**SUPPLEMENTAL TABLES AND FIGURES**

**Figure S1: Monthly dispensing rates for Rosuvastatin (CrestorTM) and Atorvastatin (LipitorTM) across all 75 DMAs, 2005-2010.**

Source: IMS Health Xponent 2005-2010

**Figure S2. Monthly all-payer sales rates for Rosuvastatin (CrestorTM) and Atorvastatin (LipitorTM) across DMAs\*, 2005-2010**

\*Excludes six DMAs (Las Vegas, Wikes Barre Scranton, San Antonio, Philadelphia, Birmingham, Miami Ft Lauderdale) recording four to ten-fold increases in statin dispensing from May to June 2008.

Source: IMS Health Xponent 2005-2010

**Tables S1: Sensitivity Analysis examining the effect of including the 6 DMAs that recorded significant increases in statin sales after May 2008**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Data Source / Study Population | Outcome | 69 DMAs (Main Analysis) | | 75 DMAs | |
| Crude1 | Adjusted2 | Crude1 | Adjusted2 |
| Exponent | Statin Prescriptions | 6.71%\*\*  (3.82%, 9.67%) | 2.22%\*  (0.30%, 4.19%) | 7.04%\*\*  (3.17%, 11.06%) | 2.63%  (-0.09%, 5.43%) |
| Crestor | 8.86%\*\*  (4.37%, 13.55%) | 5.18%\*\*  (2.35%, 8.09%) | 9.74%\*\*  (4.40%, 15.34%) | 6.71%\*\*  (2.81%, 10.75%) |
| Lipitor | 10.46%\*\*  (5.64%, 15.50%) | 4.21%\*  (0.67%, 7.87%) | 10.72%\*\*  (5.05%, 16.67%) | 3.94%  (-0.15%, 8.18%) |
| Marketscan (Commercially Insured) | Statin Prescriptions | 5.24%\*  (2.35%, 8.21%) | 2.73%\*  (0.77%, 4.73%) | 4.68%\*  (1.94%, 7.50%) | 2.30%\*  (0.42%, 4.21%) |
| Crestor | 6.52%\*  (1.42%, 11.88%) | 5.17%\*  (1.52%, 8.94%) | 5.73%\*  (0.91%, 10.78%) | 4.54%\*  (1.09%, 8.11%) |
| Lipitor | 8.41%\*\*  (3.85%, 13.18%) | 5.03%\*  (1.32%, 8.88%) | 7.94%\*\*  (3.59%, 12.48%) | 4.65%\*  (1.09%, 8.34%) |
| Hyperlipidemia-Related Outpatient Visits | 5.03%\*  (2.15%, 7.99%) | 1.44%  (-0.38%, 3.29%) | 4.99%\*  (2.18%, 7.87%) | 1.65%  (-0.09%, 3.42%) |

\* p<0.05 \*\*: p<0.01

1 Predictors include advertising as average views per household and time is months as categorical variable 1-60,

2 Predictors include: ads ratings for any Indication per 100 views, months as categorical variable 1-60, three promotional expenditures as free samples categories (low, medium or high), median age, median income in thousand, high cholesterol prevalence, smoking prevalence, physician density in thousand

Source: IMS Health Xponent and Marketscan® Commercial Claims and Encounter Data 2005-2010

