Pharmaceutical Resources:
Databases, Websites, and Wireless Resources

Finding information about drugs is easy. A Google search for isotretinoin will produce about 195,000 results. Finding good drug information can be more difficult. This handout was created to give you a few good drug resources to rely on when looking for drug information.

General precautions:

- Be aware of country differences (e.g., acetaminophen versus paracetamol, Losec versus Prilosec).
- Keep in mind Brand versus Generic versus Chemical names.
- Always check the currency of drug material.
- Be aware of the producer of the material.

**EMBASE**

**Go to:** The Library’s Homepage (http://library.med.nyu.edu) → E-Resources → Biomedical Databases. Select Embase.

**General Searching**

Search EMBASE for drug research, pharmacology, pharmacy, pharmacoconomics, pharmaceutics and toxicology.

EMBASE contains a much larger body of drug information than Medline and the choices for sub-headings are much more varied. There will be overlap between MEDLINE and EMBASE but enough unique literature to make it worthwhile to search.

It is especially important in EMBASE to keep in mind the differences in naming (paracetamol versus acetaminophen).

Use generic (or brand and generic) names when searching for drug information. Brand and generic names can be found by consulting a drug monograph and in the Scope Note for the corresponding database subject heading.

**Ex.** (fluoxetine OR prozac OR prosac OR fluctin OR fluctine OR flunirin OR fluoxifar OR lovan OR prozamin OR sarafem)

**Note:** Using all the brand names in the Scope note can be overwhelming since EMBASE has more European and Asian content. You may need to be selective. (e.g. Propranolol)

**Other Search Techniques**

**Subheadings (use if appropriate)**

**NOTE:** Consult the online help for definitions of subheadings ☞

- Drug Administration (/ad)
- Drug Dose (/do)
- Drug Combination (/cb)
- Drug Comparison (/cm)
- Drug Interaction (/it)
- Pharmacokinetics (/pk)
- Pharmacology (/pd)
- Drug Toxicity (/to)
- Drug Therapy (/dt)
- Adverse Drug Reaction (/ae)
- Clinical Trial (/ct)*

**Ex.** (fluoxetine/pk OR fluoxetine/pd)

* Use Clinical Trial as a subheading in EMBASE (unlike Medline where you should use the Limits to choose Clinical Trials). Other types of drug/therapeutic studies are available as subject headings, e.g., randomized controlled trial, multicenter study, etc.
Limits (use if appropriate)

<table>
<thead>
<tr>
<th>Publication Type</th>
<th>Routes of Drug Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very limited</td>
<td>Very large choice</td>
</tr>
<tr>
<td>Article</td>
<td>(47 choices)</td>
</tr>
<tr>
<td>Conference Paper</td>
<td></td>
</tr>
<tr>
<td>Proceeding</td>
<td></td>
</tr>
</tbody>
</table>

Use the Limits tool to limit a search by Routes of Drug Administration (this is an exhaustive list). These limits are excellent for searching unusual routes of administration, such as periocular or intracerebroventricular.

For more specific information on using Embase (Ovid), see the Library’s handout at http://library.med.nyu.edu/library/instruction/handouts/index.html.

MEDLINE (via Ovid or PubMed)

Go to: The Library’s Homepage (http://library.med.nyu.edu).
Under Handy Resources on the left side of the page, select Medline (Ovid) or PubMed.

General Searching
Search MEDLINE for drug research, pharmacology, pharmacy, pharmaco economics, pharmaceutics and toxicology.

Use generic (or brand and generic) names when searching for drug information. Brand and generic names can be found by consulting a drug monograph and in the Scope Note for the corresponding database subject heading.

Ex. (fluoxetine OR prozac OR prosac OR fluctin OR fluctine OR fluoxifar OR lovan OR prozamin OR sarafem)

Other Search Techniques

MeSH Subheadings (use if appropriate)

NOTE: Consult the online help for definitions of subheadings.

