



HEALTHGRADES

## Prescription Drug User Ratings 2008 Methodology White Paper

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### *Introduction*

To help consumers evaluate and compare prescription drugs, HealthGrades collects and analyzes consumer experience survey data. Through the HealthGrades Prescription Drug User Rating tool, consumers rate their experience with a drug for treating a specific medical condition. Survey questions relate to effectiveness, tolerability, ease of use, likelihood to recommend to others, and overall value.

The purpose of drug user ratings is to:

- Guide consumers through the process of evaluating if they are getting the most effective treatment for their condition.
- Raise awareness that medication side effects might be impacting their health, quality of life, or their ability to take their medication as prescribed.
- Encourage consumers to talk with their doctor about medication effectiveness, side effects, and treatment options to ultimately optimize their overall health.

In addition to viewing ratings for a drug by condition, consumers also receive an overall drug score based on their survey answers to help them talk to their physician about their experience with the drug.

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### *Data Acquisition*

Through the HealthGrades Prescription Drug User Rating tool, consumers can rate a drug they are using to treat a specific condition based on five questions using a 1 to 5 star rating scale.

- **Effectiveness:** How effective was the drug for treating a particular condition?
- **Easy to Tolerate Side Effect:** If you had side effects from the drug, how easy was it to tolerate these side effects?\*
- **Easy to Use:** How easy was it for you to use the drug for treating a particular condition?
- **Recommend to Others:** How likely are you to recommend the drug for treating a particular condition?
- **Value:** Was the drug worth the price you paid?

\*Survey respondents were separated into two groups—those who report experiencing side effects and those who report having no side effects. Those who had no side effects automatically receive a five-star score for the easy to tolerate question.

Additionally, price information is provided by First Data Bank; and drug prescribing rank and change in number of prescriptions is provided by IMS Health Inc.

## User Rating Methodology

Based on independent ratings from consumers who use a drug to treat a specific condition, HealthGrades' Drug User Rating tool provides star ratings for individual drugs by condition. User ratings are provided for the following five categories.

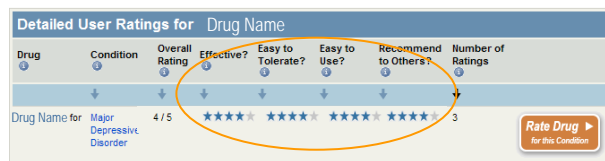
- **Effectiveness:** How effective the drug is for treating a particular condition.
- **Easy to Tolerate:** How easy it is to tolerate side effects, if any.\*
- **Easy to Use:** How easy it is to use the drug for treating a particular condition.
- **Recommend to Others:** How likely people who rated the drug would recommend the drug for treating a particular condition.
- **Overall Value:** If the drug worth the price paid.

## Assignment of Category Ratings

Each **category rating** is an average of the independent ratings from all consumers who shared their experience of using the drug to treat a specific condition. Each category rating is based on all previous consumers' answers to the question in that category (counting only surveys in which all five of the star questions were answered).

For a given category, the category rating value is created by taking a straight average of the results and then rounding to the nearest even number. If the average ends in .5, it is rounded to the nearest even number (e.g., 1.5 is rounded to 2; 2.5 is rounded to 2; and 3.5 is rounded to 4). This method reduces total rounding errors that can result in upwardly skewed results.

The following star ratings system is then applied based on the category rating value.



The following are the five categories and their related questions and rating criteria.


Survey Measure	Rating	
<b>Effectiveness</b>	Not at all Effective	Very Effective
How effective was the drug for treating the particular condition?	★ ★ ★ ★ ★	
<b>Easy to Use</b>	Not at all Easy	Very Easy
How easy was it for you to use the drug for treating the particular condition?	★ ★ ★ ★ ★	
<b>Easy to Tolerate Side Effects</b>	Not at all Easy	Very Easy or No Side Effects
If you experienced side effects from the drug, how easy was it to tolerate these side effects?	★ ★ ★ ★ ★	
<b>Overall Value</b>	Not at all Worth Price	Very Worth Price
Was the drug worth the price you paid? (Rating is displayed in the consumer's <i>Drug Ratings Survey Report</i> only).	★ ★ ★ ★ ★	
<b>Would You Recommend?</b>	Not at all Likely	Very Likely
How likely are you to recommend the drug to treat the particular condition?	★ ★ ★ ★ ★	

## Assignment of Overall Rating

The **overall rating** is an average of the five separate category ratings (effectiveness, easy to tolerate if side effects, easy to use, likelihood to recommend to others, and value for price) for a drug and condition combination.

