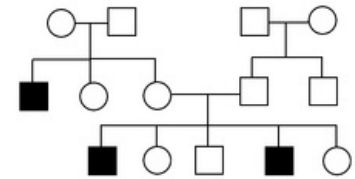


# Gonosomal recessive inheritance

**Gonosomal recessive inheritance** is the transmission of the observed trait, the allele on which lies gonosome, namely **chromosome X** (X-linked inheritance). Few genes are located on the chromosome Y, eg. SRY. The increased pubic hair previously reported as an example of a Y-linked trait (OMIM: 425500 (<https://www.omim.org/entry/425500>)), is probably not strongly linked to the Y chromosome.

A typical manifestation is a far greater number of sick men than women, who are overwhelmingly only healthy **carriers**.



An example of a family tree with a gonosomally recessive trait

## Deviations

Some inconsistencies may arise because carriers have different degrees of disease manifestation. It is caused by random Lyonization of one of the **X chromosomes** in each cell of the body. This can occur, for example, in hemophilia.

## Examples

- Hemophilia A (OMIM: 306700 (<https://www.omim.org/entry/306700>))
- Hemophilia B (OMIM: 306900 (<https://www.omim.org/entry/306900>))
- Color blindness (OMIM: 303800 (<https://www.omim.org/entry/303800>))
- Duchenne muscular dystrophy (OMIM: 310200 (<https://www.omim.org/entry/310200>))
- Becker muscular dystrophy (OMIM: 300376 (<https://www.omim.org/entry/300376>))

## Links

### Related links

- Autosomal dominant inheritance
- Autosomal recessive inheritance
- Gonosomal inheritance
  - Gonosomal dominant inheritance
- X-linked inheritance
- Y-linked inheritance
- Non-Mendelian inheritance

Monogenically inherited diseases		
autosomally inherited diseases	autosomal dominant inheritance	autosomal inherited agammaglobulinemia • achondroplasia • Apert syndrome • brachydactyly • familial hypercholesterolemia • Huntington's chorea • Marfan syndrome • myotonic dystrophy • neurofibromatosis • osteogenesis imperfecta (late form) • polycystic kidney disease • polydactyly • Thomsen syndrome
	autosomal recessive inheritance	autosomal inherited agammaglobulinemia • Ataxia telangiectasia • cystic fibrosis • phenylketonuria • Friedreich's ataxia • osteogenesis imperfecta (early form) • polycystic kidney disease • galactosemia • glycogenoses • congenital adrenal hyperplasia • sickle cell anemia • Hurler syndrome • Tay-Sachs disease • Thomsen syndrome • thalassemia • Werdnig-Hoffmann disease • Wilson disease
gonosomally inherited diseases	gonosomal dominant inheritance	incontinentia pigmenti • vitamin D-resistant rickets
	gonosomal recessive inheritance	Becker muscular dystrophy • Bruton's agammaglobulinemia • color blindness • Duchenne muscular dystrophy • hemophilia A • hemophilia B • Wiskott-Aldrich syndrome
	Y-linked inheritance	--