

# I work in pharmacy. Why do I need to know about genomics?

All pharmacy teams need to know about genomics.

It's now included in the GPhC Initial Education and Training Standards for Pharmacists: <https://bit.ly/IETPharm>.

Here are some examples of genomics in everyday pharmacy practice:

- **Antibiotics:** mt-RNR1 test for risk of aminoglycoside-related hearing loss
- **Familial Hypercholesterolaemia (FH):** identifying patients for genetic testing and supporting lipid management
- **Cancer:** DPYD test before fluoropyrimidine use, TPMT/NUDT15 testing for thiopurine use in cancer
- **HIV:** interpreting HLA-B\*57-01 results to avoid adverse reactions to abacavir
- **Supporting patients with genetic conditions e.g. Cystic Fibrosis, monogenic diabetes**
- **Providing pharmacy technical services support for gene therapies and Advanced Therapy Medicinal Products**
- **Near future:** interpreting CYP2C19 test results to identify patients who do not respond to clopidogrel, and optimising medication
- **Near future:** using genetic test results to optimise dosage of drugs such as mavacamtem
- **Near future:** supporting prescribing through pharmacogenomic panel testing for drugs such as opioids, statins, antidepressants

# I work in pharmacy. Where can I learn more about genomics?

Explore the many free online courses and resources at:



## **NHSE Genomics Education Programme**

[genomicseducation.hee.nhs.uk](http://genomicseducation.hee.nhs.uk)  
Online courses and tools, including GeNotes case-study based resources.



## **Future Learn**

[futurelearn.com](http://futurelearn.com)

Many courses are free to access if completed within a specific timeframe.



## **e-Learning for Healthcare**

[e-lfh.org.uk](http://e-lfh.org.uk)

Genomics in the NHS learning modules.



## **RPS position statement for pharmacy professionals and genomic medicine**

[rpharms.com/development/pharmacogenomics/genomicstatement](http://rpharms.com/development/pharmacogenomics/genomicstatement)



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**BPS/RCP Personalised Prescribing – using pharmacogenomics to improve patient outcomes**  
[bps.ac.uk/about/our-campaigns/personalised-prescribing](http://bps.ac.uk/about/our-campaigns/personalised-prescribing)

Explore the National Genomic Test Directory to find out about NHSE commissioned genomic tests and eligibility criteria at:  
[www.england.nhs.uk/publication/national-genomic-test-directories/](http://www.england.nhs.uk/publication/national-genomic-test-directories/)

[centralsouthgenomics.nhs.uk](http://centralsouthgenomics.nhs.uk)

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