DEMO DEMO

BIOGENIQ

Sample number	BIO-DEMO	**Report date**	2018-11-23
Date of birth	1990-02-02	**Specimen**	Saliva
Sex	Male		
Pharma Profile(s)	Pain		

Pharmacogenetic report

For more information, contact us:

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The Pharma profile is a clinical decision support tool aimed at reducing the risks of adverse drugs reactions and therapeutic failure. The Pharma profile does not replace existing prescription guides. Response to medication can be influenced by factors not evaluated in this report. Response to treatment may be different than predicted in this report. The Pharma profile does not diagnose any disorder, condition or disease.

Nonsteroidal anti-inflammatory drug (NSAID)

Celecoxib (CELEBREX®)

Flurbiprofen (ANSAID®)

Opioid

⚠ **Codeine** (ATASOL®)

⚠ **Oxycodone** (OXYNEO®, OXY.IR®)

⚠ **Tramadol** (RALIVIA®, DURELA®)

Tricyclic antidepressant

(!) **Amitriptyline** (ELAVIL®)

Legend: (!) Increased risk of adverse drug reactions ⚠ Increased risk of therapeutic failure

PHARMACOGENETIC RECOMMENDATIONS

(!) Amitriptyline (ELAVIL®)

GENES: ***CYP2C19, CYP2D6*** LEVEL OF EVIDENCE: **1**

Increased risk of adverse drug reactions with standard dosing of amitriptyline

Your body may metabolize and eliminate amitriptyline at a slower rate than expected.

- Be alert to adverse drug reactions (e.g. dry mouth, constipation, confusion, abnormal involuntary movements, weight gain, increased heart rate).
- The use of an alternative medication or a dose adjustment could improve your treatment.
- Consult your healthcare provider to optimize your therapy.

Celecoxib (CELEBREX®)

GENE: ***CYP2C9*** LEVEL OF EVIDENCE: **2**

No genetic variation identified that would prompt changes to celecoxib therapy

Your body should metabolize and eliminate celecoxib normally. Therefore, your genetic results do not suggest any change to celecoxib therapy.

- No change to the recommended dose.

⚠ Codeine (ATASOL®)

GENE: ***CYP2D6*** LEVEL OF EVIDENCE: **1**

Increased probability of treatment failure with standard dosing of codeine

Your body may metabolize and activate codeine at a slower rate than expected.

- Be alert to insufficient response.
- The use of an alternative medication could improve treatment efficacy.
- Consult your healthcare provider to optimize your therapy.

Flurbiprofen (ANSAID®)

GENE: ***CYP2C9*** LEVEL OF EVIDENCE: **1**

No genetic variation identified that would prompt changes to flurbiprofen therapy

Your body should metabolize and eliminate flurbiprofen normally. Therefore, your genetic results do not suggest any change to flurbiprofen therapy.

- No change to the recommended dose.

⚠ Oxycodone (OXYNEO®, OXY.IR®)

GENE: ***CYP2D6*** LEVEL OF EVIDENCE: **1**

Increased probability of treatment failure with standard dosing of oxycodone

Your body may metabolize and activate oxycodone at a slower rate than expected.

- Be alert to insufficient response.
- The use of an alternative medication could improve treatment efficacy.
- Consult your healthcare provider to optimize your therapy.

Legend: (!) Increased risk of adverse drug reactions ⚠ Increased risk of therapeutic failure

⚠ **Tramadol** (RALIVIA®, DURELA®) GENE: ***CYP2D6*** LEVEL OF EVIDENCE: **1**

Increased probability of treatment failure with standard dosing of tramadol

Your body may metabolize and activate tramadol at a slower rate than expected.

- Be alert to insufficient response.
- The use of an alternative medication could improve treatment efficacy.
- Consult your healthcare provider to optimize your therapy.

Legend: (!) Increased risk of adverse drug reactions ⚠ Increased risk of therapeutic failure

RESULTS

GENES	TESTED ALLELES	GENOTYPES	PHENOTYPES
CYP2C19	*1, *2, *3, *4, *5, *6, *7, *8, *17	*1/*1	Normal metabolizer
CYP2C9	*1, *2, *3, *4, *5, *6, *8, *11, *12, *13, *15, *25, *27	*1/*1	Normal metabolizer
CYP2D6	*1, *2, *3, *4, *5, *6, *7, *8, *9, *10, *11, *12, *14, *15, *17, *19, *41, *69, CNV	*4/*5	Poor metabolizer

CYP2C19: Cytochrome P450 2C19; CYP2C9: Cytochrome P450 2C9; CYP2D6: Cytochrome P450 2D6

Levels of evidence

1 - Recommendation based on pharmacogenetic information on the drug label approved by Health Canada and/or the US Food and Drug Administration (FDA). A level 1 will also be attributed if the recommendation originates from a clinical guideline published by the Clinical Pharmacogenetics Implementation Consortium (CPIC) or the Dutch Pharmacogenomics Working Group (DPWG).

2 - Recommendation based on the results of multiple studies showing a statistically significant effect of a genetic variant on drug response.

3 - Recommendation based on the results of a single study showing a statistically significant effect of a genetic variant on drug response and/or drug pharmacokinetics.

4 - Recommendation based only on knowledge of the principal metabolizing enzyme without in vivo or in vitro data demonstrating the impact that genetic variability has on drug response or pharmacokinetics.