

Metadata		Data
Select	<div>dt[CRITERIA, meta = TRUE]<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div> <div><i># to subet the metadata only for males</i> <i>> male_meta <- dt[sex == "M",</i> <i> meta = TRUE]</i></div>	<div>dt[CRITERIA]<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div> <div><i># to keep only data > 5s</i> <i>> late_dt <- dt[t > 5]</i> Note: metadata is updated when selection removes all data from one id.</div>
Alter, create & delete (meta)variables	<div>dt[, X := value, meta = TRUE]<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div> <div><i># to create a metavariable set to "wt"</i> <i>> dt[, genotype := "wt", meta = TRUE]</i> <i># delete</i> <i>> dt[, sex := NULL, meta = TRUE]</i></div>	<div>dt[, Y := value]<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div> <div><i># to create t_2 (t - 1)</i> <i>> dt[, t_2 := t - 1]</i> <i># to delete t</i> <i>> dt[, t := NULL]</i> Note: update data in place. No copy of dt in memory.</div>
Expand metavariables as variables	<div>dt[xmv(X)]<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div> <div><i># to select data with sex</i> <i>> dt <- dt[xmv(sex) == "M"]</i> <i># to copy a metavariable as a variable</i> <i>> dt[, s := xmv(sex)]</i></div>	<div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div>
Aggregate & summary	<div>dt[, OPERATION, by = id]<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div> <div><i># to compute mean activity, per individual</i> <i>> dt <- dt[,.(</i> <i> mean_act = mean(activity)</i> <i>), by = id]</i> <i># to count reads per id</i> <i>> dt[, .N, by = id]</i></div>	<div>OPERATION<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div>
Join data & metadata	<div>rejoin(dt)<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div></div> <div><i># to reunite data and metadata</i> <i>> full_table <- rejoin(dt)</i> Note: used mostly after aggregation or preprocessing</div>	<div>REJOIN<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div>