Clinical trial results:
A Phase 2 Open-label Trial to Evaluate Safety, Efficacy, Tolerability, and Pharmacodynamics of a Combination of JNJ-73763989, Nucleos(t)ide Analogs, and a PD-1 Inhibitor in Chronic Hepatitis B Patients

Summary

EudraCT number	2021-005132-33
Trial protocol	FR ES IT
Global end of trial date	31 May 2024

Results information

Result version number	v1 (current)
This version publication date	01 June 2025
First version publication date	01 June 2025

Trial information

Trial identification

Sponsor protocol code	73763989PAHPB2008

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT05275023
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Janssen Research & Development, LLC
Sponsor organisation address	920 Route 202, Raritan,, NJ, United States, 08869
Public contact	Clinical Registry Group, Janssen Research & Development, LLC, ClinicalTrialsEU@its.jnj.com
Scientific contact	Clinical Registry Group, Janssen Research & Development, LLC, ClinicalTrialsEU@its.jnj.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	31 May 2024
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	31 May 2024
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The main objective of this trial was to evaluate the efficacy of the study intervention, based on hepatitis B surface antigen (HBsAg) levels at follow-up (FU) Week 24.

Protection of trial subjects:

This study was conducted in accordance with the ethical principles that have their origin in the Declaration of Helsinki and that are consistent with Good Clinical Practice and applicable regulatory requirements.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	30 June 2022
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	United Kingdom: 2
Country: Number of subjects enrolled	France: 2
Country: Number of subjects enrolled	Italy: 5
Country: Number of subjects enrolled	Spain: 7
Country: Number of subjects enrolled	Türkiye: 9
Country: Number of subjects enrolled	Taiwan: 7
Country: Number of subjects enrolled	Canada: 5
Worldwide total number of subjects	37
EEA total number of subjects	14

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0

Adolescents (12-17 years)	0
Adults (18-64 years)	37
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

A total of 37 subjects were enrolled in the study.

Period 1

Period 1 title	Intervention Phase: Week 0 to Week 24
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)

Arm description:

In intervention phase (IP), subjects received a loading dose of JNJ-73763989 (JNJ-3989) 200 milligrams (mg) as subcutaneous (SC) injection once weekly (QW) for first 4 weeks starting from Week 0 up to Week 3 followed by single dose once every 4 weeks (Q4W) from Week 4 up to Week 24. At Week 16, subjects received a single dose of nivolumab 0.3 milligrams per kilogram (mg/kg) as intravenous (IV) infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or tenofovir alafenamide [TAF] 25 mg or entecavir [ETV] 0.5 mg) tablet orally once daily (QD) from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to follow up (FU) Week 48 (up to Week 72).

Arm type	Experimental
Investigational medicinal product name	JNJ-73763989
Investigational medicinal product code	
Other name	JNJ-3989
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use, Subdermal use

Dosage and administration details:

Subjects received JNJ-3989 200 mg QW from Week 0 up to Week 3 followed by Q4W from Week 4 until Week 24.

Investigational medicinal product name	Nivolumab
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

Subjects received nivolumab 0.3 mg/kg once at Week 16.

Investigational medicinal product name	NA
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

Subjects received NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) QD from Week 0 up to Week 24.

Arm title	JNJ-3989 + Nivolumab (3 infusions) + NA

Arm description:

In IP, subjects received a loading dose of JNJ-3989 200 mg as SC injection QW for first 4 weeks starting from Week 0 up to Week 3 followed by single dose Q4W from Week 4 up to Week 24. At Weeks 16, 20 and 24, subjects received of nivolumab 0.3 mg/kg as IV infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Arm type	Experimental
Investigational medicinal product name	JNJ-73763989
Investigational medicinal product code	
Other name	JNJ-3989
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Subjects received JNJ-3989 200 mg QW from Week 0 up to Week 3 followed by Q4W from Week 4 until Week 24.

Investigational medicinal product name	Nivolumab
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

Subjects received nivolumab 0.3 mg/kg once at Week 16, 20, 24.

Investigational medicinal product name	NA
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

Subjects received NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) QD from Week 0 up to Week 24.

Number of subjects in period 1	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog	JNJ-3989 + Nivolumab (3 infusions) + NA
Started	18	19
Completed	18	19

Period 2

Period 2 title	FU Phase: FU Week 1 to FU Week 48
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Not blinded

Blinding implementation details:

NA

Arms

Are arms mutually exclusive?	Yes
Arm title	NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg)

Arm description:

After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Arm type	Experimental
Investigational medicinal product name	NA
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

Subjects continued to receive NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) QD up to follow-up Week 48 (Week 72).

Arm title	NA(tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg)

Arm description:

After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Arm type	Experimental
Investigational medicinal product name	NA
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

Subjects continued to receive NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) QD up to follow-up Week 48 (Week 72).

Number of subjects in period 2	NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg)	NA(tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg)
Started	18	19
Completed	18	19

Baseline characteristics

Reporting groups

Reporting group title	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)

Reporting group description:

In intervention phase (IP), subjects received a loading dose of JNJ-73763989 (JNJ-3989) 200 milligrams (mg) as subcutaneous (SC) injection once weekly (QW) for first 4 weeks starting from Week 0 up to Week 3 followed by single dose once every 4 weeks (Q4W) from Week 4 up to Week 24. At Week 16, subjects received a single dose of nivolumab 0.3 milligrams per kilogram (mg/kg) as intravenous (IV) infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or tenofovir alafenamide [TAF] 25 mg or entecavir [ETV] 0.5 mg) tablet orally once daily (QD) from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to follow up (FU) Week 48 (up to Week 72).

Reporting group title	JNJ-3989 + Nivolumab (3 infusions) + NA

Reporting group description:

In IP, subjects received a loading dose of JNJ-3989 200 mg as SC injection QW for first 4 weeks starting from Week 0 up to Week 3 followed by single dose Q4W from Week 4 up to Week 24. At Weeks 16, 20 and 24, subjects received of nivolumab 0.3 mg/kg as IV infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Reporting group values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog	JNJ-3989 + Nivolumab (3 infusions) + NA	Total
Number of subjects	18	19	37
Age Categorical Units: Subjects			
Age continuous Units: years			
arithmetic mean	40.7	47.9	
standard deviation	± 7.75	± 5.05	-
Gender categorical Units: Subjects			
Male	15	15	30
Female	3	4	7
Age Categorical Units: Subjects			
<=18 years	0	0	0
Between 18 and 65 years	18	19	37
>=65 years	0	0	0

Subject analysis sets

Subject analysis set title	JNJ-73763989 (JNJ-3989) + Nivolumab (1 infusion) + NA
Subject analysis set type	Full analysis

Subject analysis set description:

In intervention phase (IP), subjects received a loading dose of JNJ-3989 200 milligrams (mg) as subcutaneous (SC) injection once weekly (QW) for first 4 weeks starting from Week 0 up to Week 3

followed by single dose once every 4 weeks (Q4W) from Week 4 up to Week 24. At Week 16, subjects received a single dose of nivolumab 0.3 mg/kg as IV infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or tenofovir alafenamide [TAF] 25 mg or entecavir [ETV] 0.5 mg) tablet orally once daily (QD) from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Subject analysis set title	JNJ-3989 + Nivolumab (3 infusions) + NA
Subject analysis set type	Full analysis

Subject analysis set description:

In IP, subjects received a loading dose of JNJ-3989 200 mg as SC injection QW for first 4 weeks starting from Week 0 up to Week 3 followed by single dose Q4W from Week 4 up to Week 24. At Weeks 16, 20 and 24, subjects received 3 doses of nivolumab 0.3 mg/kg as IV infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Reporting group values	JNJ-73763989 (JNJ-3989) + Nivolumab (1 infusion) + NA	JNJ-3989 + Nivolumab (3 infusions) + NA	
Number of subjects	18	19	
Age Categorical Units: Subjects			
Age continuous Units: years arithmetic mean standard deviation	±	±	
Gender categorical Units: Subjects			
Male	0	0	
Female	0	0	
Age Categorical Units: Subjects			
<=18 years	0	0	
Between 18 and 65 years	0	0	
>=65 years	0	0	

End points

End points reporting groups

Reporting group title	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)

Reporting group description:

In intervention phase (IP), subjects received a loading dose of JNJ-73763989 (JNJ-3989) 200 milligrams (mg) as subcutaneous (SC) injection once weekly (QW) for first 4 weeks starting from Week 0 up to Week 3 followed by single dose once every 4 weeks (Q4W) from Week 4 up to Week 24. At Week 16, subjects received a single dose of nivolumab 0.3 milligrams per kilogram (mg/kg) as intravenous (IV) infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or tenofovir alafenamide [TAF] 25 mg or entecavir [ETV] 0.5 mg) tablet orally once daily (QD) from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to follow up (FU) Week 48 (up to Week 72).

