



Finding independent information on new drugs

Rosalind Tindale, Drug information specialist, Sydney

Summary

When a new drug becomes available, prescribers may wish to have independent information to formulate their own opinion about its place in therapy. Information may be in the form of drug monographs or summaries, peer-reviewed articles, clinical guidelines, systematic reviews and clinical evaluations from drug agencies. Knowing where to find information on potential adverse drug reactions is important.

Key words: drug information, drug therapy, evidence-based medicine.

(*Aust Prescr* 2011;34:85–8)

Introduction

Prescribers may feel besieged by information when a new drug is marketed or listed on the Pharmaceutical Benefits Scheme. This information may take the form of glossy brochures, for instance, reports of conference proceedings or presentations at meetings. These publications have often been prepared by the manufacturer, or at least with funding provided by the manufacturer. Prescribers and pharmacists may want to find independent information on a new product. Some sources of information are freely available online, while others may only be available by subscription or through state health department sites or libraries.

Drug-specific information

Following the registration of a new drug in Australia, the Therapeutic Goods Administration (TGA) publishes the Australian Public Assessment Report (AusPAR) free online (www.tga.gov.au/industry/pm-auspar.htm). This includes information about the clinical evaluation by the TGA, as well as the product information. Other national drug agencies provide similar assessments of new drugs online (Table 1). These are often available before the AusPAR, depending on when the drug is approved overseas, although formulations may differ.

A report of decisions made by the Australian Pharmaceutical Benefits Advisory Committee (PBAC) also becomes available online following its meetings (www.health.gov.au/internet/main/publishing.nsf/Content/pbac-outcomes-and-public-summary-documents).

Once a product is marketed, the approved prescribing information becomes incorporated into practice software systems and is generally available through organisations such as MIMS and Health Communication Network.

Drug summary reports appear in independent publications such as NPS (National Prescribing Service) RADAR and *Australian Prescriber* (Table 2). Reviews of the product may also be found in other peer-reviewed journals (Table 3). There are publications designed for hospital formulary decision makers (Table 4).

Extensive monographs on new generic products, prepared by independent organisations, become available from sources such as AHFS Drug Information and DRUGDEX (Micromedex) (Table 5). Most of the resources listed in Tables 2–5 are published both in print and online. However, DRUGDEX is only available in electronic form.

Place in therapy

Prescribers may wish to confirm a drug's place in therapy by finding current disease management guidelines or evidence-based reviews.

Australian information

The Therapeutic Guidelines series and the Australian Medicines Handbook are major sources of information (Table 3). However, if any of these particular guidelines are a little dated or do not provide specific information about the drug of interest, it may be necessary to search further. *Australian Prescriber* and the various other NPS publications such as RADAR also provide guidance on the place of new drugs in therapy and are free (Table 2).

Table 1
National drug agencies

Organisation	Website
Therapeutic Goods Administration	www.tga.gov.au
US Food and Drug Administration	www.fda.gov
UK Medicines and Healthcare Products Regulatory Agency	www.mhra.gov.uk
Canadian Agency for Drugs and Technologies in Health	www.cadth.ca
European Medicines Agency	www.ema.europa.eu

Table 2

Freely available information on new drugs

Source	Access	Comments
NPS publications including: - <i>Australian Prescriber</i>	www.nps.org.au www.australianprescriber.com	Provides independent drug information Peer-reviewed journal publishing concise reviews on drugs and therapeutics. Reviews are usually published when new drugs first become available for prescribing. Six issues a year in print and online.
-NPS RADAR	www.nps.org.au/health_professionals/publications/nps_radar	Provides a review of evidence on new drugs when they are listed on the Pharmaceutical Benefits Scheme. Reviews give key practice points and place in therapy. Three issues a year with extra reviews on the web. Available in print, online and with certain prescribing software.
Articles from open-access publishers	e.g. www.dovepress.com, www.biomedcentral.com	Provide online access to articles from peer-reviewed biomedical and scientific journals

International consensus guidelines and evidence-based reviews

Open access websites

Valuable websites which provide a wide search function for international guidelines and evidence-based reviews include:

- Trip Database www.tripdatabase.com
- Health Information Resources, UK NHS Evidence www.library.nhs.uk
- PubMed www.ncbi.nlm.nih.gov/pubmed

PubMed contains Medline and provides journal citations, abstracts and the full text of selected articles. Searches can be limited to publication type, for example 'practice guideline', 'consensus development conference', 'evidence-based practice', 'guideline', 'meta-analysis' or 'review'. The PubMed Clinical Queries search page (www.ncbi.nlm.nih.gov/pubmed/clinical) is particularly useful for finding an array of clinical evidence and consensus documents.

Searches of these sites can identify systematic reviews from such organisations as the Cochrane Library and guidelines from international groups including the National Health and Medical Research Council in Australia, the New Zealand Guidelines Group, the National Institute for Health and Clinical Excellence in the UK and the Scottish Intercollegiate Guidelines Network. Documents available through the US National Guideline Clearinghouse can also be accessed. Other useful free-access sites include eMedicine (www.emedicine.medscape.com) and Intute: Medicine (www.intute.ac.uk/medicine).

Websites accessed by subscription only

Various evidence-based medicine resources may also be

available through state health departments or university and hospital libraries:

- Evidence-Based Medicine Reviews can be accessed through Ovid (for example via Medline, limiting the search to Evidence-Based Medicine Reviews). This resource covers a number of major evidence-based medicine databases including the Cochrane Library.
- UpToDate www.uptodate.com is an excellent peer-reviewed clinical information resource. With the help of editors, topics are written by clinicians for clinicians. The information is current and includes particular categories for primary care.
- DynaMed www.ebscohost.com/dynamed is another excellent clinical reference tool for healthcare professionals designed to be used at the point of care.

