

**Official Title:** A Phase IIa, Multicenter, Randomized, Placebo-Controlled, Double-Blind Study to Evaluate the Efficacy, Safety, and Pharmacokinetics of MTPS9579A in Patients with Asthma Requiring Inhaled Corticosteroids and a Second Controller

**NCT Number:** NCT04092582

**Document Date:** DAP Version 3: 30-July-2022

## Output Specifications

**Study title:** A PHASE IIa, MULTICENTER, RANDOMIZED, PLACEBO-CONTROLLED, DOUBLE-BLIND STUDY TO EVALUATE THE EFFICACY, SAFETY, AND PHARMACOKINETICS OF MTPS9579A IN PATIENTS WITH ASTHMA REQUIRING INHALED CORTICOSTEROIDS AND A SECOND CONTROLLER

**Protocol number:** GB41149

**Reporting event:** CSR, August 2022

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**Author:**



July 21,  
2022

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**Study Statistician**

**Date**

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**Approver:**



July 30, 2022

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**Date**

**\* The approver has ensured that key team members have been involved, contributed, and reviewed the Output Specifications for completeness and ability to address the scientific objectives and reporting needs, as well as for appropriate level of scope.**

## Key Definitions:

Analysis Populations

**Intent-to-Treat (ITT) Population:**

Definition: All patients who are randomized in the study.

Variable: ADSL.ITFL

**Modified Intent-to-Treat (mITT) Population:**

Definition: All patients randomized who received at least one dose of study drug.

Variable: ADSL.MITTFL

**Run-in Safety-Evaluable (PEFL) Population:**

Definition: All patients who received the single-blind placebo dose during the run-in period, regardless of whether or not the patient is randomly allocated into the double-blind treatment period.

Variable: ADSL.PEFL

**Safety-Evaluable (SE) Population:**

Definition: All randomized patients who received at least one dose of study drug during the 48-week double-blind treatment period, with patients grouped according to treatment received (MTPS9579A or placebo)

Variable: ADSL.SAFFL

## Biomarker Subgroups

- NASO
- SERUM

## Definition of Baseline

Use randomization (Week 2) as the baseline.

- ADLB uses VISIT = "WEEK 2-RANDOMIZATION" for Baseline calculations; use VISIT = "SCREENING" for parameters that don't have VISIT = "WEEK 2-RANDOMIZATION".
- ADVS uses VISIT = "WEEK 2-RANDOMIZATION" and VSTPT = "PRE-DOSE" for Baseline calculations or VISIT = "SCREENING" for parameters that don't have VISIT = "WEEK 2-RANDOMIZATION" (height and weight).

## Data Handling Specifications:

General Output Specification Categories for all TLGs unless specified below:

- **Column Variables:**

All outputs are unblinded. Columns are displayed in this order: 'Placebo', 'MTPS9579A'.

- **Treatment Group:** Group by Treatment Assigned. ADSL.TRT01P
- **Column Totals:** 'All Patients'
- **Analysis Variables:** See each mock-up below.
- **Numeric Precision and Formatting of Statistics:** Round to 1 decimal unless otherwise specified. For change from baseline outputs, using default STREAM precision is fine.
- **Optional Subsetting:** N

## Section 1. Study Conduct and Analysis Population

### Output 1.1 Summary of Analysis Populations (APT01)

Analysis Populations, Placebo Run-in Period, All Patients

Protocol: GB41149

	All Patients (N=140)
Run-in Safety-Evaluable (PEFL) Population	140 ( 100%)

Analysis Populations, All Patients

Protocol: GB41149

	Placebo (N=66)	MTPS9579A Active (N=69)	All Patients (N=135)
Intent-to-Treat Population (as Randomized)	66 (100%)	69 (100%)	135 ( 100%)
Modified Intent-to-Treat Population	65 (98.5%)	69 (100%)	134 (99.3%)
Safety-Evaluable Population	65 (98.5%)	69 (100%)	134 (99.3%)

## Output 1.2 Enrollment by Country and Investigator Number (ENT01A)

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population

Country, Investigator Number	Placebo (N=nnn)	MTPS9579A (N=nnn)	All Patients (N=nnn)
Country 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
██████████	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
██████████	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Country 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
██████████	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
██████████	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Country 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
██████████	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

## Output 1.3 Summary of Major Protocol Deviations (PDT01)

Protocol: GB41149

Analysis Population: Intent-to-treat population

Category	Placebo (N=nnn)	MTPS9579A (N=nnn)	All Patients (N=nnn)
Total number of patients with at least one major protocol deviation	nn(xx.x%)	nn (xx.x%)	nn(xx.x%)
Total number of major protocol deviations	nn	nn	nn
Inclusion Criteria			
Number of patients	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Exclusion Criteria			
Number of patients	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Procedural deviation			

## Output 1.4 Listing of Major Protocol Deviations (PDL01)

Protocol: GB41149

Analysis Population: Intent-to-treat population

Treatment: PLACEBO

Subject Identifier	Major	Deviation
[REDACTED]	Yes	Inclusion criteria
	Yes	Exclusion criteria
	Yes	Procedural
...		

## Output 1.5 Patient Disposition (DST01)

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population

Status	Placebo (N=nnn)	MTPS9579A (N=nnn)	All Patients (N=nnn)
Completed study	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Optional row 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Optional row 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Optional row n			
Discontinued study	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Reason 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Reason 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

## Output 1.6 Patients Discontinued from Study Treatment (DST01)

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population

Status	Placebo (N=nnn)	MTPS9579A (N=nnn)	All Patients (N=nnn)
Completed treatment	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Optional row 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Optional row 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Optional row n			

Discontinued treatment	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Reason 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Reason 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

## Output 1.7 Listing of Patients who Discontinued from Study (DSL02)

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population

Treatment: PLACEBO

Center/ Patient ID	Age/Sex/Race	Date of First Study Drug Administration	Date of Last Study Drug Administration	Day of Study Discontinuation Relative to First Study Drug Administration	Day of Study Discontinuation Relative to Randomization	Reason for Discontinuation
[REDACTED]	[REDACTED]/F [REDACTED]	[REDACTED]	[REDACTED]	12	14	14
[REDACTED]	[REDACTED]/M [REDACTED]	[REDACTED]	[REDACTED]	36	65	Lost to follow-up
[REDACTED]	[REDACTED]/M [REDACTED]				2	Withdrawal by subject

## Output 1.8 Listing of Patients who Discontinued from Study Treatment (DSL02)

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population

Treatment: PLACEBO

Center/ Patient ID	Age/ Sex/Race	Date of First Study Drug Administration	Day of Last Study Drug Administration	Day of Treatment Discontinuation Relative to First Study Drug Administration	Day of Treatment Discontinuation Relative to Randomization	Reason for Discontinuation
[REDACTED]	[REDACTED]/F [REDACTED]	[REDACTED]	12	14	14	Adverse event
[REDACTED]	[REDACTED]/M [REDACTED]	[REDACTED]	36	65	65	Lost to follow-up
[REDACTED]	[REDACTED]/M [REDACTED]				2	Withdrawal by subject