Reporting group title	JNJ-3989 + Nivolumab (3 infusions) + NA

Reporting group description:

In IP, subjects received a loading dose of JNJ-3989 200 mg as SC injection QW for first 4 weeks starting from Week 0 up to Week 3 followed by single dose Q4W from Week 4 up to Week 24. At Weeks 16, 20 and 24, subjects received of nivolumab 0.3 mg/kg as IV infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Reporting group title	NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg)

Reporting group description:

After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Reporting group title	NA(tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg)

Reporting group description:

After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Subject analysis set title	JNJ-73763989 (JNJ-3989) + Nivolumab (1 infusion) + NA
Subject analysis set type	Full analysis

Subject analysis set description:

In intervention phase (IP), subjects received a loading dose of JNJ-3989 200 milligrams (mg) as subcutaneous (SC) injection once weekly (QW) for first 4 weeks starting from Week 0 up to Week 3 followed by single dose once every 4 weeks (Q4W) from Week 4 up to Week 24. At Week 16, subjects received a single dose of nivolumab 0.3 mg/kg as IV infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or tenofovir alafenamide [TAF] 25 mg or entecavir [ETV] 0.5 mg) tablet orally once daily (QD) from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Subject analysis set title	JNJ-3989 + Nivolumab (3 infusions) + NA
Subject analysis set type	Full analysis

Subject analysis set description:

In IP, subjects received a loading dose of JNJ-3989 200 mg as SC injection QW for first 4 weeks starting from Week 0 up to Week 3 followed by single dose Q4W from Week 4 up to Week 24. At Weeks 16, 20 and 24, subjects received 3 doses of nivolumab 0.3 mg/kg as IV infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD from Week 0 up to Week 24. After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Primary: Percentage of Subjects Who Achieved Hepatitis B Surface Antigen (HBsAg) Seroclearance at Follow-up (FU) Week 24

End point title	Percentage of Subjects Who Achieved Hepatitis B Surface Antigen (HBsAg) Seroclearance at Follow-up (FU) Week 24[1]

End point description:

Percentage of subjects who achieved HBsAg seroclearance at FU Week 24 were reported. Seroclearance of HBsAg was defined as a (quantitative) HBsAg level less than (<) lower limit of quantification (LLOQ) (0.05 international unit per millilitres [IU/mL]). Full analysis set (FAS) included all subjects who were randomly assigned to an intervention arm in this intervention-specific appendix (ISA) and received at least 1 dose of study intervention within this ISA.

End point type	Primary

End point timeframe:

At FU Week 24

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: Only descriptive data was planned to be reported for this endpoint.

End point values	NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg)	NA(tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg)		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Percentage of subjects				
number (not applicable)	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Who Experienced Treatment-emergent Adverse Events (TEAEs) of Special Interest

End point title	Percentage of Subjects Who Experienced Treatment-emergent Adverse Events (TEAEs) of Special Interest

End point description:

An AE was any untoward medical occurrence in a subject participating in a clinical study that does not necessarily had a causal relationship with the pharmaceutical/biological agent under study. Any AE occurring at or after the initial administration of study intervention was considered to be treatment-emergent. AEs of interest were significant AEs that are judged to be of special interest because of clinical importance, known class effects or based on nonclinical signals. Safety analysis set included all subjects who received at least 1 dose of study intervention within this ISA.

End point type	Secondary

End point timeframe:

IP: Week 0 up to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Percentage of subjects				
number (not applicable)				
IP	11.1	5.3		
FU Phase	0	5.3		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Subjects with TEAEs by Severity

End point title	Number of Subjects with TEAEs by Severity

End point description:

Number of subjects with TEAEs by severity were reported. An AE was any untoward medical occurrence in a subject participating in a clinical study that did not necessarily had a causal relationship with the pharmaceutical/biological agent under study. Any AE occurring at or after the initial administration of study intervention was considered to be treatment-emergent. Severity of AE were graded by using Division of Acquired Immunodeficiency Syndrome (DAIDS) grading scale that ranges from Grade 1 to Grade 5. Grade 1 indicates a mild event, Grade 2 indicates a moderate event, Grade 3 indicates a severe event, Grade 4 indicated a potentially life-threatening event, Grade 5 indicated death. Safety analysis set included all subjects who received at least 1 dose of study intervention within this ISA.

End point type	Secondary

End point timeframe:

IP: Week 0 up to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Subjects				
IP: Grade 1	5	7		
IP: Grade 2	1	5		
IP: Grade 3	0	0		
IP: Grade 4	0	0		
IP: Grade 5	0	0		
FU Phase: Grade 1	7	6		
FU Phase: Grade 2	1	2		
FU Phase: Grade 3	0	0		
FU Phase: Grade 4	0	0		
FU Phase: Grade 5	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Subjects with Immune Related TEAEs

End point title	Number of Subjects with Immune Related TEAEs

End point description:

Number of subjects with immune related TEAEs were reported. An AE was any untoward medical occurrence in a subject participating in a clinical study that did not necessarily have a causal relationship with the pharmaceutical/ biological agent under study. Any AE occurring at or after the initial administration of study intervention was considered to be treatment-emergent. Immune-related AEs (irAEs) were alanine aminotransferase/alanine aminotransferase (ALT/AST) elevations including immune-related hepatic AEs, infusion-related reaction (IRRs) and other irAEs (including gastrointestinal AEs, neurological AEs, pulmonary AEs, renal AEs, endocrinopathies, rash, uveitis and visual complaints, lipase/amylase elevations, and infection), hematological abnormalities and injection site reactions. Safety analysis set included all subjects who received at least 1 dose of study intervention within this ISA.

End point type	Secondary

End point timeframe:

IP: Week 0 up to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Subjects				
IP	0	0		
FU Phase	0	1		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Subjects with Abnormalities in Vital Signs

End point title	Number of Subjects with Abnormalities in Vital Signs

End point description:

Number of subjects with abnormalities in vital signs measurements (including pulse rate: abnormally low: less than or equal to [<=45 bpm], abnormally high: greater than or equal to [>=]120 bpm; diastolic blood pressure [BP]: abnormally low: <=50 millimetres of mercury (mmHg), mild: >90 to <100 mmHg, moderate: >=100 to <110 mmHg, and severe: >=110 mmHg; systolic BP: abnormally low: <=90 mmHg, mild: >140 to <160 mmHg, moderate: >=160 to <180 mmHg, and severe: >=180 mmHg) were reported. Safety analysis set included all subjects who received at least 1 dose of study

intervention within this ISA.

