



**Figure S1. Plot of the Monte Carlo simulations of cost-effectiveness for the traditional (▲) and reverse (●) algorithms using CMS Test Costs.** The estimated cost per test (in USD) is plotted on the y-axis and the estimated effectiveness (i.e., number of patients brought to treatment) is plotted on the x-axis. Each mark represents one iteration (n=10,000) of the Monte Carlo Simulation. For any fixed cost value, the reverse algorithm is more effective than the traditional algorithm. For any fixed level of effectiveness, the reverse algorithm is more expensive than the traditional algorithm.