Medication errors: what patients can do to minimise them

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Disclaimer

Medicines mentioned in this presentation are for illustration purposes only, without any positive or negative opinion on the product itself, or on the marketing authorisation holder.
5 “R” rules

- Right drug (41.8%)*
- Right dose (35%)
- Right route (9.7%)
- Right time (0.9%)
- Right patient (1.5%)

* Indicates error type in Guichet Erreurs Médicamenteuses: Présentation et bilan depuis la mise en place - Juin 2009
Affsaps (now ANSM)
Self-medication can be erroneous

- Istatretinoin to treat acne
- Thalidomide to treat severe aphtosis
- Women at risk of using product without proper information

? Do we always educate people never to share medicines with others?
Always read the notice!

1. Respect indication, don’t share with others
2. Don’t take if contraindicated
3. Be aware of situations that change terms of use
4. Adapt lifestyle
5. Respect dose, intake frequency, treatment duration, timing…
6. Contact HCP if ADR
7. Always be vigilant

Always keep pills inside their box!
In one’s medicine cabinet

Two adults, one cabinet: each adult often takes the wrong tablet as both packs are kept together and look alike.
Loose pills: which is what?

What time?
With or without food?
Etc.
Sites that can help

Pill Identifier

Search by Imprint, Shape or Color

Note: All fields optional. Use the pill finder to identify medications by visual appearance or name.

Imprint
Select Color
Select Shape

Search

Search by Drug Name

Drug Name

Search

Search by National Drug Codes (NDC)

Drug Code (NDC)
### Mercaptopurine

**Imprint:**
93 5510

**Strength:**
50 mg

**Color:**
Yellow

**Size:**
9.00 mm

**Shape:**
Round

**Availability:**
Prescription only

**Drug Class:**
Antimetabolites

**Pregnancy Category:**
D - Positive evidence of risk

**CSA Schedule:**
N - Not a controlled drug

**Manufacturer:**
Teva Pharmaceuticals USA

**National Drug Code (NDC):**
00093-5510

**Inactive Ingredients:**
- corn starch
- potato starch
- lactose
- magnesium stearate
- stearic acid

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![Images & Information](image)

![Result](result)
A patient says

- I take up to 80 mg a day depending on symptoms
- The tablets come in various dose amounts
- I used to take two or three 5 mgs a day now I take 1 mg 3 times a day
- The blister packs that the medication is contained within are identical even the colour and you have to look carefully at the packet to see which dose it is
- If you are vision-impaired it is more of a problem and you can easily take the wrong tablet
- When you use them and pop a tablet out then it is harder to distinguish what the writing on the blister pack says as it has been broken up

Why not a tablet-free zone?
- Zidovudine
- Lamivudine
- Abacavir: 8% risk of potentially life-threatening hypersensitivity reaction. Never re-challenge
An Apparent Third-Party Tampering Issue -- GSK
Community Statement

From GlaxoSmithKline
March 29, 2007

Dear Community Member,

We would like to call to your attention an apparent third-party tampering that caused misbranding of Ziagen® (abacavir sulfate) Tablets as Combivir® (lamivudine and zidovudine) Tablets and employed counterfeit labels for Combivir Tablets. Both Combivir and Ziagen are medicines used as part of combination regimens to treat HIV infection.

http://www.thebody.com/content/art40466.html
Inconsistent choices

Combivir bottle: yellow colour

But the yellow tablets are abacavir tablets
Among thousands, some medical apps can help

**HIV iChart**

**Developer:**
University of Liverpool [UK-based university] eMedFusion [UK- and USA-based app developer and advertising agency]

Blackberry: –
Nokia: –
Windows Phone: –
Other weblinks: –
Languages: English
Number of languages: 1
Countries of use: Any in which the user is familiar with English

**Summary:**
Provides people with HIV/AIDS with up-to-date information on potential drug interactions between HIV drugs and other drugs that the individual may be prescribed (also covers over-the-counter, recreational, and alternative medications). Results are presented as a ‘traffic-light’ system of red, amber, or green. A brief summary of the interaction is given, along with a grading of the quality of evidence (very low; low; moderate; or high). The app is offline after being downloaded to the user’s device, and does not need an Internet connection during operation (except to download regular updates).