End point type	Secondary

End point timeframe:

IP: Week 0 up to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Subjects				
IP: Pulse: Abnormally Low	0	0		
IP: Pulse: Abnormally High	0	0		
IP: Diastolic BP: Abnormally Low	0	0		
IP: Diastolic BP: Mild	0	1		
IP: Diastolic BP: Moderate	0	1		
IP: Diastolic BP: Severe	0	1		
IP: Systolic BP: Abnormally low	2	2		
IP: Systolic BP: Mild	2	1		
IP: Systolic BP: Moderate	0	1		
IP: Systolic BP: Severe	0	0		
FU Phase: Pulse: Abnormally low	0	0		
FU Phase: Pulse: Abnormally high	0	0		
FU Phase: Diastolic BP: Abnormally low	0	1		
FU Phase: Diastolic BP: Mild	1	1		
FU Phase: Diastolic BP: Moderate	0	1		
FU Phase: Diastolic BP: Severe	0	0		
FU Phase: Systolic BP: Abnormally low	0	0		
FU Phase: Systolic BP: Mild	2	2		
FU Phase: Systolic BP: Moderate	0	0		
FU Phase: Systolic BP: Severe	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Subjects with Abnormalities in 12-lead Electrocardiogram (ECGs)

End point title	Number of Subjects with Abnormalities in 12-lead Electrocardiogram (ECGs)

End point description:

Number of subjects with abnormalities in 12-lead ECGs: heart rate (abnormally low: <45 beats per minute [bpm], abnormally high: greater than or equal [>=]120 bpm), PR interval (abnormally high: greater than [>] 220 millisecond [msec]), QRS interval (abnormally high: >=120 msec), QTc interval Fridericia (Borderline prolonged QT: 450< QTc <=480 msec; Prolonged QT: 480 < QTc <=500; Pathologically prolonged (PP) QT: QTc >500), were reported. Safety analysis set included all subjects who received at least 1 dose of study intervention within this ISA. Here, 'n' (number analysed) refers to number of subjects evaluable at specified parameter.

End point type	Secondary

End point timeframe:

IP: Week 0 up to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Subjects				
IP:Heart rate: Abnormally low (n=18,19)	0	0		
IP: Heart rate: Abnormally high (n=18,19)	0	0		
IP: PR interval: Abnormally high (n=18,19)	1	0		
IP: QRS interval: Abnormally high (n=18,19)	0	0		
IP:QTc interval: Borderline prolonged QT(n=18,19)	0	1		
IP: QTc interval: prolonged QT (n=18,19)	0	0		
IP: QTc interval: PP QT (n=18,19)	0	0		
FU Ph: Heart rate: Abnormally low (n=18,18)	0	0		
FU Ph: Heart rate: Abnormally high (n=18,18)	0	0		
FU Ph: PR interval: Abnormally high (n=18,18)	0	0		
FU Ph: QRS interval: Abnormally high (n=18,18)	0	0		
FU:QTc interval Borderline prolonged QT(n=18,18)	0	1		
FU Ph: QTc interval: prolonged QT(n=18,18)	0	0		
FU Ph:QTc interval: PP QT (n=18,18)	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects with Abnormalities in Clinical Laboratory Parameters: Hematology

End point title	Percentage of Subjects with Abnormalities in Clinical Laboratory Parameters: Hematology

End point description:

Percentage of subjects with abnormalities in hematology parameters (including basophils/Leukocytes high, erythrocytes mean corpuscular volume (EMCV) high, erythrocytes high and low, lymphocytes/leukocytes high and low, monocytes/leukocytes high and low, neutrophils, segmented+band form high and low, reticulocytes/erythrocytes high and low, basophils/leukocytes,

eosinophils/leukocytes high, erythrocyte mean corpuscular hemoglobin (EMCH) low, reticulocytes/erythrocytes high and low, lymphocytes atypical/leukocytes high, lymphocytes atypical high, hematocrit high, monocytes low and high) were reported. Abnormalities with at least 1 subject is included. Low and high categorization depend on investigator's discretion. Safety analysis set included all subjects who received at least 1 dose of study intervention within this ISA. Here, 'n' (number analysed) refers to number of subjects evaluable at specified parameter. n=0 indicates that there was no evaluable subject for specified parameter.

End point type	Secondary

End point timeframe:

IP: Week 0 up to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Percentage of Subjects				
number (not applicable)				
IP:Basophils/Leukocytes:High(n=18,19)	11.1	42.1		
IP: EMCV:High (n=18,19)	16.7	0		
IP: Erythrocytes: Low (n=18,19)	16.7	26.3		
IP: Erythrocytes: High (n=18,19)	0	5.3		
IP:Lymphocytes/Leukocytes:Low(n=18,19)	0	5.3		
IP:Lymphocytes/Leukocytes: High(n=18,19)	11.1	5.3		
IP:Monocytes/Leukocytes:Low (n=18,19)	0	5.3		
IP:Monocytes/Leukocytes:High (n=18,19)	0	5.3		
IP:Neutrophils, Segmented+Band Form:Low (n=18,19)	22.2	26.3		
IP:Neutrophils, Segmented+Band Form:High(n=18,19)	11.1	10.5		
IP: Reticulocytes/Erythrocytes: Low (n=18,19)	0	10.5		
IP: Reticulocytes/Erythrocytes: High (n=18,19)	0	10.5		
FU Ph: Basophils/Leukocytes: High (n=18,19)	11.1	5.3		
FU Ph:Eosinophils/Leukocytes:High (n=18,19)	0	15.8		
FU Ph: EMCH Low (n=18,19)	5.6	0		
FU Ph: EMCV: High (n=18,19)	27.8	15.8		
FU Ph: Erythrocyte: Low (n=18,19)	11.1	21.1		
FU Ph: Erythrocyte: High (n=18,19)	0	5.3		
FU Ph:Lymphocytes/Leukocytes:Low (n=18,19)	11.1	5.3		
FU Ph:Lymphocytes/Leukocytes:High (n=18,19)	22.2	5.3		
FU Ph:Monocytes/Leukocytes: Low (n=18,19)	0	10.5		
FU Ph:Monocytes/Leukocytes: High (n=18,19)	5.6	15.8		

FU:Neutrophils, Segmented+Band Form:Low(n=18,19)	38.9	31.6		
FU:Neutrophils,Segmented+Band Form:High(n=18,19)	11.1	0		
FU Ph: Reticulocytes/Erythrocytes: Low (n=18,19)	16.7	42.1		
FU Ph:Reticulocytes/Erythrocytes: High(n=18,19)	0	5.3		
FU Ph:Lymphocytes Atypical/Leukocyte:High(n=0,1)	0	100		
FU Ph: Lymphocytes Atypical: High (n=0,1)	0	100		
FU Ph: Hematocrit: High (n=18, 19)	5.6	0		
FU Ph: Monocytes: Low (n=18, 19)	5.6	10.5		
FU Ph: Monocytes: High (n=18, 19)	5.6	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Subjects with Abnormalities in Physical Examinations

End point title	Number of Subjects with Abnormalities in Physical Examinations

End point description:

Number of subjects with abnormalities in physical examinations were reported. Safety analysis set included all subjects who received at least 1 dose of study intervention within this ISA.

End point type	Secondary

End point timeframe:

IP: Week 0 up to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Subjects				
IP	0	2		
FU Phase	2	1		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Subjects with Abnormalities in Clinical Laboratory Parameters: Clinical Chemistry

End point title	Number of Subjects with Abnormalities in Clinical Laboratory

	Parameters: Clinical Chemistry

End point description:

Number of subjects with abnormalities in clinical chemistry parameters (including C reactive protein high, cystatin C low and high, gamma glutamyl transferase low, high density lipoprotein (HDL) cholesterol low and high, indirect bilirubin high, lactate dehydrogenase high, protein high, thyrotropin low and high, free thyroxine high, free triiodothyronine low and high, and urea nitrogen high), were reported. Abnormalities with at least 1 subject is included. Low and high categorization depend on investigator's discretion. Safety analysis set included all subjects who received at least 1 dose of study intervention within this ISA. Here, 'n' (number analysed) signifies number of subjects analysed at each specified timepoint.

