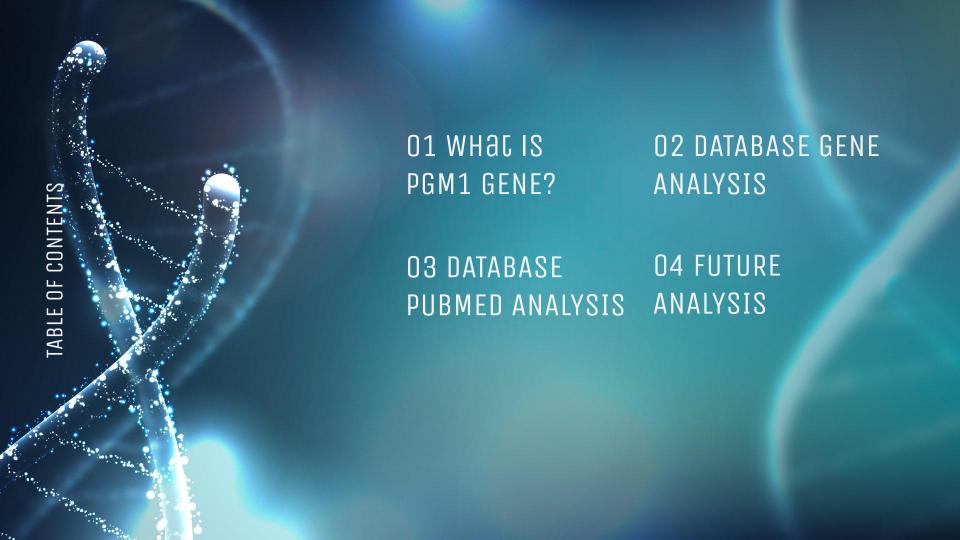
PGM1 GENE ANALYSIS Giacomo Villa 807462







A BIG FAMILY!

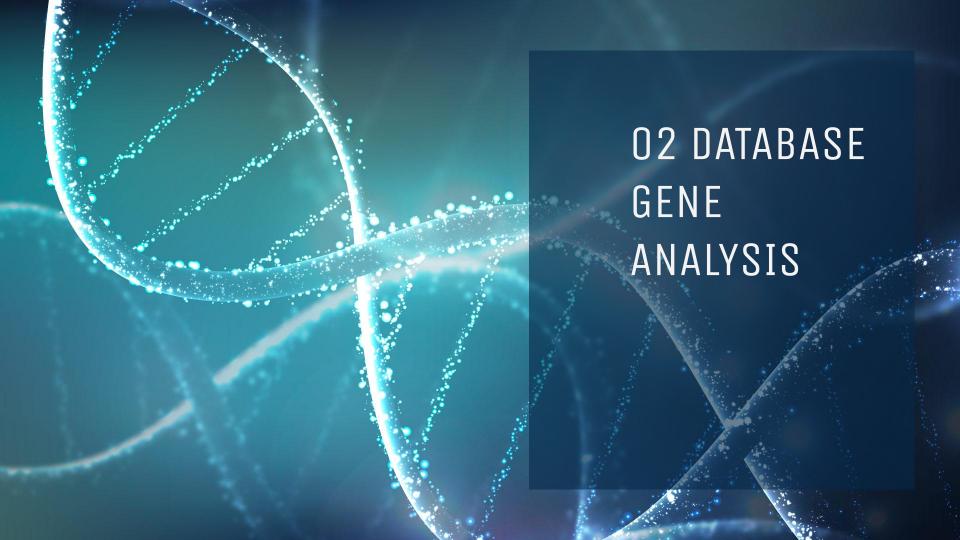
The protein encoded by this gene is an isozyme of phosphoglucomutase (PGM) and belongs to the phosphohexose mutase family. There are several PGM isozymes, which are encoded by different genes¹.

