SYNOPSIS

Trial Identification and Protocol Summary

Company: Tibotec Pharmaceuticals Ltd.		naceuticals Ltd.	Drug Substance: TMC125					
Trade Name: -			Trial no.: TMC125-C211					
Indication: HIV-1 Infection			Clinical Phase: IIb					
TMC	C125 trial to		jects who were randomized in any sponsor-selected logically failed or completed the entire treatment st 48 weeks.					
Investigator: C. Hicks, Division of Infectious Diseases, Duke University Medical Center, Durham, NC27710, United States		versity Medical Center, Durham,	Country : United States, Canada, Italy, Belgium, Spain, France, Poland, Portugal.					
Trial Period: Start: 27-Sep-2004		27-Sep-2004	No. of Investigators: 33					
	End: 20-Mar-2007		No. of Subjects: 43					
Objectives: T	no primory	objective of this study was to evaluate	the long term sofety and tolerability of TMC125					

Objectives: The primary objective of this study was to evaluate the long-term safety and tolerability of TMC125. Secondary objectives were to evaluate the antiviral activity and immunological effect of TMC125 as part of an ARV regimen over time, and to evaluate genotypic and phenotypic changes over time.

Design: This was a Phase IIb, open-label, rollover trial to evaluate the long-term safety and tolerability of TMC125, administered as part of an individually optimized antiretroviral therapy, in HIV-1 infected subjects. In addition, the antiviral activity and immunological effect of TMC125 as part of an antiretroviral regimen over time, and the evolution of HIV phenotype and genotype were evaluated. Subjects who were randomized to an active control arm of any sponsor-selected TMC125 trial and virologically failed or completed the entire treatment period, or who were randomized in a fully blinded TMC125 trial, being unblinded after treatment for at least 48 weeks and identified as having received placebo and who might have derived benefit from TMC125 treatment as judged by the investigator could be enrolled. TMC125 800 mg b.i.d. (formulation TF035) and, after the formulation switch, 200 mg b.i.d. (formulation F060) was given in combination with an investigator-selected, optimized underlying therapy starting at Baseline and consisting of at least 2 drugs (NRTIs and/or allowed PIs and/or ENF) for 48 weeks. Tolerability and safety were assessed throughout the trial. The efficacy parameters were determined at defined time-points during the trial. The trial involved a screening visit, preferably on the same day as the withdrawal visit of the sponsor-selected trial, a baseline visit, a treatment period of 48 weeks, a final visit and a 4-week follow-up period.

Subject Selection

Inclusion Criteria

- 1. Subject had signed the Informed Consent Form (ICF) voluntarily;
- 2. Male or female subject, aged 18 years and above;
- 3. Subject having previously been randomized to an active control arm of a sponsor-selected TMC125 trial and having completed the entire treatment period or having met the definition of virological failure, as defined in the original protocol, before TMC125-C211 screening or subjects who were randomized in a fully blinded TMC125 trial, being unblinded after treatment for at least 48 weeks and identified as having received placebo;
- 4. Subject agreed to take TMC125 in combination with the investigator-selected combination therapy consisting of at least 2 drugs (NRTIs and/or allowed PI and/or ENF; low-dose ritonavir [≤ 400 mg daily dose] was not counted as a separate ARV);
- 5. Subject could comply with the protocol requirements;
- 6. Subject's general medical condition, in the investigator's opinion, did not interfere with the assessments and the completion of the trial.