End point type	Secondary

End point timeframe:

IP: Week 0 up to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Subjects				
IP: C Reactive Protein: High (n=18,19)	3	2		
IP: Cystatin C: Low (n=18,19)	2	1		
IP: Cystatin C: High (n=18,19)	1	1		
IP:Gamma Glutamyl Transferase:Low (n=18,19)	4	4		
IP: HDL Cholesterol: Low (n=18,19)	6	3		
IP: HDL Cholesterol: High (n=18,19)	3	4		
IP: Indirect Bilirubin: High (n=18,19)	1	0		
IP: Lactate Dehydrogenase: High (n=18,19)	2	2		
IP: Protein: High (n=18,19)	1	0		
IP: Thyrotropin: Low (n=18,19)	2	0		
IP: Thyrotropin: High (n=18,19)	1	0		
IP: Thyroxine, Free : High (n=18,19)	3	1		
IP: Triiodothyronine, Free : Low (n=18,19)	0	1		
IP: Triiodothyronine, Free: High (n=18,19)	5	4		
IP: Urea Nitrogen: High (n=18,19)	1	2		
FU Phase: Chloride: Low (n=18,19)	0	1		
FU Phase: Cystatin C: Low (n=18,19)	1	0		
FU Phase: Cystatin C: High (n=18,19)	2	3		
FU Ph:Gamma Glutamyl Transferase:Low(n=18,19)	0	1		
FU Phase: HDL Cholesterol: Low (n=18,19)	6	2		
FU Phase: HDL Cholesterol: High (n=18,19)	2	4		
FU Phase: Indirect Bilirubin: High (n=17,18)	1	0		
FU Phase: Lactate Dehydrogenase: High (n=18,19)	2	2		
FU Phase: Protein: High (n=18,19)	1	1		

FU Phase: Thyrotropin: Low (n=18,19)	1	0		
FU Phase: Thyrotropin: High (n=18,19)	1	1		
FU Phase: Thyroxine, Free: Low (n=18,19)	1	1		
FU Phase: Thyroxine, Free: High (n=18,19)	2	0		
FU Phase: Triiodothyronine, Free: High (n=18,19)	6	3		
FU Phase: Urea Nitrogen: High (n=18,19)	1	1		
FU Phase: C Reactive Protein: High (n=18,19)	2	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Hepatitis B Surface Antigen (HBsAg) Levels

End point title	Change From Baseline in Hepatitis B Surface Antigen (HBsAg) Levels

End point description:

Change from baseline in HBsAg levels were reported. International units per millilitres=IU/mL. EOSI was the last post-baseline visit in study intervention period. EOS was the last visit in the study. FAS included all subjects who were randomly assigned to an intervention arm in this ISA and received at least 1 dose of study intervention within this ISA. Here, 'n' (number analysed) signifies number of subjects analysed at each specified timepoints.

End point type	Secondary

End point timeframe:

IP: Baseline, Weeks 1, 2, 3, 4, 8, 12, 16, 20, and End of Study Intervention (EOSI; Week 24); FU Phase: FU Weeks 4, 8, 12, 16, 20, 24, 32, 40, 48, and End of Study (EOS)

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: log10 IU/mL				
arithmetic mean (standard deviation)				
IP: Baseline (n=18,19)	3.25 (± 0.472)	3.14 (± 0.542)		
IP: Week 1 (n=18,19)	-0.19 (± 0.185)	-0.17 (± 0.135)		
IP: Week 2 (n=18,19)	-0.26 (± 0.293)	-0.31 (± 0.330)		
IP: Week 3 (n=18,19)	-0.34 (± 0.335)	-0.44 (± 0.405)		
IP: Week 4 (n=18,19)	-0.40 (± 0.400)	-0.52 (± 0.525)		
IP: Week 8 (n=18,19)	-0.80 (± 0.576)	-0.87 (± 0.695)		
IP: Week 12 (n=18,19)	-1.32 (± 0.513)	-1.41 (± 0.687)		

IP: Week 16 (n=18,19)	-1.77 (± 0.361)	-1.84 (± 0.548)		
IP: Week 20 (n=18,19)	-1.97 (± 0.376)	-2.07 (± 0.549)		
IP: EOSI (Week 24) (n=18,19)	-2.01 (± 0.385)	-2.10 (± 0.563)		
FU Phase: Week 4 (n=6,7)	-1.93 (± 0.515)	-1.98 (± 0.590)		
FU Phase: Week 8 (n=18,19)	-1.99 (± 0.417)	-2.12 (± 0.613)		
FU Phase: Week 12 (n=17,16)	-1.93 (± 0.393)	-1.99 (± 0.574)		
FU Phase: Week 16 (n=18,19)	-1.85 (± 0.420)	-2.01 (± 0.648)		
FU Phase: Week 20 (n=18,19)	-1.77 (± 0.418)	-2.02 (± 0.584)		
FU Phase: Week 24 (n=18,19)	-1.70 (± 0.507)	-1.85 (± 0.616)		
FU Phase: Week 32 (n=18,19)	-1.64 (± 0.616)	-1.75 (± 0.606)		
FU Phase: Week 40 (n=18,19)	-1.38 (± 0.568)	-1.69 (± 0.904)		
FU Phase: Week 48 (n=17,16)	-1.23 (± 0.527)	-1.54 (± 0.929)		
FU Phase: EOS (n=18,19)	-1.26 (± 0.530)	-1.54 (± 0.929)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Subjects with Abnormalities in Clinical Laboratory Parameters: Urinalysis

End point title	Number of Subjects with Abnormalities in Clinical Laboratory Parameters: Urinalysis

End point description:

Number of subjects with abnormalities in clinical chemistry parameters (including specific gravity high and urine hyaline casts high) were reported. Abnormalities with at least 1 subject is included. Low and high categorization depend on investigator's discretion. Safety analysis set included all subjects who received at least 1 dose of study intervention within this ISA. Here, N (number of subjects analysed) signifies number of subjects analysed for this endpoint and 'n' (number analysed) signifies number of subjects analysed at each specified timepoint.

End point type	Secondary

End point timeframe:

IP: Week 0 up to Week 24: FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: Subjects				

IP: Specific Gravity: High (n=9,11)	2	0		
IP: Urine Hyaline Casts: High (n=1,1)	1	1		
FU Phase: Specific Gravity: High (n=8,7)	1	1		
FU Phase: Urine Hyaline Casts: High (n=2,2)	2	2		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects with Change in HBsAg Levels Below/Above Different Cut-offs Over Time

End point title	Percentage of Subjects with Change in HBsAg Levels Below/Above Different Cut-offs Over Time

End point description:

Percentage of subjects with change in HBsAg levels below/above different cut-offs (<0.05 IU/mL, <1 U/mL, <10 IU/mL, <100 IU/mL , <1000 IU/mL) over time were reported. EOSI was the last post-baseline visit in study intervention period. EOS was the last visit in the study. FAS included all subjects who were randomly assigned to an intervention arm in this ISA and received at least 1 dose of study intervention within this ISA. Here, 'n' (number analysed) signifies number of subjects analysed at each specified timepoints.

End point type	Secondary

End point timeframe:

IP: Baseline, Weeks 1, 2, 3, 4, 8, 12, 16, 20, and EOSI (Week 24); FU Phase: FU Weeks 4, 8, 12, 16, 20, 24, 32, 40, 48, and EOS (last visit at FU Week 48)

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Percentage of subjects				
number (not applicable)				
IP: Baseline: HBsAg < 0.05 IU/mL (n=18,19)	0	0		
IP: Baseline: HBsAg <1 IU/mL (n=18,19)	0	0		
IP: Baseline: HBsAg <10 IU/mL (n=18,19)	0	0		
IP: Baseline: HBsAg <100 IU/mL (n=18,19)	0	0		
IP: Baseline: HBsAg <1000 IU/mL (n=18,19)	38.9	42.1		
IP: Week 1: HBsAg <0.05 IU/mL (n=18,19)	0	0		
IP: Week 1: HBsAg <1 IU/mL (n=18,19)	0	0		
IP: Week 1: HBsAg <10 IU/mL (n=18,19)	0	0		