- Administration & Dosage (/ad)
- Adverse Effects (/ae)
- Contraindications (/ct)
- Pharmacokinetics (/pk)
- Pharmacology (/pd)
- Poisoning (/po)
- Therapeutic Use (/tu)
- Toxicity (/to)

Ex. (fluoxetine/pk OR fluoxetine/pd)

Limits (use if appropriate)

<table>
<thead>
<tr>
<th>Publication Type</th>
<th>Study Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Trial</td>
<td>Humans</td>
</tr>
<tr>
<td>Clinical, Phase I – IV</td>
<td>Animals</td>
</tr>
<tr>
<td>Controlled Clinical Trial</td>
<td>Both</td>
</tr>
<tr>
<td>Multicenter Study</td>
<td></td>
</tr>
<tr>
<td>Randomized Controlled Trial</td>
<td></td>
</tr>
</tbody>
</table>

For more specific information on using Medline (Ovid) or PubMed, see the Library’s handout at http://library.med.nyu.edu/library/instruction/handouts/index.html.
Specialized Databases

Chem ID Plus

Go to: The Library’s Homepage (http://library.med.nyu.edu) → E-Resources → Biomedical Databases. Select ChemID Plus.

Description:
ChemIDPlus is a free database produced by the Specialized Information Services department of the National Library of Medicine (NLM). It provides access to structure and nomenclature information for the identification of chemical substances cited in NLM databases. The database contains over 379,000 chemical records, of which over 257,000 include chemical structures. ChemIDplus Lite is available for Name and RN searching without the need for plugins or applets.

Notes/Tips:
Use ChemIDPlus Lite for simple searching of substances by name or registry number without need of plugins or special display software required in the full or Advanced ChemIDPlus. For full searching of structures, use the Advanced mode with these three types of structure queries: Substructure Search, Similarity Search, and Exact Structure Search.

Search this database via one of these 6 access points:
1. Substance Identification -- for textual chemical identifiers, such as Name/Synonym, CAS RN, Molecular Formula, Classification Code, and Locator
2. Toxicity -- for numeric toxicity data such as LD50
3. Chemical Properties -- for numeric property data such as Melting Point
4. Locator Codes -- to qualify a search by one or more databases which contain pertinent data
5. Structure -- to search by chemical structure
6. Molecular Weight -- to range on the MW calculated from the structure

For search assistance when using ChemIDPlus Advanced, click on the information button located on the top right of each search dialog box.

Clinical Pharmacology Online

Go to: The Library’s Homepage (http://library.med.nyu.edu) → E-Resources → Biomedical Databases. Select Clinical Pharmacology Online.

Description:
Clinical Pharmacology is a drug information application that provides peer reviewed, clinically-relevant information on drugs available in the United States, including off-label uses and dosages, herbal supplements, nutritional products, and new and investigational drugs.

Notes/Tips:
The Clinical Pharmacology Online screen is divided into frames. The tabs at the top are the main navigational tool for accessing the various features. You can move from one section to another by clicking on the appropriate tab, which will then display a menu of subsections below the tab in the blue area. Clicking on a subsection will display a help screen in the left frame and a search area in the right frame. Browser navigation buttons (e.g., Back, Forward, Print, Refresh, etc) can be used throughout each of the sections and subsections in addition to navigation buttons located in the left or right frames.

The Drug Interactions tool is exceptionally useful. You can quickly create a custom report. In addition to drug-drug interactions, drug-food, drug-tobacco, drug-grapefruit juice, drug-alcohol, drug-enteral feeding and drug-caffeine interactions can be included. The report also includes a Therapeutic Duplication section (Caution! this has limited usefulness. If we create a report for erythromycin & minocycline, no therapeutic duplication is found.)

Choose the Patient Education tab at the top to print up drug information handouts for patients. The Drug Info Handouts are written at a 6th – 8th grade reading level. A Consumer Drug Interactions report can be created for consumer use.
The **Tutorial/Help** tab at the top will link to a very in-depth and worthwhile tutorial.

For more specific information on using Clinical Pharmacology Online, see the Library’s handout at [http://library.med.nyu.edu/library/instruction/handouts/index.html](http://library.med.nyu.edu/library/instruction/handouts/index.html).

**Micromedex**

**Go to:** The Library’s Homepage ([http://library.med.nyu.edu](http://library.med.nyu.edu)).
Under **Handy Resources** on the left side of the page, select Micromedex.
*(note: off campus access through Onsite Health only)*

**Description:**
Micromedex is a collection of databases of peer-reviewed disease, drug, acute care, and toxicology information. The *‘Main keyword search’* feature in the center of the homepage searches across all databases simultaneously. Search for information within a specific **category** by clicking on that category’s tab. Narrow the category search with the choices from each category’s dropdown menu. Use the *‘Calculators’* link at the top right of the homepage to access calculators, dosing tools, nomograms, and references.

