Streptococcus pneumoniae or Pneumococcus is responsible for severe invasive infections (IPD) in high risk groups and in the elderly. Moreover Str. pneumoniae is the commonest agent in community acquired pneumonia (CAP) in adults. Two anti-pneumococcal vaccines are presently available for adult population: 23-valent polysaccharide (PPV23) and 13-valent conjugate (PCV13). Aim of this study is the Budget Impact analysis of anti-pneumococcus vaccination in adult and elderly populations in Italy from the perspective of the National Health System (SSN) at 1, 3 and 5 years of follow-up. Three scenarios are considered utilizing only PPV23, only PCV13 or a combination of the two vaccines. The economic model was built following the guidelines of the International Society of Pharmacoeconomics and Outcome Research (ISPOR). A Markov model was developed based on the cohort of the Italian population with the aim of describing pneumococcal disease in elderly (>65 years) and high risk adult (50-64 years) populations in correlation with immunization status. At 5 years follow-up, the incremental costs of the use of PCV13 alone in a static model are about € 90 million Euro in comparison with the use of PPV23 and the costs for avoided cases are also much lower with PPV23. From this study, in which the same effectiveness was considered for both vaccines, the real low (5%) vaccine coverage was applied and the serotype replacement effect was not evaluated, considering a sensitivity analysis the strategy using PPV23 alone seems the most convenient.