Exclusion Criteria

1. Use of disallowed concomitant therapy;

2. History of or currently active alcohol or substance use which in the investigator's opinion would likely have

compromised the subjec								
		safety or compliance with the study procedures;						
		ficant disease (e.g., tuberculosis, cardiac dysfunction) or findings during physical vestigator's opinion, would have compromised the subject's safety;						
		mised the subject's safety;						
4. Pregnant or breastfeedin		a hirth control matheds or not willing to						
continue practicing these trial (or the last intake of	Female subject of childbearing potential without the use of effective birth control methods or not willing to continue practicing these birth control methods during the trial and for at least 14 days after the end of the trial (or the last intake of investigational medication): Note: Hormonal based contraception may not be reliable when taking TMC125, therefore to be eligible for							
this study, women of chi	ldbearing potential had to either:							
foam/ gel or diaphragm		-						
	contraceptives <u>in combination with</u> a barri ap with spermicide or female condom with							
	device in combination with a barrier contra							
	micide or female condom with spermicide							
	lly active, practice sexual abstinence or hav							
	postmenopausal for at least 2 years, wome							
	bal ligation were considered of non-childbe							
6. Renal impairment as def	fined by serum creatinine $> 2 x$ upper limit	of normal (ULN);						
	toxicity according to the ACTG grading sev							
	de/cholesterol grade 3 or 4 elevations; or as							
	tamyl transferase [GGT] with all other live							
	3 elevation in amylase with no increase in							
	laboratory evidence of significantly decrea							
	yme levels (International Normalized Ratio	> 1.3 or albumin < 30 g/L or direct						
bilirubin > 2.5 x ULN).								
Treatment	reatment TMC125							
Concentration		ulation switch, 200 mg b.i.d.						
		ulation switch, 200 mg b.i.d.); 100 mg tablets b.i.d. (F060)						
Concentration Dosage Form (TF No.) Usage	200 mg tablets b.i.d. (TF035	•						
Dosage Form (TF No.) Usage	200 mg tablets b.i.d. (TF035); 100 mg tablets b.i.d. (F060)						
Dosage Form (TF No.) Usage Batch Number	200 mg tablets b.i.d. (TF035) O Formulation TF035 D03106, D04210, D04255, D04256 TMC125 800 mg b.i.d. (4 tablets TF035); 100 mg tablets b.i.d. (F060) ral Formulation F060 05H25, 05E24, 05E03, 05E11, 05E10, 05D26, 05D25, 05D23, 05E02, 05D07, 05D06 b.i.d.) or after formulation switch,						
Dosage Form (TF No.) Usage Batch Number	200 mg tablets b.i.d. (TF035) O Formulation TF035 D03106, D04210, D04255, D04256); 100 mg tablets b.i.d. (F060) ral Formulation F060 05H25, 05E24, 05E03, 05E11, 05E10, 05D26, 05D25, 05D23, 05E02, 05D07, 05D06 b.i.d.) or after formulation switch,						
Dosage Form (TF No.) Usage Batch Number	200 mg tablets b.i.d. (TF035) O Formulation TF035 D03106, D04210, D04255, D04256 TMC125 800 mg b.i.d. (4 tablets TF035 TMC125 200 mg b.i.d. (2 tablets F060 b Underlying ART consisting of:); 100 mg tablets b.i.d. (F060) ral Formulation F060 05H25, 05E24, 05E03, 05E11, 05E10, 05D26, 05D25, 05D23, 05E02, 05D07, 05D06 b.i.d.) or after formulation switch, .i.d.) +						
Dosage Form (TF No.) Usage Batch Number	200 mg tablets b.i.d. (TF035) O Formulation TF035 D03106, D04210, D04255, D04256 TMC125 800 mg b.i.d. (4 tablets TF035 TMC125 200 mg b.i.d. (2 tablets F060 b); 100 mg tablets b.i.d. (F060) ral Formulation F060 05H25, 05E24, 05E03, 05E11, 05E10, 05D26, 05D25, 05D23, 05E02, 05D07, 05D06 b.i.d.) or after formulation switch, .i.d.) +						
Dosage Form (TF No.) Usage Batch Number Dose Regimen	200 mg tablets b.i.d. (TF035) O Formulation TF035 D03106, D04210, D04255, D04256 TMC125 800 mg b.i.d. (4 tablets TF035 TMC125 200 mg b.i.d. (2 tablets F060 b Underlying ART consisting of: OBR: at least 2 ARV drugs: NRTI(s) and); 100 mg tablets b.i.d. (F060) ral Formulation F060 05H25, 05E24, 05E03, 05E11, 05E10, 05D26, 05D25, 05D23, 05E02, 05D07, 05D06 b.i.d.) or after formulation switch, .i.d.) +						
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Dosage Form (TF No.) Usage Batch Number Dose Regimen Duration of Treatment Duration of Trial	200 mg tablets b.i.d. (TF035) O Formulation TF035 D03106, D04210, D04255, D04256 TMC125 800 mg b.i.d. (4 tablets TF035 TMC125 200 mg b.i.d. (2 tablets F060 b Underlying ART consisting of: OBR: at least 2 ARV drugs: NRTI(s) and 48 v 48 weeks (excluding So Disallowed Antiretroviral Therapy The following ARV drugs were not allow); 100 mg tablets b.i.d. (F060) ral Formulation F060 05H25, 05E24, 05E03, 05E11, 05E10, 05D26, 05D25, 05D23, 05E02, 05D07, 05D06 b.i.d.) or after formulation switch, .i.d.) + d/or allowed PI(s) and/or ENF weeks creening and follow-up)						
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Dosage Form (TF No.) Usage Batch Number Dose Regimen Duration of Treatment Duration of Trial	200 mg tablets b.i.d. (TF035) O Formulation TF035 D03106, D04210, D04255, D04256 TMC125 800 mg b.i.d. (4 tablets TF035 TMC125 200 mg b.i.d. (2 tablets F060 b Underlying ART consisting of: OBR: at least 2 ARV drugs: NRTI(s) and 48 weeks (excluding S Usallowed Antiretroviral Therapy The following ARV drugs were not allow trial: - PIs: use of PIs other than the combin b.i.d., SQV/rtv 1000/100 mg b.i.d., A	p; 100 mg tablets b.i.d. (F060) ral Formulation F060 05H25, 05E24, 05E03, 05E11, 05E10, 05D26, 05D25, 05D23, 05E02, 05D07, 05D06 b.i.d.) or after formulation switch, .i.d.) + d/or allowed PI(s) and/or ENF weeks creening and follow-up) wed from Baseline and throughout the nations of LPV/rtv 400/100 mg ATV/rtv 300/100 mg q.d. and						
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	 Disallowed Concomitant (non-ARV) Therapy The following medications were not allowed from 14 days prior to Baseline until Week 48 or the withdrawal visit: Therapeutic HIV vaccines; Other vaccines during the first 6 weeks of treatment, afterwards approved
	 vaccines were allowed as long as they were given outside the 4-week time frame preceding a plasma viral load measurement; All investigational drugs were disallowed throughout the trial (except for tenofovir, emtricitabine, ENF where these were not yet licensed in a participating country); Drugs that could potentiate the activity of antiretroviral drugs or have
	 intrinsic antiretroviral activity (but no indication for treatment of HIV infection): Mycophenolic acid, Hydroxyurea, Foscarnet;
	 Cytochrome P450 3A4 inducers: Rifamycins: rifabutin, rifampicin/rifampin, Anticonvulsants: phenobarbital, phenytoin, carbamazepine, Systemic dexamethasone, All products containing <i>Hypericum perforatum</i> (St John's Wort);
	 Cytochrome P450 3A4 inhibitors and inhibitors of transporting proteins: Systemic azole antifungals: ketoconazole and voriconazole were not allowed; itraconazole if not exceeding 200 mg/day and fluconazole were allowed, Macrolide antibiotics: erythromycin, clarithromycin and troleandomycin. In the event that there was a need to introduce these drugs during the trial, dosage and regimen had to be discussed in
	 advance with the sponsor; Cytochrome P450 3A4 substrates with a small therapeutic index: > Terfenadine, astemizole, cisapride, triazolam, and midazolam; > Investigators were to be aware that clinically significant interactions have been demonstrated between sildenafil and other ARVs, specifically PIs. Therefore, the administration of these agents and their dose was to take into consideration possible interactions of the phosphodiesterase type 5 (PDE-5) inhibitors and all other medications, including ARVs,
	 being concurrently administered. The antiarrhythmics amiodarone and quinidine; The antimigraine ergotamines, dihydroergotamine, ergonovine, methylergonovine, ergotaminetartrate and other ergot derivates; The lipid lowering agents simvastatin, lovastatin, cholestyramine and colestipol; Cycloenorin tagrolimus warfarin digovin;
	 Cyclosporin, tacrolimus, warfarin, digoxin; Immunomodulators: systemic corticosteroids, interleukins, interferons; Bone marrow suppressants used in oncology treatment. In addition, radiation therapy was not allowed from 28 days prior to first intake of investigational medication to the last intake of investigational medication.
Statistical Methods	Intent to treat (ITT) analysis, descriptive statistics, frequency tabulations Wilcoxon matched-pairs signed-ranks test Kaplan-Mejer curves

