

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

F1\_M3

**NTP Study Number:** C07062  
**Lock Date:** 03/30/2012  
**Cage Range:** ALL  
**Date Range:** ALL  
**Reasons For Removal:** ALL  
**Removal Date Range:** ALL  
**Treatment Groups:** Include ALL  
**Study Gender:** Both  
**TDMSE Version:** 3.0.1.1\_001  
**PWG Approval Date:** NONE

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 3

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63958

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

---

**Experiment Number:** 07062 - 02

**Test Type:** 30-day

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

**CAS Number:** L-MWNT-1020

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**First Dose M/F:** 05/30/11 / 05/30/11

**Lab:** BNW

---

**ANIMAL ID:** 4

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63959

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**Experiment Number:** 07062 - 02

**Test Type:** 30-day

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

**CAS Number:** L-MWNT-1020

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**First Dose M/F:** 05/30/11 / 05/30/11

**Lab:** BNW

---

**ANIMAL ID:** 15

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63970

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 17

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63972

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
\* Trachea

\* Lung

\* Lymph Node, Mediastinal

\* Pharynx

---

**MISSING**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Nose

Inflammation

Suppurative, Minimal

---

**Experiment Number:** 07062 - 02

**Test Type:** 30-day

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013

**Time Report Requested:** 12:41:38

**First Dose M/F:** 05/30/11 / 05/30/11

**Lab:** BNW

---

**ANIMAL ID:** 18

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63973

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 23

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63978

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Nose

\* Pharynx

\* Trachea

---

**MISSING**

\* Lymph Node, Mediastinal

---

**Experiment Number:** 07062 - 02

**Test Type:** 30-day

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013

**Time Report Requested:** 12:41:38

**First Dose M/F:** 05/30/11 / 05/30/11

**Lab:** BNW

---

**ANIMAL ID:** 25

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63980

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---





**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 30

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63985

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
\* Pharynx

\* Lung  
\* Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**MISSING**

\* Lymph Node, Bronchial

---

**Experiment Number:** 07062 - 02

**Test Type:** 30-day

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013

**Time Report Requested:** 12:41:38

**First Dose M/F:** 05/30/11 / 05/30/11

**Lab:** BNW

---

**ANIMAL ID:** 34

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63989

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 203

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64308

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Larynx  
Pharynx

Lymph Node, Bronchial  
Trachea

Lymph Node, Mediastinal

Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 204

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64309

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Larynx  
Pharynx

\* Lung  
Trachea

Lymph Node, Bronchial

Nose

---

**INSUFFICIENT TISSUE**

Lymph Node, Mediastinal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 215

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64320

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Lymph Node, Mediastinal

Nose

Pharynx

Trachea

---

**MISSING**

Lymph Node, Bronchial

---

**OBSERVATIONS**

Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Minimal

---

Experiment Number: 07062 - 02

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:38

First Dose M/F: 05/30/11 / 05/30/11

Lab: BNW

---

**ANIMAL ID:** 217

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64322

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Lymph Node, Bronchial  
Trachea

Lymph Node, Mediastinal

Nose

Pharynx

---

**OBSERVATIONS**

Larynx  
\* Lung

Epiglottis

Metaplasia  
Foreign Body

Squamous, Minimal  
Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 218

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64323

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Larynx  
Trachea

Lymph Node, Bronchial

Nose

Pharynx

---

**MISSING**

Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---



Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 223

TRT#: 3

SEX: Male

DAY ON TEST: 31

DOSE: 0.1 mg/m3

DISP: Terminal Sacrifice

HISTO: 64328

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Larynx  
Pharynx

Lymph Node, Bronchial  
Trachea

Lymph Node, Mediastinal

Nose

OBSERVATIONS

\* Lung

Lymph Node

Lumbar

Lumbar

Foreign Body

Hyperplasia

Pigmentation

Minimal

Lymphoid, Mild

Mild

[ Hyperplasia TGLs = 1-5 ]