**Notes/Tips:**
To begin searching from the Main page enter a keyword(s) in the *‘Main keyword search’* box and submit the search. Do not use Boolean search operators (and, or). For example, type in ‘acetaminophen fever’.

To search individual databases or a selection of databases, click on the *‘Select Databases’* button at the bottom right corner of the Main keyword search box.

Keyword matches found in more than one database are displayed on an *‘Initial Results’* page. Matching results are organized into general information categories (Summary Documents, Drug Information, Disease Information, Labs, Toxicology and Reproductive Risk) with the associated database names listed below and hypertext links to the right of each. When one database has several matching documents, clicking on the *‘results’* link next to it on the Initial Results page brings up the *‘Narrow Results’* page. This page is organized into groups according to where the search term was found in the document.

To search by **category**, choose one of the category tabs running across the top of the homepage (Drugs, Toxicology, Disease, Labs, IV Compatibility, Interactions, and Patient Ed) then make a selection from the dropdown menu. Narrow the search to a specific database, search within a specific therapeutic class of drug, specific drug or toxicology lists, do a side-by-side drug comparison, or do a topic search.

**IV Compatibility** category helps to make accurate intravenous drug compatibility decisions.

Use the **Interactions** link for interactions between drugs, alternative medicines, and food. Unlike Clinical Pharmacology, Micromedex does not list therapeutic duplication.

Micromedex has good patient education handouts (click on the Patient Ed category tab and select CareNotes). The Micromedex “med sheets” have been designated the default choice for unit nurses at NYUMC.

The ‘Calculators’ link is available on the top right hand side of any page in Micromedex. Access dosing tools, various calculators, laboratory values, nutrition references and other tools. Includes pediatric dosing and references.

To print: Clicking on the *‘Print ready’* button will print the entire document with clean margins. If a *‘Print Setup’* link is displayed, clicking on it will give the option to print only selected sections of a document (e.g. print only Pharmacokinetics and Contraindications of a drug monograph). This feature is not available for all documents.

**For the PDA:**
MobileMicromedex does include drug information, alternative medicine information, disease information or toxicology information.

MobileMicromedex supports Palm and Pocket PC platforms.
MDConsult

Go to: The Library’s Homepage (http://library.med.nyu.edu). Under Handy Resources on the left side of the page, select MD Consult.

Description:
A collection of clinical resources that can be searched individually. The drug database contains prescribing information for over 30,000 individual drugs and drug combinations. The drug information is primarily supplied by Gold Standard.

Notes/Tips:
Use the tabs along the top to navigate MDConsult. Click on Drugs for a variety of ways to access drug information (e.g., indications, ingredients). Also a good resource for safety warnings, news, new approvals and new indications.

Use the ‘Drug Look-up’ feature to search for a drug or browse using the ‘Contents’ list on the left hand side. Drugs within a topic are listed alphabetically. Browse by letter or use the ‘Comprehensive Index’ to browse all drugs listed within a topic.

Click on the Patient Handouts tab to get to consumer medication handouts. Medications can be searched by generic name only. Spanish language handouts are available for about half of the material.

Patient education materials can be customized. For customization, you must log in. Click for Personal Log in link will give you the option to login or set up a personal account.

For the PDA:
Login to your account to download Pocket Consult to your PDA.

Pocket Consult provides access to Mosby Drug Consult and Interactions with over 900 drug monographs including brand name indexing.

Pocket Consult supports Palm and Pocket PC platforms.

Electronic Textbooks

Go To: The Library’s Homepage (http://library.med.nyu.edu) → E-Resources → Biomedical E-Books by Title Select Title of Textbook.

- AHFS Drug Information – via STAT!Ref
- Drug Facts and Comparisons Pocket Guide – via Books@Ovid
- Goodman & Gilman’s – via Access Medicine
- Lippincott’s Nursing Drug Guide – via Books@Ovid
- Mosby’s DrugConsult – via STAT!Ref and MD Consult
- USP DI: Drug Information for the Health Care Provider – via STAT!Ref
- USP DI: Drug Information Advice for the Patient – via STAT!Ref

The PDR and Martindale available to search via Micromedex. To access, click on “Search by Database” and check the box to search.

