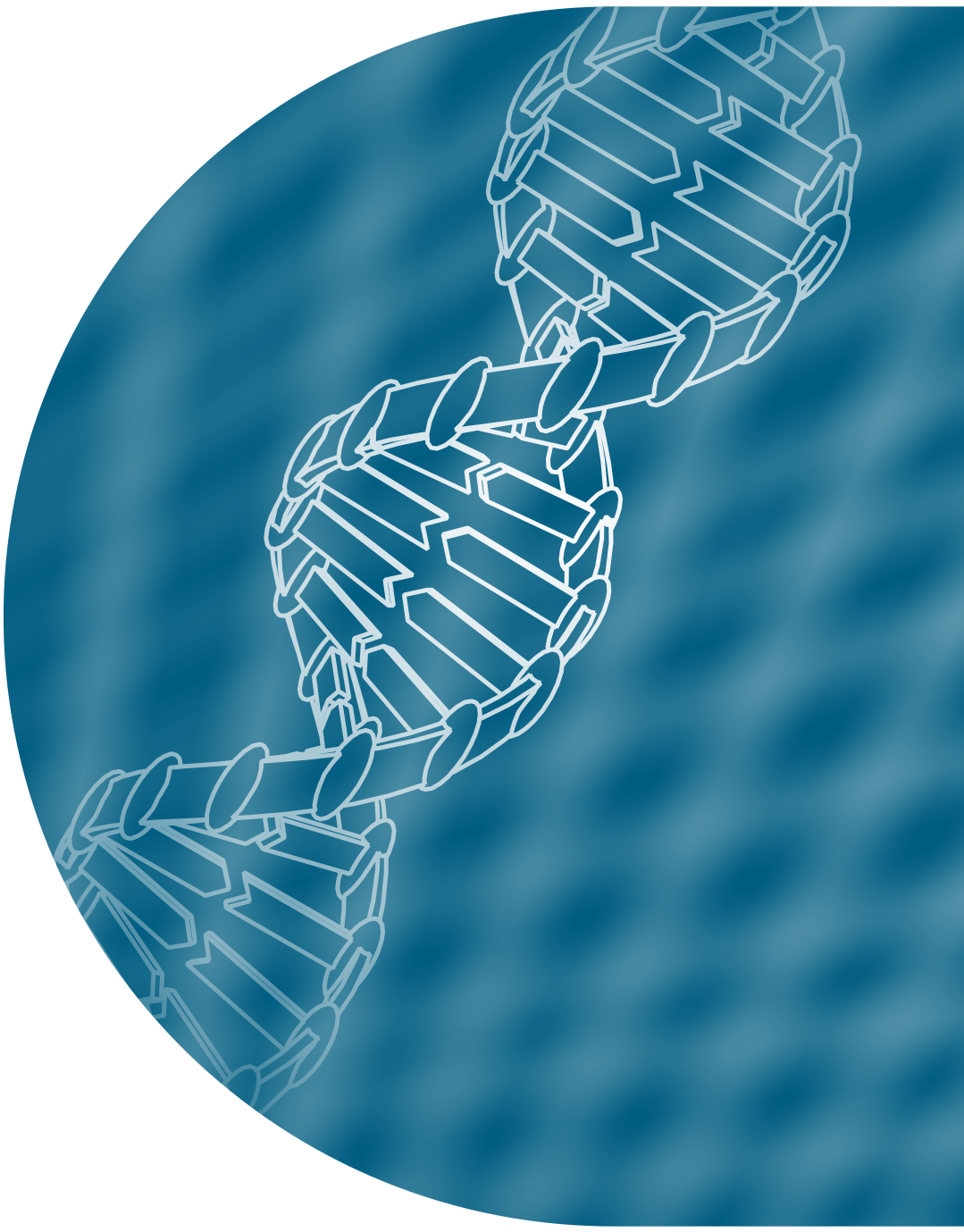
HANIFA
GENETICS



ژنتیک پاسخ
به داروها

Acetaldehyde|
ALDH2 | rs671-GG|

Evidence Level: 3

Recommendations:

Patients with the rs671 GG genotype may have decreased concentrations of acetaldehyde, a metabolite of ethanol, as compared to patients with the AG genotype. This annotation only covers the pharmacokinetic relationship between rs671 and acetaldehyde and does not include evidence about clinical outcomes. Other genetic and clinical factors may also influence concentrations of acetaldehyde.