**Table S2: Sensitivity Analysis Examining Effect of Lag Time Between DTCA and Statin Sales.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Both Drugs | Crestor | Lipitor |
| One-Month Lag | | | |
| Total Prescriptions | | | |
| Crude1 | 6.62%\*\*  (3.72%, 9.60%) | 9.19%\*\*  (4.50%, 14.09%) | 10.32%\*\*  (5.52%, 15.34%) |
| Adjusted2 | 2.16%\*  (0.22%, 4.14%) | 5.20%\*\*  (2.28%, 8.21%) | 4.22%\*  (0.70%, 7.86%) |
| New Prescriptions | | | |
| Crude1 | 6.52%\*\*  (3.27%, 9.88%) | 10.85%\*\*  (5.99%, 15.92%) | 8.99%\*\*  (3.89%, 14.34%) |
| Adjusted2 | 2.50%\*  (0.15%, 4.90%) | 6.72%\*\*  (3.56%, 9.98%) | 3.79%  (-0.28%, 8.03%) |
| Refilled Prescriptions | | | |
| Crude1 | 6.67%\*\*  (3.81%, 9.61%) | 8.31%\*\*  (3.53%, 13.30%) | 10.95%\*\*  (6.13%, 15.99%) |
| Adjusted2 | 2.01%\*  (0.17%, 3.89%) | 4.43%\*\*  (1.46%, 7.48%) | 4.43%\*  (1.03%, 7.95%) |
| Two-Month Lag | | | |
| Total Prescriptions | | | |
| Crude1 | 6.08%\*\*  (3.32%, 8.80%) | 7.98%\*\*  (4.01%, 12.12%) | 10.34%\*\*  (5.44%, 15.48%) |
| Adjusted2 | 1.91%\*  (0.15%, 3.71%) | 4.36%\*  (0.83%, 8.00%) | 4.36%\*  (0.83%, 8.00%) |
| New Prescriptions | | | |
| Crude1 | 6.08%\*\*  (3.04%, 9.21%) | 9.35%\*\*  (5.26%, 13.61%) | 9.13%\*\*  (3.97%, 14.56%) |
| Adjusted2 | 2.34%\*  (0.25%, 4.46%) | 4.07%\*  (0.05%, 8.26%) | 4.07%\*  (0.05%, 8.26%) |
| Refilled Prescriptions | | | |
| Crude1 | 6.08%\*\*  (3.36%, 8.86%) | 7.24%\*\*  (3.18%, 11.46%) | 10.92%\*\*  (5.97%, 16.09%) |
| Adjusted2 | 1.70%\*  (0.02%, 3.43%) | 4.49%\*\*  (1.08%, 8.03%) | 4.49%\*\*  (1.08%, 8.03%) |

\* p<0.05 \*\*: p<0.01

1 Predictors include advertising as average views per household and time is months as categorical variable 1-60,

2 Predictors include: ads ratings for any Indication per 100 views, months as categorical variable 1-60, three promotional expenditures as free samples categories (low, medium or high), median age, median income in thousand, high cholesterol prevalence, smoking prevalence, physician density in thousand

Source: IMS Health Xponent and Marketscan® Commercial Claims and Encounter Data 2005-2010

