CLINICAL OUTCOMES: Loss of HBeAg is responsive to dose and duration in the treatment with interferon-α. A high-dose (≥5 MU) and regular-duration (16–24 weeks) interferon-α is effective than in clearing virological and serological markers. A dose ≥5 MU and a duration 16–24 week interferon-α is recommended to use.

**MAJOR GI EVENTS AMONG ELDERLY CHRONIC USERS OF COX-2S AND NON-SELECTIVE NSAIDS, WITH/WITHOUT ASPIRIN**
Wang J1, Mullins CD1, Naradzay JF1, Howard K2
1University of Maryland School of Pharmacy, Baltimore, MD, USA, 2Pfizer, New York, NY, USA

OBJECTIVES: The gastrointestinal (GI) risks associated with selective cyclooxygenase-2 inhibitors (COX-2s) versus non-selective non-steroidal anti-inflammatory drugs (NSAIDs) among arthritis patients are well documented in clinical trials. This study is to estimate the major GI risks among elderly chronic users of COX-2s versus NSAIDs, with/without aspirin (ASA), in clinical practice. METHODS: A cohort study was conducted using secondary data from the GE logician database (Centricity EMR), which contained medical records of 3 million patients seen by 5,000 physicians across 27 states. Inclusion criteria: chronic use (2 or more medication mentions) of COX-2s or NSAIDs within 60 days between 1/1/1999 and 6/30/2003, 65 or older, no switch between COX-2s and NSAIDs during one-year follow-up or before a major GI event, defined as GI hemorrhage including melena (ICD-9 codes: 578.xx). Descriptive and multivariate logistic analyses were conducted to determine how major GI risks differed across chronic users of COX-2s alone, NSAIDs alone, COX-2s + ASA, and NSAIDs + ASA. The logistic analysis controlled for gender, age, pre- or post-index GI-harmful drug use, major and minor GI events in the year prior to index date, and prior GI-protective drug use. RESULTS: The number of patients and the percent having major GI events during one-year follow-up period were as follows: COX-2s-alone 7,338 (1.73%); NSAIDs-alone 3,826 (2.06%); COX-2s + ASA 963 (1.77%); and NSAIDs + ASA 602 (2.66%). The multivariate logistic results showed that compared to COX-2s-alone users, NSAIDs-alone and NSAIDs + ASA users had higher major GI risks (OR = 1.35, p = 0.04, 95% CI: 1.01–1.80; and OR = 1.68, p = 0.06, 95% CI: 0.99–2.86 respectively). COX-2s + ASA users had similar risks (OR = 0.96, p = 0.88, 95% CI: 0.57–1.61) to COX-2s-alone users. CONCLUSIONS: The major GI risk was highest among elderly chronic users of NSAIDs + ASA, followed by NSAIDs-alone. Only NSAIDs-alone users had a statistically significant higher risk than COX-2s-alone users. The addition of ASA did not significantly increase major GI risk among COX-2 users.

**COMPARATIVE EFFICACY OF LAMIVUDINE WITH ADEFOVIR IN PATIENTS WITH HBEAG POSITIVE AND NEGATIVE CHRONIC HEPATITIS B: DIRECT AND INDIRECT**

**META-ANALYSIS**
Sun X, Li Y, Qin W
West China Hospital, Sichuan University, Chengdu, China

OBJECTIVES: Few trials directly compared lamivudine with adefovir in patients with HBeAg-positive and HBeAg-negative chronic hepatitis B (CHB). This study used direct and indirect comparison methods to compare the relative efficacy of lamivudine to adefovir. METHODS: We searched Medline, SCI-expanded, Current Content Connect, Cochrane Library and Chinese Biomedical Database to September 15, 2005, and manually screened the references of included studies. Trials for HBeAg-positive and HBeAg-negative CHB were included if they directly compared lamivudine with adefovir, or compared lamivudine (or adefovir) with placebo/non-treatment. Direct comparison was made by pooling the trials of lamivudine versus adefovir. An adjusted indirect comparison was performed by calculating the difference of pooled estimates of lamivudine and adefovir, which was obtained from trials of lamivudine (or adefovir) versus placebo/no treatment. RESULTS: Eight trials (n = 1324) were included. Of these, six were trials for HBeAg-positive CHB patients, and two for HBeAg-negative CHB patients. One trial compared lamivudine with adefovir in lamivudine-resistant patients with HBeAg-positive CHB, and seven trials compared lamivudine (or adefovir) with placebo/non-treatment in naive patients. Quality was medium-to-high in most trials. The direct comparison for lamivudine-resistant patients showed that lamivudine with adefovir were equivalent in clearing serological markers, lamivudine was less effective in normalizing ALT (OR = 0.11, 95%CI = 0.013–0.97) but superior in histological response (OR = 2.08, 95%CI = 1.08–4.04). Indirect comparison from four trials (n = 915) showed that lamivudine and adefovir were equally effective in serological and biomedical markers in naive patients with HBeAg-positive CHB. Indirect comparison from two trials (n = 282) showed that lamivudine was more effective in normalization of ALT than adefovir in HBeAg-negative CHB. But no data on serological and histological response were available. CONCLUSION: Lamivudine and adefovir was equally effective for naive patients with HBeAg-positive CHB. Larger direct comparison trials for lamivudine-resistant CHB and HBeAg-negative CHB should be further performed.

**COMPARING THE COST-EFFECTIVENESS OF THE INTERFERONS (IFNS) UTILIZED IN THE TREATMENT OF CHRONIC HEPATITIS C VIRUS (HCV): A MODEL EVALUATING THE CLINICAL AND ECONOMIC IMPACT OF CURRENT TREATMENT OPTIONS**
Goldberg LD
Goldberg MD & Associates, Battle Ground, WA, USA

OBJECTIVES: The interferons (IFNs) currently indicated for the treatment of chronic Hepatitis C Virus (HCV) have been shown to exhibit varying responsiveness in terms of achieving a sustained viral response (SVR). It is the objective of this model to be used as tool to compare the relative cost-effectiveness of these agents from a payer perspective. METHODS: An interactive Excel-based model was developed to compare the relative cost of treating chronic HCV in terms of both treatment naive and pegylated-IFN nonresponders. Drug effectiveness with respect to the SVR rate was based on the published literature for therapy in combination with weight-based ribavirin. Drug costs were based on average wholesale price cost with consideration of contractual discounts and patient co-payment. The primary economic endpoint was the drug cost per SVR obtained. Results were displayed for treatment naive, pegylated-IFN nonresponders, and combined cases respectively. Multi-factor sensitivity analyses were conducted. RESULTS: In a typical managed care population, with an estimated prevalence of chronic HCV of 1.4% and with 5% of patients being treated, the drug cost of HCV treatment is $1,222 PMPM. For treatment naive patients, Genotype I, the cost per SVR obtained is $31,356, $51,152, and $19,113 for Pegasy, Peg-Intron, and consensus interferon (CIFN) respectively. For treatment naive patients, Genotypes 2/3, the cost per SVR obtained is $18,030, $24,890, and $12,305 for...