To derive the overall rating:

1. HealthGrades first **calculates a category rating value** for each of the five categories. Each category rating is a straight average of the independent ratings from all consumers who shared their experience of using the drug to treat a specific condition. Each category rating is based on all previous consumers' answers to the question in that category (counting only surveys in which all five of the star questions were answered). The category rating value is not rounded to calculate the overall rating.
2. HealthGrades then **calculates the overall rating value** by averaging the five category ratings from step one and then rounding to the nearest even number. If the average ends in .5, it is rounded to the nearest even number (e.g., 1.5 is rounded to 2; 2.5 is rounded to 2; and 3.5 is rounded to 4). This method reduces total rounding errors that can result in upwardly skewed results.
3. The following star rating system is then applied based on the overall rating value. On the Compare Details table, the overall rating is displayed numerically (due to space constraints).

Star Rating	Numeric Display	Interpretation
★★★★★	5/5	High rating
★★★★☆	4/5	
★★★☆☆	3/5	
★★★☆☆	2/5	
★★☆☆☆	1/5	
★☆☆☆☆	1/5	

**User Ratings for Drug Name**

Drug	Condition	Overall Rating	Number of Ratings
Drug Name	Major Depressive Disorder	★★★★☆	3

[Rate Drug for this Condition](#)

**Compare Details Table**

Drug	Condition	Overall Rating	Effective?	Easy to Tolerate?	Easy to Use?	Recommend to Others?	Number of Ratings
Drug Name for Major Depressive Disorder	Major Depressive Disorder	4/5	★★★★★	★★★★★	★★★★★	★★★★★	3

[Rate Drug for this Condition](#)

## Assignment of Overall Drug Score (in Rating Survey Report)

When a consumer completes a drug rating survey they receive a personalized Drug Rating Survey Report. The report provides the overall drug score and provides guidelines to consumers to help them talk to their physician about their experience with the drug. Additionally a Ratings Results section of the report compares the consumer's ratings with the average rating from all other consumers who rated the drug for a particular condition.

### Assignment of the Overall Drug Score

The overall drug score provides a guideline on how satisfied or dissatisfied the consumer may be in using the drug to treat a particular condition. A consumer can receive a possible 25 points based on five points for each of the five survey questions regarding: effectiveness, tolerability, ease of use, likelihood to recommend the drug to others, and value for price. For example, if a consumer indicates four stars for effectiveness, they receive four points to their total points. The overall drug score value is created by adding the points received from all five questions.

A consumer must answer all five survey questions to receive an overall drug score. If a consumer answers that they did not experience side effects, they automatically receive five points for the easy to tolerate question.

The drug score range relates directly to guidelines for consumers for communicating with their physician.

Score Range	What does this mean to you?
0 to 14 points	You may be <b>dissatisfied</b> with the drug and it may be impacting your quality of life or causing problems in taking the drug as prescribed. <ul style="list-style-type: none"> <li>▶ If you are dissatisfied, you should make an appointment with your physician to discuss your experience with the drug and possible options.</li> </ul>
15 to 19 points	You are <b>neither satisfied nor dissatisfied</b> with the drug, or you may have extreme dissatisfaction in 1 or 2 areas, like side effects or cost. <ul style="list-style-type: none"> <li>▶ There may be a better option for you. Consider making an appointment with your physician to discuss your experience with the drug.</li> </ul>
20 to 25 points	You are <b>generally satisfied</b> with the drug. <ul style="list-style-type: none"> <li>▶ Next time you visit with your physician, inform your physician that you are generally satisfied with the drug and discuss any concerns that you may have.</li> </ul>

### Ratings Results Section

In the Ratings Results section of the report, a consumer can see how their ratings (Your Rating) compare to others who rated the drug for the same condition (e.g., Average of 4 Responses).

