

# Gene patents Closing the Floodgates

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# Gene Patents

- The attempt by Genetic Technologies to enforce their patents over BRCA1 and BRCA2 testing in 2008 focused public attention on this issue
- It would have restricted testing to one commercial laboratory
  - Increased cost and restricted availability implications
- It could have restricted research and invention based on the genes to one company
  - And it is biological inventions which should be able to be patented, not mere discovery and isolation of genes
- But this was only the tip of the iceberg!

# Genes and Cancer Treatment

- The paradigm shift in cancer treatment is from conventional chemotherapy to targeted therapies
- These drugs target gene products that are specific to the growth of cancers and spare normal tissue
- Early examples are:
  - Monoclonal antibodies (Mabthera and Herceptin)
  - Small Molecules (Glivec and Sutent)

# The Importance of Genes in Cancer Research

- Over the next decade there will be a flood of such treatments as genetic targets are identified and researchers invent drugs to target them
- The genetic makeup of a cancer
  - Will tell what type of cancer it is
  - How aggressive it is and its prognosis
  - What treatment it is likely to respond to
- Research must not be restricted

# Solutions

- Following the Senate enquiry we want Governments to review the gene patenting laws in a multidisciplinary way
  - Patent lawyers **PLUS**
  - Economists
  - Researchers
  - Health Professionals
  - Consumers

# Solutions

- International precedents may not resolve our issues since they are often decided on technicalities rather than the principle of whether the mere discovery of a gene can be patented
- It is early enough to draw a line not allowing further gene patents and not get into arguments about retrospectivity  
(Although an amendment to the Patents Act 1990 could exempt already patented genes from license fees)

# Short Term

- Open licences for genes or genetic tests so a fee is not required for non-commercial use
- Resource the ACCC to challenge gene patent claims as part of consumer protection

# Conclusions

- The mere act of isolating genes from the human body should not be patentable.
- Australia needs to ensure that the patent system is not exploited by corporations to patent genes
- Our patent law system needs to be overhauled now to ensure that future generations will inherit an equitable health system