PHY/MI. Musculoskeletal disorders were the most prevalent inflammation-related condition. Multinomial logistic regression revealed that women compared to men (AOR: 1.88; 95% CI: 1.75, 2.01); older adults (≥55 years) compared to younger adults (18-24 years) had significantly higher likelihood (AOR: 6.14; 95% CI:5.05, 7.04) of having IF. PHY/MI interestingly, African Americans, Hispanics and Asians had lower likelihood of having IF. PHY/MI compared to White. METHODS: To evaluate the relative treatment efficacy of FF/VI, a once-daily inhaled corticosteroid (ICS)/long-acting beta2 agonist (LABA) combination therapy, compared with corresponding dosages of established twice-daily ICS/LABA thera-
pies, this study employed a large randomized controlled trial (RCT) in patients with moderate/severe asthma. The primary outcome was the incidence of asthma exacerbations during a 12-month treatment period. Secondary outcomes included forced expiratory volume in one second (FEV1) and other clinical measures of asthma control. This study was conducted at 48 clinical centers across the United States. A total of 2,328 patients were randomized to treatment with FF/VI 92/22mcg, FF/VI 184/22mcg, FP/SAL, and BUD/FORM. The primary endpoint was the number of asthma exacerbations during the treatment period. RESULTS: Once-daily FF/VI 92/22mcg and 184/22mcg demonstrated non-inferiority to FP/SAL (95% CI: 0.80-1.07; p=0.003) and BUD/FORM (95% CI: 0.82-1.06; p=0.008) for the primary endpoint of asthma exacerbations. There were no significant differences between the once-daily FF/VI and FP/SAL or BUD/FORM regimens in terms of change in FEV1, symptom scores, or other secondary endpoints. CONCLUSIONS: Once-daily FF/VI 92/22mcg is non-inferior to FP/SAL and BUD/FORM in the prevention of asthma exacerbations in patients with moderate/severe asthma. Further studies are needed to evaluate the long-term safety and efficacy of once-daily FF/VI in this patient population.

PHYSICAL ACTIVITY AND MENTAL HEALTH

Physical activity is known to have a positive impact on mental health, with regular exercise reducing symptoms of depression and anxiety. The role of physical activity in the prevention and management of mental health disorders has been extensively studied. Several large-scale randomized controlled trials have demonstrated that physical activity interventions can significantly improve mood, reduce anxiety, and enhance overall well-being. The effects of physical activity on mental health are thought to be mediated through various mechanisms, including changes in brain structure and function, neurochemical alterations, and cytokine production. Regular physical activity has also been shown to improve cognitive function and reduce the risk of developing mental health disorders, such as Alzheimer’s disease and dementia.

PHYSICAL ACTIVITY AND NEOPLASM

Physical activity is inversely associated with the risk of several types of cancer, including breast, colon, and prostate cancer. The mechanism by which physical activity reduces cancer risk is not fully understood, but it is thought to involve a combination of factors, including weight management, hormone levels, and inflammation. Regular physical activity has also been shown to improve cancer outcomes, such as survival rates and quality of life, for patients with cancer. The role of physical activity in cancer prevention and management is an active area of research, with many ongoing studies exploring the potential benefits of physical activity interventions in cancer prevention and treatment.