The study listed may include approved and non-approved uses, formulations or treatment regimens. The results reported in any single study may not reflect the overall results obtained on studies of a product. Before prescribing any product mentioned in this Register, healthcare professionals should consult prescribing information for the product approved in their country.

GSK Medicine: Orlistat
Study Number: W2660371
Title: Study to establish the bioequivalence of the 30mg chewable Orlistat tablet to the 60mg Orlistat capsule
Rationale: To establish the bioequivalence and compare the pharmacological effect of the 30 mg chewable orlistat tablet to the 60 mg orlistat capsule.
Phase: I
Study Period: 11 October 2007 to 23 November 2007
Study Design: The study was an open-label, single-centre, randomised, three-period, three treatments crossover design. It was conducted among overweight to obese male and female subjects with Body Mass Index (BMI) of 25-33 inclusive, who were willing to remain in continuous confinement during the run-in period (baseline) and treatment periods. Subjects were screened up to 28 days prior to admission to the study site for the confinement phase of the study. Any eligible subject taking weight loss products was required to undergo a minimum four days washout prior to admission to the study site for the confinement phase. Eligible subjects were admitted to the study site for the 37-day confinement period. Subjects completed a six-day run-in (baseline) period, and then were randomised to receive their first of three treatments. Each treatment period consisted of nine days, during which subjects received the allocated dose three times a day at mealtimes. On Days 4-9 inclusive of each treatment period, all faeces were collected for faecal fat analysis. For the entire treatment periods, subjects were required to consume a standard diet containing a total of 70 g fat and 2200 kcal daily.
Centre: 1, UK
Indication: Fecal fat measurement
Treatments: Test product Orlistat chewable tablets 30 mg, administered as a 30 mg dose, with meals, three times daily. Reference Product Orlistat capsules 60 mg, administered as either a 60 mg dose (1 capsule) or a 120 mg dose (2 ×60 mg capsules =120 mg), with meals, three times daily
Objectives: Primary Objective To establish the bioequivalence of the 30 mg chewable Orlistat tablet to the 60 mg Orlistat capsule. Secondary Objective To assess and compare the frequency and intensity of commonly observed adverse events (AEs).
Primary Endpoint : 1. Percent Feacal Fat (PFF) excreted 2. 24-hour fecal fat Secondary Endpoint: Adverse events (AEs)
Statistical Methods: Per Protocol (PP) population was the primary analysis population. Descriptive statistics were calculated and presented for the primary efficacy variable PFF and for 24-hour faecal fat (g).The statistical methods used in evaluating bioequivalence between test (60 mg capsule) and reference (30 mg chewable tablet) in this completed study are: • 90% Confidence Intervals (CI) of the ratio of geometric means, and • Fieller's 90% CI. The bioequivalence acceptance range was (0.80, 1.25).

Study Population:			
Subject Disposition			
	Overall		
Subjects Randomised, n (%)	30 (100.0)		
Treatments	Chewable Tablets 30 mg	Capsules 60 mg	Capsule 120 mg
Safety Population, n (%)	29 (96.7)	28 (93.3)	28 (93.3)
Intent To Treat (ITT) Population, n (%)	29 (96.7)	27 (90.0)	28 (93.3)
PP Population, n (%)	27 (90.0)	27 (90.0)	27 (90.0)
Completed Treatment, n (%)	27 (93.1)	27 (96.4)	27 (96.4)
Subjects did not completed the study, n (%)	2 (6.9)	2 (7.1)	1 (3.6)
AEs	2 (6.9)	1 (3.6)	1 (3.6)
Withdrawal of Consent, n (%)	0	1 (3.6)	0
Demographics (All Randomised Subjects, N=30)			
	Overall		
Sex, n (%)			
Females: Males	10 (33.3):20 (66.7)		
Mean Age, years (SD)	33.99 (10.499)		
Race, n (%)			
Caucasian	30 (100.0)		
Primary Efficacy Results (PP population N= 30)			
Table 1: Percent Faecal Fat			
Baseline (4 Days)			
	Overall		
N	30		
Mean (SD)	2.30 (1.985)		
On Treatment (Days 4 to 9)			
Treatments	Chewable Tablets 30mg	Capsules	
		60 mg	120 mg
n	27	27	27
Mean (SD)	22.72 (7.412)	19.25 (8.349)	25.01 (8.682)
Adjusted mean	22.71	19.37	24.83
95% CI	(19.84, 25.58)	(16.50, 22.24)	(21.96, 27.69)
P-value	<.0001	<.0001	<.0001
30 mg Chewable Vs 60 mg Capsule			
Ratio of Geometric Means	1.25		
90% CI for geometric means ratio	(1.10, 1.41)		
30 mg Chewable Vs 60 mg Capsule			
Ratio of Means	1.17		
Fieller's 90% CI	(1.05, 1.32)		
ANOVA model contains the term subject nested in sequence as random and the terms sequence, period and treatment as fixed.			
Table 2: 24-Hour Faecal Fat			
Baseline (4 hours)			
	Overall		
N	30		
Mean (SD)	1.61 (1.389)		
On treatments (Days 4 to 9)			
Treatments	Chewable Tablets 30mg	Capsules	
		60 mg	120 mg
n	27	27	27

