Simply prefix your regression command with `bayes`:

- Over 50 likelihood models supported, including multilevel, survival, GLM, and more
- Censoring, truncation, sample selection
- Intuitive and elegant model specification
- Default and custom priors
- Comprehensive Bayesian-features support

**Linear regression**
Use default normal priors for coefficients and inverse-gamma prior for variance.

```
. bayes: regress y x1 x2
```

![Linear regression output](image)

Use Gibbs sampling.

```
. bayes, gibbs: regress y x1 x2
```

**Logistic regression**
Use default normal priors for coefficients.

```
. bayes: logistic y x1 x2
```

Use custom Cauchy priors for coefficients on `x1` and `x2`.

```
. bayes, prior((y:x1 x2), cauchy(0,2.5)): logistic y x1 x2
```

Check convergence of coefficient on `x1`.

```
. bayesgraph diagnostics {y:x1}
```

![Logistic regression output](image)
Generalized linear model
Use burn-in of 1,000 and MCMC size of 5,000
  . bayes, burnin(1000) mcmcsize(5000): glm y x1 x2, family(binomial) link(log)
Test that coefficient \{y:x1\} is greater than 4
  . bayestest interval \{y:x1\}, lower(4)

Survival regression
Declare survival data
  . stset time, failure(died)
Fit Bayesian exponential regression
  . bayes, saving(mcmc_exp): streg x1 x2, distribution(exponential)
  . estimates store exp
Fit Bayesian Weibull regression
  . bayes, saving(mcmc_weibull): streg x1 x2, distribution(weibull)
  . estimates store weibull
Compare models using Bayes factor
  . bayestats ic exp weibull, bayesfactor

Compare models using posterior probabilities
  . bayestest model exp weibull

Other regression models
Ordered logistic regression
  . bayes: ologit y x1 x2
Conditional logistic regression
  . bayes: clogit y x1 x2, group(id)
Poisson regression
  . bayes: poisson y x1 x2
Zero-inflated negative binomial regression
  . bayes: zinb y x1 x2, inflated(z1 z2)
Multilevel regression
  . bayes: mixed y x1 x2 || id:
And more
  . bayes: ...

Perform any analyses using GUI