IP: Week 1: HBsAg <100 IU/mL (n=18,19)	0	10.5		
IP: Week 1: HBsAg <1000 IU/mL (n=18,19)	44.4	57.9		
IP: Week 2: HBsAg <0.05 IU/mL (n=18,19)	0	0		
IP: Week 2: HBsAg <1 IU/mL (n=18,19)	0	0		
IP: Week 2: HBsAg <10 IU/mL (n=18,19)	0	0		
IP: Week 2: HBsAg <100 IU/mL (n=18,19)	5.6	15.8		
IP: Week 2: HBsAg <1000 IU/mL (n=18,19)	38.9	63.2		
IP: Week 3: HBsAg <0.05 IU/mL (n=18,19)	0	0		
IP: Week 3: HBsAg <1 IU/mL (n=18,19)	0	0		
IP: Week 3: HBsAg <10 IU/mL (n=18,19)	0	0		
IP: Week 3: HBsAg <100 IU/mL (n=18,19)	11.1	15.8		
IP: Week 3: HBsAg <1000 IU/mL (n=18,19)	50.0	63.2		
IP: Week 4: HBsAg <0.05 IU/mL (n=18,19)	0	0		
IP: Week 4: HBsAg <1 IU/mL (n=18,19)	0	0		
IP: Week 4: HBsAg <10 IU/mL (n=18,19)	0	0		
IP: Week 4: HBsAg <100 IU/mL (n=18,19)	11.1	15.8		
IP: Week 4: HBsAg <1000 IU/mL (n=18,19)	61.1	73.7		
IP: Week 8: HBsAg <0.05 IU/mL (n=18,19)	0	0		
IP: Week 8: HBsAg <1 IU/mL (n=18,19)	0	0		
IP: Week 8: HBsAg <10 IU/mL (n=18,19)	0	10.5		
IP: Week 8: HBsAg <100 IU/mL (n=18,19)	27.8	42.1		
IP: Week 8: HBsAg <1000 IU/mL (n=18,19)	66.7	78.9		
IP: Week 12: HBsAg <0.05 IU/mL (n=18,19)	0	0		
IP: Week 12: HBsAg <1 IU/mL (n=18,19)	0	5.3		
IP: Week 12: HBsAg <10 IU/mL (n=18,19)	11.1	15.8		
IP: Week 12: HBsAg <100 IU/mL (n=18,19)	55.6	68.4		
IP: Week 12: HBsAg <1000 IU/mL (n=18,19)	100.0	94.7		
IP: Week 16: HBsAg <0.05 IU/mL (n=18,19)	0	0		
IP: Week 16: HBsAg <1 IU/mL (n=18,19)	0	5.3		
IP: Week 16: HBsAg <10 IU/mL (n=18,19)	16.7	21.1		
IP: Week 16: HBsAg <100 IU/mL (n=18,19)	83.3	89.5		

IP: Week 16: HBsAg <1000 IU/mL (n=18,19)	100.0	100.0		
IP: Week 20: HBsAg <0.05 IU/mL (n=18,19)	0	0		
IP: Week 20: HBsAg <1 IU/mL (n=18,19)	0	5.3		
IP: Week 20: HBsAg <10 IU/mL (n=18,19)	22.2	42.1		
IP: Week 20: HBsAg <100 IU/mL (n=18,19)	83.3	94.7		
IP: Week 20: HBsAg <1000 IU/mL (n=18,19)	100.0	100.0		
IP:EOSI (Week 24): HBsAg <0.05 IU/mL (n=18,19)	0	0		
IP: EOSI (Week 24): HBsAg <1 IU/mL (n=18,19)	0	5.3		
IP: EOSI (Week 24): HBsAg <10 IU/mL (n=18,19)	33.3	52.6		
IP: EOSI (Week 24): HBsAg <100 IU/mL (n=18,19)	88.9	94.7		
IP: EOSI (Week 24): HBsAg <1000 IU/mL (n=18,19)	100.0	100.0		
FU Phase: Week 4: HBsAg <0.05 IU/mL (n=6,7)	0	0		
FU Phase: Week 4: HBsAg <1 IU/mL (n=6,7)	0	0		
FU Phase: Week 4: HBsAg <10 IU/mL (n=6,7)	16.7	57.1		
FU Phase: Week 4: HBsAg <100 IU/mL (n=6,7)	83.3	85.7		
FU Phase: Week 4: HBsAg <1000 IU/mL (n=6,7)	100.0	100.0		
FU Phase: Week 8: HBsAg <0.05 IU/mL (n=18,19)	0	0		
FU Phase: Week 8: HBsAg <1 IU/mL(n=18,19)	0	10.5		
FU Phase: Week 8: HBsAg <10 IU/mL(n=18,19)	33.3	52.6		
FU Phase: Week 8: HBsAg <100 IU/mL(n=18,19)	88.9	94.7		
FU Phase: Week 8: HBsAg <1000 IU/mL(n=18,19)	100.0	100.0		
FU Phase: Week 12: HBsAg <0.05 IU/mL(n=17,16)	0	0		
FU Phase: Week 12: HBsAg <1 IU/mL(n=17,16)	0	0		
FU Phase: Week 12: HBsAg <10 IU/mL(n=17,16)	29.4	50.0		
FU Phase: Week 12: HBsAg <100 IU/mL(n=17,16)	88.2	93.8		
FU Phase: Week 12: HBsAg <1000 IU/mL(n=17,16)	100.0	100.0		
FU Phase: Week 16: HBsAg <0.05 IU/mL(n=18,19)	0	0		
FU Phase: Week 16: HBsAg <1 IU/mL(n=18,19)	0	5.3		
FU Phase: Week 16: HBsAg <10 IU/mL(n=18,19)	22.2	47.4		
FU Phase: Week 16: HBsAg <100 IU/mL(n=18,19)	83.3	94.7		
FU Phase: Week 16: HBsAg <1000 IU/mL(n=18,19)	100.0	100.0		

FU Phase: Week 20: HBsAg <0.05 IU/mL(n=18,17)	0	0		
FU Phase: Week 20: HBsAg <1 IU/mL(n=18,17)	0	0		
FU Phase: Week 20: HBsAg <10 IU/mL(n=18,17)	22.2	52.9		
FU Phase: Week 20: HBsAg <100 IU/mL(n=18,17)	83.3	100.0		
FU Phase: Week 20: HBsAg <1000 IU/mL(n=18,17)	94.4	100.0		
FU Phase: Week 24: HBsAg <0.05 IU/mL(n=18,19)	0	0		
FU Phase: Week 24: HBsAg <1 IU/mL(n=18,19)	0	0		
FU Phase: Week 24: HBsAg <10 IU/mL(n=18,19)	16.7	42.1		
FU Phase: Week 24: HBsAg <100 IU/mL(n=18,19)	72.2	84.2		
FU Phase: Week 24: HBsAg <1000 IU/mL(n=18,19)	88.9	94.7		
FU Phase: Week 32: HBsAg <0.05 IU/mL(n=18,19)	0	0		
FU Phase: Week 32: HBsAg <1 IU/mL(n=18,19)	5.6	0		
FU Phase: Week 32: HBsAg <10 IU/mL(n=18,19)	16.7	26.3		
FU Phase: Week 32: HBsAg <100 IU/mL(n=18,19)	72.2	78.9		
FU Phase: Week 32: HBsAg <1000 IU/mL(n=18,19)	88.9	94.7		
FU Phase: Week 40: HBsAg <0.05 IU/mL(n=18,19)	0	5.3		
FU Phase: Week 40: HBsAg <1 IU/mL(n=18,19)	0	5.3		
FU Phase: Week 40: HBsAg <10 IU/mL(n=18,19)	11.1	15.8		
FU Phase: Week 40: HBsAg <100 IU/mL(n=18,19)	66.7	78.9		
FU Phase: Week 40: HBsAg <1000 IU/mL(n=18,19)	88.9	89.5		
FU Phase: Week 48: HBsAg <0.05 IU/mL(n=17,19)	0	5.3		
FU Phase: Week 48: HBsAg <1 IU/mL(n=17,19)	0	5.3		
FU Phase: Week 48: HBsAg <10 IU/mL(n=17,19)	11.8	15.8		
FU Phase: Week 48: HBsAg <100 IU/mL(n=17,19)	64.7	78.9		
FU Phase: Week 48: HBsAg <1000 IU/mL(n=17,19)	82.4	89.5		
FU Phase: EOS: HBsAg <0.05 IU/mL(n=18,19)	0	5.3		
FU Phase: EOS: HBsAg <1 IU/mL(n=18,19)	0	5.3		
FU Phase: EOS: HBsAg <10 IU/mL(n=18,19)	11.1	15.8		
FU Phase: EOS: HBsAg <100 IU/mL(n=18,19)	66.7	78.9		
FU Phase: EOS: HBsAg <1000 IU/mL(n=18,19)	83.3	89.5		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects With HBsAg With Seroconversion

End point title	Percentage of Subjects With HBsAg With Seroconversion

End point description:

Percentage of subjects with HBsAg seroconversion were reported. Seroconversion of HBsAg was defined as having achieved HBsAg seroclearance and appearance of anti-HBs antibodies (baseline anti-HBs antibodies <LLOQ and a post-baseline assessment >=LLOQ). FAS included all subjects who were randomly assigned to an intervention arm in this ISA and received at least 1 dose of study intervention within this ISA. Here, 'N' (number of subjects analysed) signifies number of subjects analysed for this endpoint and 'n' (number analysed) signifies number of subjects analysed at each specified timepoint.