Genes Analyzed: ALDH2

Acetaminophen;Tramadol|
OPRM1 | rs1799971-AA|

Evidence Level: 3

Recommendations:

Patients with the rs1799971 AA genotype may have an increased response to combined acetaminophen and tramadol as compared to patients with the AG or GG genotypes. Other genetic or clinical factors may also affect response to combined acetaminophen and tramadol.

Genes Analyzed: OPRM1

Alprazolam|
CYP3A;CYP3A4 | rs35599367-GG|

Evidence Level: 3

Recommendations:

Patients with alcoholism, anxiety and the GG genotype may have decreased concentrations of alprazolam as compared to patients with the AG genotype. This annotation over covers the pharmacokinetic relationship between rs35599367 and alprazolam and does not include evidence about clinical outcomes. Other genetic and clinical factors may also affect concentrations of alprazolam in a patient.

Genes Analyzed: CYP3A;CYP3A4

Amantadine;Anticholinergics;Dopamine Agonists;Levodopa;Selegiline|
SLC22A1 | rs622342-AC|

Evidence Level: 3

Recommendations:

Patients with the AC genotype and Parkinson disease may require increased doses of anti-Parkinsonian drugs and may have an increased risk of mortality as compared to patients with the AA genotype, and require decreased doses and have a decreased risk of mortality as compared to patients with the CC genotype. Other genetic and clinical factors may also influence dose of anti-Parkinsonian drugs and risk of mortality.

Genes Analyzed: SLC22A1

Aspirin|
ITGB3 | rs5918-TT|

Evidence Level: 4

Recommendations:

Patients with the TT genotype may be more likely to respond to aspirin as compared to patients with the CC or CT genotype. However, contradictory findings are reported. Other genetic and clinical factors may also influence a patient's response to aspirin.

Genes Analyzed: ITGB3

Aspirin|
GP1BA | rs6065-CC|

Evidence Level: 3

Recommendations:

Patients with the rs6065 CC genotype may have a decreased response and an increased risk for aspirin resistance as compared to patients with the CT or TT genotype. Other genetic and clinical factors may also influence a patient's response to aspirin.

Genes Analyzed: GP1BA

Codeine|
*CYP2D6 | *10/*41*

DPWG guidelines

Description

The Pharmacogenetics Working Group Guideline for codeine includes individual recommendations for cough or pain for CYP2D6 poor, intermediate, and ultrarapid metabolizer. In addition, for ultrarapid metabolizer, higher or lower doses and additional risk factors are taken into consideration.

Implications

The genetic variation reduces the conversion of codeine to morphine. This can result in reduced analgesia.

Recommendations:

For COUGH: No action required. For PAIN: It is not possible to offer adequately substantiated advice for dose adjustment based on the limited available literature for this phenotype. Be alert to a reduced effectiveness. In the case of inadequate effectiveness: 1. Try a dose increase., 2. If this does not work: choose an alternative. Do not select tramadol, as this is also metabolised by CYP2D6. Morphine is not metabolised by CYP2D6. Oxycodone is metabolised by CYP2D6 to a limited extent, but this does not result in differences in analgesia in patients. If no alternative is selected: advise the patient to report inadequate analgesia.

Genes Analyzed: CYP2D6

Salmeterol|
ADRB2 | rs1042713-AA|

Evidence Level: 2A

Recommendations:

Patients with the rs1042713 AA genotype and asthma may have a decreased response to salmeterol as compared to patients with the GG genotype. However, conflicting evidence has been reported. Other genetic and clinical factors may also influence a response to salmeterol.

Genes Analyzed: ADRB2

Selective Beta-2-Adrenoreceptor Agonists|
VDR | rs2239179-TT|

Evidence Level: 3

Recommendations:

Patients with TT genotype may have increased response to selective beta-2-adrenoreceptor agonists in people with asthma as compared to patients with genotype CC or CT. Other genetic and clinical factors may also influence the risk of response to selective beta-2-adrenoreceptor agonists.

Genes Analyzed: VDR

مرکز ژنتیک حنیفا

نشانی: تهران، بزرگراه مدرس به سمت شمال
خیابان الهـیه شمالی، خیابان گلـنار، پـلاک ۵۲
ساختمان گالریا رزیدنس، طبقه ۱، واحد غربی

(۰۲۱) ۹۱۰۰۶۰۰۰
(۰۹۹۸) ۱۱۱۶۰۰۰
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