec as European standardisation organisations
 - [Combined studies](#): interface between the Regulations on clinical trials of medicinal products, medical devices and IVDs
 - [Guidance documents endorsed by the Medical Device Coordination Group \(MDCG\)](#): These documents present a common understanding of how the MDR and IVDR should be applied in practice aiming at an effective and harmonised implementation of the legislation. These documents are classified by subject areas. Without pre-empting the future needs of applicants and consortia, the following areas could be highlighted as of particular relevance in the context of IHI proposals/projects: "clinical investigation and evaluation", "borderline and classification", "in vitro diagnostic medical devices" and "new technologies".

EMA

- [Qualification of novel methodology for drug development: guidance to applicants](#)
- [Essential considerations for successful qualification of novel methodologies.](#)
- [Questions and answers: Qualification of digital technology-based methodologies to support approval of medicinal products.](#)

FDA

- [Biomarker Qualification: Evidentiary Framework](#)
- [BEST \(Biomarkers, EndpointS, and other Tools\) Resource](#)
- [Qualification Process for Drug Development Tools – Guidance for Industry and FDA Staff](#)
- [Drug Development Tool \(DDT\) Qualification Programs](#)
- [Innovative Science and Technology Approaches for New Drugs \(ISTAND\) Pilot Program](#)
- Medical Device Development Tools (MDDT) Qualification [webpage](#)

Publications from IMI projects and other relevant project deliverables

- **BEAT-DKD**: Biomarker qualification at the European Medicines Agency: A review of Biomarker Qualification Procedures from 2008 to 2020 <https://doi.org/10.1002/cpt.2554>
- **IDEA-FAST**: Regulatory Qualification of a Cross-Disease Digital Measure: Benefits and Challenges from the Perspective of IMI Consortium IDEA-FAST <https://doi.org/10.1159/000533189>
- **LITMUS**: NAFLD and NASH biomarker qualification in the LITMUS consortium – Lessons learned <https://doi.org/10.1016/j.jhep.2022.11.028>
- **MOBILISE-D**: Toward a Regulatory Qualification of Real-World Mobility Performance Biomarkers in Parkinson's Patients Using Digital Mobility Outcomes <https://doi.org/10.3390/s20205920>
- **RADAR-AD**: The Use of Remote Monitoring Technologies: A Review of Recent Regulatory Scientific Advices, Qualification Opinions, and Qualification Advices Issued by the European Medicines Agency <https://doi.org/10.3389/fmed.2021.619513>
- **HARMONY** deliverable "[Qualification for novel methodologies' stakeholders guide](#)" <https://cordis.europa.eu/project/id/116026/results>

- **NEURONET:** [regulatory and HTA decision tool](#) that outlines key processes and procedures for engaging with regulatory, HTA bodies, and payers, and may help IMI/IHI projects identify relevant procedures, based on the project's stage of research and asset developed

Examples of data standards and guidance (list non-exhaustive)

- [CDISC standards](#) in the clinical research process
- [HL7® FHIR® standard](#) that allows the sharing and reuse of scientific data
- [The International Council for Harmonisation of Technical Requirements guidelines](#) - for instance multidisciplinary guidelines M11 (Clinical electronic Structures Harmonised Protocol - ceSHaP) and M14 (Guideline on General Principles on Plan, Design, and Analysis of Pharmacoepidemiological Studies that Utilize Real-World Data for Safety Assessment of Medicines).
- [HMA-EMA Catalogues of real-world data sources and studies](#)
- [List of metadata for the HMA-EMA Catalogues of real-world data sources and studies](#)
- [EMA Good Practice Guide for the use of the Metadata Catalogue of Real-World Data Sources](#)
- [EMA Data quality framework for EU medicines regulation](#)
- [EMA Reflection paper on the use of artificial intelligence in the lifecycle of medicines](#)
- [FDA Using Artificial Intelligence and Machine Learning in the Development of Drug and Biological Products](#)
- [International Medical Devices Regulators Forum: Machine Learning-enabled Medical Devices: Key Terms and Definitions \(IMDRF/AIMD WG/N67\)](#)

Annex - Overview of the opportunities for interaction with EMA and FDA

Regulatory agencies offer a range of services to support the development of novel methodologies. The table below provides an overview of the services available at the EMA and FDA. Please refer to the EMA and FDA websites for more information on these services and procedures. All these services/procedures/programmes are voluntary.

Main EMA procedures to support the development of innovative methodologies

	Scope	Fee	Link for more information
EMA support to externally funded regulatory science projects	Informal advice on (1) plans for regulatory interactions and (2) potential involvement of the EMA.	No fee	Regulatory.science@ema.europa.eu
Innovation task force (ITF) briefing meetings	Forum for early dialogue on medicines innovation. Informal regulatory, technical forum and scientific input on broad areas, any products, technologies and methodologies. Multidisciplinary platform to provide early dialogue on innovative aspects in medicines development.	No fee	For more info and how to apply: https://www.ema.europa.eu/en/human-regulatory-overview/research-development/supporting-innovation#applying-for-a-briefing-meeting
Scientific advice	Procedure to support the timely and sound development of high-quality, effective and safe medicines, for the benefit of patients. Ensure key aspects of the development is in line with regulatory expectations. Follow-up SA possible.	Fee (Fee incentives for SMEs, academia)	For more info: www.ema.europa.eu/en/human-regulatory/research-development/scientific-advice-protocol-assistance Contact: scientificadvice@ema.europa.eu
Qualification of novel methodologies for medicine development	Procedure to seek scientific advice or an opinion to support the qualification of innovative development methods (rather than a specific product) for a specific intended use in the context of research and development into pharmaceuticals.	Fee (fee incentives for SMEs, academia)	For more info: www.ema.europa.eu/en/human-regulatory/research-development/scientific-advice-protocol-assistance/qualification-novel-methodologies-medicine-development-0 To apply: https://www.ema.europa.eu/en/qualification-novel-methodologies-medicine-development Contact: scientificadvice@ema.europa.eu

