

Summary of the Evaluation of ISED funding to the Centre for Drug Research and Development

Audit and Evaluation Branch
Senior Management Committee – February 2022

The Centre for Drug Research and Development (CDRD) is a not-for-profit organization that works in partnership with academia, industry, and government to support drug R&D projects and advance health innovation.



Background: The CDRD was established as a national Centre of Excellence for Commercialization and Research (CECR) in 2008-09. The CECR funding program ended and the CDRD entered into funding agreements with ISED, which provided the CDRD with \$80 million over five years, beginning in 2017-18. In 2019-20, the CDRD joined with the NEOMED Institute and Accel-Rx to form adMare BioInnovations, a new pan-Canadian organization in the health innovation ecosystem. The CDRD, now as adMare BioInnovations, continues to support the advancement of drug R&D projects towards commercialization.

Three areas were examined in the evaluation using four data collection methods, covering the period from 2017-18 to 2020-21 as required under the *Financial Administration Act*.

Relevance: To what extent is the CDRD addressing a unique and continued need in Canada's drug R&D landscape?

Performance: To what extent is the CDRD contributing to:

- Attracting, training, and retaining talent in Canada?
- Accelerating drug research and developing drug technologies?
- Commercializing drug technologies and realizing health benefits for Canadians?

Efficiency: To what extent is the CDRD program delivery and funding model an efficient and effective approach for supporting drug R&D in Canada?



Data Collection Methods

- Literature and Document Review
- Performance, Financial and Administrative Data Review
- Virtual Interviews
- Online Surveys



Two findings presented the relevance for supporting the translation of drug R&D and the continued need for organizations, such as the CDRD, in the health innovation ecosystem in Canada.

Finding 1: The life sciences sector in Canada has evolved over time and the emergence of the COVID-19 pandemic has heightened its importance. There is a continued need for the federal government to support the health innovation ecosystem in Canada, particularly in regards to the translation of drug research, in order to improve the health outcomes of Canadians. The challenge of translating drug research into commercial application is characterized by high costs, high risk and long timelines.

Finding 2: The CDRD addressed the need to support the translation of drug research in Canada by providing the health innovation ecosystem with a full spectrum of services, including scientific expertise, research infrastructure, business development support and funding to projects with commercial potential. The creation of adMare BioInnovations enabled the CDRD to strengthen its presence nationally, combining the complementary roles of the NEOMED Institute and Accel-Rx. In recent years, the CDRD shifted its focus to supporting projects that are further along the drug R&D continuum and to building life sciences companies in Canada.



Four findings demonstrated the CDRD's effectiveness in providing training, drug R&D support, and launching start-up companies in Canada.

Finding 3: The CDRD training programs contributed to addressing Canada's talent and skills gap and were further expanded under adMare BioInnovations to build a diverse talent pipeline in Canada's health innovation ecosystem. These training programs helped attract talent to Canada, particularly those who have significant expertise in the commercialization of drug R&D.

Finding 4: The CDRD training programs supported skills and knowledge development in areas related to commercializing drug R&D and business development, as well as retaining talent in Canada. adMare BioInnovations continues to improve and expand the CDRD training programs, prioritizing the training of scientists in areas including drug development, commercialization and company creation. These training programs were effectively delivered virtually during the COVID-19 pandemic.

Finding 5: In the last few years, the CDRD tightened its criteria for selecting drug R&D projects in line with its new strategic plan, resulting in a smaller portfolio of projects. The CDRD's R&D activities contributed to advancing promising opportunities and its refined approach to project selection helped to identify those with a greater potential to achieve commercialization.

Finding 6: The CDRD supported the launch of start-up companies, as well as supported existing companies in Canada's life sciences sector that are developing drug products with potential future health benefits to Canadians. These companies are at different stages in the drug R&D process, with the most advanced being in pre-clinical and clinical development.



Two findings highlighted the efficiency of the CDRD's improved program delivery model to facilitate the translation of drug R&D and its funding profile which includes private sector investments.

Finding 7: The CDRD undertook an operational re-organization to improve the effectiveness and efficiency of its program delivery, which includes the translation of drug R&D and company building activities. The CDRD model can be an efficient approach to achieving self-sustainability, but it is highly dependent on its spin-off and portfolio companies achieving commercial success, which to date is limited given the nature of drug development and Canada's health innovation ecosystem.

Finding 8: ISED funding to the CDRD was effective in attracting funding from other sources, thereby sharing the risk associated with commercializing drug R&D. The CDRD generated project and commercial revenue via CDRD Venture Inc (CVI). Its spin-off and portfolio companies experienced growth in private sector investments, highlighting in part their potential for commercial outcomes.

Two recommendations were produced in the evaluation, stemming from the assessment of relevance and efficiency, and supported by at least three data collection methods.

Relevance



Recommendation 1: ISED's Science and Research Sector should work with adMare BioInnovations to increase understanding within the academic community of its refined focus, role and objectives in regards to advancing drug R&D projects.

Efficiency



Recommendation 2: ISED's Science and Research Sector should engage with adMare BioInnovations to better understand the organization's metrics and plan towards self-sustainability.