Clinical Scenario Evaluation

# General information

## Project information

This report was generated by [Mediana's User] using the Mediana package version 1.0.7. For more information about the Mediana package, see http://gpaux.github.io/Mediana.

Project title: Case study 1

Description: Clinical trial in patients with rheumatoid arthritis

## Simulation parameters

Random seed: 42938001

Number of simulations: 1000

Number of cores: 4

Start time: 2018-07-16 10:32:18

End time: 2018-07-16 10:32:25

Duration: 7.58 secs

# Data model

## Sample size

Number of samples: 2

Number of sample size sets: 4

1. Sample size

| **Sample size set** | **Sample** | **Size** |
| --- | --- | --- |
| N = 80 | Placebo | 80 |
| Treatment | 80 |
| N = 90 | Placebo | 90 |
| Treatment | 90 |
| N = 100 | Placebo | 100 |
| Treatment | 100 |
| N = 110 | Placebo | 110 |
| Treatment | 110 |

## Outcome distribution

Number of outcome parameter sets: 3

Outcome distribution: Binomial

1. Outcome parameter

| **Outcome parameter set** | **Sample** | **Parameter** |
| --- | --- | --- |
| Pessimist | {Placebo} | prop = 0.3 |
| {Treatment} | prop = 0.5 |
| Standard | {Placebo} | prop = 0.3 |
| {Treatment} | prop = 0.55 |
| Optimist | {Placebo} | prop = 0.3 |
| {Treatment} | prop = 0.6 |

# Analysis model

## Tests

Number of tests/null hypotheses: 1

1. Tests

| **Test ID** | **Test type** | **Test parameters** | **Samples** |
| --- | --- | --- | --- |
| Placebo vs treatment | Test for proportions |  | {Placebo}, {Treatment} |

# Evaluation model

## Criteria

Number of criteria: 1

1. Criteria

| **Criterion ID** | **Criterion parameters** | **Tests** | **Statistics** | **Label** |
| --- | --- | --- | --- | --- |
| Marginal power | alpha = 0.025 | Placebo vs treatment |  | Placebo vs treatment |

# Simulation results

## Outcome Parameter (Pessimist)

1. Results summary

| **Sample Size** | **Criterion** | **Test/Statistic** | **Result** |
| --- | --- | --- | --- |
| N = 80 | Marginal power | Placebo vs treatment | 0.7090 |
| N = 90 | Marginal power | Placebo vs treatment | 0.7750 |
| N = 100 | Marginal power | Placebo vs treatment | 0.8120 |
| N = 110 | Marginal power | Placebo vs treatment | 0.8460 |

## Outcome Parameter (Standard)

1. Results summary

| **Sample Size** | **Criterion** | **Test/Statistic** | **Result** |
| --- | --- | --- | --- |
| N = 80 | Marginal power | Placebo vs treatment | 0.9020 |
| N = 90 | Marginal power | Placebo vs treatment | 0.9430 |
| N = 100 | Marginal power | Placebo vs treatment | 0.9640 |
| N = 110 | Marginal power | Placebo vs treatment | 0.9740 |

## Outcome Parameter (Optimist)

1. Results summary

| **Sample Size** | **Criterion** | **Test/Statistic** | **Result** |
| --- | --- | --- | --- |
| N = 80 | Marginal power | Placebo vs treatment | 0.9770 |
| N = 90 | Marginal power | Placebo vs treatment | 0.9870 |
| N = 100 | Marginal power | Placebo vs treatment | 0.9930 |
| N = 110 | Marginal power | Placebo vs treatment | 0.9960 |