**Tables S3: Sensitivity Analysis Examining Effect of Lag Time Between DTCA and Statin Use Among Commercially Insured.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Both Drugs | Crestor | Lipitor |
| One-Month Lag | | | |
| Total Prescriptions | | | |
| Crude1 | 5.22%\*  (2.31%, 8.21%) | 5.56%\*  (1.06%, 10.27%) | 8.38%\*\*  (3.82%, 13.14%) |
| Adjusted2 | 2.70%\*  (0.73%, 4.71%) | 5.11%\*\*  (1.36%, 9.00%) | 5.06%\*  (1.36%, 8.90%) |
| New Prescriptions | | | |
| Crude1 | 5.44%\*  (1.84%, 9.16%) | 6.47%\*  (1.51%, 11.67%) | 8.01%\*  (2.76%, 13.53%) |
| Adjusted2 | 2.33%\*  (0.10%, 4.62%) | 5.34%\*  (1.12%, 9.74%) | 3.71%\*  (0.32%, 7.21%) |
| Refilled Prescriptions | | | |
| Crude1 | 6.33\*  (2.52%, 10.28%) | 6.30%  (-0.23%, 13.26%) | 11.51%\*\*  (5.25%, 18.13%) |
| Adjusted2 | 4.07%\*  (0.94%, 7.30%) | 6.00%\*  (1.29%, 10.95%) | 7.82%\*  (1.87%, 14.12%) |
| Mail Order Prescriptions | | | |
| Crude1 | 11.55%\*\*  (7.05%, 16.22%) | 13.69%\*\*  (7.21%, 20.56%) | 18.76%\*\*  (11.17%, 26.88%) |
| Adjusted2 | 5.36%\*  (1.75%, 9.10%) | 7.03%\*  (1.50%, 12.86%) | 10.23%\*  (4.38%, 16.40%) |
| Two-Month Lag | | | |
| Total Prescriptions | | | |
| Crude1 | 4.73%\*  (1.99%, 7.55%) | 5.56%\*  (1.06%, 10.27%) | 8.31\*\*  (3.64%, 13.19%) |
| Adjusted2 | 2.36%\*  (0.56%, 4.20%) | 4.27%\*  (1.11%, 7.52%) | 5.02%\*  (1.27%, 8.91%) |
| New Prescriptions | | | |
| Crude1 | 4.97%\*  (1.58%, 8.48%) | 6.47%\*  (1.51%, 11.67%) | 8.05%\*  (2.69%, 13.70%) |
| Adjusted2 | 2.07%\*  (0.00, 4.20%) | 4.53%\*  (0.97%, 8.21%) | 3.77%\*  (0.34%, 7.32%) |
| Refilled Prescriptions | | | |
| Crude1 | 5.78%\*  (2.20%, 9.48%) | 5.17%  (-0.40%, 11.06%) | 11.44%\*\*  (4.98%, 18.30%) |
| Adjusted2 | 3.57%\*  (0.72%, 6.51%) | 4.87%\*\*  (1.00%, 8.90%) | 7.72%\*  (1.63%, 14.17%) |
| Mail Order Prescriptions | | | |
| Crude1 | 10.68%\*\*  (6.49%, 15.03) | 11.02%\*\*  (5.76%, 16.54%) | 18.85%\*\*  (11.00%, 27.26%) |
| Adjusted2 | 4.84%\*  (1.49%, 8.30%) | 5.71%\*\*  (1.14%, 10.48%) | 10.30%\*\*  (4.39%, 16.55%) |

\* p<0.05 \*\*: p<0.01

1 Predictors include advertising as average views per household and time is months as categorical variable 1-60

2 Predictors include: ads ratings for any Indication per 100 views, months as categorical variable 1-60, three promotional expenditures as free samples categories (low, medium or high), median age, median income in thousand, high cholesterol prevalence, smoking prevalence, physician density in thousand

Source: IMS Health Xponent and Marketscan® Commercial Claims and Encounter Data 2005-2010

**Tables S4: Cross-advertising Elasticity of Demand between Rosuvastatin and Atorvastatin among the Commercially Insured. \*\***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Prescription Type | Rosuvastatin (CrestorTM) | | Atorvastatin (LipitorTM) | |
|  | Effect Estimate  (95% CI)1 | p value | Effect Estimate  (95% CI)2 | p value |
| Total Prescriptions | 19.2%  (-23.6%, 86.0%) | 0.43 | -18.7%  (-33.7%, 0.03%) | 0.17 |
| New | 26.6%  (-19.0%, 98.1%) | 0.29 | -16.6%  (-31.2%, 1.2%) | 0.19 |
| Refills | 31.5%  (-17.2%, 108.9%) | 0.23 | -16.7%  (-31.6%, 1.5%) | 0.21 |
| Mail order | 35.4 %  (-14.3, 114.0%) | 0.18 | -16.8%  (-31.9%, 1.6%) | 0.21 |

1 Change in the number of rosuvastatin prescriptions dispensed per 1% increase in DTCA for atorvastatin

2 Change in the number of atorvastatin prescriptions dispensed per 1% increase in DTCA for rosuvastatin

\*\* Adjusted for ad ratings for any indication per 100 views, months as categorical variable 1-60, three promotional expenditures as free samples categories (low, medium or high), median age, median income in thousand, high cholesterol prevalence, smoking prevalence, physician density in thousand

Source: Marketscan® Commercial Claims and Encounter Data 2005-2010