Type of visit	Withdrawal visit previous TMC125 trial	Screening ⁽¹⁾	Baseline ⁽²⁾				Treat	ment pe	riod ⁽³⁾				Final\ withdrawal visit	Post treatn follow-up p	
Time of Visit			Day 1	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 24	Week 32	Week 40	Week 48	Week 1 follow- up visit	Week 4 follow- up visit
Visit		1	2	3	4	5	6	7	8	9	10	11	12	13	14
Informed consent		Х													
Urine pregnancy test, if applicable	Х		Х			Х	Х	Х	Х	Х	Х	Х	Х		Х
Inclusion/exclusion criteria		Х													
Complete physical examination	Х		Х				Х	Х		Х			Х		Х
Brief physical examination				X ⁽⁴⁾	X ⁽⁴⁾	Х			Х		Х	Х			
PBMC sample	Х		Х							Х			Х		
Hepatitis A, B and C test ⁽⁵⁾	Х						Х			Х			Х		
T_3 , T_4 and TSH testing ⁽⁵⁾	Х		Х				Х	Х		Х			Х		
Coagulation test ⁽⁸⁾	Х		Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Hematology & biochemistry (10 h fasting), Urinalysis	Х		Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Vital signs (Pulse, Blood Pressure, Body Temperature)	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
ECG (central reading)	Х		Х					Х		Х			Х		
Weight	Х		Х			Х	Х	Х	Х	Х	Х	Х	Х		Х
TMC125 pharmacokinetics ⁽⁶⁾						Х		Х		Х			Х		
Samples for phenotype/genotype determinations (7)	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Samples for protein analysis					Х	Х		Х		Х			Х		
Plasma viral load	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Immunology	Х		Х		Х	Х	Х	Х	Х	Х	Х	Х	Х		Х
Dispensation of investigational medication			Х		Х	Х	Х	Х	Х	Х	Х	Х			
Concomitant therapy	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Observe/Interview for AEs and HIV-related events	Х		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х