[ Pigmentation TGLs = 1-5 ]

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 225

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64330

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Larynx  
Pharynx

Lymph Node, Bronchial  
Trachea

Lymph Node, Mediastinal

Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 228

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64333

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Larynx  
Pharynx

Lymph Node, Bronchial  
Trachea

Lymph Node, Mediastinal

Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 230

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64335

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Larynx  
Trachea

Lymph Node, Bronchial

Nose

Pharynx

---

**MISSING**

Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 234

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64339

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Larynx  
Pharynx

Lymph Node, Bronchial  
Trachea

Lymph Node, Mediastinal

Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 403

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64238

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Bronchial

\* Nose

Pharynx

---

**MISSING**

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 404

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64239

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 415

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64250

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Bronchial

\* Nose

Pharynx

Trachea

---

**MISSING**

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Minimal

---



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 417

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64252

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**OBSERVATIONS**

\* Larynx  
\* Lung

Epiglottis

Metaplasia  
Foreign Body

Squamous, Minimal  
Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 418

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64253

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
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**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 423

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64258

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 425

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64260

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Bronchial

\* Nose

Pharynx

Trachea

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Minimal

\* Lymph Node, Mediastinal

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 428

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64263

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**MISSING**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 430

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64265

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 434

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64269

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 603

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64168

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Mediastinal

\* Nose

Pharynx

Trachea

---

**MISSING**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

---



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 604

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64169

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Nose

Pharynx

Trachea

---

**MISSING**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 615

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64180

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

\* Lymph Node, Bronchial

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 617

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64182

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

Pharynx

Trachea

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Minimal

Inflammation

Chronic, Minimal

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 618

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64183

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**OBSERVATIONS**

\* Larynx  
\* Lung

Epiglottis

Metaplasia  
Foreign Body  
Inflammation

Squamous, Minimal  
Minimal  
Chronic, Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 623

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64188

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Nose

Pharynx

Trachea

---

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

\* Lymph Node, Mediastinal

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 625

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64190

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**MISSING**

Trachea

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

\* Lymph Node, Bronchial

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 628

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64193

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**OBSERVATIONS**

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 630

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64195

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lymph Node, Mediastinal

Pharynx

Trachea

---

**OBSERVATIONS**

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

\* Lymph Node, Bronchial

Foreign Body

Minimal

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

---



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 634

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64199

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal                      Pharynx

**MISSING**

Trachea

**OBSERVATIONS**

* Larynx	Epiglottis	Metaplasia	Squamous, Minimal
* Lung		Foreign Body	Mild
		Inflammation	Chronic, Minimal
* Lymph Node, Bronchial		Foreign Body	Minimal
		Hyperplasia	Lymphoid, Minimal
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 803

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64098

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Pharynx Trachea

**INSUFFICIENT TISSUE**

\* Lymph Node, Mediastinal

**OBSERVATIONS**

* Larynx	Epiglottis	Metaplasia	Squamous, Minimal
* Lung	Bronchiole, Epithelium	Foreign Body	Mild
		Hyperplasia	Minimal
		Inflammation	Chronic, Mild
[ Foreign Body TGLs = 1-2 ]			
* Lymph Node, Bronchial		Foreign Body	Minimal
		Hyperplasia	Lymphoid, Mild
[ Foreign Body TGLs = 2-2 ]			
[ Hyperplasia TGLs = 2-2 ]			
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 804

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64099

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Pharynx Trachea

**OBSERVATIONS**

* Larynx	Epiglottis	Metaplasia	Squamous, Minimal
* Lung	Bronchiole, Epithelium	Foreign Body	Mild
		Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
[ Foreign Body TGLs = 1-2 ]			
* Lymph Node, Bronchial		Foreign Body	Minimal
* Lymph Node, Mediastinal		Foreign Body	Minimal
		Hyperplasia	Lymphoid, Moderate
[ Foreign Body TGLs = 2-4 ]			
[ Hyperplasia TGLs = 2-4 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 815

