

The Effect of Generic Statin Availability on Initial Statin Prescribing Trends Among Medicare Beneficiaries

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Background

Brand-name atorvastatin:

- Was the top-selling prescription drug in the United States from 2007-2011, comprising ~25% of all statins prescribed, second to simvastatin.
- Became available as a generic in November 2011.
 - This led to decreased use of brand-name atorvastatin from 2012-2014, decreased combined brand and generic atorvastatin expenditures.³
- Little is known about statin prescribing for new statin users following generic atorvastatin availability and the effect on the market share of other statins.

Objectives

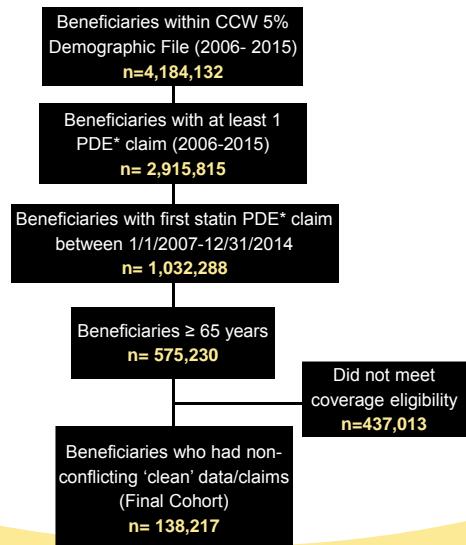
The objective of this study was to examine new statin prescription trends and the influence of market changes following availability of generic atorvastatin among Medicare beneficiaries.

Methods

- Data Source: 2012 Chronic Condition Data Warehouse 5% File (CCW)
- Study Cohort: Medicare beneficiaries aged ≥ 65 years with a new statin prescription between January 1, 2007 to December 31, 2014 (no statin use 12 months prior to their index statin prescription).
- Continuous enrollment in Medicare parts A, B and D was required ≥ 12 months pre- and post- the initial statin prescription (Figure 1).
- Studied drugs: brand-name rosuvastatin, brand-name atorvastatin, lovastatin, pravastatin sodium, simvastatin, and atorvastatin calcium.
- We examined trends in initial statin prescribing frequency by type of statin prescribed for years 2007-2014.

Cohort Description

Figure 1. Cohort Identification

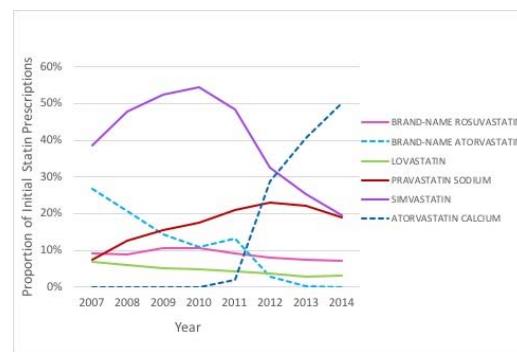


Results

Table 1. New Statin Prescriptions (as a share of total statin prescribing) Pre- and Post-Generic Atorvastatin Availability

Statin	2007-2011	2012-2014	Change in Frequency
BRAND-NAME ROSUVASTATIN	9.66%	7.57%	-2.09%
BRAND-NAME ATORVASTATIN	18.33%	0.98%	-17.35%
LOVASTATIN	5.68%	3.28%	-2.40%
PRAVASTATIN SODIUM	13.89%	21.15%	7.26%
SIMVASTATIN	47.57%	25.51%	-22.06%
ATORVASTATIN CALCIUM	0.28%	40.28%	40.00%
OTHER STATINS	4.58%	1.22%	-3.36%

Figure 2. New Statin Prescriptions, 2007-2014.



- 138,217 initial statin prescriptions were filled by new statin users during the study period.
- From 2007-2011, simvastatin was most commonly prescribed, followed by brand-name atorvastatin and brand-name rosuvastatin.
- From 2012-2014 generic atorvastatin rose to be most commonly prescribed, followed by simvastatin. Prescriptions for pravastatin also increased during this time.
- Initial statin prescribing of brand-name atorvastatin dropped from 13.36% of all new statin prescriptions in 2011 to 0.08% in 2014 while generic atorvastatin prescribing rose from 1.94% in 2011 to 50.04% in 2014.

Conclusion

- The majority of the cohort received a generic statin prescription as their initial therapy.
- Prior to generic atorvastatin availability, generic simvastatin dominated prescribing with limited alternative generic options.
- Once atorvastatin became available as a generic it saw a sharp increase in prescribing, replacing simvastatin as 'market leader' among our study cohort.

References

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- FDA
- Warrach S, Salami J, Khera R, Valero-Elizondo J, Okunrintemi V, Nasir K. Trends in Use and Expenditures of Brand-name Atorvastatin After Introduction of Generic Atorvastatin. *JAMA Internal Medicine* [serial online]. March 10, 2018.

Acknowledgements: This study was funded by a PhRMA Foundation Research Starter Award

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