## Section 2 Demographics & Baseline Characteristics

### Output 2.1 Demographics and Baseline Characteristics (DMT01)

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population

	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
Age (yr)			
n	nnn	nnn	nnn
Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
Median	xx.x	xx.x	xx.x
Min-max	xx-xx	xx-xx	xx-xx
Age group (yr)			

n	nnn	nnn	nnn
18 – <50	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
50 – <65	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>= 65	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<b>Sex</b>			
n	nnn	nnn	nnn
Male	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Female	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<b>Ethnicity</b>			
n	nnn	nnn	nnn
Hispanic or Latino	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Not Hispanic or Latino	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<b>Race</b>			
n	nnn	nnn	nnn
Asian	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Black or African American	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

White nn (xx.x%) nn (xx.x%) nn (xx.x%)

Unknown nn (xx.x%) nn (xx.x%) nn (xx.x%)

**Weight (kg) at Baseline**

n nnn nnn nnn

Mean (SD) xx.x (xx.x) xx.x (xx.x) xx.x (xx.x)

Median xx.x xx.x Xx.x-

Min-max xx.x xx.x xx.x

**Height (cm) at Baseline**

n nnn nnn nnn

Mean (SD) xx.x (xx.x) xx.x (xx.x) xx.x (xx.x)

Median xx.x xx.x xx.x

Min-max xx.x xx.x xx.x

**BMI (kg/m2) at Baseline**

n nnn nnn nnn

Mean (SD) xx.x (xx.x) xx.x (xx.x) xx.x (xx.x)

Median xx.x xx.x xx.x

Min-max

xx.X

xx.X

xx.X

Geographic Region, IxRS Stratif

n

nnn

nnn

nnn

United States / Western Europe

xx.x (xx.x)

xx.x (xx.x)

xx.x (xx.x)

Eastern Europe

xx.X

xx.X

xx.X

Southern Hemisphere

xx.X

xx.X

xx.X

Asthma Exac in Prior Year, IxRS Stratif

n

nnn

nnn

nnn

1 event

xx.x (xx.x)

xx.x (xx.x)

xx.x (xx.x)

>=2 events

xx.X

xx.X

xx.X

Percent Predicted FEV1 at Baseline

n

nnn

nnn

nnn

Mean (SD)

xx.x (xx.x)

xx.x (xx.x)

xx.x (xx.x)

Median

xx.X

xx.X

xx.X

Min-max

xx.X

xx.X

xx.X

Blood Eosinophils at Baseline

n	nnn	nnn	nnn
Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
Median	xx.X	xx.X	xx.X
Min-max	xx.X	xx.X	xx.X
<b>Blood Eosinophils Group at Baseline</b>			
n	nnn	nnn	nnn
< 150	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
150 - 300	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
> 300	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<b>Active Tryptase Allele Counts</b>			
n	nnn	nnn	nnn
<=2	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
>2	xx.X	xx.X	xx.X
<b>ACQ-5 Score at Baseline</b>			
n	nnn	nnn	nnn
Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)

Median	xx.x	xx.x	xx.x
Min-max	xx-xx	xx-xx	xx-xx

## Output 2.2 Listing of Investigators (ENL01)

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population

Center	Investigator	Investigator Number	Center Name	Country
[REDACTED]	...	...	...	...
	...	...	...	...
	...	...	...	...
...	...	...	...	...

## Output 2.3 Listing of Demographics and Baseline Characteristics (DML01)

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population

Treatment: <Treatment>

Center/ Patient ID	Age/Sex/Race	Weight (kg)	Height (cm)	BMI (kg/m <sup>2</sup> )	Ethnicity	...
[REDACTED]	/F/[REDACTED]	xx.x	xxx	xx.x	[REDACTED]	...
	/F/[REDACTED]	xx.x	xxx	xx.x	[REDACTED]	...
	/F/[REDACTED]	xx.x	xxx	xx.x	[REDACTED]	...
/M/[REDACTED]	/M/[REDACTED]	xx.x	xxx	xx.x	[REDACTED]	...
/M/[REDACTED]	/M/[REDACTED]	xx.x	xxx	xx.x	[REDACTED]	...

## Output 2.4 Listing of Randomization Assignments (DML02)

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population

Center/Patient ID	Randomized Treatment	Date of Randomization	Date of First Study Drug Administration

Placebo		
Placebo		
Placebo		
Active Treatment		

## Output 2.5 Summary of Medical History (MHT01)

Protocol: GB41149

Analysis Population: Run-in safety-evaluable population (PEFL)

MedDRA System Organ Class MedDRA Preferred Term	Placebo (N = XXX)	MTPS9579A (N = XXX)	All Patients (N=nnn)
Total number of patients with at least one condition	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of conditions	nnn	nnn	nnn
<b>VASCULAR DISORDERS</b>			
Total number of patients with at least one condition	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of conditions	nn	nn	nn
<b>HYPERTENSION</b>			
	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<b>VARICOSE VEINS</b>			
	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...			
...			

Investigator text for medical history conditions coded using MedDRA version xx.x. Percentages are based on N in the column headings.

Includes all diseases and conditions reported as part of asthma medical history, categorized by Clinical Science.

## Output 2.6 Listing of Medical History (MHL01)

Protocol: GB41149

Analysis Population: Run-in safety-evaluable population (PEFL)

Treatment: ARM A

Center/Patient ID - Age/Sex/Race Body System or Organ Class Standardized Disease Term	Date of First Study Drug Administration	Start Date of Disease	Start Day of Disease	End Date of Disease	End Day of Disease	Time Relation
████████ - █████/F/████						
GASTROINTESTINAL DISORDERS						
GASTROINTESTINAL HAEMORRHAGE	████████	████████	-2021	████████	-2010	prior
DUODENAL ULCER			-2016		-1996	prior
INFECTIONS AND INFESTATIONS	████████	████████	-3758			prior-concomitant
CHRONIC HEPATITIS C						
MUSCULOSKELETAL AND CONNECTIVE TISSUE DISORDERS	████████	████████	-2348	████████	-2338	prior
HAEMARTHROSIS			-1133			prior-concomitant
OSTEOARTHRITIS						prior-concomitant
OSTEOARTHRITIS						
No Coding available			-2018			
No Coding available						
RENAL AND URINARY DISORDERS						
STAG HORN CALCULUS	████████	████████	-5574	████████	-5571	prior
SURGICAL AND MEDICAL PROCEDURES						
HIP ARTHROPLASTY	████████	████████	-5574	████████	-2338	prior
RENAL STONE REMOVAL						
████████ - █████/M/████						
No Coding available		████████	████████	-6447		
No Coding available						
████████ - █████/F/████						
No Coding available		████████	████████	-7739		
No Coding available						

Investigator text for medical history conditions coded using MedDRA xx.xx.

