



Assessment of the national research organizations

ASSESSMENT REPORT OF INSERM
(NATIONAL INSTITUTE FOR HEALTH
AND FOR MEDICAL RESEARCH)

December 2025

On behalf of the committee of experts:

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On behalf of Hcéres:

Coralie Chevallier, president of *Hcéres*

In application of articles R. 114-10 and R. 114-15 of the French research Code, the assessment reports are signed by the chairperson of the assessment committee and countersigned by the president of Hcéres.

Executive summary

Founded in 1964, the National Institute for health and for medical research (*Inserm : Institut national de la santé et de la recherche médicale*) is a French public research institution under the supervision of the minister in charge of research and the minister in charge of health. Its missions, defined by Decree No. 83-975 of November 1983, as amended, are to:

- encourage, undertake, develop, coordinate and organise, in the medium and long term, on its own initiative or at the request of public authorities, all research work aimed at:
 - in the field of life and health sciences and in disciplines that contribute to health and medical progress, the acquisition and development of knowledge related to human health and to factors that influence it, both in terms of individual and collective health and with regard to physical, mental, and social factors;
 - the discovery and evaluation of all means of intervention aimed at preventing, diagnosing and treating diseases or their consequences and improving the health of the population;
- contribute to the promotion of the results of the research it conducts or organises;
- collect and centralise information in its field of activity, to keep the government and other public authorities informed of the knowledge acquired, and contribute to a scientific watch and to the development of a national research and health policy in the areas within its competence;
- promote the publication of all works and studies relating to its own activities and those it organises [...];
- contribute to higher education and to training in research and through research [...];
- carry out or contribute to carrying out scientific expertise.

Inserm's activities cover fundamental and translational research, clinical and preclinical trials, cohorts and epidemiological studies, expertise for public health and research policy, technology transfer and biomedical research platforms. These activities are organised into nine thematic institutes: molecular and structural basis of life sciences; cell biology, reproduction, development and evolution; genetics, genomics and bioinformatics; neurosciences, cognitive sciences, neurology and psychiatry; cancer; immunology, inflammation, infectiology and microbiology; physiopathology, metabolism, nutrition; public health; health technologies.

Inserm conducts its research in partnership with a wide range of actors, the majority of which are universities and also with university hospitals and with other French national research organisations such as the CNRS and other actors (including *grandes écoles*, cancer treatment centres, private foundations, etc.). Research is performed in research units shared with these partner institutions. Inserm is involved in 278 'joint research units', located in over 50 cities in France, as well as in 48 'service units' (mainly core facilities shared between research units), and 34 'clinical investigation centres' located in university hospitals. Inserm's headquarters are in Paris.

In 2023, Inserm employed 8,691 people: 4,972 permanent staff (civil servants), including 2,180 researchers and 2,792 engineers, technicians and administrative staff, as well as 3,719 non-permanent staff, including 1,808 contract scientists and 1,911 contract support staff. Inserm's units employed 28,800 persons at the end of 2023, including 6,820 employees of Inserm and 21,980 employees from partner institutions. Inserm had a total budget of €1.15 billion in 2023, including €0.71 billion (62%) from the subsidy allocated by the French State, and €0.44 billion (38%) in other revenues.

Inserm's Objectives and performance Contract with the French State for the 2021-2025 period affirms that Inserm has a 'dual role', as funding agency and as research performing organisation.

* * *

The reference period for the current assessment is 2019-2023. The self-assessment report was prepared by Inserm based on the Hcéres *Reference assessment framework for national organizations*, supplemented by a specific document entitled 'Key topics for the 2024-2025 assessment of Inserm', which was written by Hcéres in close relation with Inserm and published in March 2024 on the Hcéres website. Inserm's self-assessment report was delivered to Hcéres in October 2024.

The assessment committee was composed of eight experts representing five nationalities, recognised for their scientific excellence, their experience in managing higher education and research institutions, and their knowledge of the world of health and biomedical research. The assessment visit took place at Inserm headquarters in Paris between April 2 and 4, 2025. Its programme included interviews held with persons from Inserm and from Inserm research units as well as with representatives of Inserm's partners and stakeholders. The assessment committee also visited a few research units located in Paris.

The assessment committee identified the main topics examined in this report as follows:

- role and missions of Inserm in France,
- research quality, scientific strategy and policy,
- relations with universities and university hospitals, and involvement in site policies,

- innovation and relations with companies,
- European commitment and international cooperations,
- science in society,
- governance, organisation, management and operations.

* * *

Inserm, the leading French institution in health research, has a high reputation for excellence in Europe and worldwide. The self-assessment report shows that Inserm is ambitious and aims to be modern and innovative, whilst supporting research excellence. The committee acknowledges that, in several key areas, namely innovation and cooperation with private companies, participation in European research and innovation programmes, and dialogue of science with society, Inserm remarkably amplified its actions and improved its results during the assessed period.

The assessment committee observed that the mandate, entrusted in 2024 to Inserm by the French government, to establish a new 'health research programme agency' is a clear priority for Inserm's top management, which has given this programme agency a good start. The committee's main recommendation in this regard is to define a clear strategy and policy to separate Inserm's developing role as a programme agency from its role as a research performing organisation. It is also recommended that the budget and governance of the programme agency be separated from Inserm as research performing organisation, and that clear working mechanisms be defined for the next steps of the programme agency, with the aim of prioritising a limited number of research programmes, while paying major attention to transparency and seizing opportunities for simplification and for the reduction of fragmentation.

Concerning research quality at Inserm, the committee recommends developing the culture and practice of research assessment at the international level by systematically taking advice from foreign experts in the assessment of researchers and by developing international comparisons. In addition, Inserm as research performing organisation should define a clear scientific strategy, including explicit priorities. Population health is identified as one of these priorities, with the aim of raising Inserm to the best international level over the next five years. Moreover, Inserm is encouraged to establish an ambitious action plan to position itself as a leader in the data and digital transformation of health research. The committee also suggests pandemic preparedness should be an important part of strategy and policy for Inserm, in line with the biomedical strategies worldwide.

The committee strongly recommends that Inserm as research performing organisation focus on improving local relationships with universities and university hospitals, with a much greater leadership role for the universities in line with international examples. This should be combined with modernised governance and simplified management of joint research units, in the framework of a deepened partnership between Inserm and research-intensive universities. This should also be combined with initiatives aimed at improving clinical research and strengthening synergies between universities and university hospitals.

In addition to pursuing and consolidating its efforts to strengthen its participation in EU-funded research and innovation programmes, Inserm is encouraged to define and implement a strong and visible European strategy with targeted priorities, including strategic partnerships with key European public and private actors in the field of health research and innovation. It is suggested that this European strategy be developed in coordination with French partner universities in order to leverage on certain 'European university networks', which are increasingly transforming academic partnerships in Europe.

The assessment committee's analyses and recommendations also concern Inserm's organisation, management and operations. The internal organisation would benefit from being clarified and updated in view of the development of the programme agency. Inserm should improve its executive management by establishing clear reporting, objective-setting and annual review mechanisms for all directors, with better coordination and increased synergies between thematic institutes, and with a strengthened role for the Executive committee as a decision-making body. The committee recommends making better use of the assignment of researchers and the allocation of budget to research units as key levers for implementing Inserm's scientific strategy. Moreover, Inserm's human resources policy should be strengthened by fully integrating contract staff, establishing a detailed multi-year perspective for the evolution of jobs and skills, and reinforcing mentoring for all permanent employees. Lastly, the committee observed that the insufficient clarity and readability of Inserm's budget and accounts, and the persisting lack of analytical accounting, make it impossible to assess whether the financial situation is sustainable.

Following its assessment, the committee made 15 main recommendations to Inserm as research performing organisation, to the programme agency and to the French State, aimed at helping Inserm become an undisputed leader in the field of health and biomedicine in Europe and worldwide. These are presented below and included in each chapter of this report. The committee also identified Inserm's main strengths and weaknesses which are presented in the conclusion of this report.

Main recommendations

The analyses of the assessment committee have led to 15 main recommendations listed below, which are described in greater detail in the body of the report. While acknowledging the quality of research conducted in Inserm research units, these recommendations are intended to enable Inserm to achieve its full potential, for the benefit of the French and European health research community, and society as a whole.

These recommendations are mainly addressed to Inserm as research performing organisation. Some of them are addressed to the recently created programme agency, and some of them are addressed to the ministry in charge of research and the ministry in charge of health for the purposes of preparing the contract between Inserm and the French State for the 2026-2030 period. Recommendations 1, 4, 6, 7 and 12 are of the highest priority.

The main recommendations are listed below in the order in which they appear in the report. More specific recommendations and suggestions are included in the report.

Recommendation 1: Clearly distinguish and separate the programme agency and Inserm as research performing organisation. Clarify the governance, objectives and working mechanisms of the programme agency, with the objective of prioritising a limited number of research programmes, and pay close attention to transparency and to seizing opportunities for simplification and for the reduction of fragmentation.

Recommendation 2: *(to the French State and Inserm)* Establish a clear multi-year perspective for the budget of the programme agency and the budget of Inserm as research performing organisation.

Recommendation 3: *(to the programme agency)* Establish with all partners a consistent national strategy for health research platforms and equipment, and a shared roadmap for its implementation.

(to the French State) Implement a consistent and sustained funding effort for platforms, including cutting-edge technological equipment, data platforms, biobanks and cohorts.

Recommendation 4: Develop the culture and practice of research assessment at the international level by systematically taking advice from foreign experts on the assessment of researchers and by developing international comparisons. Strengthen efforts to ensure that the assessment of researchers moves away from quantitative indicators and appropriately values all their contributions to Inserm's missions.

Recommendation 5: Define a clear scientific strategy for Inserm as research performing organisation, including explicit priorities, and clear directions for its implementation.

- Establish an ambitious strategy for population health, with the aim of raising Inserm to the best international level over the next five years.
- Establish an ambitious action plan to position Inserm as a leader in the data and digital transformation of health research.

Recommendation 6: Starting with experimentations at certain selected sites, implement a new 'dialogue platform' at site level, shared between the university, the university hospital, Inserm and other partners and led by the site university, with the goal of developing a unified site health research strategy.

Recommendation 7: Take rapid and significant steps to improve collaboration and deepen partnerships with universities.

- **Together with the universities, empower the directors of research units and strengthen their ability to play a leadership role, including active participation in decisions, real influence over the evolution of the research objectives of the unit, and leveraging the corresponding resources.**
- **Together with the universities, establish a clear shared governance system for the joint research units.**
- **Decentralise as much as possible the operational processes and decisions on resource allocation to research units, so that these decisions can be made in concert with partner universities.**
- **Encourage Inserm researchers to contribute to education and provide means for helping them to do so.**
- **Define a common framework for the consolidation of management data and information at all levels: units, site, and national.**
- **Establish shared objectives and consolidated indicators at the university site level.**

Recommendation 8: Clarify Inserm's role in clinical research at national and international level, on the one hand, and at site level on the other. As a programme agency, establish a programme aimed at supporting the most promising local initiatives in clinical research. Expand tools such as 'contrats d'interface' and 'Atip-Avenir' grants to medical applicants and researchers involved in clinical research.

Recommendation 9: While carefully maintaining the efficiency and professionalism of its current organisation with the *Inserm Transfert* subsidiary, establish a genuine capacity within Inserm to define and monitor its innovation strategy, and reflect carefully on how to reduce the potential risks and drawbacks of this organisation.

Recommendation 10: Define and implement a strong and visible European strategy with targeted priorities, including the development of strategic partnerships with key European public and private actors in the field of health research and innovation, in coordination with French partner universities. Define a consistent international strategy prioritising a limited number of strategic partnerships with world-leading institutions.

Recommendation 11: In order to better connect collective expert reports to current events and make them more impactful, review the decision-making process and methodology, publish them in English and make them more widely known in Europe.

Recommendation 12: Define a roadmap for major epidemic preparedness describing how the objectives, work processes, and communication strategy of the programme agency and of Inserm as research performing organisation should be adapted in the event of a future pandemic similar to the Covid-19 crisis.

Recommendation 13: Clarify the internal organisation and improve executive management with clear reporting, objective setting and annual review mechanisms for all directors, with better coordination and increased synergies between thematic institutes, and with a strengthened role for the Executive committee as a decision-making body.

Recommendation 14: Fully integrate contract staff into Inserm's vision of itself and into its human resources policy. Establish a detailed multi-year perspective for the development of contract staff jobs and skills.

Recommendation 15: Improve the clarity and readability of the budget and accounts, draw up a detailed multi-year plan for the evolution of income and expenditure, and urgently implement analytical accounting.

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Introduction

1/ Composition of the assessment committee

The assessment committee included 8 experts of 5 different nationalities:

- Anna Dominiczak, regius professor of medicine at the University of Glasgow, chief scientist for health for the Scottish government, chair of the committee;
- María Blasco, former director of the Spanish national cancer research Centre (CNIO, Spain);
- François Cuny, deputy CEO for innovation, Inria (French national research Institute in digital science and technology);
- Sylvain Ducroz, deputy CEO, *Institut Gustave Roussy*;
- Katherine Frohlich, scientific director of the Institute of population and public health of the Canadian Institutes of health research, professor of public health at the University of Montreal;
- Patrick Lévy, emeritus professor of physiology and a physician, former president of Grenoble-Alpes University;
- Roger Marthan, professor in physiology and a physician, former vice-president for research at the University of Bordeaux;
- Jessica Polka, director of the Open science programme at the Astera Institute (USA).

A brief biography of each expert is given at the end of this report.

2/ Brief presentation of Inserm

Founded in 1964, the National Institute for health and for medical research (*Inserm : Institut national de la santé et de la recherche médicale*) is a French public research institution (*établissement public à caractère scientifique et technologique*) under the supervision of the minister in charge of research and the minister in charge of health. Its missions, defined by Decree No. 83-975 of November 1983, as amended, are to:

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- collect and centralise information in its field of activity to keep the government and other public authorities informed of the knowledge acquired, and contribute to a scientific watch and to the development of a national research and health policy in the areas within its competence;
- promote the publication of all works and studies relating to its own activities and those it organises, and contribute to the national and international dissemination of scientific and technological knowledge;
- contribute to higher education and to training in research and through research in the areas within its competence;
- carry out or contribute to carrying out scientific expertise.

Inserm's activities cover fundamental and translational research, clinical and preclinical trials, cohorts and epidemiological studies, expertise for public health and research policy, technology transfer and biomedical research platforms. These activities are organised into nine thematic institutes: molecular and structural basis of life sciences; cell biology, reproduction, development and evolution; genetics, genomics and bioinformatics; neurosciences, cognitive sciences, neurology and psychiatry; cancer; immunology, inflammation, infectiology and microbiology; physiopathology, metabolism, nutrition; public health; and health technologies.

Inserm had a total budget of €1.15 billion in 2023, including €0.71 billion (62%) from the subsidy allocated by the French State, and €0.44 billion (38%) in other revenues. In 2023, Inserm employed 8,691 people: 4,972 permanent staff (civil servants), including 2,180 researchers and 2,792 engineers, technicians and administrative staff, as well as 3,719 non-permanent staff, including 1,808 contract scientists and 1,911 contract support staff.

Inserm conducts its research in partnership with a wide range of actors, the majority of which are universities, and also with university hospitals¹ and other French national research organisations such as the CNRS and other actors (including *grandes écoles*, cancer treatment centres and private foundations such as the *Institut Pasteur*).

¹ In this report, the so-called 'university hospitals' mainly include around 30 '*centres hospitaliers universitaires*' (CHUs) – sometimes called '*centres hospitaliers régionaux universitaires*' (CHRUs) – and other (smaller) institutions like '*instituts hospitaliers universitaires*' (IHUs); 7 IHUs were created in the 2010s and 12 new IHUs are currently under creation.

Research is performed in research units (i.e. laboratories) shared with these partner institutions. Typically, a 'joint research unit' is a research lab shared between two 'home institutions', Inserm and a university; the unit is a shared entity (with no legal personality) that appears in the organisation of each of its home institutions. However, 48% of the research units have more than two home institutions, and CNRS is often one of them.² Inserm is involved in 278 joint research units as well as in 48 'service units' (mainly core facilities shared between research units) and 34 'clinical investigation centres' (CIC) located in university hospitals.

Inserm's units employed 28,800 people at the end of 2023, of whom 6,820 (24%) were Inserm employees.³ Inserm considers that, in terms of 'research full-time equivalent' staff, 27% of the units' staff are Inserm employees.

Inserm's headquarters are in Paris. Research units are located in over 50 cities throughout France. Inserm also has 11 regional offices in charge of direct local management of research units and liaising with local partners and authorities.

3/ Context of the assessment

a/ Main elements of context

This is the fourth assessment of Inserm. A first assessment of Inserm was conducted in 2008 by Aéres (the predecessor of Hcéres) and another in 2020-2021 by Hcéres. Moreover, an assessment of Inserm was conducted in 2015 by an 'international review panel' chosen by Inserm's management.

The reference period for the current assessment is 2019-2023. Preparation for this assessment began between October 2023 and March 2024 with informal meetings between Hcéres and Inserm, which enabled them to discuss together the objectives, spirit and content of the assessment. Based on these discussions and on the expectations expressed by Inserm and its supervisory ministries, Hcéres set out the main issues to be addressed in the assessment: the *Reference assessment framework for national organisations* approved in October 2021 by the Board of Hcéres was supplemented by a specific document entitled 'Key topics for the 2024-2025 assessment of Inserm', which was written by Hcéres in close relation with Inserm and published in March 2024 on the Hcéres website.

This document specified that the assessment would pay particular attention to the key results and developments undertaken by Inserm since 2019, particularly those concerning the implementation of its scientific policy, its contribution to society in terms of research, innovation and expertise, as well as feedback and lessons learned from the Covid-19 epidemic. The key topics for the assessment also included Inserm's involvement in university site policies and its contribution to the development of internationally renowned universities, the quality of its relationship and cooperation with university hospitals, and its actions in open science, in particular the opening up of research data, including clinical trial data. Lastly, the document on 'key topics for the assessment' stated that Inserm's actions and results would be assessed in light of the commitments and objectives of Inserm's Objectives and performance Contract (*Contrat d'objectifs et de performance, Cop*) entered into with the French State for the 2021-2025 period,⁴ and in the context of preparing the next Cop for the 2026-2030 period.

Based on these two documents, the *Reference assessment framework for national organizations* and the 'Key topics for the 2024-2025 assessment', Inserm prepared its self-assessment report between March and October 2024, and the assessment visit took place in Paris in April 2025. The assessment committee identified the main topics examined in this report as follows:

- role and missions of Inserm in France,
- research quality, scientific strategy and policy,
- relations with universities and university hospitals, and involvement in site policies,
- innovation and relations with companies,
- European commitment and international cooperation,
- science in society,
- governance, organisation, management and operations.

Another element of context for this assessment was the change of chief executive officer (CEO) at Inserm during the assessment period. The previous CEO, Gilles Bloch, completed his four-year term at the end of 2022 and a new CEO, Didier Samuel, was appointed in February 2023.

² Written answer of Inserm to a written question of the assessment committee.

³ Written answer of Inserm to a written question of the assessment committee.

⁴ The Cop, signed by Inserm and its two supervisory ministers, determines the main priorities and objectives of Inserm for the five-year period and the key performance indicators.

b/ The self-assessment report

Inserm's self-assessment report was the main source of information for the expert committee at the beginning of its work. The main comments of the committee on the self-assessment report are set out below.

- The self-assessment report is difficult to those who are not familiar with Inserm and with the French biomedical research ecosystem. It does not provide a clear description of Inserm's organisation, activities and results, nor of its position within the French biomedical research ecosystem.
- The self-assessment report is rather descriptive, sometimes promotional, and does not engage sufficiently with critical self-appraisal. It rarely identifies where there is room for improvement – except for Inserm's attractiveness for talented scientists. The distinction between strategy, governance, resources deployed and results obtained is not clear.
- On several important topics – such as the lessons learned after the Covid-19 crisis, for example – the self-assessment report falls short of what was expected following the note on 'key topics for the assessment' published on the Hcéres website.
- The self-assessment report does not present an institution committed to transformative change. Were it not for the evolution of its internal research funding agency from ANRS to ANRS-MIE,⁵ the priority research programmes and equipment (PEPRs, *Programmes et équipements prioritaires de recherche*) and the programme agency under creation (three changes related to the 'agency role' of Inserm; see chapter I below), the self-assessment report would give a 'static' view of Inserm.
- The analyses presented in the self-assessment report sometimes refer to the scope of Inserm (and its 8,891 employees), and sometimes to the scope of all units in which Inserm is involved (including the 28,800 people working in them), but the report rarely specifies which of these two scopes is being considered.
- The self-assessment report barely addresses universities as research operators which may have their own research policies and be on their way to becoming leaders in research within their regional ecosystem.
- The self-assessment report does not include any assessment of the impact of Inserm, whether on science, the economy or society.

It is clear, however, that a great deal of work went into collecting the data and writing the self-assessment report and its 23 appendices. The assessment committee thanks Inserm for this work and for its written answers to the written questions asked by the committee for more complete information.

c/ Follow-up on the recommendations of the previous assessment

The assessment committee noted that Inserm has implemented certain actions that partially address some of the ten main recommendations of the 2021 Hcéres assessment report. Below is a summary description of these actions taken by Inserm.⁶

1. Inserm should identify ways to increase the budget available to deploy up to a €30-40 million range per year on scientific policy.

- Inserm has negotiated specific resources amounting to €180 million for its scientific policy within the framework of its 2021-2025 Cop. It has also increased charitable funding and European funding.

2. Inserm should increase its interdisciplinary research. This requires a stronger collaboration between Inserm and other institutions, such as CNRS, and should be facilitated at ministry level.

- Inserm has developed 16 new project-teams with other national research organisations, enabling the emergence of interdisciplinary research activities (see section II.2.b).

3. Inserm should provide greater support for research within its agency through investment in project management, including better administrative and financial support.

- Inserm has improved its administrative support by reorganising its financial affairs department and financial services in the regional offices. It has also set up joint support units and shared management platforms at several sites.

4. Functions such as ethical approvals and intellectual property/licensing need to adopt a more business-like model, using tools such as key performance indicators and audit, to ensure timely support to researchers.

- Inserm has strengthened its organisation to support human clinical trials and implemented tools in order to respond more quickly to researchers' expectations and needs, while better measuring the output of technology transfer activities.

⁵ ANRS (Agence nationale de recherche sur le sida et les maladies hépatiques), the national research agency on AIDS and hepatic diseases, was created in the 1980s as an 'internal autonomous agency' within Inserm. In 2021, after the Covid-19 crisis, it became ANRS-MIE (ANRS-Maladies infectieuses émergentes), with a new emphasis put on emerging infectious diseases.

⁶ Self-assessment report.

5. Inserm should discuss with relevant partners the possibility of setting up a one-stop shop for European collaboration infrastructure similar to the Dutch HealthRI.

- The one-stop shop for European infrastructure has not been implemented due to the fragmented and complex national landscape in this field.

6. Inserm researchers should be encouraged to participate in research-led teaching.

- Inserm considers that the conditions for encouraging researchers to increase their participation in teaching should be the subject of a debate at national level, possibly involving measures taken by the ministry in charge of higher education and research.

7. Inserm's governance procedures would benefit from:

- staggered terms of appointment for members of the scientific council to improve continuity and retention of business intelligence;
- encouragement of researchers to support collegial activities, such as SSC (specialized scientific committee)/RSC (research support commission) membership, by including them in the promotion criterion.
- The composition of the Scientific Board has not changed. The participation of researchers in assessment committees is taken into consideration in the new compensation scheme and is part of the researchers' assessment criteria.

8. Retention of new staff would benefit from:

- the wider use of packages, commensurate with those offered by ATIP-Avenir, for new recruits to offset the problem of low, fixed salaries;
- adoption of new models such as the proposed 50:50 clinical: research positions.
- Inserm has continued its policy of attracting talent with the Atip-Avenir programme. It has developed a welcome package for newly recruited permanent researchers, as have most French organisations, and has taken advantage of the new opportunities to create around 10 'junior professor chairs'⁷ per year. Inserm has also increased the number of its research positions for clinicians.

9. Existing staff would benefit from:

- establishment of a staff mentoring scheme for academic, technical and support staff;
- mandatory training in gender equality, unconscious bias and research integrity for all academic staff;
- management training of staff in senior positions;
- better career pathways and progression for technical and support staff.
- Mentoring and coaching programmes have been gradually implemented for newly recruited researchers. Plans for gender equality and a management training programme have been developed. A significant increase in promotions for researchers and technicians has been implemented.

10. The evaluation of individuals, units and programmes would benefit from:

- wider recognition of impact beyond academic achievements;
- expansion of the evaluation of individuals to cover staff development as well as evaluation of performance;
- automatic feedback of evaluations to the staff members being evaluated and their line managers;
- workshops or other methods should be used to inform individuals/units about the criteria used for evaluation and promotions.
- Inserm has modified its researcher evaluation policy to take into account non-academic activities (see section II.1.a).

⁷ Tenure-track positions à la française.

I. Role and missions of Inserm in France

Recommendation 1: Clearly distinguish and separate the programme agency and Inserm as research performing organisation. Clarify the governance, objectives and working mechanisms of the programme agency, with the objective of prioritising a limited number of research programmes, and pay close attention to transparency and to seizing opportunities for simplification and for the reduction of fragmentation.

Recommendation 2: (to the French State and Inserm) Establish a clear multi-year perspective for the budget of the programme agency and the budget of Inserm as research performing organisation.

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(to the French State) Implement a consistent and sustained funding effort for platforms, including cutting-edge technological equipment, data platforms, biobanks and cohorts.