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64110

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal                      \* Pharynx                                      Trachea

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

**OBSERVATIONS**

* Larynx	Epiglottis	Metaplasia	Squamous, Mild
* Lung		Foreign Body	Mild
	Bronchiole, Epithelium	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
[ Foreign Body    TGLs = 1-2 ]			
* Nose	Respirat Epith	Accumulation, Hyaline Droplet	Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 817

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64112

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

[ Foreign Body TGLs = 2-2 ]

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 818

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64113

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[ Foreign Body TGLs = 2-2 ]

[ Hyperplasia TGLs = 2-2 ]

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 823

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64118

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Bronchiole, Epithelium

Foreign Body

Mild

Alveolus

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

[ Foreign Body TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 825

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64120

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Bronchiole, Epithelium

Foreign Body

Mild

[ Foreign Body TGLs = 1-2 ]

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

\* Lymph Node, Bronchial

Foreign Body

Minimal

[ Foreign Body TGLs = 2-2 ]

Hyperplasia

Lymphoid, Mild

[ Hyperplasia TGLs = 2-2 ]

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal



Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 828

TRT#: 9

SEX: Male

DAY ON TEST: 31

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 64123

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

Trachea

OBSERVATIONS

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Bronchiole, Epithelium

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[ Foreign Body TGLs = 2-2 ]

[ Hyperplasia TGLs = 2-2 ]

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 830

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64125

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

Alveolus

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

[ Foreign Body TGLs = 2-2 ]

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 834

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64129

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Larynx

\* Lymph Node, Mediastinal

\* Pharynx

Trachea

**OBSERVATIONS**

\* Lung

Bronchiole, Epithelium

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Mild

Alveolus

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[ Foreign Body TGLs = 2-2 ]

[ Hyperplasia TGLs = 2-2 ]

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1003

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64028

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Minimal

Inflammation

Chronic, Mild

Alveolus

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[ Foreign Body TGLs = 2-2 ]

[ Hyperplasia TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Mild

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1004

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64029

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

\* Trachea

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Foreign Body

Mild

Bronchiole, Epithelium

Hyperplasia

Minimal

Inflammation

Chronic, Mild

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lym Node Bron

Note: NO CORRELATING LESION TGL 2.

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 1015

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 64040

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Pharynx

\* Trachea

MISSING

\* Lymph Node, Bronchial

INSUFFICIENT TISSUE

\* Lymph Node, Mediastinal

OBSERVATIONS

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Minimal

Inflammation

Chronic, Mild

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Mild

Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 1017

TRT#: 11

SEX: Male

DAY ON TEST: 31

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 64042

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Lymph Node, Mediastinal

\* Pharynx

\* Trachea

OBSERVATIONS

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Minimal

Alveolus

Inflammation

Chronic, Mild

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

[ Foreign Body TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1018

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64043

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 2-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

[ Foreign Body TGLs = 1-4 ]

[ Hyperplasia TGLs = 1-4 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1023

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64048

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Bronchiole, Epithelium

Foreign Body

Moderate

Alveolus

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

[ Foreign Body TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1025

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64050

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Bronchial

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Bronchiole, Epithelium

Foreign Body

Moderate

Alveolus

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[ Foreign Body TGLs = 2-4 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Mild

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1028

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64053

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Mild

Hyperplasia

Lymphoid, Mild

[ Foreign Body TGLs = 2-2 ]

[ Hyperplasia TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1030

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64055

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Pharynx

\* Trachea

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lym Node Bron

Note: NO CORRELATING LESION TGL 2.