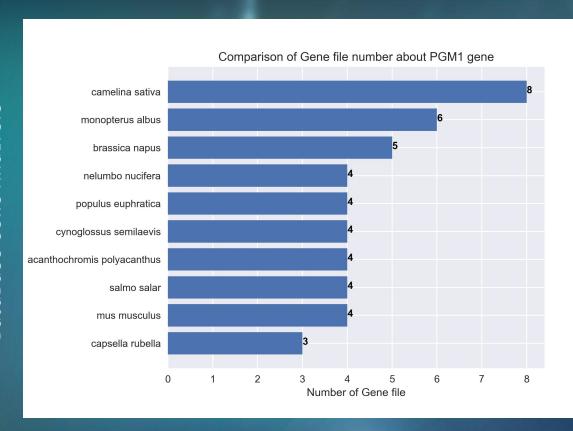
Function

PGM1 is an evolutionarily conserved enzyme that regulates one of the most important metabolic carbohydrate trafficking in prokaryotic and eukaryotic organisms¹.

In the human...

...the **PGM1 gene** is localized to the **first chromosome**.





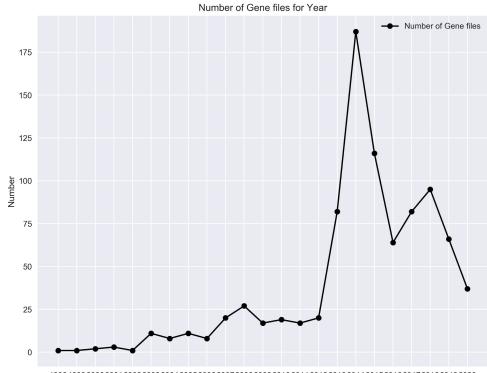
Top 10 organisms for query done on gene database.

No resource has been found for justifying these numbers...

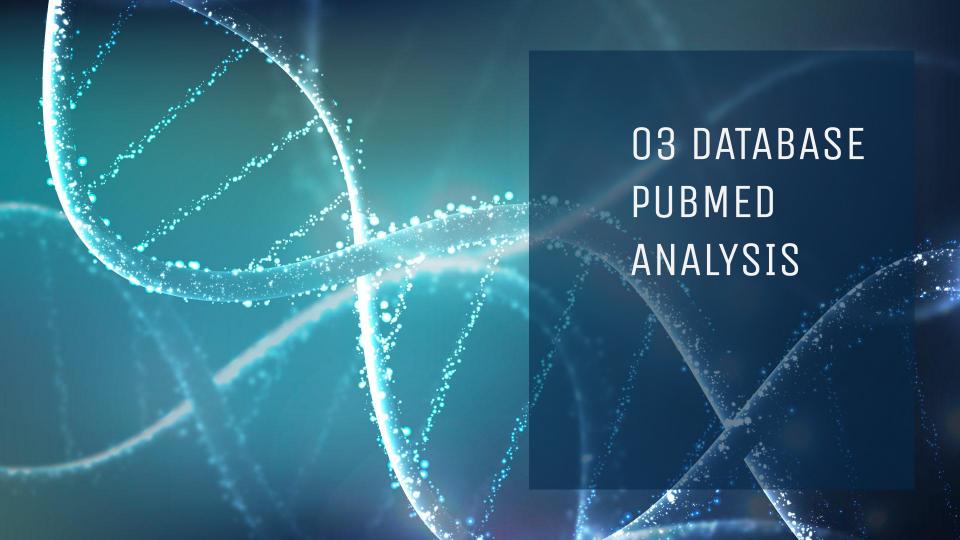
The analysis has been done on **organism** field.

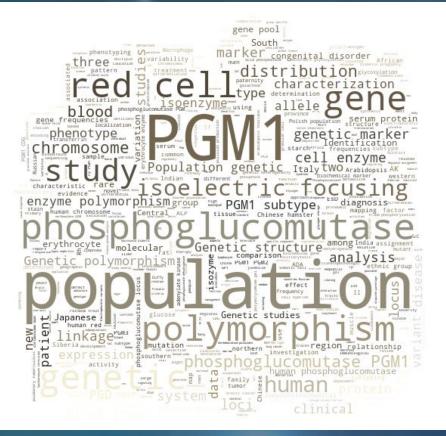
Analysis has been done on "create date" field.