Screening visit preferably took place on the same day as the withdrawal visit of the sponsor-selected TMC125 trial. Overlapping assessments from the original trial to the TMC125-211 were only conducted once. In case the original trial was not immediately followed by trial TMC125-C211 all assessments needed to be performed.

2) Baseline visit could be scheduled as soon as results of screening assessments were known, showing the subject to be eligible for inclusion. In case the baseline visit was performed within 14 days of the screening visit only the concomitant therapy and the AE/HIV related events needed checked and the investigational medication was dispensed. ART could be modified at Baseline.

3) Unscheduled visits could be performed for safety / tolerability reasons and for a confirmatory plasma viral load.

4) Only a skin examination was to be performed at Week 1 and Week 2.

5) Whenever clinically relevant, extra tests could be done at other visits.

6) Pharmacokinetic samples were taken and only analyzed upon sponsor specific request. Samples could be taken at any given time point before or after intake of study medication.

7) Samples collected at Screening and Final/withdrawal visits were tested in real time for the determination of the virco[®]TYPE HIV-1. Screening and Final/withdrawal visit virco[®]TYPE HIV-1 results were provided to the investigators. Baseline samples were tested in batches; reports were not provided. Samples collected at other intervals could be selected for testing by the Protocol Virologist based on viral load; reports were not provided.

9) Coagulation test consisted of measurement of PT, PTT and calculation of INR.

