

ClinicalTrials.gov Protocol and Results Registration System (PRS) Receipt
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IMPACT Study: A Study of Valcyte (Valganciclovir) for Prevention of Cytomegalovirus Disease (CMV) in Kidney Allograft Recipients

This study has been completed.

| | |
|--------------------------------|-------------------|
| Sponsor: | Hoffmann-La Roche |
| Collaborators: | |
| Information provided by: | Hoffmann-La Roche |
| ClinicalTrials.gov Identifier: | NCT00294515 |

► Purpose

This study will determine the relative efficacy and safety of up to 100 days Valcyte prophylaxis relative to up to 200 days Valcyte prophylaxis when given for the prevention of CMV disease in high-risk (D+/R-) kidney allograft recipients. The anticipated time on study treatment is 3-12 months and the target sample size is 100-500 individuals.

| Condition | Intervention | Phase |
|----------------------------|----------------------|---------|
| Cytomegalovirus Infections | Drug: Valganciclovir | Phase 3 |

Study Type: Interventional

Study Design: Treatment, Parallel Assignment, Double Blind (Subject, Investigator), Randomized, Safety/Efficacy Study

Official Title: A Randomized, Double-Blind, Placebo-Controlled, Multi-Center Study of the Efficacy and Safety of up to 100 Days of Valganciclovir Versus up to 200 Days of Valganciclovir for Prevention of Cytomegalovirus (CMV) Disease in High-Risk Kidney Allograft Recipients

Further study details as provided by Hoffmann-La Roche:

Primary Outcome Measure:

- Percentage of Patients Who Developed Cytomegalovirus (CMV) Disease up to Month 12 Post-transplant [Time Frame: 12 months post-transplant] [Designated as safety issue: No]
Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 12 months post-transplant.

Secondary Outcome Measures:

- Percentage of Patients Who Developed CMV Disease up to Month 6 Post-transplant [Time Frame: 6 months post-transplant] [Designated as safety issue: No]
Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 6 months post-transplant.
- Percentage of Patients Who Developed CMV Disease up to Month 9 Post-transplant [Time Frame: 9 months post-transplant] [Designated as safety issue: No]
Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 9 months post-transplant.
- Percentage of Patients Who Developed CMV Disease up to Month 18 Post-transplant [Time Frame: 18 months post-transplant] [Designated as safety issue: No]
Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 18 months post-transplant.
- Percentage of Patients Who Developed CMV Disease up to Month 24 Post-transplant [Time Frame: 24 months post-transplant] [Designated as safety issue: No]
Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 24 months post-transplant.

Enrollment: 326

Study Start Date: March 2006

Primary Completion Date: August 2008

Study Completion Date: August 2009

| Arms | Assigned Interventions |
|--|---|
| Experimental: Valganciclovir up to 100 days Valganciclovir for up to 100 days post kidney transplant | Drug: Valganciclovir 900 mg orally daily for up to 100 days Other Names: Valcyte |
| Active Comparator: Valganciclovir up to 200 days Valganciclovir for up to 200 days post kidney transplant | Drug: Valganciclovir 900 mg orally daily for up to 200 days Other Names: Valcyte |

Eligibility

Ages Eligible for Study: 16 Years and older

Genders Eligible for Study: Both
Accepts Healthy Volunteers: No

Criteria

Inclusion Criteria:

- ≥ 16 years of age
- CMV seronegative recipient of primary or secondary renal allograft from a living or cadaveric seropositive donor
- Adequate hematological and renal function
- Patients and partners must agree to maintain effective birth control for 90 days following cessation of study medication

Exclusion Criteria:

- CMV disease, or receipt of anti-CMV therapy within 30 days prior to screening
- Multi-organ transplant recipient
- Hepatitis B, hepatitis C or HIV positive
- Women who are pregnant or lactating



Contacts and Locations

Locations

United States, Alabama

Birmingham, Alabama, United States, 35294

United States, California

Los Angeles, California, United States, 90057

Los Angeles, California, United States, 90095

San Diego, California, United States, 92103-8401

San Francisco, California, United States, 94143-0116

San Francisco, California, United States, 94115

United States, Florida

Tampa, Florida, United States, 33606

United States, Illinois

Chicago, Illinois, United States, 60612-3824

United States, Indiana

Indianapolis, Indiana, United States, 46202-5124

United States, Massachusetts

Boston, Massachusetts, United States, 02111

United States, Michigan

Ann Arbor, Michigan, United States, 48109-0331

United States, Minnesota

Minneapolis, Minnesota, United States, 55455

United States, New Jersey

Hackensack, New Jersey, United States, 07601

Livingston, New Jersey, United States, 07039

New Brunswick, New Jersey, United States, 08901

United States, North Carolina
Winston-salem, North Carolina, United States, 27157-1082

