



# Handbook and Website on HIV Drug Therapy

Alice L Tseng<sup>1,2</sup>, Michelle M Foisy<sup>3,4</sup>

Toronto General Hospital  
University Health Network

Immunodeficiency Clinic-Toronto General Hospital,<sup>1</sup> Leslie Dan Faculty of Pharmacy, University of Toronto,<sup>2</sup> Northern Alberta Program-Alberta Health Services,<sup>3</sup> Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta<sup>4</sup>



## BACKGROUND

- ❖ Practitioners need to consider factors such as efficacy, toxicity, drug interactions, medication adherence, and cost when initiating or modifying ARV regimens.
- ❖ As principles of HIV therapy evolve, and as new agents continue to emerge, antiretroviral (ARV) combination regimens become increasingly complex.
- ❖ A handbook and website were created to address this need.

## OBJECTIVES

- 1) To create a centralized repository for continually updated HIV drug information for health care professionals with a main focus on drug interactions.
- 2) To promote safe and rational prescribing of ARVs.

## METHODS

- ❖ Two pharmacists with expertise in HIV disease have collaborated on this project since 1992.
- ❖ Information was retrieved via a MEDLINE search for English language human studies and case reports for the years 1987-present.
- ❖ MeSH headings included:
  - Human immunodeficiency virus
  - Acquired immunodeficiency syndrome
  - Opportunistic infections
  - Individual ARV drug names
  - Drug interactions
- ❖ Additional information from:
  - Abstracts of international and national HIV conferences
  - Review articles
  - Textbooks
  - Drug manufacturers
- ❖ Information was initially compiled in a pocket manual which was updated biannually. In 2000, an accompanying website was created to allow more rapid publication of up-to-date information to a greater audience.
- ❖ External funding from industry obtained to publish the manual (unrestricted educational grants)

## RESULTS

- ❖ This project, which has been evolving for almost 20 years, has been highly successful.
- MANUAL**
- ❖ The ninth edition of the manual was recently published and has expanded from a 14 page-pocket book in 1992 to a full-size 550 page desktop reference and CD-ROM in 2010. Up to 5000 copies per edition were printed and distributed nationally and internationally.
  - ❖ Information contained in the manual focuses on:
    - HIV drug therapies
    - Pharmacologic properties
    - Drug interactions
    - Drug costs
    - Provincial formulary status
- WEBSITE (www.hivclinic.ca)**
- ❖ In 2000, an accompanying website with quarterly updates was developed (Figures 1-3)
  - ❖ Approximately 100-150 hours are required annually for updates.
  - ❖ The website also includes:
    - Bilingual patient drug fact sheets
    - Hosts websites for: (Figures 4-5)
      - The HIV specialty pharmacy residency program
      - Canadian pharmacists practicing in HIV (CHAP)
      - Provincial HIV pharmacists in Ontario (Ontario HIV PSG)

## IMPACT

- ❖ Website rated among the top three HIV drug interaction sites internationally.<sup>2-3</sup>
- ❖ Website accessed globally by regular users (>12,000 unique visitors in 2010, ~40,000 hits per year).
- ❖ About 500,000 hits to date
- ❖ Recent recipient of 2 prestigious Canadian awards.<sup>4,5</sup>

Figure 4: HIV Specialty Residency



Figure 5: HIV Pharmacy Networks



## CONCLUSIONS

- ❖ A manual and website on HIV drug therapy were successfully developed.
- ❖ The 2010 edition of the manual is the 9<sup>th</sup> edition published. The website is updated quarterly.
- ❖ These resources facilitate knowledge translation of essential and current information on ARVs in a timely and accessible manner, and promote rational drug use and responsible prescribing.
- ❖ Additional information on the website promotes professional networking and specialized HIV pharmacy training.

## REFERENCES

1. HIV Drug Therapy Website Address: [http://www.hivclinic.ca/main/drugs\\_home.html](http://www.hivclinic.ca/main/drugs_home.html)
2. Sheehan NL et al. Evaluation of HIV drug interaction websites: a cross-sectional review. *Annals of Pharmacotherapy* 2003;37:1577-86. (website listed as [www.tthhivclinic.com](http://www.tthhivclinic.com))
3. Krakower D et al. AIDS: HIV-Related Internet Resources for the Practicing Clinician. *Clinical Infectious Diseases* 2010; 51(7):813-822.
4. CSHP Ontario Branch. 2010 E Amy Eck Award.
5. Pharmacy Practice. 2010 Commitment to Care & Service Awards- Disease Management Initiative Award.