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Moderate

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1034

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 31

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64059

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Bronchiole, Epithelium

Foreign Body

Moderate

Alveolus

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

[ Foreign Body TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Mild

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 103

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63993

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**OBSERVATIONS**

Lymph Node

Lumbar

Pigmentation

Mild

[ Pigmentation TGLs = 1-5 ]

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 104

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 63994

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Nose

\* Pharynx

\* Trachea

---

**MISSING**

\* Lymph Node, Mediastinal

---

**Experiment Number:** 07062 - 02

**Test Type:** 30-day

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013

**Time Report Requested:** 12:41:38

**First Dose M/F:** 05/30/11 / 05/30/11

**Lab:** BNW

---

**ANIMAL ID:** 115

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 64005

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 117

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 64007

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 118

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 64008

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**OBSERVATIONS**

Liver

Necrosis

Focal, Minimal

[ Necrosis TGLs = 1-5 ]

---

**Experiment Number:** 07062 - 02

**Test Type:** 30-day

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013

**Time Report Requested:** 12:41:38

**First Dose M/F:** 05/30/11 / 05/30/11

**Lab:** BNW

---

**ANIMAL ID:** 123

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 64013

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Nose

\* Pharynx

\* Trachea

---

**MISSING**

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 125

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 64015

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

---

**Experiment Number:** 07062 - 02

**Test Type:** 30-day

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013

**Time Report Requested:** 12:41:38

**First Dose M/F:** 05/30/11 / 05/30/11

**Lab:** BNW

---

**ANIMAL ID:** 128

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 64018

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

Liver

\* Lung

\* Lymph Node, Bronchial

\* Nose

\* Pharynx

\* Trachea

---

**INSUFFICIENT TISSUE**

\* Lymph Node, Mediastinal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 130

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 64020

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**OBSERVATIONS**

\* Lymph Node, Bronchial

Hyperplasia

Lymphoid, Minimal

---

**Experiment Number:** 07062 - 02

**Test Type:** 30-day

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013

**Time Report Requested:** 12:41:38

**First Dose M/F:** 05/30/11 / 05/30/11

**Lab:** BNW

---

**ANIMAL ID:** 134

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** Control

**DISP:** Terminal Sacrifice

**HISTO:** 64024

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lung

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

\* Nose

\* Pharynx

\* Trachea

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 303

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64343

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**INSUFFICIENT TISSUE**

Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 304

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64344

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**MISSING**

Lymph Node, Bronchial

---

**INSUFFICIENT TISSUE**

Trachea

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Metaplasia

Osseous, Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 315

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64355

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Nose

Pharynx

Trachea

---

**INSUFFICIENT TISSUE**

Lymph Node, Bronchial

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Lung

Lymph Node

[ Pigmentation TGLs = 1-5 ]

Lumbar

Foreign Body

Pigmentation

Minimal

Mild

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 317

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64357

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 318

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64358

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 323

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64363

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Nose

Pharynx

Trachea

---

**MISSING**

Lymph Node, Bronchial

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

Lymph Node

Note: NO CORRELATING LESION TGL = 1.

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 325

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64365

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**INSUFFICIENT TISSUE**

Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 328

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64368

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**INSUFFICIENT TISSUE**

Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 330

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64370

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**INSUFFICIENT TISSUE**

Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 334

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64374

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 503

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64273

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**MISSING**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 504

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64274

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 515

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64285

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

Experiment Number: 07062 - 02

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:38

First Dose M/F: 05/30/11 / 05/30/11

Lab: BNW

---

ANIMAL ID: 517

TRT#: 6

SEX: Female

DAY ON TEST: 32

DOSE: 0.3 mg/m3

DISP: Terminal Sacrifice

HISTO: 64287

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung  
Lymph Node  
[ Pigmentation TGLs = 1-5 ]