United States, Oregon
Portland, Oregon, United States, 97201

United States, Pennsylvania
Philadelphia, Pennsylvania, United States, 19102-1192
Philadelphia, Pennsylvania, United States, 19104

United States, Tennessee
Nashville, Tennessee, United States, 37232

United States, Texas
San Antonio, Texas, United States, 78284
San Antonio, Texas, United States, 78229

United States, Washington
Seattle, Washington, United States, 98195

Australia
Camperdown, Australia, 2050
Clayton, Australia, 3186
Parkville, Australia, 3050

Belgium
Bruxelles, Belgium, 1070
Gent, Belgium, 9000
Leuven, Belgium, 3000

Brazil
Campinas, Brazil, 13083-970
Porto Alegre, Brazil, 90035-003
Porto Alegre, Brazil, 90240-520
Sao Paulo, Brazil, 05651-901
Sao Paulo, Brazil, 18048-900

Canada, Alberta
Edmonton, Alberta, Canada, T6G 2S2

Canada, Ontario
Hamilton, Ontario, Canada, L8N 4A6
Toronto, Ontario, Canada, M5G 1L7

Canada, Quebec
Montreal, Quebec, Canada, H3A 1A1

France
Bordeaux, France, 33076
Grenoble, France, 38043
Montpellier, France, 34090
Paris, France, 75651
Strasbourg, France, 67091
Toulouse, France, 31054
Tours, France, 37044
Vandoeuvre-les-nancy, France, 54511

Germany

Berlin, Germany, 13353
Berlin, Germany, 10117
Düsseldorf, Germany, 40225
Erlangen, Germany, 91054
Frankfurt Am Main, Germany, 60596
Hannover, Germany, 30625
Lübeck, Germany, 23538
Regensburg, Germany, 93053

Italy

Bari, Italy, 70124
Milano, Italy, 20162
Padova, Italy, 35128
Roma, Italy, 00168

New Zealand

Auckland, New Zealand, 1001

Poland

Krakow, Poland, 31-501
Warszawa, Poland, 02-006
Wroclaw, Poland, 50-417

Romania

Bucharest, Romania, 022328
Cluj Napoca, Romania, 400006

Spain

Barakaldo, Spain
Barcelona, Spain, 08035
Barcelona, Spain, 08907
Madrid, Spain
Madrid, Spain, 28028
Valencia, Spain, 46017

United Kingdom

Antrim, United Kingdom, 2RL
Birmingham, United Kingdom, B15 2TH
Bristol, United Kingdom, BS1 05NB
Glasgow, United Kingdom, G11 6NT
Liverpool, United Kingdom, L7 8XP
London, United Kingdom, E1 1BB
Manchester, United Kingdom, M13 9WL
Newcastle Upon Tyne, United Kingdom, NE7 7DN
Nottingham, United Kingdom, NG5 1PB
Oxford, United Kingdom, OX3 7LJ

Investigators

Study Chair:

Clinical Trials

Hoffmann-La Roche

► More Information

Clinical Study Report Synopsis

<http://www.roche-trials.com/studyResultGet.action?studyResultNumber=NT18435>

Responsible Party: Hoffmann-La Roche (Disclosures Group)

Study ID Numbers: NT18435

Health Authority: United States: Food and Drug Administration

Study Results

► Participant Flow

Reporting Groups

| | Description |
|-------------------------------|---|
| Valganciclovir up to 100 Days | 900 mg valganciclovir orally daily for up to 100 days |
| Valganciclovir up to 200 Days | 900 mg valganciclovir orally daily for up to 200 days |

Overall Study

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|---------------|-------------------------------|-------------------------------|
| Started | 166 ^[1] | 160 ^[1] |
| Completed | 132 | 132 |
| Not Completed | 34 | 28 |

^[1] Randomized

► Baseline Characteristics

Reporting Groups

| | Description |
|-------------------------------|---|
| Valganciclovir up to 100 Days | 900 mg valganciclovir orally daily for up to 100 days |
| Valganciclovir up to 200 Days | 900 mg valganciclovir orally daily for up to 200 days |

Baseline Measures

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days | Total |
|---|-------------------------------|-------------------------------|-----------------|
| Number of Participants | 164 | 156 | 320 |
| Age, Continuous ^[1] [units: years] Mean (Standard Deviation) | 48.5 (13.76) | 47.0 (13.51) | 47.8 (13.64) |
| Gender, Male/Female ^[1] [units: participants] | | | |
| Female | 45 | 40 | 85 |
| Male | 119 | 116 | 235 |