1 / A position lacking clarity in a highly complex environment

It is well known and clearly outlined in the self-assessment report that the landscape of the French health research ecosystem is particularly complex. There are a large number of entities and a great many programmes, plans, initiatives, boards and committees. The 'fragmentation of actors in charge of financing, performing and steering biomedical research' and 'the inefficient organisation and execution of research that ensues' have been highlighted in a recent report on biomedical research in France, which points out that this might contribute to the fact that both the proportion and the growth of biomedical research in France are lower than in other comparable countries.⁸ This fragmentation was criticised as far back as in the very first international assessment report on Inserm in 2008.⁹

Moreover, this complexity has only increased with time. Consequently, Inserm has repeatedly had to respond to new – frequently overlapping – initiatives, originating either from Inserm itself or from external sources, particularly from the French State. Inserm itself acknowledges and criticises this increasing complexity in its self-assessment report: 'French biomedical research is characterised by multiple players. [...] Beyond the historical health research players, the multitude of new legal structures leads to relative fragmentation of responsibilities and coordination levers, and scattering of means of action. The 'Investments for the future programme',¹⁰ as welcome as it has been in terms of funding, has unfortunately amplified this complexity further'.

The assessment committee observed that, in this highly complex environment, the role and position of Inserm were not clearly established either in the self-assessment report or in the interviews held during the assessment visit.

Inserm affirms that it has a dual role, as a national agency and as a research performing organisation.

- For many years, Inserm has been fulfilling the role of a funding agency, mainly by implementing 'national research plans' or by implementing the research component of 'national health plans' decided by the government. This role of Inserm as funding agency is about to change substantially with the creation of the new 'health research programme agency' led by Inserm.¹¹
- In addition, Inserm is – and always has been since its creation – a research performing organisation (RPO), composed of 278 research units¹² and 48 'services units' (e.g. core facilities shared between research units).¹³

⁸ Supporting France Universités' reflections on the state of biomedical research in France. France Universités with Siris Academic. January 2023.

⁹ See <https://www.hceres.fr/sites/default/files/media/downloads/evaluation-report-inserm-2008.pdf>.

¹⁰ The 'Investment programmes for the future' (in French, *programmes d'investissement d'avenir*, PIA) are programmes aimed at supporting French research and innovation, with the aim of accelerating the transformation of key sectors of the French economy and 'positioning France as a leader' in the future. The first programme was launched in 2010; the current programme is entitled 'France 2030'. These programmes are steered by the General secretary for investment (SGPI : *Secrétariat général pour l'investissement*), a government department attached to the prime minister.

¹¹ In 2024, the French government entrusted some national research organisations with a new role as 'programme agencies'. Seven programme agencies are currently being set up; one of them is the health research programme agency led by Inserm.

¹² Almost all research units are joint research units common to Inserm and to a partner university, and sometimes to other institutions.

¹³ Self-assessment report.

The assessment committee considers that neither in the role of programme agency nor in the role of an RPO does Inserm have a clear strategy. **In both roles, Inserm should improve its ability to define clear strategies, with explicit priorities and objectives, and clear ways to implement them** (see Recommendation 5 in chapter II).

The creation of 'programme agencies' is seen by the government as a major evolution in the French research ecosystem. The three main priorities of the government's policy for the evolution of French public research were summarised as follows by the president of the French Republic in December 2023:

- transform the major national research organisations into genuine programme agencies;
- develop universities to enable them to play a central role as leaders in organising and managing research in their geographical area;
- significantly simplify the organisation as well as the operations and administration of research, both at the national level and at the level of each university site.

In relation to these three priorities, it is clear on the one hand that Inserm has paid a great deal of attention in the past two years to the creation of the health research programme agency. However, the assessment committee noted that Inserm does not view the creation of this programme agency as a transformation of its role and position, but merely as an additional role. The committee also observed that very little attention has been paid by Inserm to the development of universities as leaders of public research in their geographical areas, or to simplification issues.

While acknowledging that Inserm provided the health research programme agency with a good start (see section I.2.a), the assessment committee considers that Inserm should pay a more balanced attention to all three of the above priorities regarding the evolutions of French public research, and that **the creation of the health research programme agency is a major opportunity for Inserm to clarify its role and position, which will allow it to improve its performance and impact**. This implies striking a new balance between its two roles, rather than merely considering the programme agency as an extra role added to its traditional roles. It also implies a cultural change within Inserm's governance. The committee considers that **these recommendations – along with those made later in this chapter – are key conditions for the success of the programme agency**.

2 / Towards a clearer dual role

The presentation of the dual role of Inserm given in the self-assessment report is somewhat ambiguous. For instance, this dual role is described as 'research operator and health research coordinator', and the self-assessment report also recalls that the Covid-19 crisis served as a reminder of the growing necessity to enhance Inserm's coordination across the entire biomedical research and public health continuum. The need for coordination of the various actors in French health research is also mentioned in the mission statement of the programme agency signed by the supervisory ministers of Inserm. However, this coordination role is never clearly defined. The assessment committee wishes to highlight that this is a sensitive subject and that the coordination role of Inserm – or the coordination role of the programme agency – needs to be defined with care: it should be seen in the perspective of the development of the autonomy of universities, and a careful distinction should be made between the need for coordination during health crises and at 'normal times'.

The assessment committee acknowledges that the State and Inserm see the launch of the programme agency as a primary objective, and it considers that the dual role of Inserm should be stated as a 'research performing organisation (RPO)' and 'leader of the health research programme agency'.

a/ Successfully setting up the programme agency

Inserm has played a role as a funding agency for many years, covering various types of actions:

- Inserm implements the 'research component' of 'national health plans' decided by the government. A major example in recent years is the third National plan on rare diseases; Inserm has led various actions in this framework, such as those aimed at collecting clinical-biological data and constituting cohorts, creating a coordination group for the participation of French teams in the European joint programmes on rare diseases, and acting as a scientific secretariat for the International rare diseases research consortium, a group of 60 organisations.¹⁴
- Inserm also implements research plans in the framework of the French ten-year strategy for cancer control, led by the National cancer Institute (INCa, *Institut national du cancer*). In 2024, Inserm issued five calls for proposals, on the acquisition of equipment for cancer research (€3.6 million in 2024), the contributions of physics, chemistry and engineering sciences to oncology (€7.8 million), the contributions of mathematics and computer science to oncology (€2.7 million), functional exploration of the microenvironment of cancers with poor prognosis (€4.6 million), PhD training in basic and translational cancer research (€1.7 million), and a specific call for the recruitment of a chair in paediatric oncology research (€4.5 million). These calls are open to all teams in French public research.¹⁵

¹⁴ Written answer to a written question of the assessment committee.

¹⁵ Written answer to a written question of the assessment committee.

- Inserm also runs several research programmes in the context of the 'Public health research Institute' (IReSP, *Institut de recherche sur la santé publique*), a consortium of 13 institutions led by Inserm. In 2024, Inserm launched six calls for projects in this context, mainly on 'health promoting interventions, services and policies' (€1.6 million), autonomy (€2.4 million) and addictions (€5.0 million). These calls are open to all teams in French public research.¹⁶
- There was a significant increase in the number of national programmes at the beginning of the 2020s, with the launch of the PEPRs (Priority programmes for research and equipment) funded by the government in the framework of France 2030 (the new 'Investment programme for the future' launched in 2021).¹⁷ Inserm steers or co-steers 8 PEPRs:
 - 5 'strategic PEPRs': *Emerging infectious diseases* (€70 million over 3 years), *Digital health* (€60 million over 7 years, co-steered with Inria); *Biotherapies and bioproduction of innovative therapies* (€80 million over 7 years, co-steered with CEA); *Food systems, microbiomes and health* (€58 million over 5 years, co-steered with INRAE); *Couples' health and women's health* (€25 million over 7 years);
 - 3 'exploratory PEPRs': *Precision psychiatry* (€80 million over 5 years, with CNRS); *Cell identities and destinies: from single cells to whole organisms for disease interception* (€50 million over 6 years, with CNRS); *Organs and organoids on chips* (€48 million over 6 years, with CEA and CNRS).¹⁸

The assessment committee noted that the description of the funding activities of Inserm illustrates the complexity and fragmentation of funding mechanisms in French biomedical research. A more structured funding offer, prioritising a limited number of research programmes, would provide better value for money.

* * *

In addition to these funding activities, Inserm also includes an 'internal autonomous agency', ANRS-MIE (see section 3.b of the Introduction above). ANRS-MIE launches two generic calls for projects each year to fund research on HIV/AIDS, sexually transmitted infections, viral hepatitis and tuberculosis, including co-infections; the calls also support research on other co-infections or diseases where they contribute to a better understanding of these priority areas, as well as research into the impact of infections such as Covid-19 on the prevention, screening and management of HIV, sexually transmitted infections, viral hepatitis and tuberculosis. The calls cover fundamental, translational and clinical research (including clinical trials), as well as public health and social sciences research. They are open to all French research laboratories and foreign laboratories, primarily those in low- and middle-income countries, provided they work in partnership with a French institution. Proposals can be submitted by individual teams or as multi-group partnerships. The total amount allocated in each of the two calls in 2024 was more than €12 million. ANRS-MIE also launches an annual call dedicated to research teams in low- and middle-income countries (€5.1 million in 2024).

To respond urgently, through research, to emerging diseases, ANRS-MIE monitors signals and alerts disseminated worldwide in conjunction with the international institutions with which it is in constant contact, including the World Health Organisation (WHO) and the European Commission. It has defined a decision-making support tool for rapid and objective classification of these alerts: based on a limited number of significant parameters, this decision-making algorithm classifies the alert into one of four crisis levels and determines the level of response required. Since 2021, this system has been used on several occasions.

ANRS-MIE is an autonomous agency within Inserm: its budget constitutes a separate section within Inserm's budget and ANRS-MIE has its own administration in charge of launching calls and monitoring funded research projects. ANRS-MIE has regular coordination meetings with the French National research agency (*ANR : Agence nationale de la recherche*) to define a shared vision of their complementary roles.

The assessment committee commends the quality of the vision and actions of ANRS-MIE, and its well-established reputation both in France and abroad.

* * *

¹⁶ Written answer to a written question of the assessment committee.

¹⁷ There are two kinds of PEPRs: 'strategic PEPRs' aimed at pursuing on-going strategic transformations, and 'exploratory PEPRs' devoted to the emergence of new transformations.

¹⁸ CEA is the Atomic energy and alternative energies Commission; CNRS is the National centre for scientific research; INRAE is the National institute for research on agriculture, food, and the Environment; Inria is the National institute for research in digital science and technology.

In line with the announcements made by the president of the French Republic in December 2023, the government decided in 2024 to create the 'health research programme agency' led by Inserm; it also decided to end the Aviesan alliance.¹⁹ The role of the programme agency can be summarised as follows:

- together with all actors in French health research, develop foresight analyses, draw up proposals for a national health research strategy and for national science and innovation programmes in the field of health, and submit them to the government;
- in cooperation with the other actors, steer and operate priority research and innovation programmes.

The programme agency was launched in 2024 as a new entity within Inserm. Its executive director was appointed and is line-managed by the CEO of Inserm. As requested by the government, governance of the programme agency was established comprising three bodies: a Liaison committee with the government, a Partners' committee (with 39 members) and an Executive Board (with 10 members).

The programme agency is thus quite recent. During its first year, the agency adopted a 'horizontal and participative approach', prioritising team work with all partners and stakeholders, as Inserm was highly aware that it was of primary importance to reassure partners and enhance mutual trust. Indeed, the assessment committee has observed that several key partners, such as large universities and university hospitals, were wary when the role of programme agency was entrusted to Inserm, considering that Inserm had failed to build sufficient trust over the previous five to ten years. These key partners acknowledge that, thanks to the strong involvement of Inserm's CEO, the programme agency has had a good start in its first year, resulting in useful team work, and they expect this to constitute a good basis for the next steps.

In its first year, the programme agency essentially provided a space where all French health research players worked together on priority topics proposed by the government. A few 'national programmes' were designed on vaccines, neurodegenerative disorders, chronic inflammatory disease, organ transplantations and health prevention. The government decided to launch and fund some of these programmes, including an ambitious 'France Vaccine' programme. However, this start was not without ambiguity: several Inserm officers, emphasising their intention to reassure partners, repeatedly mentioned in the interviews with the assessment committee that Inserm is *not* the leader of the programme agency.

The committee is convinced that the programme agency now needs to find its way to a second phase and strengthen its ability to define a clear national strategy. The committee agrees that **prioritising 'a limited number of research programme proposals' is a major objective for the programme agency**, as stated in the self-assessment report. **This will require setting up clear decision-making processes and adapting the governance of the programme agency, finding an appropriate balance between participative work with all partners and real leadership by Inserm. The assessment committee also recommends that the programme agency set up an international scientific advisory board.**

Other important questions need to be clarified in order to ensure the success of the programme agency in the coming period:

- Both the self-assessment report and the interviews have shown that Inserm does not yet have a clear vision regarding several important aspects of the role of the programme agency.
 - The mission statement of the programme agency emphasises that the agency should be complementary to the French National research agency (ANR) which supports bottom-up 'curiosity-driven' research, and that it should propose 'structuring and directed' research programmes. The understanding of the assessment committee is that the programme agency should propose and implement programmes supporting 'mission-driven research', as it is called in the framework of the European research and innovation programmes. **The assessment committee recommends that the programme agency develop in-depth analysis of the type of research programmes and research projects it will promote.**
 - The role of the programme agency concerning health research equipment and platforms is also unclear. The development of a strengthened national strategy to support health research platforms is a major expectation expressed by French universities regarding the programme agency, and this corresponds to a real weakness of French research in the fields of health and life sciences. The assessment committee encourages the programme agency to engage in collective work to **propose an ambitious and effective national strategy for health research platforms, aligned with local site policies** (see also section II.3).

¹⁹ An attempt to resolve the dispersion of initiatives and the lack of cohesion within the French biomedical research ecosystem was the creation of the Aviesan alliance in 2009. This aimed to bring together all stakeholders (national research organisations, university hospitals, universities, cancer treatment centres (CLCCs: *Centres de lutte contre le cancer*), the *Institut Pasteur*, manufacturers, etc.) in dedicated discussion spaces to establish a common national strategy, thus avoiding the plethora of initiatives and gaining in efficiency at national, European and international level. Inserm played a leading role in this alliance. While the first steps of the alliance were well received by its members as they helped to streamline interactions between stakeholders and to establish the basis of a common strategy, this model ended up losing in relevance for multiple reasons, including the gradual disinterest of members. The lack of funding allocated to the Alliance in relation to its strategic objectives and the separate budget management of each partner institution also constituted major obstacles to its success.

- The mission statement of the programme agency also emphasises that it should make limited use of open calls for research projects (another complementarity with ANR). This is a sensitive question as a major concern of research communities in France is the multiplication of calls for projects. Although the note on 'key topics for the assessment' written by Hcéres with Inserm at the beginning of 2024 clearly identified these points, the self-assessment report and interviews revealed that neither Inserm nor the programme agency paid much attention to identifying lessons learned from the experience of steering PEPRs, or to defining the working mechanisms to be deployed in the agency to elaborate new research programmes and to select and monitor research projects. **The assessment committee recommends that the programme agency define clear working mechanisms and make them transparent to all actors in the French health research community.**
- Almost all actors in the French health research ecosystem met by the assessment committee expressed their concern about the lack of visibility regarding future government funding of the programme agency. This question obviously constitutes a key condition for the success of the agency: a clear funding perspective should be provided by the government to strengthen the growth of the programme agency and its influence on developing a long-term health research strategy. **The assessment committee also recommends that the French State and Inserm give a clear multi-year perspective for the budget of the programme agency and the budget of Inserm as research performing operator (RPO).** Giving mid- to long-term visibility on the balance between the funding of research programmes led by the programme agency and the budget of 'Inserm as RPO' (and in particular the budget allocated to research units) is a key condition for the trusted and successful development of the programme agency.
- Lastly, the assessment committee wishes to emphasise that **Inserm should take advantage of the development of the programme agency to seize every opportunity for simplification.** The committee observed that questions related to simplification – and to reducing fragmentation – have received little attention since the programme agency was launched, and it considers that these questions should be addressed rapidly. Issues concern Inserm's mechanisms and processes in its existing role of funding agency, as well as Inserm's internal organisation. **What impact, for instance, will the development of the programme agency have on Inserm's Department of strategic programmes? What will the precise roles of Inserm's thematic institutes be in the development of the programme agency (vs their roles within Inserm as RPO)? In the mid- to long-term, will Inserm include two autonomous internal agencies, the programme agency and ANRS-MIE? The assessment committee considers that Inserm should clarify its position regarding these issues, and clarify its internal organisation accordingly.**²⁰

b/ Carefully clarify and distinguish both roles

A key success factor for the programme agency will be linked to Inserm's ability to **carefully clarify and clearly distinguish both roles: as programme agency and RPO.** Inserm should pay very close attention to systematically specifying, when adopting public positions or deploying actions, whether it does so as (leader of the) programme agency or as an RPO. This represents an in-depth cultural change, and is a crucial condition for the successful development of the programme agency and for creating the confidence needed for all players involved.

The development of the programme agency may give rise to various conflicts of interests that should be carefully prevented. **The assessment committee recommends:**

- full transparency in terms of work processes and decisions;
- **providing firm guarantees that the programme agency will implement specific mechanisms to ensure that it will steer research programmes for the benefit of all research teams in France, without any bias in favour of the research units of Inserm as RPO;**
- **monitoring and publishing annually, for each research programme steered by the programme agency, the proportion of funding attributed to teams within and outside Inserm as RPO;**
- **separating key responsibilities related to the activities of the programme agency and of Inserm as RPO, and assigning them to different teams and individuals;**
- **and clearly separating the programme agency's budget from the budget of Inserm as RPO, as is the case today for the ANRS-MIE budget.**

The National institutes of health (NIH) in the USA provide an interesting example on how the programme agency may be managed. The funding and structuring model for health research in the United States is based primarily on the NIH programmes, which funded up to \$47.7 billion in 2023. Below the Office of the director, NIH's structure is divided into two *independent* components: the *intramural programme*, which aims to support research projects carried out in NIH laboratories on one of the NIH campuses, and the *extramural programme* which funds research projects carried out in laboratories outside the NIH campuses, at research universities and national laboratories. The Medical research Council (MRC) in the UK also has a dual role as a funding agency

²⁰ In particular, the self-assessment report identifies the urgent need to clarify the roles and the governance of ANRS-MIE and of the 'Immunology, inflammation, infectiology and microbiology' thematic institute of Inserm.

and as a research operator, but the UK government recently decided to structurally and functionally embed MRC units in universities and to focus MRC on a single role as a national medical research funding agency – operating within a larger research funder, UK Research and innovation.

The assessment committee noted that, as research operators, NIH and MRC represent a very limited percentage – close to 1% – of the scientific publications of their respective countries in the field of health research; much smaller than the percentage of Inserm as RPO in the French health research scientific publications. This important 'weight' of Inserm and its research units in the French health research ecosystem makes it even more important to clearly distinguish and separate the programme agency and Inserm as RPO.

* * *

The question of the 'weight' of Inserm in French health research merits greater attention. In fact, the assessment committee observed that Inserm's view of its scientific position in French health research is not precise.

- The Cop for the 2021-2025 period mentioned that 'Inserm has a high-quality scientific output, accounting for approximately 40% of French output in biomedical research and public health'. The self-assessment report provides a close but slightly different figure, stating that 'Inserm produces 36% of French publications in the biomedical domain'.
- The bibliometric analyses carried out by the '*Observatoire des sciences et techniques*' (OST, a department of Hcéres) as part of this assessment of Inserm help clarify the interpretation of these figures.²¹ In fact, 36% represents the percentage of French publications in biomedical research in the 2018-2022 period whose authors included at least one contributor working in one of Inserm research units. Therefore, it can be said that Inserm research units participate in 36% of French publications in the biomedical domain; but this differs from the conclusion that 'Inserm produces 36% of French publications in the biomedical domain'.
- Taking into account that many publications are co-publications shared between several laboratories, i.e. in fractional count, OST analyses show that, for the assessed period, the contributions of Inserm research units represent 17% of French publications in biomedical research.

The real measure of the scientific output of Inserm as RPO in French biomedical research therefore appears to be 17%.²²

It is important to note that this 'weight' of Inserm as RPO in France is far from being homogeneous across the entire field of biomedical research. This point is investigated in the bibliometric analyses by OST: scientific publications are classified using the nomenclature of the European research council (ERC), into three main domains – PE (Physics and engineering), LS (Life sciences) and SH (Social sciences and humanities) – and 27 sub-fields (the so-called 'ERC panels'), including in particular 9 sub-domains in the domain of life sciences. The results are as follows:

- For the whole LS domain, the national percentage of Inserm as RPO over the 2018-2022 period is 17%, as stated above.
- There are five sub-domains in which the national percentage of Inserm as RPO is higher than 17%, and sometimes much higher:
 - In sub-domain LS3 (Cellular, developmental and regenerative biology), the percentage of Inserm as RPO is 34.5%.
 - In sub-domain LS5 (Neuroscience and disorders of the nervous system), the percentage of Inserm as RPO is 26%.
 - In sub-domain LS4 (Physiology in health, disease and ageing), the percentage of Inserm as RPO is 22%.
 - In sub-domain LS2 (Integrative biology: from genes and genomes to systems) and in sub-domain LS6 (Immunity, infection and immunotherapy), the percentage of Inserm as RPO is 20.5%.
- In sub-domain LS1 (Molecules of life: biological mechanisms, structures and functions), the percentage of Inserm as RPO is 17%, and 16.5% in sub-domain LS7 (Prevention, diagnosis and treatment of human diseases).
- There are two sub-domains in which the national percentage of Inserm as RPO is much lower than 17%: in sub-domain LS8 (Environmental biology, ecology and evolution) and in sub-domain LS9 (Biotechnology and biosystems engineering), the percentage of Inserm as RPO is 1.2%.

²¹ See <https://www.hceres.fr/sites/default/files/media/downloads/analysis-scientific-technological-profile-inserm.pdf>. Both Inserm's and OST's analyses use the Web of science bibliometric data base.

²² The basic principle here is that all publications having at least one author in a research unit attached to Inserm are publications affiliated to Inserm, whether the authors are employees of Inserm or employees of partner institutions – e.g. universities – in the joint research units. In other words, the bibliometric analyses consider that 'Inserm as RPO' includes all research units having Inserm as one of their home institutions. It is fair to recall here that about 27% of the workforce in these research units are employees of Inserm, the other 73% being employees of other home institutions of the units (see section 2 of the Introduction).

This heterogeneity of the national 'weight' of Inserm as RPO from one sub-domain to another does not appear in the self-assessment report, nor in any other document provided by Inserm. **The assessment committee considers that the programme agency can fulfil its mission – with appropriate transparency and guarantees of avoiding conflicts of interests – only if it acquires a precise and detailed knowledge of French scientific production in health research, in comparison with other countries, and precise and detailed knowledge of the scientific position of Inserm as RPO.**

c/ Strengthen and modernise the role of Inserm as research performing organisation

As it requires the clarification and distinction of the two roles of Inserm, **the creation of the programme agency is an opportunity to strengthen Inserm as RPO.** It may help:

- to reaffirm the scientific position of Inserm as RPO in France and Europe, and **to clarify and strengthen its scientific strategy and policy** (see chapter II), bearing in mind that there should be a distinction between the scientific strategy of Inserm as RPO and the national health research strategy proposed by the programme agency.
- and to take a clear step forward in developing new partnerships with universities, through enhanced university leadership in research within their geographical area. In parallel, this should result in stronger site policies for health research, with **a new partnership of Inserm as RPO with universities and university hospitals**, and with **improved decentralisation and simplification for the management and administration of research units** (see chapter III).

The assessment committee is convinced that the creation of the programme agency provides an opportunity for Inserm to take this step and redefine the balance of its position within the French health research ecosystem. If Inserm does not take this step forward with universities – and with university hospitals – the mistrust and tensions present at the start of the programme agency will reappear and risk hindering its successful development.

The following chapters set out the assessment committee's analyses and recommendations in this perspective of modernising the role of Inserm as RPO while developing the programme agency.

II. Research quality, scientific strategy and policy

Recommendation 4: Develop the culture and practice of research assessment at the international level by systematically taking advice from foreign experts on the assessment of researchers and by developing international comparisons. Strengthen efforts to ensure that the assessment of researchers moves away from quantitative indicators and appropriately values all their contributions to Inserm's missions.

Recommendation 5: Define a clear scientific strategy for Inserm as research performing organisation, including explicit priorities, and clear directions for its implementation.

- Establish an ambitious strategy for population health, with the aim of raising Inserm to the best international level over the next five years.
- Establish an ambitious action plan to position Inserm as a leader in the data and digital transformation of health research.

1 / Research assessment

a/ Research assessment within Inserm

Research assessment at Inserm is conducted by seven specialised scientific committees (CSSs : *commissions scientifiques spécialisées*).²³ Half of the CSS members are elected by Inserm staff and half are appointed by the CEO of Inserm. The CSSs play a major role in the processes of recruitment, promotion and periodic assessment of permanent Inserm researchers, and they take part in the periodic assessment of Inserm research units. Members of the CSSs hold a 5-year term, which ensures a certain consistency of the assessments over time. There is a pool of around 50 potential members for each CSS, but not all of them participate in every assessment: a smaller number of members are called upon for each assessment, depending on their skills and the expertise required.

An Assessment department was created within Inserm in 2023 (from the Assessment and program monitoring department). This department organises the assessment processes, provides training and support to the CSSs and ensures compliance with ethical considerations (management of conflicts of interests, confidentiality, transparency, equal treatment, etc.).²⁴ It is also in charge of watching the evolution of research assessment practices in other institutions at the international level. Inserm has been working since 2018 to move assessment criteria beyond bibliometric indicators and promote a larger range of criteria. Applicants are now asked to present the 5 to 10 most important achievements: not only publications, but also patents, startups, public engagement, translation of findings into policy, etc. The assessment department has undertaken a review of certain assessment criteria in order to better 'recognise international actions, involvement in the European research area, economic and societal value creation activities, and open science initiatives', and a methodology has been developed and deployed 'to better qualify innovative profiles and foster their recognition during individual and collective assessments'.²⁵ These changes have been accompanied by awareness-raising and training initiatives for CSS members. Inserm joined the Coalition for advancing research assessment (CoARA) in 2022.