Main Features of the Subject Sample and Summary of the Results

Subject Dispostion Discontinuations and Treatment Duration	TMC125 N = 43
Discontinuations – Reason, n (%)	14 (32.6)
Adverse event/HIV related event	6 (14.0)
Subject reached a virologic endpoint	4 (9.3)
Subject lost to follow-up	1 (2.3)
Subject withdrew consent	1 (2.3)
Subject noncompliant	1 (2.3)
Subject ineligible to continue the trial	1 (2.3)
Duration of Treatment	
Median (range), weeks	48.1 (1.7 - 54.4)
Total patient-years of exposure	33.2

N = number of subjects, n = number of subjects with observations

Baseline Characteristics	TMC125	
	N = 43	
Demographic Data		
Gender, n (%)		
Female	3 (7.0)	
Male	40 (93.0)	
Age: median (range), years	45.0 (18 - 58)	
Weight: median (range), kg	76.9 (44 – 157)	
BMI: median (range), kg/m^2	24.3 (19 – 50)	
Ethnic Origin, n (%)		
Caucasian	32 (74.4)	
Black	8 (18.6)	
Hispanic	2 (4.7)	
Other	1 (2.3)	
Baseline Disease Characteristics*		
Viral load: median (range), copies/mL	16630 (49 – 651,220)	
Log ₁₀ viral load: median (range), copies/mL	4.2 (1.7 – 5.8)	
CD4+ cell count: median (range), 10^6 cells/L	158.0 (1.0 - 671.0)	
Duration of known HIV infection: median (range), years	15.2 (2.9 - 22.9)	
CDC Category, n (%)		
Category A	8 (18.6)	
Category B	7 (16.3)	
Category C	28 (65.1)	
HBV – HBsAg Positive, n (%)	2 (4.7)	
Active HCV infection, n (%)	2 (4.7)	
Hepatitis B and/or C co-infection	3 (7.0)	

N = number of subjects; n = number of subjects with observations * at Baseline of TMC125-C211 trial

Previous ARV experience, n (%)	TMC125 N = 43
NNRTI	
≥ 1	39 (90.7)
NRTI	
\geq 3	42 (97.8)
PI	
\geq 3	36 (83.8)
Fusion Inhibitor	
1	24 (55.8)

N = number of subjects; n = number of subjects with observations

Baseline Resistance Data	TMC125				
	N = 43				
Baseline RT Mutations, median (range)					
Tibotec NNRTI RAMs ^a	2 (0 - 6)				
TMC125 RAMs ^a	1 (0 – 4)				
IAS – USA NNRTI RAMs ^b	1 (0 – 3)				
IAS – USA NRTI RAMs ^b	6 (1 – 11)				
Baseline FC NNRTIs, median (range)					
Nevirapine (NVP)	59.7 (0.2 – 153.5)				
Delavirdine (DLV)	26.3 (0.4 – 247.7)				
Efavirenz (EFV)	12.3 (0.4 – 15693)				
TMC125	1.7 (0.1 – 578.4)				

N = number of subjects; n = number of subjects with observations. ^a Based on the Tibotec extended list of mutations². ^b Based on the November 2005 IAS-USA list of mutations¹.

Underlying ART During the Treatment	TMC125
Period	N = 43
Number of ARVs in Underlying ART, n (%)	
Any ARV	5 (11 ()
2	5 (11.6)
3	16 (37.2)
4	14 (32.6)
5	4 (9.3)
6 7	3 (7.0)
	1 (2.3)
NRTI	1 (2 2)8
0	$1(2.3)^{a}$
1	5 (11.6)
2 3	23 (53.5)
	11 (25.6)
4 5	2 (4.7)
PI IIIII	1 (2.3)
	12 (27.0)
0	12 (27.9)
$\frac{1}{2}$	27 (62.8)
FI	4 (9.3)
0	16 (37.2)
1	27 (62.8)
Individual ARVs in Underlying ART, n (%)	27 (02.8)
PI	<u> </u>
Lopinavir (LPV)	24 (55.8)
Saquinavir (SQV)	5 (11.6)
Atazanavir (ATV)	2 (4.7)
Tipranavir (TPV) ^b	2 (4.7)
Amprenavir (APV) ^b	1 (2.3)
Indinavir (IDV) ^b	1 (2.3)
NRTI	
Tenofovir (TDF)	31 (72.1)
Lamivudine (3TC)	21 (48.8)
Didanosine (ddI)	14 (32.6)
Emtricitabine (FTC)	12 (27.9)
Stavudine (d4T)	9 (20.9)
Zidovudine (AZT)	5 (11.6)
Abacavir (ABC)	5 (11.6)
FI	
Enfuvirtide (ENF)	27 (62.8)
$De novo^{c}$	7 (16.3)
Re-using	20 (46.5)

N = number of subjects; n = number of subjects with observations

^a One subject (211-2402) was a protocol violator as no NRTI was recorded as part of the OBR.