[1] Safety population



Outcome Measures

1. Primary Outcome Measure:

| | |
|---------------------|---|
| Measure Title | Percentage of Patients Who Developed Cytomegalovirus (CMV) Disease up to Month 12 Post-transplant |
| Measure Description | Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 12 months post-transplant. |
| Time Frame | 12 months post-transplant |
| Safety Issue? | No |

Analysis Population Description

Intent-to-treat population

Reporting Groups

| | Description |
|-------------------------------|---|
| Valganciclovir up to 100 Days | 900 mg valganciclovir orally daily for up to 100 days |
| Valganciclovir up to 200 Days | 900 mg valganciclovir orally daily for up to 200 days |

Measured Values

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|---------------------------------|-------------------------------|-------------------------------|
| Number of Participants Analyzed | 163 | 155 |

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|--|-------------------------------|-------------------------------|
| Percentage of Patients Who Developed Cytomegalovirus (CMV) Disease up to Month 12 Post-transplant [units: Percentage of patients] Mean (95% Confidence Interval) | 43.6 (35.8 to 51.5) | 23.9 (17.4 to 31.4) |

Statistical Analysis 1 for Percentage of Patients Who Developed Cytomegalovirus (CMV) Disease up to Month 12 Post-transplant

| | | |
|--------------------------------|--|--|
| Statistical Analysis Overview | Comparison Groups | Valganciclovir up to 100 Days, Valganciclovir up to 200 Days |
| | Comments | [Not specified] |
| | Non-Inferiority or Equivalence Analysis? | No |
| | Comments | [Not specified] |
| Statistical Test of Hypothesis | P-Value | ≤ 0.0002 |
| | Comments | [Not specified] |
| | Method | Cochran-Mantel-Haenszel |
| | Comments | Stratified by Center Pools |
| Method of Estimation | Estimation Parameter | Odds Ratio (OR) |
| | Estimated Value | 0.40 |
| | Confidence Interval | (2-Sided) 95% 0.25 to 0.66 |
| | Estimation Comments | [Not specified] |

2. Secondary Outcome Measure:

| | |
|---------------------|--|
| Measure Title | Percentage of Patients Who Developed CMV Disease up to Month 6 Post-transplant |
| Measure Description | Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 6 months post-transplant. |
| Time Frame | 6 months post-transplant |
| Safety Issue? | No |

Analysis Population Description
Intent-to-treat population

Reporting Groups

| | Description |
|-------------------------------|---|
| Valganciclovir up to 100 Days | 900 mg valganciclovir orally daily for up to 100 days |
| Valganciclovir up to 200 Days | 900 mg valganciclovir orally daily for up to 200 days |

Measured Values

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|---|-------------------------------|-------------------------------|
| Number of Participants Analyzed | 163 | 155 |
| Percentage of Patients Who Developed CMV Disease up to Month 6 Post-transplant [units: Percentage of patients] Mean (95% Confidence Interval) | 36.2 (28.8 to 44.1) | 10.3 (6.0 to 16.2) |

Statistical Analysis 1 for Percentage of Patients Who Developed CMV Disease up to Month 6 Post-transplant

| | | |
|--------------------------------|--|--|
| Statistical Analysis Overview | Comparison Groups | Valganciclovir up to 100 Days, Valganciclovir up to 200 Days |
| | Comments | [Not specified] |
| | Non-Inferiority or Equivalence Analysis? | No |
| | Comments | [Not specified] |
| Statistical Test of Hypothesis | P-Value | <0.0001 |
| | Comments | [Not specified] |
| | Method | Cochran-Mantel-Haenszel |
| | Comments | Stratified by Center Pools |
| Method of Estimation | Estimation Parameter | Odds Ratio (OR) |
| | Estimated Value | 0.20 |
| | Confidence Interval | (2-Sided) 95% 0.11 to 0.37 |
| | Estimation Comments | [Not specified] |

3. Secondary Outcome Measure:

| | |
|---------------------|--|
| Measure Title | Percentage of Patients Who Developed CMV Disease up to Month 9 Post-transplant |
| Measure Description | Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 9 months post-transplant. |
| Time Frame | 9 months post-transplant |
| Safety Issue? | No |

Analysis Population Description

Intent-to-treat population

Reporting Groups

| | Description |
|-------------------------------|---|
| Valganciclovir up to 100 Days | 900 mg valganciclovir orally daily for up to 100 days |
| Valganciclovir up to 200 Days | 900 mg valganciclovir orally daily for up to 200 days |

