



Strategic vision for the future of European EFS

Giuditta Callea

HEU-EFS Principal Investigator | Bocconi University

HEU-EFS Public Forum, 04.11.2025

What are Early Feasibility Studies



What

When

Why

Purpose

investigation of a medical device early in development.

Typically, **before the device design** has
been finalized, for a
specific indication.

Additional **nonclinical** tests are either **not available** or **non informative**.

To evaluate the device design concept with respect to initial clinical safety and performance or effectiveness as per intended use in a small number of subjects.

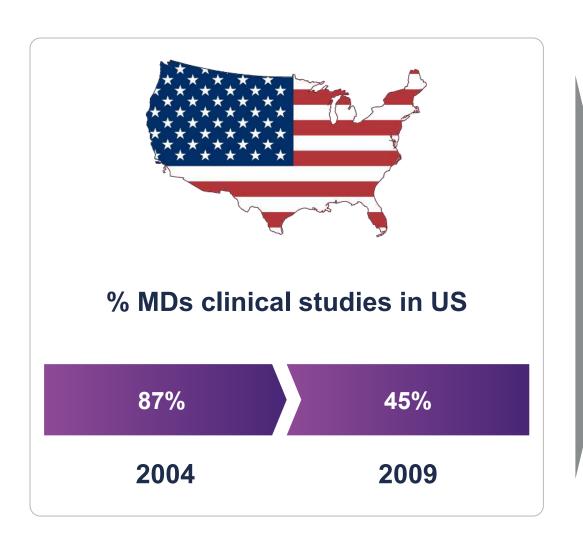
from an EFS can

guide device

modifications.

The FDA has an EFS Program since 2013





Investigational Device Exemptions (IDEs) for Early Feasibility Medical Device Clinical Studies, Including Certain First in Human (FIH) Studies

Guidance for Industry and Food and Drug Administration Staff

Document issued on: October 1, 2013

The draft of this document was issued on November 10, 2011.

For questions regarding this document, contact CDRH's Andrew Farb, 301-796-6343, <u>Andrew Farb@fda.hhs.gov</u> or Dorothy Abel, 301-796-6366, <u>Dorothy.Abel@fda.hhs.gov</u>, or CBER's Office of Communication, Outreach and Development at 1-800-835-4709 or 301-827-1800

> U.S. Department of Health and Human Services Food and Drug Administration Center for Devices and Radiological Health Center for Biologics Evaluation and Research

EFS are feasible in the EU





ISO 14155:2020 Clinical investigation of medical devices for human subjects good clinical practice



MDR 2017/745 and HTAR 2021/2282 early dialogue and life cycle approach for clinical evidence generation



MDCG 2021-6 – Rev 1.
December 2023 Q&A regarding clinical investigation

| Regulatory Status | Pre-market | | Post-market |
|--|---|---|---|
| Clinical development stage | Pilot stage <u>(1.3.2)</u> | Pivotal stage (1.3.3) | Post-market stage (1.3.4) |
| Type of design | Exploratory or confirmatory (1.4.2) | Confirmatory (1.4.3) | Observational (1.4.4) |
| Descriptors of clinical investigations | First in human clinical investigation (1.5.2) Early feasibility clinical investigation (1.5.3) Traditional feasibility clinical investigation (1.5.4) | Pivotal Post-market clinical clinical investigation (1.5.5) (1.2.3) | Registry ^a (1.5.6) Post-market clinical investigation ^a (1.2.3) |
| Burden to subject | Interventional <u>(1.6.2)</u> | | Non-interventional (1.6.3) |

EFS are beneficial









Patients

Health Systems

Clinical & Innovation Excellence

Patients with no or little
treatment options access safe
innovative technologies to
improve prognosis and quality of
life.

Payers and policymakers make evidence-based, informed investment decisions that meet patient needs and generate value for society.

Companies develop innovations that meet patient and healthcare professional needs.