While recognising the transformational intent of this work, the assessment committee observed that it is difficult to understand its actual impact on research assessment within Inserm. In fact, each CSS decides on its own criteria and rules, and the weighting given to different aspects of the assessments varies between CSSs. The assessment committee also heard that quantitative indicators such as the 'journal impact factors' are still in use in some assessments, and neither the interviews with CSS chairpersons nor with Inserm officers enabled the committee to understand where the transformation of research assessment really stands. Much certainly remains to be done to develop an appropriate qualitative assessment of research: such cultural changes take time. **The committee recommends that Inserm pursue and strengthen efforts to ensure that the assessment of researchers moves away from quantitative indicators and appropriately values all their contributions to Inserm's missions.**

The assessment committee noted that the assessment process for the recruitment of permanent researchers at Inserm has a high reputation of excellence. On average over the last 10 years, around 27% of newly-hired permanent researchers were non-French scientists.²⁶

²³ An additional committee, the 'Research steering and support committee' carries out the assessment of researchers who are primarily involved in steering and administrative activities.

²⁴ Self-assessment report.

²⁵ Self-assessment report.

²⁶ As a comparison, the average percentage of non-French scientists among the newly-hired permanent researchers of the Institute for biological sciences of CNRS is 32% (Hcéres assessment report of CNRS, 2023).

The assessment committee noted that Inserm research units are assessed by both Hcéres (with the participation of one member of a CSS in the unit's assessment committee set up by Hcéres) and by the CSSs. The chairpersons of the CSSs consider that this does not lead to any duplication. Moreover, Inserm has recently synchronised the assessment of researchers' activity every 5 years with the 5-year assessment of the research units, to optimise scientific follow-up and enable better consideration of the research environment in individual assessments. However, the assessment committee believes there is room for simplification here, and that this desire to link researchers' assessments to assessments of research units does not contribute to placing the latter in a truly international perspective.

The self-assessment report emphasises the fact that 'the assessment conducted at Inserm guarantees the excellence of the research'. The assessment committee noted, however, that more than 88% of the members of the CSSs work in Inserm research units and that none of their members work outside France – or in private companies.²⁷ Moreover, the committee was informed that there is no assessment process in which a CSS takes advice from foreign experts – or from experts working in private companies – be it for the recruitment or the promotion of researchers or for the assessment of research units. This is a major concern. The assessment committee is concerned that research assessment at Inserm is too Inserm-centric and too French-centric, and it emphasises that **research excellence can only be assessed in a truly international perspective. The committee recommends involving experts from neighbouring countries in the CSSs, systematically taking advice from foreign experts in the assessment of researchers, and developing international comparisons.** Moreover, the committee recommends involving experts from the life sciences industry in the CSSs, or taking their advice in the assessment processes, which will help to ensure that innovation and technology transfer activities are properly recognised in the assessment of researchers.

b/ Lessons to be learned from bibliometric analyses

As is done for the assessment of every national French research institution, the department of Hcéres called the *Observatoire des sciences et techniques (OST)* has produced a document entitled 'Analysis of the scientific and technological profile of Inserm'.²⁸ This document – already quoted in section 1.2.b – provides indicators on three types of scientific and technological productions: scientific publications, EU-funded research projects, and patents. The bibliometric analyses use the publication database of OST, which is an enriched version of the Web of science (WoS).²⁹ These analyses include comparisons with the following research institutions: the Chinese Academy of medical sciences (CAMS), the Helmholtz Gemeinschaft in Germany, the Medical research Council (MRC) in the UK and the National Institutes of health (NIH) in the US. Some of the main observations from these analyses can be summarised as follows:

- The share of international co-publications in the publications of Inserm research units for the 2018-2022 period is 53%. This is lower than the share of international co-publications in all publications of French biomedical research (59%). It is also lower than the same share for MRC and Helmholtz, but above the same share for NIH and CAMS.
- The main partner countries in Inserm international co-publications are, in descending order, the USA, the UK, Germany, Italy, Spain, the Netherlands, Switzerland and Canada.
- The analyses also look at publication impact indices, or citation scores,³⁰ for the 2018-2021 period. The average impact index of Inserm publications is close to 1.2 (i.e. 20% above the world average). This is above the impact index for the whole set of French publications in biomedical research (1.1) and the index of CAMS (1.0), but substantially below the indices of Helmholtz (1.5), NIH (1.5) and MRC (2.0).
- The analyses also show that the average impact index of Inserm research units' publications over the 2018-2021 period varied between the sub-domains of the life-sciences field (in the ERC nomenclature): this index is equal to 1.0 in sub-domain LS2 (Integrative biology: from genes and genomes to systems) and equal to 1.2 in sub-domain LS6 (Immunity, infection and immunotherapy).

The above-mentioned report by France Universités and Siris Academic highlights complementary observations resulting from bibliometric analyses.³¹ Although these analyses consider the whole of French biomedical research (and do not focus on Inserm research units in particular), their lessons may well be of interest to Inserm.

- One of the main issues for biomedical research in France appears to be the specialisation in classical fields rather than in cutting-edge or emerging fields.³² This increases the risk that French biomedical

²⁷ Written answer to a written question of the assessment committee.

²⁸ See <https://www.hceres.fr/sites/default/files/media/downloads/analysis-scientific-technological-profile-inserm.pdf>.

²⁹ In these bibliometric analyses, all publications having at least one author in an Inserm research unit are considered as 'Inserm publications' (see section 1.2.b).

³⁰ More precisely, these indices are the mean normalised citation scores in the life sciences domain of the ERC nomenclature.

³¹ Supporting France Universités' reflections on the state of biomedical research in France. France Universités with Siris Academic. January 2023.

³² Specialisation indicates research fields in which France produces more in comparison with the average among benchmark countries.

research will fall further behind competing countries, especially in emerging fields with significant input from the social sciences, such as public health, and in applied sciences such as bioengineering.

- The areas of cancer, infectious diseases and immunology are those in which France is more specialised in comparison with benchmark countries. France is clearly not specialised in other fields, such as those of public health and policy, psychiatry and mental health; these are fields that have garnered increasing attention in recent years in other countries.
- Overall, the level of interdisciplinarity in biomedical research is similar between France and benchmark countries, but with contributions mainly from the physical sciences. Interdisciplinary research with the social sciences is low. Interdisciplinary biomedical research in France is, furthermore, more specialised in environmental sciences and physics, rather than in biomedical applied fields such as biomedical engineering, bioengineering and biomaterials.
- French biomedical research appears to be more uneven than elsewhere in terms of scientific impact.

The assessment committee encourages Inserm to make a more appropriate use of bibliometric analyses, to reflect more deeply on the most relevant indicators and on the development of a qualitative approach to assess the scientific impact of its research, and to draw detailed comparisons with leading European and international research institutions in the field of health. This will help Inserm in its efforts to enhance the quality of its research and in its reflections on how to strengthen its scientific strategy.

2 / Scientific strategy and policy

The self-assessment report states that 'research assessment is a veritable tool for the Inserm scientific strategy', and also mentions 'the research programs launched by Inserm as part of its scientific strategy'. However, neither the self-assessment report nor the interviews with Inserm officers made it possible for the assessment committee to understand what the real content and the priorities of Inserm's scientific strategy are. The committee observed that neither at the level of Inserm as RPO nor at the level of Inserm's thematic institutes was there an 'official' document describing a clear choice of scientific priorities. In fact the assessment committee sensed resistance from Inserm leadership to the idea of selecting priorities as Inserm's mission 'is to conduct research in all areas of health' and because 'research units are free to do whatever research they want'.³³

The assessment committee considers that Inserm lacks strategic focus and lacks a real ability to identify strategic priorities. It considers that Inserm as RPO should aim to find a more appropriate balance between bottom-up initiatives – and the freedom of researchers and research units – and top-down strategic choices. **The committee recommends that Inserm as RPO develop a clear, written strategy including explicit scientific priorities, and propose it for approval by its Board of directors after discussion with its Scientific Board.** The strategy should clearly describe the rationale behind the choice of each priority, be it to accelerate efforts in new areas, or to better cover areas in which Inserm as RPO or France are weak, or to reinforce the impact of the work carried out on certain themes, or to strengthen synergies between different fields.

The strategy should also describe how Inserm as RPO wishes to implement each priority. This implementation should avoid the multiplication of 'tools' and the fragmentation of actions. The assessment committee also wishes to point out that launching 'calls for projects' or 'calls for proposals' should not be the primary 'tool' by which Inserm as RPO implements its scientific strategy – if only because issuing calls within Inserm as RPO fuels the confusion between Inserm as RPO and the programme agency. **The assessment committee observed that the budgetary allocation to research units is inadequately used as a lever for implementing scientific priorities, and that Inserm never 'targets' open positions for permanent researchers on priority themes or in priority research units** (see section VII.2.b below). **The committee recommends that Inserm gradually develop the use of these two 'levers' in order to strengthen its ability to effectively implement its scientific strategy.** Partnerships with universities, university hospitals and other national research institutions should also constitute a key way of implementing the scientific strategy.

The next parts of section II.2 deal with three themes which the assessment committee identified as important for the scientific strategy of Inserm as RPO: clinical research, population health, and the data and digital transformation of health research. Lastly, the topics of interdisciplinarity, the emergence of new research themes and the risk appetite are addressed.

a/ Clinical research

While being aware that the development of clinical research is a difficult issue in many countries, the assessment committee tried to understand the present situation at Inserm and in France, as well as the envisaged paths for progress. The committee found the clinical research ecosystem described in the self-assessment report difficult to understand. The committee also noted that there are fewer clinical scientists currently employed by Inserm compared to 10 or 20 years ago. The re-activation of the '*contrats d'interface*' and other tools enabling the

³³ Information given in interviews held during the assessment visit.

preservation and funding of time dedicated to research by physicians was an important measure taken in the Cop for the 2021-2025 period, but the number of these 'contrats d'interface' has remained very limited.

In addition to increasing the number of the 'contrats d'interface', the assessment committee suggests that the *Atip-Avenir* programme could be mobilised to support clinical research. This programme has been run by Inserm since 2009 in partnership with CNRS, and it enables young researchers with a very high-level project to create their own research team for 5 years. The programme has excellent reputation and 50 contracts were active in 2023.³⁴ **The Atip-Avenir programme could be reinforced and opened up more broadly to clinical scientists,**³⁵ in line with Inserm's objective of 're-medicalising' its research.

'Inserm school' (*École de l'Inserm*) offers training programmes to clinicians. The committee viewed this as an interesting initiative, but it suffers from a small annual intake and the rigid organisation of medical studies in France. The committee also noted that it could be better coordinated with universities. Additionally, Inserm could be more involved in training young medical doctors who want to pursue both research and clinical practice in university hospitals.

Inserm and university hospitals jointly manage 'clinical investigation centres' (CICs), originally created to provide Inserm units with platforms for clinical trials. The operation of CICs varies from site to site: some are limited to Inserm-led research, while others are open to all clinical researchers at the hospital. Although the impact of the recent reform of CICs remains to be evaluated, the assessment committee heard that the role of CICs and their relationship to Inserm are not fully clear, and that the structure of clinical research platforms, which are mostly hosted and funded by university hospitals, needs to be simplified and clarified. A clearer definition of the roles of each actor – university, hospital, and Inserm – is also necessary. Inserm could focus on enhancing national and international research networks through its 'Clinical research unit',³⁶ and the F-CRIN infrastructure.³⁷ The Strategic programme for collaborative health research (PSRCS in French) provides robust support for the health research continuum and provides a good example on how programmes run by the programme agency could contribute to supporting relevant efforts and initiatives at the site level.³⁸

At the local level, clinical research, which should not be opposed to basic research, constitutes an essential component of the research continuum, and it should be a key topic for the site health research strategy. Translational research, a key part of this continuum, requires access to health data and biological samples hosted within hospitals. These resources should be shared with researchers regardless of their employer (Inserm, university, or university hospital), and the programme agency could play a role in providing a national framework and support in this perspective.

Further analyses and recommendations on clinical research are presented in chapter III (see Recommendation 8 and section III.2).

b/ Population health

'Public health' is the name of one of Inserm's thematic institutes, which also includes clinical trials and clinical Investigations centres (CICs), which the committee found to be a somewhat surprising organisation. The assessment committee found gaps in the coverage of public health in the self-assessment report and in the appendix dedicated to the 'Public health thematic institute'. The tendency seems to be towards clinical epidemiology and away from population health.³⁹

The committee noted that Inserm's attention to public and population health research, specifically its attention to primary prevention, the mainstay of public and population health, is unclear. The topics cited in Inserm's public health collective expert reports from the 2019-2023 period (developmental coordination disorder or dyspraxia, fibromyalgia, etc. – see section VI.1.a) are far from covering all major public health topics. Worldwide public health priorities, such as the prevention of ultra-processed food consumption and obesity, the toxic-drug crisis, reducing alcohol consumption, reducing or even banning smoking among young age groups and increasing physical activity, seemed much less prominent in Inserm's population health research than expected by the committee. The committee was informed, furthermore, that the Public health thematic institute proposes mainly to develop research into other topics such as planetary health and climate change, as well as into new technologies, including wearables. The committee also noted that 'One Health' research seems to be under-developed within Inserm as RPO.

³⁴ Self-assessment report and 2023 social report.

³⁵ In 2023, 6 of the 50 *Atip-Avenir* staff were physicians (*Rapport social unique 2023*).

³⁶ Self-assessment report; the Clinical research unit is included in the Public health thematic institute.

³⁷ Self-assessment report. See <https://www.fcrin.org/en>.

³⁸ Self-assessment report.

³⁹ To obtain more complete information on population health research, the assessment committee submitted a written question to Inserm, and received a written answer. In addition, a specific interview on population health was included in the programme of the assessment visit.

The assessment committee noted that Inserm participated in some well-recognized contributions to population health.⁴⁰ However, the committee's impression was of a lack of focus and expertise in population health, an increasingly important area in health research worldwide. A more careful analysis of Inserm's and France's strengths and potential areas for growth would be warranted. **The committee recommends that Inserm as RPO establish an ambitious strategy for population health, with the aim of raising Inserm to the best international level over the next five years.**

c/ The data and digital transformation of health research

Digital innovations, including artificial intelligence (AI), machine learning and the pooling of multisource health data are all becoming critical to health research. Inserm's digital transformation challenges and the impact of digital technology on biomedical research – including data analysis, the development of AI tools, data storage, data lakes, etc. – were deemed by the committee to be underdeveloped in the self-assessment report. Moreover, AI is likely to form the core of an in-depth transformation of health research: new molecules, drugs, technologies, treatments and diagnoses will be increasingly developed *in silico*, using AI, rather than in the 'real world'.

A new office within Inserm entitled 'AI and digital technology' was created in March 2025. This is entrusted with two main tasks: defining and updating Inserm's strategy regarding AI and digital methods and proposing concrete actions in support of this strategy. Inserm reported one challenge they have faced is that of different ministries having different policies on data storage, so that the separation of basic and clinical data is currently planned though may not be optimal. The committee was also informed that the salaries offered by Inserm made it difficult to recruit skilled specialists in digital technology. Finally, the committee noted that Inserm is considering forbidding the use of non-EU generative AI in its research units, which might become a barrier for international collaboration.

The committee would like to emphasise that the data and digital transformation have common needs and require common pathways for healthcare and health research. **It recommends urgent broad and in-depth reflection on the topic, with appropriately chosen partners, and an ambitious action plan to position Inserm as a leader in the data and digital transformation of health research.**

d/ Limited efforts to encourage interdisciplinarity, emergence of new themes and risk appetite

As stated in its Cop for the 2021-2025 period,⁴¹ Inserm sees the creation of joint research teams with other national research organisations as facilitating the development of interdisciplinary research. Following a recommendation from the previous Hcéres assessment, Inserm created 14 project-teams between 2020 and 2023, including 8 with Inria, 4 with INRAE and 2 with CNRS.⁴² These teams are created within a research unit, with scientific objectives jointly agreed with the partner institution.

Several 'tools' of Inserm as RPO are supposed to contribute to the emergence of new research themes, and in some cases to interdisciplinarity. The 'booster programmes' aim to combine the strengths of Inserm teams across France that do not usually work together, in order to create synergy between teams, leading to larger initiatives and promoting the development of groundbreaking interdisciplinary work that a single unit would not be able to achieve on its own. Five booster programmes have been deployed, each receiving €1.5 million over 3 years; they cover a large spectrum of Inserm's fields, ranging from 3D cell models and the surgery of the future in collaboration with hospital partners, to research on climate and health. Another tool consists of 'technology research accelerators'; in a context in which science is increasingly dependent on access to state-of-the-art technologies, the aim is to accelerate technological research and make the results quickly available to research teams. Three technology research accelerators have been set up, focusing on medical ultrasound, bioprinting and genomic therapy.

While acknowledging the interest of these efforts – which nevertheless remain limited – the assessment committee considers that Inserm as RPO is a research institution that remains primarily organised by discipline, with the CSSs and the thematic institutes remaining very discipline-oriented. In particular, the committee was informed of the difficulties encountered by interdisciplinary researchers who have to submit application files to several disciplinary CSSs, who do not discuss the cases together. The committee is concerned that the very

⁴⁰ A major example is the 'Nutri-score', a simple and accessible symbol aimed to facilitate consumer information on the nutritional quality of food products. Developed, evaluated, and validated by research from an Inserm joint research unit (with *Université Sorbonne Paris-Nord*, *Conservatoire national des arts et métiers*, and INRAE), the Nutri-Score is now the official logo for consumer nutritional information in 7 European countries.

⁴¹ Cop, p. 21.

⁴² Self-assessment report.

organisation of Inserm as RPO may limit the encouragement of interdisciplinarity; **it encourages Inserm to reflect in depth, in an open and outward-facing manner, on how it could really strengthen research beyond the boundaries of CSSs and thematic institutes.**

The assessment committee could not discern a clear policy on the part of Inserm as RPO to encourage the emergence of new research themes, whether at the level of Inserm as a whole, at the level of the thematic institutes or at site level. Neither did the committee notice any attention by Inserm to proactive 'horizon-scanning' mechanisms enabling the detection of issues before they become urgent and emergent, thus providing a strategic advantage. It would be worth Inserm reflecting on this type of mechanism.

In 2023, the French government asked five national research institutions, including Inserm, to propose a programme devoted to 'high-risk research'. The self-assessment report highlights the disruptive, high-risk and high-impact research programme entitled 'Health Impact', launched in 2024. The first four projects selected focus on the discovery of new human immune actors thanks to evolution, the treatment of brain diseases through personalised non-invasive stimulation, the health effects of materials in contact with food, and the identification of neurons involved in the voluntary control of breathing. The assessment committee remained unclear regarding what proportion of the projects were within as opposed to outside Inserm as RPO. It was also unclear what role the programme agency would play in continuing to encourage this type of high-risk, high-reward project development.

3 / Specific efforts to be secured regarding platforms and cohorts

In its 2022 report,⁴³ the *Cour des comptes* pointed out the difficulties facing France and Inserm concerning the funding of technology platforms and equipment for health research. It highlighted that substantial financial efforts devoted to platforms in biology and health research had been made since 2010 in the framework of the 'Investment programmes for the future' (see section I.1). It also pointed, however, to insufficient funding, as illustrated by the fact that the budget of the IBISA consortium (in French: *infrastructures en biologie-santé et agronomie*)⁴⁴ had fallen from €15 million in 2008 to €2.5 million in 2021. The *Cour des comptes* noted that, unlike other countries, France does not have a sustainable funding mechanism for research platforms in biology and health. The report also mentioned Inserm's efforts to expand competences surrounding platforms, through the creation of 'joint service units' involving several platforms, and its work on mapping Inserm's main platforms and instruments with a view to opening up these facilities to the wider scientific community. In 2016, Inserm created a central 'Unit for research infrastructure' within the Health technology thematic institute, to help coordinate Inserm's strategy and efforts regarding technology platforms and equipment.

For the period 2021-2023, the self-assessment report describes several new initiatives taken by the French government, in particular in the framework of 'France 2030' (the new 'investment programme for the future' launched in 2021). A France 2030 Innovation health programme was launched in 2023, including an €80 million budget for the rejuvenation of 16 existing biology and health platforms, and a €50 million budget for a project on biological collections.⁴⁵ Several platform projects were also developed in the framework of PEPRs.

* * *

It is important to mention the specific efforts devoted in the last 5 to 10 years concerning cohorts. In the framework of the 'investment programmes for the future', part of the government funding for health research was devoted in the second half of the 2010s to launching several cohorts. Inserm was mandated in 2019 to support the implementation of a national cohort infrastructure called *France Cohortes*. A service unit was created to provide cross-cutting services for data security, expertise and statistical analysis. The platform was designed to host 9 cohorts by the end of 2024, with a target of 20 cohorts by the end of 2025.⁴⁶ *France Cohortes* allows cohorts to interface with the new data environment of the health insurance system. The committee encourages these positive developments, as well as the on-going plans to simplify the management of biobanks, cohorts and data sharing procedures.

More recently, in the framework of France 2030, Inserm was asked by the government to propose a €50 million plan aimed at structuring and sustaining the cohort landscape in the coming years. This plan would fund new cohorts, support platforms, and regular calls for proposals⁴⁷. The self-assessment report did not mention if this work is to take place within the programme agency.

* * *

⁴³ See <https://www.ccomptes.fr/fr/documents/62967>.

⁴⁴ Inserm is a member of this consortium.

⁴⁵ Self-assessment report.

⁴⁶ This target has not yet been achieved.

⁴⁷ Self-assessment report.

The understanding of the assessment committee is that French health research was clearly identified in the 2010s as lagging far behind several European countries in terms of platforms and equipment, and that it continues to lag behind. The perception of the committee is also that national efforts on these issues remain fragmented. **The committee recommends that health research platforms and equipment become a priority topic in the agenda of the programme agency, in order to establish a single shared vision and a consistent national strategy with all partners – Inserm as RPO, universities, university hospitals, other national research organisations, etc. – with a shared roadmap for its implementation. The committee also recommends that a consistent and sustained funding effort for platforms (including cutting-edge technological equipment, data platforms, biobanks and cohorts) should be a primary priority for government funding of health research in the coming years** (see Recommendation 3 and section I.2.a).

4 / Open science

Open science is listed as one of Inserm's four main strategic priorities in the Cop for the 2021-2025 period. Inserm has made significant progress in this area, opening its Open science department and publishing its Open science charter in 2023.⁴⁸

Open science includes open access to publications, and Inserm is close to achieving its goal of 90% of open access publications in 2025; the percentage of open access publications increased from 65% in 2019 to 81% in 2023 (well above the national average of 65% in 2023).⁴⁹ Inserm also encourages the publication of preprints as a means to increase the speed of dissemination of research results and promote open review and collaboration. According to Inserm's open science barometer,⁵⁰ roughly 2,000 preprints were posted on bioRxiv and medRxiv in 2022, which represents approximately 10% of all papers published. It would be interesting to update these data for more recent years, as many fields and institutions experienced a temporary interest in preprints during the Covid-19 pandemic that later dipped back toward the baseline.

Open science also includes opening data up. In 2022, Inserm appointed a 'data, algorithms and source code administrator', who is also 'chief data officer' and reports to the Information systems department. Inserm promotes the deployment of data management plans and a bilingual template was made available to Inserm researchers in 2022. Inserm participated in the preparation of the national *Recherche Data Gouv* platform and is involved in the development of this ecosystem. The self-assessment report mentions Inserm's efforts to improve the quality of research data, in particular in cooperation with the *France Cohortes* infrastructure. However, it was difficult for the assessment committee to assess the actual dissemination of a culture and of good practice for FAIR data.⁵¹ A 'software factory service' is also under development with the aim of opening up the possibility for researchers to collaborate, share and reuse software and source codes.

While encouraging Inserm to pursue these initiatives, the assessment committee noticed that very little information is available on actual data publication and sharing. **Inserm should monitor data publication and reuse.**

Publication of the results of clinical trials merits particular attention. In 2017, Inserm signed a WHO statement on the release of data from clinical trials. This is an area in which French public health research performs poorly, with only 28% of clinical trials with academic sponsors followed by publication. While higher than this national average, Inserm's publication rate (40%) clearly leaves room for improvement.⁵²

Open science also has implications for the assessment of research. The focus on transparency, replicability, data reuse and collaboration demands new ways of assessing research and researchers. Inserm is working on these issues (see section II.1.a). However, as these policies are relatively new, it is not clear whether staff at all levels of Inserm are philosophically and practically aligned with their implications, be it with regard to open science itself or changes to research assessment criteria. **The assessment committee recommends that Inserm pursue and strengthen its awareness-raising and training activities on open science and its implications for research assessment.**

⁴⁸ See [Charte science-ouverte INSERM.pdf](#) (in French).

⁴⁹ Self-assessment report.

⁵⁰ See [Insermbiblio - Baromètre SO - Baromètre Inserm 2024 de la Science Ouverte](#).

⁵¹ Findable, accessible, interoperable and reusable data.

⁵² Self-assessment report.

III. Involvement in site policies

Recommendation 6: Starting with experimentations at certain selected sites, implement a new 'dialogue platform' at site level, shared between the university, the university hospital, Inserm and other partners and led by the site university, with the goal of developing a unified site health research strategy.

Recommendation 7: Take rapid and significant steps to improve collaboration and deepen partnerships with universities.

- Together with the universities, empower the directors of research units and strengthen their ability to play a leadership role, including active participation in decisions, real influence over the evolution of the research objectives of the unit, and leveraging the corresponding resources.
- Together with the universities, establish a clear shared governance system for the joint research units.
- Decentralise as much as possible the operational processes and decisions on resource allocation to research units, so that these decisions can be made in concert with partner universities.
- Encourage Inserm researchers to contribute to education and provide means for helping them to do so.
- Define a common framework for the consolidation of management data and information at all levels: units, site, and national.
- Establish shared objectives and consolidated indicators at the university site level.

Recommendation 8: Clarify Inserm's role in clinical research at national and international level, on the one hand, and at site level on the other. As a programme agency, establish a programme aimed at supporting the most promising local initiatives in clinical research. Expand tools such as '*contrats d'interface*' and '*Atip-Avenir*' grants to medical applicants and researchers involved in clinical research.

Following a great deal of reflection in France, a broad consensus seems to be emerging on the importance of

- promoting clearer and stronger site strategies for health research and innovation at the local level,
- and giving renewed ambition and momentum to the relationship between universities and university hospitals.⁵³

Moreover, as mentioned in section I.1, giving universities – and in particular research-intensive universities – a leading role in organising and managing research in their geographical area is one of the priorities of the national research policy.