Measured Values

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|---|-------------------------------|-------------------------------|
| Number of Participants Analyzed | 163 | 155 |
| Percentage of Patients Who Developed CMV Disease up to Month 9 Post-transplant [units: Percentage of patients] Mean (95% Confidence Interval) | 43.6 (35.8 to 51.5) | 22.6 (16.3 to 30.0) |

Statistical Analysis 1 for Percentage of Patients Who Developed CMV Disease up to Month 9 Post-transplant

| | | |
|--------------------------------|--|--|
| Statistical Analysis Overview | Comparison Groups | Valganciclovir up to 100 Days, Valganciclovir up to 200 Days |
| | Comments | [Not specified] |
| | Non-Inferiority or Equivalence Analysis? | No |
| | Comments | [Not specified] |
| Statistical Test of Hypothesis | P-Value | 0.0001 |
| | Comments | [Not specified] |
| | Method | Cochran-Mantel-Haenszel |

| | | |
|----------------------|----------------------|-------------------------------|
| | Comments | Stratified by Center Pools |
| Method of Estimation | Estimation Parameter | Odds Ratio (OR) |
| | Estimated Value | 0.37 |
| | Confidence Interval | (2-Sided) 95% 0.22 to 0.60 |
| | Estimation Comments | [Not specified] |

4. Secondary Outcome Measure:

| | |
|---------------------|---|
| Measure Title | Percentage of Patients Who Developed CMV Disease up to Month 18 Post-transplant |
| Measure Description | Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 18 months post-transplant. |
| Time Frame | 18 months post-transplant |
| Safety Issue? | No |

Analysis Population Description

Intent-to-treat population

Reporting Groups

| | Description |
|-------------------------------|---|
| Valganciclovir up to 100 Days | 900 mg valganciclovir orally daily for up to 100 days |
| Valganciclovir up to 200 Days | 900 mg valganciclovir orally daily for up to 200 days |

Measured Values

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|--|-------------------------------|-------------------------------|
| Number of Participants Analyzed | 163 | 155 |
| Percentage of Patients Who Developed CMV Disease up to Month 18 Post-transplant [units: Percentage of patients] Mean (95% Confidence Interval) | 47.9 (40.0 to 55.8) | 34.2 (26.8 to 42.2) |

Statistical Analysis 1 for Percentage of Patients Who Developed CMV Disease up to Month 18 Post-transplant

| | | |
|--------------------------------|--|--|
| Statistical Analysis Overview | Comparison Groups | Valganciclovir up to 100 Days, Valganciclovir up to 200 Days |
| | Comments | [Not specified] |
| | Non-Inferiority or Equivalence Analysis? | No |
| | Comments | [Not specified] |
| Statistical Test of Hypothesis | P-Value | 0.0126 |
| | Comments | [Not specified] |
| | Method | Cochran-Mantel-Haenszel |
| | Comments | Stratified by Center Pools |
| Method of Estimation | Estimation Parameter | Odds Ratio (OR) |
| | Estimated Value | 0.56 |
| | Confidence Interval | (2-Sided) 95% 0.35 to 0.88 |
| | Estimation Comments | [Not specified] |

5. Secondary Outcome Measure:

| | |
|---------------------|---|
| Measure Title | Percentage of Patients Who Developed CMV Disease up to Month 24 Post-transplant |
| Measure Description | Percentage of CMV-seronegative renal transplant recipients (R-) receiving a CMV-seropositive graft (D+) who developed CMV disease (confirmed and assumed) within 24 months post-transplant. |
| Time Frame | 24 months post-transplant |
| Safety Issue? | No |

Analysis Population Description
Intent-to-treat population

Reporting Groups

| | Description |
|-------------------------------|---|
| Valganciclovir up to 100 Days | 900 mg valganciclovir orally daily for up to 100 days |
| Valganciclovir up to 200 Days | 900 mg valganciclovir orally daily for up to 200 days |

Measured Values

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|--|-------------------------------|-------------------------------|
| Number of Participants Analyzed | 163 | 155 |
| Percentage of Patients Who Developed CMV Disease up to Month 24 Post-transplant [units: Percentage of patients] Mean (95% Confidence Interval) | 48.5 (40.6 to 56.4) | 34.2 (26.8 to 42.2) |

