



JOHN

63 years old

Months of severe back pain

Trialed a combination of pain relief medications

Did not achieve sufficient pain relief

# TAILORING MEDICATION FOR EVERY INDIVIDUAL

Achieve treatment goals for patients sooner,  
with more informed prescribing.

**1** IN **3**  
PATIENTS

MAY PROCESS CERTAIN MEDICATIONS<sup>1</sup>  
TOO QUICKLY, **INCREASING**  
THEIR RISK<sup>OF</sup>  
**TREATMENT FAILURE**

**Pharmacogenomics (PGx)**

*The study of genetic variations that influence medication response.*

**1 IN 5** AUSTRALIAN PATIENTS HAVE **ABNORMAL FUNCTION OF THE CYP2D6 ENZYME,** WHICH METABOLISES ~25% OF MEDICATIONS IN CLINICAL USE<sup>2</sup>

## BEFORE TESTING



20mg

## PG<sub>x</sub> MEDICATION TEST

## AFTER TESTING

POOR METABOLISER    INTERMEDIATE METABOLISER    NORMAL METABOLISER    ULTRARAPID METABOLISER



5mg



10mg



20mg



30mg

**DNA LED PRESCRIBING HAS BEEN SHOWN TO IMPROVE PATIENT OUTCOMES**



**1 IN 5**

Australians suffer from chronic pain, making their risk of depression higher than those without pain<sup>3</sup>

JOHN

PG<sub>x</sub> Medication Test completed

Poor metaboliser

Alternative pain medication prescribed

Immediate pain relief resulting in significant improvements

# HOW TO ORDER A PG<sub>x</sub> TEST WHEN PRESCRIBING MEDICATION FOR PAIN & MENTAL HEALTH CONDITIONS

*Improving access  
to PG<sub>x</sub> testing for  
all patients*



## REQUEST FORM

Discuss PG<sub>x</sub> medication testing with your patient.

Request a PG<sub>x</sub> medication test with a standard request form.

Select PG<sub>x</sub> MH (\$147\*)  
PG<sub>x</sub> Pain (\$147\*)  
or PG<sub>x</sub> Multi (\$197\*)

**Remember to list patients' medications.**



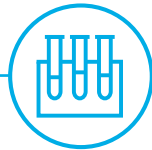
## PAYMENT

Patient should pay at [www.gdpay.com.au](http://www.gdpay.com.au)

before visiting any Lavery Pathology Collection Centre and record their receipt number on their form.

This test has **NO** Medicare rebate.

**Call 1800 822 999**  
for any enquiries.



## COLLECTION CENTRE

Patient visits any Lavery Pathology Collection Centre with request form for blood collection.



## RESULTS READY

The patient report will be delivered by your preferred method. A pdf report with further recommendations and insights is available on a secure doctor portal by using the link at the end of the report.

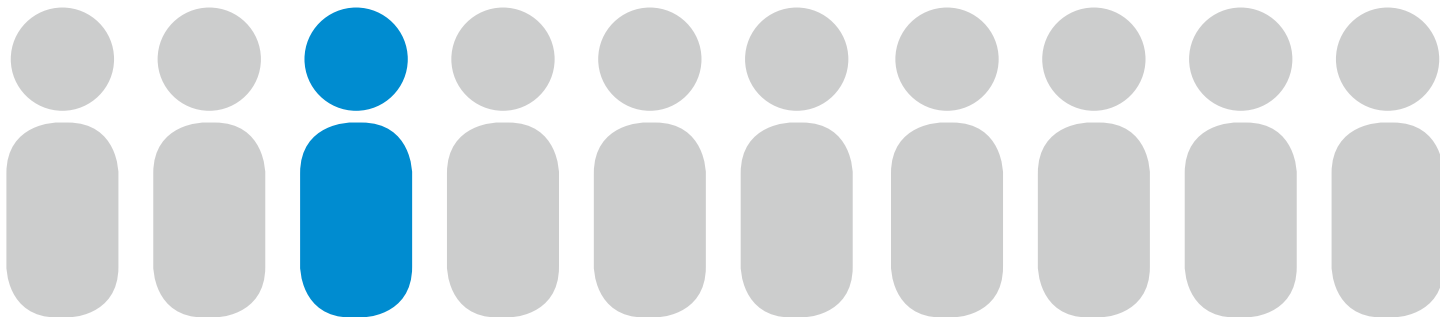


## LIFETIME RELEVANCE

You can provide your patient with access to the pdf version of their report using their unique patient access code and the link at the end of the test report.

The PG<sub>x</sub> MH and PG<sub>x</sub> Multi Medication Tests cover  
80 per cent of commonly prescribed antidepressants.

**80%**



OFFER A SOLUTION  
THAT CAN  
**CHANGE LIVES**

**myDNA**<sup>™</sup>

  
**Genomic Diagnostics**  
LEADING THE WAY TO IMPROVE HEALTH

  
**Lavery**  
PATHOLOGY

**FOR MORE INFORMATION AND SUPPORT**

Call **1800 822 999** or email **info@genomicdiagnostics.com.au**

**WHAT IS THE SUPPORTING EVIDENCE FOR THE CLINICAL APPLICATION OF PGx?** The PGx Medication Reports are based on the results of many clinical studies that measure how genetic variations affect a drug's efficacy and/or risk of adverse effects. Recently, the results of these studies have been confirmed by an increasing number of randomised controlled trials (RCTs). These studies have been recently summarised into published guidelines by the Clinical Pharmacogenetics Implementation Consortium (CPIC) and the Royal Dutch Pharmacists Association – Pharmacogenetics Working Group.

**TEST LIMITATIONS** There are some important PGx Medication Test limitations to be aware of: The test cannot determine how individuals respond to all medications in clinical use; response to medications is complex and this genetic test only looks at one aspect affecting drug response; a "normal" result does not always predict the patient will respond to a medication and not experience any side effects, but can indicate that their genetic result doesn't predict a further increase in the risk of these clinical issues; enzyme function can also be affected by factors other than genotype, including age, the effect of co-administered drugs (i.e. drug-drug interactions), and the presence of liver disease; these should be taken into account when considering the PGx Medication Reports; allergic reactions cannot be detected by this genetic test; the test does not detect all known variants in the genes tested; only common variants present in Caucasian, African and Asian backgrounds are covered; if an individual carries a rare variant not covered by the test, the phenotype may be inaccurately reported; and testing for the common variants is the practice of most screening molecular genetic testing laboratories around the world.

#### REFERENCES

1. Hicks JK, et al. Clinical pharmacogenetics implementation consortium guideline (CPIC) for CYP2D6 and CYP2C19 genotypes and dosing of tricyclic antidepressants: 2016 update. Clin Pharmacol Ther. 2016.
2. Mostafa S, Kirkpatrick CMJ, Byron K, Sheffield L. An analysis of allele, genotype and phenotype frequencies, actionable pharmacogenomic (PGx) variants and phenoconversion in 5408 Australian patients genotyped for CYP2D6, CYP2C19, CYP2C9 and VKORC1 genes. J Neural Transm [journal on the internet]. 2018 Sep 6 [cited 2018 Dec 6]. Available from: <https://link.springer.com/article/10.1007%2Fs00702-018-1922-0> [Epub ahead of print]
3. Rush AJ, Trivedi MH, Wisniewski SR, Nierenberg AA, Stewart JW, Warden D, et al. Acute and longer-term outcomes in depressed outpatients requiring one or several treatment steps: a STAR\*D report. Am J Psychiatry. 2006;163(11):1905-17.

Please note: case study name "John" for marketing purposes only.

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