\* End day derived from imputed end date.

## Output 2.7 Glossary of Medical History Coded Terms (AEL01\_NOLLT)

Protocol: GB41149

Analysis Population: Run-in safety-evaluable population (PEFL)

MedDRA System Organ Class Specified Medical History Term	MedDRA Preferred Term	Investigator-
BLOOD AND LYMPHATIC SYSTEM DISORDERS DEFICIENCY ANAEMIA	IRON DEFICIENCY ANAEMIA	IRON
CONGENITAL, FAMILIAL AND GENETIC DISORDERS CHIARI	ARNOLD-CHIARI MALFORMATION	ARNOLD
SYNDROME	GILBERT'S SYNDROME	GILBERT'S

ENDOCRINE DISORDERS  
HYPOTHYROID

HYPOTHYROIDISM

...

...

....

## Section 3. Efficacy Analysis

Efficacy analyses will be conducted on an mITT population, consisting of all randomized patients who received at least one dose of study drug during the 48-week double-blind treatment period, with patients grouped according to the treatment assigned at randomization.

Unless otherwise noted, analyses of efficacy outcome measures will be adjusted by:

1. Blood eosinophil level at week 2 randomization visit (ADSL.BEOGRWK2 < 150 cells/ $\mu$ L, 150–300 cells/ $\mu$ L, > 300 cells/ $\mu$ L)
2. Geographic region (ADSL.REGIONST): United States/Western Europe, Eastern Europe, Southern Hemisphere)
3. Asthma exacerbations in prior year (ADSL.ASMEXGST)

## Tables

### Output 3.1 Time to First CompEx Event, 48-Week Double-Blind Treatment Period

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (MITTFL = 'Y')

Time to First CompEx Event, 48-Week Double-Blind Treatment Period, mITT Subjects Who Were Dosed in Treatment Period		
	Placebo	MTPS9579A Active
Total number of patients per arm	XX	XX
Patients with event: N (%)	XX (XX.X%)	XX (XX.X%)
Patients with diary event: N (%)	XX (XX.X%)	XX (XX.X%)
Patients with exacerbation: N (%)	XX (XX.X%)	XX (XX.X%)
Patients without event (%)	XX (XX.X%)	XX (XX.X%)
Time to event (weeks)		

Median	XXX.X	XXX.X
95% CI	(XXX, XXX)	(XXX, XXX)
25 - 75 percentile	XXX, XXX	XXX, XXX
Range	XXX to XXX	XXX to XXX
Stratified Analysis		
p-value (log-rank)	-	X.XXXX
Hazard Ratio	-	X.XX
95% CI	-	(XX.X, XX.X)
p-value	-	X.XXXX

Hazard ratios were estimated by Cox regression with the following stratification factors as covariates: blood eosinophil level at visit 1 (<150, >=150 to <=300, >300 cells/uL), number of asthma exacerbations requiring the use of systemic corticosteroids within the 12 months prior to the study entry (1 or >=2 events), and geographic region (United States/Western Europe [United States, Germany], Eastern Europe [Poland], Southern Hemisphere [Peru, Argentina]).

## Output 3.2 Time to First Protocol-Defined Asthma Exacerbation, 48-Week Double-Blind Treatment Period

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (MITTFL = 'Y')

Time to First Protocol-defined Asthma Exacerbation, 48-Week Double-Blind Treatment Period, mITT Subjects Who Were Dosed in Treatment Period		
	Placebo	MTPS9579A Active
Total number of patients per arm	XX	XX
Patients with event (%)	XX (XX.X%)	XX (XX.X%)
Patients without event (%)	XX (XX.X%)	XX (XX.X%)
Time to event (weeks)		
Median	XXX.X	XXX.X
95% CI	(XXX, XXX)	(XXX, XXX)

25 - 75 percentile	XXX, XXX	XXX, XXX
Range	XXX to XXX	XXX to XXX
Stratified Analysis		
p-value (log-rank)	-	X.XXXX
Hazard Ratio	-	X.XX
95% CI	-	(XX.X, XX.X)
p-value	-	X.XXXX

Hazard ratios were estimated by Cox regression with the following stratification factors as covariates: blood eosinophil level at visit 1 (<150, >=150 to <=300, >300 cells/uL), number of asthma exacerbations requiring the use of systemic corticosteroids within the 12 months prior to the study entry (1 or >=2 events), and geographic region (United States/Western Europe [United States, Germany], Eastern Europe [Poland], Southern Hemisphere [Peru, Argentina]).

### Output 3.3 Rate of Asthma Exacerbations, 48-Week Double-Blind Treatment Period

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (MITTFL = 'Y')

Rate of Protocol-defined Asthma Exacerbation, 48-Week Double-Blind Treatment Period, All mITT Subjects Who Were Dosed in Treatment Period		
	Placebo	MTPS9579A Active
N	XXX	XXX
Number of exacerbations per patient		
0	XX (XX.X%)	XX (XX.X%)
1	XX (XX.X%)	XX (XX.X%)
2	XX (XX.X%)	XX (XX.X%)
3	XX (XX.X%)	XX (XX.X%)
...		
Total number of exacerbations	XXX	XXX

Total follow-up time at risk (years)	XXX.X	XXX.X
Exacerbation rate (per year)		
Unadjusted	X.XX	X.XX
Adjusted	X.XX	X.XX
Absolute rate difference (events/ year), adjusted (MTPS9579A - placebo)	–	X.XX
Rate ratio, adjusted (MTPS9579A/placebo)	–	X.XX
95% CI		(X.XX, X.XX)
p-value	–	X.XXXX
Percentage rate reduction, adjusted (MTPS9579A vs. placebo)	–	(XX.X%)

Adjusted exacerbation rates and rate ratio are estimated from a Poisson regression model with over-dispersion adjusted for the following covariates and log(patient time at risk) as offset term: blood eosinophil level at visit 1 (<150, >=150 to <=300, >300 cells/uL), number of asthma exacerbations requiring the use of systemic corticosteroids within the 12 months prior to the study entry (1 or >=2 events), and geographic region (United States/Western Europe [United States, Germany], Eastern Europe [Poland], Southern Hemisphere [Peru, Argentina]).