The increasing number of the file could be caused by the lower price and high precision of sequencing techniques.



19981999200020012002200320042005200620072008200920102011201220132014201520162017201820192020 Year





This analysis has been done on papers titles found in pubmed database.

A lot of words recall the object of research.

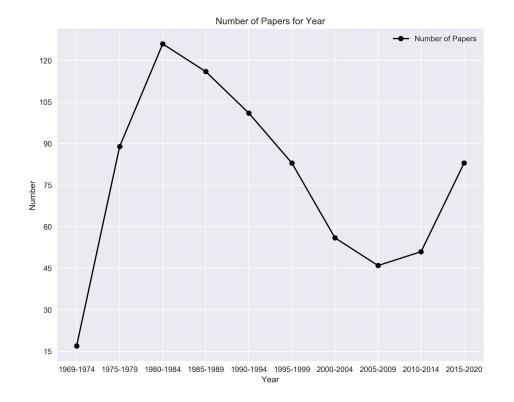
The words: **red**, **cell**, **blood** could be related to a disease caused by gene **deficiency** (Dilated cardiomyopathy¹).

This analysis has been done on papers abstracts found in pubmed database.

Once again a **lot of words recall** the PGM1 gene.

Allele and locus are related to presence of allele for PGM1 gene. Hopkinson at all, at the end of '60, suggesting that there are at least 5 alleles identified¹.





This analysis has been done on the field "year" about papers release.

A lot of studies are focused at the end of last century. This because "exploratory studies" (alleles, PGM2 and PGM3 discovering, polymorphism of phosphoglucomutase) are centered in those years¹.

The **last decade i**ncreasing could be originated by the **studies of disease** caused by this gene mutations².

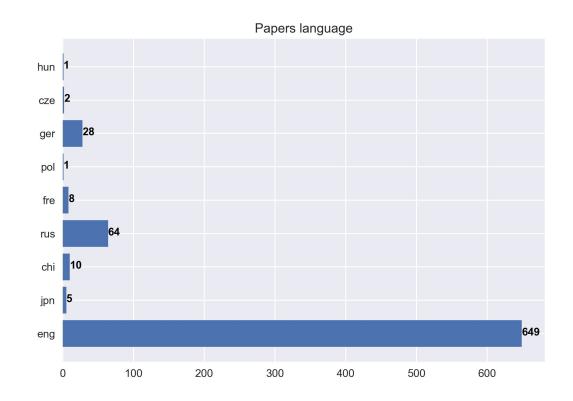
^{1:} Molecular Genetics, Mapping

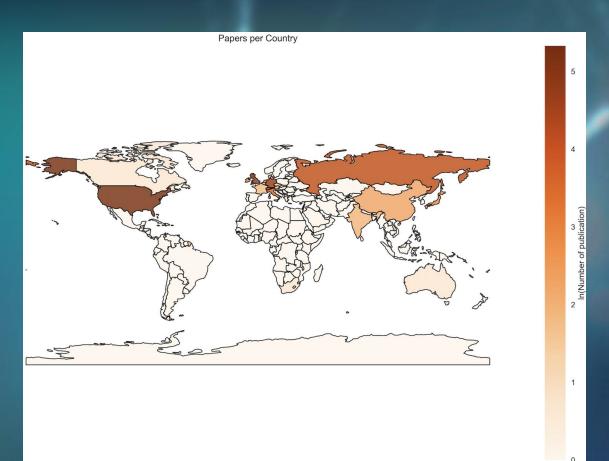
^{2:} Congenital Disorder of Glycosylation

Of course, the most of the papers have been wrote in english. But there are quite few Russian's numbers.

Could the rivalry against USA and Russia be recorded during the cold world?

This analysis has been done on the "language" paper field.





USA, **England** and **Germany** host a lot of scientific journals and they are followed by **Russia** and **Italy**.

This analysis has been done on **Journal Info data**.



Find an explanation about gene file number.

Find **clues about cold war theory**. How many russian papers have been done in the years of cold war?

Analysis and match on papers titles and abstracts between last century studies and recent one.

Find, for every country with a significative numbers of papers, the **languages used for them**.