The assessment committee observed that many actors in the health research ecosystem consider that a new 'governance' is needed at site level. It appears that the current 'Biomedical research and public health committees' (CRBSP : *comité de la recherche biomédicale et de santé publique*), which are attached to the governance of university hospitals, are not well-suited to fulfilling a real strategic role at site level and should be restructured. Inserm's self-assessment report acknowledges the need to establish a more collaborative structure or committee to foster dialogue between all partners involved at each site; it proposes the example of a new dialogue 'platform' called Coris established in Lorraine with the university, the university hospital and other national research organisations to work on common strategic priorities.

Without having examined in detail the current CRBSPs, the assessment committee considers it **important to implement new 'dialogue platforms' at site level**. This – more strategic and agile – committee should be located outside of hospital governance structures and closer to the lead university; it should include the university, the university hospital, Inserm and other partners involved in health research at the site. This 'dialogue platform' would provide the site partners with a space for defining a shared site health research strategy, including common priorities and joint actions, and for monitoring its implementation. Clearly, a key condition for the success of such site strategies will be the allocation of an appropriate budget to empower the lead university, together with its partners, to enhance collaboration, cohesion and coordination at site level.

These perspectives are crucial for Inserm. The relationship with universities and university hospitals has always been important for Inserm, which has had a positive influence on the research carried out in universities since its creation in the 1960s. Today, Inserm is essentially present in the Paris area⁵⁴ – mainly at the sites of three large universities: *Université Paris-Cité*, *Sorbonne Université* and *Université Paris Saclay* – and also at around 10 sites

⁵³ A key reference here is the recent report by Anne-Marie Armanteras and Manuel Tunon de Lara: *Plan de rénovation de la recherche biomédicale*, May 2024. See: <https://www.enseignementsup-recherche.gouv.fr/sites/default/files/2024-05/rapport--plan-de-r-novation-de-la-recherche-biom-dicale-33138.pdf>.

⁵⁴ Around 44% of Inserm's permanent staff are located in the Paris area (2024 social report).

outside the Paris area. These are mostly the sites where large research-intensive universities emerged in the 2010s, and are also the sites of the largest university hospitals.

At each of the main sites where it is involved, Inserm as RPO must act as one of the main partners of the local research-intensive university to define and implement the site strategy. At each of these sites, Inserm's contribution is key to establishing a shared understanding of the specific characteristics and expertise of the site, while paying attention to the consistency of the site strategy with the national health research strategy.

1 / Renew and deepen partnerships with research-intensive universities

The development of French universities is – and has consistently remained since the law on the autonomy and responsibility of universities in 2007 – a primary objective of the French government's policy in the field of higher education and research. Many French universities have gone through in-depth transformations over the past 15 years. In addition, the policy of supporting mergers and alliances has led to the creation of research-intensive universities that are on their way to becoming major players at national, European and international levels.

Inserm, like the CNRS and other national research organisations, was a partner in the construction of these research-intensive universities in the 2010s. It appears, however, that Inserm has not really updated its role and positioning vis-à-vis universities. In particular, it has made very few changes in the way it manages research units, or co-manages them with the partner universities.⁵⁵ The self-assessment report says very little about university autonomy, or about universities as research operators that may have their own policy for developing research. Both the self-assessment report and the interviews held during the assessment visit sometimes gave the impression that Inserm is not ready to engage in the process of the strategic development of universities.

The assessment committee firmly believes that Inserm should strive to better plan for its future in a context where universities will gain greater autonomy and where research-intensive universities will become increasingly capable and effective in developing a site-specific strategy and coordinating the tools and resources needed to implement this strategy in the areas of education, research, 'science for and with society', innovation and interactions with the socio-economic world.

Strengthening its involvement in site strategies, as part of a renewed partnership with research-intensive universities, will require Inserm as RPO to increase decentralisation and to update its modes of operation. But it also, however, represents a major opportunity for Inserm as RPO to strengthen its position as an actor in local research ecosystems and to contribute to simplifying the administration and operations for research units.

As stated in section I.2.c, the assessment committee is convinced that this change in the partnership between Inserm as RPO and the universities and in its involvement in site strategies must take place now, as it is an essential condition for building confidence among all stakeholders, which will contribute to enabling the programme agency to successfully fulfil its role.

* * *

There are several avenues for improving the site involvement of Inserm as RPO and deepen its partnership with research-intensive universities. Many of them are related to how Inserm as RPO and the universities co-steer and co-manage their joint research units.⁵⁶

- **Strengthen the role of research unit directors.**

The committee observed that units directors are often bound by decisions taken elsewhere without their participation or advice. Directors are not really in a position to influence the evolution of research in their unit: they have limited resources at their disposal, and the funding of research projects is mostly obtained through calls for projects to which researchers apply individually. Consequently, the position of research unit director is relatively unattractive.

The committee considers this topic to be of major importance. Decisive action should be taken to **empower research unit directors and strengthen their ability to play a leadership role and have an effective influence on the evolution of research in the unit.** This also means that the balance between

⁵⁵ Inserm has recently appointed 'site scientific advisors' to work alongside regional offices in order to increase Inserm's local engagement in site strategic discussions. The perception of the assessment committee is that this change has had limited impact on Inserm's relationship with universities; these advisors often lack visibility and should probably be granted greater autonomy.

⁵⁶ Almost all Inserm research units are joint research units with universities. With no legal personality, a unit is a sort of 'joint venture' common to several 'home institutions'. The common features of the research units are the following:

- The creation of a joint research unit relies on a five-year renewable contract between the home institutions. The unit is organised around scientific teams. The unit's director is jointly appointed by the home institutions.
- The home institutions allocate financial resources and staff to the unit.
- All scientific publications of the unit are credited to each of the home institutions. These institutions are co-owners of the inventions developed in the unit (e.g. patents).

project-funding made available through calls for projects and operators' funding for performing research in units is a key question that merits greater attention by Inserm and by the ministry in charge of research (see section I.2.a).

- **Establish effective shared governance for the joint research units.**
Effective governance should be developed for each joint research unit, **giving the unit director and all home institutions of the unit the opportunity to meet regularly** (typically, on an annual basis) **to discuss the main objectives of the unit and its needs for resources.**⁵⁷ Generalising clear and shared governance for each unit should be given high priority. Moreover, the home institutions should jointly examine the resource needs of their joint research units, discuss priorities and take concerted decisions for the allocation of resources to these units.
- **Decentralise as much as possible the operational processes of Inserm as RPO.**
Within Inserm as RPO, the allocation of resources to research units is mostly a centralised process. The committee recommends a real push towards decentralisation to the university sites and to the regional levels in several areas. For instance, the budget allocation to research units, the allocation of administrative staff positions, and the management and allocation of engineers and technical staff positions (except for positions attached to certain 'national platforms' and large 'national projects') could certainly be decentralised. **The decentralisation of the allocation of resources to research units would allow for a better understanding of the needs of the units and for a better pooling of resources at local or regional level. Moreover, it would facilitate concerted allocation decisions with partner universities.** Certain decisions related to technology transfer and relations with private companies could also be decentralised, allowing for greater proximity to the regional economy and facilitating the partnership with universities for innovation activities.
- **Encourage Inserm researchers and engineers to strengthen their contribution to education.**
Inserm researchers currently contribute to education on a voluntary basis: they advise doctoral students within the research units and some researchers take on teaching responsibilities within the universities. According to the self-assessment report, around half of Inserm researchers report a teaching activity, averaging around 20 hours a year.
The assessment committee considers that a substantial increase in the contribution of Inserm researchers and engineers to education could be mutually beneficial in the renewed partnership between Inserm as RPO and research-intensive universities. Encouraging Inserm researchers to contribute further to education on a voluntary basis – without changing their researcher status – and encouraging research units to become collective spaces in which all members can be involved in educational duties is a very promising avenue for the future of French biomedical research.
- **Define a common framework for consolidating and sharing units' management data.**
The 'system' of joint research units is at the core of the model of Inserm as RPO. However, it comes with very high transaction costs, and research capacity often suffers from too many interfaces. A major illustration is that the home institutions of a research unit operate with heterogeneous, non-interoperable administrative information systems.
Rather than the utopian goal of harmonising these information systems, **the objective should be to establish a common framework for consolidating and sharing management data.**⁵⁸ This would allow the units and each of the home institutions (Inserm and universities) to have an integrated and coherent view of the unit's resources (*ex ante*) and of their use (*ex post*) in a common format. This would increase the transparency of the 'joint research units system' and enhance trust among the institutions. This improved transparency would also make it possible for the administrative management of a unit to be performed by only one of the home institutions, on behalf of all of them.
- **Establish shared objectives and consolidated indicators at site level.**
Defining shared and consolidated indicators at site level is very important to give real consistency to the new local strategies and strengthen the partnerships at site level. For instance, using the amount of funding obtained from the EU – or from private companies – for all research units of a given site as a key performance indicator (KPI) for this site, and giving Inserm as RPO and the university (and other home institutions) joint responsibility for the evolution of this KPI would help them strengthen the partnership.

⁵⁷ Today, discussions between Inserm and other home institutions of a research unit (and with the unit director) take place at the beginning of the 'five-year cycle' of the unit, both before and after the unit's assessment by Hcéres and a CSS (see section II.1.a). But the interactions between Inserm and other home institutions of research units during the five-year cycle are very limited, and focus on management issues and information sharing.

⁵⁸ It is currently very difficult – if not impossible – for the director of a research unit to obtain a consolidated view of all financial resources of the unit, and it is equally difficult – if not impossible – for a university to obtain a consolidated view of all financial resources of its research units.

On the contrary, using separate KPIs that push each institution to grow its own contract funding from the EU or from private companies only encourages sterile competition.

2 / Strengthen partnerships with universities and university hospitals at site level

University hospitals clearly have a major role to play in the development of the ambitious health research site strategies described above.

The self-assessment report states that the 'proximity with hospitals and universities has been the DNA of Inserm since its creation', and also states that Inserm intends to strengthen its role as 'a central part of the Inserm-hospital-university triptych'. It is not clear to the assessment committee whether this strategy is wholly appropriate in the present context, where building closer relationships between universities and university hospitals is undoubtedly an important issue on every site. Inserm should probably deepen its analysis of the current situation, together with its partners, to define its future role within the 'triptych'. For instance, increasing and improving clinical research is clearly a major objective in the partnership between universities and university hospitals, but there is certainly a role for Inserm to contribute to this objective, both for the programme agency through **a programme aimed at supporting the most promising local initiatives for developing clinical research**,⁵⁹ and for Inserm as RPO, as a key actor involved in the site's research units. At some sites, there is a need to optimise the development of clinical research and to better articulate the university-Inserm joint research units with the clinical research taking place within the university hospital. This may sometimes imply modifying the role of the CICs (clinical investigation centres) to provide an interface between the needs of research units and the clinical departments.

In addition to the analyses and recommendations of section II.2.a on clinical research, the assessment committee wishes to add the following remarks.

- Training and retaining clinical scientists for long-term research careers is a challenge that is not unique to France. In addition to the valuable but limited contribution of 'École de l'Inserm', Inserm could play a greater role in supporting young doctors pursuing research careers within university hospitals. A decentralised MD-PhD training programme, co-developed at site level with the university and the university hospital, could be developed. This programme could target high-potential junior physicians identified jointly by the three partners.
- A major challenge to the attractiveness of university hospitals is the lack of dedicated research time for clinical scientists. Inserm's 'interface contracts', which fund protected research time, are widely appreciated but extremely limited in number (only 36 active contracts at the end of 2023)⁶⁰. **The committee recommends expanding this 'contrats d'interface' programme for physicians dedicating time to research and, reciprocally, for researchers involved in university hospitals for a period of time.** As with training, a decentralised support system, developed and co-funded by all three partners at site level, could help retain talented clinical scientists and support their careers.

⁵⁹ Health research agencies of other countries, such as the *Fonds de recherche en santé du Québec*, do fund scholarships for clinical scientists.

⁶⁰ Self-assessment report.

IV. Innovation and relations with companies

Recommendation 9: While carefully maintaining the efficiency and professionalism of its current organisation with the *Inserm Transfert* subsidiary, establish a genuine capacity within Inserm to define and monitor its innovation strategy, and reflect carefully on how to reduce the potential risks and drawbacks of this organisation.

The assessment committee considers Inserm's commitment to innovation and partnership with private companies as a very significant strength.

Since 2000, Inserm as RPO has delegated almost all its activities in innovation, technology transfer and contractual relations with private companies to its 100%-owned subsidiary '*Inserm Transfert*', which brings together highly skilled professionals in these areas. *Inserm Transfert* is a for-profit company with around 90 employees.⁶¹

1 / A strong commitment and a remarkable track record

In the self-assessment report, the presentation of innovation activities starts with the description of *Inserm Transfert*'s efforts to 'develop a culture of innovation' within Inserm. *Inserm Transfert* has implemented a structured approach to meeting and discussing with researchers identified as 'potential innovators', with the aim of raising their awareness and training them in the dynamics of innovation.⁶² These efforts appear fruitful given the number of invention disclosures, though the committee was unable to measure the real impact on the diffusion of an innovation culture within Inserm research units.

Inserm pays attention to taking innovation activities into account in researchers' recruitment and promotion processes. The assessment bodies (CSSs) claim they take into account all aspects of applicants' contributions when assessing researchers, including industry experience, technology output, patents and startup creation. However, opinions remain divided on the actual importance given to such 'non-scientific' aspects in researchers' assessments, and the committee could not determine if the assessment of innovation activities had really improved and was having a clear impact on Inserm's innovation culture.

Inserm has also set aside €2 million per year for a dedicated scheme to support early-stage innovation, including the protection of 'embryonic' innovations and the development of proof-of-concept studies. This investment has been leveraged by additional funding from *Inserm Transfert*, amounting to €5 million or €6 million annually. Inserm has also created specialised units to support the technological and regulatory advancement of innovation.

* * *

The self-assessment report also shows that *Inserm Transfert*'s intellectual property (IP) strategy has consistently placed Inserm among the top 5 patent filers in pharmaceutical and biological fields within the European Union, with an average of 150 new filings per year. This strategy is implemented through a careful management of Inserm's patent portfolio, with a high level of attrition 'upstream of the transition to the national phases': only about half of the patents proceed to the national phase after both technical and industrial qualification. *Inserm Transfert* has high-level patent analysis expertise; this capability enables significant cost savings compared to outsourcing IP services to specialised external offices. Financially, the strategy has paid off: licensing revenues have risen from less than €10 million to over €30 million per year in recent years.

* * *

Inserm and *Inserm Transfert* run a 'pre-entrepreneurial programme' to help mature startup creation projects led by scientists from Inserm research units.⁶³ The support offered is specific to each project. Over a few months (typically three), it aims to train the project leaders in six main areas: team creation, consolidation of a differentiating concept meeting market needs, protection of intellectual property, market access strategy, development plan and financing plan. The pre-entrepreneurial programme is a validation step used by *Inserm Transfert* to allow the entrepreneur to enter into licensing negotiations. This licensing negotiation phase is a relatively short process thanks to the expertise and dedication of *Inserm Transfert*'s teams, typically lasting a few

⁶¹ See <https://www.inserm-transfert.fr/>.

⁶² Surprisingly, this action is strictly limited to individual meetings – with no possibility of meeting a group of researchers.

⁶³ Self-assessment report.

months.⁶⁴ A total of 107 projects followed this process during the assessment period, leading to the creation of 66 new startups.⁶⁵ The committee views these efforts positively, but they have not yet led to a noticeable increase in the number of startups created.

Most negotiations concerning intellectual property assets are based on licence fee mechanisms. **The committee suggests exploring the possibility of equity participation in startups, a practice that is becoming increasingly common in technology transfer offices around the world.** Some entrepreneurs continue to report lengthy licensing agreement negotiations, despite their acceleration. **The committee recommends continuing efforts to simplify these licensing agreements,** in particular by only including clauses that are strictly necessary.

Support for startups also includes post-creation assistance, particularly in establishing relationships with venture capital investors to facilitate fundraising. Entrepreneurs confirm the value of *Inserm Transfert's* close ties with investors.

* * *

Inserm Transfert also has strong expertise in setting up cooperation agreements with industrial partners. All those interviewed praised the professionalism and efficiency of *Inserm Transfert's* teams in negotiating and setting up these contracts. Certain agreements involving multiple research units and large annual budgets are considered strategic. These strategic partnerships (e.g. with Sanofi and MSD) are based on framework agreements that streamline the contracting process⁶⁶ and have facilitated Inserm's participation in Sanofi and MSD international innovation programmes. The consistently positive feedback from strategic partners highlights *Inserm Transfert's* competence and professionalism. Contract volumes remain around €20 million annually, similar to the previous period⁶⁷. **The committee suggests that Inserm set targets in terms of volume and strategic scope to further drive its industrial partnership strategy.**

* * *

Several results of Inserm's innovation activities are highlighted in the self-assessment report. For example: annual fundraising of €240 million by Inserm spin-offs, the acquisition of several spin-offs by French and European industry, tracking of the socio-economic impact of marketed innovations such as new therapeutic, diagnostic and prognostic products derived from Inserm innovations that have come to market, and more than 190 potential medicinal products that were at various stages of development at the end of 2023. Moreover, the self-assessment report gives a short description of several success stories of Inserm and *Inserm Transfert* in terms of value creation. **The committee encourages Inserm to continue monitoring the impact of its innovation activities and to assess the level and evolution of innovation culture in its research units.**

* * *

The monitoring of the innovation dynamics of Inserm as RPO is based on results reported by *Inserm Transfert*.⁶⁸ In fact, *Inserm Transfert* manages the innovation activities and contracts of around 45% of the teams within Inserm research units;⁶⁹ the other 55% are managed by other home institutions of the research units, or other actors within the 'innovation ecosystems' at site level. Inserm's current monitoring therefore covers the innovation activities of fewer than half of its research teams. **The assessment committee considers that Inserm as RPO should really aim to establish a comprehensive overview of its innovation activities.** As recommended in section III.1 above, **Inserm should work with universities – and with other home institutions of the research units – to consolidate data on its research units' innovation activities.**

* * *

Lastly, the assessment committee would like to make three comments.

- Neither the self-assessment report nor the interviews made it possible to obtain a clear understanding of Inserm's relationship with the new French Agency for health innovation created in 2022.⁷⁰
- The self-assessment report develops the classical 'linear model of innovation' where an innovation project 'emerges from a scientific project', and it uses the TRL (technology-readiness model) scale as a measure of progress towards innovation. This might well be relevant for most innovation projects run by Inserm's teams, but perhaps not for all. Inserm and *Inserm Transfert* could probably also consider other types of innovation projects, for instance in the field of 'social innovation' (e.g. in population health, or innovation projects conducted with patients' associations). The assessment committee did not, moreover, had the opportunity to analyse whether any startups created from Inserm research units

⁶⁴ According to the self-assessment report, the time taken to establish partnerships or operating contracts has been considerably reduced to less than 3 months for R&D partnerships and less than 9 months for operating agreements.

⁶⁵ Self-assessment report.

⁶⁶ Self-assessment report.

⁶⁷ Self-assessment report.

⁶⁸ In particular, data given by Inserm on 'innovation revenues' concern only the portion of these revenues included in Inserm's or *Inserm Transfert's* accounts.

⁶⁹ Information given in interviews held during the assessment visit.

⁷⁰ See <https://gpius.esante.gouv.fr/en/players/player-profiles/agency-health-innovation-ais>.

belong to the 'digital economy' – in which time cycles and innovation paths are not the same as in the pharmaceutical or biotech worlds – and whether Inserm and *Inserm Transfert* have the appropriate skills to support and help such startups.

- The self-assessment report and the interviews showed that the vision of Inserm's innovation activities seems essentially to be limited to the national scale. **The assessment committee recommends that Inserm define a strategy and an action plan to play a leading role in health innovation in Europe.** Inserm's influence strategy at the level of the European Union should also fully integrate innovation, and not only research.⁷¹

2 / Inserm's and *Inserm Transfert*'s roles and relationship

Inserm Transfert operates under a 'public service delegation for the valorisation of public research', a contract between Inserm and *Inserm Transfert*. According to the current contract, which covers the 2022–2027 period, *Inserm Transfert* is essentially responsible for all innovation and transfer activities of Inserm, which remains the owner of all intellectual property rights. The delegation agreement delegates to *Inserm Transfert* the establishment of European collaborative projects coordinated by Inserm.⁷²

a/ Governance and *Inserm Transfert*'s 'business model'

The assessment committee analysed in detail the relationship between Inserm and *Inserm Transfert*.

Inserm Transfert has a Supervisory Board and an Executive management Board (in French: *Conseil de surveillance* and *Directoire*).

- The Supervisory Board is chaired by Inserm's CEO and also includes Inserm's deputy CEO for strategy and two external members from private companies. Inserm's director of finance is invited to the meetings of the Supervisory Board, which meets quarterly.
- The Executive management Board includes five members and is chaired by *Inserm Transfert*'s CEO.

A Steering committee for the Inserm-*Inserm Transfert* delegation agreement also exists. This serves as a liaison and operational coordination body between Inserm and *Inserm Transfert*. The committee includes two representatives from Inserm and two from *Inserm Transfert*, accompanied by respective experts. The Steering committee meets six times a year. *Inserm Transfert*'s CEO is, moreover, invited to all meetings of Inserm's Executive committee, and has monthly meetings with Inserm's CEO and Deputy CEO for strategy to 'ensure maximum strategic and operational alignment between Inserm and *Inserm Transfert*'.⁷³ *Inserm Transfert* officers also participate in the monthly meetings of the heads of Inserm's regional offices.

Inserm's evaluation of *Inserm Transfert*'s performance is mainly based on *Inserm Transfert* annual reports, and *Inserm Transfert*'s annual objectives are proposed every year by *Inserm Transfert* itself.⁷⁴ *Inserm Transfert* monitors certain quantitative indicators: time taken to negotiate contracts, licensing revenues, number of start-ups created and indicators related to startup development (fund-raising or acquisition).

Inserm Transfert's revenue model is complex, with variable compensation based on the activity type: 20% from licensing activities, 10% from industrial partnerships and pay-per-service billing for other tasks as specified in the public service delegation agreement. For entrepreneurial activities, *Inserm Transfert* works *pro bono*.⁷⁵

b/ Strategic suggestions and recommendations

The situation of Inserm and *Inserm Transfert* is quite singular, with intertwined governance bodies and a multiplication of activities and operations in which employees of both institutions closely interact on a daily basis and jointly interact with third parties. While fully acknowledging the effectiveness of this organisation and the high appraisal of the skills of *Inserm Transfert*'s teams, the assessment committee considers that several important questions deserve close attention.

The full extent of the delegation given to *Inserm Transfert* in the area of innovation occasionally appeared odd to the assessment committee. For instance, remarks such as '*Inserm Transfert* continued its efforts to develop a culture of innovation within Inserm' or 'It is *Inserm Transfert*'s job to identify potential innovations in Inserm research units', expressed in the self-assessment report or in interviews, sound strange: one might have thought that such

⁷¹ See the action plan for the implementation of Inserm's European strategy: <https://www.calameo.com/read/005154450f9392ae0ab5c>.

⁷² Public service delegation agreement, article 15.

⁷³ Written answer from Inserm to a written question of the assessment committee.

⁷⁴ The assessment committee did not have access to the conclusions of the evaluation of *Inserm Transfert* carried out in 2020 by Inserm.

⁷⁵ Written answer from Inserm to a written question of the assessment committee.

key responsibilities would be exercised by Inserm and would form a key part of the role of the directors of research units and of thematic institutes. This situation is not without consequences for Inserm:

- The assessment committee observed that officers in the management of Inserm have neither real experience in promoting innovation and relations with private companies, nor the mandate to do so. No officer in the management of Inserm has the ability or the remit to think on future directions for Inserm's innovation strategy. In fact, Inserm's innovation strategy, if it exists, seems to be defined and implemented by *Inserm Transfert*. **The assessment committee encourages Inserm to establish a genuine capacity to define its innovation strategy, set and monitor objectives, evaluate results, and report to the Executive committee and to the Board of directors.**
- There is a risk that Inserm's choice of outsourcing innovation activities be felt by Inserm's employees as a sign that innovation is not considered a core mission for Inserm. This may hinder the development of an innovation culture within Inserm, or full recognition of innovation activities in the assessment of Inserm researchers. There is also a risk that the directors of research units and of thematic institutes lose their sense of responsibility – and feel disempowered – in matters of innovation. These subjects certainly require vigilance on the part of Inserm.

As in every situation where an institution is the unique shareholder of a private for-profit company (and in particular when it is also the unique 'customer' of this company), the greatest attention should be paid to carefully avoiding the risk that Inserm's officers interfere with *Inserm Transfert*'s internal management decisions. The assessment committee lacked the necessary information to assess whether sufficient awareness-raising and training measures are provided to Inserm's officers with regards to these risks.⁷⁶

Lastly, the present organisation of Inserm and *Inserm Transfert* generates the risk of rendering relations with third parties more complex, as any bilateral relationship between Inserm and a (public or private) partner is likely to become a trilateral relationship wherever innovation is at stake. In fact, the companies met by the assessment committee, while praising *Inserm Transfert*'s professionalism, expressed that they find three-party contracts complex. This concern was also raised by the universities, despite the fact that Inserm and *Inserm Transfert* have developed actions to improve synergies with local 'innovation ecosystems' in the context of 'university innovation hubs', as reported in the self-assessment report.

The assessment committee encourages Inserm to reflect on these questions in more depth, while carefully maintaining the effectiveness, efficiency and professionalism of its current organisation with *Inserm Transfert*.

⁷⁶ The assessment committee observed that *Inserm Transfert* is sometimes perceived as an internal Inserm entity, but it is not.

V. European commitment and international cooperation

Recommendation 10: Define and implement a strong and visible European strategy with targeted priorities, including the development of strategic partnerships with key European public and private actors in the field of health research and innovation, in coordination with French partner universities. Define a consistent international strategy prioritising a limited number of strategic partnerships with world-leading institutions.