**Rating Results**  
Here's how you and others rated Drug Name for Major Depressive Disorder.



Survey Measure	Responses	Rating	
<b>Effectiveness</b>		Not At All Effective	Very Effective
How effective was Drug Name for the treatment of Erosive Esophagitis?	Your Rating	★ ★ ★ ★ ★	★ ★ ★ ★ ★
	Average of 4 Responses	★ ★ ★ ★ ★	★ ★ ★ ★ ★
<b>Ease of Use</b>		Not At All Easy	Very Easy
How easy was it for you to use Drug Name for the treatment for Erosive Esophagitis?	Your Rating	★ ★ ★ ★ ★	★ ★ ★ ★ ★
	Average of 4 Responses	★ ★ ★ ★ ★	★ ★ ★ ★ ★
<b>Easy to Tolerate Side Effects</b>		Not At All Easy	Very Easy or No Side Effects
If you had side effects from Drug Name, how easy was it to tolerate these side effects?	Your Rating	★ ★ ★ ★ ★	★ ★ ★ ★ ★
	Average of 4 Responses	★ ★ ★ ★ ★	★ ★ ★ ★ ★
<b>Would You Recommend?</b>		Not At All Likely	Very Likely
How likely are you to recommend Drug Name for the treatment of Erosive Esophagitis?	Your Rating	★ ★ ★ ★ ★	★ ★ ★ ★ ★
	Average of 4 Responses	★ ★ ★ ★ ★	★ ★ ★ ★ ★
<b>Overall Value</b>		Not At All Worth Price	Very Worth Price
Was Drug Name worth the price you paid?	Your Rating	★ ★ ★ ★ ★	★ ★ ★ ★ ★
	Average of 4 Responses	★ ★ ★ ★ ★	★ ★ ★ ★ ★







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## Drug Profile Information

In addition to the user rating results, the following information is provided for each drug under its Drug Profile.

### Price Level

The Price Level is a gauge of the wholesale cost of the drug, compared to other drugs, on a scale of 1 to 6 with  being lowest cost drugs to  being highest cost drugs. Price information is supplied by First Data Bank. Price Level scores are based on the Blue Book average wholesale unit price at the National Drug Code (NDC) package level. The comparison is relative to all drugs, not relative to drugs in a specific class of drugs.

Price Level Indicator	Unit Price Range
	\$0.01 – \$2.00
	\$2.01 – \$4.00
	\$4.01 – \$6.00
	\$6.01 – \$8.00
	\$8.01 – \$10.00
	\$10.01 and up

### Drug Prescribing Rank

Drug Prescribing Rank indicates how often the drug is prescribed in the United States relative to other drugs in its class. For example, 3 out of 20 means that a drug is the 3<sup>rd</sup> most prescribed drug of the 20 drugs in its drug class in the United States. Drugs are grouped by class based on their similar chemical makeup and similar effect. This data is supplied IMS Health Inc.

### Change in Number of Prescriptions

Change in Number of Prescriptions indicates the percentage increase or decrease in the number of prescriptions written for this drug during one month of this year as compared to the same month last year. For example, the percentage change could represent the increase (or decrease) in the number of prescriptions written for the drug in January of this year, compared to January of last year. The number of prescriptions written may decline when a competitive drug or an equivalent generic drug is released to the marketplace.

Since physicians prescribe all prescription medications, an increase in the number of prescriptions written means that either more physicians are prescribing the drug, or the same physicians are prescribing the drug to more patients, or both.

- If a drug lists a 25% Change in the Number of Prescriptions that means that 25% **more** prescriptions have been written for this drug this year than last year.
- If a drug lists a -5% (negative number) Change in the Number of Prescriptions that means that 5% **fewer** prescriptions have been written for this drug this year than last year.
- If a drug lists a 0% Change in the Number of Prescriptions, that means that the **same** number of prescriptions have been written for this drug this year compared to last year.

This data is supplied by IMS Health Inc. and is calculated as follows:

$$\left( \frac{\text{Volume in one month of current year} - \text{volume in same month of prior year}}{\text{Volume in prior year}} \right) * 100$$

*with volume calculated by summing over all NDC codes and rolling up to the drug name level.*

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## ***Limitations of the Ratings***

It must be understood that while these ratings may be valuable in helping consumers evaluate and compare prescription drugs, one should not use this information alone to determine the most effective treatment for a condition. This information is only meant to:

- Guide consumers through the process of evaluating if they are getting the most effective treatment for their condition.
- Raise awareness that medication side effects might be impacting their health, quality of life, or their ability to take their medication as prescribed.
- Encourage consumers to talk with their doctor about medication effectiveness, side effects, and treatment options to ultimately optimize their overall health.

The ratings are limited by the following factor:

- All information provided by the patient (consumers completing a drug rating survey) is subject to individual bias. This bias may skew the “average scores” used in comparisons.

Please note that none of the user ratings in this tool constitute a recommendation or endorsement by Health Grades, Inc.. Only individual patients along with their physician can decide whether a particular drug is suited for their unique needs.