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,

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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,

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