



SNPClinic v.1.0 software

Software to discover regulatory variants in the human genome

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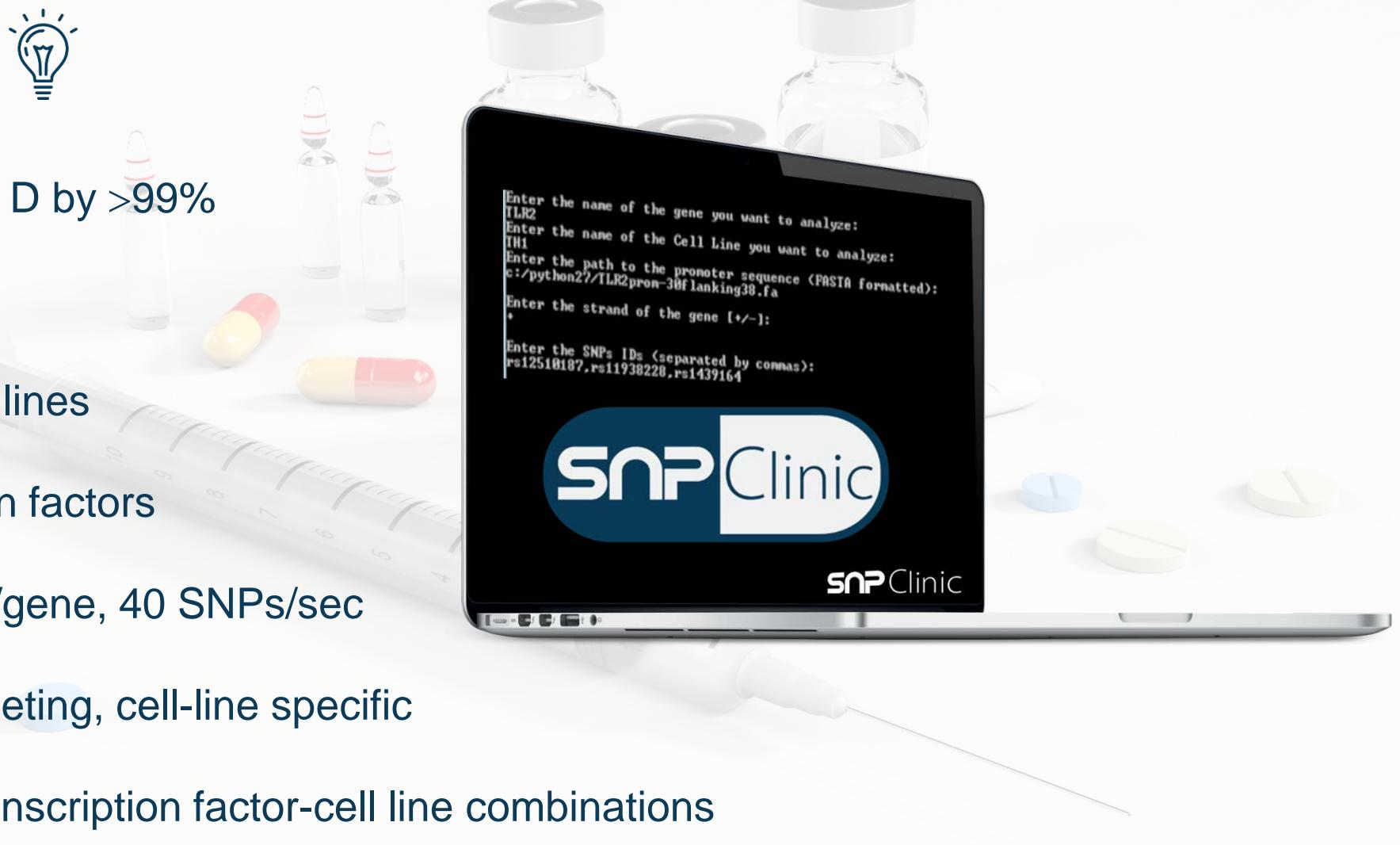
PROBLEM



How to discover *in silico* regulatory SNPs in human genes
saving R & D costs and time?

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SOLUTION



- Reduces costs of R & D by >99%
- Specificity: 84.7%
- Up to 184 human cell lines
- Up to 559 transcription factors
- Running time: <5 sec/gene, 40 SNPs/sec
- Ethnic population targeting, cell-line specific
- Discovery of rSNP-transcription factor-cell line combinations

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APPLICATIONS



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REAL-TIME DEMO

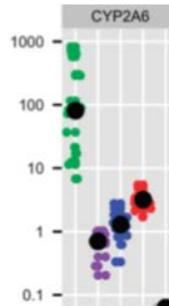


*Para ver el contenido del video,
instale la versión reciente de Flash®
Player.