End point type	Secondary

End point timeframe:

IP: Week 0 to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	17	19		
Units: Percentage of subjects				
number (not applicable)				
IP Phase (n=17,19)	0	0		
FU Phase (n=17,18)	0	5.6		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subejcts With HBsAg Seroclearance

End point title	Percentage of Subejcts With HBsAg Seroclearance

End point description:

Percentage of subjects with HBsAg seroclearance were reported. Seroclearance of HBsAg was defined as a HBsAg level <lower limit of quantification (LLOQ) (0.05 IU/mL). FAS included all subjects who were randomly assigned to an intervention arm in this ISA and received at least 1 dose of study intervention within this ISA.

End point type	Secondary

End point timeframe:

IP: Week 0 to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Percentage of subjects				
number (not applicable)				
IP	0	0		
FU Phase	0	5.3		

Statistical analyses

No statistical analyses for this end point

Secondary: Time to Achieve HBsAg Seroclearance

End point title	Time to Achieve HBsAg Seroclearance[2]

End point description:

Time to achieve HBsAg seroclearance was reported. Seroclearance of HBsAg was defined as a (quantitative) HBsAg level <LLOQ (0.05 IU/mL). FAS included all subjects who were randomly assigned to an intervention arm in this ISA and received at least 1 dose of study intervention within this ISA. 99999 signifies that median and upper limit could not be estimated due to insufficient number of subjects with events. Data could not be collected and analysed as no subject had event in arm JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA).

End point type	Secondary

End point timeframe:

Week 0 up to FU Week 48 (up to Week 72)

Notes:

[2] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: This endpoint was planned to be reported for specified arms only.

End point values	JNJ-3989 + Nivolumab (3 infusions) + NA			
Subject group type	Reporting group			
Number of subjects analysed	1			
Units: Days				
median (full range (min-max))	99999 (450 to 99999)			

Statistical analyses

No statistical analyses for this end point

Secondary: Time to Achieve HBsAg Seroconversion

End point title	Time to Achieve HBsAg Seroconversion[3]

End point description:

Time to achieve HBsAg seroconversion were reported. Seroconversion of HBsAg was defined as having achieved HBsAg seroclearance and appearance of anti-HBs antibodies (baseline anti-HBs antibodies <LLOQ and a post-baseline assessment >=LLOQ). FAS included all subjects who were randomly assigned to an intervention arm in this ISA and received at least 1 dose of study intervention within this ISA. 99999 signifies that median and upper limit could not be estimated due to insufficient number of subjects with events. Data could not be collected and analysed as no subject had event in arm JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA).

End point type	Secondary

End point timeframe:

Week 0 up to FU Week 48 (up to Week 72)

Notes:

[3] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: This endpoint was planned to be reported for specified arms only.

End point values	JNJ-3989 + Nivolumab (3 infusions) + NA			
Subject group type	Reporting group			
Number of subjects analysed	1			
Units: Days				
median (full range (min-max))	99999 (505 to 99999)			

Statistical analyses

No statistical analyses for this end point

Secondary: Hepatitis B Virus (HBV) Deoxyribonucleic Acid (DNA) Levels Over Time

End point title	Hepatitis B Virus (HBV) Deoxyribonucleic Acid (DNA) Levels Over Time

End point description:

HBV DNA levels over time were reported. EOSI was the last post-baseline visit in study intervention period. EOS was the last visit in the study. FAS included all subjects who were randomly assigned to an intervention arm in this ISA and received at least 1 dose of study intervention within this ISA. Here, 'n' (number analysed) signifies number of subjects analysed at each specified timepoint.

End point type	Secondary

End point timeframe:

IP: Baseline, Weeks 2, 4, 8, 12, 16, 20 and EOSI (Week 24); FU Phase: FU Weeks 4, 8, 12, 16, 20, 24, 32, 40, 48, and EOS (last visit at FU Week 48)

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: log10 IU/mL				
arithmetic mean (standard deviation)				

IP: Baseline (n=18,19)	0.83 (± 0.220)	0.80 (± 0.200)		
IP: Week 2 (n=18,19)	0.87 (± 0.260)	0.72 (± 0.109)		
IP: Week 4 (n=18,19)	0.83 (± 0.220)	0.85 (± 0.228)		
IP: Week 8 (n=18,19)	0.88 (± 0.239)	0.82 (± 0.216)		
IP: Week 12 (n=18,19)	0.88 (± 0.239)	0.82 (± 0.216)		
IP: Week 16 (n=18,19)	0.91 (± 0.244)	0.82 (± 0.216)		
IP: Week 20 (n=18,19)	0.86 (± 0.231)	0.80 (± 0.200)		
IP: EOSI (Week 24) (n=18,19)	0.96 (± 0.281)	0.77 (± 0.179)		
FU Phase: Week 4 (n=18,19)	0.83 (± 0.220)	0.90 (± 0.288)		
FU Phase: Week 8 (n=18,19)	0.83 (± 0.220)	0.80 (± 0.200)		
FU Phase: Week 12 (n=17,18)	0.93 (± 0.257)	0.91 (± 0.244)		
FU Phase: Week 16 (n=18,19)	0.78 (± 0.183)	0.85 (± 0.228)		
FU Phase: Week 20 (n=18,17)	0.86 (± 0.231)	0.90 (± 0.242)		
FU Phase: Week 24 (n=18,19)	0.86 (± 0.231)	0.87 (± 0.236)		
FU Phase: Week 32 (n=18,19)	0.88 (± 0.239)	0.75 (± 0.150)		
FU Phase: Week 40 (n=18,19)	0.91 (± 0.244)	0.85 (± 0.228)		
FU Phase: Week 48 (n=17,19)	0.84 (± 0.224)	0.82 (± 0.216)		
FU Phase: EOS (n=18,19)	0.83 (± 0.220)	0.82 (± 0.216)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects With Hepatitis B Virus Deoxyribonucleic Acid (HBV DNA) Level Below/Above Different Cut-offs Over Time

End point title	Percentage of Subjects With Hepatitis B Virus Deoxyribonucleic Acid (HBV DNA) Level Below/Above Different Cut-offs Over Time

End point description:

Percentage of subjects with HBV DNA level below/above different cut-offs over time were reported. HBV DNA cut offs: <LLOQ target detected (TD): that is, traces of HBV DNA were detected/found but were too low to be quantified; <LLOQ target not detected (TND): that is, no traces of HBV DNA were detected/found. EOSI was the last post-baseline visit in study intervention period. EOS was the last visit in the study. The LLOQ for HBV DNA was 20 IU/mL. As indicated in the data table, the sum of percentage values of each sub-categories within the specific timepoints "IP: Week 2" and "FU Phase: Week 4", shows a slight deviation from 100% due to rounding. FAS included all subjects who were randomly assigned to an intervention arm in this ISA and received at least 1 dose of study intervention within this ISA. Here, 'n' (number analysed) signifies number of subjects analysed at each specified timepoint.