Lumbar

Foreign Body  
Pigmentation

Minimal  
Mild

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 518

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64288

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 523

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64293

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 525

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64295

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Bronchial

\* Nose

Pharynx

Trachea

---

**MISSING**

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Minimal

---



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 528

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64298

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Pharynx

\* Lymph Node, Bronchial  
Trachea

\* Lymph Node, Mediastinal

\* Nose

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 530

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64300

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Mediastinal

\* Nose

Pharynx

---

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung  
Lymph Node  
[ Pigmentation TGLs = 1-5 ]

Lumbar

Foreign Body  
Pigmentation

Minimal  
Mild

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 534

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 0.3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64304

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lymph Node, Bronchial

Pharynx

Trachea

---

**INSUFFICIENT TISSUE**

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Lung

Foreign Body

Minimal

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 703

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64203

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lymph Node, Mediastinal

Pharynx

Trachea

---

**MISSING**

\* Lymph Node, Bronchial

---

**OBSERVATIONS**

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 704

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64204

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Mediastinal

Pharynx

Trachea

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

\* Lymph Node, Bronchial

Foreign Body

Minimal

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 715

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64215

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Nose

Pharynx

Trachea

---

**INSUFFICIENT TISSUE**

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

\* Lymph Node, Bronchial

Hyperplasia

Lymphoid, Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 717

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64217

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Bronchial

\* Nose

Pharynx

---

**MISSING**

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Lung

Foreign Body  
Inflammation

Mild  
Chronic, Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 718

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64218

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx  
Trachea

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

Pharynx

---

**OBSERVATIONS**

\* Lung  
\* Nose

Olfactory Epi  
Respirat Epith

Foreign Body  
Accumulation, Hyaline Droplet  
Accumulation, Hyaline Droplet

Mild  
Minimal  
Minimal

---



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 723

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64223

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Bronchial

Pharynx

Trachea

---

**MISSING**

\* Lymph Node, Mediastinal

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

---

Experiment Number: 07062 - 02

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:38

First Dose M/F: 05/30/11 / 05/30/11

Lab: BNW

---

ANIMAL ID: 725

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 64225

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

Pharynx

Trachea

---

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

---

Experiment Number: 07062 - 02

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:38

First Dose M/F: 05/30/11 / 05/30/11

Lab: BNW

ANIMAL ID: 728

TRT#: 8

SEX: Female

DAY ON TEST: 32

DOSE: 1 mg/m3

DISP: Terminal Sacrifice

HISTO: 64228

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Larynx

\* Lymph Node, Bronchial

Pharynx

Trachea

**OBSERVATIONS**

\* Lung

Foreign Body

Mild

\* Lymph Node, Mediastinal

Hyperplasia

Lymphoid, Mild

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 730

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64230

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lymph Node, Mediastinal

Pharynx

Trachea

---

**OBSERVATIONS**

\* Lung

Foreign Body

Mild

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

---

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

---

**ANIMAL ID:** 734

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 1 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64234

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Larynx

\* Lymph Node, Mediastinal

Pharynx

Trachea

---

**OBSERVATIONS**

\* Lung

Foreign Body

Mild

\* Lymph Node, Bronchial

Foreign Body

Minimal

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

---

Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 903

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 64133

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Larynx

\* Lymph Node, Mediastinal

Pharynx

Trachea

INSUFFICIENT TISSUE

\* Lymph Node, Bronchial

OBSERVATIONS

\* Lung

Bronchiole, Epithelium

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

Alveolus

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 904

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64134

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Bronchial

\* Lymph Node, Mediastinal

Pharynx

Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Bronchiole, Epithelium

Foreign Body

Mild

Alveolus

Hyperplasia

Minimal

Inflammation

Chronic, Mild

Proteinosis

Minimal

[ Foreign Body TGLs = 3-2 ]

