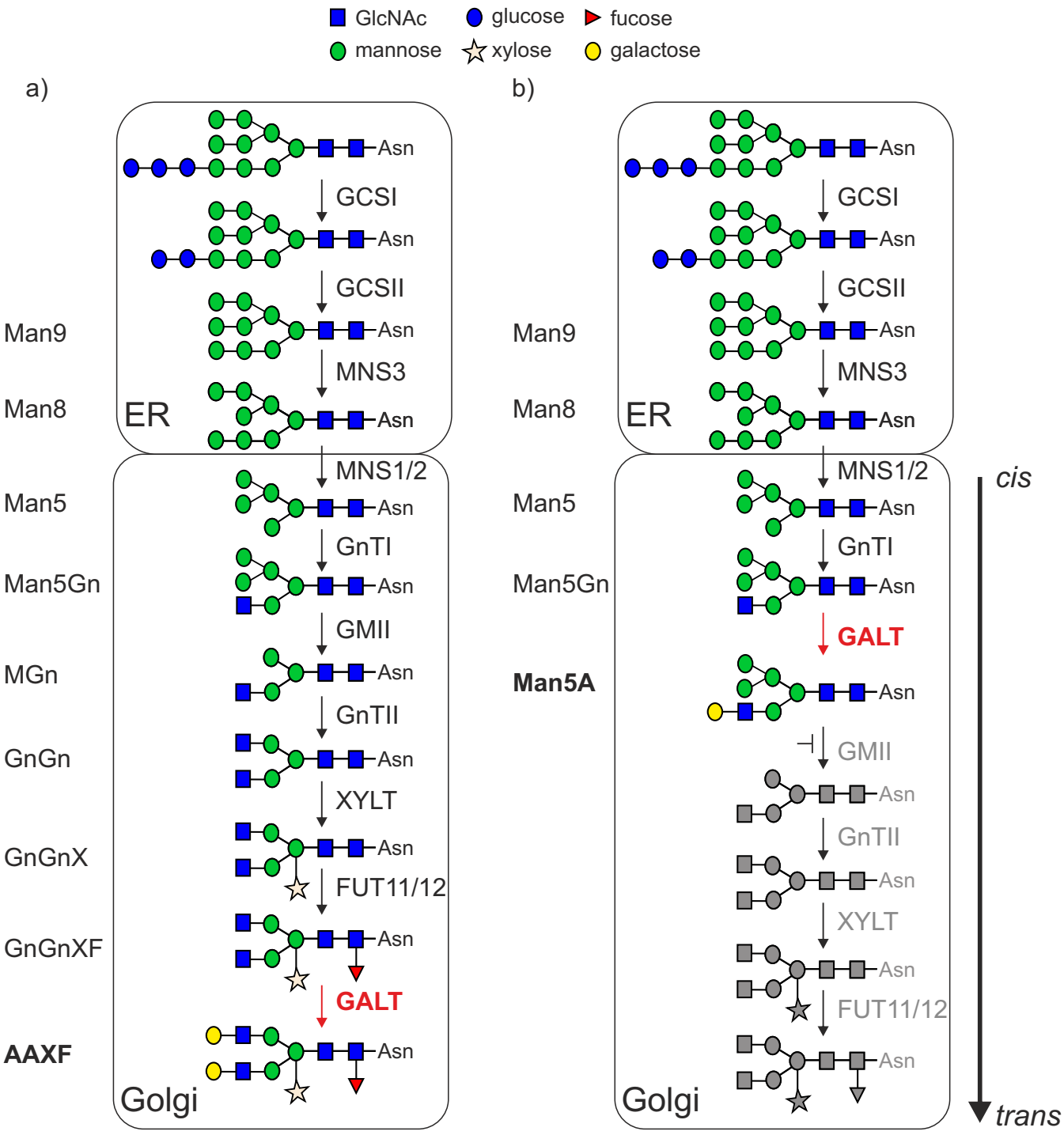

Figure S2: Schematic presentation of the N-glycan processing pathway and the inhibition of processing by GALT action at different sites within the Golgi.
N-glycan processing enzymes: GCSI: α-glucosidase I; GCSII: α-glucosidase II; MNS3: ER-α-mannosidase I; MNS1/2: Golgi-α-mannosidase I; GnTI: N-acetylglucosaminyltransferase I; GMII: Golgi-α-mannosidase II; GnTII: N-acetylglucosaminyltransferase II; XYLT: β1,2-xylosyltransferase; FUT11/FUT12: core α1,3-fucosyltransferase; GALT: human β1,4-galactosyltransferase.
a) GALT is targeted to the *trans*-Golgi (e.g. by fusion to RRR) and adds terminal galactose residues to the fully processed complex N-glycan GnGXF resulting in the formation of AAXF structures.
b) GALT is targeted to the *cis*/medial-Golgi (e.g. by fusion to NNN) and adds a single galactose residue to hybrid (Man5Gn) or other incompletely processed N-glycans. The presence of galactose (Man5A) inhibits N-glycan processing enzymes acting downstream of GnTI (structures depicted in grey).