End point type	Secondary

End point timeframe:

IP: Baseline, Weeks 2, 4, 8, 12, 16, 20, and EOSI (Week 24); FU Phase: FU Weeks 4, 8, 12, 16, 20, 24, 32, 40, 48, and EOS (last visit at FU Week 48)

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Percentage of subjects				
number (not applicable)				
IP: Baseline: HBV DNA < LLOQ TND(n=18,19)	72.2	78.9		
IP: Baseline: HBV DNA < LLOQ TD(n=18,19)	27.8	21.1		
IP: Week 2: HBV DNA < LLOQ TND(n=18,19)	66.7	94.7		
IP: Week 2: HBV DNA < LLOQ TD(n=18,19)	27.8	5.3		
IP: Week 2: HBV DNA>LLOQ(n=18,19)	5.6	0		
IP: Week 4: HBV DNA < LLOQ TND(n=18,19)	72.2	68.4		
IP: Week 4: HBV DNA < LLOQ TD(n=18,19)	27.8	31.6		
IP: Week 8: HBV DNA < LLOQ TND(n=18,19)	61.1	73.7		
IP: Week 8: HBV DNA < LLOQ TD(n=18,19)	38.9	26.3		
IP: Week 12: HBV DNA < LLOQ TND(n=18,19)	61.1	73.7		
IP: Week 12: HBV DNA < LLOQ TD(n=18,19)	38.9	26.3		
IP: Week 16: HBV DNA <LLOQ TND(n=18,19)	55.6	73.7		
IP: Week 16: HBV DNA <LLOQ TD(n=18,19)	44.4	26.3		
IP: Week 20: HBV DNA <LLOQ TND(n=18,19)	66.7	78.9		
IP: Week 20: HBV DNA <LLOQ TD(n=18,19)	33.3	21.1		
IP: EOSI (Week 24): HBV DNA <LLOQ TND(n=18,19)	50.0	84.2		
IP: EOSI (Week 24): HBV DNA <LLOQ TD(n=18,19)	38.9	15.8		
IP: EOSI(Week 24): HBV DNA > LLOQ(n=18,19)	11.1	0		
FU Phase: Week 4: HBV DNA <LLOQ TND(n=18,19)	72.2	63.2		
FU Phase: Week 4: HBV DNA <LLOQ TD(n=18,19)	27.8	31.6		
FU Phase: Week 4: HBV DNA > LLOQ(n=18,19)	0	5.3		
FU Phase: Week 8: HBV DNA <LLOQ TND(n=18,19)	72.2	78.9		
FU Phase: Week 8: HBV DNA <LLOQ TD(n=18,19)	27.8	21.1		
FU Phase: Week 12: HBV DNA <LLOQ TND(n=17,18)	52.9	55.6		
FU Phase: Week 12: HBV DNA <LLOQ TD(n=17,18)	41.2	44.4		
FU Phase: Week 12: HBV DNA > LLOQ(n=18,19)	5.9	0		

FU Phase: Week 16: HBV DNA <LLOQ TND(n=18,19)	83.3	68.4		
FU Phase: Week 16: HBV DNA <LLOQ TD(n=18,19)	16.7	31.6		
FU Phase: Week 20: HBV DNA <LLOQ TND(n=18,17)	66.7	58.8		
FU Phase: Week 20: HBV DNA <LLOQ TD(n=18,17)	33.3	41.2		
FU Phase: Week 24: HBV DNA <LLOQ TND(n=18,19)	66.7	63.2		
FU Phase: Week 24: HBV DNA <LLOQ TD(n=18,19)	33.3	36.8		
FU Phase: Week 32: HBV DNA <LLOQ TND(n=18,19)	61.1	89.5		
FU Phase: Week 32: HBV DNA <LLOQ TD(n=18,19)	38.9	10.5		
FU Phase:Week 40:HBV DNA <LLOQ TND(n=18,19)	55.6	68.4		
FU Phase: Week 40: HBV DNA <LLOQ TD(n=18,19)	44.4	31.6		
FU Phase: Week 48: HBV DNA <LLOQ TND(n=17,19)	70.6	73.7		
FU Phase: Week 48: HBV DNA <LLOQ TD(n=17,19)	29.4	26.3		
FU Phase: EOS: HBV DNA <LLOQ TND(n=18,19)	72.2	73.7		
FU Phase: EOS: HBV DNA <LLOQ TD(n=18,19)	27.8	26.3		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects with Hepatitis B e Antigen (HBeAg) Level Below/above Different Cut-offs Over Time

End point title	Percentage of Subjects with Hepatitis B e Antigen (HBeAg) Level Below/above Different Cut-offs Over Time

End point description:

Percentage of subjects with HBeAg level below/above different cut-offs over time were reported. HBeAg cut-offs: <LLOQ (0.11 IU/mL). EOSI was the last post-baseline visit in study intervention period. EOS was the last visit in the study. FAS included all subjects who were randomly assigned to an intervention arm in this ISA and received at least 1 dose of study intervention within this ISA. Here, 'n' (number analysed) signifies number of subjects analysed at each specified timepoint. 99999 signifies no subject was analysed at that timepoint.

End point type	Secondary

End point timeframe:

IP: Baseline, Weeks 2, 4, 8, 12, 20, and EOSI (Week 24); FU Phase: FU Weeks 12, 16, 20, 24, 32, 40, 48, and EOS (last visit at FU Week 48)

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Percentage of subjects				
number (not applicable)				
IP: Baseline (n=18,19)	100.0	94.7		
IP: Week 2 (n=0,1)	99999	100.0		
IP: Week 4 (n=0,1)	99999	100.0		
IP: Week 8(n=0,1)	99999	100.0		
IP: Week 12(n=18,19)	100.0	100.0		
IP: Week 20(n=0,1)	99999	100.0		
IP: EOSI (Week 24)(n=18,19)	100.0	100.0		
FU Phase: Week 12 (n=16,16)	100.0	100.0		
FU Phase: Week 16 (n=0,1)	99999	100.0		
FU Phase: Week 24 (n=18,18)	100.0	100.0		
FU Phase: Week 32 (n=0,1)	99999	100.0		
FU Phase: Week 40: (n=1,0)	100.0	99999		
FU Phase: Week 48 (n=17,17)	94.1	100.0		
FU Phase: EOS: (n=18,19)	94.4	100.0		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects with Virologic Breakthrough

End point title	Percentage of Subjects with Virologic Breakthrough

End point description:

Percentage of subjects with virologic breakthrough (confirmed on-treatment HBV DNA increase by >1 log10 IU/mL from nadir in subjects who did not have on-treatment HBV DNA level below LLOQ or a confirmed on-treatment HBV DNA level >200 IU/mL in subjects who had on-treatment HBV DNA level below LLOQ) were reported. FAS included all subjects who were randomly assigned to an intervention arm in this intervention-specific appendix (ISA) and received at least 1 dose of study intervention within this ISA.

End point type	Secondary

End point timeframe:

IP: Week 0 to Week 24; FU Phase: FU Week 1 up to FU Week 48

End point values	JNJ-3989 + Nivolumab (1 infusion) + Nucleos(t)ide Analog (NA)	JNJ-3989 + Nivolumab (3 infusions) + NA		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	18	19		
Units: Percentage of subjects				
number (not applicable)				

IP	0	0		
FU Phase	0	0		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

IP: Week 0 up to Week 24; FU Phase: FU Week 1 up to FU Week 48

Adverse event reporting additional description:

Safety analysis set included all subjects who received at least 1 dose of study intervention within this ISA.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	26.1

Reporting groups

Reporting group title	IP: JNJ-73763989 (JNJ-3989) + Nivolumab (1 Infusion) + NA

Reporting group description:

In intervention phase (IP), subjects received a loading dose of JNJ-3989 200 milligrams (mg) as subcutaneous (SC) injection once weekly (QW) for first 4 weeks starting from Week 0 up to Week 3 followed by single dose once every 4 weeks (Q4W) from Week 4 up to Week 24. At Week 16, subjects received a single dose of nivolumab 0.3 mg/kg as intravenous (IV) infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or tenofovir alafenamide [TAF] 25 mg or entecavir [ETV] 0.5 mg) tablet orally once daily (QD) from Week 0 up to Week 24.

Reporting group title	FU: JNJ-3989 + Nivolumab (3 infusions) + NA

Reporting group description:

After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Reporting group title	FU: JNJ-3989 + Nivolumab (1 infusion) + NA

Reporting group description:

After Week 24, subjects were followed up for safety for 48 weeks during which they continued to receive NA (tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD up to FU Week 48 (up to Week 72).

