Variable	Example	Type of Regression	R function / R function for mixed models
Continuous	Age, Quality of Life	linear	`lm`
			`lmer(), glmmTMB()`
Binary	Success yes/no	binary logistic	`glm(family=binomial)`
			`glmer(), glmmTMB()`
Trials (or proportion of *counts*)	20 successes out of 30 trials	logistic	`glm(cbind(trial,success), family=binomial)`
			`glmer(), glmmTMB()`
Count data	Number of usage, counts of events	Poisson	`glm(family=poisson)`
			`glmer(), glmmTMB()`
Count data, with excess zeros or overdispersion	Number of usage, counts of events (with higher variance than mean of response)	negative binomial	`glm.nb()`
			`glmer.nb(), glmmTMB(family=nbinom)`
Count data with very many zeros (inflation)	see count data, but response is modelled as mixture of Bernoulli & Poisson distribution (two sources of zeros)	zero-inflated	`zeroinfl()`
			`glmmTMB(ziformula, family=poisson)`
Count data, with very many zeros (inflation) and overdispersion	Number of usage, counts of events (with higher variance than mean of response)	zero-inflated negative binomial	`zeroinfl(dist="negbin")`
			`glmmTMB(ziformula, family=nbinom)`
Count data, zero-truncated	see count data, but only for positive counts (hurdle component models zero-counts)	hurdle (Poisson)	`hurdle()`
			`glmmTMB(family=truncated_poisson)`
Count data, zero-truncated and overdispersion	see "Count data, zero-truncated", but with higher variance than mean of response	hurdle (neg. binomial)	`vglm(family=posnegbinomial)`
			`glmmTMB(family=truncated_nbinom)`
Proportion / Ratio (without zero and one)	Percentages, proportions of *continuous* data	Beta *(see note below)*	`betareg()`
			`glmmTMB(family=beta)`
Proportion / Ratio (including zero and one)	Percentages, proportions of *continuous* data	Beta-Binomial	`BBreg(), betabin(), vglm(family=betabinomial)`
Ordinal	Likert scale, worse/ok/better	ordinal, proportional odds	`polr(), clm()`
			`clmm(), mixor(), MCMCglmm()`
Cumulative, multinomial	No natural order of categories, like red/green/blue	cumulative link, multinomial	`multinom(), clm(),bracl(), brmultinom()`
			`clmm(), mixor(), MCMCglmm()`
Continuous, right-skewed	Financial data, reaction times	Gamma	`glm(family=Gamma)`
			`glmer(), glmmTMB()`
Continuous, but truncated or outliers		truncated	`censReg(), tobit(), vglm(family=tobit)`
Proportion / Ratio with > 2 categories	Biomass partitioning in plants (ratio of leaf, stem and root mass)	Dirichlet	`DirichReg()`

Note that ratios or proportions from count data, like `cbind(trials, success)`, are modelled as logistic regression with `glm(cbind(trials, success), family=binomial())`, while ratios from continuous data where the response ranges from 0 to 1 are modelled using beta-regression.