1/ A strong European commitment

The significant increase in Inserm's participation in EU-funded research and innovation programmes stands out as one of the major achievements of the 2019-2023 period. Inserm has stepped up its efforts to secure European funding, particularly through the Horizon 2020 and Horizon Europe programmes. The self-assessment report states that European funding increased by 53%, from €56 million in 2019 to €85 million in 2023, primarily due to the growing success of Inserm teams in Horizon Europe calls. For the whole Horizon 2020 programme, covering the 2014-2020 period, Inserm was ranked number 1 in Europe for the number of projects selected and coordinated and for the amount of funding received in the context of calls for collaborative health research projects; Inserm was involved in 396 projects and coordinated 172 of them. Inserm was also involved in 142 Horizon Europe projects for the 2021-2023 period, coordinating 17 of them. At the national level, Inserm is the leading French institution for EU-funded collaborative health research projects and hosts the second-largest number of ERC grant recipients in France (after CNRS), ranking as France's second-largest participant in the Marie Skłodowska-Curie actions programme.⁷⁷

In September 2022, Inserm adopted an action plan 'for the implementation of its European strategy', structured around three main axes: influence, encouragement and support.

- The first axis, influence, included a mix of actions aimed at improving the position and facilitating the participation of teams of Inserm as RPO and of French health research in general in EU programmes. In practice, most actions seem to have been undertaken in close association with other French actors, foreshadowing the role of the programme agency. The self-assessment report mentions several results of these actions in the fields of brain health, rare diseases and 'food and health'.
- The second axis aimed to encourage Inserm research units and researchers to submit proposals by better sharing information on the EU programmes, instruments and calls; increasing incentives and improving recognition of European involvement in the individual assessment of researchers; and increasing support for networking activities contributing to the emergence of new proposals.
- The third axis focused on support provided for setting up and managing EU projects at both national level (Inserm's headquarters and *Inserm Transfert*) and within Inserm's regional offices. Specific training sessions were organised and specific support dedicated to project coordination was also enhanced.⁷⁸

This action plan clearly demonstrates a strong commitment by Inserm to increasing the participation of its teams in EU programmes. Although the plan is relatively recent, it appears to have generated real momentum.⁷⁹ However, due to the multiple affiliations of researchers and home institutions of Inserm research units, the data presented only reflect EU grants managed directly by Inserm and not the full scope of EU-funded projects involving Inserm research units. Again, **Inserm as RPO should aim to establish a comprehensive overview of the EU-funded research projects of its research units, and should work with universities – and other home institutions of the research units – to consolidate data on research units' European projects.**

Despite the positive assessment of Inserm's action plan 'for the implementation of its European strategy', the assessment committee noted that Inserm's European strategy itself is not as precisely defined as it should be. After having identified the main fields in which it plays – or would like to play – a leading role in Europe, Inserm should determine areas where increasing its participation in EU programmes is strategic. In addition to EU programmes, Inserm should also develop strategic partnerships with key actors in Europe. Efforts are now being made to establish partnerships with Northern European countries (Sweden, Denmark, the Netherlands, etc.), but dedicated discussions with other European research institutions are limited. Moreover, the self-assessment report makes no mention of 'European university networks' which are increasingly transforming academic partnerships in Europe. Except for Paris Saclay University, Inserm's partnerships with French universities are not mobilised to establish and strengthen European strategic partnerships. **The committee encourages Inserm as RPO to develop**

⁷⁷ Self-assessment report.

⁷⁸ The enhanced quality of support in project setup was acknowledged in a survey conducted among Inserm researchers.

⁷⁹ Self-assessment report.

a strong and visible European strategy, coordinated with French partner universities. This strategy should include strategic partnerships with leading European universities and research institutions, and ambitious initiatives with key European public and private actors in the field of health research and innovation.

2/ Flourishing yet dispersed international cooperation

Inserm's international cooperation activities are also flourishing. As the world's second largest biomedical research organisation, Inserm has 7,000 international cooperation agreements, collaborates with more than 100 countries and has 66 foreign partner laboratories.⁸⁰ Around 53% of scientific publications produced by its research units are international co-publications (see section II.1.b). The self-assessment report highlights co-publications with world leaders such as Harvard University (3.8% of the co-publications of Inserm as RPO), the University of London (5.6%) and the University of California system (3.2%) and stresses that Inserm's co-publications with US institutions have an excellent average citation score, above 3.6.

The self-assessment report also describes how Inserm has renewed its 'international cooperation tools' via several programmes.

- The objectives of the 'First steps' and the 'International research projects' programmes are to 'initiate and structure partnerships', through annual calls for proposals that are open both thematically and geographically. The 2020 call supported over 40 'first steps' (12 months duration) and 54 'international research projects' (5 years duration) with a budget that has more than doubled, from €300k to €700k.
- The 'Key international partnerships' programme is designed to 'structure institutional partnerships on targeted themes'. It includes 32 currently active partnerships, with partners such as the US National Institutes of Health (NIH), the Japan Society for the promotion of science (JSPS), the Oswaldo-Cruz Foundation in Brazil and the *Fonds de recherche en santé du Québec*.
- The 'thematic coordination programmes' are aimed at 'structuring international thematic scientific networks at international level'. Two are already operational, one in the area of aging and one in precision psychiatry, each involving 7 countries and 6 sites in France with a focus on co-supervised PhD students in France and partner countries.

In addition, the self-assessment report mentions:

- cooperation with international institutions such as the WHO and high-level groups such as the Heads of international biomedical research organisations (HIROs);
- strengthening of the Inserm office in Washington in 2024 and consideration of a new office in Asia;
- creation in 2024 of 6 'joint labs' between a research unit in France and a foreign laboratory;
- launch in 2024 of the 'Inserm abroad' network, including Inserm scientists working in foreign research institutions;
- international actions led by Inserm's internal agency ANRS-MIE in low- and medium-resource countries, and launching of the ANRS-MIE international network in 2023.

As for Europe, the assessment committee considers that, despite the stated objective of structuring partnerships and networks, these numerous collaborations lack a clearly articulated international strategy. There is, moreover, a genuine risk of limited funding being dispersed across too many initiatives. **The committee therefore encourages Inserm as RPO to define a coherent international strategy**, with targeted priorities. Noting that the self-assessment report indicates that 'thematic and geographical priorities' will be defined, the committee recommends aligning thematic and geographical priorities in order to **prioritise a limited number of strategic partnerships with world-leading institutions**, in collaboration with French research-intensive universities that have strong ties with Inserm, in order to include an educational dimension in this strategy.

⁸⁰ Self-assessment report.

VI. Science in society

Recommendation 11: In order to better connect collective expert reports to current events and make them more impactful, review the decision-making process and methodology, publish them in English and make them more widely known in Europe.

Recommendation 12: Define a roadmap for major epidemic preparedness describing how the objectives, work processes, and communication strategy of the programme agency and of Inserm as research performing organisation should be adapted in the event of a future pandemic similar to the Covid-19 crisis.

1/ Contribution to public policies

a/ Hearings with policy makers and collective expert reports

According to the self-assessment report, Inserm mainly contributes to public policies in two ways: hearings with policy makers and parliamentarians on the one hand, and publications of 'collective expert reports', on the other.

Inserm has monitored the number of its parliamentary hearings since 2019: 117 hearings took place between 2019 and 2023, a third of which were with Inserm's CEO and two thirds with other representatives. These efforts were negatively impacted by the Covid-19 crisis, during which Inserm had no representative on the Scientific Council set up by the president of the Republic, and was unable to establish itself as one of the main advisors in assisting political decision-making. Inserm's advocacy and lobbying efforts were nevertheless maintained after the crisis.

Of course, measuring the impact of these activities is difficult. Inserm monitors the number of citations of its contributions in various parliamentary contributions. It noted that the number of legislative files mentioning Inserm increased from 38 in 2022 to 66 in 2023. According to the self-assessment report, Inserm has also established close ties with the Parliamentary Office for the evaluation of scientific and technological choices (OPECST : *Office parlementaire d'évaluation des choix scientifiques et techniques*). The assessment committee noted that Inserm does not currently plan to deploy this 'political influence strategy' at the European level, either with European parliamentarians or with policy makers at the European Commission.⁸¹

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A more traditional way for Inserm to participate in the public debate and contribute to public policies is the production of 'collective expert reports'. Commissioned by the public authorities, these reports – which Inserm has produced since 1993 – aim to provide scientific knowledge to help healthcare system stakeholders make decisions. They are based on a collegial effort to critically analyse the scientific literature, following a well-established procedure managed by a specific 'Collective expert reports unit' within the Public health thematic institute. Inserm considers these reports to be authoritative in their scientific quality, independence, multidisciplinary nature and relevance.⁸² They contribute to the public debate on current scientific, economic and social issues in health, and contribute to the establishment of public health policies. Among the 80 collective expert reports issued since 1993, some have gained particular prominence in the public debate, such as 'Effects of asbestos on human health' published in 1996, 'Nuclear tests and health: outcomes in French Polynesia' (2020) and 'Pesticides and effects on health' (2021). Inserm measures the impact of these reports through their citations, which seem to increase regularly; most of the citations appear in scientific articles and around 10% in parliamentary documents.

The assessment committee noted with surprise that no collective expert report had been published for three years during the recent period.⁸³ The committee also has several observations:

- Inserm's decision-making process to launch work on a new collective expert report (or to delay or decline a recommendation for a new report from the authorities) is not clear. Inserm never appears to have decided to produce a collective expert report on its own initiative.
- The time needed to prepare and deliver a collective expert report – three years – clearly constitutes an obstacle for making a timely contribution to the public or political debate. The quality of the reports

⁸¹ The presence of an Inserm officer in Brussels is dedicated to strengthening Inserm's position in the EU research programmes.

⁸² Self-assessment report.

⁸³ The last collective expert reports published by Inserm are the following: 'Physical activity: prevention and treatment of chronic diseases' (February 2019), 'Developmental coordination disorder of dyspraxia' (December 2019), 'Fibromyalgia' (October 2020), 'Nuclear tests and health: outcomes in French Polynesia' (February 2021), 'Reduction of alcohol-related harms' (May 2021), 'Pesticides and effects on health' (June 2021) and 'Poly-handicap' (June 2024).

must not be compromised by undue pressure to deliver them faster, but a more reactive process would appear necessary to ensure relevance with regard to current social issues.

- The committee was surprised to learn that Inserm's collective expert reports are published only in French. Publishing English versions would allow the reports to serve as an internationally recognised and cited benchmark of Inserm's expertise.

In order to connect collective expert reports more to current events and render them more impactful, the assessment committee recommends reviewing the decision-making process and the methodology for these reports, and also publishing them in English and making them more widely known in Europe.

b/ Lessons learned from the Covid-19 crisis and pandemic preparedness

Neither in a public document nor in any other 'official' document – such as a memo presented to its Board of directors – has Inserm presented what it learned from the Covid-19 crisis, or a review of its actions and contributions during the crisis. This is regrettable, as many actors in the health system ecosystem have been hoping to know more about Inserm's experience during the crisis, and about lessons learned following the crisis.

The self-assessment presents the change in Inserm's internal agency from ANRS to ANRS-MIE in 2021, with the expansion of its remit to cover emerging infectious diseases, as the main measure taken after the Covid-19 crisis. However, there are many other aspects about which clear lessons could have been drawn from the crisis. One such aspect relates to communication, raising several questions: how to adapt Inserm's communication in times of health crisis, how to help scientists with their own communication when advising authorities or communicating to the general public? This is a major topic; some observers consider that the Covid-19 crisis to have been a missed opportunity in France to enhance society's trust in science, and that Inserm failed to make its voice heard in the public debate during the crisis.

Certain lessons from the Covid-19 crisis are more of interest for the programme agency than for Inserm as RPO. For instance, it would appear clear that France had great difficulty in promoting efficient clinical research during the Covid-19 crisis. The general context has been well summarised in various papers⁸⁴. Although this disorganisation was observed in several countries, it was particularly the case in France: many underpowered and irrelevant studies were commenced, limiting the capacity of conducting pivotal studies. Inserm has been criticised for this situation. This raises the question of how Inserm, universities and university hospitals could improve their coordination of clinical trials, specifically in the case of future pandemics, and the question of the coordinating role that could be played by the programme agency. In broader terms, the programme agency should certainly reflect specifically on how its objectives and work processes should be adapted in the event of a future pandemic.

The assessment committee had the impression of little clarity regarding the preparedness of Inserm as RPO or of the programme agency in the event of any future health crisis. **The committee recommends defining a roadmap for major epidemic preparedness describing how the objectives, work processes and communication strategy of the programme agency and of Inserm as RPO should be adapted in the event of a future pandemic similar to the Covid-19 crisis.**

2/ Significant involvement in dialogue and debates with society

Inserm has launched ambitious initiatives regarding its outreach to society. The objectives of its communication strategy are to 'turn citizens into genuine Inserm stakeholders' and to 'clearly communicate to the public the added value and impact of Inserm research findings'. Significant attention is paid to 'correct misinformation and deliver the most accurate information possible to the public', so as to 'strengthen public confidence in science' and 'benefit the health of everyone'.⁸⁵

Inserm has developed scientific mediation, with many citizen outreach events such as the '30 minutes Santé' programme on its YouTube channel, as well as exhibitions, etc. In addition, Inserm has developed its *Canal Détox* series which aims to fight health misinformation in a variety of forms (videos, written materials, interviews, webinars, seminars, symposia, books, etc.), giving Inserm researchers a voice on a wide range of scientific health issues.⁸⁶ Inserm has also worked with the Ministry of education to help create school *curricula* based on Inserm results and materials. Inserm's audience among the general public has grown in recent years: Inserm's website traffic increased from 9 million visits in 2020 to 11.4 million visits in 2024, and the number of views on *Canal Détox* grew from 500,000 in 2020 to 1,900,000 in 2023.⁸⁷

⁸⁴ See <https://www.statnews.com/2020/07/06/data-show-panic-and-disorganization-dominate-the-study-of-covid-19-drugs/>.

⁸⁵ Self-assessment report.

⁸⁶ Self-assessment report.

⁸⁷ Self-assessment report and Inserm's 2024 annual report.

Several actions are being implemented to mobilise and train Inserm staff. An 'Inserm Media charter' was published in September 2023, 'in order to give each staff member the keys to successful media communication that promotes the collective and credible image of science'.⁸⁸ Media training sessions are proposed to Inserm researchers. Inserm has also created the 'Riposte unit', composed of 120 researchers who have volunteered to address health misinformation. Inserm promotes the recognition of the researchers' involvement in actions towards society in their individual assessments, having added a section on 'societal value-creation' to report templates.

Two other initiatives are worth mentioning:

- Inserm's 'patient think tank' (called Gram, *Groupe de réflexion avec les associations de malades*) was established for the purpose of enabling patients' associations to have a say on the strategic directions of health research. Composed of patients, researchers and administrators, this think tank meets quarterly and reports to Inserm's top management.
- Inserm places strong emphasis on participatory research, allocating funding (€15k) to support the launch of projects selected by a committee. To date, 11 participatory research projects have been supported.

The assessment committee applauds Inserm's efforts in its outreach to civil society and its exemplary work towards popularising learnings from the health sciences. Inserm's communication strategy to increase public confidence in the health sciences are of major importance, particularly given the growing distrust of science associated with the Covid-19 pandemic. **The committee strongly encourages Inserm to pursue the momentum of its initiatives towards society.** It recommends associating partner universities in these actions, as well as other partners such as CNRS and the *Institut Pasteur*.

It also recommends working with partners from the research ecosystem and civil society organisations on the construction of a 'barometer' to regularly measure society's confidence in health research as precisely as possible, and to assess the impact of the on-going initiatives. In the future, Inserm could expand its communication campaigns to populations lacking a specific interest in science but seeking health information, for example as they book medical appointments or interact with the healthcare system in other ways.

3/ Sustainable development

Inserm began developing policies in favour of sustainable development as part of the objectives of its Cop for the 2021-2025 period,⁸⁹ focusing on three priorities:

- assessing the environmental impact of its activities,
- supporting and training Inserm's stakeholders in order to develop their practice,
- supporting research and innovation with respect to sustainable development, particular with regard to health issues.

In 2023, Inserm created the Ecological and societal transition unit, with an internal network of 'ecological and societal transition advisors' representing the various components of the institution. This network now has more than 50 advisors in around 100 research or service units, as well as in the regional offices, the departments and the thematic institutes. This new unit reports to the Financial affairs department.

Several actions have been carried out or are in progress. A carbon audit was performed in 2022 and Inserm intends to define an ambitious low-carbon policy after a new carbon audit in 2025, with the objective of taking into account indirect emissions related to procurement and mobility. There is ongoing development of a purchasing charter that aims to implement good practice regarding waste reduction and waste recycling in order to minimise waste and prioritise greener alternatives where possible within laboratories (e.g. recycled goods, eco-friendly cleaning products, etc.). There is also the promotion of sustainable mobility for daily commuting and for assignments, as well as the reduction of carbon-heavy travel by encouraging remote working and the organisation of meetings online. There are also energy saving actions, including the maintenance of equipment and the replacement of lighting in the buildings by LEDs. Lastly, efforts are being made to communicate and spread awareness about environmental issues across Inserm – including the organisation of eco-solidarity challenges, amongst other activities.

Despite having begun this work quite recently, the assessment committee found the efforts of Inserm on sustainable development issues commendable. Inserm recognises, however, that major transformative sustainable development actions are still required. The committee also noted that the vast majority of research and service units do not participate in the network of ecological and societal transition advisors. **The committee strongly encourages Inserm to pursue and strengthen its efforts on sustainable development issues, and to assess their impact.**

⁸⁸ See <https://inserm.xyz/intranet-docs/Charte%20de%20la%20parole%20publique%20de%20Inserm.pdf>.

⁸⁹ Self-assessment report.

Finally, in connection with the Cop priority of 'supporting research and innovation with respect to sustainable development, particular with regard to health issues', a 'climate change and health' research programme was launched in 2023, led by the Public health thematic institute. This is a 3-year 'booster programme' (see section II.2.d) with a €1.5 million budget, and 6 projects had been selected at the end of 2023 by an international jury. Again, the assessment committee noted that there is little development of 'One Health' research at Inserm.

4/ Improving society's trust: ethics, integrity and professional conduct

Inserm was a pioneer in scientific integrity when it created its Scientific integrity office in 1999. Today, Inserm promotes ethics, integrity and professional conduct through four main bodies:

- The College of professional conduct was created in 2020. Its missions are to advise employees; to respond to management queries on individual situations; to advise management, and to collect and process whistleblower reports. Between July 2020 and July 2024, the College examined 43 referrals
- The Ethics evaluation committee is a Research ethics committee registered with the Office for human research protections of the U.S. Department of health and human services. It aims to provide ethical opinions on research projects that directly or indirectly involve human subjects in the biological and medical fields, but also in the social sciences and humanities. More than 100 new projects are examined per year.
- The Ethics committee is more forward-looking and strategic; it comprises around 20 members. Its mission is to support Inserm staff in identifying and integrating ethical issues into the design of their research projects. It directs its work according to referrals received from any Inserm staff, Inserm's management, or any Inserm structure. Over the period 2019-2023, the Ethics committee produced 15 memos, all available in French and English on the Inserm website. It participated in several international ethics research projects and organised an annual conference.
- The Office for research integrity aims to disseminate a strong culture of scientific integrity, help teams and people to resolve scientific conflicts through a mediation procedure, and deal with any possible breach of research integrity reported.⁹⁰

In 2021, Inserm also created the 'Lorier' programme to foster the development within Inserm of a common culture of ethical and responsible research that meets the highest international standards,⁹¹ and to improve the accountability, transparency, reproducibility and quality of research. The scope of this ambitious and promising initiative is very broad, including topics such as research assessment and 'research on research'. It boasts excellent engagement, as attested by unusually high webinar attendance figures.

The committee encourages Inserm to carefully pursue these efforts, which sustain its policy on ethics and scientific integrity. It recommends ensuring that all new staff receive appropriate training on ethics, scientific integrity and professional conduct. It also advises Inserm to ensure that it is fully prepared in the event it encounters a situation of serious scientific misconduct; the definition of an appropriate 'scale of sanctions' and the delicate issues of both internal and external communications in such an event merit careful preparation.

The interviews held during the assessment visit showed that one of the challenges facing research ethics and integrity relates to differences between hospital culture and academic culture regarding research assessment and career trajectories. **The assessment committee recommends that Inserm, following its engagement in CoARA (see section II.1.a), work on promoting qualitative research assessment not only within Inserm as RPO but also for the whole health research ecosystem in France, and advocate for research assessment reform across disciplines and affiliated institutions.**

⁹⁰ Self-assessment report.

⁹¹ Lorier means 'L'organisation pour une recherche Inserm éthique et responsable': Organisation for ethical and responsible research at Inserm.

VII. Governance, organisation, management and operations

Recommendation 13: Clarify the internal organisation and improve executive management with clear reporting, objective setting and annual review mechanisms for all directors, with better coordination and increased synergies between thematic institutes, and with a strengthened role for the Executive committee as a decision-making body.

Recommendation 14: Fully integrate contract staff into Inserm's vision of itself and into its human resources policy. Establish a detailed multi-year perspective for the development of contract staff jobs and skills.

Recommendation 15: Improve the clarity and readability of the budget and accounts, draw up a detailed multi-year plan for the evolution of income and expenditure, and urgently implement analytical accounting.

1/ Governance

Inserm's Board of directors (BoD) rules on the strategic directions presented by the CEO and the five-year contract with the French State; it votes on budgets and their amendments and approves the annual report and the general internal regulations, including decisions to create thematic institutes and CSSs (see section II.1.a). In addition to Inserm's CEO, who chairs the Board, the BoD is composed of six representatives from ministries, three representatives of French public institutions in the field of higher education and research,⁹² six elected representatives of Inserm's staff and six external members appointed by the ministry in charge of health and the ministry in charge of research.

The elected representatives and several of the external members were interviewed by the assessment committee. They confirmed the quality of the board's activity, highlighting the transparency of the information and the quality of the debates. All board members appreciate that each meeting opens with a high-level scientific presentation. The BoD members met by the assessment committee stated that they have received all the necessary information regarding recent important issues. For instance, the creation of the health research programme agency had been the subject of an in-depth debate; similarly, the conclusions of the *Cour des comptes'* 2022 report had been shared with the Board of Directors.⁹³

The Scientific Board is Inserm's body for reflection and proposals on scientific policy. It studies the situation and prospects for the development of research, in conjunction with the thematic institutes. It is also in charge of advising Inserm's CEO on the institution's strategy and the five-year contract with the French State, on its policy for creating and renewing research units, on decisions to create and close research units (on the basis of the assessments of units performed by the CSSs; see section II.1.a) and on decisions to appoint research unit directors. The Scientific Board has 26 members, half of whom are elected by staff of Inserm and partners working in Inserm research units, and half of whom are appointed by the supervisory ministries of Inserm. In its current composition, 13 of its members are women and 13 are men.

The assessment committee noted that, in its current composition, all members of the Scientific Board conduct their main activities in France, very often in Inserm research units. **The committee recommends that Inserm as RPO set up an international independent scientific advisory board with a high proportion of members from abroad, in line with international best practice at world-class research institutions, and entrust it with the role of providing Inserm with external advice and strategic suggestions from an international perspective.**

2/ Organisation and management

a/ Internal organisation and executive management

Inserm's internal decrees, updated in 2023 and 2024, describe the internal organisation, which can be mainly summarised as follows:

- the CEO, the deputy CEO for strategy and the deputy CEO for administration;⁹⁴
- the 9 thematic institutes (see section 2 of the Introduction);

⁹² The CEO of CNRS (or his or her representative), the president of a university, and the CEO of a university-hospital.

⁹³ See <https://www.ccomptes.fr/fr/documents/62967>.

⁹⁴ Up until 2021, there was only one deputy CEO, with no specific responsibilities. In 2020, Inserm created a Strategy department and appointed a 'director of strategy', and the organisation with two deputy CEOs was introduced in 2021.

- 9 departments at 'corporate level': Assessment department; Financial affairs department; Human resources department; Partnerships and foreign relations department; Information systems department; Legal affairs department; Communication department; Open science department; Strategic programmes department;
- and the 12 regional offices, one of which being in charge of the administration of the headquarters.

These internal decrees describe the roles of the thematic institutes, the departments and the regional offices. The assessment committee has several remarks regarding these documents:

- In addition to their roles within Inserm as RPO – namely 'on proposals for the creation of units, on resource allocation to units, and on the organisation of partnerships, in particular with universities' – in close cooperation with the Scientific Board and the CSSs, the thematic institutes are also responsible for the coordination with other institutional operators involved in the field of biomedical research. This coordinating role is a reminiscence of the Aviesan alliance (see section I.2.a) which no longer exists.
- There is no written description of the roles of the two deputy CEOs.
- The heads of regional offices are appointed by the CEO for a five-year term. The directors of the thematic institutes and the directors of the departments are appointed by the CEO with no explicit duration of their term.
- Finally, Inserm has not yet made a clear choice concerning the administrative organisation of the programme agency. The creation of a 'Support unit to the programme agency' was approved by the Board of directors in October 2024, but this decision did not create the programme agency as an 'internal Inserm agency', i.e. with the same status as ANRS-MIE.

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The assessment committee received two versions of Inserm's organisation chart, one in October 2024 and one in March 2025. The latter version presents Inserm's organisation with two levels:

- the CEO and two deputy CEOs;
- and about 40 entities: the 9 thematic institutes, the 9 departments, the 12 regional offices and 9 various entities (committees, units or individuals): Scientific Board; College of professional conduct; History committee; Ethics committee; Ethics evaluation committee; Think tank with patients' organisations (Gram); Office for research integrity; data protection officer; defence security officer.

The organisation chart shows a very flat organisational structure, and suggests that all the above-mentioned entities report equally to the three people in top management, namely the CEO and the two deputy CEOs. In practice, the regional offices and four departments (Financial affairs, Human resources, Information systems and Legal affairs) report to the deputy CEO for administration,⁹⁵ but the assessment committee did not understand to whom the other 5 departments and the thematic institutes report to. The assessment committee noted that ANRS-MIE does not appear in any of the two versions of the organisation chart received by the committee, and that the programme agency does not appear in the organisation chart of March 2025.⁹⁶ The 'site scientific advisors' (see section III.1) are also absent in both versions of the organisation chart, as well as important topics such as 'innovation', 'Europe' and 'relations with universities'.