\* Nose

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 915

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64145

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Pharynx

Trachea

**OBSERVATIONS**

* Larynx	Epiglottis	Metaplasia	Squamous, Minimal
* Lung	Bronchiole, Epithelium	Foreign Body	Mild
		Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
	Alveolus	Proteinosis	Minimal
[ Foreign Body TGLs = 1-2 ]			
* Lymph Node, Bronchial		Foreign Body	Minimal
		Hyperplasia	Lymphoid, Minimal
[ Foreign Body TGLs = 2-2 ]			
[ Hyperplasia TGLs = 2-2 ]			
* Lymph Node, Mediastinal		Foreign Body	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
	Respirat Epith	Accumulation, Hyaline Droplet	Minimal



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 917

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64147

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Larynx

\* Lymph Node, Mediastinal

Pharynx

**MISSING**

Trachea

**OBSERVATIONS**

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

Proteinosis

Minimal

Alveolus

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[ Foreign Body TGLs = 2-2 ]

[ Hyperplasia TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 918

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 64148

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Pharynx

Trachea

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

Alveolus

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 923

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64153

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Pharynx

Trachea

**OBSERVATIONS**

* Larynx	Epiglottis	Metaplasia	Squamous, Minimal
* Lung		Foreign Body	Mild
	Bronchiole, Epithelium	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
	Alveolus	Proteinosis	Minimal
[ Foreign Body TGLs = 1-2 ]			
* Lymph Node, Bronchial		Foreign Body	Minimal
		Hyperplasia	Lymphoid, Mild
[ Foreign Body TGLs = 2-2 ]			
[ Hyperplasia TGLs = 2-2 ]			
* Lymph Node, Mediastinal		Foreign Body	Minimal
* Nose	Olfactory Epi	Accumulation, Hyaline Droplet	Minimal
	Respirat Epith	Accumulation, Hyaline Droplet	Mild

Experiment Number: 07062 - 02

Test Type: 30-day

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

1020 Long Multiwalled Carbon Nanotube

CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013

Time Report Requested: 12:41:38

First Dose M/F: 05/30/11 / 05/30/11

Lab: BNW

ANIMAL ID: 925

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 64155

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Pharynx

Trachea

OBSERVATIONS

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Minimal

Proteinosis

Minimal

[ Foreign Body TGLs = 4-2 ]

Alveolus

Lymph Node

Lumbar

Pigmentation

Mild

[ Pigmentation TGLs = 1-5 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

[ Foreign Body TGLs = 3-2 ]

\* Lymph Node, Mediastinal

Foreign Body

Minimal

[ Foreign Body TGLs = 2-4 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 928

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 3 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64158

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

Pharynx

Trachea

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Mild

Inflammation

Chronic, Mild

Alveolus

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 930

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 64160

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Larynx

\* Lymph Node, Mediastinal

Pharynx

Trachea

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

\* Lung

Bronchiole, Epithelium

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Minimal

[ Foreign Body TGLs = 1-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 934

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 3 mg/m3

DISP: Terminal Sacrifice

HISTO: 64164

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Larynx

\* Lymph Node, Mediastinal

Pharynx

Trachea

OBSERVATIONS

\* Lung

Bronchiole, Epithelium

Foreign Body

Mild

Hyperplasia

Minimal

Inflammation

Chronic, Mild

Alveolus

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Minimal

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1103

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64063

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Bronchial

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Bronchiole, Epithelium

Foreign Body

Moderate

Alveolus

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[ Foreign Body TGLs = 2-4 ]

[ Hyperplasia TGLs = 2-4 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild



**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1104

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64064

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Bronchiole, Epithelium

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Alveolus

Proteinosis

Minimal

[ Foreign Body TGLs = 2-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

Note: NO CORRELATING LESION TGL = 1.