^b Three subjects used at least one disallowed PI during the treatment period (protocol violators). Subject 211-5601 took IDV for 2 months, subject 211-7012 took DRV for 4 months, TPV for 6 weeks and APV for approximately 4 months and subject 211-7016 took TPV for 16 days. [°] *De novo* use = ENF not previously used up to Baseline

Only the initial therapies (i.e., as determined on Day 7) were considered

Sensitivity of Underlying ARVs During the Treatment Period ^{a,b}	TMC125 N = 43
Number of Sensitive ARVs (Antivirogram [®]) in	11 - 73
Underlying ART, n (%)	
Any ARV	
0	13 (30.2)
1	14 (32.6)
2	12 (27.9)
3	3 (7.0)
4	1 (2.3)
NRTI	
0	15 (35.7)
1	17 (40.5)
2	9 (21.4)
3	1 (2.4)
PI	\ /
0	23 (79.3)
1	6 (20.7)
FI	
0	20 (74.1)
1	7 (25.9)

N = number of subjects; n = number of subjects with observations
 ^a TMC125 was not included in the calculation. Sensitivity was based on Antivirogram[®]. ENF was counted as sensitive if it had not been used previously.
 ^b Only the initial therapies (i.e., as determined on Day 7) in the underlying ART were considered.

Safety	TMC125
	N = 43
Treatment-Emergent AEs (Treatment Per	iod)
Most frequently reported AEs ^a , n (%)	
Nausea	9 (20.9)
Fatigue	7 (16.3)
Diarrhea	6 (14.0)
Injection site reaction	6 (14.0)
Flatulence	5 (11.6)
Upper respiratory tract infection	5 (11.6)
n (%) with 1 or more AEs	42 (97.7)
n (%) of deaths during treatment ^b	2 (4.7)
n (%) with one or more serious AEs	7 (16.3)
n (%) of treatment discontinued due to Al	
n (%) with one or more grade 3 or 4 AEs	15 (34.9)
Treatment-Emergent AEs of Interest	
n (%) with any skin event of interest	14 (32.6)
n (%) with rash (any type)	13 (30.2)
n (%) with any neuropsychiatric event of i	
n (%) with any neuropsychiatric event of inter	
n (%) with psychiatric event	10 (23.3)
n (%) with any hepatic event	4 (9.3)
n (%) with hepatobiliary disorders	2 (4.7)
n (%) with any cardiac event	2 (4.7) 2 (4.7)
n (%) with any bleeding event	4 (9.3)
n (%) with any pancreatic event	1 (2.3)
n (%) with pancreatitis	1(2.3) 1(2.3)
N = number of subjects; $n =$ number of pa	
^a Individual preferred terms in at least 10	
^b One additional subject died during follo	
(individual preferred terms at least 10.0%) upper respiratory tract infection. Most AEs grade 3 or 4 AEs was seen. Two subjects d up period. None of the deaths were conside during TMC125 treatment. All but one SA subject each. The incidence of SAEs at leas subjects). Six subjects permanently discont subject) being abdominal pain upper (2 sub subjects (30.2%). Most rashes were grade discontinued TMC125 as a result of this ev	% of subjects reported at least 1 AE, with the most common AEs being nausea, fatigue, diarrhea, injection site reaction, flatulence and were grade 1 or 2 in severity. No consistent pattern of individual ied during the treatment period and 1 subject died during the follow- ered related to TMC125. SAEs were reported in 7 subjects (16.3%) E (dehydration, which occurred in 2 subjects) occurred in only 1 st possibly related to investigational medication was 4.7% (2 inued trial treatment due to AEs with the most common AE (> 1 ojects, 4.7%). Rash (any type, grouped term) was reported in 13 l or 2 in severity. Grade 3 rash occurred in 1 subject who ent. Neuropsychiatric events of interest occurred in 16 subjects eeding events and pancreatic events were generally low in incidence
Clinical Laboratory Tests	ТМС125
	N = 43
Treatment emergent laboratory data	
n (%) with any grade 1 abnormality	39 (90.7)
n (%) with any grade 2 abnormality	32 (74.4)
n (%) with any grade 3/4 abnormality	14 (32.6)
n (%) with any grade 3/4 abnormality	
	14 (32.6)
n (%) with any grade 4 abnormality	3 (7.0)