The structure of Inserm's internal organisation appears to have been relatively stable over time. In addition to the creation of the position of deputy CEO for strategy and the change from ANRS to ANRS-MIE in 2021, three changes were made during the 2019-2023 period, with the creation in 2023 of the Assessment department, the Strategic programmes department and the Open science department.⁹⁷ The main remarks of the assessment committee on these evolutions are as follows:

- It would appear that the role of the deputy CEO for strategy is not described in any document and it does not appear to be fully clear. In particular, it was not clear to the assessment committee to what extent the deputy CEO is in charge of coordinating the thematic institutes and reducing 'silos effects' between them. Neither did the committee understand the relationships of the deputy CEO with the Strategic programmes department, with ANRS-MIE and with the programme agency.
- In addition, the role of the Strategic programmes department did not appear clear. The self-assessment report explains that Inserm's experience of steering PEPRs showed the need to harmonise practices for running research programmes, in particular for 'project selection, follow-up and assessment', and the Strategic programmes department was created to meet these needs 'at the interface between thematic institutes'. The interviews did not make it possible for the assessment committee to understand whether the role of the department focuses on harmonising practices, or rather on reflecting on strategy. Furthermore, the committee received contradictory answers to the question of whether the

⁹⁵ Information given in interviews held during the assessment visit. The heads of regional offices have annual objectives and they have an annual review with the deputy CEO for administration. The directors of thematic institutes (and the site scientific advisors) do not have annual objectives, nor an annual review.

⁹⁶ Surprisingly, in the version of the organisation chart of October 2024, the director of the programme agency appears at top management level together with the CEO and both deputy CEOs and also with the chief of staff to the CEO, who is also head of the Communication department.

⁹⁷ The previous organisation included an Evaluation and programme monitoring department.

department is in charge of 'internal Inserm programmes' (within Inserm as RPO) or of 'national programmes' in relation with the programme agency.

Of course, the fact that the programme agency was created only recently, goes some way towards explaining why Inserm has not yet fully clarified all organisational aspects linked to this agency. Nevertheless, the assessment committee considers that **there is an urgent need to clarify Inserm's organisation**: at the time of the assessment visit, not all high-level Inserm's officers had a shared understanding of the organisation, and this confusion poses a real problem. **Inserm should implement the principles of modern public management, with clear mission statements for all directors, an explicit duration of their term, as well as clear reporting, objective-setting and annual review mechanisms for all directors.** Inserm should also have a clear and stabilised organisation chart showing functional and hierarchical links. Lastly, **it is also important that Inserm specify who is responsible for coordinating the thematic institutes and improving synergies between them** (see section II.2.d), and how this will be done.

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The Executive committee of Inserm meets weekly. It includes the CEO, the two deputy CEOs, the directors of thematic institutes, the directors of departments, the director of the programme agency and the director of ANRS-MIE. Moreover, the CEO of *Inserm-Transfert* and the director of the 'Inserm Foundation'⁹⁸ are also invited to all meetings of the Executive committee.⁹⁹ Having examined the agendas of the meetings, the assessment committee noted that the Executive committee merely provides a space for exchanging information, and not a space for preparing and making decisions nor for coordinating internal entities and regularly monitoring key actions led by Inserm. The assessment committee also noted that neither the CEO nor the Executive committee have a dashboard including a set of indicators making it possible to monitor the evolution and the results of Inserm's activities.¹⁰⁰ **The assessment committee recommends transforming the Executive committee into a decision-making body and equipping it with a high-level dashboard including an appropriate set of key indicators.** Inserm could also explore ways to improve the transparency of the Executive committee's work by making its dashboard and summary reports of its meetings accessible to its teams.

b/ Resource allocation to research and service units

Resource allocation to research units is a topic on which the 2022 report of the *Cour des comptes* strongly criticised Inserm. The *Cour des comptes* considered that resource allocation to units is characterised by 'inertia and dispersion'. Among its main recommendations, this report recommended a better concentration of human and budgetary resources to research units, and also the targeting of some open positions for the recruitment of permanent researchers on priority themes and/or priority research units. Surprisingly, the self-assessment report makes no mention of the issues of allocating researcher positions and funding to research units.

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Concerning positions for permanent researchers, the *Cour des comptes* reported that Inserm leaves it to its permanent researchers to choose their research units. It observed that 10% of Inserm research units had zero Inserm permanent researchers and that another 10% of Inserm research units had only one Inserm permanent researcher. It also mentioned Inserm's responses to these observations: Inserm considers that the 'Inserm label' given to research units is a 'sign of excellence', that universities are often very much attached to this label, that labelled units are encouraged to present applicants to the competitive examination for the recruitment of Inserm researchers, and that part of Inserm's role is to support excellent units even if they have no Inserm researcher. The *Cour des comptes* made the point that the role of a national RPO is not to award labels, but to steer and support research units, notably by assigning researchers to these units, and it regretted that Inserm never 'targets' open positions of permanent researchers on priority themes or in priority research units. Inserm's response to this remark – confirmed in the interviews held during the assessment visit – is that Inserm seeks to recruit researchers only on the basis of scientific excellence, and not on strategic scientific priorities.¹⁰¹

The assessment committee fully agrees that the role of Inserm as RPO is not to award labels, but to steer and support research units – in close cooperation with the partner home institutions of these units (see section III.1) – and to allocate resources to these units within the framework of its strategy. The committee considers that Inserm should progressively **increase the number of open positions for permanent researchers targeting priority themes** – as is the case in most world-class research institutions worldwide – **and possibly priority research units.** In the perspective of a renewed partnership with research-intensive universities presented in section III.1, the

⁹⁸ See <https://fondation-inserm.org/en/>.

⁹⁹ As of 2025, the head of the 'AI and digital technology office', of the 'Clinical research unit' and of the unit for research infrastructure are also invited to all meetings of the Executive committee.

¹⁰⁰ Information given in interviews held during the assessment visit.

¹⁰¹ In practice, Inserm's top management distributes open researcher positions among the CSSs, the positions are opened without any mention that some of them are targeted on specific research themes and without any mention that some of them are open in specific research units. At the end of the recruitment process, Inserm assigns each newly-hired researcher to the research unit of his or her choice.

committee suggests that Inserm could entirely delegate the responsibility for steering research units that have zero or one Inserm researcher, and that have remained in this situation for several years, to partner universities.

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Concerning engineers, technicians and administrative permanent staff, the self-assessment report explains that expressed needs amount to 700 to 800 positions every year, whereas the number of open positions for new recruitments is around 100. The allocation of open positions is based on the following principles:

- priority allocation to structures with a national scope (national infrastructure, agencies, cohorts, etc.), in the framework of the multiannual resource plan established upon the creation of each of these entities;
- priority allocation of one third of the available open positions to the regional offices and to Inserm's headquarters;
- allocation to research units based on a cross-analysis of expressed needs carried out by the regional offices and the thematic institutes.

The assessment committee fully understands these principles, which clearly prioritise the 'agency role' of Inserm (and are likely to help successfully developing the programme agency), and rank the research units in third place. The committee encourages Inserm to establish a 5- to 10-year perspective in order to verify whether this system is sustainable in the long term.

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Concerning budget allocation to research units, the *Cour des comptes* reported that, according to the regional offices, the main factor was the units' seniority. It also noted that, in 2019, Inserm changed the way it allocated funding to units, introducing three criteria. The allocated funding is computed as the sum of three parts, whose average weightings are 60%, 30% and 10%:

- one part is proportional to the number of permanent scientists (be they employed by Inserm or by the academic partners);
- one part is related to the scientific assessment of the unit by the CSSs;
- and the last part is attributed on the basis of scientific priorities.

The assessment committee applauds the choice of allocating 30% of the overall budget on the basis of the units' assessment, but does not understand how strong the differentiation between units is for this allocation. The committee also questions whether the 10% weighting of the third part is adequate given the perspective of Inserm strengthening its scientific strategy, as recommended in section II.2.

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Lastly, the committee wishes to make several remarks and suggestions:

- First, the committee would like to recall its recommendations in section III.1 (see Recommendation 7):
 - organise (for as many units as possible) an annual meeting giving the unit's director the opportunity to discuss with all home institutions the main objectives of the unit as well as its needs for resources;
 - decentralise as much as possible the operational processes and decisions regarding resource allocation to research units, so that these decisions can be made in concert with partner universities.
- The committee noted from the report of the *Cour des comptes* and from several interviews that the 'historical legacy' weighs heavily on the allocation of resources to research units. It encourages Inserm to analyse this issue in detail and to carefully check for the existence of imbalances inherited from the past, which should be gradually reduced.¹⁰²
- The committee also recommends that Inserm carefully monitor the consistency and harmonisation of processes and criteria for allocating resources to research units across thematic institutes. It also recommends increased transparency within Inserm as RPO regarding these processes and criteria, as well as regarding the resources allocated.

3/ Human resources policy

a/ Evolution of Inserm's workforce

The structure of Inserm's personnel at the end of 2023 was as follows:

- 3,988 scientists, including 2,180 permanent researchers (civil servants) and 1,808 contract scientists;
- and 4,703 support staff, including 2,792 civil servants (engineers, technicians and administrative permanent staff) and 1,911 contract staff.¹⁰³

¹⁰² For instance, the assessment committee heard about imbalances in budget allocation between research units within and outside the Paris area. The committee was not in a position to investigate whether or not this were true.

¹⁰³ *Rapport social unique 2023*.

The assessment period was a period of significant contrasts in terms of the evolutions of Inserm's workforce. Between December 2018 and December 2023:¹⁰⁴

- The number of permanent staff slightly decreased (-2.6%), from 5,104 to 4,972. Among them, the number of permanent researchers increased from 2,142 to 2,180 (+1.8%) and the number of permanent support staff decreased from 2,962 to 2,792 (-5.7%).
- There was a sharp increase in the number of contract staff (+38.3%) from 2,690 to 3,719. Among them, the number of contract scientists increased from 1,484 to 1,808 (+21.8%) and the number of contract support staff increased from 1,206 to 1,911 (+58.5%).

Of course, these changes in Inserm's workforce are related to a substantial growth in its budget: both the State subsidy allocated to Inserm and its other revenues increased during the assessment period (see section VII.4.a below).

The assessment committee noted that the sharp increase in the contract workforce was not mentioned in the self-assessment report, its appendices or the interviews. Moreover, rather surprisingly, the section of the self-assessment report on 'forward-looking management of jobs and competencies' only concerns the permanent staff.

Managing such a high level of growth is a significant challenge for any institution, whether public or private. The assessment committee would like to offer the following remarks:

- The sharp increase in the contract support staff represents an in-depth transformation of Inserm. It requires in-depth work on the recruitment processes for contract staff and on Inserm's training offer for its contract employees. It also requires supporting the research units and regional offices to improve their ability to appropriately analyse needed skills, improve their knowledge of the local and regional employment pool and succeed in hiring and integrating new recruits.
- Inserm needs to increase its effort to reduce the potential negative effects related to a high proportion of contract positions, in particular the increased turn-over of support staff in research units, which contributes to a heavier administrative burden for scientists.¹⁰⁵
- The assessment committee noted that 98% of contract staff are employed on fixed-term contracts,¹⁰⁶ which implies that a very high number of these individuals leave Inserm every year. This raises another important issue. The committee was unable, within the time available, to examine how Inserm helps these individuals prepare for their professional integration after their time spent at Inserm, and how it makes every effort to ensure that their professional experience at Inserm is beneficial for the rest of their career.
- **The assessment committee recommends that Inserm establish a detailed multi-year perspective for the development of jobs and skills of its contract staff.** Moreover, while noting that contract staff benefit from Inserm's training policy, the committee considers that **Inserm should strive to become an institution that fully integrates its contract staff into its vision of itself and into its human resources policy.**

The assessment committee also noted the high average age of Inserm's permanent employees. In 2024, the average age was 51.5 for permanent researchers and 48.5 for permanent support staff. For both categories, the average age increased by 2.6 years between 2015 and 2024.¹⁰⁷ The average age of fixed-term contract staff is much lower: 30.8 for contract scientists and 31.6 for contract support staff in 2024. The assessment committee considers that both aspects, the high and rapidly increasing average age of permanent researchers and the rapidly increasing proportion of (young) contract staff, raise important questions for the future of Inserm. For instance, will Inserm in 2035 be an institution where the average age of permanent researchers is above 54 and where the number of contract staff exceeds the number of permanent staff?

b/ Recruitment and attractiveness

The recruitment of permanent researchers, conducted through an annual and national competitive examination, is a key 'pillar' of research quality at Inserm. During the assessment period, Inserm increased the number of researcher recruitments, from 64 in 2019 to 73 in 2023. The distribution of open positions among the CSSs, decided by the CEO, is very stable over time and is essentially proportional to the numbers of Inserm researchers attached to each CSS for their individual assessments. The average age of newly-hired researchers (*chargés de recherche*) was high – close to 37.5 – and stable over the period.¹⁰⁸ The average number of applicants per open position was relatively stable and close to 6. Among the newly-hired researchers, 40% did

¹⁰⁴ *Bilan social 2018 and Rapport social unique 2023.*

¹⁰⁵ The assessment committee noted that Inserm has managed to slightly increase the ratio of – permanent and contract – support staff in the overall workforce, from 53.5% in December 2018 to 54.1% in December 2023. The committee cannot assess if this slight increase was adequate in a period where the number of research programmes and contract research projects managed by Inserm grew substantially.

¹⁰⁶ *Rapport social unique 2023.*

¹⁰⁷ *Rapport social unique 2024.*

¹⁰⁸ The self-assessment report (p. 65) states that Inserm wishes to lower the average age at which researchers are recruited, but does not describe what the appropriate levers would be for addressing this difficult issue.

not prepare their PhD thesis in Inserm research units.¹⁰⁹ The assessment committee encourages Inserm to take actions to increase the percentage of newly-hired researchers who did not prepare their PhD thesis in Inserm research units.

The self-assessment report shows that Inserm is very aware that it 'must improve the attractiveness of the professions and careers it offers'. Over the 2019 period, Inserm mobilised 'various regulatory and budgetary levers' to increase the number of promotions for permanent employees.¹¹⁰ Significant effort was made regarding the compensation scheme for Inserm's civil servants, as well as regarding the salaries of contract staff.¹¹¹ Inserm is also aware that it has to reduce its 'attractiveness deficit'¹¹² for medical doctors and hospital practitioners, by increasing the number of its '*contrats d'interface*' and making them more attractive (see sections II.2.a and III.2). Moreover, Inserm faces issues of attractiveness for the recently opened *junior professor chairs*:¹¹³ only 55% of such positions were filled in 2022 and 72% in 2023. Inserm should pursue its efforts and make sure it targets these *junior professor chairs* in research units that are in a good position to attract high-level applicants.

Although it was able to make substantial efforts regarding salaries over the 2021-2023 period, Inserm should pay attention to the fact that an attractiveness policy cannot be reduced to salary policy alone. In this regard, all those interviewed by the assessment committee highlighted several points in favour of Inserm's attractiveness:

- a strong reputation for competence and rigour, recognised at national level and beyond, to which professionals are sensitive when it comes to comparing a job at Inserm with jobs in other institutions;
- the quality of the training offers available within Inserm;
- efforts made in favour of gender equality.

Inserm should pursue its efforts to strengthen these assets and make them more widely known outside and within the institution.

* * *

The self-assessment report provides a great deal of information on attractiveness issues for scientists but little information on attractiveness for management and support positions. However, Inserm also faces difficulties with regard to these positions: in its 2023 recruitment campaign for permanent engineers, technicians and administrative staff, only 88 positions were filled out of 106 open positions, which did not compensate for the increase of departures. The assessment committee considers that Inserm should examine these attractiveness issues in more detail; it should establish a plan for recruiting and retaining permanent engineers and technical and administrative staff, in a context where talented individuals in this category of staff are highly sought after by many private and public institutions.

c/ Other key topics of the human resources policy

Inserm's equality policy has three main objectives:¹¹⁴

- guarantee the same recruitment, career advancement and remuneration conditions for women and men; in particular, the deciding bodies are informed, prior to any 'competitive' process, of the comparative situation of men and women, and made aware of gender bias and the risks of discrimination;
- a better balance between professional and personal life, by supporting parenthood and reducing its impact on women's career development;
- combating violence, harassment and discrimination; awareness-raising and training initiatives on sexual and gender-based violence have been widely proposed.

Inserm has established a 2024-2026 Gender equality plan to implement this policy.

The assessment committee noted the following information concerning the proportion of women and men at the end of 2023:¹¹⁵

- 46% of permanent researchers were women (51% of the *chargés de recherche*, but only 39% of the *directeurs de recherche*), and 62% of contract scientists were women;

¹⁰⁹ Two thirds of them prepared their PhD thesis in a non-French laboratory and one third in a French laboratory not attached to Inserm.

¹¹⁰ For instance, the number of annual recruitment of *chargés de recherche* to *directeurs de recherche*, which was close to 30 between 2015 and 2020, was raised to 40 in 2022 and was above 50 in 2023.

¹¹¹ The self-assessment report evokes an average 6% salary increase for contract scientists and 22% for contract engineers and technicians from January 2023.

¹¹² Self-assessment report.

¹¹³ The 'Research programming law' of 2020 has opened up the possibility of these new contracts (sometimes referred to as '*tenure track à la française*'). Lasting a maximum of 6 years, they allow for accelerated progression to positions of *directeurs de recherche*. Inserm prioritises these positions on 'strategic themes' and targets them in specific research units.

¹¹⁴ Self-assessment report.

¹¹⁵ *Rapport social unique 2023*.

- 69% of permanent management and support staff were women and 69% of the contract management and support staff were women;
- only 27% of the 349 heads of Inserm units and entities were women.

Moreover, 8 (36%) of the 22 members of Inserm's Executive committee (see section VII.2.a) were women on the date of finalisation of this assessment report, in October 2025.

These figures show that, despite real efforts, Inserm still has a substantial way to go in terms of equality between women and men.

* * *

It seems that Inserm has no real policy concerning the mobility of its permanent employees, be it internal mobility, mobility towards universities or mobility towards other public institutions or private companies. Both the annual rate of internal mobility and the annual rate of external mobility of permanent employees are low – close to 2%.¹¹⁶ The assessment committee encourages Inserm to develop, implement and monitor a real mobility policy, which will allow it to offer interesting career developments to employees interested in mobility opportunities.

* * *

Inserm has a well-developed training policy. The ratio of its training expenses to its mass salary amounts to 2.4% – substantially above the same ratio for CNRS (2.05%). The self-assessment report shows that Inserm mobilised its training policy to support the development of the dialogue with society, or the deployment of several internal actions (on sustainable development, on gender equality, on the evolution of research assessment criteria, on the *Lorier* programme,¹¹⁷ etc.). Inserm's training offer seems to be positively appreciated,

However, more broadly, Inserm does not appear to have fully taken the measure of the challenges its human resources policy must face to improve its ability to attract and retain the most talented people and to help them reach their full potential. The quality of an institution is increasingly measured by its capacity to take care of its employees and to give them tools and abilities to evolve at all stages of their careers. This holds true for all employees, researchers, engineers and administrative or technical staff, as well as for contract staff. Beyond the development of mentoring, increased efforts should be made to expand the training available, the range of in-house career opportunities, the possibilities of professional mobility and overall employees' awareness of these perspectives.

Following a recommendation of the previous Hcéres assessment, Inserm has started to implement a mentoring programme for newly-hired researchers. However, the survey of 'young researchers' conducted by Inserm in 2023,¹¹⁸ as well as certain interviews, revealed significant demand for a more developed mentoring programme. **The assessment committee recommends that Inserm develop a more ambitious mentoring programme** and ensure that this programme keeps pace with the evolution of best practices in similar institutions elsewhere. Every employee – from all categories: researchers, engineers and administrative and technical staff – should have a formal mentor, with the aim of establishing a long-term advisory relationship. Inserm should also develop training for mentors and ensure that the advice dispensed conforms to modern policies and expectations. Special effort should also be made to train and mentor new team leaders and unit directors.

The committee did not feel that Inserm paid sufficient attention to young researchers, who are essential for the future of Inserm and who need to be supported. At every level in the organisation, those interviewed by the committee during the assessment visit seemed far more concerned with the research performed at Inserm than with the welfare of Inserm researchers: a balance may need to be struck between the two, but it is not clear whether this balance is currently in place.

4/ Administration

a/ Ensuring the clarity and sustainability of the financial situation

The 2019-2023 period was characterised by several significant changes in Inserm's budget:¹¹⁹

- the subsidy of the French State to Inserm grew significantly from €631 million in 2019 to €702 million in 2021, followed by a slight increase to €708 million (+1%) in 2023;
- other subsidies from French public institutions grew from €34 million in 2019 to €58 million in 2023 (+70%), connected to the increase in the 'agency' activity of Inserm;
- EU funding grew from €49 million in 2019 to €79 million in 2023 (+60%);
- and other 'own revenues' grew from €139 million in 2019 to €152 million in 2023 (+9%).

¹¹⁶ *Rapport social unique 2023*.

¹¹⁷ See section VI.4.

¹¹⁸ Self-assessment report: Inserm conducted a survey of researchers who had joined the institution in the last ten years.

¹¹⁹ Self-assessment report.

The assessment committee noted that Inserm's revenue continues to grow, with an increase in the State subsidy from €708 million in 2023 to €725 million in 2025, and an increase in other revenues from €440 million in 2023 to around €500 million in 2025.

In its 2022 report, the *Cour des comptes* expressed several concerns about Inserm's financial situation. It observed serious weaknesses in Inserm's financial management and in its financial information system, and highlighted the illegibility of Inserm's accounts and budget. It made several recommendations to make budget information and accounts more readable and reliable and emphasised that several actions needed to be taken before the change in the financial information system which was planned to take place in January 2025.

The assessment committee noted that Inserm did not completely share the diagnosis of the *Cour des comptes* and had not taken all recommended actions.¹²⁰ Above all, the committee observed that the period of strong growth beginning in 2020, just after the 2015-2019 period consisting of four deficit years, has not made it easy for Inserm to understand the real financial situation: it is difficult to know whether the return to budgetary balance is due to a real improvement in financial sustainability or to other circumstantial effects. In short, the assessment committee considers that the financial information given by Inserm does not provide complete assurance that Inserm's financial situation is under control.

- On the one hand, Inserm has no analytical accounting. As a consequence, Inserm is not able to ensure whether or not revenues from its research contracts (with French and European public funders and with private companies) fully cover its research costs.¹²¹ At a time when these 'contract research activities' are on the increase, involving multi-year programmes and projects, this creates uncertainty about the financial situation and a risk regarding financial sustainability.¹²²
- On the other hand, it is not clear whether the increase in personnel expenses in the 2019-2023 period (+ 12% for the payroll expenses of permanent employees and + 16% for the total payroll) will be sustainable over the next five-year period, during which Inserm is at risk of being impacted by the budget difficulties of the French State.

Inserm should urgently implement analytical accounting, improve the clarity and readability of its budget and accounts, and establish a detailed multi-year plan for the evolution of its income and expenditure. It is also clear that these analyses of the uncertainties in the financial situation of Inserm are an additional reason to **separate the budget of Inserm as RPO and the budget of the programme agency** (see section 1.2.b).

b/ The effective modernisation of information systems

The assessment period was clearly marked by tangible efforts to reorganise the Information systems department and reposition its missions to better integrate information technology (IT) services, research data management and collaborative tools. The 'Health data host' certification (in French: *Hébergeur de données de santé*) and recognition obtained in the 2022-2024 period attest to the quality of the initiatives undertaken concerning data management.¹²³ The security of Inserm's IT infrastructure was also a major priority. Alongside this, the missions of the IT support units in the regional offices were redefined: to facilitate this transition, certain information system functions were centralised at national level, including office automation tasks. A clearly defined site policy, based on differentiated services in collaboration with the universities, has been established.

Inserm has also worked towards the implementation of a shared computing platform, partly funded by research projects. Given the sensitivity of the data processed by Inserm, whether concerning research or health, the modernisation of the information systems also prioritised cybersecurity issues, as Inserm units are among the most exposed targets for cyberattacks in France.¹²⁴

The assessment committee encourages Inserm to ensure that these major efforts to structure and upgrade its information systems are more widely known within the institution, so that all units and staff feel the benefits of this ambitious policy. Inserm should also pay attention to ensure that these efforts, which have been centrally managed, do not overshadow daily user support: it is important to preserve local intervention capabilities for hardware and office automation issues.

¹²⁰ Information given in interviews held during the assessment visit.

¹²¹ The *Cour des comptes* also made the point that the public funds allocated to Inserm to steer national research programmes do not cover all related administrative and coordination costs.

¹²² The figures provided by Inserm raise doubts as to the sustainability of expenditure based on 'other revenues', i.e. on revenues received in addition to the French State subsidy. Between 2019 and 2023, these revenues grew from €335 million to €411 million, whereas expenditure grew from €257 million to €374 million. It appears that the amount of these expenses remains lower than the amount of these revenues; but it also appears that both the amount and the percentage of the increase in expenditure (+ €117 million and +46%) are much higher than the amount and the percentage of the increase in revenues (+ €76 million and + 23%).

¹²³ Self-assessment report.

¹²⁴ Self-assessment report.

Concerning the information systems, Inserm chose to migrate its 'historical' internal tools to software already used by several other national research institutions and universities. The Dialog tool, dedicated to collecting resource needs expressed by research units, and Sifac, the budget and finance information system, have been in operation since the beginning of 2025. This migration generated daily difficulties for teams in regional offices and research units in the first months of 2025, but Inserm now shares the same management tools as other national research institutions and a number of partner universities.

c/ Improving administrative support to research units

Inserm has gradually introduced new procedures to improve the agility of the administration of research units. The 'management delegation contracts' allow an administrative unit (generally, a regional office of Inserm) to assume administrative responsibilities delegated by other home institutions of the research units. These delegation contracts make it possible to reduce the number of administrative contacts for research units, but they also impose the management of all resources according to Inserm rules, which are sometimes more rigid than those of other institutions.

