

COST-EFFECTIVENESS OF ROUTINE SCREENING FOR CARDIAC TOXICITY IN PATIENTS TREATED WITH IMATINIB

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Background: Imatinib is currently considered the standard first-line therapy for chronic myeloid leukemia. Regarding imatinib's potential for cardiotoxicity, recent studies suggest that the incidence of heart failure after long-term use of imatinib is much lower than what is observed with anthracyclines. Goal: To evaluate the cost-effectiveness of different strategies for cardiotoxicity screening in patients receiving imatinib. Methods: We performed a cost-effectiveness study of different strategies of screening for cardiotoxicity in patients receiving imatinib, the first strategy based on yearly echocardiograms in all patients; the second strategy based on yearly BNP measurement, reserving echocardiograms for patients with an abnormal test. Results are presented in terms of additional cost per diagnosis, as compared to not performing any screening. Results and conclusion: From the Brazilian private sector's perspective, strategies 1 and 2 resulted in additional costs of US\$ 30,951.53 and US\$ 19,925.64 per diagnosis of cardiotoxicity, respectively. In the perspective of the Brazilian public health system, the same strategies generated additional costs of US\$ 7,668.00 and US\$ 20,232.87 per diagnosis, respectively. In our study, systematic screening for cardiotoxicity in patients using imatinib has a high cost per diagnosis. If screening is to be adopted, a strategy based on BNP measurement, reserving echocardiography for patients with abnormal results, results in lower costs per diagnosis.