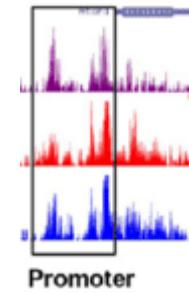


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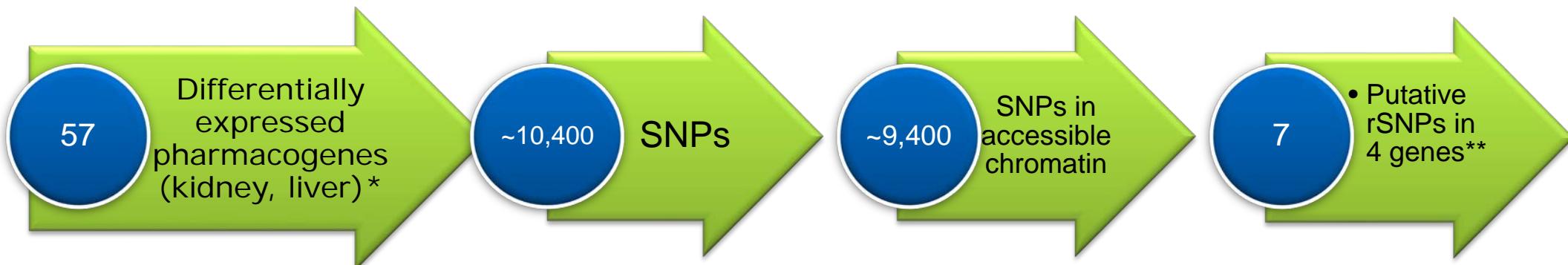
Example No.1. Predicting side effects by rSNPs in pharmacogenes



```
Python 2.7 (r27:82525, Jul 4 2010, 07:43:08) [MSC v.1500  
32  
Type "help", "copyright", "credits" or "license" for more  
>>> import sys  
>>> sys.path.append('/python27/SNPClinic')  
>>> sys.path.append('/python27/')  
>>> import SNPClinic_run  
Enter the name of the gene you want to analyze:  
TLR2  
Enter the name of the Cell Line you want to analyze:  
TH1  
Enter the path to the promoter sequence (FASTA formatted):  
c:/python27/TLR2prom-30flanking38.fa  
Enter the strand of the gene [+/-]:  
+  
Enter the SNPs IDs (separated by commas):  
rs12510187,rs11938228,rs1439164
```



Affinity Imp	HR	HWF	FIF	Abs FIF
21.6029242	1	1	21.6	21.603
21.6029242	1	1	21.6	21.603
19.5022555	1	1	19.5	19.502
14.7055795	1	1	14.71	14.706
14.7055795	1	1	14.71	14.706
11.0489385	1	1	11.05	11.049
-10.546082	1	1	-10.55	10.546
-10.435373	1	1	-10.44	10.435
19.5022555	2	0.5	9.751	9.7511
14.8664646	2	0.5	7.433	7.4332

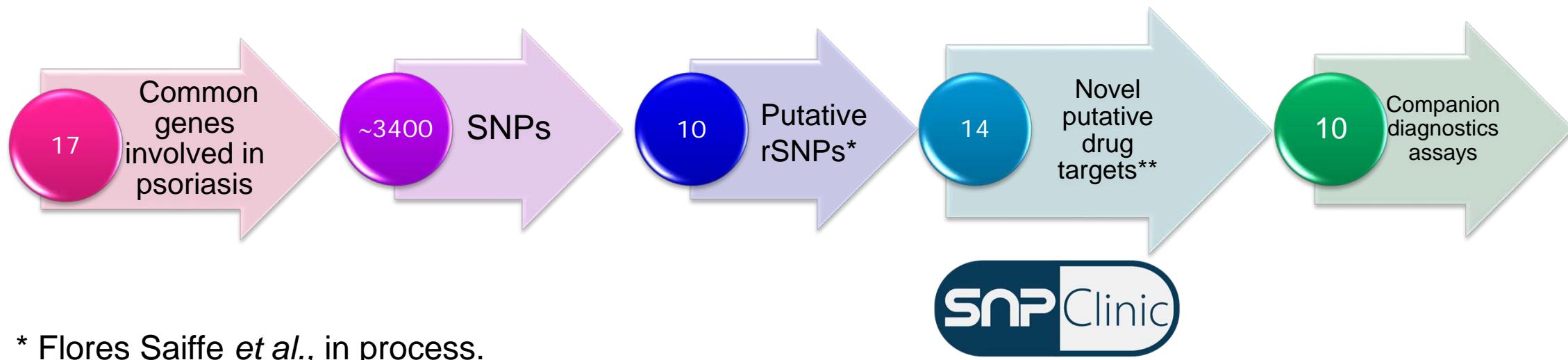


*Chhibber *et al.*, 2017.

**Chávez Álvarez *et al.*, in process.



Example No. 2. Drug target discovery + Companion diagnostics in psoriasis



* Flores Saiffe *et al.*, in process.

**Cell lines involved/analyzed in psoriasis: keratinocytes, dendritic and T cells