Statistical Analysis 1 for Percentage of Patients Who Developed CMV Disease up to Month 24 Post-transplant

| | | |
|--------------------------------|--|--|
| Statistical Analysis Overview | Comparison Groups | Valganciclovir up to 100 Days, Valganciclovir up to 200 Days |
| | Comments | [Not specified] |
| | Non-Inferiority or Equivalence Analysis? | No |
| | Comments | [Not specified] |
| Statistical Test of Hypothesis | P-Value | 0.0100 |
| | Comments | [Not specified] |
| | Method | Cochran-Mantel-Haenszel |
| | Comments | Stratified by Center Pools |
| Method of Estimation | Estimation Parameter | Odds Ratio (OR) |
| | Estimated Value | 0.55 |
| | Confidence Interval | (2-Sided) 95% 0.34 to 0.86 |
| | Estimation Comments | [Not specified] |



Reported Adverse Events

| | |
|------------------------|-------------------|
| Time Frame | [Not specified] |
| Additional Description | Safety Population |

Reporting Groups

| | Description |
|-------------------------------|---|
| Valganciclovir up to 100 Days | 900 mg valganciclovir orally daily for up to 100 days |
| Valganciclovir up to 200 Days | 900 mg valganciclovir orally daily for up to 200 days |

Serious Adverse Events

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|--|-------------------------------|-------------------------------|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Total | 94/164 (57.32%) | 78/156 (50%) |
| Blood and lymphatic system disorders | | |
| Agranulocytosis | 1/164 (0.61%) | 0/156 (0%) |
| Anaemia | 1/164 (0.61%) | 0/156 (0%) |
| Bicytopenia | 0/164 (0%) | 1/156 (0.64%) |
| Febrile Neutropenia | 1/164 (0.61%) | 2/156 (1.28%) |
| Haemolytic Anaemia | 1/164 (0.61%) | 0/156 (0%) |
| Leukopenia | 2/164 (1.22%) | 1/156 (0.64%) |
| Neutropenia | 3/164 (1.83%) | 9/156 (5.77%) |
| Thrombocytopenia | 0/164 (0%) | 1/156 (0.64%) |
| Cardiac disorders | | |
| Acute Coronary Syndrome | 0/164 (0%) | 2/156 (1.28%) |
| Angina Pectoris | 0/164 (0%) | 1/156 (0.64%) |
| Arrhythmia | 1/164 (0.61%) | 1/156 (0.64%) |
| Arrhythmia Supraventricular | 1/164 (0.61%) | 0/156 (0%) |
| Cardiac Failure | 1/164 (0.61%) | 0/156 (0%) |
| Mitral Valve Disease | 1/164 (0.61%) | 0/156 (0%) |
| Myocardial Infarction | 0/164 (0%) | 2/156 (1.28%) |
| Pericardial Effusion | 1/164 (0.61%) | 0/156 (0%) |
| Tachycardia | 1/164 (0.61%) | 0/156 (0%) |
| Congenital, familial and genetic disorders | | |

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|--|-------------------------------|-------------------------------|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Hereditary Haemorrhagic Telangiectasia | 0/164 (0%) | 1/156 (0.64%) |
| Renal Arteriovenous Malformation | 0/164 (0%) | 1/156 (0.64%) |
| Endocrine disorders | | |
| Hyperparathyroidism | 1/164 (0.61%) | 0/156 (0%) |
| Gastrointestinal disorders | | |
| Abdominal Pain | 1/164 (0.61%) | 3/156 (1.92%) |
| Abdominal Pain Upper | 0/164 (0%) | 1/156 (0.64%) |
| Colitis | 0/164 (0%) | 1/156 (0.64%) |
| Constipation | 1/164 (0.61%) | 0/156 (0%) |
| Diarrhoea | 2/164 (1.22%) | 4/156 (2.56%) |
| Gastric Ulcer | 0/164 (0%) | 1/156 (0.64%) |
| Gastrooesophageal Reflux Disease | 0/164 (0%) | 1/156 (0.64%) |
| Impaired Gastric Emptying | 0/164 (0%) | 1/156 (0.64%) |
| Inguinal Hernia | 0/164 (0%) | 1/156 (0.64%) |
| Intestinal Ischaemia | 1/164 (0.61%) | 0/156 (0%) |
| Large Intestine Perforation | 0/164 (0%) | 1/156 (0.64%) |
| Mouth Ulceration | 1/164 (0.61%) | 0/156 (0%) |
| Oral Pain | 1/164 (0.61%) | 0/156 (0%) |
| Pancreatitis | 2/164 (1.22%) | 0/156 (0%) |
| Pancreatitis Acute | 1/164 (0.61%) | 0/156 (0%) |
| Small Intestinal Obstruction | 0/164 (0%) | 1/156 (0.64%) |
| General disorders | | |
| Asthenia | 0/164 (0%) | 1/156 (0.64%) |
| Catheter Related Complication | 0/164 (0%) | 1/156 (0.64%) |
| Catheter Site Discharge | 1/164 (0.61%) | 0/156 (0%) |
| Chest Pain | 0/164 (0%) | 2/156 (1.28%) |