## Output 3.4 Pre-Bronchodilator FEV1 Results and Change from Baseline by Visit (L), 48-Week Double-Blind Treatment Period

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FEV1\_MITT = 'Y')

Pre-Bronchodilator FEV1 Results and Change from Baseline by Visit (L), 48-Week Double-Blind Treatment Period, mITT Subjects Who Were Dosed in Treatment Period				
			Placebo (N = XXX)	MTPS9579A Active (N = XXX)
Baseline	Value at visit	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX

Week 3	Value at visit	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX
	Change from baseline	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX
	Percent change from baseline	n	XXX	XXX
		Mean (SD)	XX.X (XX.X)	XX.X (XX.X)
		Median	XX.X (XX.X)	XX.X (XX.X)
		Min - Max	XX.X (XX.X)	XX.X (XX.X)
Week ...				
Week 50	Value at visit	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX
	Change from baseline	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX
	Percent change from baseline	n	XXX	XXX
		Mean (SD)	XX.X (XX.X)	XX.X (XX.X)

		Median	XX.X (XX.X)	XX.X (XX.X)
		Min - Max	XX.X (XX.X)	XX.X (XX.X)

## Output 3.5 Pre-Bronchodilator FeNO Results and Change from Baseline by Visit (ppb), 48-Week Double-Blind Treatment Period

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FENO\_MITT = 'Y')

Pre-Bronchodilator FeNO Results and Change from Baseline by Visit (ppb), 48-Week Double-Blind Treatment Period, mITT Subjects Who Were Dosed in Treatment Period				
			Placebo (N = XXX)	MTPS9579A Active (N = XXX)
Baseline	Value at visit	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX
Week 3	Value at visit	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX
	Change from baseline	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX
	Percent change from baseline	n	XXX	XXX
		Mean (SD)	XX.X (XX.X)	XX.X (XX.X)
		Median	XX.X (XX.X)	XX.X (XX.X)
		Min - Max	XX.X (XX.X)	XX.X (XX.X)

Week ...				
Week 50	Value at visit	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX
	Change from baseline	n	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX
	Percent change from baseline	n	XXX	XXX
		Mean (SD)	XX.X (XX.X)	XX.X (XX.X)
		Median	XX.X (XX.X)	XX.X (XX.X)
		Min - Max	XX.X (XX.X)	XX.X (XX.X)

## Output 3.6 Mixed-Effect Model Repeated Measures Analysis of Absolute Change from Randomization Visit in Pre-bronchodilator FEV1 (L) through Week 50

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FEV1\_MITT = 'Y')

Mixed-Effect Model Repeated Measures Analysis of Absolute Change from Randomization Visit in Pre-bronchodilator FEV1 (L) through Week 50, mITT Subjects Who Were Dosed in Treatment Period

Visit	Absolute Change from Baseline, Pre-Bronchodilator FEV1 (L)	Placebo (N = XXX)	MTPS9579A Active (N = XXX)
Week 3	n	XXX	XXX
	Adjusted Mean (SE)	XXX (XX)	XXX (XX)
	95% CI for Adjusted Mean	(XXX, XXX)	(XXX, XXX)
	Difference in Adjusted Means (SE)	-	XXX (XX)

	95% CI for Difference in Adjusted Means	-	(XXX, XXX)
	P-value	-	X.XXXX
Week ...			
Week 50	n	XXX	XXX
	Adjusted Mean (SE)	XXX (XX)	XXX (XX)
	95% CI for Adjusted Mean	(XXX, XXX)	(XXX, XXX)
	Difference in Adjusted Means (SE)	-	XXX (XX)
	95% CI for Difference in Adjusted Means	-	(XXX, XXX)
	P-value	-	X.XXXX

Footnotes: Estimates are based on a mixed model for repeated measures (MMRM) analysis with an unstructured covariance matrix. The model used the absolute change pre-bronchodilator FEV1 as the response variable and included terms for treatment arm, study visit, treatment arm by study visit interaction, baseline FEV1 as well as its interaction with study visit, in addition to the stratification factors: blood eosinophil level at visit 1 (<150, >=150 to <=300, >300 cells/uL), number of asthma exacerbations requiring the use of systemic corticosteroids within the 12 months prior to the study entry (1 or >=2 events), and geographic region (United States/Western Europe [United States, Germany], Eastern Europe [Poland], Southern Hemisphere [Peru, Argentina]). Subjects without valid baseline values are excluded from analysis.

N in the header represents the number of subjects with at least one post-baseline value.

## **Output 3.7 Mixed-Effect Model Repeated Measures Analysis of Relative Change from Randomization Visit in Pre-bronchodilator FEV1 (L) through Week 50**

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FEV1\_MITT = 'Y')

Similar to Output 3.6.

## **Output 3.8 Mixed-Effect Model Repeated Measures Analysis of Absolute Change from Randomization Visit in FeNO (ppb) through Week 50**

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FENO\_MITT = 'Y')

Mixed-Effect Model Repeated Measures Analysis of Absolute Change from Randomization Visit in Pre-bronchodilator FeNO (ppb) through Week 50, mITT Subjects Who Were Dosed in Treatment Period

Visit	Absolute Change from Baseline, Pre-Bronchodilator FeNO (ppb)	Placebo (N = XXX)	MTPS9579A Active (N = XXX)
Week 3	n	XXX	XXX
	Adjusted Mean (SE)	XXX (XX)	XXX (XX)
	95% CI for Adjusted Mean	(XXX, XXX)	(XXX, XXX)
	Difference in Adjusted Means (SE)	-	XXX (XX)
	95% CI for Difference in Adjusted Means	-	(XXX, XXX)
	P-value	-	X.XXXX
Week ...			
Week 50	n	XXX	XXX
	Adjusted Mean (SE)	XXX (XX)	XXX (XX)
	95% CI for Adjusted Mean	(XXX, XXX)	(XXX, XXX)
	Difference in Adjusted Means (SE)	-	XXX (XX)
	95% CI for Difference in Adjusted Means	-	(XXX, XXX)
	P-value	-	X.XXXX

Footnotes: Estimates are based on a mixed model for repeated measures (MMRM) analysis with an unstructured covariance matrix. The model used the absolute change pre-bronchodilator FeNO as the response variable and included terms for treatment arm, study visit, treatment arm by study visit interaction, baseline FeNO as well as its interaction with study visit, in addition to the stratification factors: blood eosinophil level at visit 1 (<150, >=150 to <=300, >300 cells/uL), number of asthma exacerbations requiring the use of systemic corticosteroids within the 12 months prior to the study entry (1 or >=2 events), and geographic region (United States/Western Europe [United States, Germany], Eastern Europe [Poland], Southern Hemisphere [Peru, Argentina]).

N in the header represents the number of subjects with at least one post-baseline value.

### Output 3.8 Mixed-Effect Model Repeated Measures Analysis of Relative Change from Randomization Visit in FeNO (ppb) through Week 50

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FENO\_MITT = 'Y')

Similar to Output 3.7.

## Graphs

### **Output 3.9 Time to First CompEx Event, 48-Week Double-Blind Treatment Period**

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (MITTFL = 'Y')

Kaplan Meier Plot of Time to First CompEx Event, 48-Week Double-Blind Treatment Period, mITT Subjects Who Were Dosed in Treatment Period

### **Output 3.10 Time to First Protocol-Defined Asthma Exacerbation, 48-Week Double-Blind Treatment Period**

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (MITTFL = 'Y')

Kaplan Meier Plot of Time to First Protocol-defined Asthma Exacerbation, 48-Week Double-Blind Treatment Period, mITT Subjects Who Were Dosed in Treatment Period

### **Output 3.11 Absolute Change from Randomization in Pre-bronchodilator FEV1 (L) Across Time**

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FEV1\_MITT)

Note: add the number of patients at each time point in the plot. Considering the applicability of SAS, a separate table placed below the plot is also acceptable.