The overall incidence of laboratory abnormalities was low and no clinically relevant mean changes from Baseline were observed for any laboratory test parameter. The majority of graded laboratory abnormalities was grade 1 or 2 in severity. Treatment-emergent grade 3 laboratory abnormalities occurred in 14 (32.6%) subjects and three (7.0%) subjects had a treatment-emergent grade 4 laboratory abnormality. The most common treatment-emergent grade 3 or 4 laboratory abnormalities were increases in triglycerides experienced in 5 subjects (11.9%) and a decrease in neutrophil count experienced in 3 subjects (7.0%).

Cardiovascular Safety

Small mean changes from Baseline were observed for vital signs or ECG parameters. None of the changes over time or treatment-emergent individual abnormalities were considered clinically relevant.

Other Safety Parameters

There were no clinically relevant changes over time in physical examination findings.

Efficacy				
Parameter	TMC125 N = 43			
Log ₁₀ viral load: mean change (SE) from				
Baseline (copies/mL)				
Week 24	-0.64 (0.165)			
Week 48	-0.57 (0.145)			
Virologic Response Rate (TLOVR), n (%)				
Viral load < 50 copies/mL				
Week 24	12 (27.9)			
Week 48	9 (20.9)			
Viral load < 400 copies/mL				
Week 24	19 (44.2)			
Week 48	16 (37.2)			
Viral load decrease $\geq 1.0 \log_{10} \text{ copies/mL}$				
Week 24	13 (30.2)			
Week 48	10 (23.3)			
Immunologic change ^a : mean change (SE)				
CD4+ cell count (x 10^6 cells/L)				
Week 24	+ 25.2 (14.9)			
Week 48	+33.4 (16.4)			

The efficacy results of this trial showed that treatment with TMC125 as part of an individually optimized ART resulted in a substantial initial mean decrease in plasma viral load from Baseline of approximately -1.1 \log_{10} copies/mL after 4 weeks of treatment. The initial response was followed by a subsequent loss of response with gradual rebound towards Baseline (approximately -0.6 \log_{10} copies/mL at Week 48). Secondary efficacy parameters were in line with the results for the primary efficacy parameter. The mean imputed CD4+ cell count reached approximately 258 x 10⁶ cells/L at Week 32, after which a downward trend was seen. The mean change from Baseline at Week 48 in CD4+ cell count (imputed data) was +33.4 x 10⁶ cells/L.

N = number of subjects; n = number of observations; SE = standard error

^a NC = F.

Conclusions

Trial TMC125-C211 was a rollover trial for subjects not virologically suppressed in the control groups of other Phase II trials, and as such had failed an additional ART compared to subjects in the originating trials. The subjects had high levels of ARV resistance at trial entry. Results confirmed the long-term safety and tolerability of the TMC125 800 mg b.i.d. (TF035) or 200 mg b.i.d (F060) treatment regimens in this patient population. The safety profile was consistent with the safety profile observed in other trials. Most AEs were grade 1 or 2 in severity and infrequently led to discontinuation. No new safety signals were identified. No consistent or clinically relevant changes in laboratory, vital signs or ECG parameters were observed. The antiviral activity of TMC125 in this population was demonstrated by a substantial initial mean decrease in plasma viral load from Baseline. This was followed by a subsequent loss of response. The lack of durability of the response is very likely due to multiple factors, including a high degree of ARV experience and/or resistance at trial entry and limited activity of the background ARVs in the majority of subjects. These results are consistent with current treatment guidelines that recommend at least 2 active agents in treatment-experienced patients to increase the likelihood of substantial and sustained virologic response.

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