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|-------------------------------------|-------------------------------|-------------------------------|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Impaired Healing | 0/164 (0%) | 2/156 (1.28%) |
| Malaise | 0/164 (0%) | 2/156 (1.28%) |
| Multi-organ Failure | 1/164 (0.61%) | 0/156 (0%) |
| Non-cardiac Chest Pain | 0/164 (0%) | 1/156 (0.64%) |
| Oedema Peripheral | 0/164 (0%) | 1/156 (0.64%) |
| Pyrexia | 3/164 (1.83%) | 4/156 (2.56%) |
| Immune system disorders | | |
| Food Allergy | 1/164 (0.61%) | 0/156 (0%) |
| Kidney Transplant Rejection | 3/164 (1.83%) | 0/156 (0%) |
| Transplant Rejection | 11/164 (6.71%) | 8/156 (5.13%) |
| Infections and infestations | | |
| Abscess Limb | 0/164 (0%) | 1/156 (0.64%) |
| Bacterial Infection | 1/164 (0.61%) | 0/156 (0%) |
| Bronchopneumonia | 1/164 (0.61%) | 0/156 (0%) |
| Campylobacter Infection | 1/164 (0.61%) | 0/156 (0%) |
| Cellulitis | 1/164 (0.61%) | 0/156 (0%) |
| Cytomegalovirus Colitis | 1/164 (0.61%) | 0/156 (0%) |
| Cytomegalovirus Hepatitis | 1/164 (0.61%) | 0/156 (0%) |
| Cytomegalovirus Infection | 21/164 (12.8%) | 5/156 (3.21%) |
| Cytomegalovirus Syndrome | 12/164 (7.32%) | 1/156 (0.64%) |
| Cytomegalovirus Viraemia | 2/164 (1.22%) | 0/156 (0%) |
| Erysipelas | 0/164 (0%) | 1/156 (0.64%) |
| Escherichia Sepsis | 0/164 (0%) | 1/156 (0.64%) |
| Escherichia Urinary Tract Infection | 0/164 (0%) | 1/156 (0.64%) |
| Febrile Infection | 0/164 (0%) | 1/156 (0.64%) |
| Folliculitis | 1/164 (0.61%) | 0/156 (0%) |

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|--|-------------------------------|-------------------------------|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Gastroenteritis | 2/164 (1.22%) | 3/156 (1.92%) |
| Klebsiella Infection | 1/164 (0.61%) | 0/156 (0%) |
| Lung Infection Pseudomonal | 0/164 (0%) | 1/156 (0.64%) |
| Mediastinitis | 0/164 (0%) | 1/156 (0.64%) |
| Perirectal Abscess | 1/164 (0.61%) | 0/156 (0%) |
| Pneumonia | 1/164 (0.61%) | 2/156 (1.28%) |
| Pneumonia Streptococcal | 1/164 (0.61%) | 0/156 (0%) |
| Pyelonephritis | 0/164 (0%) | 1/156 (0.64%) |
| Pyelonephritis Acute | 2/164 (1.22%) | 2/156 (1.28%) |
| Sepsis | 1/164 (0.61%) | 3/156 (1.92%) |
| Septic Shock | 1/164 (0.61%) | 0/156 (0%) |
| Subcutaneous Abscess | 1/164 (0.61%) | 0/156 (0%) |
| Upper Respiratory Tract Infection | 0/164 (0%) | 1/156 (0.64%) |
| Urinary Tract Infection | 7/164 (4.27%) | 10/156 (6.41%) |
| Urosepsis | 1/164 (0.61%) | 0/156 (0%) |
| Wound Infection | 1/164 (0.61%) | 1/156 (0.64%) |
| Injury, poisoning and procedural complications | | |
| Complications of Transplant Surgery | 1/164 (0.61%) | 0/156 (0%) |
| Complications of Transplanted Kidney | 2/164 (1.22%) | 1/156 (0.64%) |
| Contusion | 0/164 (0%) | 1/156 (0.64%) |
| Graft Dysfunction | 0/164 (0%) | 2/156 (1.28%) |
| Hip Fracture | 1/164 (0.61%) | 0/156 (0%) |
| Medical Device Complication | 0/164 (0%) | 1/156 (0.64%) |
| Overdose | 1/164 (0.61%) | 0/156 (0%) |
| Post Procedural Fistula | 1/164 (0.61%) | 0/156 (0%) |
| Ureteric Anastomosis Complication | 0/164 (0%) | 1/156 (0.64%) |