Mean (SD)	15.90 (5.188)	13.48 (5.844)	17.51 (6.077)
Adjusted mean	15.90	13.56	17.38
95% CI	(13.89, 17.91)	(11.55, 15.56)	(15.37, 19.38)
P-value	<.0001	<.0001	<.0001
30 mg Chewable Vs 60 mg Capsule			
Ratio of Geometric Means	1.25		
90% CI For Geometric Means Ratio	(1.10, 1.41)		
30 mg Chewable Vs 60 mg Capsule			
Ratio of Means	1.17		
Fieller's 90% CI	(1.05, 1.32)		
ANOVA model contains the term subject nested in sequence as random and the terms sequence, period and treatment as fixed.			

Safety Results (Safety population)

Table 3: Treatment Emergent AEs

	Chewable Tablets	Capsules	
Treatments	30mg	60 mg	120 mg
N	29	28	28
Number of Subjects With at Least one AE, n (%)	20 (69.0)	20 (71.4)	21 (75.0)
Gastrointestinal Disorders			
Vomiting	6 (20.7)	1 (3.6)	2 (7.1)
Diarrhoea	5 (17.2)	4 (14.3)	4 (14.3)
Abdominal Pain upper	5 (17.2)	5 (17.9)	2 (7.1)
Nausea	4 (13.8)	1 (3.6)	2 (7.1)
Constipation	3 (10.3)	0	0
Faecal Incontinence	0	1 (3.6)	2 (7.1)
Toothache	0	2 (7.1)	1 (3.6)
Abdominal Pain Lower	1 (3.4)	0	0
Abdominal distension	1 (3.4)	0	0
Abdominal pain	0	0	1 (3.6)
Dyspepsia	1 (3.4)	0	0
Flatulence	0	1 (3.6)	0
Rectal discharge	1 (3.4)	0	0
Stomach Discomfort	0	0	1 (3.6)
Nervous system Disorders			
Headache	8 (27.6)	10 (35.7)	9 (32.1)
Dizziness	4 (13.8)	2 (7.1)	4 (14.3)
Facial Palsy	0	1 (3.6)	0
Skin and Subcutaneous Tissue Disorders			
Pruritus	1 (3.4)	2 (7.1)	3 (10.7)
Rash	1 (3.4)	0	2 (7.1)
Rash Erythematous	0	1 (3.6)	0
Musculoskeletal and Connective Tissue Disorders			
Arthralgia	1 (3.4)	0	1 (3.6)
Musculoskeletal Stiffness	1 (3.4)	0	0
Back disorder	0	1 (3.6)	0
Neck pain	0	1 (3.6)	0
Pain in extremity	0	1 (3.6)	0

Infections and Infestations			
Tinea pedis	1 (3.4)	0	0
Diverticulitis	0	1 (3.6)	0
Oral herpes	0	0	1 (3.6)
Eye disorders			
Ocular Hyperaemia	0	0	1 (3.6)
Eyelid Ptosis	1 (3.4)	0	0
Psychiatric Disorders			
Insomnia	0	1 (3.6)	1 (3.6)
Libido decreased	1 (3.4)	0	0
Ear And Labyrinth Disorders			
Ear Pain	0	0	1 (3.6)
General Disorders and Administration Site Conditions			
Chest Pain	0	1 (3.6)	1 (3.6)
Renal and urinary disorders			
Dysuria	1 (3.4)	0	0
Pollakiuria	0	1 (3.6)	0
Reproductive System and Breast Disorders			
Dysmenorrhoea	0	0	1 (3.6)
Testicular Disorder	0	0	1 (3.6)
Cardiac disorders			
Palpitations	0	1 (3.6)	0
Injury, Poisoning And Procedural Complications			
Excoriation	0	1 (3.6)	0
Respiratory, Thoracic and Mediastinal Disorders			
Cough	0	1 (3.6)	0
Serious Adverse Events (SAEs)			
Infections and Infestations			
	Chewable Tablets	Capsules	
	30mg	60 mg	120 mg
Diverticulitis	0	1	0