**H-Bookmark**

**Developer:**
Network Persone Sieropositive (NPS) Italia Onlus [Italy-based patient group specialising in HIV/AIDS]

Android: http://bit.ly/N77yZ0
Apple: http://bit.ly/T0ZTzN
Nokia: –
Windows Phone: –
Other weblinks: http://bit.ly/MOEiLP
Languages: Italian
Number of languages: 1
Countries of use: Italy, Switzerland (parts of)

**Summary:**
App for people living with HIV/AIDS. Provides a daily planner, with a schedule of appointments, consultations, tests, and treatments, and supplies notification of when events are due, and when medication must be taken. Issues reminders when medication is running low. Lists antiretroviral drugs, detailing properties and ingredients. A database of centres for infectious diseases in Italy can be searched by name, region or province. Also holds information on restrictions faced by people living with HIV/AIDS who travel to different countries in the world. A ‘Help me’ facility relies on the phone’s GPS to text friends and relatives of the exact location if help is needed.

**FarmaciaPlus**

**Developer:**
Logica Informatica srl [Italy-based computer service company]

Android: –
Blackberry: –
Nokia: –
Windows Phone: –
Other weblinks: –
Languages: Italian
Number of languages: 1
Countries of use: Italy, Switzerland (parts of)

**Summary:**
A catalogue of 80,000 formulations of 18,000 drugs available in Italy (and Europe), searchable by characters, types of medicine, manufacturer, side effects, interactions, and others. ‘Favorites’ can be grouped into custom categories. Information on each drug includes: name; therapeutic indications; active ingredients; interactions; effects on driving, lactation, and pregnancy; side effects; the presence of gluten; preclinical safety data; precautions for storage; period of validity; nature and contents of container, etc. Updated every three months. Only available to people aged over 17.
Shapes can help

- Heart diseases
- Bone diseases
- Kidney diseases
- Lung diseases
- Other ideas…
New technologies can decrease medication errors by 30 to 80% (1)

Double-checking decreases administration errors by 70% (2)

Simple control at all stages reduces medication errors by 80% (3)

A informed patient can intercept 3% of errors (4)

Popular measures

- Treatment initiation forms
  - There should be 3 types of treatment initiation forms:
    - Female patient of childbearing potential
    - Female patient of non-childbearing potential
    - Male patient
  - All treatment initiation forms should contain the following elements:
    - Teratogenicity warning
    - Date of counselling
    - Affirmation of patient understanding regarding the risk of thalidomide and the PPP measures.
    - Patient details, signature and date
    - Prescriber name, signature and date
  - Aim of this document i.e. as stated in the PPP: “The aim of the treatment initiation form is to protect patients and any possible foetuses by ensuring that patients are fully informed of and understand the risk of teratogenicity and other adverse reactions associated with the use of thalidomide. It is not a contract and does not absolve anybody from his/her responsibilities with regard to the safe use of the product and prevention of foetal exposure.”
For those who can’t read

- Voice labeling system that allows users to record, and re-record information onto self-adhesive labels
- Recognises sound
- Instantly plays back the recordings
Suggestions to patients and others

- Medicines cabinet at home: one per person
- EudraPharm and other sites: pill identifier
- Patient education: never share drugs (EUPATI)
- Issue: specific graphic design for package
- Special shapes, colours... for drugs at risk
- Package leaflets also for inpatients!
Eurordis Drug Information Transparency and Access ‘DITA’ task force members

- Claudie Baleydier, Friedreich Ataxia, FRA
- Greetje Goossens, Myeloma Patients Europe, BEL
- Juan Fuertes, Primary Pulmonary Hypertension, SPA
- Ellen van Veldhuizen, Addison Disease Org., NLD
- Rainald von Gizycki, Pro Retina, GER
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- François Houÿez, Anne-Mary Bodin, EURORDIS, Paris

- Rob Camp, EURORDIS, SPA
- Lise Murphy, Marfan syndrome, SWE
- Oliver Timmis, Alkaptonuria Society, GBR
- Christine Lavery, Mucopolysaccharidosis Society, GBR
- Philip Bloom, Myeloma Patients Europe, FRA
- Dragomir Slavev, Thalassemia org., BLG
- Richard West, Behcet Society, GBR
Thank you.