What is the CYP2D6 genetic screen for pain medicines and why should I have it?

- It will determine how well your body can process (metabolize) certain pain medicines. The test may also be called a pharmacogenetics or PGx screen.
- The CYP2D6 gene controls how your body processes codeine, hydrocodone, oxycodone, and tramadol (Ultram®) to give you pain relief. The test looks at DNA changes (variants) in CYP2D6 that cause your body to process pain medicines normally, poorly, or too quickly.
- The type of CYP2D6 gene you have will help your doctor decide which pain medicine will work best for you.

How can variants in this gene affect me?

- You may not have any CYP2D6 variants, so you will process your pain medicine normally. These are called normal, or extensive, metabolizers.
- Some CYP2D6 gene variants process medicine(s) poorly, so the drug will not work well for you. These are called poor metabolizers.
- Some CYP2D6 gene variants process medicine(s) too quickly, so you may get too much drug in your blood stream. These are called ultra-rapid metabolizers.
- Some CYP2D6 gene variants process medicine(s) different than normal, but not too quickly or too slow. These are called intermediate metabolizers.

Will this screen tell me about other medicines?

- The CYP2D6 gene can also control how your body processes some antidepressants. Talk to your doctor about any other medicines you are taking.
- This PGx screen tests for variants in other genes that can affect how you process other medicines. We will not report results for other genes at this time.
How will I learn about my results?

• Your doctor or nurse can tell you the results at your next appointment.
• We will also send you a letter explaining your results.
• Our genetic counselor can answer your questions about genetic information.
• In the future we may be able to tell you about other gene variants that predict how other drugs may work for you. If you wish to learn more, let us know and we will send you a letter when those results are ready. Since this is a research study, it may take years before the results will be ready.

How much does this screen cost?

• Being a research study, there is no cost to you for this screen.

Can my insurance get my pharmacogenetic screen results?

• No, this is a research study, so your insurance company will not get your results. However, if you tell your doctors about your results, they may write it in your medical record, and then the insurance company can find out your results.

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