	<p>Novel methodologies for drug development not yet integrated in the drug development and clinical management paradigm.</p> <p>At any stage of development but early advice with subsequent follow-up is recommended.</p>		
SME briefing meeting	<p>Platform for early dialogue with SMEs.</p> <p>Discuss the regulatory strategy of a medicinal product development. Navigate the range of procedures and incentives available.</p>	<p>No fee</p> <p>Open to SMEs and academia only</p>	<p>SME entry points / SME office: www.ema.europa.eu/en/human-regulatory/overview/supporting-smes SME@ema.europa.eu</p> <p>Academia liaison: www.ema.europa.eu/en/partners-networks/academia Academia@ema.europa.eu</p>

Scientific/qualification advice

EMA offers the possibility to request an EMA/EUnetHTA parallel consultation (see more information [here](#)). There is also an opportunity to request the involvement of non-EU regulatory agencies, notably the FDA, in a qualification advice procedure.

For medical devices

EMA has recently put in place a [pilot process](#) to provide advice on the development of certain high-risk medical devices.

EMA is responsible for evaluating the quality, safety and efficacy of marketing authorisation applications assessed through the centralised medicinal product authorisation procedure, including the safety and performance of the medical device in relation to its use with the medicinal product. SMEs and academia working on medical devices can still apply to have an ITF Briefing Meeting. Find out more on the [EMA website](#).

Main FDA procedures to support the development of innovative methodologies

	Scope	Fee	Link for more information
Critical path innovation meetings (CPIM)	<p>To discuss a methodology or technology proposed by the meeting requester and for CDER to provide general advice on how this methodology or technology might enhance drug development.</p> <p>Potential topics for a CPIM include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • biomarkers in the early phase of development and not yet ready for the Biomarker Qualification Program (BQP); • Clinical Outcome Assessments in the early phase of development and not yet ready for the Clinical Outcome Assessment Qualification Program; • natural history study designs and implementation; • merging technologies or new uses of existing technologies; • innovative conceptual approaches to clinical trial design and analysis. 	No fee	https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/critical-path-innovation-meetings-cpim
Biomarker Qualification Program	<p>To support outreach to stakeholders for the identification and development of new biomarkers</p> <p>To provide a framework for the review of biomarkers for use in regulatory decision-making</p> <p>To qualify biomarkers for specific contexts of use that address specified drug development needs</p>	No fee	https://www.fda.gov/drugs/drug-development-tool-ddt-qualification-programs/biomarker-qualification-program
Clinical Outcome Assessment (COA) Qualification Program	Qualification process for COAs intended to address unmet public health needs.	No fee	https://www.fda.gov/drugs/drug-development-tool-ddt-qualification-programs/clinical-outcome-assessment-coa-qualification-program
Animal Model Qualification Program	Qualification process for animal models	No fee	https://www.fda.gov/drugs/drug-development-tool-ddt-qualification-programs/animal-model-qualification-program-amqp

Innovative Science and Technology Approaches for New Drugs (ISTAND) Pilot Program	<p>The (ISTAND) Pilot Program is designed to expand Drug Development Tool (DDT) types by encouraging development of DDTs that are out of scope for existing DDT qualification programmes but may still be beneficial for drug development.</p>	<p>No Fee</p>	<p>https://www.fda.gov/drugs/drug-development-tool-ddt-qualification-programs/innovative-science-and-technology-approaches-new-drugs-istand-pilot-program</p>
Qualification of Medical Device Development Tools	<p>Voluntary programme for the qualification of medical device development tools (MDDTs) for use in the evaluation of devices regulated by Center for Devices and Radiological Health (CDRH).</p>	<p>No Fee</p>	<p>https://www.fda.gov/regulatory-information/search-fda-guidance-documents/qualification-medical-device-development-tools contact: mddt@fda.hhs.gov</p>
Fit-for-Purpose Initiative	<p>Provides a pathway for regulatory acceptance of dynamic tools for use in drug development programmes. Due to the evolving nature of these types of drug development tools (DDTs) and the inability to provide formal qualification, a designation of 'fit-for-purpose' (FFP) has been established. A DDT is deemed FFP based on the acceptance of the proposed tool following a thorough evaluation of the information provided. The FFP determination is made publicly available to facilitate greater utilisation of these tools in drug development programmes.</p>	<p>No fee</p>	<p>https://www.fda.gov/drugs/development-approval-process-drugs/drug-development-tools-fit-purpose-initiative</p>