As announced in the Cop for the 2021-2025 period, Inserm has tested two new models for the local organisation of administrative support for joint research units, by grouping together administrative support staff from Inserm and from universities:

- a joint service unit common to Inserm and to Université de Strasbourg, created in 2019, is in charge of all administrative tasks for 11 joint research units;
- in Montpellier, two shared management platforms are in charge of providing support to a set of joint research units for their financial management and for the management of their research contracts.

Inserm considers both models to be successful¹²⁵ and the creation of a second joint service unit was planned in Strasbourg in 2025, but the wider roll-out of this new organisational model does not yet appear to be on the agenda.

In addition, Inserm should continue to delegate new responsibilities to the local level. These responsibilities may cover the field of resource allocation to research units (see section III.1), as well as regulatory authorisations: several situations requiring instruction from Inserm's headquarters in Paris were highlighted during interviews (contracts between Inserm units, participation in clinical research studies, etc.).

¹²⁵ Self-assessment report.

Conclusion

Inserm, the leading French institution in health research, has a high reputation for excellence in Europe and worldwide. The self-assessment report shows that Inserm is ambitious and aims to be modern and innovative, whilst supporting research excellence. In several key areas, namely innovation and cooperation with private companies, participation in European research and innovation programmes, and dialogue of science with society, Inserm remarkably amplified its actions and improved its results during the assessed period. In this context, the constructive criticisms and recommendations of the assessment committee are intended to help Inserm pursue these ambitious goals and become an undisputed leader in the field of health and biomedicine in Europe and worldwide.

The mandate entrusted to Inserm by the government to establish a new 'health research programme agency' is a clear priority for Inserm's top management, which has given this programme agency a good start. The committee's main recommendation in this regard is to define a clear strategy and policy to separate Inserm's developing role as a programme agency from its role as a research performing organisation (RPO). It is also recommended that the budget and governance of the programme agency be separated from Inserm as RPO, and that clear working mechanisms be defined for the next steps of the programme agency, with the aim of prioritising a limited number of research programmes, while paying major attention to transparency and seizing opportunities for simplification and for the reduction of fragmentation.

Concerning research quality at Inserm, the committee recommends developing the culture and practice of research assessment at the international level by systematically taking advice from foreign experts in the assessment of researchers and by developing international comparisons. In addition, Inserm as RPO should define a clear scientific strategy, including explicit priorities. Population health is identified as one of these priorities, with the aim of raising Inserm to the best international level over the next five years. Moreover, Inserm is encouraged to establish an ambitious action plan to position itself as a leader in the data and digital transformation of health research. The committee also suggests pandemic preparedness should be an important part of strategy and policy for Inserm, in line with the biomedical strategies worldwide.

The committee strongly recommends that Inserm as RPO focus on improving local relationships with universities and university hospitals, with a much greater leadership role for the universities in line with international examples. This should be combined with modernised governance and simplified management of joint research units, in the framework of a deepened partnership between Inserm and research-intensive universities. This should also be combined with initiatives aimed at improving clinical research and strengthening synergies between universities and university hospitals.

In addition to pursuing and consolidating its efforts to strengthen its participation in EU-funded research and innovation programmes, Inserm is encouraged to define and implement a strong and visible European strategy with targeted priorities, including strategic partnerships with key European public and private actors in the field of health research and innovation. It is suggested that this European strategy be developed in coordination with French partner universities in order to leverage on certain 'European university networks', which are increasingly transforming academic partnerships in Europe.

The assessment committee's analyses and recommendations also concern Inserm's organisation, management and operations. The internal organisation would benefit from being clarified and updated in view of the development of the programme agency. Inserm should improve its executive management by establishing clear reporting, objective-setting and annual review mechanisms for all directors, with better coordination and increased synergies between thematic institutes, and with a strengthened role for the Executive committee as a decision-making body. The committee recommends making better use of the assignment of researchers and the allocation of budget to research units as key levers for implementing Inserm's scientific strategy. Moreover, Inserm's human resources policy should be strengthened by fully integrating contract staff, establishing a detailed multi-year perspective for the evolution of jobs and skills, and reinforcing mentoring for all permanent employees. Lastly, the committee observed that the insufficient clarity and readability of Inserm's budget and accounts, and the persisting lack of analytical accounting, make it impossible to assess whether the financial situation is sustainable.

1 / Strengths

- A high reputation for excellence in France, in Europe and at international level.
- A high-level competitive recruitment of permanent researchers, with around 27% of non-French scientists among the newly-hired researchers.
- A strong commitment to innovation, a remarkable track-record – be it for spinouts creation, technology transfer or partnerships with private companies – and recognised professionalism.
- A strong momentum for participation in EU-funded research and innovation programmes.
- A strong commitment to contributing to public policies, and embedding science in society.
- A substantial effort in recent years with regard to salaries, to increase attractiveness for talented scientists.
- A good start for the programme agency.

2 / Weaknesses

- Lack of clarity of Inserm's vision regarding its position and role in the French health research ecosystem.
- A limited ability to make a clear distinction between the two roles of Inserm as programme agency and Inserm as research performing organisation.
- Inserm did not take the lessons learned from the Covid-19 crisis, and it did not produce a document on preparedness in the event of a future pandemic.
- Lack of a clear strategy on many issues such as scientific priorities, European strategy beyond participation in EU programmes, and international cooperation.
- French-centric research assessment.
- An inward-looking culture and a reluctance to change. Inability to project itself in a perspective where universities become research leaders at site and regional levels.
- Lack of a clear vision on Inserm's role for steering research units.
- Need to clarify and update its internal organisation in view of the development of the programme agency. Executive management weakened by insufficient reporting and objective-setting mechanisms, and weak coordination.
- Lack of clarity and readability of the budget and accounts, and a persisting lack of analytical accounting, making it impossible to assess whether the financial situation is sustainable.

3 / Main recommendations

Recommendation 1: Clearly distinguish and separate the programme agency and Inserm as research performing organisation. Clarify the governance, objectives and working mechanisms of the programme agency, with the objective of prioritising a limited number of research programmes, and pay close attention to transparency and to seizing opportunities for simplification and for the reduction of fragmentation.

Recommendation 2: *(to the French State and Inserm)* Establish a clear multi-year perspective for the budget of the programme agency and the budget of Inserm as research performing organisation.

Recommendation 3: *(to the programme agency)* Establish with all partners a consistent national strategy for health research platforms and equipment, and a shared roadmap for its implementation.

(to the French State) Implement a consistent and sustained funding effort for platforms, including cutting-edge technological equipment, data platforms, biobanks and cohorts.

Recommendation 4: Develop the culture and practice of research assessment at the international level by systematically taking advice from foreign experts on the assessment of researchers and by developing international comparisons. Strengthen efforts to ensure that the assessment of researchers moves away from quantitative indicators and appropriately values all their contributions to Inserm's missions.

Recommendation 5: Define a clear scientific strategy for Inserm as research performing organisation, including explicit priorities, and clear directions for its implementation.

- Establish an ambitious strategy for population health, with the aim of raising Inserm to the best international level over the next five years.
- Establish an ambitious action plan to position Inserm as a leader in the data and digital transformation of health research.

Recommendation 6: Starting with experimentations at certain selected sites, implement a new 'dialogue platform' at site level, shared between the university, the university hospital, Inserm and other partners and led by the site university, with the goal of developing a unified site health research strategy.

Recommendation 7: Take rapid and significant steps to improve collaboration and deepen partnerships with universities.

- Together with the universities, empower the directors of research units and strengthen their ability to play a leadership role, including active participation in decisions, real influence over the evolution of the research objectives of the unit, and leveraging the corresponding resources.
- Together with the universities, establish a clear shared governance system for the joint research units.
- Decentralise as much as possible the operational processes and decisions on resource allocation to research units, so that these decisions can be made in concert with partner universities.
- Encourage Inserm researchers to contribute to education and provide means for helping them to do so.
- Define a common framework for the consolidation of management data and information at all levels: units, site, and national.
- Establish shared objectives and consolidated indicators at the university site level.

Recommendation 8: Clarify Inserm's role in clinical research at national and international level, on the one hand, and at site level on the other. As a programme agency, establish a programme aimed at supporting the most promising local initiatives in clinical research. Expand tools such as 'contrats d'interface' and 'Atip-Avenir' grants to medical applicants and researchers involved in clinical research.

Recommendation 9: While carefully maintaining the efficiency and professionalism of its current organisation with the *Inserm Transfert* subsidiary, establish a genuine capacity within Inserm to define and monitor its innovation strategy, and reflect carefully on how to reduce the potential risks and drawbacks of this organisation.

Recommendation 10: Define and implement a strong and visible European strategy with targeted priorities, including the development of strategic partnerships with key European public and private actors in the field of health research and innovation, in coordination with French partner universities. Define a consistent international strategy prioritising a limited number of strategic partnerships with world-leading institutions.

Recommendation 11: In order to better connect collective expert reports to current events and make them more impactful, review the decision-making process and methodology, publish them in English and make them more widely known in Europe.

Recommendation 12: Define a roadmap for major epidemic preparedness describing how the objectives, work processes, and communication strategy of the programme agency and of Inserm as research performing organisation should be adapted in the event of a future pandemic similar to the Covid-19 crisis.

Recommendation 13: Clarify the internal organisation and improve executive management with clear reporting, objective setting and annual review mechanisms for all directors, with better coordination and increased synergies between thematic institutes, and with a strengthened role for the Executive committee as a decision-making body.

Recommendation 14: Fully integrate contract staff into Inserm's vision of itself and into its human resources policy. Establish a detailed multi-year perspective for the development of contract staff jobs and skills.

Recommendation 15: Improve the clarity and readability of the budget and accounts, draw up a detailed multi-year plan for the evolution of income and expenditure, and urgently implement analytical accounting.

Observations of the CEO of Inserm



ASSESSMENT REPORT OF INSERM

Observations Letter

December 5th, 2025

Inserm wishes to express its sincere appreciation for the quality, balance and depth of the evaluation carried out by the assessment committee chaired by Professor Anna Dominiczak, and HCERES. The final report provides a clear and constructive analysis of the institution's strengths, challenges and future directions, and will serve as a valuable reference for guiding Inserm's strategic development in the coming years.

The institution welcomes the recognition of its "high reputation for excellence in Europe and worldwide" and the acknowledgement that Inserm has "remarkably amplified its actions" in recent years, particularly in the areas of innovation, participation in European programmes, and scientific and societal communication. These achievements reflect the strong commitment of our teams and confirm the relevance of the strategic orientations pursued. The report's encouragement to further strengthen Inserm's European presence and to build a more visible and targeted international strategy is fully aligned with the priorities set by the CEO.

The report also highlights the strong involvement of Inserm's top management in the newly created health research programme agency and acknowledges its "good start." Inserm shares the view that the consolidation and stabilisation of the programme agency is now essential. Substantial work is already underway to define and structure the agency as a robust, coherent entity within Inserm, capable of coordinating ambitious national research programmes and of defining, together with its scientific partners, strategic research priorities. Inserm also underlines the importance of fully recognising its dual role—as a national coordinator of research efforts through the programme agency, and as a research operator. We welcome the recommendations aimed at clarifying the agency's scope, objectives and budgets, in close coordination with the French State.

The evaluation underscores the importance of deepening partnerships with universities.

Inserm fully agrees that strengthening these collaborations is essential for the national research ecosystem. However, the institution wishes to emphasise that the dynamics initiated over the past two years—both at site level within our joint research units and nationally within the governance of the programme agency—are more extensive than reflected in the report. The work undertaken with universities, university hospitals and research centres to enhance local coordination, co-develop site strategies, empower unit directors and simplify operational processes has become a cornerstone of Inserm’s institutional transformation. We regret that these advances may not have been fully perceived, as they represent one of the central pillars of the actions currently being implemented. We already consider universities as site coordinators of research, and we are fully engaged in a process of co-constructing biomedical research strategies with universities, academic hospitals and other research organisations. In addition, we recently signed an agreement between Inserm, universities and academic hospitals to jointly build research strategies on university sites.

Inserm also takes note of the bibliometric analysis and shares the view that the institution can aspire to even stronger international performance. It nevertheless wishes to point out an important methodological limitation:

the restriction of publication data to researchers formally affiliated with Inserm does not reflect the fundamental model of joint research units. Once Inserm has accredited a unit, both its financial and service contributions and its scientific output are considered collectively by all institutional partners. A bibliometric approach that accounts for the full publication output of UMRs would therefore provide a more accurate representation of Inserm’s scientific activity and strategic footprint. In addition, Inserm’s weight is underestimated by the use of an inadequate disciplinary perimeter; for example, environmental biology and ecology—fields outside Inserm’s core mission—should not be included in the comparison.

More broadly, Inserm welcomes the strategic orientations outlined in the report, which reinforce many key priorities already underway.

These include the consolidation of the programme agency; the strengthening of Inserm’s European and international engagement; and greater investment in population health. In this respect, we believe our robust work on nutrition, environmental toxicants and addictions, as well as health inequalities (including socio-economic aspects), addresses major areas of public health. For instance, Inserm plays a recognised leadership role at European level through its contribution to the development and scientific validation of the Nutri-Score. However, we agree that there are some domains where Inserm is less active, as the panel highlights. The report also encourages sustained preparedness for future health crises. Inserm stresses that significant progress has already been achieved in terms of research preparedness and response to infectious outbreaks. ANRS-MIE, created in 2021 within Inserm, ensures permanent real-time monitoring of emerging

pathogens; Inserm and ANRS-MIE jointly lead the PEPR Emerging Infectious Diseases launched in 2023; Inserm recently initiated the national France Vaccine programme; and ANRS-MIE coordinates the “Be Ready” preparedness initiative at European level, with more than 80 institutions, from 27 countries partners. These initiatives illustrate Inserm’s commitment to strengthening national and European resilience to infectious threats.

Inserm acknowledges the committee’s observations regarding the mobilisation of resource-allocation levers to support its scientific priorities. It nonetheless wishes to put this assessment into perspective: the institution already earmarks several positions for specific units, notably for engineering, technical and administrative staff, as well as for certain researcher profiles such as those recruited through the junior professor chairs scheme. While a large share of researcher recruitment continues to depend on national competitive examinations, Inserm is also reinforcing strategic recruitment through programmes such as ATIP Avenir, which foster scientific excellence, and contrats d’interface, which strengthen its priorities at the interface with the medical field. Finally, Inserm is exploring ways to better align operational funding of its units with its strategic priorities. These efforts will contribute to a more coherent and effectively implemented scientific strategy.

Drawing on its external perspective, the committee also encourages Inserm to further reinforce its external evaluation mechanisms. The institution fully shares the ambition of ensuring that its units and strategic programmes are assessed according to the highest international standards and is ready to further strengthen the systematic use of external, international expertise. While the specialised scientific committees (CSS) already include a large proportion of internationally recognised experts working in France, Inserm acknowledges that additional progress is possible—particularly by increasing the involvement of experts currently working outside France. Beyond the CSS, most ad hoc evaluation committees—ATIP-Avenir, Chairs, Cancer Plan—already involve international experts. Inserm also welcomes the recommendation to continue moving away from quantitative indicators in individual assessment. This transition, already well advanced, is reflected in an evaluation framework centred on a selection of meaningful achievements across scientific, clinical, societal and economic impact, together with teaching, open science practices and contributions to collaborative and translational research. Inserm’s recent work within CoARA represents a formal consolidation of this long-standing approach, and the CoARA action plan currently being developed will propose further measures.

Regarding support functions, Inserm fully shares the committee’s view that its HR policy must better integrate the needs arising from the growth of contract-based employment. This transition is already underway, notably through the inclusion of more comprehensive data on contract staff in the unified social report. Inserm already considers contract staff as an integral part of our community and, as such, benefit from our training policy, contributing not only to their professional development but also to their ability to succeed in their future career paths. In terms of financial management, Inserm agrees that analytical accounting could be a useful future tool, but only once the new budget and accounting information system deployed in 2025 has been fully stabilised. More broadly, Inserm supports the objective of enhancing budget transparency—made complex by the diversity of its missions and associated funding—and will work towards this in close coordination with its supervisory authorities.

Inserm thanks HCERES once again for the quality of its analysis and for the constructive spirit that guided this evaluation. As stated by the jury, its recommendations aim to “enable Inserm to achieve its full potential for the benefit of the French and European health research community and society as a whole.” Inserm confirms that they will be taken into account in the preparation of its future COMP. The final report will have a direct impact on Inserm’s strategic steering and support the evolution of the organisation to meet more effectively the upcoming challenges of health research in France, in Europe and internationally. Building on these findings and recommendations, Inserm reaffirms its commitment to fully playing its role, supported by the high dedication of its teams—whose engagement it warmly acknowledges—and together with all its partners.



Pr Didier Samuel
President and CEO

Members of the assessment committee

Anna Dominiczak

Chair of the assessment committee

Regius professor of medicine at the University of Glasgow, chief scientist for health for the Scottish government

Dame Anna Dominiczak obtained a M.D. in 1978 from the Gdansk medical University in Poland. In 1982, she moved to Scotland to pursue her career at the University of Glasgow, with major research interests in hypertension, cardiovascular genomics and precision medicine.

She held a British heart foundation (BHF) chair of cardiovascular medicine at the University of Glasgow between 1997 and 2010 and directorship of the BHF cardiovascular research centre between 2000 and 2010.

Between 2010 and 2020, she was vice-principal and head of the College of medical, veterinary and life sciences at the University of Glasgow. She actively participated in the development and delivery of the University's clinical academic campus at the Queen Elizabeth university hospital where she led a triple helix partnership between academia, the National health service (NHS) and industry.

She was a president of the European society of hypertension, the association of physicians of Great Britain and Ireland, vice president for life sciences of the Royal society of Edinburgh, and health innovation champion for the Medical Research Council.

In 2005 she was awarded the Order of the British Empire and in 2016 she was awarded Dame Commander of the British Empire (DBE) for services to cardiovascular and medical sciences.

She is currently editor-in chief of precision medicine, Prism journal of the Cambridge press.

In July 2022, professor Dominiczak was appointed as chief scientist for health for the Scottish government, where she leads and coordinates health research and innovation, working in partnership with the NHS, academia and industry to develop rapid translation and adoption of transformative innovations for the Scottish NHS.

María Blasco

Former director of the Spanish national cancer research centre (CNIO)

María Blasco obtained in 1993 a PhD in biochemistry and molecular biology from Autonomía University of Madrid in 1993. Her research is devoted to the study of telomeres and telomerase and their role in cancer and aging.

After several post-doctoral fellowships in Spain and in the US, she became in 1997 staff investigator at the National Centre of biotechnology in Madrid.

She joined the CNIO in 2003 as head of the telomeres and telomerase group. The same year, she also became director of the molecular oncology programme until 2011. Between 2005 and 2011, María Blasco was vice-director of basic research. She has been director of the CNIO from 2011 to 2025.

She was awarded the EMBO gold medal in 2004, and was appointed as full member (*Académica de número*) of the Royal Spanish Academy of pharmacy.

François Cuny

Deputy CEO for innovation, Inria

François Cuny completed a PhD in computer science at Inria in 2000. He then founded his first startup based on a technology transfer developed during his PhD. He devoted his post-doctoral year at the Inria Nancy-Grand-Est research centre to launching this project, which won the national competition to support business creation.

In 2005, he took part in the creation of the Paris Region competitiveness cluster Systematic, an ecosystem of 900 members dedicated to deep tech. He was promoted general delegate of Systematic in 2011. In June 2018, he took over management of the Competitiveness and knowledge department within the Grand Est region.

In October 2018, François Cuny was appointed deputy CEO for innovation of Inria.

Sylvain Ducroz

Deputy CEO, Institut Gustave Roussy

Sylvain Ducroz graduated from the *Institut d'études politiques de Paris* (school of public affairs) in 1998 and from the *École nationale de la santé publique* (National school of public health) in 2000.

He began his career in 2000 at the *Portes de l'Oise* hospital (Val-d'Oise) as director of economic and technical services for two years, then as director of human resources at the Armand Trousseau Children's Hospital in Paris. He then joined the Nancy University Hospital (Meurthe-et-Moselle), where he became director of financial affairs in 2004. In 2007, he gained his first experience at *Institut Gustave Roussy* as director of the T2A division, in charge of implementing medicalised pricing and internal contracts. Two years later, he was appointed general manager of Foch hospital in Suresnes (Hauts-de-Seine), where he remained for five years, until 2015.

He then returned to AP-HP (Paris hospitals), as director of university hospital groups. In 2018, he became director of human resources for the entire AP-HP.

In 2021, Sylvain Ducroz was appointed deputy CEO of *Institut Gustave Roussy* for a five-year term.

Katherine Frohlich

Scientific director of the Institute of population and public health, Canadian Institutes of health research, professor of public health at the University of Montreal

Katherine Frohlich obtained a PhD in public health from the University of Montreal in 2000 and went on to conduct her post-doctoral studies at the University of California, Berkeley, from 2000 to 2002. She is a professor in the department of social and preventive medicine in the School of public health of the University of Montreal as well as research associate with the Public health research centre (CReSP). Her programme of research, funded for over 20 years by both the Canadian institutes of health research (CIHR) and the Social sciences and humanities research Council (SSHRC), focuses on better understanding and reducing social inequities in urban youth health. As an interdisciplinary scholar, her work straddles the boundaries of health promotion, social epidemiology, sociology of health and health geography.

She also co-holds the Myriagone McConnell-UdM chair on youth knowledge mobilisation, an interdisciplinary, intersectoral chair with the Faculty of arts and science of the University of Montreal.

Since September 2023, she has been the scientific director of the Institute of population and public health of the Canadian Institutes of health research.

Patrick Lévy

Emeritus Professor of physiology and physician, former president of Grenoble-Alpes University

Patrick Lévy obtained his M.D. in 1982 and has been a pulmonologist since 1983. He also has a PhD in biology (1989).

He was president of Joseph Fourier University in Grenoble from 2012 to 2015 and president of the Grenoble Alpes University from 2018 to 2020. From 2016 to 2021, he also coordinated the 'Grenoble Excellence Initiative' which led Grenoble Alpes University being awarded an Initiative of Excellence (Idex) by the French government.

For 25 years, he developed clinical and translational research in the field of apnoea, for which Grenoble is now one of Europe's reference centres.

He chaired the Société française de recherche et de médecine du sommeil (French society for sleep research and sleep medicine) from 1999 to 2001 and created and chaired the Institut national du sommeil et de la vigilance (National sleep and vigilance institute) from 2000 to 2007.

Roger Marthan

Professor and physician in physiology, former vice-president for research of the University of Bordeaux

Roger Marthan obtained his M.D. in 1983 from the University of Bordeaux and specialised in anaesthesiology-intensive care the same year.

He then went on to hold a postdoctoral fellowship at the University of Sydney's Woolcock Institute of Medical Research. Upon his return to France, Roger Marthan set up an Inserm research group in 1998 on the pathophysiology of bronchial and pulmonary vascular reactivity. From 2006, he also directed the *Institut fédératif de recherche* (IFR Inserm n°4) "*Coeur Poumons Vaisseaux Thrombose*" (Heart Lungs Blood vessels Thrombosis), which led to the creation of the *Centre de recherche cardio-thoracique* de Bordeaux (Bordeaux cardio-thoracic research centre) in 2011. He was director of this centre until 2023.

He was director of the *École doctorale des sciences de la vie et de la santé* (Doctoral school of life and health sciences) from 2006 to 2016, before setting up the *Collège des écoles doctorales de l'Université de Bordeaux* (College of doctoral schools of the University of Bordeaux) in 2016, which he now heads.

Roger Marthan was research vice-president at the University of Bordeaux from 1998 to 2002 and at Bordeaux University Hospital from 2010 to 2023.

Jessica Polka

Director of the open science program at the Astera Institute, USA

Jessica Polka obtained a PhD in biochemistry and cell biology from the University of California San Francisco in 2012. From 2013 to 2017, she held a post-doctoral fellowship in synthetic biology at Harvard medical school until 2017.

In 2016, she co-founded and served as executive director of ASAPbio, an open science non-profit organisation focused on community development and culture change around the adoption of preprints and open peer review.

In February 2024, she joined the Astera Institute, a non-profit organisation meant to support the creation of public goods to accelerate scientific and technological progress. She heads the Astera Institute's Open science programme, which supports the development of innovative knowledge sharing tools by entrepreneurial Fellows.

Conduct of the assessment

As described in the introduction above, the assessment began with several meetings between Inserm and Hcéres to discuss the objectives, spirit and content of the assessment. Based on these discussions and on the expectations expressed by Inserm and its supervisory ministries, the note on 'Key topics for the 2024-2025 assessment of Inserm' was written and published on the Hcéres website in March 2024. Inserm prepared its self-assessment report between March and October 2024. The CEO of Inserm was also able to express his expectations regarding the assessment during a meeting with the chairwoman of the assessment committee in October 2024. In addition, a document entitled 'Analysis of the scientific and technological profile of Inserm - Publications, European projects and patents' intended for Inserm and the evaluation committee, was drawn up by the Observatory of sciences and technology (a department of Hcéres).¹²⁶

The assessment committee held two videoconference meetings ahead of the assessment visit, one in November 2024 and one in March 2025. The committee sent written questions to Inserm in February 2025 and received the written answers in March 2025.

The assessment visit took place at Inserm headquarters in Paris between 2 and 4 April 2025. The programme included 55 interviews and meetings

- Most of the interviews were held with individuals from Inserm and Inserm research units:
 - the CEO, both with the two deputy CEOs and alone,
 - external members of the BoD,
 - the chairman of the Scientific Board,
 - directors of thematic institutes,
 - directors of research units, administrative staff of research units, young researchers, PhD students,
 - several elected staff representatives,
 - and various Inserm officers in charge of topics addressed in this report: scientific policy, platforms, open science, public health, regional offices, innovation (with the CEO of *Inserm Transfert*), communication, European and international cooperation, human resources policy, financial affairs, environmental impact, ethics and scientific integrity, etc.
- Around 20 interviews were held with representatives of Inserm's partners and stakeholders, such as universities, university hospitals, national research institutions, European and international partners, as well as private companies.

The assessment committee also visited a few research units located in Paris.

The programme of the visit also included several meetings of the assessment committee on its own, to share the main observations and learnings from the interviews and meetings, and to begin identifying the key points of the assessment report. The committee then worked on drafting the assessment report, which was reviewed with Hcéres and collegially approved by the assessment committee.

