

## Expert interpretation and prescribing advice – the key to introducing pharmacogenomics into clinical practice

Sonic Genetics teams with internationally-recognised pharmacogenomics interpretive experts, Translational Software, to provide comprehensive, explicit and clinically applicable reports.

Pharmacogenomics (PGx) is an important new direction in medical practice, making it possible to choose medications with the greatest potential of efficacy and lowest risk of adverse reactions in the management of patients across a range of specialties.

A patient may not benefit from a medication at the highest recommended dose, they may show toxicity at a standard dose, or they may develop severe idiosyncratic adverse effects. The time taken to document a lack of response, and then manage a safe transition to another medication, constitutes an enormous burden on patients, families, their doctors and the funding of healthcare.

Knowledge of the gene variants influencing exposure or response allows prescribers to move from the general to the particular and provide a scientific basis for individualised prescribing. The goal is more effective and safer choices of medication and dose.<sup>1</sup>

### The importance of expert interpretation and prescribing advice

There are now internationally agreed guidelines for reporting PGx testing. However, an important challenge for clinicians wishing to adopt PGx into daily practice lies in the interpretation of reports.

The Sonic PGx reports incorporate recommendations from expert pharmacogenomic groups and associations in an easy-to-read format that provides explicit, relevant information. Importantly, they detail the prescribing consequences arising from a result in the context of the unique clinical scenario:

- Prescribing and dosage recommendations for current or proposed medications
- Genotypes and predicted metaboliser status/activity status for each gene tested
- Potential drug-gene interactions.

### The Sonic PGx Panel

**The Sonic PGx Panel is a 10-gene pharmacogenomic test that provides guidance on medication and dose across common therapeutic areas, including cardiology, gastroenterology, pain management, psychiatry and addiction medicine.**

While the Sonic PGx Panel is available to all Australians, it is most useful for patients:

- Experiencing unwelcome side-effects or not responding to medication or
- About to commence medications where PGx has been shown to influence clinical outcomes.

The genes tested on the Sonic PGx Panel are CYP2D6, CYP2C19, CYP1A2, CYP3A4, CYP3A5, CYP2C9, VKORC1, ABCB1, OPRM1 and SLCO1B1.

### Arranging a Sonic PGx Panel

- Complete a Sonic PGx Panel Request Form (downloaded from [snp.com.au](http://snp.com.au)) or request the 'Sonic PGx Panel' using our standard pathology request form
- Maximise the value from the PGx test by providing information regarding your patient's clinical state and current or proposed medications
- Send your patient to any Sullivan Nicolaides Pathology collection centre for a blood test. Sonic PGx Panel reports are delivered via Sonic Dx or courier, usually within 10 business days following receipt of the sample in our laboratory.

### Costs

Medicare does not cover the cost of the PGx Panel and your patient will receive an invoice. The cost to the patient is \$197\* (including the comprehensive new report).

### More information

A doctor's brief outlining the Sonic PGx Panel and its clinical application is available. Additional information, including examples of patient reports, can be found on the Sonic Genetics website, [www.sonicgenetics.com.au/pgx](http://www.sonicgenetics.com.au/pgx). Patient reports are multi-page PDFs and are best downloaded via our online Sonic Dx portal. A patient brochure is also available.

<sup>1</sup> <https://www1.racgp.org.au/ajgp/2019/march/pharmacogenomics-in-general-practice>  
Polasek TM, Mina K, Suthers G. Pharmacogenomics in general practice: The time has come. Australian Journal of General Practice. 2019;48(3):100-5.

\*To ensure up-to-date cost information at the time of ordering, please check the Sonic Genetics website <https://www.sonicgenetics.com.au/tests/pgx/>



## Sullivan Nicolaides Pathology uploads to the My Health Record system

Following a successful pilot study involving 40 medical centres in Far North Queensland, we are now uploading patients' results to My Health Record. We are the first large private pathology provider to do so.

We can upload results when pathology requests are received as electronic orders (eOrders) that include the patient's Individual

Health Identifier (IHI) and the flag to indicate that the patient has given consent to send their results to the My Health Record system. Currently it is possible to transmit compatible eOrders from Best Practice and Medical Director practice management systems.

We will only use an IHI that is electronically transmitted with the electronic pathology order sent from your practice management system's database to ours. This prevents a patient's results being uploaded to the wrong My Health Record. It also protects patient privacy because the IHI is not visible during the pathology request-test-report process.

Once a specimen is removed from the patient, the accuracy and safety of the testing process are reliant on the identifiers on that specimen and the laboratory information system.

We have adopted the agreed national approach of the seven-day window between the pathology results being uploaded to patient's My Health Record and the patient having access to the results. This allows you, the referring doctor, the time needed to consult and discuss results with your patient. Healthcare professionals are able to access results as soon as they are uploaded.

Our system is flexible and doctors can choose to opt in or out from uploading results to their patient's My Health Record at any time. You can also choose not to upload results for a single pathology episode by simply indicating this in the pathology request screen at the time you are creating the pathology request.

For more information about enabling uploading of SNP pathology results to the My Health Record system, contact your Medical Liaison Manager on **P:** 1300 767 284 or **E:** [marketing@snp.com.au](mailto:marketing@snp.com.au)

## What happens in Australia's most modern histopathology lab?

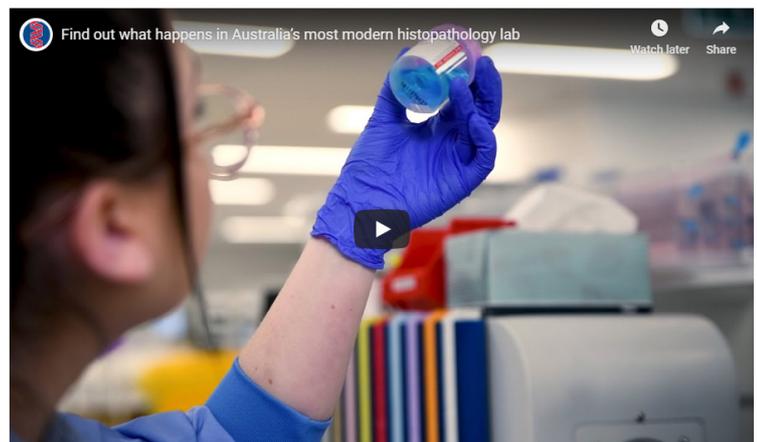
If you've ever wondered what happens to a tissue sample when it is investigated in the lab, just visit our website and take a look at the new video tour of our purpose-built histopathology department.

Our Bowen Hills laboratory is one of the most modern in the world, and our Histopathology Department is the largest of its kind in the southern hemisphere, processing thousands of individual patient episodes every day.

Find out how our expert teams of scientists, laboratory staff and histopathologists work together to get the right answer in every situation, and how they are able to draw on the expertise of their colleagues in all pathology disciplines, on-site in the same building.

Learn how Histopathology performs the most extensive array of ancillary testing in Queensland, including state-of-the-art immunohistochemistry, immunofluorescence and, in conjunction with our genetics lab, the latest molecular testing.

See how slides are scanned using advanced digital technology and shared for analysis in real time, enabling a specimen to be processed overnight and the image made ready for the pathologist first thing in the morning.



<https://www.snp.com.au/about-us/our-pathologists/histopathology/>