By Patrice Wendling

CHICAGO — Equivalent or better asthma control using combination therapy may be achieved with less budesonide/formoterol than with fluticasone/salmeterol in the first year of use, Samy Suissa, Ph.D., said at the annual meeting of the American College of Chest Physicians.

He and Dr. Pierre Ernst of McGill University Health Center, Montreal, reported an observational study in 23,075 patients, aged 4-95 years, with asthma, who were first-time users of budesonide/formoterol (6,918) or fluticasone/salmeterol (16,157). The therapies are the only combination treatments available in a single inhaler.

The investigators used the United Kingdom's General Research Database, which includes 6 million patients from about 450 practices, to identify patients who received their first budesonide/formoterol or fluticasone/salmeterol prescription from May 2001 (when both therapies became available in the United Kingdom) to December 2005.

To emulate a prospective randomized trial, they conducted both intent-to-treat and persistent-treatment analyses on the frequency of prescriptions and health care events in the year after the first prescription. They adjusted for covariates measured during the year before this prescription.

A range of dosages and inhalers was used in each group. Patients with chronic obstructive pulmonary disease were excluded, said Dr. Suissa. He and Dr. Ernst have received research grants and speaker fees from, and have served on advisory boards for, AstraZeneca Pharmaceuticals LP, which manufactures budesonide/formoterol as Symbicort, and GlaxoSmithKline Inc., which makes fluticasone/salmeterol as Advair.

At baseline, budesonide/formoterol patients had a generally less severe asthma profile, compared with fluticasone/salmeterol patients, said Dr. Suissa, director of McGill's pharmacoepidemiology research unit, and professor of epidemiology, biostatistics, and medicine. Budesonide/formoterol patients used fewer short-acting (83% vs. 85%) and long-acting (23% vs. 36%) β-agonists, and fewer oral (28% vs. 32%) and inhaled (47% vs. 57%) corticosteroids, and were less likely to have an asthma-related hospital visit (1% vs. 1.7%). Both groups saw a general provider an average of 10 times in the year before their combination therapy prescription.

In the intent-to-treat analysis, budesonide/formoterol patients received 14% fewer prescriptions for their study drug than did fluticasone/salmeterol patients, 8% fewer prescriptions for other asthma medications, and 9% fewer antibiotic prescriptions.

In the persistent-treatment analysis, which covered only the 3 months on average of continuous use, budesonide/formoterol patients got 11% fewer prescriptions for their therapy than did fluticasone/salmeterol patients, 8% fewer prescriptions for other asthma medications, and 9% fewer antibiotic prescriptions.