The assessment report was then submitted to Inserm for comments on any factual errors, omissions, misunderstandings, inappropriate wording or ill-founded assertions. Lastly, the CEO of Inserm was invited to draft his observation letter, which is included in the public version of the assessment report.

Within Hcéres, Bernard Larroutou, head of the Hcéres department of assessment of national research organisations, Stéphane Régnier, scientific advisor, and Valentine Vigné, project manager, supported the assessment committee in its work.

¹²⁶ See <https://www.hceres.fr/sites/default/files/media/downloads/analysis-scientific-technological-profile-inserm.pdf>.

List of acronyms

A

Aéres	<i>Agence d'évaluation de la recherche et de l'enseignement supérieur</i>
ANR	<i>Agence nationale de la recherche</i>
ANRS	<i>Agence nationale de recherche sur le sida et les maladies hépatiques</i>
ANRS-MIE	<i>Agence nationale de recherche sur le sida et les maladies hépatiques – Maladies infectieuses émergentes</i>

B

BoD	Board of directors
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C

CEA	<i>Commissariat à l'énergie atomique et aux énergies alternatives</i>
CEO	Chief executive officer
CIC	Clinical investigation centre
CNIO	<i>Centro nacional de investigaciones oncológicas</i>
CNRS	<i>Centre national de la recherche scientifique</i>
Cop	<i>Contrat d'objectifs et de performance</i>
CoARA	Coalition for advancing research assessment
CRBSP	<i>Comité de la recherche biomédicale et de santé publique</i>
CSS	<i>Commissions scientifiques spécialisées</i>

E

ERC	European research Council
EU	European Union

H

Hcéres	<i>Haut Conseil de l'évaluation de la recherche et de l'enseignement supérieur</i>
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I

INRAE	<i>Institut national de recherche pour l'agriculture, l'alimentation et l'environnement</i>
Inria	<i>Institut national de recherche en sciences et technologies du numérique</i>
Inserm	<i>Institut national de la santé et de la recherche médicale (National Institute for health and for medical research)</i>
IP	Intellectual property
IT	Information technology

M

MRC	Medical research Council
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O

OPECST	<i>Office parlementaire d'évaluation des choix scientifiques et technologiques</i>
OST	<i>Observatoire des sciences et techniques</i>

P

PEPR	<i>Programme et équipements prioritaires de recherche</i>
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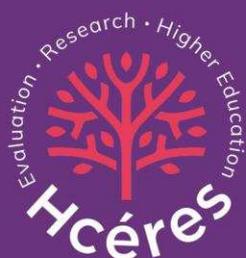
R

RPO	Research performing organisation
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W

WHO	World health Organisation
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Assessment of universities and schools
Assessment of research units
Assessment of academic programs
Assessment of national research organizations
International assessment and accreditations



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PARIS,
LE 11 DÉCEMBRE 2025

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PUBLICATION DU RAPPORT D'ÉVALUATION DE L'INSERM

Le rapport d'évaluation de l'Inserm (Institut national de la santé et de la recherche médicale), rédigé en anglais, est rendu public le 11 décembre 2025 sur le site internet du Hcéres.

Voir <https://www.hceres.fr/sites/default/files/media/downloads/rapport-inserm.pdf>

* * *

L'évaluation a été réalisée par un comité d'évaluation composé de huit experts de cinq nationalités, reconnus pour leur excellence scientifique, leur expérience dans le management d'établissements d'enseignement supérieur et de recherche, et leur connaissance du monde de la santé et de la recherche biomédicale (voir composition *in fine*). La période de référence de l'évaluation est 2019-2023. Le rapport d'auto-évaluation a été préparé par l'Inserm sur la base du *Référentiel d'évaluation des organismes de recherche* du Hcéres, complété par un document spécifique intitulé « Éléments de problématique pour l'évaluation 2024-2025 de l'Inserm », rédigé par le Hcéres en étroite collaboration avec l'Inserm et rendu public en mars 2024 sur le site internet du Hcéres. Le rapport d'auto-évaluation de l'Inserm a été remis au Hcéres en octobre 2024.

La visite d'évaluation s'est déroulée au siège de l'Inserm à Paris du 2 au 4 avril 2025. Son programme comprenait des entretiens avec des personnes de l'Inserm et des unités de recherche de l'Inserm, ainsi qu'avec des représentants d'institutions publiques et privées partenaires de l'Inserm. Le comité d'évaluation a également visité quelques unités de recherche situées à Paris.

Le comité d'évaluation a identifié les principaux sujets de l'évaluation comme suit :

- rôle et missions de l'Inserm en France,
- qualité de la recherche, stratégie et politique scientifiques,
- relations avec les universités et les hôpitaux universitaires¹, et implication dans les politiques des sites,
- innovation et relations avec les entreprises,
- engagement européen et coopérations internationales,
- science dans la société,
- gouvernance, organisation, management et fonctionnement.

* * *

L'Inserm, première institution de recherche française dans le domaine de la santé, jouit d'une excellente réputation en Europe et dans le monde entier. Le rapport d'auto-évaluation montre que l'Inserm est ambitieux et vise à être moderne et innovant, tout en soutenant l'excellence de la recherche. Dans plusieurs domaines clés, à savoir l'innovation et la coopération avec les entreprises, la participation aux programmes européens de recherche et d'innovation, et l'inscription de la science dans la société, l'Inserm a remarquablement amplifié ses actions et amélioré ses résultats au cours de la période évaluée.

¹ Comme son équivalent anglais utilisée dans le rapport d'évaluation (*university hospitals*), l'expression « hôpitaux universitaires » désigne ici à la fois les centres hospitaliers universitaires (CHU) et les institut hospitalo-universitaires (IHU).

Le comité d'évaluation a constaté que le mandat confié en 2024 à l'Inserm par le gouvernement pour créer la nouvelle « agence de programmes de la recherche en santé » est une priorité pour la direction de l'Inserm, qui a assuré à cette agence de programmes un bon démarrage. La principale recommandation du comité à cet égard est de définir une stratégie claire pour séparer le rôle de l'Inserm en tant qu'agence de programmes de son rôle en tant qu'opérateur de recherche. Il est également recommandé de séparer le budget et la gouvernance de l'agence de programmes du budget et de la gouvernance de l'Inserm en tant qu'opérateur de recherche, et de mettre en place des dispositifs de travail clairs pour les prochaines étapes de l'agence de programmes. Son objectif doit être de définir un nombre limité de programmes de recherche, tout en accordant une attention particulière à la transparence et en saisissant les opportunités de simplification et de réduction de la fragmentation des financements.

En ce qui concerne la qualité de la recherche à l'Inserm, le comité recommande de développer la culture et la pratique de l'évaluation de la recherche au niveau international en sollicitant systématiquement l'avis d'experts étrangers pour l'évaluation des chercheurs et en développant des comparaisons internationales. En outre l'Inserm, en tant qu'opérateur de recherche, devrait définir une stratégie scientifique claire, incluant des priorités explicites. La santé des populations est identifiée comme l'une de ces priorités, l'objectif étant de hisser l'Inserm au meilleur niveau international au cours des cinq prochaines années. De plus, l'Inserm est invité à établir un plan d'action ambitieux afin de se positionner comme un *leader* dans la transformation numérique de la recherche en santé. Le comité suggère également que la préparation aux pandémies fasse partie intégrante de la stratégie de l'Inserm.

Le comité recommande vivement que l'Inserm, en tant qu'opérateur de recherche, s'attache à améliorer les relations avec les universités et les hôpitaux universitaires en se plaçant dans une perspective où les universités jouent un rôle de « chef de file », sur le modèle des exemples internationaux. Cela devrait s'accompagner d'une gouvernance modernisée et d'une gestion simplifiée des unités de recherche, dans le cadre d'un partenariat approfondi entre l'Inserm et les universités intensives en recherche. Cela devrait également s'accompagner d'initiatives visant à améliorer la recherche clinique et à renforcer les synergies entre les universités et les hôpitaux universitaires.

Au-delà de la poursuite des efforts pour renforcer sa participation aux programmes de recherche et d'innovation financés par l'Union européenne, l'Inserm est encouragé à définir et à mettre en œuvre une stratégie européenne forte et visible, assortie de priorités ciblées, notamment des partenariats stratégiques avec des acteurs publics et privés européens de premier rang dans le domaine de la recherche et de l'innovation en santé. Il est suggéré que cette stratégie européenne soit élaborée en coordination avec les universités françaises partenaires afin de s'appuyer sur certains des réseaux « d'universités européennes », qui transforment de plus en plus les partenariats académiques en Europe.

Les analyses et recommandations du comité d'évaluation concernent aussi l'organisation, le management et le fonctionnement de l'Inserm. L'organisation interne gagnerait à être clarifiée et actualisée dans la perspective du développement de l'agence de programmes. L'Inserm devrait améliorer le fonctionnement de sa direction nationale en mettant en place des mécanismes clairs de *reporting*, de fixation d'objectifs et d'évaluation annuelle pour tous les directeurs, avec une meilleure coordination et des synergies accrues entre les instituts thématiques, et avec un rôle renforcé du comité de direction en tant qu'organe décisionnel. Le comité recommande de mieux utiliser l'affectation des chercheurs et l'allocation de la dotation budgétaire des unités de recherche comme leviers pour la mise en œuvre de la stratégie scientifique de l'Inserm. De plus, la politique des ressources humaines de l'Inserm devrait être renforcée en intégrant pleinement le personnel contractuel, en établissant une perspective pluriannuelle précise pour l'évolution des emplois et des compétences, et en renforçant le mentorat pour tous les employés permanents. Enfin,

le comité a observé que le manque de clarté et de lisibilité du budget et des comptes de l'Inserm, ainsi que l'absence persistante de comptabilité analytique, ne permettent pas d'évaluer la soutenabilité de la situation financière de l'institution.

À l'issue de son évaluation, le comité a formulé 15 recommandations principales et a identifié les principales forces et faiblesses de l'Inserm.

Recommandations principales

Ces recommandations s'adressent principalement à l'Inserm en tant qu'opérateur de recherche. Certaines d'entre elles s'adressent à l'agence de programmes récemment créée, d'autres à l'État en vue de la préparation du contrat entre l'Inserm et l'État pour la période 2026-2030. Les recommandations 1, 4, 6, 7 et 12 sont de la plus haute priorité.

- **Recommandation 1 : Distinguer et séparer l'agence de programmes et l'Inserm en tant qu'opérateur de recherche. Clarifier la gouvernance, les objectifs et les mécanismes de fonctionnement de l'agence de programmes, dans le but de donner la priorité à un nombre limité de programmes de recherche, et accorder une attention particulière à la transparence et aux opportunités de simplification et de réduction de la fragmentation des financements.**
- **Recommandation 2 :** *(adressée à l'État et à l'Inserm)* Établir une perspective pluriannuelle claire pour le budget de l'agence de programmes et le budget de l'Inserm en tant qu'opérateur de recherche.
- **Recommandation 3 :** *(adressée à l'agence de programmes)* Établir avec tous les partenaires une stratégie nationale cohérente pour les plateformes et les équipements de recherche en santé, ainsi qu'une feuille de route commune pour sa mise en œuvre.
(adressée à l'État) Mettre en œuvre un effort de financement cohérent et soutenu pour les plateformes, y compris les équipements technologiques de pointe, les plateformes de données, les biobanques et les cohortes.
- **Recommandation 4 : Développer la culture et la pratique de l'évaluation de la recherche au niveau international en sollicitant systématiquement l'avis d'experts étrangers pour l'évaluation des chercheurs et en développant des comparaisons internationales. Renforcer les efforts visant à faire en sorte que l'évaluation des chercheurs s'éloigne des indicateurs quantitatifs et valorise de manière appropriée toutes leurs contributions aux missions de l'Inserm.**
- **Recommandation 5 :** Définir une stratégie scientifique pour l'Inserm en tant qu'opérateur de recherche, comprenant des priorités explicites et des orientations claires pour sa mise en œuvre.
 - Mettre en place une stratégie ambitieuse en matière de santé publique, avec l'objectif de hisser l'Inserm au meilleur niveau international au cours des cinq prochaines années.
 - Mettre en place un plan d'action ambitieux pour positionner l'Inserm comme leader dans la transformation numérique de la recherche en santé.
- **Recommandation 6 : À partir d'expérimentations sur certains sites sélectionnés, installer une nouvelle « plateforme de dialogue » au niveau des sites, partagée entre l'université, l'hôpital universitaire, l'Inserm et d'autres partenaires, et pilotée par l'université du site, dans le but d'élaborer une stratégie unifiée de recherche en santé pour le site.**
- **Recommandation 7 : Engager des progrès rapides et significatifs pour améliorer la collaboration et approfondir les partenariats avec les universités.**
 - En collaboration avec les universités, responsabiliser les directeurs d'unités de recherche et renforcer leur capacité à jouer un rôle de leader notamment en participant activement aux décisions, en exerçant une influence réelle sur l'évolution des objectifs de recherche de l'unité et en mobilisant les ressources correspondantes.
 - En collaboration avec les universités, établir un système de gouvernance

- **partagée clair pour les unités mixtes de recherche.**
 - **Décentraliser autant que possible les processus opérationnels et les décisions relatives à l'allocation des ressources aux unités de recherche, afin que ces décisions puissent être prises en concertation avec les universités partenaires.**
 - **Encourager les chercheurs Inserm à contribuer à la formation et leur en donner les moyens.**
 - **Définir un cadre commun pour la consolidation des données et informations de gestion à tous les niveaux : unités, site et national.**
 - **Établir des objectifs communs et des indicateurs consolidés au niveau des sites universitaires.**
- **Recommandation 8** : Clarifier le rôle de l'Inserm dans la recherche clinique au niveau national et international, d'une part, et au niveau des sites, d'autre part. En tant qu'agence de programmes, mettre en place un programme visant à soutenir les initiatives locales les plus prometteuses en matière de recherche clinique. Étendre les outils tels que les « contrats d'interface » et les bourses « Atip-Avenir » aux médecins et aux chercheurs impliqués dans la recherche clinique.
- **Recommandation 9** : Tout en préservant soigneusement l'efficacité et le professionnalisme de son organisation actuelle avec la filiale Inserm Transfert, installer au sein de l'Inserm une véritable capacité à définir et à suivre sa stratégie d'innovation, et réfléchir à la manière de réduire les risques et inconvénients potentiels de cette organisation.
- **Recommandation 10** : Élaborer et mettre en œuvre une stratégie européenne forte et visible avec des priorités ciblées, notamment le développement de partenariats stratégiques avec des acteurs européens majeurs – publics et privés – dans le domaine de la recherche et de l'innovation en santé, en coordination avec les universités partenaires françaises. Élaborer une stratégie internationale cohérente donnant la priorité à un nombre limité de partenariats stratégiques avec des institutions de premier plan au niveau mondial.
- **Recommandation 11** : Pour mieux relier les rapports d'expertise collective à l'actualité et leur donner plus d'impact, revoir le processus décisionnel et la méthodologie, les publier en anglais et les faire connaître plus largement en Europe.
- **Recommandation 12** : **Élaborer une feuille de route pour la préparation à une épidémie majeure, en décrivant comment les objectifs, les processus de travail et la stratégie de communication de l'agence de programmes et de l'Inserm en tant qu'opérateur de recherche devraient être adaptés en cas de future pandémie similaire à la crise du Covid-19.**
- **Recommandation 13** : Clarifier l'organisation interne et améliorer la capacité de management de la direction de l'Inserm grâce à des mécanismes de *reporting*, de définition d'objectifs et d'évaluation annuelle pour tous les directeurs, à une meilleure coordination et à des synergies accrues entre les instituts thématiques, et au renforcement du rôle du comité de direction en tant qu'organe décisionnel.
- **Recommandation 14** : Intégrer pleinement les agents contractuels dans la vision que l'Inserm a de lui-même et dans sa politique de ressources humaines. Établir une perspective pluriannuelle détaillée pour le développement des emplois et des compétences du personnel contractuel.
- **Recommandation 15** : Améliorer la clarté et la lisibilité du budget et des comptes, élaborer un plan pluriannuel détaillé pour l'évolution des recettes et des dépenses, et mettre en œuvre sans délai une comptabilité analytique.

Forces

- Une réputation d'excellence établie, en France, en Europe et à l'échelle internationale.
- Un recrutement compétitif de haut niveau pour les chercheurs permanents, avec environ 27 % de non français parmi les chercheurs nouvellement embauchés.

- Un engagement fort en faveur de l'innovation, un bilan remarquable – que ce soit en matière de création d'entreprises, de transfert de technologies ou de partenariats avec des entreprises privées – et un professionnalisme reconnu.
- Une forte dynamique de participation aux programmes de recherche et d'innovation financés par l'Union européenne.
- Un engagement fort pour contribuer aux politiques publiques et inscrire la science dans la société.
- Un effort substantiel ces dernières années en matière de rémunérations, afin d'accroître l'attractivité pour les meilleurs scientifiques.
- Un bon démarrage pour l'agence de programmes.

Faiblesses

- Manque de clarté de la vision de l'Inserm concernant son positionnement et son rôle dans l'écosystème français de recherche en santé.
- Capacité limitée à distinguer clairement les deux rôles de l'Inserm en tant qu'agence de programmes et en tant qu'opérateur de recherche.
- L'Inserm n'a pas tiré les leçons de la crise du Covid-19 et n'a pas produit de document pour la préparation à une possible future pandémie.
- Absence de stratégie claire sur de nombreuses questions telles que les priorités scientifiques, la stratégie européenne au-delà de la participation aux programmes de l'Union européenne et la coopération internationale.
- L'évaluation de la recherche est centrée sur la France.
- Manque d'ouverture de la culture d'établissement et réticence au changement. L'Inserm n'est pas en capacité de se projeter dans une perspective où les universités deviennent des chefs de file de la recherche au niveau local et régional.
- Absence de vision claire sur le rôle de l'Inserm dans le pilotage des unités de recherche.
- Nécessité de clarifier et d'actualiser l'organisation interne en vue du développement de l'agence de programmes. La direction nationale est affaiblie par des dispositifs insuffisants de *reporting* et de fixation d'objectifs, et par un déficit de coordination.
- Manque de clarté et de lisibilité du budget et des comptes, et absence persistante de comptabilité analytique, rendant impossible l'évaluation de la soutenabilité financière.

Composition du comité d'évaluation

- Anna Dominiczak, *Regius professor* de médecine à l'Université de Glasgow, conseillère scientifique du gouvernement écossais pour la santé, présidente du comité d'évaluation ;
- María Blasco, ancienne directrice du Centre national espagnol de recherche sur le cancer (CNIO) ;
- François Cuny, directeur général délégué Innovation d'Inria ;
- Sylvain Ducroz, directeur général adjoint de l'Institut Gustave Roussy ;
- Katherine Frohlich, directrice scientifique de l'Institut de santé publique, Instituts de recherche sur la santé du Canada, et professeure de santé publique à l'Université de Montréal ;
- Patrick Lévy, professeur émérite de physiologie et médecin, ancien président de l'Université Grenoble Alpes ;
- Roger Marthan, professeur de physiologie et médecin, ancien vice-président Recherche de l'Université de Bordeaux ;
- Jessica Polka, directrice de la science ouverte, *Astera Institute*, États-Unis.

Observations of the CEO of Inserm



ASSESSMENT REPORT OF INSERM

Observations Letter

December 5th, 2025

Inserm wishes to express its sincere appreciation for the quality, balance and depth of the evaluation carried out by the assessment committee chaired by Professor Anna Dominiczak, and HCERES. The final report provides a clear and constructive analysis of the institution's strengths, challenges and future directions, and will serve as a valuable reference for guiding Inserm's strategic development in the coming years.

The institution welcomes the recognition of its "high reputation for excellence in Europe and worldwide" and the acknowledgement that Inserm has "remarkably amplified its actions" in recent years, particularly in the areas of innovation, participation in European programmes, and scientific and societal communication. These achievements reflect the strong commitment of our teams and confirm the relevance of the strategic orientations pursued. The report's encouragement to further strengthen Inserm's European presence and to build a more visible and targeted international strategy is fully aligned with the priorities set by the CEO.

The report also highlights the strong involvement of Inserm's top management in the newly created health research programme agency and acknowledges its "good start." Inserm shares the view that the consolidation and stabilisation of the programme agency is now essential. Substantial work is already underway to define and structure the agency as a robust, coherent entity within Inserm, capable of coordinating ambitious national research programmes and of defining, together with its scientific partners, strategic research priorities. Inserm also underlines the importance of fully recognising its dual role—as a national coordinator of research efforts through the programme agency, and as a research operator. We welcome the recommendations aimed at clarifying the agency's scope, objectives and budgets, in close coordination with the French State.

The evaluation underscores the importance of deepening partnerships with universities.

Inserm fully agrees that strengthening these collaborations is essential for the national research ecosystem. However, the institution wishes to emphasise that the dynamics initiated over the past two years—both at site level within our joint research units and nationally within the governance of the programme agency—are more extensive than reflected in the report. The work undertaken with universities, university hospitals and research centres to enhance local coordination, co-develop site strategies, empower unit directors and simplify operational processes has become a cornerstone of Inserm’s institutional transformation. We regret that these advances may not have been fully perceived, as they represent one of the central pillars of the actions currently being implemented. We already consider universities as site coordinators of research, and we are fully engaged in a process of co-constructing biomedical research strategies with universities, academic hospitals and other research organisations. In addition, we recently signed an agreement between Inserm, universities and academic hospitals to jointly build research strategies on university sites.

Inserm also takes note of the bibliometric analysis and shares the view that the institution can aspire to even stronger international performance. It nevertheless wishes to point out an important methodological limitation:

the restriction of publication data to researchers formally affiliated with Inserm does not reflect the fundamental model of joint research units. Once Inserm has accredited a unit, both its financial and service contributions and its scientific output are considered collectively by all institutional partners. A bibliometric approach that accounts for the full publication output of UMRs would therefore provide a more accurate representation of Inserm’s scientific activity and strategic footprint. In addition, Inserm’s weight is underestimated by the use of an inadequate disciplinary perimeter; for example, environmental biology and ecology—fields outside Inserm’s core mission—should not be included in the comparison.

More broadly, Inserm welcomes the strategic orientations outlined in the report, which reinforce many key priorities already underway.

These include the consolidation of the programme agency; the strengthening of Inserm’s European and international engagement; and greater investment in population health. In this respect, we believe our robust work on nutrition, environmental toxicants and addictions, as well as health inequalities (including socio-economic aspects), addresses major areas of public health. For instance, Inserm plays a recognised leadership role at European level through its contribution to the development and scientific validation of the Nutri-Score. However, we agree that there are some domains where Inserm is less active, as the panel highlights. The report also encourages sustained preparedness for future health crises. Inserm stresses that significant progress has already been achieved in terms of research preparedness and response to infectious outbreaks. ANRS-MIE, created in 2021 within Inserm, ensures permanent real-time monitoring of emerging

pathogens; Inserm and ANRS-MIE jointly lead the PEPR Emerging Infectious Diseases launched in 2023; Inserm recently initiated the national France Vaccine programme; and ANRS-MIE coordinates the “Be Ready” preparedness initiative at European level, with more than 80 institutions, from 27 countries partners. These initiatives illustrate Inserm’s commitment to strengthening national and European resilience to infectious threats.

Inserm acknowledges the committee’s observations regarding the mobilisation of resource-allocation levers to support its scientific priorities. It nonetheless wishes to put this assessment into perspective: the institution already earmarks several positions for specific units, notably for engineering, technical and administrative staff, as well as for certain researcher profiles such as those recruited through the junior professor chairs scheme. While a large share of researcher recruitment continues to depend on national competitive examinations, Inserm is also reinforcing strategic recruitment through programmes such as ATIP Avenir, which foster scientific excellence, and contrats d’interface, which strengthen its priorities at the interface with the medical field. Finally, Inserm is exploring ways to better align operational funding of its units with its strategic priorities. These efforts will contribute to a more coherent and effectively implemented scientific strategy.

Drawing on its external perspective, the committee also encourages Inserm to further reinforce its external evaluation mechanisms. The institution fully shares the ambition of ensuring that its units and strategic programmes are assessed according to the highest international standards and is ready to further strengthen the systematic use of external, international expertise. While the specialised scientific committees (CSS) already include a large proportion of internationally recognised experts working in France, Inserm acknowledges that additional progress is possible—particularly by increasing the involvement of experts currently working outside France. Beyond the CSS, most ad hoc evaluation committees—ATIP-Avenir, Chairs, Cancer Plan—already involve international experts. Inserm also welcomes the recommendation to continue moving away from quantitative indicators in individual assessment. This transition, already well advanced, is reflected in an evaluation framework centred on a selection of meaningful achievements across scientific, clinical, societal and economic impact, together with teaching, open science practices and contributions to collaborative and translational research. Inserm’s recent work within CoARA represents a formal consolidation of this long-standing approach, and the CoARA action plan currently being developed will propose further measures.

Regarding support functions, Inserm fully shares the committee’s view that its HR policy must better integrate the needs arising from the growth of contract-based employment. This transition is already underway, notably through the inclusion of more comprehensive data on contract staff in the unified social report. Inserm already considers contract staff as an integral part of our community and, as such, benefit from our training policy, contributing not only to their professional development but also to their ability to succeed in their future career paths. In terms of financial management, Inserm agrees that analytical accounting could be a useful future tool, but only once the new budget and accounting information system deployed in 2025 has been fully stabilised. More broadly, Inserm supports the objective of enhancing budget transparency—made complex by the diversity of its missions and associated funding—and will work towards this in close coordination with its supervisory authorities.

Inserm thanks HCERES once again for the quality of its analysis and for the constructive spirit that guided this evaluation. As stated by the jury, its recommendations aim to “enable Inserm to achieve its full potential for the benefit of the French and European health research community and society as a whole.” Inserm confirms that they will be taken into account in the preparation of its future COMP. The final report will have a direct impact on Inserm’s strategic steering and support the evolution of the organisation to meet more effectively the upcoming challenges of health research in France, in Europe and internationally. Building on these findings and recommendations, Inserm reaffirms its commitment to fully playing its role, supported by the high dedication of its teams—whose engagement it warmly acknowledges—and together with all its partners.



Pr Didier Samuel
President and CEO