Hypothesis / aims of study
Interstitial cystitis/bladder pain syndrome (IC/BPS) and irritable bowel syndrome (IBS) are chronic pelvic pain disorders. Both are embarrassing and can inhibit daily activities. They often coexist which might be due to "neural cross-talk". There are many similarities between these two diseases, such as difficult to get definite diagnosis and efficient treatment because of elusive etiology. These patients often have physical, psychological, social and work influences, and consequently need lots of medical care. Clemens (2008) reported IC/BPS mean yearly medical expense 2.4 times higher than the age and gender controlled non-IC/BPS. The cost differences were mainly due to pharmacy and outpatient expense. In this study, we objectively compared public health insurance reimbursement between IC/BPS and IBS during one year after index date (the date of first diagnosis) in outpatient perspective. The purpose of this study was to evaluate whether IC/BPS had more reimbursement than IBS.

Materials and methods
Through data mining in 2002-2013 Longitudinal Health Insurance Database of Taiwan, we identified IC/BPS and IBS patients. There were 2 models (unmatched and matched) designed to compare outpatient reimbursement for IC/BPS and IBS. The conclusion would be verified if we got same results from both models. In model 1, we compared two cohorts before matching. In model 2, IC/BPS to IBS were matched under 1:1 ratio based on index date, sex, age, income, and 22 co-morbidities (chronic diseases modified from RxRisk model) (Figure 1). Data of expense were compared with Chi-square, ANOVA and multiple linear regressions based on the purpose of our research and properties of variables.

RESULTS
In model 1, IC/BPS had larger female proportion and less income level. There was no significant ratio difference in comorbidities between two cohorts (Table 1). Before matching, IC/BPS had significantly higher visit times (2.9 vs. 2.5). There was no significant difference in pharmacy expense. There were significant differences in yearly non-pharmacy expense, yearly total, per-visit non-pharmacy expense and per-visit total claims (Table 2). In model 2, IC/BPS and IBS were matched nearly identically (Table 4). Except total visit times and yearly total pharmacy claim, there were significant differences in yearly total non-pharmacy, yearly total, per-visit pharmacy and per-visit total claims. In model 2, IC/BPS and IBS were matched nearly identically (Table 4). Except total visit times and yearly total pharmacy claim, there were significant differences in yearly total non-pharmacy, yearly total, per-visit pharmacy and per-visit total claims. The results demonstrated the outpatient reimbursements of IC/BPS had more medical cost than IBS.

CONCLUSIONS
In unmatched model, the larger female proportion and lower income in IC/BPS were compatible with clinical scenario. Patient characteristics of these two cohorts showed no significant difference in ratio of comorbidities. It probably reflected "neural cross-talk" between these 2 patient groups. More IC/BPS outpatient visits might be the result of larger proportion of female gender and easy accessibility to health care with low co-payment in Taiwan.