Herceptin® treatments in hospital and at CLSCs for breast cancer patients in Quebec: comparative analysis of costs and care trajectories.

## Description

## Herceptin® treatments in hospital and at CLSCs for breast cancer patients in Quebec: comparative analysis of costs and care trajectories.

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## ABSTRACT

Background: In the fall of 2019, a pilot project was initiated in Quebec in which 30 patients with HER2+ breast cancer received subcutaneous (SC) administration of Herceptin® at local community service centres (CLSCs) rather than receiving it intravenously (IV) in hospitals. Objectives: This multicentre study aimed to estimate all the direct and indirect costs of cancer treatments in both care settings. Method: Semi-structured interviews were conducted with 30 healthcare professionals at the six institutions participating in the pilot project—4 hematologist-oncologists, 2 hematology-oncology pharmacists, 2 pharmacy technicians, 16 nurse clinicians, and 6 administrative staff members-in order to map the steps in patients' care trajectories and estimate the time required for each step. Interviews took place between June 9, 2021 and May 16, 2022. Official and administrative databases were used to measure the costs associated with the use of professional, medical, and administrative resources as part of the pilot project. Results: Mean total per-patient time for IV administration of Herceptin® was estimated as 111.4 minutes per treatment visit per patient in the hospital versus 36.8 minutes per cycle per patient for SC administration in the CLSC. The annual per-patient direct cost (excluding the medication) was estimated at \$4,211 in the hospital (IV) and at \$760 in the CLSC (SC). Incorporating lost work and leisure time, the annual per-patient cost climbs to \$7,270 in the hospital and at \$1,775 in the CLSC. Analyzing different scenarios on the potential number of eligible patients, we calculated that the savings for the Quebec government could vary between \$5.4 million and \$7.2 million annually for Herceptin® patients. Conclusion: The results of the Herceptin® pilot project implemented in three CLSCs in Quebec show that switching from IV mode to SC mode would alleviate the pressure on the medical teams of oncology clinics in hospitals, whose capacity is currently saturated. By using fewer health professionals and infusion chairs to treat the same number of patients with SC mode, these resources would then be available to be redeployed elsewhere in the healthcare system to treat other patients. This could help improve access to care for a greater number of Quebec patients.

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