

# Package ‘StatTools’

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**Title** All-in-One Chi Distribution CI

**Version** 0.1.1

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**Description** Computes confidence intervals for variance using the Chi-Square distribution, without requiring raw data. Wikipedia (2025) <[https://en.wikipedia.org/wiki/Chi-squared\\_distribution](https://en.wikipedia.org/wiki/Chi-squared_distribution)>. 'All-in-One Chi Distribution CI' provides functions to calculate confidence intervals for the population variance based on a chi-squared distribution, utilizing a sample variance and sample size. It offers only a simple all-in-one method for quick calculations to find the CI for Chi Distribution.

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**Imports** stats

**Suggests** testthat

**Encoding** UTF-8

**RoxygenNote** 7.3.2

**NeedsCompilation** no

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**Repository** CRAN

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chi\_var\_ci\_no\_data      *Compute Confidence Interval for Variance Without Raw Data*

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**Description**

This function calculates the confidence interval for variance when only + the sample variance and sample size are known.

**Usage**

```
chi_var_ci_no_data(s2_given, n_given, conf_level)
```

**Arguments**

s2_given	Numeric. The sample variance.
n_given	Integer. The sample size.
conf_level	Numeric. The confidence level (e.g., 0.95 for 95% CI).

**Value**

A numeric vector with the lower and upper bounds of the confidence interval.

**Examples**

```
s2_given <- 21.5 # Sample variance
n_given <- 26 # Sample size
conf_level <- 0.98 # 98% confidence level
chi_var_ci_no_data(s2_given, n_given, conf_level)
```

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