Reporting group title	IP: JNJ-3989 + Nivolumab (3 infusions) + NA

Reporting group description:

In IP, subjects received a loading dose of JNJ-3989 200 mg as SC injection QW for first 4 weeks starting from Week 0 up to Week 3 followed by single dose Q4W from Week 4 up to Week 24. At Weeks 16, 20 and 24, subjects received of nivolumab 0.3 mg/kg as IV infusion. Subjects also received NA (either tenofovir disoproxil 245 mg or TAF 25 mg or ETV 0.5 mg) tablet orally QD from Week 0 up to Week 24.

Serious adverse events	IP: JNJ-73763989 (JNJ-3989) + Nivolumab (1 Infusion) + NA	FU: JNJ-3989 + Nivolumab (3 infusions) + NA	FU: JNJ-3989 + Nivolumab (1 infusion) + NA
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0

Serious adverse events	IP: JNJ-3989 + Nivolumab (3 infusions) + NA		

Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 19 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		

Frequency threshold for reporting non-serious adverse events: 5 %

Non-serious adverse events	IP: JNJ-73763989 (JNJ-3989) + Nivolumab (1 Infusion) + NA	FU: JNJ-3989 + Nivolumab (3 infusions) + NA	FU: JNJ-3989 + Nivolumab (1 infusion) + NA
Total subjects affected by non-serious adverse events			
subjects affected / exposed	6 / 18 (33.33%)	8 / 19 (42.11%)	8 / 18 (44.44%)
Vascular disorders			
Hypertension			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
General disorders and administration site conditions			
Injection Site Erythema			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Asthenia			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Chills			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Fatigue			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Pyrexia			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Immune system disorders			
Drug Hypersensitivity			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	2	0	0
Reproductive system and breast			

disorders			
Cystocele			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Intermenstrual Bleeding			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Respiratory, thoracic and mediastinal disorders			
Cough			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	1	0	1
Oropharyngeal Pain			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Productive Cough			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Psychiatric disorders			
Insomnia			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Anxiety			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Investigations			
Lipase Increased			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Amylase Increased			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Cardiac disorders			
Palpitations			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Nervous system disorders			

Cervical Radiculopathy			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Headache			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Blood and lymphatic system disorders			
Anaemia			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Eye disorders			
Ocular Hyperaemia			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Conjunctival Haemorrhage			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Gastrointestinal disorders			
Gastritis			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Abdominal Pain Upper			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Abdominal Tenderness			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Dental Caries			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Diarrhoea			
subjects affected / exposed	1 / 18 (5.56%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	1	2	0
Oesophagitis			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Nausea			

subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Haemorrhoids			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Dyspepsia			
subjects affected / exposed	0 / 18 (0.00%)	2 / 19 (10.53%)	0 / 18 (0.00%)
occurrences (all)	0	2	0
Oral Pain			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Toothache			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Vomiting			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Hepatobiliary disorders			
Cholelithiasis			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Skin and subcutaneous tissue disorders			
Skin Hyperpigmentation			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Renal and urinary disorders			
Nephrolithiasis			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Pollakiuria			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Renal Cyst			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Endocrine disorders			

Hyperthyroidism			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Musculoskeletal and connective tissue disorders			
Pain in Extremity			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Periarthritis			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Myalgia			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Muscular Weakness			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	1	0	0
Muscle Spasms			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Intervertebral Disc Protrusion			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Arthralgia			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Infections and infestations			
Conjunctivitis			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Candida Infection			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Bronchitis			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Nasopharyngitis			

subjects affected / exposed	2 / 18 (11.11%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	3	0	0
Influenza			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	1	0	1
Laryngopharyngitis			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Covid-19			
subjects affected / exposed	1 / 18 (5.56%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	1	0	1
Respiratory Tract Infection			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	2
Pharyngitis			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Oral Herpes			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	0 / 18 (0.00%)
occurrences (all)	0	0	0
Viral Infection			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Urethritis			
subjects affected / exposed	0 / 18 (0.00%)	0 / 19 (0.00%)	1 / 18 (5.56%)
occurrences (all)	0	0	1
Urinary Tract Infection			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Metabolism and nutrition disorders			
Vitamin D Deficiency			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0
Decreased Appetite			
subjects affected / exposed	0 / 18 (0.00%)	1 / 19 (5.26%)	0 / 18 (0.00%)
occurrences (all)	0	1	0

Non-serious adverse events	IP: JNJ-3989 + Nivolumab (3 infusions) + NA		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	12 / 19 (63.16%)		
Vascular disorders			
Hypertension			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
General disorders and administration site conditions			
Injection Site Erythema			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Asthenia			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Chills			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Fatigue			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Pyrexia			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Immune system disorders			
Drug Hypersensitivity			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Reproductive system and breast disorders			
Cystocele			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Intermenstrual Bleeding			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	4		
Respiratory, thoracic and mediastinal disorders			

Cough subjects affected / exposed occurrences (all) Oropharyngeal Pain subjects affected / exposed occurrences (all) Productive Cough subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1 1 / 19 (5.26%) 1 0 / 19 (0.00%) 0		
Psychiatric disorders Insomnia subjects affected / exposed occurrences (all) Anxiety subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0 0 / 19 (0.00%) 0		
Investigations Lipase Increased subjects affected / exposed occurrences (all) Amylase Increased subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1 1 / 19 (5.26%) 1		
Cardiac disorders Palpitations subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Nervous system disorders Cervical Radiculopathy subjects affected / exposed occurrences (all) Headache subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0 1 / 19 (5.26%) 4		
Blood and lymphatic system disorders Anaemia			

subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Eye disorders			
Ocular Hyperaemia			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Conjunctival Haemorrhage			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Gastrointestinal disorders			
Gastritis			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Abdominal Pain Upper			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Abdominal Tenderness			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Dental Caries			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Diarrhoea			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Oesophagitis			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Nausea			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Haemorrhoids			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Dyspepsia			

subjects affected / exposed occurrences (all) Oral Pain subjects affected / exposed occurrences (all) Toothache subjects affected / exposed occurrences (all) Vomiting subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1 1 / 19 (5.26%) 1 0 / 19 (0.00%) 0 1 / 19 (5.26%) 1		
Hepatobiliary disorders Cholelithiasis subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Skin and subcutaneous tissue disorders Skin Hyperpigmentation subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Renal and urinary disorders Nephrolithiasis subjects affected / exposed occurrences (all) Pollakiuria subjects affected / exposed occurrences (all) Renal Cyst subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0 0 / 19 (0.00%) 0 0 / 19 (0.00%) 0		
Endocrine disorders Hyperthyroidism subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Musculoskeletal and connective tissue disorders Pain in Extremity			

subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Periarthritis			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Myalgia			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Muscular Weakness			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Muscle Spasms			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Intervertebral Disc Protrusion			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Arthralgia			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Infections and infestations			
Conjunctivitis			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	2		
Candida Infection			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Bronchitis			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Nasopharyngitis			
subjects affected / exposed	0 / 19 (0.00%)		
occurrences (all)	0		
Influenza			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		

Laryngopharyngitis subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Covid-19 subjects affected / exposed occurrences (all)	3 / 19 (15.79%) 3		
Respiratory Tract Infection subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Pharyngitis subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Oral Herpes subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Viral Infection subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Urethritis subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Urinary Tract Infection subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Metabolism and nutrition disorders Vitamin D Deficiency subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		
Decreased Appetite subjects affected / exposed occurrences (all)	0 / 19 (0.00%) 0		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
30 June 2022	The purpose of this amendment was to allow inclusion of subjects with low titers of auto antibodies, to remove certain procedures, to implement changes regarding immune-related gastro-intestinal adverse event management based on Health Authority feedback and clarifications of sampling collection.
28 March 2023	The purpose of this amendment was that due to difficult recruitment a strategic decision was taken to not extend further enrollment beyond the planned enrollment period and continue the study with a reduced sample size.
30 June 2023	The main purpose of this amendment was the discontinuation of programmed cell death protein receptor-1 inhibitor (nivolumab) as study intervention as of 20 June 2023 as an urgent safety measure (USM).

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

Per protocol amendment 2 (28 Mar 2023), due to difficulties in recruitment, further subjects enrollment was stopped. Hence, pharmacokinetic assessments were not performed due to change in planned analysis.

Notes: