# 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

---

## 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

---

## 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')

---

## Comment SLM_SLM_015_001 | v1.0

simpleParameter

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

**Description:** comment

---

## Pre-Day 14 Death SLM_SLM_016_001 | v1.1

simpleParameter

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

**Description:** pre_day_1_death

**Options:** No, Yes,

---

## 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,

---