

| DISEASE | AFFECTED PATHWAY | CLINICAL EXAMPLE |
|-----------------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------|
| SPHINGOLIPIDOSES | Degradation of ceramide-containing membrane lipids | Gaucher disease, Fabry disease, Niemann-Pick A/B |
| MUCOPOLYSACCHARIDOSES | Glycosaminoglycane degradation | MPS type I (Hurler disease) |
| OLIGOSACCHARIDOSES | Degradation of complex carbohydrate side-chains of glycoproteins | α -Mannosidosis |
| MUCOLIPIDOSES | Deficiency of several lysosomal enzymes, many pathways affected | Mucopolipidos type II |
| LIPID STORAGE DISEASE | Degradation of lipid compounds other than sphingolipids | Cholesterol ester storage disease |
| GLYCOGEN STORAGE DISEASE TYPE II | Intralysosomal glycogen breakdown due to deficiency of lysosomal acid maltase | Pompe disease |
| LYSOSOMAL TRANSPORT DEFECTS | Failure to transport certain compounds across the lysosomal membrane | Sialic acid transport defect |

Tabella 1. Classificazione delle malattie da accumulo lisosomiale (*Modified according to van Dahl S, Mengel E-2010*)

| Disease | Incidence | Prevalence |
|--------------------------------|-------------|-------------|
| Cystinosis | 1/281,000 | 1/192,000 |
| Anderson–Fabry disease | 1/117,000 | 1/117,000 |
| Gaucher disease | 1/59,000 | 1/57,000 |
| GM ₁ gangliosidosis | 1/422,000 | 1/384,000 |
| Krabbe disease | 1/201,000 | 1/141,000 |
| α-mannosidosis | 1/1,056,000 | 1/1,056,000 |
| MPS I | 1/111,000 | 1/88,000 |
| MPS II | 1/162,000 | 1/136,000 |
| ASMD | 1/264,000 | 1/248,000 |
| Niemann–Pick C | 1/211,000 | 1/211,000 |
| Pompe disease | 1/201,000 | 1/146,000 |
| Sandhoff disease | 1/422,000 | 1/384,000 |
| Tay-Sachs disease | 1/222,000 | 1/201,000 |
| Wolman disease | 1/704,000 | 1/528,000 |
| All LSDs | 1/9000 | 1/7700 |

Legenda: ASMD, acid sphingomyelinase deficiency (formerly Niemann–Pick A/B); LSD, lysosomal storage disorder; MPS, mucopolysaccharidosis

Tabella 2. Incidenza e prevalenza delle malattie da accumulo lisosomiale (adapted from Meikle PJ, et al. 1999)

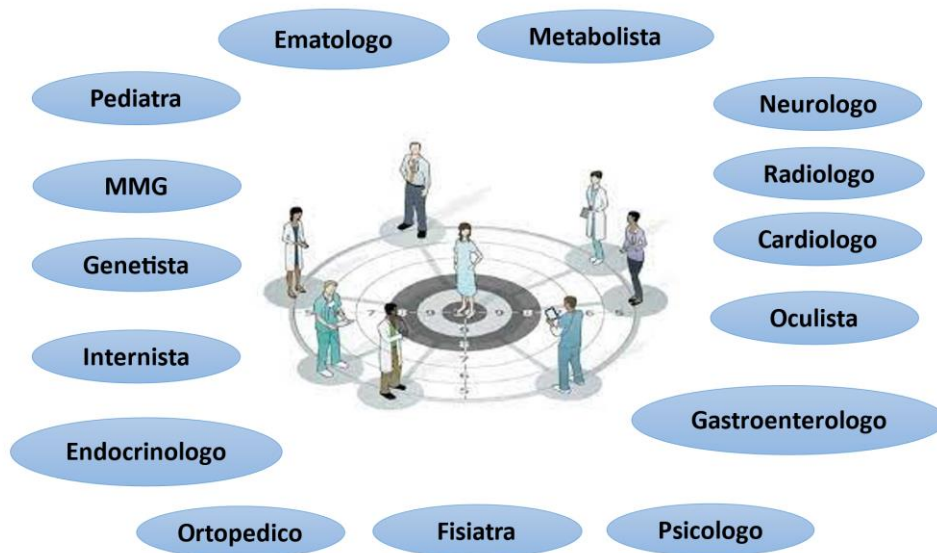


Figura 1. La gestione multidisciplinare delle malattie da accumulo lisosomiale