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|---|-------------------------------|-------------------------------|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Wound Dehiscence | 1/164 (0.61%) | 0/156 (0%) |
| Wound Secretion | 0/164 (0%) | 1/156 (0.64%) |
| Investigations | | |
| Blood Creatinine Increased | 10/164 (6.1%) | 8/156 (5.13%) |
| Metabolism and nutrition disorders | | |
| Dehydration | 4/164 (2.44%) | 1/156 (0.64%) |
| Diabetes Mellitus | 0/164 (0%) | 2/156 (1.28%) |
| Diabetes Mellitus Inadequate Control | 1/164 (0.61%) | 0/156 (0%) |
| Diabetic Ketoacidosis | 1/164 (0.61%) | 0/156 (0%) |
| Hyperglycaemia | 1/164 (0.61%) | 0/156 (0%) |
| Hyperkalaemia | 1/164 (0.61%) | 1/156 (0.64%) |
| Hypoglycaemia | 0/164 (0%) | 1/156 (0.64%) |
| Hyponatraemia | 0/164 (0%) | 1/156 (0.64%) |
| Musculoskeletal and connective tissue disorders | | |
| Arthralgia | 0/164 (0%) | 1/156 (0.64%) |
| Groin Pain | 0/164 (0%) | 1/156 (0.64%) |
| Muscle Haemorrhage | 1/164 (0.61%) | 1/156 (0.64%) |
| Muscular Weakness | 0/164 (0%) | 1/156 (0.64%) |
| Nervous system disorders | | |
| Cerebrovascular Accident | 1/164 (0.61%) | 0/156 (0%) |
| Clonus | 0/164 (0%) | 1/156 (0.64%) |
| Neuropathy Peripheral | 0/164 (0%) | 1/156 (0.64%) |
| Tremor | 0/164 (0%) | 1/156 (0.64%) |
| Renal and urinary disorders | | |
| Haematuria | 1/164 (0.61%) | 1/156 (0.64%) |
| Hydronephrosis | 1/164 (0.61%) | 0/156 (0%) |

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|---|-------------------------------|-------------------------------|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Renal Artery Stenosis | 1/164 (0.61%) | 0/156 (0%) |
| Renal Failure | 0/164 (0%) | 1/156 (0.64%) |
| Renal Failure Acute | 4/164 (2.44%) | 2/156 (1.28%) |
| Renal Impairment | 3/164 (1.83%) | 2/156 (1.28%) |
| Renal Tubular Disorder | 0/164 (0%) | 1/156 (0.64%) |
| Renal Tubular Necrosis | 0/164 (0%) | 1/156 (0.64%) |
| Renal Vein Thrombosis | 1/164 (0.61%) | 0/156 (0%) |
| Ureteric Obstruction | 1/164 (0.61%) | 1/156 (0.64%) |
| Ureteric Stenosis | 1/164 (0.61%) | 1/156 (0.64%) |
| Reproductive system and breast disorders | | |
| Benign Prostatic Hyperplasia | 1/164 (0.61%) | 1/156 (0.64%) |
| Respiratory, thoracic and mediastinal disorders | | |
| Acute Pulmonary Oedema | 0/164 (0%) | 1/156 (0.64%) |
| Lung Disorder | 1/164 (0.61%) | 2/156 (1.28%) |
| Pulmonary Embolism | 1/164 (0.61%) | 1/156 (0.64%) |
| Pulmonary Oedema | 1/164 (0.61%) | 0/156 (0%) |
| Respiratory Failure | 0/164 (0%) | 1/156 (0.64%) |
| Surgical and medical procedures | | |
| Ureteral Stent Removal | 1/164 (0.61%) | 0/156 (0%) |
| Vascular disorders | | |
| Arterial Stenosis | 1/164 (0.61%) | 0/156 (0%) |
| Deep Vein Thrombosis | 2/164 (1.22%) | 1/156 (0.64%) |
| Haemorrhage | 1/164 (0.61%) | 0/156 (0%) |
| Hypotension | 2/164 (1.22%) | 0/156 (0%) |
| Iliac Artery Stenosis | 1/164 (0.61%) | 0/156 (0%) |
| Lymphocele | 2/164 (1.22%) | 3/156 (1.92%) |

