

MEDICINES - THE DISCOVERY PROCESS (BETA-VERSION)

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Summary - maximum 5 stars

Ease of Installation
Ease of Use
Quality of Interface/Navigation
Quality of Content/
Visual Appearance
Clarity of Learning Objectives
Fulfilment of Learning Objectives
Accuracy of Content
Value to Teacher

Please note that when reviewed this package was at the beta-version stage. Because of this we are including the authors comments in italics as appropriate. All the reviewers comments have since been addressed.

This was an interesting package to review as it aimed to cover a large and complex process, namely the discovery of medicines, in a simple and user friendly way. The program is easy and efficient to install and getting started and using it is straight forward. The material is well set out and there is a logical progression through the drug discovery process. The initial sections of the program seem rather simple and directed at the school leaver while the later sections might be of more use to the user with some understanding of the basic principles of clinical pharmacology.

The program is divided into six sections starting with (i) the Pharmaceutical Industry then (ii) selecting the disease area which is followed by (iii) selecting the target, (iv) initial screening, (v) the screening cascade and finally (vi) safety testing and clinical trials. Each section can be used alone and there are some question and answer parts within each section which add interest and variety to the program.

There are some curiosities in the package. For example, in section (ii) selecting the disease area it was surprising to find the biological scientist in the management team was attributed the role of the questioning the financial implications of the discovery process and not the scientific ones! ** authors comment: "I accept the reviewers comments but the questions people might ask were not intended to be linked to the

roles of the people assembled in the previous graphic. It was just that this was the only clipart graphic of a number of people we could find" ** Also there is no mention of the input of the toxicologist although this may be considered part of the remit of the generic biological scientist. The documentation which comes with the package is very brief and could be expanded to be more informative. One poor point is there is no obvious contact number or address for help with the program.

Overall the first 2 sections portray an altruistic view of the pharmaceutical industry. They are straightforward but at some points there is quite a jump from simple information about the need to know about the industry to the complexities of bronchoconstriction in asthma, for example.

There are some small problems with the program. The major one in the package reviewed is the error message which appears after help or the highlighted boxes are used. Unfortunately there is no support available from the package producers which could have perhaps removed this problem easily. In addition there are some smaller irritations. For example, in the optimisation section examining the effects of adding different side chains to a drug the program would not accept an ethyl group substitution. Also in some of the questions and answer sections there are a few unnecessary complications for such a general program in that you have to select specifically a concentration rather

than anywhere in that row of the table. Similarly, in the enzyme assay question and answer section it was a nuisance to have to flick between pages to complete the calculations. ** authors comment: "the problems arose because it was a beta-version reviewed. All have been addressed" **

The area which seems to have the best coverage is the last section which is, arguably, the most critical in the drug development process. This section is however probably also the one which is most difficult in terms of the target audience. The level of information seems far beyond that which would be needed by a school leaver or by a 1st year undergraduate in pharmacology or medicine, but is probably too simple for the more advanced user

In conclusion this package may interest a wider audience than the original aims. It will certainly have appeal to the school leaver/new undergraduate interested in the pharmaceutical industry in terms of general information but it could also be of use to more advanced students in transferring from non pharmacologically based degrees to employment within the industry.

Publisher:

Zeneca Pharmaceuticals Education Liaison Group

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