**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