### **Output 3.12 Relative Change from Randomization in Pre-bronchodilator FEV1 (%) Across Time**

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FENO\_MITT)

Similar to Output 3.11.

## **Output 3.13 Absolute Change from Randomization in Pre-bronchodilator FeNO (ppb) Across Time**

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FENO\_MITT)

Similar to Output 3.11.

## **Output 3.14 Relative Change from Randomization in Pre-bronchodilator FeNO (%) Across Time**

Protocol: GB41149

Analysis Population: Modified Intent-to-treat population (FEV1\_MITT)

Similar to Output 3.11.

## **Section 4. Safety Analysis**

### **Tables**

#### **Output 4.1 Study Treatment Exposure (EXT01)**

Protocol: GB41149

Analysis Population: Double-Blind Treatment Period (PHASE2); Safety-evaluable population (SE)

	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
Treatment duration (days)			
n	nnn	nnn	nnn
Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
Median	xx.x	xx.x	xx.x
Min-max	xx-xx	xx-xx	xx-xx
Treatment duration (days)			

n	nnn	nnn	nnn
1-28	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
29-56	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
57-84	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
85-112	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
113-140	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
141-168	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
169-196	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
197-224	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
225-252	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
253-280	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
281-308	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
309-336	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>= 337	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<b>Total cumulative dose (unit)</b>			
n	nnn	nnn	nnn
Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
Median	xx.x	xx.x	xx.x

Min-max	xx-xx	xx-xx	xx-xx
---------	-------	-------	-------

Number of doses received

n	nnn	nnn	nnn
---	-----	-----	-----

Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
-----------	-------------	-------------	-------------

Median	xx.x	xx.x	xx.x
--------	------	------	------

Min-max	xx-xx	xx-xx	xx-xx
---------	-------	-------	-------

Number of missed doses

n	nnn	nnn	nnn
---	-----	-----	-----

Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
-----------	-------------	-------------	-------------

Median	xx.x	xx.x	xx.x
--------	------	------	------

Min-max	xx-xx	xx-xx	xx-xx
---------	-------	-------	-------

Relative dose intensity (%)

n	nnn	nnn	nnn
---	-----	-----	-----

Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
-----------	-------------	-------------	-------------

Median	xx.x	xx.x	xx.x
--------	------	------	------

Min-max	xx-xx	xx-xx	xx-xx
---------	-------	-------	-------

## Output 4.2 Concomitant Medications by Medication Class and Preferred Name (CMT01A)

Protocol: GB41149

Analysis Population: Safety-evaluable population

ATC Class Level 2 Other Treatment	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N=nnn)
Total number of patients with at least one treatment	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of treatments	nnn	nnn	nnn
<b>AGENTS ACTING ON THE RENIN-ANGIOTENSIN SYSTEM</b>			
Total number of patients with at least one treatment	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of treatments	nnn	nnn	nnn
RAMIPRIL	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...			
<b>Class 2</b>			
Total number of patients with at least one treatment	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of treatments	nnn	nnn	nnn
Other treatment 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...			

## Output 4.3 Concomitant Medications by Preferred Name (CMT02\_PT)

Protocol: GB41149

Analysis Population: Safety-evaluable population

Other Treatment	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N=nnn)
Total number of patients with at least one treatment	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of treatments	nnn	nnn	nnn
Other treatment 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Other treatment 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...			

## Output 4.4 Overview of Deaths and Adverse Events (AET01)

Protocol: GB41149

Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
Total number of patients with at least one AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of AEs	nn	nn	nn
Total number of deaths	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of patients withdrawn from study due to an AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

Total number of patients with at least one			
AE with fatal outcome	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Serious AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Serious AE leading to withdrawal from treatment	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Serious AE leading to dose modification/interruption	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Related Serious AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
AE leading to withdrawal from treatment	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
AE leading to dose modification/interruption	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Related AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Related AE leading to withdrawal from treatment	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Related AE leading to dose modification/interruption	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Grade 3-5 AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

## Output 4.5 Deaths (DTHT01)

Protocol: GB41149

Analysis Population: Safety-evaluable population

	Placebo (N=xx)	MTPS9579A Active (N=xx)	All patients (N=xxx)
Total number of deaths	nn	nn	nn

Primary cause of death	nn	nn	nn
N			
Adverse event	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Progressive disease	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Other	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

Percentages for Total Number of Deaths are relative to total N.

All other percentages are relative to n within each module.

## Output 4.6 Adverse Events Resulting in Death (AET07)

Protocol: GB41149

Analysis Population: Safety-evaluable population

MedDRA SOC and Preferred Term	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
Total number of deaths	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
SOC1 / PT 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
SOC2 / PT 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
SOC3 / PT 3	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
SOC4 / PT 4	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...			

## Output 4.7 Adverse Events (AET02)

Protocol: GB41149

Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)
- (3) 3 patients that were administered saline by IV infusion without IP at week18 visit (DEVI)
- (4) Grade 3+ adverse events (GRD3)

MedDRA System Organ Class MedDRA Preferred Term	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
Total number of patients with at least one adverse event	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Overall total number of events	nn	nn	nn
SOC 1			
Total number of patients with at least one adverse event	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of events	nn	nn	nn
PT 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
PT 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
PT 3	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
PT 4			
...			

## Output 4.8 Adverse Events Leading to Study Treatment Discontinuation (AET02)

Protocol: GB41149

Analysis Population: 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

[Similar to output 4.7]

## **Output 4.9 Adverse Events Leading to Study Discontinuation (AET02)**

Protocol: GB41149

Analysis Population: 48-Week Double-Blind Treatment Period; Safety-evaluable population

[Similar to output 4.7]

## **Output 4.10 Serious Adverse Events (AET02)**

Protocol: GB41149

Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

[Similar to output 4.7]

## **Output 4.11 Adverse Events Related to Study Treatment (AET09)**

Protocol: GB41149

Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

[Similar to output 4.7]

## **Output 4.12 Serious Adverse Events Related to Study Treatment (AET02)**

Protocol: GB41149

Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

[Similar to output 4.7]

## **Output 4.13 Adverse Events by Preferred Term (AET02)**

Protocol: GB41149

Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
<b>MedDRA Preferred Term</b>			
Total number of patients with at least one adverse event	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Overall total number of events	nn	nn	nn
PT 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
PT 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
PT 3	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
PT 4			
...			