Free Websites

Eckerd.com

Go to: http://www2.eckerd.com
Description: This site is maintained by Eckerd Pharmacy and is an excellent resource of consumer health information. The drug information is clear, concise and written for the consumer.

Notes/Tips: Search for a drug using the ‘Drug Advisor’ link. The patient information and the Drug Interaction Tool is provided by Clinical Pharmacology.

Handouts are also available in Spanish.

SafeMedication.com

Go to: http://www.safemedication.com/

Description: This site is sponsored by the American Society of Health-System Pharmacists and is designed primarily for consumers. In addition to excellent drug information, this site has links to information about vaccines, alternative medications and antibiotic use.

Notes/Tips: Search for a drug using the ‘Type Your Medication Name Here’ search box. The patient information is provided by MedMaster.

Has great links to patient information on how to administer various dosage forms under **How to Administer**. These are PDF documents and can be printed for patient use.

Clinicaltrials.gov

Go to: http://clinicaltrials.gov/

Description: ClinicalTrials.gov provides regularly updated information about federally and privately supported clinical research in human volunteers. ClinicalTrials.gov gives you information about a trial's purpose, who may participate, locations, and phone numbers for more details.

Notes/Tips: Use chemical and/or generic name to search. Avoid using brand names if possible.

In the **Search Clinical Trials** box, enter words or phrases separated by commas (eg. Colon cancer, cetuximab, New York)

**Focused Search** will allow you to narrow your search by location, agegroup, phase, etc. and will give better results.

Understanding Clinical Trials section has excellent consumer information on participating in clinical trials, including an explanation of the different phases and a glossary.

Once the search results are listed, there is an option at the top of the page to **include trials that are no longer recruiting**. Checking this box is the only way to incorporate this information into your search results.

NeedyMeds

Go to: http://www.needymeds.com

Description: NeedyMeds is a non-profit corporation that provides information about patient assistance programs which provide no cost prescription medications to eligible participants. The organization describes themselves as a sort of Yellow Pages for the programs many drug companies have that give away free prescription medications to people who have no insurance and qualify for their programs.
Notes/Tips:
Using the browsable lists on the left-hand side, health professionals and patients very quickly can identify programs for their particular medication. This is a surprisingly easy to use feature. Just choose your drug (brand or generic) from the list and all the information about relevant programs will pop up.

Less helpful are the browsable lists of programs and companies that provide programs for patients.

**Partnership for Prescription Assistance**

**Go to:** [https://www.pparx.org/](https://www.pparx.org/)

**Description:**
The Partnership for Prescription Assistance is a collaboration among pharmaceutical companies, doctors, other health care providers, patient advocacy organizations and community groups to help qualifying patients who lack prescription coverage get the medicines they need through the public or private program that’s right for them.

**Notes/Tips:**
Choose your appropriate starting point from the main page (patient, caregiver or prescriber) and wizards will guide the user through the searching process.

Mirror image of website available in Spanish by clicking on **Espanol** link at the top of the page.

**National Institute on Drug Abuse**

**Go to:** [http://www.nida.nih.gov](http://www.nida.nih.gov)

**Description:**
This is an excellent government site devoted to drug abuse and addiction. The mission of the National Institute on Drug Abuse (NIDA) is “to lead the nation in bringing the power of science to bear on drug abuse and addiction”.

**Notes/Tips:**
This site is appropriate for consumers and health professionals.

NIDA is especially useful for keeping current on emerging and club drugs.

Use the link or hotline number for treatment referral information.

Researchers and Health Professionals link leads to useful clinical information such as charts on ‘Commonly Abused Drugs’ and ‘Potentially Abused Prescription Drugs’. Also a very good section on ‘How to Tell if Someone is Abusing Drugs’.

This site is searchable by using the search box at the top of the main page.

**Additional Resources**

Additional online drug-related databases, books, journals, and websites are available through the Library.

**Go to:** The Library’s Homepage ([http://library.med.nyu.edu](http://library.med.nyu.edu)) → E-Resources → All E-Resources by Subject

Select a subject from the available list including: Antibiotics, Drug Therapy, Pharmacology, or Pharmacy. You can then select the type of resource: Journals | Databases | Websites | E-Books.

For general assistance with database searching or locating resources stop by the Library Information Desk, or contact the Library at (212) 263-8483 or library@library.med.nyu.edu.