

### InVivos Pte Ltd- Health Report

|                                      |                                 |                              |                                   |
|--------------------------------------|---------------------------------|------------------------------|-----------------------------------|
| <b>Production site:</b>              | InVivos                         | <b>Date of report:</b>       | 03 Jan 2019                       |
| <b>Address:</b>                      | 9 Perahu Road, Singapore 718793 | <b>Species:</b>              | Rat: 1 stock (as specified below) |
| <b>Health report Group:</b>          | BBR 01                          | <b>Transferred From:</b>     | Taconic Biosciences Inc.          |
| <b>Date Location First Occupied:</b> | 31 Jan 2013                     | <b>Animal strains/Stock:</b> | WH                                |
| <b>Taconic Health Standard:</b>      | Murine Pathogen Free (MPF)      |                              |                                   |

\* **Latest Test Date** is the date animals are removed from the colony to begin the health testing process.

Compilation of all results for web posting may take several weeks.

#### Viruses

| Target Organism                          | Test Frequency | Testing Laboratory | Test Method | *Latest Test Date | Species Tested<br>M = Mice<br>R = Rat | Latest Result<br>#positive /<br>#tested | 2018<br>Cumulative<br>Results<br>#positive/<br>#tested | 2016-2017<br>Cumulative<br>Results<br>#positive/<br>#tested |
|--|----------------|--------------------|-------------|-------------------|---------------------------------------|---|--|---|
| Kilham's Rat Virus (KRV)                 | Monthly        | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/60   | 0/120   |
| Rat Coronavirus (RCV)                    | Monthly        | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/60   | 0/120   |
| Rat Minute Virus (RMV)                   | Monthly        | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/60   | 0/120   |
| Rat Parvo Virus (RPV)                    | Monthly        | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/60   | 0/120   |
| Sialodacryoadenitis Virus (SDAV)         | Monthly        | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/60   | 0/120   |
| Toolon's H-1 Virus (TH1)                 | Monthly        | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/60   | 0/120   |
| Encephalomyelitis Virus (GD7)            | Monthly        | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/60   | 0/120   |
| Pneumonia Virus of Mice (PVM)            | Monthly        | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/60   | 0/120   |
| Sendai Virus                             | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/20   | 0/40  |
| Lymphocytic Choriomeningitis Virus (LCM) | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/20   | 0/40  |
| Hantaan Virus                            | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/20   | 0/40  |
| Mouse Adenovirus (FL) (MAV 1)            | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/20   | 0/40  |
| Mouse Adenovirus (K87) (MAV 2)           | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/20   | 0/40  |
| Respiratory Enteric Virus III (REO 3)    | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018       | R                                     | 0/5                                     | 0/20   | 0/40  |

#### Bacteria, Mycoplasma and Fungi

| Target Organism                             | Test Frequency | Testing Laboratory | Test Method | Latest Test Date | Species Tested<br>M = Mice<br>R = Rat | Latest Result<br>#positive /<br>#tested | 2018<br>Cumulative<br>Results<br>#positive/<br>#tested | 2016-2017<br>Cumulative<br>Results<br>#positive/<br>#tested |
|---|----------------|--------------------|-------------|------------------|---------------------------------------|---|--|---|
| Beta hemolytic Streptococcus                | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Bordetella bronchiseptica                   | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Clostridium piliforme                       | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Corynebacterium kutscheri                   | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Klebsiella oxytoca                          | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Klebsiella pneumoniae                       | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Mycoplasma sp.                              | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Pasteurella pneumotropica                   | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Other Pasteurella sp.                       | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Pseudomonas aeruginosa                      | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Salmonella sp.                              | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Staphylococcus aureus                       | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Streptobacillus moniliformis                | Quarterly      | IDEXX RADIL        | PCR         | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Streptococcus pneumoniae                    | Quarterly      | IDEXX RADIL        | CULT        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Cilia Associated Respiratory Bacillus(CARB) | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Helicobacter sp.                            | Quarterly      | IDEXX RADIL        | PCR         | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Pneumocystis sp.                            | Quarterly      | IDEXX RADIL        | PCR         | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |

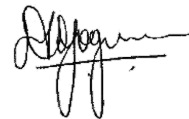
## Parasites

| Target Organism          | Test Frequency | Testing Laboratory | Test Method | Latest Test Date | Species Tested<br>M = Mice<br>R = Rat | Latest Result<br>#positive /<br>#tested | 2018<br>Cumulative<br>Results<br>#positive/<br>#tested | 2016-2017<br>Cumulative<br>Results<br>#positive/<br>#tested |
|--------------------------|----------------|--------------------|-------------|------------------|---------------------------------------|---|--|---|
| Ectoparasites            | Quarterly      | IDEXX RADIL        | MICR        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Endoparasites            | Quarterly      | IDEXX RADIL        | MICR-PCR    | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Enteric helminths        | Quarterly      | IDEXX RADIL        | MICR        | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |
| Encephalitozoon cuniculi | Quarterly      | IDEXX RADIL        | MFI         | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |

| Target Organism   | Test Frequency | Testing Laboratory  | Test Method | Latest Test Date | Species Tested<br>M = Mice<br>R = Rat | Latest Result<br>#positive /<br>#tested | 2018<br>Cumulative<br>Results<br>#positive/<br>#tested | 2016-2017<br>Cumulative<br>Results<br>#positive/<br>#tested |
|-------------------|----------------|---------------------|-------------|------------------|---------------------------------------|---|--|---|
| Necropsy findings | Quarterly      | Taconic Diagnostics |             | 10 Dec 2018      | R                                     | 0/5                                     | 0/20   | 0/40  |

Health testing performed against IHMS™ standards at Taconic Biosciences Inc. using samples supplied by InVivos.

Reviewed by



Nijaguna Bethur, B Vet Sc, MVSc (Path)  
(Veterinary Services Manager, InVivos Pte Ltd)

Do you have questions about this health report? Contact Dr.Nijaguna Bethur at +65 66438619 or [Nijaguna\\_bethur@invivos.com.sg](mailto:Nijaguna_bethur@invivos.com.sg)