## Output 4.14 Adverse Events by Highest WHO Toxicity Grade (AET04)

Protocol: GB41149

Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

MedDRA System Organ Class MedDRA Preferred Term	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
Grade	Grade 1-2	nn (xx.x%)	nn (xx.x%)
- Any adverse events -	- Any Grade -	nn (xx.x%)	nn (xx.x%)
		nn (xx.x%)	nn (xx.x%)

	1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	<i>Grade 3-4</i>	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	3	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	4	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	<i>Grade 5</i>	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<b>BLOOD AND LYMPHATIC SYSTEM DISORDERS</b>				
- Overall -	- Any Grade -	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	<i>Grade 1-2</i>	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	<i>Grade 3-4</i>	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	3	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	4	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	<i>Grade 5</i>	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
NEUTROPENIAS	- Any Grade -	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	<i>Grade 1-2</i>	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<i>Grade 3-4</i>	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
3	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
4	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<i>Grade 5</i>	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

## Output 4.15 Adverse Event of Special Interest Summary Table (AET01\_AESI)

Protocol: GB41149

Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
Total number of patients with at least one AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of AEs	nn	nn	nn
Total number of patients with at least one AE by worst grade			
Grade 1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Grade 2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

Grade 3	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Grade 4	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of patients with study drug withdrawn due to AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of patients with dose modified/interrupted due to AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of patients with treatment received for AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of patients with all non-fatal AEs resolved	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of patients with at least one unresolved or ongoing non-fatal AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of patients with at least one serious AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Total number of patients with at least one related AE	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)

## Output 4.16 Adverse Events by System Organ Class and Preferred Term (AET01\_ADA)

Protocol: GB41149

Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

MedDRA System Organ Class MedDRA Preferred Term	ADA- (N = XXX)	ADA+ (N = XXX)
Total number of patients with at least one adverse event	nn (xx.x%)	nn (xx.x%)
Overall total number of events	nn	nn
SOC 1		
Total number of patients with at least one adverse event	nn (xx.x%)	nn (xx.x%)
Total number of events	nn	nn
PT 1	nn (xx.x%)	nn (xx.x%)
PT 2	nn (xx.x%)	nn (xx.x%)
PT 3	nn (xx.x%)	nn (xx.x%)
PT 4	nn (xx.x%)	nn (xx.x%)
...		

**Programming notes:**

ADA Evaluable Patients are defined as patients with non-missing ADA status (Either Positive or Negative), ADA status is in the ADAB dataset provided by the MSA team.

## **Output 4.17 Laboratory Tests and Change from Baseline by Visit (LBT01)**

Protocol: GB41149

Analysis Population: Safety-evaluable population

Parameter: <parameter>					
Visit			Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
Baseline	Value at Visit	n	XXX	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX	XXX - XXXX
Day 22	Value at Visit	n	XXX	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX	XXX - XXXX
	Change from Baseline	n	XXX	XXX	XXX
		Mean (SD)	XXXX (XXX)	XXXX (XXX)	XXXX (XXX)
		Median	XXXX	XXXX	XXXX
		Min - Max	XXX - XXXX	XXX - XXXX	XXX - XXXX
	Percent Change from Baseline	n	XXX	XXX	XXX
		Mean (SD)	XX.X (XX.X)	XX.X (XX.X)	XX.X (XX.X)
		Median	XX.X (XX.X)	XX.X (XX.X)	XX.X (XX.X)
		Min - Max	XX.X (XX.X)	XX.X (XX.X)	XX.X (XX.X)
...					

## Output 4.18 Laboratory Test Results with Highest WHO Grade Post-Baseline (LBT07)

Protocol: GB41149

Analysis Population: Double-Blind Treatment Period; Safety-evaluable population (PHASE2\_SE)

Laboratory Test Direction of Abnormality	Highest WHO Grade	Placebo (N = XXX)	MTPS9579A Active (N = XXX)	All Patients (N = XXX)
Absolute neutrophil count	n	nn	nn	nn
Low	1	nn (xx.x <sup>4</sup> %)	nn (xx.x%)	nn (xx.x%)
	2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	3	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	4	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	Any	nn (xx.x <sup>6</sup> %)	nn (xx.x%)	nn (xx.x%)
Alkaline phosphatase	n	nn	nn	nn
High	1	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	2	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	3	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	4	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
	Any	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...				

## Output 4.19 Laboratory Test Results with Highest WHO Grade at Any Time (LBT08)

Protocol: GB41149

Analysis Population: Safety-evaluable population

[Similar to output 4.18]

## Output 4.20 Vital Signs Change from Baseline by Visit (VST01)

Protocol: GB41149

Analysis Population: Safety-evaluable population

<Parameter>

Placebo (N=nnn)	MTPS9579A Active (N=nnn)	All Patients (N=nnn)
--------------------	-----------------------------	-------------------------

Visit	Value at Visit	Change from Baseline	Value at Visit	Change from Baseline	Value at Visit	Change from Baseline
<b>Baseline</b>						
N	nnn		nnn		nnn	
Mean (SD)	xx.x (xx.x)		xx.x (xx.x)		xx.x (xx.x)	
Median	xx.x		xx.x		xx.x	
Min-max	xx.X-xx.X		xx.X-xx.X		xx.X-xx.X	
<b>Day XX</b>						
n	nnn	nnn	nnn	nnn	nnn	nnn
Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
Median	xx.x	xx.x	xx.x	xx.x	xx.x	xx.x
Min-max	xx.X-xx.X	xx.X-xx.X	xx.X-xx.X	xx.X-xx.X	xx.X-xx.X	xx.X-xx.X
<b>Day XX</b>						
n	nnn	nnn	nnn	nnn	nnn	Nnn
Mean (SD)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)	xx.x (xx.x)
Median	xx.x	xx.x	xx.x	xx.x	xx.x	xx.x
Min-max	xx.X-xx.X	xx.X-xx.X	xx.X-xx.X	xx.X-xx.X	xx.X-xx.X	xx.X-xx.X
...						

## Output 4.21 Vital Sign Parameters outside Normal Limits Regardless of Abnormality at Baseline (VST02\_1)

Protocol: GB41149

Analysis Population: Safety-evaluable population

Assessment	Direction of Abnormality	Placebo (N=nnn)	MTPS9579A Active (N=nnn)	All Patients (N=nnn)
Diastolic Blood Pressure	Low	nn/nnn (xx.x%)	nn/nnn (xx.x%)	nn/nnn (xx.x%)
	High	nn/nnn (xx.x%)	nn/nnn (xx.x%)	nn/nnn (xx.x%)

Systolic Blood Pressure	Low	nn/nnn (xx.x%)	nn/nnn (xx.x%)	nn/nnn (xx.x%)
Heart Rate	etc.	nn/nnn (xx.x%)	nn/nnn (xx.x%)	nn/nnn (xx.x%)
Temperature		nn/nnn (xx.x%)	nn/nnn (xx.x%)	nn/nnn (xx.x%)
...				

