# USER GUIDE

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For more information, visit us online at [www.lexi.com](http://www.lexi.com) or call 866-397-3433
Welcome to the Lexicomp Online User Guide
With this guide, learn how to navigate the following clinical databases and modules:

CLINICAL DATABASES INCLUDE:
- Lexi-Drugs® *(with AHFS Essentials & AHFS DI for hospital and academic clients)*
- Lexi-Drugs® International
- Pediatric & Neonatal Lexi-Drugs™
- Geriatric Lexi-Drugs™
- Natural Products
- Pharmacogenomics
- Infectious Diseases
- Lab and Diagnostic Procedures

CLINICAL MODULES:
- Drug, drug allergy, herbal interaction and duplicate therapy analysis
- Identification of drugs in various dosage forms
- Extensive medical calculations
- I.V. compatibility via King® Guide to Parenteral Admixtures™ and Trissel’s IV Chek™
- Patient education: Printable patient leaflets providing drug, disease, condition and procedure, discharge instructions, natural product, and healthy living information for your patients
- Assessment, diagnosis, and treatment of poisonings and drug overdoses
- Facts & Comparisons® for comparative data tables

OPTIONAL ADD-ON RESOURCES:
- The 5-Minute Clinical Consult
- Martindale: The Complete Drug Reference™
- Lexi-Drug Plans™
- FORMULINK℠
Welcome to Lexicomp Online User Guide

Welcome to Lexicomp Online. Lexicomp Online is a collection of clinical databases and clinical decision support tools that provides users with an extensive medical library. This guide is designed to help users understand and navigate all of the features of the Lexicomp Online application. The initial home screen of the application provides users access to Lexicomp content via global searching or by browsing the available content. In addition to browsing/searching our clinical databases, the blue tool bar across the top of the application allows the user to access all clinical decision support tools.

THE LEXICOMP ONLINE HOME PAGE

Searching from the Home Page

From the opening screen, enter any keyword (i.e., drug, lab, disease) in the search box and click the “Search” button. To assist with searching, a possible keyword list will appear after you enter at least four (4) characters. To select a suggested term, simply click on the desired search term and the system will automatically perform a search and display the results. Additionally, if you misspell a search term, you will be presented with a “Did you mean” list of possible search terms. To perform a new search using the correct term, simply click on the desired search term and the system will automatically perform a search and display the results. Once you have entered your search term, clicking the “Search” button or hitting the enter key on the keyboard will initiate a global search across all available databases. Any database that has information on the keyword searched will be displayed on the results screen.

For more information, visit us online at www.lexi.com or call 866-397-3433.
Limiting Searches within Monograph Sections

In addition to basic global searching, Lexicomp Online allows users to perform a more refined search of the clinical content. To perform a more targeted search within a specific section of the monograph, click the “Limit Search to” drop-down arrow to view a list of possible sections that can be searched. To limit your search to a particular field, simply click on the desired listing from the drop-down menu. Below is a extensive listing of the sections that can be searched specifically:

- **Monograph Name** – This is the default search that limits the search to the title of the monograph.
- **Adverse Reactions** – This will limit your search to the Adverse Reactions section of the drug monograph and allows the user to enter a particular adverse reaction and see a list of all drugs that have this adverse reaction listed.
- **Contraindications** – This will limit your search to the Contraindications section of the monograph. This allows the user to enter a particular condition and see a list of drugs that have the condition listed in the contraindication section.
- **Charts/Special Topics** – This will limit your search to the Charts/Special Topics section of the database. This allows the user to enter any keyword and the system will return any Chart/Special Topic that contains that keyword.
- **Drug Interactions** – This will limit your search to the Drug Interactions section of the monograph. This allows the user to enter in a specific drug or drug class to see if that drug is listed in the interactions section.
- **Use** – This will limit the search to the Use section of the monograph. This allows users to enter a particular disease or condition and see a list of drugs that have that use listed as either a labeled or off-labeled indication.
- **Warnings/Precautions** – This will limit the search to the Warnings/Precautions section of the monograph. This allows users to enter in a specific keyword and see a list of all drugs that have that keyword listed in the Warnings/Precautions section.
- **NDC** – This will limit your search to the NDC section of the monograph. This allows users to search for drugs using NDC numbers.
- **Methodology** – This will limit your search to the methodology section of a lab monograph. This allows a user to see a list of laboratory tests that use a particular methodology.
- **Pharmacologic Category** – This will limit the search to the Pharmacologic Category section of the monograph. This allows the user to enter a specific pharmacologic category and see all drugs that are part of that category.
- **Field Name** – This will limit the search to only section headings. This allows users to search for drug monographs that contain a specific field.
- **Manufacturer** – This will limit the search to the Manufacturer section of the monograph. This allows the user to enter a manufacturer name and see a list of drugs that have that manufacturer listed. **Note:** This search is only effective with brand name products.
- **All Text** – This will allow the user to search all of the text in the Lexicomp Online system and can be used to find a keyword or topic regardless of in which field the word appears.
Explore by General Category

The “Explore by General Category” function allows the user to browse the available databases using different indexes. The databases are classified into six main categories: Drugs, Diseases, Toxicology, Patient Education, Laboratory, and International Drugs. To browse the available drug databases, click the “Drugs” button; to browse the available disease databases, click the “Diseases” button; to access toxicology information, click the “Toxicology” button; to browse the patient education databases, click the “Patient Education” button; to browse available laboratory databases, click the “Laboratory” button; and to browse international drug information, click the “International Drugs” button.