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|--------------------|-------------------------------|-------------------------------|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Phlebitis | 2/164 (1.22%) | 0/156 (0%) |
| Shock Haemorrhagic | 1/164 (0.61%) | 0/156 (0%) |
| Venous Thrombosis | 0/164 (0%) | 1/156 (0.64%) |

Other Adverse Events

Frequency Threshold Above Which Other Adverse Events are Reported: 5%

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|--------------------------------------|-------------------------------|-------------------------------|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Total | 133/164 (81.1%) | 141/156 (90.38%) |
| Blood and lymphatic system disorders | | |
| Anaemia | 29/164 (17.68%) | 24/156 (15.38%) |
| Leukopenia | 41/164 (25%) | 58/156 (37.18%) |
| Neutropenia | 22/164 (13.41%) | 16/156 (10.26%) |
| Thrombocytopenia | 6/164 (3.66%) | 8/156 (5.13%) |
| Gastrointestinal disorders | | |
| Abdominal Pain | 12/164 (7.32%) | 8/156 (5.13%) |
| Abdominal Pain Upper | 7/164 (4.27%) | 8/156 (5.13%) |
| Constipation | 24/164 (14.63%) | 14/156 (8.97%) |
| Diarrhoea | 41/164 (25%) | 48/156 (30.77%) |
| Dyspepsia | 3/164 (1.83%) | 11/156 (7.05%) |
| Nausea | 18/164 (10.98%) | 17/156 (10.9%) |
| Vomiting | 6/164 (3.66%) | 10/156 (6.41%) |
| General disorders | | |
| Fatigue | 7/164 (4.27%) | 14/156 (8.97%) |
| Oedema Peripheral | 35/164 (21.34%) | 30/156 (19.23%) |
| Pyrexia | 17/164 (10.37%) | 10/156 (6.41%) |
| Infections and infestations | | |

| | Valganciclovir up to 100 Days | Valganciclovir up to 200 Days |
|---|-------------------------------|-------------------------------|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Nasopharyngitis | 17/164 (10.37%) | 12/156 (7.69%) |
| Upper Respiratory Tract Infection | 14/164 (8.54%) | 14/156 (8.97%) |
| Urinary Tract Infection | 20/164 (12.2%) | 29/156 (18.59%) |
| Investigations | | |
| Blood Creatinine Increased | 11/164 (6.71%) | 9/156 (5.77%) |
| Metabolism and nutrition disorders | | |
| Hyperkalaemia | 20/164 (12.2%) | 14/156 (8.97%) |
| Hypomagnesaemia | 17/164 (10.37%) | 10/156 (6.41%) |
| Hypophosphataemia | 20/164 (12.2%) | 18/156 (11.54%) |
| Nervous system disorders | | |
| Headache | 16/164 (9.76%) | 9/156 (5.77%) |
| Tremor | 19/164 (11.59%) | 25/156 (16.03%) |
| Psychiatric disorders | | |
| Insomnia | 12/164 (7.32%) | 10/156 (6.41%) |
| Renal and urinary disorders | | |
| Haematuria | 7/164 (4.27%) | 9/156 (5.77%) |
| Respiratory, thoracic and mediastinal disorders | | |
| Cough | 17/164 (10.37%) | 7/156 (4.49%) |
| Dyspnoea | 9/164 (5.49%) | 6/156 (3.85%) |
| Oropharyngeal Pain | 6/164 (3.66%) | 8/156 (5.13%) |
| Skin and subcutaneous tissue disorders | | |
| Rash | 9/164 (5.49%) | 5/156 (3.21%) |
| Vascular disorders | | |
| Hypertension | 21/164 (12.8%) | 19/156 (12.18%) |
| Hypotension | 10/164 (6.1%) | 3/156 (1.92%) |

Limitations and Caveats

[Not specified]

More Information

Certain Agreements:

Principal Investigators are NOT employed by the organization sponsoring the study.

There IS an agreement between the Principal Investigator and the Sponsor (or its agents) that restricts the PI's rights to discuss or publish trial results after the trial is completed.

The Study being conducted under this Agreement is part of the Overall Study. Investigator is free to publish in reputable journals or to present at professional conferences the results of the Study, but only after the first publication or presentation that involves the Overall Study. The Sponsor may request that Confidential Information be deleted and/or the publication be postponed in order to protect the Sponsor's intellectual property rights.

Results Point of Contact:

Name/Official Title: Medical Communications

Organization: Hoffmann-La Roche

Phone: 800-821-8590

Email: