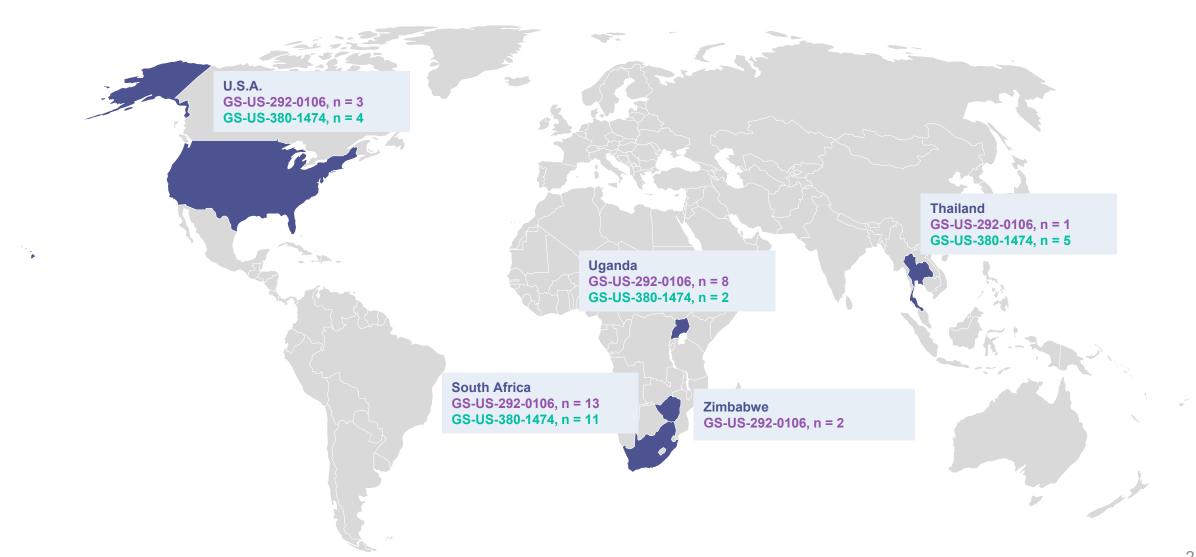
Weight Change and Metabolic Assessment of Virologically Suppressed Children With HIV Aged ≥ 2 Years and Weighing 14 to < 25 Kg Who Received a TAF-Containing Regimen

Supplementary Materials

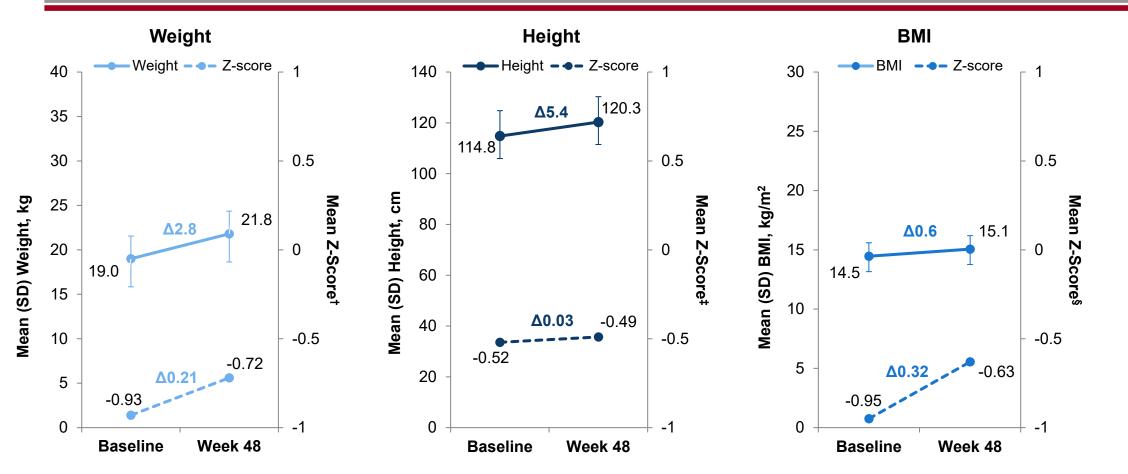
Eva Natukunda,¹ Renate Strehlau,² Elizabeth Hellström,³ Kulkanya Chokephaibulkit,⁴ Afaaf Liberty,⁵ Susanne Crowe,⁶ Kathryn Kersey,⁶ Vinicius A. Vieira,⁶ Natella Rakhmanina^{7–9}

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Enrollment by Country



Weight, Height and BMI at Baseline, and Changes at Week 48*: E/C/F/TAF (N = 27)



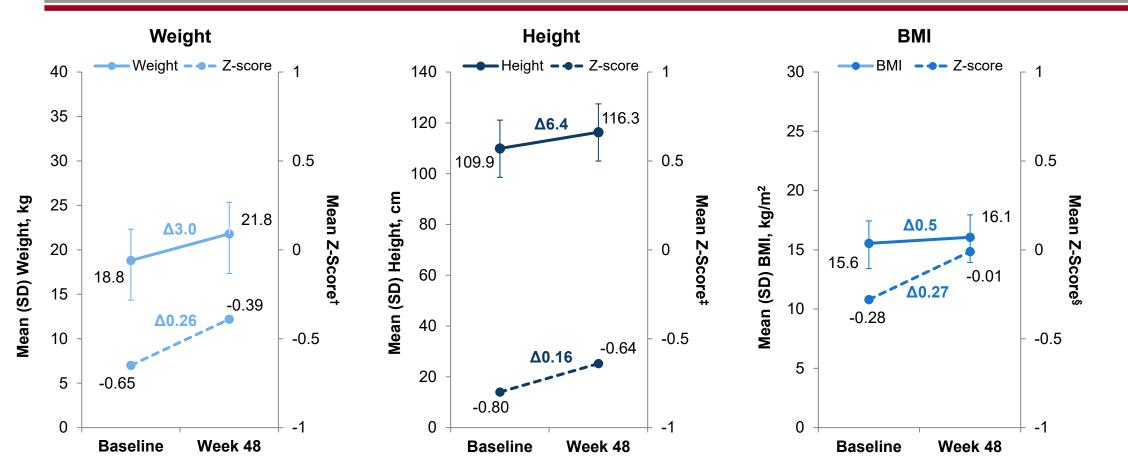
Changes in Z-scores were observed for weight, height and BMI

BMI-for-age percentile increased from baseline to Week 48 by 9.0%

^{*}Z-scores and percentiles were generated based on year 2000 growth charts from the CDC, calculated for child's sex and age¹; †SD for weight z-score was 1.03 kg at baseline and 1.07 kg at Week 48; ‡SD for height was 1.10 cm at baseline and 1.23 cm at Week 48; §SD for BMI z-score was 1.03 kg/m² at baseline and 1.12 kg/m² at Week 48. BMI, body mass index; CDC, Centers for Disease Control and Prevention; E/C/F/TAF, elvitegravir/cobicistat/emtricitabine/tenofovir alafenamide; SD, standard deviation

^{1.} CDC. https://www.cdc.gov/nchs/data/series/sr_11/sr11_246.pdf (accessed May 24, 2023)

Weight, Height and BMI at Baseline, and Changes at Week 48*: B/F/TAF (N = 22)



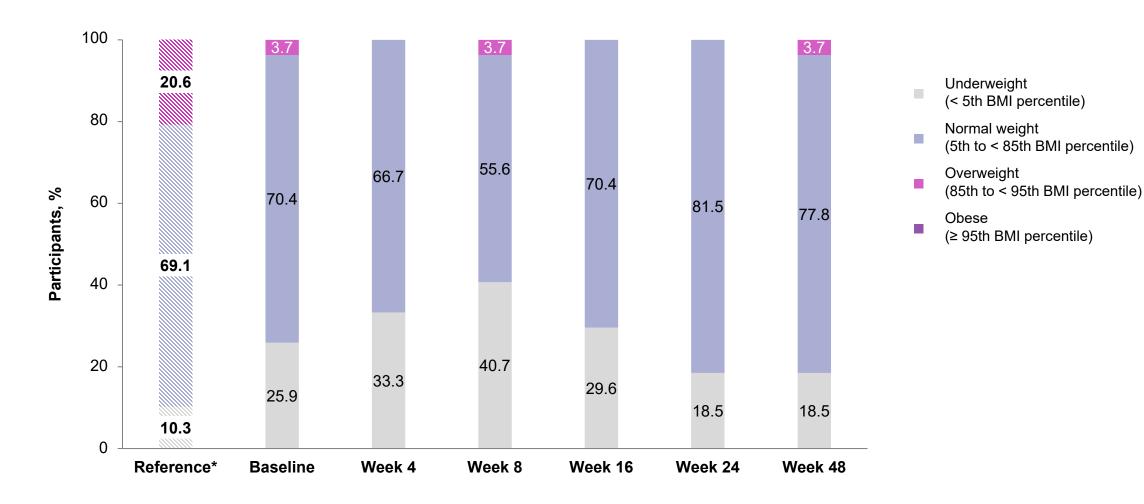
Changes in Z-scores were observed for weight, height and BMI

BMI-for-age percentile increased from baseline to Week 48 by 4.2%

^{*}Z-scores and percentiles were generated based on year 2000 growth charts from the CDC, calculated for child's sex and age¹; †SD for weight z-score was 1.07 kg at baseline and 1.15 kg at Week 48; ‡SD for height was 1.12 cm at baseline and 1.18 cm at Week 48; §SD for BMI z-score was 1.44 kg/m² at baseline and 1.28 kg/m² at Week 48. B/F/TAF, bictegravir/emtricitabine/tenofovir alafenamide; BMI, body mass index; CDC, Centers for Disease Control and Prevention; SD, standard deviation

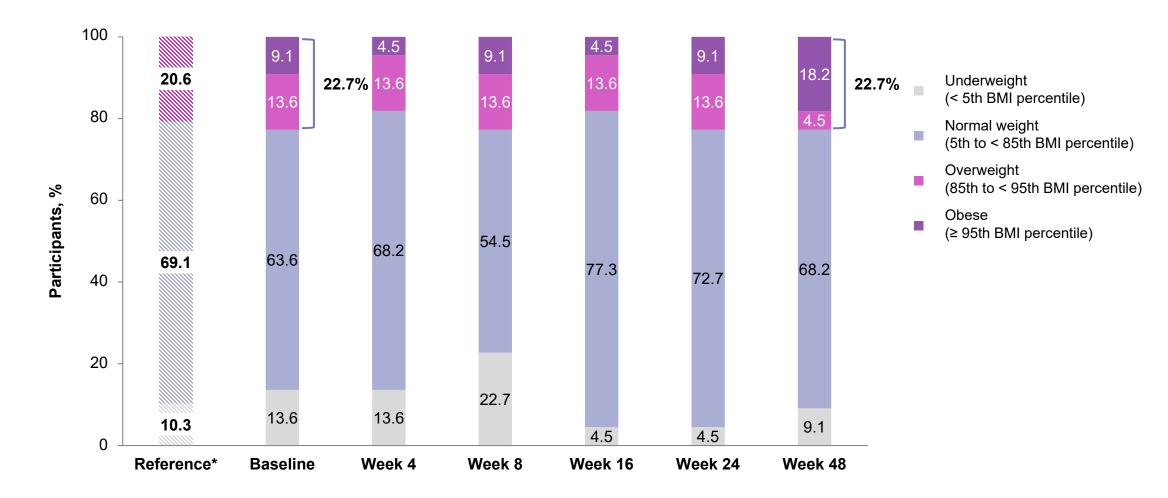
^{1.} CDC. https://www.cdc.gov/nchs/data/series/sr_11/sr11_246.pdf (accessed May 24, 2023)

BMI Categories by Visit: E/C/F/TAF (N = 27)



BMI categories for study data are according to CDC growth charts.^{1,2} *Reference WHO global prevalence data are shown for children aged 5–9 years: underweight, < -2 SD below the median; overweight/obese, > 1 SD above the median.³ BMI, body mass index; CDC, Centers for Disease Control and Prevention; E/C/F/TAF, elvitegravir/cobicistat/emtricitabine/tenofovir alafenamide; SD, standard deviation; WHO, World Health Organization 1. CDC. https://www.cdc.gov/nchs/data/series/sr_11/sr11_246.pdf (accessed May 24, 2023); 2. CDC. https://www.cdc.gov/obesity/basics/childhood-defining.html (accessed May 24, 2023); 3. WHO. https://www.who.int/data/gho/data/indicators (accessed May 24, 2023)

BMI Categories by Visit: B/F/TAF (N = 22)



BMI categories for study data are according to CDC growth charts.^{1,2} *Reference WHO global prevalence data are shown for children aged 5–9 years: underweight, < -2 SD below the median; overweight/obese, > 1 SD above the median.³ B/F/TAF, bictegravir/emtricitabine/tenofovir alafenamide; BMI, body mass index; CDC, Centers for Disease Control and Prevention; SD, standard deviation; WHO, World Health Organization

1. CDC. https://www.cdc.gov/nchs/data/series/sr_11/sr11_246.pdf (accessed May 24, 2023); 2. CDC. https://www.cdc.gov/obesity/basics/childhood-defining.html (accessed May 24, 2023);

3. WHO. https://www.who.int/data/gho/data/indicators (accessed May 24, 2023)

Multivariate Linear Regression of BMI-for-Age Percentile at Week 48: Final Model (N = 49)

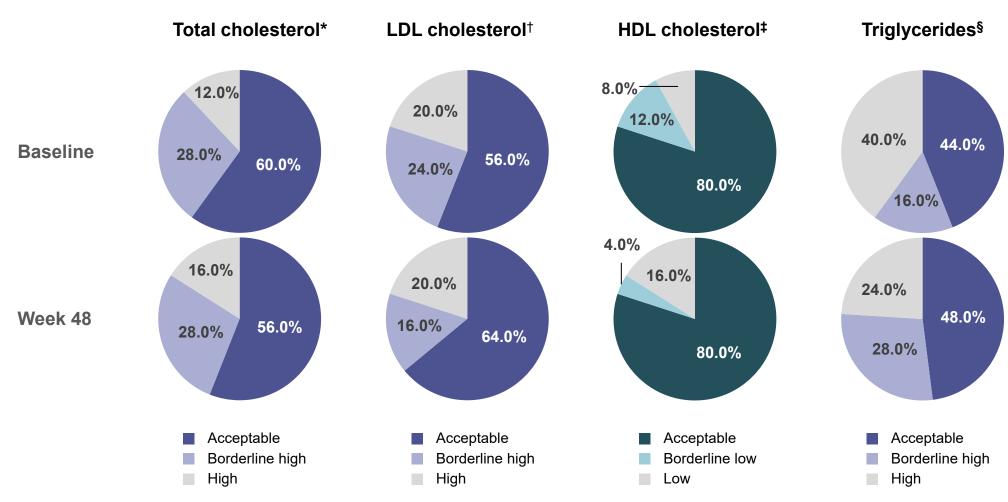
Explanatory variable	Test vs. reference	Estimate (95% CI)	<i>P</i> -value
Sex at birth	Female vs. male (ref.)	11.4 (1.8, 21.0)	0.0213
Baseline ABC	Yes vs. no (ref.)	9.1 (-1.3, 19.5)	0.0858
BMI category at baseline	Underweight vs. overweight/obese (ref.)	18.8 (2.5, 35.1)	0.0248
BMI category at baseline	Normal vs. overweight/obese (ref.)	9.3 (-4.8, 23.4)	0.1916

Bold = P < 0.15. BMI categories for study data are according to CDC growth charts.^{1,2} Percentiles were generated based on the year 2000 growth charts from the CDC website. Stepwise model selection was used to identify which explanatory variables were associated with change in BMI-for-Age percentile at Week 48, resulting in the inclusion of the above explanatory variables in the final model.

ABC, abacavir; BMI, body mass index; CDC, Centers for Disease Control and Prevention; CI, confidence interval

^{1.} CDC. https://www.cdc.gov/nchs/data/series/sr_11/sr11_246.pdf (accessed May 24, 2023); 2. CDC. https://www.cdc.gov/obesity/basics/childhood-defining.html (accessed May 24, 2023)

Lipid Metabolism Categories at Baseline and Week 48: E/C/F/TAF (N = 25)

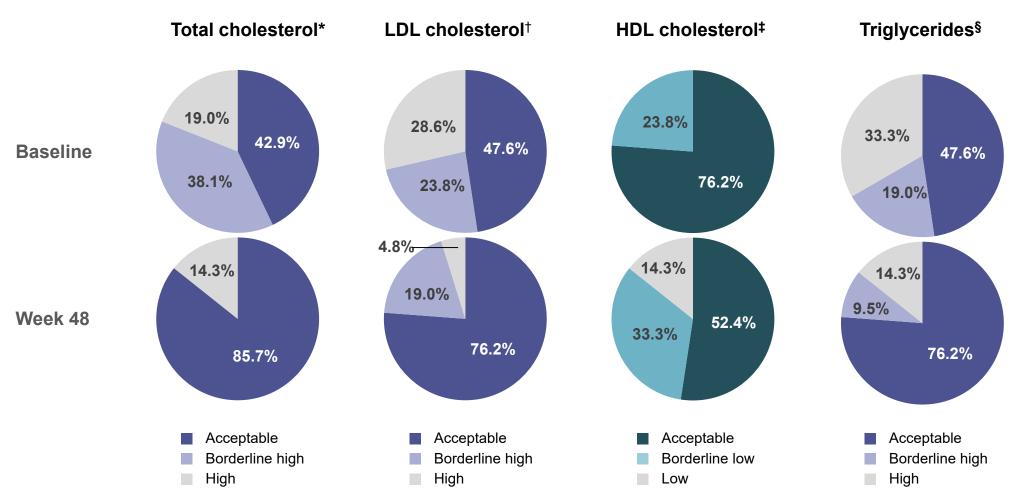


Due to rounding, percentages may not total 100%. Categories were based on integrated guidelines for cardiovascular health and risk reduction in children and adolescents¹
*Fasting total cholesterol (mg/dL): acceptable, < 170; borderline high, \geq 170 to \leq 129; high, \geq 170 to \leq 129; high, \geq 200. †Fasting LDL cholesterol (mg/dL): acceptable, < 110; borderline high, \geq 110 to \leq 129; high, \geq 130. ‡Fasting HDL cholesterol (mg/dL): acceptable, < 45; borderline low, \geq 40 to \leq 45; low, < 40. \$Fasting triglycerides (mg/dL) for age (0–9 years) at collection: acceptable, < 75; borderline high, \geq 75 to \leq 99; high, \geq 100; for age (10–19 years) at collection: acceptable, < 90; borderline high, \geq 90 to \leq 129; high, \geq 130

E/C/F/TAF, elvitegravir/cobicistat/emtricitabine/tenofovir alafenamide; HDL, high-density lipoprotein; LDL, low-density lipoprotein

^{1.} Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction In Children and Adolescents. Pediatrics 2011;128(Suppl. 5):S213-S256

Lipid Metabolism Categories at Baseline and Week 48: B/F/TAF (N = 21)

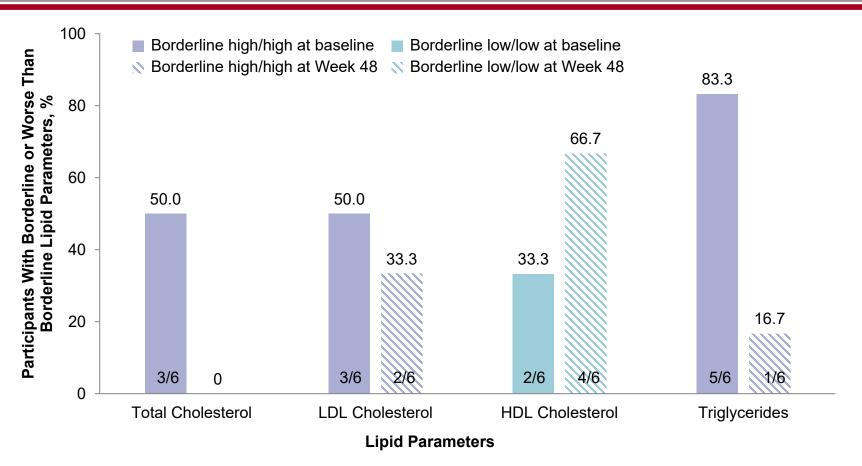


Due to rounding, percentages may not total 100%. Categories were based on integrated guidelines for cardiovascular health and risk reduction in children and adolescents¹
*Fasting total cholesterol (mg/dL): acceptable, < 170; borderline high, \geq 170 to \leq 129; high, \geq 170 to \leq 129; high, \geq 200. †Fasting LDL cholesterol (mg/dL): acceptable, < 110; borderline high, \geq 110 to \leq 129; high, \geq 130. ‡Fasting HDL cholesterol (mg/dL): acceptable, < 45; borderline low, \geq 40 to \leq 45; low, < 40. \$Fasting triglycerides (mg/dL) for age (0–9 years) at collection: acceptable, < 75; borderline high, \geq 75 to \leq 99; high, \geq 100; for age (10–19 years) at collection: acceptable, < 90; borderline high, \geq 90 to \leq 129; high, \geq 130

B/F/TAF, bictegravir/emtricitabine/tenofovir alafenamide; HDL, high-density lipoprotein; LDL, low-density lipoprotein

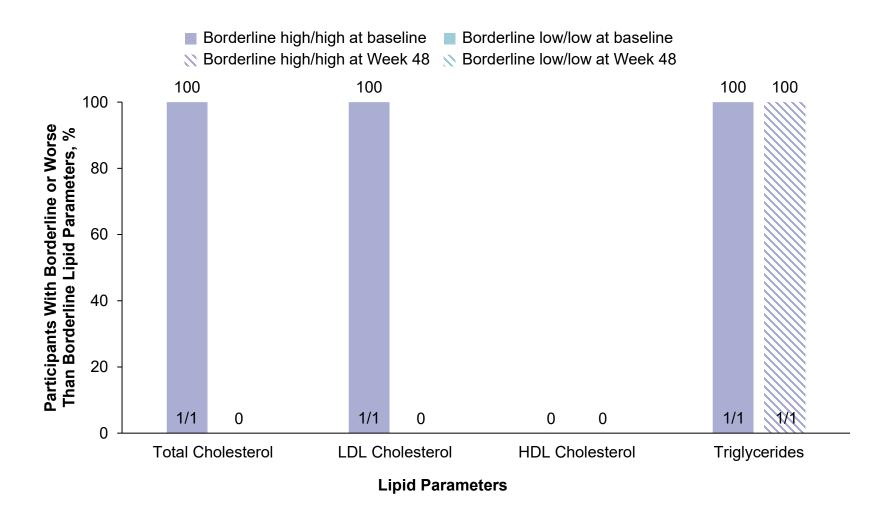
^{1.} Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction In Children and Adolescents. Pediatrics 2011;128(Suppl. 5):S213-S256

Lipid Parameters at Baseline and Week 48 in Individuals Who Were Categorized as Overweight or Obese at Baseline: Total Population (N = 6)



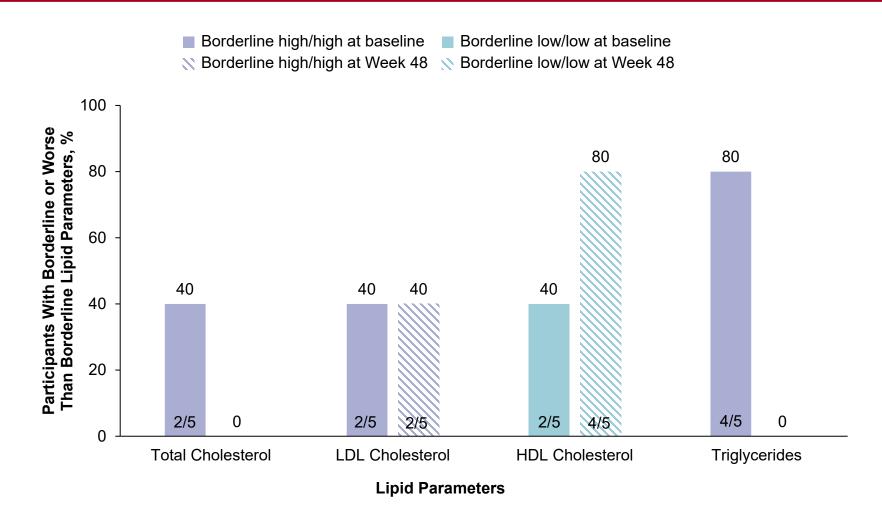
- Proportion of participants who were overweight or obese at baseline who had borderline high or high levels of total cholesterol,
 LDL cholesterol and triglycerides decreased from baseline to Week 48
 - Proportion with borderline low or low HDL cholesterol increased from baseline to Week 48

Lipid Parameters at Baseline and Week 48 in Individuals Who Were Categorized as Overweight or Obese at Baseline: E/C/F/TAF (N = 1)



Categories were based on integrated guidelines for cardiovascular health and risk reduction in children and adolescents. Fasting total cholesterol (mg/dL): borderline high, \geq 170 to \leq 199; high, \geq 200. Fasting LDL cholesterol (mg/dL): borderline high, \geq 110 to \leq 129; high, \geq 130. Fasting HDL cholesterol (mg/dL): borderline low, \geq 40 to \leq 45; low, < 40. Fasting triglycerides (mg/dL) for age (0–9 years) at collection: borderline high, \geq 75 to \leq 99; high, \geq 100. Fasting triglycerides (mg/dL) for age (10–19 years) at collection: borderline high, \geq 90 to \leq 129; high, \geq 130. E/C/F/TAF, elvitegravir/cobicistat/emtricitabine/tenofovir alafenamide; HDL, high-density lipoprotein; LDL, low-density lipoprotein 1. Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction In Children and Adolescents. Pediatrics 2011;128(Suppl. 5):S213-S256

Lipid Parameters at Baseline and Week 48 in Individuals Who Were Categorized as Overweight or Obese at Baseline: B/F/TAF (N = 5)



Categories were based on integrated guidelines for cardiovascular health and risk reduction in children and adolescents. Fasting total cholesterol (mg/dL): borderline high, \geq 170 to \leq 199; high, \geq 200. Fasting LDL cholesterol (mg/dL): borderline high, \geq 110 to \leq 129; high, \geq 130. Fasting HDL cholesterol (mg/dL): borderline low, \geq 40 to \leq 45; low, < 40. Fasting triglycerides (mg/dL) for age (0–9 years) at collection: borderline high, \geq 75 to \leq 99; high, \geq 100. Fasting triglycerides (mg/dL) for age (10–19 years) at collection: borderline high, \geq 90 to \leq 129; high, \geq 130. B/F/TAF, bictegravir/emtricitabine/tenofovir alafenamide; HDL, high-density lipoprotein; LDL, low-density lipoprotein 1. Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction In Children and Adolescents. Pediatrics 2011;128(Suppl. 5):S213-S256

Lipid Parameter Values at Baseline and Week 48

Parameter	E/C/F/TAF	B/F/TAF	Total
	N = 27	N = 22	N = 49
Total cholesterol, mg/dL, median (Q1, Q3) Baseline Week 48 Change from baseline at Week 48	166 (155, 179)	178 (153, 191)	167 (155, 183)
	167 (142, 192)	150 (126, 167)	163 (138, 175)
	-2 (-15, 21)	-25 (-46, -7)	-11 (-30, 7)
LDL cholesterol, mg/dL, median (Q1, Q3) Baseline Week 48 Change from baseline at Week 48	102 (92, 125)	113 (94, 131)	107 (93, 128)
	97 (86, 115)	92 (78, 103)	96 (80, 113)
	-9 (-21, 2)	-21 (-43, -3)	-14 (-28, 1)
HDL cholesterol, mg/dL, median (Q1, Q3) Baseline Week 48 Change from baseline at Week 48	55 (48, 64)	50 (46, 73)	54 (47, 67)
	57 (46, 69)	46 (43, 61)	51 (43, 65)
	1 (-8, 10)	-8 (-11, 1)	-4 (-9, 4)
Triglycerides, mg/dL, median (Q1, Q3) Baseline Week 48 Change from baseline at Week 48	91 (64, 116)	81 (61, 116)	86 (62, 116)
	80 (64, 97)	57 (50, 72)	69 (56, 97)
	-7 (-41, 34)	-16 (-47, -1)	-11 (-45, 16)