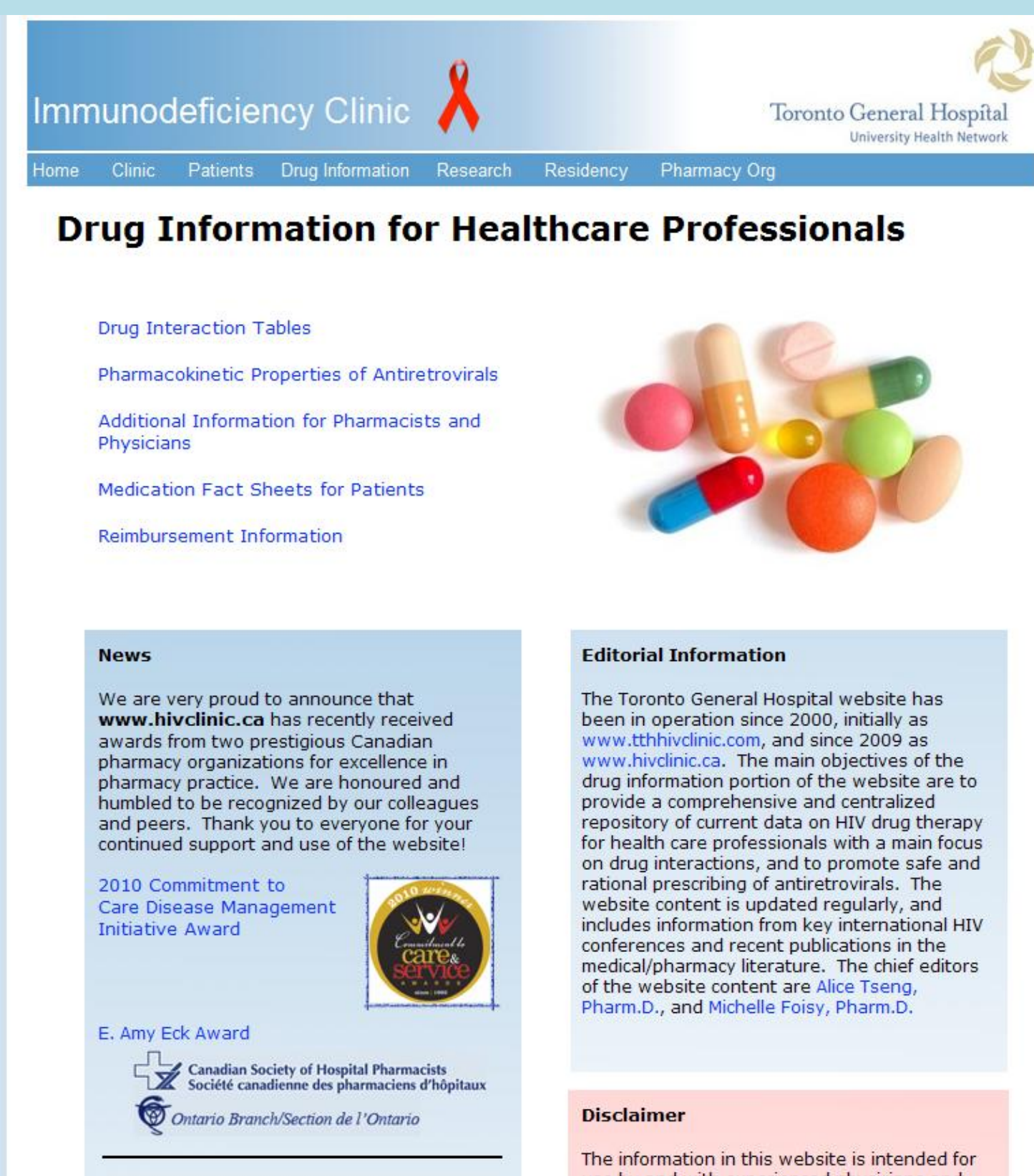


Figure 1: Drug Information Homepage



Figure 2: Additional Information



Figure 3: Drug Interaction Tables

