Research Variant Watchlist

You need to find patients that share the same VUCS and are phenotypically similar? But you are afraid to make the whole data visible to the scientific community?
GeneTalk's Watchlist for research variants is what you need:

- **Discuss variants of uncertain clinical significance (VUCS)**
- **Find the "second patient"**
- **Establish a scientific collaboration**

What is GeneTalk's Watchlist?

GeneTalk's Watchlist is a database for variants with yet uncertain clinical significance (VUCS). The database is strictly confidential, separated from other GeneTalk databases, and not publicly visible. It can be used only to find matches.

How does it work?

As a verified user, you can query a VUCS with additional phenotype information to GeneTalk's Watchlist confidentially. If your inquiry meets the quality criteria (i.e., it is annotated with phenotype information and no appropriate annotation was found in another database), there are two possible outcomes:

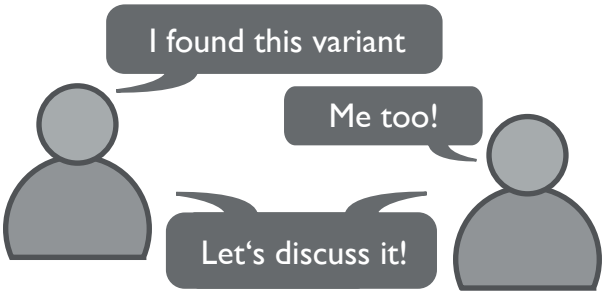
① No match found

You are the first user who submitted this VUCS. The VUCS is registered in the database with a timestamp and you as contributor. GeneTalk certificates your finding. You will be notified, when another GeneTalk user submits an inquiry for the same VUCS.

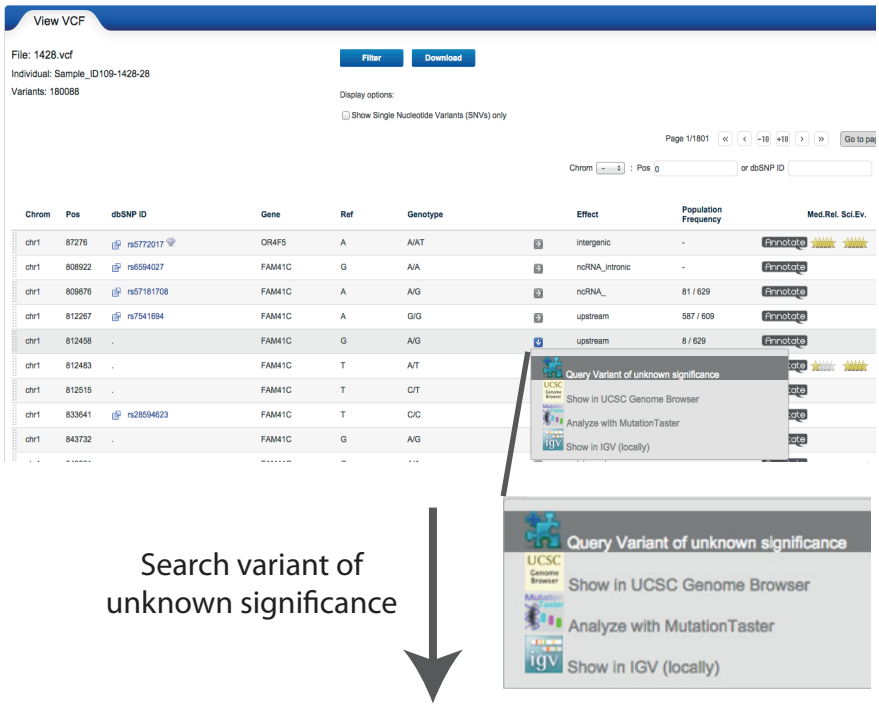
② Match found

Your inquiry matches with a VUCS entry of another user. In this case, both you and the other user are notified about your finding.

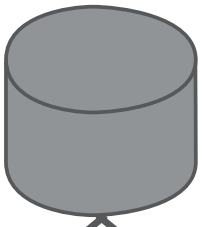
Happy collaborating!



GeneTalk VCF Viewer



Search variant of unknown significance



GeneTalk Research Variants

Match found!

User X already added this variant to the database.
You and User X are notified!

No match

Congratulations!
You contributed a new VUCS.
You will be notified, if another user finds the same variant.

What is the difference between an entry in the Watchlist and a variant specific annotation?

The primary goal of the Watchlist is to clarify the status of a VUCS in a patient. That's why a VUCS request to the Watchlist is always linked to a sample that is phenotyped. By this means clinicians can best decide in a collaborative effort, whether a VUCS is medically relevant e.g. because it occurs multiple times in phenotypically similar individuals.

In contrast, a variant specific annotation is not linked to a real sample. It should rather be viewed as a general statement about the medical impact of an allele. Ideally, any statement in an annotation is documented by a source reference, such as a link to a pubmed article. This makes it much easier for other users to comment and rank the annotation.

What happens if the status of a VUCS is clarified?

We consider all entries of the Watchlist as transient. The scientific collaboration that started by making a match between GeneTalk users ends successfully if the clinicians publish for example a paper describing the effect of a VUCS. Then the entry will be removed from the Watchlist and we will transfer the relevant information to a database for pathogenic mutations such as ClinVar.

Vice versa, it is also possible that a VUCS is listed in databases of pathogenic mutations after an update. In this case all GeneTalk users that collaborate on this VUCS will be notified ensuring that the most recent clinical information is always available for patient care.

How exactly do you ensure data protection?

Only verified users are allowed to query the Research Variant Database. A user verification requires a completely filled user profile (first name, last name, Institutional address, contact telephone number, email address). GeneTalk will check the identity of such users to guarantee that they are professional clinical scientists that have a legitimate research interest. Verified users are allowed to submit to the WatchList and to exchange phenotype and genotype information of a sample. By committing a variant to the WatchList, verified users mutually agree to collaborate on clearing the status of a VUCS and are familiar with the code of conduct of the Research Variant Database.

If a match has been made and one of the matching parties does not respond in an appropriate amount of time, the GeneTalk staff will clarify whether any technical problems occurred. Serious infringements of the Watchlist will be penalized. If we encounter unfair or unethical behavior will exclude the user from the Watchlist and take legal actions if necessary.

Of course, all data is transferred encrypted (using SSL, i.e., the same encryption as used in online banking) and stored in a high security data center.

Do you differentiate between known disease genes and genes that are not yet disease-related?

Yes we do. If a gene is listed in the Online Catalog of Human Genes and Genetic Disorders, OMIM, then we match queries about the exact same VUCS. For genes that are not yet associated with any Mendelian disorder, we match all VUCS queries regarding this specific gene.

GeneTalk GmbH
Retzbacher Weg 83
13189 Berlin, Germany

CEO:
Dr. Peter Krawitz
Dr. Tom Kamphans

info@gene-talk.de
Phone: +49 (0) 160 766 9042
Fax: +49 (0) 30 138 838 01

Commercial registry:
Amtsgericht Charlottenburg
Nr. HRB 153711B