Other well-regarded resources for evidence include:

- Essential Evidence Plus www.essentialevidenceplus.com
- Clinical Evidence www.clinicalevidence.bmj.com
- American College of Physicians PIER <http://pier.acponline.org>
- FirstConsult www.firstconsult.com

Updating information

Information can be updated by searching databases such as Medline (for instance via PubMed) and Embase. At the beginning of the PubMed search results, articles may appear ahead of publication. These may be similar to those found from searching Ovid's Premedline. Ovid's user-friendly searching of Medline, Premedline (Medline-in-Process) and Embase is available via several state health departments' clinical information sites.

Table 3

Subscription-only information on new drugs *

Source	Access	Comments
Australian Medicines Handbook (AMH)	Available in electronic (www.amh.net.au) and print formats	Concise drug summaries with practice points, counselling information, comparative drug information tables and prescribing guides. Updated twice a year in electronic version and annually in print. AMH is jointly owned by the Royal Australian College of General Practitioners, the Pharmaceutical Society of Australia and the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists.
Therapeutic Guidelines	Available in electronic (www.tg.org.au) and print formats	Provides independent evidence-based guidelines for prescribing by specialty. Guidelines for each specialty are updated every few years.
AusDI Advanced	Distributed by Health Communication Network	Standardised summary monographs together with the approved prescribing information
Martindale: The Complete Drug Reference	Available in hard copy or electronically. Sources include Micromedex and Medicines Complete.	Produced by the publishing arm of the Royal Pharmaceutical Society of Great Britain
Drug bulletins: [†]		
-Drug and Therapeutics Bulletin	www.dtb.bmj.com	Published by the BMJ group in the UK
-The Medical Letter on Drugs and Therapeutics	http://medicalletter.org	Based in the USA
-Prescrire International	http://english.prescrire.org/en	Based in France
Reviews in journals such as:		Provide extensive drug reviews. Check whether authors have received financial support from the pharmaceutical manufacturers. Journal supplements are often supported by the manufacturer of a new therapy.
-The Annals of Pharmacotherapy	www.theannals.com	
-Pharmacotherapy (some articles are free)	http://pharmacotherapyjournal.org	
-Drugs, Drugs and Aging, BioDrugs	http://adisonline.com	
Additional resources:		Some of these products are designed to support point-of-care decisions
-Lexicomp	www.lexi.com	
-Clinical Pharmacology	www.clinicalpharmacology.com	
-Facts & Comparisons	www.factsandcomparisons.com	

* Access may also be through state health department sites, libraries and certain practice software

[†] Other drug bulletins are listed on the International Society of Drug Bulletins website www.isdbweb.org

In my experience, Embase generally includes reference to articles more rapidly than Medline. It also has more drug-related search terms than Medline.

Medline and Embase require some initial understanding to search them appropriately. A tutorial with a librarian or online is advisable before embarking on serious searching. Otherwise

searches may be requested via an institutional library or from a local drug information centre.

Information on adverse drug reactions

Clinicians may want to find more information about potential adverse drug reactions. If a particular adverse event is not listed

Table 4

Reviews to assist formulary decision making

Source	Access
In journals such as:	
-P & T Journal	http://ptjournal.com
-PharmacoEconomics	http://adisonline.com
-Formulary	http://formularyjournal.modernmedicine.com
Documents prepared by state therapeutics advisory groups	NSW Therapeutic Advisory Group South Australian Therapeutics Advisory Group Victorian Medicines Advisory Committee Western Australian Therapeutics Advisory Group
The US online resource P & T Community	
Other hospital or organisational bulletins	

in the approved product information, an online search for alerts or warnings, especially from national drug agencies including the TGA, may be useful (see Table 1).

Medicines Safety Update

In Australia, the TGA's Office of Product Review publishes Medicines Safety Update every two months in *Australian Prescriber* and online (at www.tga.gov.au/hp/msu.htm). Summaries relating to adverse event reports are also available on request (by emailing ADR.Reports@tga.gov.au or phoning 1800 044 114).

Table 5

Where to find extensive drug monographs *

Database	Comments
AHFS Drug Information	Highly regarded reference for detailed drug information by generic name. Published by the American Society of Health-System Pharmacists. Easy to navigate. Drugs new to the Australian market may already be included. Includes 'off-label' uses
DRUGDEX (Micromedex)	A well-regarded source of drug information. The monographs are extremely easy to navigate and to find specific sections of information. Includes 'off-label' uses

* Available through many public health departments and hospital and university libraries, otherwise through subscription

Reactions Weekly

The journal *Reactions Weekly* is useful for finding early reports of adverse reactions. This publication scans the literature and a range of other resources broadly. It also includes news from the World Health Organization Centre for International Drug Monitoring (Uppsala). Titles for articles can be retrieved free online but payment is required for the full text.

Other sources

Local drug information centres may help with a search for adverse event case reports, including reports in the published literature. These centres often have full access to *Reactions Weekly*. Drug companies may also be consulted. They have mandatory requirements to forward adverse event reports to the appropriate authorities.

Telephone services

Local drug information centre phone numbers can be found on the NPS website (www.nps.org.au/health_professionals/guide_to_medicines_information_resources).

Conclusion

To find useful information about new drugs in a time-efficient manner, it is important to know where valuable information is most likely to be. Understanding how to search online and to make use of resources available through state health department clinical information sites and libraries is fundamental to quick, appropriate drug information retrieval.

Conflict of interest: none declared