Each thalassemic patient has two treatment options (i.e. HSCT and BT-ICT). The Markov model consists of five health states and patients receiving HSCT can transition through each of these health states whereas BT-ICT patients can be in either alive BT-ICT state or death state. The cycle length is one year with a 99-year time horizon. HSCT: hematopoietic stem cell transplantation; BT-ICT: blood transfusion combined with subcutaneous iron chelating therapy.