## **Output 4.22 Vital Sign Parameters outside Normal Limits Among Patients without Abnormality at Baseline (VST02\_2)**

Protocol: GB41149

Analysis Population: Safety-evaluable population

[Similar to output 4.21]

## **Output 4.23 ECG Parameters Change from Baseline by Visit (EGT01)**

Protocol: GB41149

Analysis Population: Safety-evaluable population

[Similar to output 4.20]

## **Output 4.24 ECG Parameters outside Normal Limits Regardless of Abnormality at Baseline (EGT02\_1)**

Protocol: GB41149

Analysis Population: Safety-evaluable population

[Similar to output 4.21]

## **Output 4.25 ECG Parameters outside Normal Limits Among Patients without Abnormality at Baseline (EGT02\_2)**

Protocol: GB41149

Analysis Population: Safety-evaluable population

[Similar to output 4.21]

## Output 4.26 QTcF Actual Values and Change from Baseline by Visit (EGT05\_QTCAT)

Protocol: GB41149

Analysis Population: Safety-evaluable population

Visit / Category	Placebo (N=nnn)	MTPS9579A Active (N=nnn)	All Patients (N=nnn)
<b>Baseline</b>			
Value at Visit			
n	nnn	nnn	nnn
<=450 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>450 to <=480 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>480 to <=500 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>500 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
<b>Day 22</b>			
Value at Visit			
n	nnn	nnn	nnn
<=450 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>450 to <=480 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>480 to <=500 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>500 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
Change from Baseline			
n	nnn	nnn	nnn
<=30 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>30 to <=60 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
>60 msec	nn (xx.x%)	nn (xx.x%)	nn (xx.x%)
...			

## Listings

### Output 4.27 Listing of Drug Administration (EXL01)

Protocol: GB41149

Analysis Population: Double-Blind Treatment Period; Safety-evaluable population (PHASE2\_SE)

Treatment: xxxx (N=xx)

Center/ Patient ID	Visit	Study Day From	Study Day To	Treatment	Dose	Unit	Frequency	Route
	Day 1	1	27	RO12345678	25	MG	QD	ORAL
	Day 28	28	55	RO12345678	25	MG	QD	ORAL
	Day 1	1	27	RO12345678	25	MG	QD	ORAL
	Day 1	1	27	RO12345678	25	MG	QD	ORAL
	Day 28	28	55	RO87654321	50	MG	QD	ORAL
	Day 1	1	27	RO12345678	25	MG	QD	ORAL
	Day 28	28	55	RO12345678	25	MG	QD	ORAL
	Day 1	1	27	RO12345678	25	MG	QD	ORAL
	Day 28	28	55	RO12345678	25	MG	QD	ORAL
	...							

## Output 4.28 Glossary of Concomitant Medication Class, Preferred Name, and Investigator-Specified Terms (CML02A\_GL)

Protocol: GB41149

Analysis Population: Double-Blind Treatment Period; Safety-evaluable population (PHASE2\_SE)

ATC Class Level 2	WHO Drug Preferred Name	Investigator-Specified Treatment Term
Class2 1		
	Preferred Name 1	Investigator Text 1
		Investigator Text 2
	Preferred Name 2	Investigator Text 1
		Investigator Text 2
Class2 2	Preferred Name 1	Investigator Text 1
		Investigator Text 2
	Preferred Name 2	Investigator Text 1

Preferred Name 1

Investigator Text 1

Preferred Name 2

Investigator Text 1

---

## Output 4.29 Listing of Deaths (AEL04)

Protocol: GB41149

Analysis Population: Safety-evaluable population

Treatment: PLACEBO

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Center/ Patient ID	Age/Sex/Race	Date of First Study Drug Administration	Day of Last Study Drug Administration	Day of Death	Cause of Death	Autopsy Performed?
[REDACTED]	[REDACTED]/F/[REDACTED]	[REDACTED]		12	62	Myocardial infarction
[REDACTED]	[REDACTED]/M/[REDACTED]	[REDACTED]		36	37	Ischemic Stroke

---

## Output 4.30 Listing of Pregnancy Results

Protocol: GB41149

Analysis Population: Safety-evaluable population

Treatment: PLACEBO

Center/Patient ID	Age/Sex/Race	Type of Sample	Visit	Date of Collection	Pregnancy Result	Result	Unit
[REDACTED]	[REDACTED]/F/[REDACTED]	Blood	SCREENING	[REDACTED]:08:40:00	<0.6		mU/mL
		Blood	SCREENING	[REDACTED]:08:40:00	NEGATIV		

...

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## Output 4.31 Glossary of Adverse Event Preferred Terms and Investigator-Specified Adverse Event Terms (AEL01\_NOLLT)

Protocol: GB41149

Analysis Population: Safety-evaluable population

MedDRA System Organ Class	MedDRA Preferred Term	Investigator-Specified Adverse Event Term
BLOOD AND LYMPHATIC SYSTEM DISORDERS	ANAEMIA NOS	ANAEMIA
		ANEMIA
	LEUCOCYTOSIS NOS	LEUKOCYTOSIS
	LEUCOPENIA NOS	LEUKOPENIA
	LYMPHADENOPATHY	NECROTIC LYMPH NODE
		SWOLLEN GLANDS IN THROAT
		SWOLLEN THROAT GLANDS
CARDIAC DISORDERS	NEUTROPENIA	NEUTROPENIA
	CARDIOMYOPATHY NOS	CARDIOMYOPATHY
	CONGESTIVE (DILATED) CARDIOMYOPATHY	DILATED CARDIOMYOPATHY
	PERICARDIAL HAEMORRHAGE	PROBABLE PERICARDIAL BLEED
	TACHYCARDIA NOS	TACHYCARDIA
...		

## Output 4.32 Listing of Adverse Events (AEL02\_ED)

Protocol: GB41149

### Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)
- (3) 3 patients that were administered saline by IV infusion without IP at week18 visit (DEVI)

Treatment: <Treatment>

Center/Patient ID	Study Day at Onset	Time from Last Dose to Onset	AE Duration in Days	Most Extreme Intensity	Cause d by Study Drug	Outcome (1)	Treatment for AE	Action Taken (2)
Adverse Event MedDRA Preferred Term	Age/Sex/Race	days hrs mins	Serious					
ANEAMIA NOS	xxx*	xxx xx xx	1**	No	Mild	Yes	2	No
APPETITE DECREASED	xxx	xxx xx xx	2	No	Moderate	No	3	No
DIARRHEA NOS	xxx	xxx xx xx	2**	No	Mild	No	3	No

(1) Outcome: 1 = fatal; 2 = not recovered/not resolved; 3 = recovered/resolved; 4 = recovered/resolved with sequelae; 5 = recovering/resolving; 6 = unknown.

(2) Action taken: 1 = dose increased; 2 = dose not changed; 3 = dose reduced; 4 = drug interrupted; 5 = drug withdrawn; 6 = not applicable; 7 = unknown.

\* Study day derived from imputed onset date

\*\* Duration derived from imputed onset date and/or end date

## Output 4.33 Listing of Serious Adverse Events (AEL03)

Protocol: GB41149

### Analysis Population:

- (1) Placebo Run-in Period; Run-in safety-evaluable population (PERIOD1\_PEFL)
- (2) 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

### Treatment: PLACEBO

Center/Patient ID SAE MedDRA Preferred Term	Age/Sex/Race	Date of First Study Drug Administratio n	Study Day of Onset	AE Duration in Days	Most Extreme Intensity	Caused by Study Drug	Outcom e (1)	Treatment for SAE	Action Taken (2)	Reason Classified as Serious (3)
	■/F/■									
ANEAMIA NOS		■	60*	1**	Mild	Yes	2	No	2	2
APPETITE DECREASED		■	91	2**	Moderate	No	3	No	3	3
	■/M■									
DIARRHEA NOS		■	425	2	Mild	No	3	No	2	6

(1) Outcome: 1 = fatal; 2 = not recovered/not resolved; 3 = recovered/resolved; 4 = recovered/resolved with sequelae; 5 = recovering/resolving; 6 = unknown.

(2) Action taken: 1 = dose increased; 2 = dose not changed; 3 = dose reduced; 4 = drug interrupted; 5 = drug withdrawn; 6 = not applicable; 7 = unknown <; Withdrawal = withdrawal from study>.

(3) Reason classified as serious: 1 = resulted in death; 2 = life threatening; 3 = required or prolonged in patient hospitalization; 4 = disabling; 5 = a congenital anomaly/birth defect in offspring of study subject; 6 = does not meet any of the above serious criteria, but may jeopardize the subject, and may require medical or surgical intervention to prevent one of the outcomes listed above

\* Study day derived from imputed onset date

\*\* Duration derived from imputed onset date and/or end date

## Output 4.34 Listing of Adverse Events Leading to Study Treatment Discontinuation (AEL02\_ED)

Protocol: GB41149

Analysis Population: 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

[Similar to output 4.32]

## Output 4.35 Listing of Adverse Events Leading to Study Discontinuation (AEL02\_ED)

Protocol: GB41149

Analysis Population: 48-Week Double-Blind Treatment Period and 12-Week Safety Follow-up Period; Safety-evaluable population (PERIOD2\_SE)

[Similar to output 4.32]

## Output 4.36 Listing of Laboratory Abnormalities (including WHO grade) (LBL02A)

Protocol: GB41149

Analysis Population: Safety-evaluable population

TREATMENT: <Treatment>

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Lab Test (Unit)	Center / Patient ID	Study Day	Cycle	Date	Days Since Last Dose of Study Drug	Result	Lab Normal Range	WHO Grade
<Lab Test> (<unit>)								
	xxxx/xxx	xx	xx	ddMMYY	xx	xx	XX-XX	xx
	xxxx/xxx	xx	xx	ddMMYY	xx	xx	XX-XX	xx
	xxxx/xxx	xx	xx	ddMMYY	xx	xx	XX-XX	xx
	xxxx/xxx	xx	xx	ddMMYY	xx	xx	XX-XX	xx
	xxxx/xxx	xx	xx	ddMMYY	xx	xx	XX-XX	xx
	xxxx/xxx	xx	xx	ddMMYY	xx	xx	XX-XX	xx

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## Output 4.37 Listing of Vital Signs (VSL01)

Protocol: GB41149

Analysis Population: Safety-evaluable population

Treatment: <Treatment>

Center / Patient ID Age/Sex/Race Visit/Time Point	Standard Range:	Pulse Rate (beats/min)	Respiratory Rate (breaths/min)	Systolic Blood Pressure (mmHg)	Diastolic Blood Pressure (mmHg)	Temperature (C)
		(60-100)	(8-20)	(90-130)	(60-80)	(36.5-37.5)
██████████ M	Study Day	Result	Change from BL Result	Change from BL Result	Change from BL Result	Change from BL Result
Screening	xx	xx	xx	xx	xx	xx
Baseline	xx	xx / L	xx	xx	xx	xx
Day 1/ 1HR	xx	xx / L	xx	xx	xx	xx
Day 1/ 2HR	xx	xx	xx			
Day 2/ 24HR	xx	xx	xx			
xxxx/xx	xx	xx				
xxxx/xxxxx xx/xx/xxxxx						
xxxxx/xxx	xx	xx	xx	xx	xx	xx
xxxxx/xxx	xx	xx / H	xx	xx	xx	xx
	xx	xx / H	xx			
	xx	xx	xx			

Baseline is the patient's last observation prior to initiation of study drug. Abnormalities are flagged as high (H) or low (L) if outside the Roche standard reference range.

## Output 4.38 Listing of ECG Data (EGL01)

Protocol: GB41149

Analysis Population: Safety-evaluable population

[Similar to output 4.37]

## Section 5. Biomarker (PD) Analysis

The analyses of all PD endpoints will be based on the safety-evaluable population.

## Tables

Below 3 tables will be covered in the Safety Section: Output 4.17 Laboratory Tests and Change from Baseline by Visit (LBT01). So there is no need to duplicate those tables.

1. Nasosorption Results and Change from Baseline by Visit and Tests
2. Urea-normalized Nasosorption Results and Change from Baseline by Visit and Tests
3. Serum Results and Change from Baseline by Visit and Tests

## Graphs

### **Output 5.1 Mean Value of Active Tryptase Over Time in Nasosorption**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (NASO\_SE)

### **Output 5.2 Mean Value of Total Tryptase Over Time in Nasosorption**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (NASO\_SE)

### **Output 5.3 Mean Value of Active Tryptase Over Time in Nasosorption - Urea Normalized**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (NASO\_SE)

### **Output 5.4 Mean Value of Total Tryptase Over Time in Nasosorption - Urea Normalized**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (NASO\_SE)

### **Output 5.5 Mean Value of Total Tryptase Over Time in Serum**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (SERUM\_SE)

### **Output 5.6 Mean Percent Change From Baseline of Total Tryptase Over Time in Serum**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (SERUM\_SE)

### **Output 5.7 Mean Percent Change From Baseline of Active Tryptase Over Time in Nasosorption**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (NASO\_SE)

### **Output 5.8 Mean Percent Change From Baseline of Total Tryptase Over Time in Nasosorption**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (NASO\_SE)

## **Output 5.9 Mean Percent Change From Baseline of Active Tryptase Over Time in Nasosorption - Urea Normalized**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (NASO\_SE)

## **Output 5.10 Mean Percent Change From Baseline of Total Tryptase Over Time in Nasosorption - Urea Normalized**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (NASO\_SE)

## **Output 5.11 Mean Value of Urea Over Time in Nasosorption**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (NASO\_SE)

## **Output 5.12 Mean Value of Urea Over Time in Serum**

Protocol: GB41149

Analysis Population: Safety-evaluable population; Nasosorption results (SERUM\_SE)