New Drug Approvals & Special Alerts

These sections will dynamically display new U.S. drug approvals and the most recent Special Alerts added to the Lexi-Drugs database. Clicking on any topic will direct the user to the indicated Lexi-Drugs monograph.
Clinical Decision Tool Bar

The blue Clinical Decision Tool Bar provides access to all clinical tools that are included in the user’s account. This bar is always available from any screen in the application and provides access to the following tools:

- **Interactions** – a complete drug, drug allergy, herbal interaction and duplicate therapy analysis program that uses a predictive, evidenced-based model.

- **Drug Identification** – identify various unknown dosage forms based on imprint, dosage form, shape and/or color.

- **Calculators** – access to over 130 medical calculations designed to assist in drug dosing, drip rates and organ function assessment in both adults and children.

- **I.V. Compatibility** – full access to the King® Guide to Parenteral Admixtures™ and Trissel’s™ 2 Clinical Pharmaceutics Database (Trissel’s IV Chek™) for extensive analysis of Admixture, Y-Site and Syringe compatibilities.

- **Patient Education** – access to multi-language patient education materials for medications, disease/conditions, procedures, discharge instructions, natural products and healthy living.

- **Toxicology** – access to information on agents of toxicity, antidotes and decontaminants, household products, toxicity-specific calculators and drug identification in one single tool.

- **Facts & Comparisons** – offers valuable clinical content from our affiliate, Facts & Comparisons, for the ability to build custom comparative tables and access content from the Formulary Monograph Service™.

- **More Clinical Tools** – this section contains access to several other tools including:
  - **Drug Plans** – access to over 5,500 insurance formularies, including managed care organizations, pharmacy benefits manager companies, health maintenance organizations, state Medicaid formularies, self-insured companies and other health care plans.
  - **Web Search** – a medically focused search engine that queries predetermined, vetted medical websites providing additional resources and information.
  - **Indexes** – access a list of all available databases using alphabetical and other relative indexes.
  - **Other Clinical Tools** – a list of links to other significant websites for information on new drugs, drug shortages, recalls and more.

Recent Documents

This button allows the user to review the last ten (10) documents accessed. This functionality is local to the computer and therefore may reflect the searching activity of multiple users on computers that are located in common areas of the facility.

Additional Links

- **Feedback** – Send feedback directly to Lexicomp via a Web-based feedback form.
- **Corporate** – This link will take the user to the Lexicomp corporate website (www.lexi.com).
- **User Guide** – This link will take the user to the detailed user manual that can be viewed or printed.
- **Logout** – For subscribers with login/password access and a limited number of concurrent users, this link will log the user out so another user can log into the system on another computer.
Drug Databases

The “Explore by General Category” links allow the user to browse the databases included in Lexicomp Online. Clicking on the “Drugs” button from the home page will take the user to a listing of available drug databases. This screen provides brief overviews of each drug database that is available with Lexicomp Online. The left side of the screen provides links to the available indexes for each database.

Click on the database name to display a more detailed overview of the content available in that database, as well as a list of the editorial panel. The “Indexes” links on the left side of the screen can be used to browse each database via a number of useful indexes.
**BROWSE BY CATEGORY**

**Generic Names**
This link will display an alphabetical index of generic drug names. Click on a letter to display a list of generic drugs that begin with that letter. From the list of drugs, you can view the drug monograph by clicking on the name of the medication.

**U.S. Brand Names**
This link will display an alphabetical index of brand name products marketed in the United States. Click on a letter to display a list of brand name products that begin with that letter. From the list of brand name products, you can view a drug monograph by clicking on a product from the list.

**Canadian Brand Names**
This link will display an alphabetical index of brand name products marketed in Canada. Click on a letter to display a list of brand name products that begin with that letter. From the list of brand name products, you can view a drug monograph by clicking on a product from the list.

**Charts/Special Topics**
This link will provide an alphabetical listing of all Charts/Special Topic documents available within this database. The Charts/Special Topics section consists of supplemental information such as drug comparison charts, treatment overviews and other therapeutically relevant topics.

**Changed Last 7 Days**
This index displays all drugs that have been updated or modified in the last seven (7) days. From this list, the user can click on any drug and view the monograph.

**Pharmacologic/Therapeutic Category**
This index will display an alphabetical listing of all pharmacologic categories. Clicking on a pharmacologic category will display all drugs in that category. From this list, the user can click on any drug displayed and access the full monograph for that drug.

**REMS**
This index provides a list of all drugs that have a Risk Evaluation and Mitigation Strategy (REMS) as required by the FDA. From the list displayed, the user can click on any drug and access the full monograph.

**Monographs with Prescribing and Access Restrictions**
This index provides a list of all drugs that have restricted access or prescribing restrictions that fall outside of the FDA’s REMS program. From this list, the user can click on any drug and access the full monograph.

**Monographs with Black Box Warnings**
This index provides a list of all drugs that have a black box warning issued by the FDA. From this list, the user can click on any drug displayed and access the full monograph for that drug.

**Monographs with Special Alerts**
This index displays a list of all drugs that have a Special Alert. The “Special Alert” field displays important information, such as new warnings, adverse reactions, recalls, etc., that is of a time-sensitive nature. From this list, the user can click on any drug and view the entire drug monograph.
Disease Databases

The “Explore by General Category” links allow the user to browse the available databases that are part of Lexicomp Online. Clicking on the “Diseases” button from the home page will take the user to a listing of the available disease databases. This screen provides brief overviews of each disease database that is available within Lexicomp Online. The left side of the screen provides links to the available indexes for each database.

Click on the database name to display a more detailed overview of the content available in that database as well as a list of the editorial panel. The “Available Disease Indexes” links on the left side of the screen can be used to browse each database via a number of useful indexes which were reviewed above.
**Toxicology Databases**

The “Explore by General Category” links allow the user to browse the available databases that are part of Lexicomp Online. Clicking on the “Toxicology” button from the home page will take the user to a listing of the available toxicology databases. This screen provides brief overviews of each toxicology database that is available within Lexicomp Online. The left side of the screen provides links to the available indexes for each database.

Click on the database name to display a more detailed overview of the content available in that database, as well as a list of the editorial panel. The “Available Toxicology Indexes” links on the left side of the screen can be used to browse each database via a number of useful indexes which were reviewed above.
Patient Education Databases

The “Explore by General Category” links allow the user to browse the available databases that are part of Lexicomp Online. Clicking on the “Patient Education” button from the home page will take the user to a listing of the available patient education databases. This screen provides brief overviews of each patient education database that is available within Lexicomp Online. The left side of the screen provides links to the available indexes for each database.

Click on the database name to display a more detailed overview of the content available in that database, as well as a list of the editorial panel. The “Available Patient Education Indexes” links on the left side of the screen may be used to browse each database via a number of useful indexes which were reviewed above.
Laboratory Databases

The “Explore by General Category” links allow the user to browse the available databases that are part of Lexicomp Online. Clicking on the “Laboratory” button from the home page will take the user to a listing of the available laboratory databases. This screen provides a brief overview of the laboratory and diagnostic procedures database that is available within Lexicomp Online. The left side of the screen provides links to the available indexes for this database.

Click on the database name to display a more detailed overview of the content available in that database, as well as a list of the editorial panel.
International Drug Databases

The “Explore by General Category” links allow the user to browse the available databases that are part of Lexicomp Online. Clicking on the “International Drugs” button from the home page will take the user to a listing of the available international drug databases. This screen provides a brief overview of the international drug databases that are available within Lexicomp Online. The left side of the screen provides links to the available indexes for these databases.

Click on the database name to display a more detailed overview of the content available in that database, as well as a list of the editorial panel.
REVIEWING SEARCH RESULTS

Search Results Window

After performing a search, the user will be presented with results from all databases that have a match to the search performed. Only databases that are available to the user and have a result will be displayed in the search results. To view the monograph within any database, click on the hyperlinked drug name displayed under the desired database.

Filter Results

The “Filter Results” drop-down menu can be used to sort your search results to display only specific databases. The filter results can be used to filter by the following topic areas:

- Drug Content
- Disease/Lab Content
- International Drug Content
- Toxicology Content
- Patient Education Content

Field Selection

To activate the “Jump to field” menu, hover the cursor over the hyperlinked drug name in the results list and a list of the available fields within that monograph will display. From this list, the user can select a field of interest and immediately open the drug monograph to that section.
ACCESSING INFORMATION WITHIN A DRUG MONOGRAPH

Monograph Display

Once a user selects a database by clicking on a drug name or using the field selection function on the search results page, the drug monograph will be displayed. In the top left corner of the screen, the monograph title and database name will be displayed as a point of reference.

Navigating a Monograph

Once in the monograph, the user has three ways to navigate the information presented. The first method is to use the “Navigation Tree” displayed on the left side of the screen. This box provides a table of contents view of the available sections of the drug monograph. To jump to a particular section, click on the desired section. Sections that have a “▼” sign next to them have sub-sections that allow the user to jump to more specific areas of content. To expose all of the sub-sections at once, click the “Expand All” link at the top right of the Navigation Tree box. To hide the Navigation Tree box and expand the screen space for monograph viewing, click the “Hide” link in the top right corner of the box. To open the Navigation Tree once it has been hidden, click the “Show Tree” link in the top left corner of the monograph window.
The second navigation method is located in the top right area of the monograph display in a box titled “Jump to Section.” Click on this box and an alphabetical list of all sections and sub-sections is displayed in a drop-down menu. To jump to a particular section, click on the desired field from the drop down list.

Lastly, the drug monograph can be viewed by scrolling through the entire document using the standard browser scroll bars located on the left side of the monograph window.

**Linking to Other Content from a Drug Monograph**

Throughout the drug monograph, hyperlinks are presented that allow the user to link to additional content. In some instances, these links provide access to related content within Lexicomp Online such as: calculators, disease/organism content (infectious disease drugs only), pharmacogenomics information, charts/special topics, allergy/idiosyncratic reaction information, pregnancy/lactation detail, comparative efficacy information, and AHFS content, to name a few.

Along with the additional Lexicomp content, other hyperlinks provide access to content found on the Internet such as: FDA medication guides, Clinical Practice Guidelines, FDA warnings/alerts, and PubMed links for references.
Accessing Images, Patient Education Leaflets

In addition to the monograph information, additional content is available via the tabs across the top of the monograph window. Clicking on these tabs will give users access to (1) images of various dosage forms; (2) adult patient education material and (3) pediatric patient education material.

Images

From a monograph, clicking on the images tab displays a list of the available products with images (oral solid dosage forms). To view a larger image and additional detail about a particular product, click on the image.

Note: To access the drug identification tool for identifying unknown medications, click on the “Drug I.D.” button in the blue tool bar.

To return to the monograph information, simply click on the “Monograph” tab at the top of the content panel.
Adult & Pediatric Patient Education

From the monograph, clicking on the patient education tabs will display the patient education document (adult or pediatric) for that drug. This document can be navigated using the same three methods used to navigate a drug monograph: (1) the left panel Navigation Tree; (2) the “Jump to Section” drop-down menu in the upper right corner of the content panel; or (3) scrolling the document using the right side scroll bars.

The patient education handouts are written at a consumer level and can be viewed in multiple languages. To view the document in a different language, click on the “Switch Language” drop-down menu in the upper right corner of the content panel. Available languages will be displayed using this menu.

To print the document, click on the “Print” link in the upper right corner of the content window and a list of the available printers to which your computer is connected will be displayed.
Interactions

The interactions tool is accessed via the blue tool bar at the top of the screen. Lexi-Interact is a complete drug and herbal interaction analysis program capable of assessing potential drug-drug interactions, drug-allergy interactions, and duplicate therapy interactions. Begin by entering the list of medications and known drug allergies to be analyzed. The interactions tool allows users to enter medications (both prescription and over-the-counter), natural products, foods and/or alcohol. Allergies may be entered by medication name (e.g., aspirin) or by the pharmacologic class (e.g., salicylates).

To enter an item, begin typing a keyword into the “Search Drugs” and/or “Search Allergies” box. After you enter at least four (4) characters, suggested terms will populate, and you can select the desired term from the list. If multiple products match your search term, a list of products will appear. To add that medication to the medication list, simply click the “Add” button. Continue this process until all items are added. To remove an item from the list, uncheck the selected box next to the product you wish to remove.

Once the list is complete, click the “Analyze” button to perform an analysis. The Duplicate Drug Therapy feature is automatically checked to provide an analysis of the selected medications which are considered duplications because they belong to the same pharmacologic class. If you do not want the duplicate therapy screening to be performed, the box can be unchecked prior to selecting the “Analyze” button.

The “Interaction Analysis” screen provides a summary of interactions organized by drug-drug, drug-allergy, and duplicate therapy sections. An assigned risk rating (A, B, C, D or X) appears next to each drug-drug and drug-allergy interaction. Each letter represents a different level of urgency in responding to the identified interactions. The risk rating scale appears on the Interaction Analysis screen and is defined in more detail on the following page.

You can filter the interactions that are displayed on the Interaction Analysis screen by using the available drop-down menus. You may filter by drugs or allergies entered and/or by various risk ratings. To remove the filters selected, simply click the “Reset Filters” button to return to the full, unfiltered interaction analysis results. In addition to the risk rating scale, any dependencies associated with a particular drug interaction will also be listed.
CLINICAL TOOLS

Dependencies & Risk Rating Scale

Dependencies (if applicable): Identifies various factors that may influence the occurrence or severity of the interaction. The factors may involve patient-specific variables, such as organ dysfunction (e.g., renal/hepatic), smoking status, genotype (e.g., VKORC1 haplotype), or phenotype (e.g., CYP2D6 poor metabolizer). Additional factors may relate to specific pharmaceutical dosage forms, routes of administration and/or specific dosing regimens. The presence of one or more factors may result in an increased risk and/or severity of interaction, or conversely, disqualify an interaction. Highlighting this information at the top of the monograph enables the clinician to more thoroughly evaluate the interaction relevance for a specific patient.

Risk Rating: Rapid indicator regarding how to respond to the interaction data. Each drug-drug interaction is assigned a risk rating of A, B, C, D, or X. The progression from A to X is accompanied by increased urgency for responding to the data. In general, A and B monographs are of academic, but not clinical concern. Monographs rated C, D, or X always require the user's attention. The text of the “Patient Management” section of the monographs will provide assistance regarding the types of actions that could be taken. Each drug-allergy interaction is assigned a risk rating of X. The definition of each risk rating is as follows:

<table>
<thead>
<tr>
<th>Risk Rating</th>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>No Known Interaction</td>
<td>Data have not demonstrated either pharmacodynamic or pharmacokinetic interactions between the specified agents.</td>
</tr>
<tr>
<td>B</td>
<td>No Action Needed</td>
<td>Data demonstrate that the specified agents may interact with each other, but there is little to no evidence of clinical concern resulting from their concomitant use.</td>
</tr>
<tr>
<td>C</td>
<td>Monitor Therapy</td>
<td>Data demonstrate that the specified agents may interact with each other in a clinically significant manner. The benefits of concomitant use of these two medications usually outweigh the risks. An appropriate monitoring plan should be implemented to identify potential negative effects. Dosage adjustments of one or both agents may be needed in a minority of patients.</td>
</tr>
<tr>
<td>D</td>
<td>Consider Therapy Modification</td>
<td>Data demonstrate that the two medications may interact with each other in a clinically significant manner. A patient-specific assessment must be conducted to determine whether the benefits of concomitant therapy outweigh the risks. Specific actions must be taken in order to realize the benefits and/or minimize the toxicity resulting from concomitant use of the agents. These actions may include aggressive monitoring, empiric dosage changes, choosing alternative agents.</td>
</tr>
<tr>
<td>X</td>
<td>Avoid Combination</td>
<td>Data demonstrate that the specified agents may interact with each other in a clinically significant manner. The risks associated with concomitant use of these agents usually outweigh the benefits. These agents are generally considered contraindicated.</td>
</tr>
</tbody>
</table>

To view more detail about a particular drug-drug interaction, click on a hyperlinked term to review information on:
- Patient management
- Interacting members, class exceptions
- Fully referenced discussion of the available literature
- References

To view more detail about a particular drug-allergy interaction, click on a hyperlinked term to review information on:
- Reactions reported as well as other relevant information for the clinician
- Fully referenced discussion of the available literature
- References

To return to the Interaction Analysis summary page, click on the “Interaction Analysis” tab at the top of the content panel. To return to the initial search screen to enter in additional item, click on the “Drugs” tab at the top of the content panel.

The “Clear” button will clear all items from the list and allow the user to start a new regimen.
Drug I.D.

The drug identification tool, powered by Medi-Span® data, is accessed via the blue tool bar at the top of the screen. Lexi-Drug I.D. is an application that allows identification of tablets, capsules, aerosols, lotions, creams, and a variety of other oral and topical dosage forms. To begin, enter known product characteristics, such as: imprint, dosage form, shape and color.

When entering an imprint code, enter each discrete marking from the tablet as a separate imprint. For example, to identify a tablet with “M” on one side and “100” on the other side, enter “M” into the “Imprint Side 1” box, then enter “100” into the “Imprint Side 2” box.

When entering the dosage form, shape, and color, select from the drop-down menu of choices in each of the respective boxes.

It is not necessary to populate all of the product characteristics into each of the boxes to be able to execute a search; however, the more information that is inputted, the greater the accuracy of the search results with drugs meeting that criteria.

Note: Multiple colors can be entered by returning to the drop-down menu and selecting additional colors.

Once the search criteria have been inputted, click the “Search” button to execute the search. The results will be displayed according to “Exact Match Results” (if any are found), followed by “Partial Match Results.”

On the Search Results screen, additional information can be viewed for each of the products displayed by clicking anywhere on that product’s description. The additional information retrieved includes a larger image (when available), NDC, manufacturer, a written description of the imprint code, Rx/OTC classification, and a bioequivalency rating. To return to the Search Results screen, click the “Search Results” tab.
Calculators

Lexi-CALC is an extensive medical calculations application covering infusions, adult and pediatric organ function assessment, and other conversion calculations. In addition to those calculators unique to Lexi-CALC, the calculations module also includes calculators from MedCalc 3000. MedCalc 3000 is a unique computerized medical reference and tool set that encompasses a wide array of pertinent medical formulae, clinical criteria sets, and decision tree analysis tools used every day by clinicians, medical educators, nurses, and healthcare students. MedCalc 3000 assists with medical error detection and reduction. When practicing, teaching, and learning medicine based on solid, literature-based data, practitioners may be easily overwhelmed by the breadth of information that they must master. MedCalc 3000 helps simplify this task by assembling easy-to-use, interactive tools to support evidence-based medicine.

Using the Calculators

The calculators tool is accessed via the blue tool bar at the top of the screen. Upon opening the tool, the user is presented with an alphabetical list of the available calculators in the left panel. Select the desired calculation by searching for keywords in the “Calculator Lookup” box or by scrolling through the list of calculations displayed. The “Browse Category” drop-down menu can be used to browse a specific subset of calculators. The available categories include: Adult, Conversions, Dental, Emergency Drugs, General, Infusions, Pediatric, Pharmacokinetics and Toxicology. Click on the desired calculator, and it will appear in the right content panel.

To perform a calculation, enter in the required variables. You can enter the value and then change the units, if necessary. Once all the inputs are entered, click the “Calculate” button to perform the calculation.

To help ensure patient safety, input data is checked against accepted values/ranges throughout the calculation process. When an input is restricted, click on the “Input” button to display the accepted range. If a value is entered that falls outside of the accepted range, a warning will be displayed after the “Calculate” button is clicked. This warning will be displayed in red text and will instruct the user to correct the value that is out of range before the calculation can be performed.

To start over, click the “Reset” button to clear all values and begin the calculation again.

To print a calculation, click the “Print” button in the upper right corner of the content panel and the printer options will be displayed.
I.V. Compatibility

The I.V. compatibility tool can be accessed via the blue tool bar at the top of the screen. This tool provides access to information on stability and compatibility through either the King Guide® or Trissel’s IV-Chek™.

King Guide®

Clicking on “I.V. Compatibility” and then “King Guide” in the blue tool bar opens the King Guide® to Parenteral Admixtures™ home page in its own window.

Begin by entering a drug name in the search box. After you enter a few letters, the drugs available in the database will be listed. Once you have found a medication of interest, click on the drug to view stability information for this medication. Click on the buttons for “Y-Site,” “Syringe,” or “Admixture” to see the results for the single drug.

References can also be displayed by clicking the blue reference links within the monograph text.

In addition to single drug compatibility, the King Guide also allows the user to enter up to 10 different medications to check for admixture, Y-site, or syringe compatibility. To begin, enter a drug name in the search box and click on the drug name. As each drug is added, the table results will build and be displayed per the Y-site, admixture or syringe compatibility results.

To view compatibility information for a specific pair, click the compatibility symbol to display detailed information.
I.V. Compatibility (continued)

The I.V. compatibility tool can be accessed via the blue tool bar at the top of the screen. This tool provides access to information on stability and compatibility through either the King Guide® or Trissel’s IV-Chek™.

Trissel’s IV-Chek™

Clicking on “I.V. Compatibility” and then “Trissel’s IV-Chek™” in the blue tool bar opens Trissel’s home page in its own window.

Depending on the information you wish to retrieve, there are 3 (three) available tabs to select: “Compatibility Chart,” “Check Compatibility,” and “Drug Properties.”

Compatibility Chart Tab: This allows you to enter a drug and solution, or multiple drugs and solutions, to create a compatibility chart. The compatibility information presented is based on one of four (4) ratings: C (indicates compatibility for this method), U (uncertain or variable for this method), I (indicates incompatibility for this method), or X (no data for any method). Begin by entering a drug name in the “Drug” search box. Once you have found a medication of interest, click on that medication within the possible list of medications provided or click the “Add” button if it has been auto-populated in the search box. Either method will move it into the “Drugs” box. Enter an I.V. solution using the same method described above in the “Solution” search box. This will move it into the “Solutions” box. You may add additional drugs and solutions using these same methods. To view the compatibility chart for the drugs and solutions entered, click the “Go” button. Clicking on any underlined text within the compatibility chart will provide you with additional information and references related to the drug or the compatibility information, depending on which one is selected.
Trissel's IV-Chek™ (continued)

Check Compatibility Tab: This allows you to retrieve compatibility information based on administration method(s) selected. Available administration methods include: Y-site, Admixture, Solution, Syringe, TPN, or All. Depending on the administration method selected, you may select up to two drugs and two vehicles, as well as a solution. To begin, type the medication name, vehicle, and solution enter the appropriate boxes and hit “Go.” This will display the compatibility information specific to the parameters entered. You may click on the hyperlinks to retrieve additional information on the compatibility study and the reference citation.

Drug Properties Tab: This allows you to select a drug or solution to display its properties. Properties may include: formulation or reconstitution information, stability and storage information, light effects, pH, and various other information. To begin, type the medication name in the “Drug” search box. You may click on the medication to place it in the search box, or if it has already been auto-populated into the search box, you may click “Show Properties” to retrieve the properties information. A solution is added to the “Solution” search box in the same manner, and you may click “Show Properties” to retrieve the information for the solution.

Once you have retrieved information from any of the tabs described, you may return back to the page where you first entered the drug(s) and/or solution(s) by clicking “Modify Criteria” or “New Criteria,” depending on whether you want to adjust your selections or clear the selections.
Patient Education

The Patient Education tool can be accessed via the blue tool bar at the top of the screen. This tool provides an opportunity to access and print patient-focused materials addressing medications, conditions, procedures, discharge instructions, natural products, and healthy living.

Searching for Leaflets

The right content panel includes several tabs across the top to allow the user to find desired leaflets using the search box or by browsing alphabetically or by topic. To search for a topic, enter a keyword into the search box and click the “Search” button. A list of matching topics will be displayed.

To preview a leaflet, click on “Leaflet Preview” and the leaflet will be displayed in a preview window. To print from this preview screen, click “Print.” To exit the preview mode, click “Close.” To print a leaflet directly from the search results screen, click the blue “Print” button.

To add a leaflet to the printable packet from the preview mode, click the “Add To Packet” button. To add the leaflet to the printable packet from the search results screen, click the “Add” button next to the desired leaflet. Continue this process until all desired leaflets are added to your printable packet. Once all the desired leaflets have been added to the packet, you may print them. You have the option to print in English or a variety of other languages.

To find leaflets by browsing the available documents via an alphabetical or topical index, click the “Browse” tab at the top of the content panel. From this screen, the user can choose to browse conditions, procedures, discharge instructions, healthy living topics, natural products, and medication leaflets (both adult and pediatric). To view available topics, click on the desired hyperlink under the type of leaflet you wish to view (“Alphabetically” or “By Body System”). When browsing by alphabetical index, select a letter of the alphabet to view the topics that begin with that letter. When browsing by body system, click on the desired body system to see a list of topics available. In either case, the “Preview” and “Add” options will function the same as outlined above.

Stored Packets

To access Lexicomp pre-defined patient education packets or any custom stored packets, click the “Stored Packets” tab at the top of the content window. A list of available packets will be displayed. To use a pre-defined packet, click the “Load” button to the left of the desired packet. This will add all of the patient education materials that are part of this packet. If desired, you can return to the “Search” or “Browse” tabs at the top of the application to add more documents to your packet before printing.

Lexicomp also allows the user to store a custom packet that is created by the user. To create a custom packet, use the “Search” or “Browse” functionality to add all of the desired leaflets to your packet. Once you have added all desired leaflets, click the “Stored Packets” tab and then choose the “Store Current Packet” button. This will allow you to enter a name for your packet. Please keep in mind that the naming convention used should not contain any patient identifiers to avoid any HIPAA conflicts. Once you have entered your name, click the “Store” button to save the packet contents. The next time you access the Patient Education tool, your packet will be available under the “Stored Packets” tab.
Preview Current Packet
To preview the current contents of your packet, click the “Preview Current Packet” tab at the top of the content window. This will display all of the documents that you have currently added to your packet as well the Patient Summary and Signature Page (if selected). From this preview screen, you can choose to add the patient’s name and any notes to be printed on the Patient Summary and Signature Page (Note: this information is not stored in the system and will be lost if you exit this tool or print the packet and start over).

Packet Contents
The left side of the screen displays the “Packet Contents” panel. This panel allows the user to select several options for the packet being created and will also display a list of the current leaflets that are included in the packet. The packet options that can be added include:

1. English copy of non-English leaflets – checking this box will automatically print an English copy in addition to any non-English language leaflets. This functionality is designed to assist an English-speaking clinician when counseling patients that do not speak English fluently.

2. Patient Summary – checking this box will create a cover sheet document that is customized with the patient’s name, a listing of the packet contents, and any related notes. This page can also be customized to include an institutional logo.

3. Signature Page – checking this box will create a document designed to be filed in a patient chart that summarizes the packet contents and allows both patient and clinician to document the patient education process.

In addition to the above options, the “Packet Contents” panel also allows the user to modify the font size for the entire packet using the “Font Size for Printout” drop-down menu. In addition to font size, the leaflets are available in multiple languages. Under each leaflet type subsection (Conditions, Procedures, etc.) is a drop-down menu with the available languages. To select a different language, click on the drop-down menu and highlight the desired language (only available languages will be displayed in the drop-down menu).
**Toxicology**

The toxicology tool is accessed via the blue tool bar at the top of the screen. The Lexi-Tox tool combines information on agents of toxicity, antidotes and decontaminants, household products, toxicology-specific calculators and drug identification in one point-of-care application.

**Searching in Lexi-Tox**

From the opening screen, enter any keyword (i.e., drug, household product) into the search box and click the “Search” button. To assist with searching, a possible keyword list will appear after you enter at least four (4) characters. To select a suggested term, simply click on the desired search term, and the system will automatically perform a search and display the results. Additionally, if you misspell a search term, you will be presented with a “Did you mean” list of possible search terms. To perform a new search using the correct term, simply click on the desired search term, and you will see a results list for the correctly spelled keyword.

Once you have entered your search term, clicking the “Search” button or hitting the enter key on the keyboard will initiate a global search across both the Household Products and Lexi-Tox databases. Any database that has information on the keyword searched will be displayed on the results screen. When searching for a particular brand name product, such as Lysol or Drano, results will likely display in the Household Products database, and when searching for a topic that has an actual treatment monograph (i.e., a drug or chemical), results will likely appear in the Lexi-Tox database.
Explore by General Category
The “Explore by General Category” box allows a user to browse either the Lexi-Tox database or the Household Products database using an alphabetical index. To browse the Lexi-Tox database, click on the “Toxicology” button to display an alphabetical listing. Choose a letter to display the topics that begin with that letter of the alphabet. A similar process can be used to browse the Household Products database.

Accessing Content in Lexi-Tox
To review information about a specific household product, click on the hyperlinked term displayed under the Household Products database. This database will provide information on the product selected, including manufacturer, ingredients and MSDS-derived safety information. From the Household Products database, you can click on any hyperlinked ingredient from the ingredient table to be taken to the Lexi-Tox monograph for that chemical.

The Lexi-Tox database is designed to provide information on the signs/symptoms, diagnosis and treatment of acute poisonings and emergent overdose situations. To review information within this database, use the same navigation techniques available throughout Lexicomp Online, including the left panel “Table of Contents” links or the alphabetical “Jump to Section” drop-down menu at the top of the content panel.

Throughout the Lexi-Tox database there are hyperlinks that allow the user to access additional details on antidotes or link to dosing calculators when available.

Clinical Tools in Lexi-Tox
Similar to the blue tool bar in the main Lexicomp Online application, Lexi-Tox also provides access to clinical tools that are relevant to the management and treatment of acute toxicology and emergent overdose situations. These clinical tools include Drug I.D., Calculators and I.V. Compatibility.
Facts & Comparisons®

The Facts & Comparisons® module can be accessed from the blue tool bar at the top of the screen and provides access to Comparative Data Tables and the Formulary Monograph Service, if included in your subscription.

**Comparative Data Tables**: The Comparative Tables tool from Drug Facts and Comparisons® allows you to quickly access over 3,000 comparative tables.

Using the “Monograph Summary” option, you may choose up to four (4) drugs you want to compare side-by-side. You may compare them by viewing “All Sections” or select only the sections you want to compare (such as Adverse Drug Reactions, Indications, and many more options).

Using the “Comparative Data Tables” option, you may choose up to four (4) drugs you want to compare by creating a dynamic data table. You may compare these drugs by selecting “All Sections” or by limiting the comparisons to only the topic sections you want to review (such as Drug-Drug Interactions, Contraindications, and many more options).

To begin to use either of the above-mentioned tools, start typing the drug name into the search box. Once you have found the medication of interest and it appears in the search box, click “Add” to move the drug into the “Search Criteria” box.

Continue this method to add at least two (2) drugs and up to four (4) drugs into the “Search Criteria” box. If you have added a drug and then wish to remove it from the list, click the red X button to the left of the drug name. You may also enter in drugs by NDC rather than by drug name. If you wish to use this method, change the choice above the search box from the default of Drugs” to “NDC.” You may adjust your choices to launch either the Monograph Summary or the Comparative Data Tables. This is also where you may leave the default to compare “All Sections” or uncheck the “All Sections” choice and begin checking which sections you wish to view. Once the selections are entered, click “Go” to view the information.
Formulary Monograph Service: The Formulary Monograph Service delivers detailed information about recently released and investigational drugs, including pharmacy and therapeutic reviews, editorial comments, drug utilization evaluations, and more.

Begin by clicking on the link for the Formulary Monograph Service, found under the Facts & Comparisons button. You will be taken to the Editorial Comments page, which outlines the most current reviews that have been completed.

Click on the monograph link to see the full review for that medication. These reviews include information necessary to make a formulary decision on a drug, including pharmacology, comparative efficacy, product availability, adverse reactions, and more.

Lists of previous monograph reviews and Editorial Comments pages can be found by clicking on the respective links near the top of the page.
CLINICAL TOOLS

Drug Plans

The drug plans tool is accessed via the blue tool bar at the top of the screen under the “More Clinical Tools” heading. The Lexi-Drug Plans tool provides the formulary status of medications, and other plan-specific information, for over 5,500 prescription drug plans. This application may be customized to limit the plans searched to only those applicable to a given facility or healthcare system. This module is an optional resource within Lexicomp Online.

To begin, select a plan from the “Select Plan” window. If desired, you can filter the plans that are shown in this window by selecting a state from the drop-down box located directly above the “Select Plan” window. Once a plan has been selected, a search box will display in the right content panel along with several additional tabs across the top. To find a drug, enter a drug name into the search box (brand or generic), or click on the “Browse” tab at the top of the monograph to view an alphabetical listing of choices by generic name, brand name or therapeutic category.

When using the search method, enter the drug name (brand or generic) into the search box and click the “Search” button. The results will then display below the search box. To view the drug monograph containing information on the formulary status of the drug, click on the hyperlinked term.
To browse and select the drug from one of the available alphabetical indexes, first click the “Browse” tab at the top of the content panel. This tab will present the user with three (3) index options: “Generic Drug Name,” “Brand Drug Name,” and “Therapeutic Category.” Select the desired index and an alphabetical listing will be presented. Click on a desired letter and further click on the drug/therapeutic category of choice to display the formulary status of the drug.

Once in the formulary monograph, the Strength, Status, Cost and Notes will be displayed for any available dosage forms. Also, a therapeutic category listing will be displayed as a hyperlink. These links can be used to display other drugs in the given category.

For more information, visit us online at www.lexi.com or call 866-397-3433.
Web Search

The Web Search tool can be accessed via the blue tool bar at the top of the screen under “More Clinical Tools.” Web Search is a tool that allows the Lexicomp Online user to expand a search to other medically based websites.

To begin, enter a desired search term in the Lexicomp Online search box (search terms can be any medically related keyword). Once the desired term is entered into the search box, click on the “Web Search” button from the blue tool bar under “More Clinical Tools.” Results are displayed in a separate window, with access to content from various resources, plus additional links to abstracts and primary literature.

After the results are displayed, click on any of the links to access more detail. Access to full text articles from the results will depend on your institution’s subscriptions to those sites.
Other Clinical Links

Other clinical links can be accessed from the blue tool bar at the top of the screen. To begin, click on “More Clinical Tools” and then “Other Clinical Links.”

This will open a page of useful weblinks that allows you to access a variety of useful information for clinicians. When these hyperlinks are clicked, the page will be opened in a new browser tab to allow you to easily return to Lexicomp Online by clicking back on that tab and resume work from your original location.

Available hyperlinks include:

- **New Drugs** – This opens a Lexicomp page with a listing of recent new drug approvals.
- **ASHP Drug Shortages** – This opens the American Society of Health-System Pharmacists® (ASHP) webpage to search current drug shortages.
- **ISMP** – This opens to the home page for the Institute for Safe Medication Practices.
- **National Library of Medicine** – This opens the U.S. National Library of Medicine’s webpage which allows you access to a multitude of databases including, but not limited to, PubMed/MEDLINE, ClinicalTrials.gov, and TOXNET.
- **Orange Book** – This opens the U.S. Food and Drug Administration (FDA) Orange Book which provides information on approved drug products with therapeutic Equivalence Evaluations.
- **FDA Recall** – This opens the U.S. Food and Drug Administration (FDA) webpage with Recalls, Market Withdrawals, & Safety Alerts.
- **Dangerous Abbreviations** – This opens a list from the National Coordinating Council for Medication Error Reporting and Prevention of dangerous abbreviations that should not be used in clinical practice.
- **Canadian Drug Shortages** – This opens the Canadian Drug Shortage Database which provides information on Canadian products affected by drug shortages.
- **Ontario Drug Benefit** – This opens to the home page for the Ontario Drug Benefit Program.
- **SwitchRx** - This opens to a Canadian tool for registered users that helps guide healthcare professionals when switching antipsychotic medications in their patients.
- **ISMP Canada** – This opens to the home page for the Institute for Safe Medication Practices in Canada.
- **ISMP Canada Safety Bulletins** – This opens to the ISMP Canada Safety Bulletins index.
- **Quebec’s Government Website** - This opens the home page for the province of Quebec's medication insurance information.
- **APES Quebec** - This opens to the Quebec pharmacists’ association website.