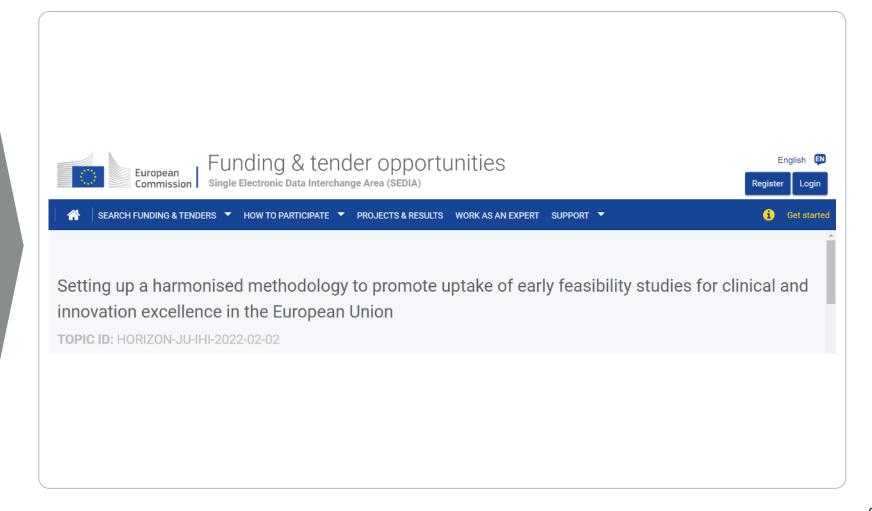
Healthcare professionals deepen their clinical development excellence.





No harmonised
procedural
framework, guidelines
or common reference
standards to conduct
EFS in the EU

The EU is at risk
of losing
competitiveness
and attractiveness
for innovation and
investments



Harmonized Approach to Early Feasibility Studies for Medical Devices in the European Union (HEU-EFS)





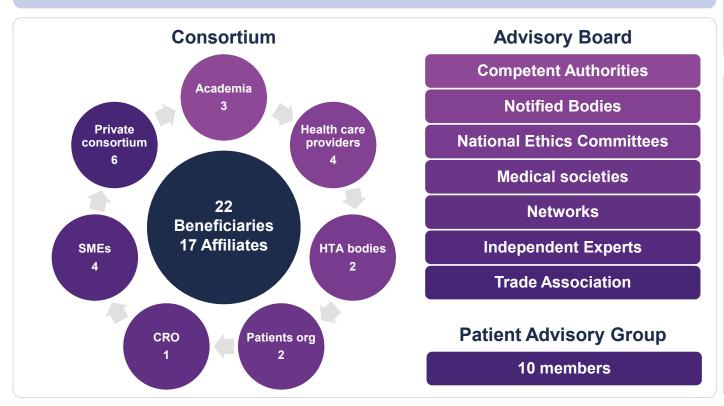
Project information

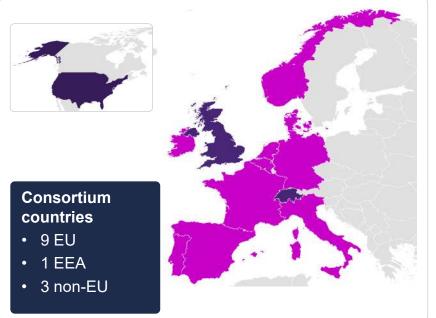
Start date: 1 October 2023 End date: 30 September 2027 **DOI:** <u>10.3030/101112185</u> **Total cost:** € 19 008 438,75



Goal

Formulate recommendations for the establishment of an Early Feasibility Studies Program within the European Union, with a focus on ensuring **patient safety** and enhancing the EU single market **competitiveness**.





HEU-EFS Consortium

































Johnson & Johnson Med Tech









Qurasoft



Phases of the HEU-EFS Project



| Research & analysis | Framework development | Framework test | | |
|--|---------------------------------------|-----------------|--|--|
| Consultation with HEU-EFS Consortium | | | | |
| Literature review | Mapping of EU regulatory pathways | Pilot use cases | | |
| Review of US FDA EFS program | | | | |
| Data collection on EFS | | | | |
| Analysis of international standards, EU regulation, MDCG Guidance | | | | |
| Mapping of pre-market approval pathways and ethical approval process | | | | |
| | Surveys, interviews & focus groups | | | |
| Con | nsultation with AB, PAG, DGSANTE, CIE | WG | | |









Thank you!

This project is supported by the Innovative Health Initiative Joint Undertaking (JU) under grant agreement No 101112185. The JU receives support from the European Union's Horizon Europe research and innovation programme and life science industries represented by MedTech Europe, COCIR, EFPIA, Vaccines Europe and EuropaBio.