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[ Foreign Body TGLs = 1-4 ]

[ Hyperplasia TGLs = 1-4 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1115

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64075

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Bronchiole, Epithelium

Foreign Body

Moderate

Alveolus

Hyperplasia

Minimal

Inflammation

Chronic, Mild

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[ Foreign Body TGLs = 2-2 ]

[ Hyperplasia TGLs = 2-2 ]

\* Lymph Node, Mediastinal

Foreign Body

Minimal

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1117

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64077

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Pharynx

\* Trachea

**INSUFFICIENT TISSUE**

\* Lymph Node, Bronchial

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

Alveolus

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1118

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64078

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Minimal

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[ Foreign Body TGLs = 2-2 ]

[ Hyperplasia TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1123

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64083

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Pharynx

\* Trachea

**INSUFFICIENT TISSUE**

\* Lymph Node, Mediastinal

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Bronchiole, Epithelium

Foreign Body

Moderate

Hyperplasia

Mild

Inflammation

Chronic, Moderate

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[ Foreign Body TGLs = 2-2 ]

[ Hyperplasia TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild

Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 1126

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 64086

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Pharynx

\* Trachea

INSUFFICIENT TISSUE

\* Lymph Node, Bronchial

OBSERVATIONS

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Minimal

Inflammation

Chronic, Mild

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 2-2 ]

Lymph Node

Lumbar

Pigmentation

Minimal

[ Pigmentation TGLs = 1-5 ]

\* Lymph Node, Mediastinal

Foreign Body

Minimal

[ Foreign Body TGLs = 4-4 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild

Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 1128

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 64088

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Pharynx

\* Trachea

INSUFFICIENT TISSUE

\* Lymph Node, Bronchial

OBSERVATIONS

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 2-2 ]

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[ Foreign Body TGLs = 1-4 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Mild

Respirat Epith

Accumulation, Hyaline Droplet

Mild

**Experiment Number:** 07062 - 02  
**Test Type:** 30-day  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** MICE/B6C3F1

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
 1020 Long Multiwalled Carbon Nanotube  
**CAS Number:** L-MWNT-1020

**Date Report Requested:** 04/16/2013  
**Time Report Requested:** 12:41:38  
**First Dose M/F:** 05/30/11 / 05/30/11  
**Lab:** BNW

**ANIMAL ID:** 1129

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 32

**DOSE:** 10 mg/m3

**DISP:** Terminal Sacrifice

**HISTO:** 64089

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Lymph Node, Mediastinal

\* Pharynx

\* Trachea

**OBSERVATIONS**

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Bronchiole, Epithelium

Foreign Body

Moderate

Alveolus

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

Proteinosis

Minimal

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Bronchial

Foreign Body

Minimal

Hyperplasia

Lymphoid, Mild

[ Hyperplasia TGLs = 2-2 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Mild



Experiment Number: 07062 - 02  
Test Type: 30-day  
Route: RESPIRATORY EXPOSURE WHOLE BODY  
Species/Strain: MICE/B6C3F1

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
1020 Long Multiwalled Carbon Nanotube  
CAS Number: L-MWNT-1020

Date Report Requested: 04/16/2013  
Time Report Requested: 12:41:38  
First Dose M/F: 05/30/11 / 05/30/11  
Lab: BNW

ANIMAL ID: 1134

TRT#: 12

SEX: Female

DAY ON TEST: 32

DOSE: 10 mg/m3

DISP: Terminal Sacrifice

HISTO: 64094

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Pharynx

\* Trachea

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

\* Larynx

Epiglottis

Metaplasia

Squamous, Mild

\* Lung

Foreign Body

Moderate

Bronchiole, Epithelium

Hyperplasia

Minimal

Inflammation

Chronic, Moderate

Alveolus

Proteinosis

Mild

[ Foreign Body TGLs = 1-2 ]

\* Lymph Node, Mediastinal

Foreign Body

Minimal

Hyperplasia

Lymphoid, Minimal

[ Foreign Body TGLs = 2-4 ]

[ Hyperplasia TGLs = 2-4 ]

\* Nose

Olfactory Epi

Accumulation, Hyaline Droplet

Minimal

Respirat Epith

Accumulation, Hyaline Droplet

Mild

\*\*\* END OF REPORT \*\*\*