LITERATURE SEARCHES OF SUBJECT-SPECIFIC DATABASES
Search databases such as CancerLit or Medline using search terms such as: neoplasms; radiotherapy; antineoplastic agents; combined modality therapy; experimental radiotherapy; experimental drug therapy.

RESULTS OF SEARCH:

SEARCHES OF SPECIALISED THREE RS RESOURCES
To locate suitable cell lines for spheroids, some cell banks and collections can be searched via the internet. Species differences can be avoided by using human cells.

RELEVANT SITES INCLUDE:
The European Collection of Cell Cultures http://www.ecacc.org.uk
National Cancer Institute Tumor Cell Lines Database http://www.atcc.org/phage/ncisearch.html
Cell line collections available from institutes around the world can be searched at: http://www.biotech.ist.unige.it/cldb/indexes.html

INVITTOX Protocol list (http://www.ivtip.org/protocols.html)
A protocol is listed which utilises tumour cell lines for drug screening in cancer research.

IMPLEMENT REDUCTION AND REFINEMENT

GATHER INFORMATION
Searches indicate that tumour cell spheroids and hollow fibres in vitro have been used in similar studies; guidelines on suitable cell types were found on the internet.

Can the project still be conducted using cells in vitro?

YES

The entire project can be conducted using cells in vitro.

NO

Can a pilot study or other part of the project be done without living animals?

YES

But part of the project still requires living animals.

NO

Can a pilot study or other part of the project be done without living animals?

YES

Can the project be done entirely without animals?

GATHER INFORMATION
Searches indicate that tumour cell spheroids and hollow fibres in vitro have been used in similar studies; guidelines on suitable cell types were found on the internet.

Is the project still relevant and necessary?

e.g. There is no information available on the particular drug/radiotherapy combination of interest.

YES

The entire project can be conducted using cells in vitro.

NO

Can a pilot study or other part of the project be done without living animals?

YES

But part of the project still requires living animals.

SEARCHES OF SPECIALISED THREE RS RESOURCES

To locate suitable cell lines for spheroids, some cell banks and collections can be searched via the internet. Species differences can be avoided by using human cells.

RELEVANT SITES INCLUDE:
The European Collection of Cell Cultures http://www.ecacc.org.uk
National Cancer Institute Tumor Cell Lines Database http://www.atcc.org/phage/ncisearch.html
Cell line collections available from institutes around the world can be searched at: http://www.biotech.ist.unige.it/cldb/indexes.html

INVITTOX Protocol list (http://www.ivtip.org/protocols.html)
A protocol is listed which utilises tumour cell lines for drug screening in cancer research.

CONTACT INDIVIDUALS WITH RELEVANT EXPERTISE IN:
The Three Rs
New techniques

For example, contact authors of the above papers, and individuals on mailing lists, newsgroups and discussion groups.

CONDUCT WORK AND PUBLISH DATA, HIGHLIGHTING THREE Rs ASPECTS