# Salmonella Challenge SLM\_SLM\_001

#### **Purpose**

Salmonella challenge

### **Experimental Design**

Mutant mice and wild-type controls (8/group)

#### **Procedure**

Mutant mice and wild-type controls (8/group) have blood collected from the tail (50 ul) at 6 weeks of age for peripheral blood leukocyte and haematology analysis.

One week later mice are infected with *Salmonella* Typhimurium M525 strain containing TETc via the intravenous route.

Weights are recorded daily and any mice that have lost greater than 20% or that exhibit clinical signs are sacrificed.

At day 14-post infection half the mutants and wild type controls are sacrificed with spleen, liver and caecal contents collected. Bacterial counts in the organs are determined by serial plating and portion of the spleen and liver are formalin fixed and paraffin embedded.

At day 28-post infection the remaining mutants are sacrificed and processed as above. In addition blood is collected by cardiac puncture and anti-TETc antibodies in the serum are determined by ELISA for total IgG, IgG1 and IgG2a.

#### **Parameters and Metadata**

## Immunization Type SLM\_SLM\_001\_001 | v1.0

procedureMetadata

Req. Analysis: true Req. Upload: true Is Annotated: false

**Description:** immunization\_type

Options: IV Salmonella typhimurium SL1344 TetC, IV Salmonella typhimurium M525 TetC,

## Days post-infection SLM\_SLM\_002\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

**Description:** days\_post\_infection

#### Tissue Collection Date SLM\_SLM\_003\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

Unit Measured: days post infection

Description: tissue\_collection\_date

## Spleen Weight SLM\_SLM\_004\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

Unit Measured: g

Description: spleen\_weight

## Spleen Counts in 20 micro litres SLM\_SLM\_005\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

Unit Measured: Counts per 20 micro litres

**Description:** spleen\_counts\_in\_20\_micro\_litres

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## Spleen Dilution Reading SLM\_SLM\_006\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

**Description:** spleen\_dilution\_reading

### Spleen bacterial count SLM\_SLM\_007\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: false Is Annotated: true

Unit Measured: Bacterial count/g tissue

**Description:** spleen\_bacterial\_count

**Derivation:** 

archived('Spleen counts in 20 micro litres \* 250 \* power10 spleen dilution reading \* 1/spleen

weight')

## Liver Weight SLM\_SLM\_008\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

Unit Measured: g

**Description:** liver\_weight

### Liver Counts in 20 micro litres SLM\_SLM\_009\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

Unit Measured: Counts per 20 micro litres

**Description:** liver\_counts\_in\_20\_micro\_litres

## Liver Dilution Reading SLM\_SLM\_010\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

**Description:** liver\_dilution\_reading

## Liver bacterial count SLM\_SLM\_011\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: false Is Annotated: true

Unit Measured: Bacterial count/g tissue

**Description:** liver\_bacterial\_count

**Derivation:** 

archived('Liver counts in 20 micro litres \* 250 \* power10 liver dilution reading \* 1/liver weight')

# Caecal Contents Counts in 20 micro litres SLM\_SLM\_012\_001 | v1

.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

Unit Measured: Counts per 20 micro litres

**Description:** caecal\_contents\_counts\_in\_20\_micro\_litres

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## Caecal Contents Dilution Reading SLM\_SLM\_013\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: true Is Annotated: false

Description: caecal\_contents\_dilution\_reading

#### Caecal Contents bacterial count SLM\_SLM\_014\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: false Is Annotated: true

Unit Measured: Bacterial count/ml contents

**Description:** caecal\_contents\_bacterial\_count

**Derivation:** 

archived('Caecal contents counts in 20 micro litres \* 250 \* power10 caecal contents dilution

reading')

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#### **Comment** SLM\_SLM\_015\_001 | v1.0

simpleParameter

Req. Analysis: false Req. Upload: false Is Annotated: false

**Description:** comment

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## Pre-Day 14 Death SLM\_SLM\_016\_001 | v1.1

simpleParameter

Reg. Analysis: false Reg. Upload: true Is Annotated: true

Description: pre\_day\_1\_death

Options: No, Yes,

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## Salmonella weight curve SLM\_SLM\_017\_001 | v1.0

seriesParameter

Req. Analysis: false Req. Upload: false Is Annotated: false

Unit Measured: % weight difference

**Increments:** 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23,

24, 25, 26, 27, 28,