Objectives: To describe demographic and health care utilization characteristics of adults with asthma who initiated inhaled long-acting beta-agonist (LABA) bronchodilators as monotherapy. Methods: A cohort of asthmatic adults with controlled and uncontrolled asthma in the General Practice Research Database was retrospectively followed to compare the propensity of initiating inhaled LABA monotherapy versus any other inhaled controller medication, inhaled corticosteroids (ICS) monotherapy or ICS/LABA combination therapy. Patients with controlled asthma are defined as not having >2 asthma drug classes or any short-acting beta-agonists (SABA) prescribed at the LABA prescribing date, and not having any of the following during 12 months before LABA prescribing date: prescription for oral corticosteroids, >6 prescriptions for SABA, or attending emergency departments or hospitalization for asthma. Results: Among the 51,103 patients aged 13-65 who met the inclusion criteria, 60% were uncontrolled asthmatics and 40% had controlled asthma. The majority of patients in both groups were nonsmoking obese females who visited general practices in England. Patients with controlled asthma were more likely to receive LABA monotherapy than patients with uncontrolled asthma (OR=2.22, 95%CI=1.90-2.59). Asthmatics who were prescribed leukotriene receptor antagonists (LTRA) were at risk of receiving add-on LABA (OR=7.90, 95%CI=4.27-13.53). General practices in England were less likely to prescribe LABA monotherapy than practices in Scotland, Wales, or Northern Ireland. Consultations ≤10 minutes were associated with 38% higher likelihood of prescribing LABA monotherapy inhalers than visits with longer duration. Conclusions: Adults with controlled asthma who are ICS-naive are more likely to initiate LABA monotherapy than patients with uncontrolled asthma; however, LABA is prescribed as an add-on therapy to anti-inflammatory LTRA in controlled asthmatics.