Supplementary materials

Table S1: Ethics Committees

BULGARIA
Ethics Committee for Multicentre Trials, Sofia
CZECH REPUBLIC
Ethics Committee Faculty Hospital Kralovske Vinohrady, Prague
GERMANY
Ethics Committee of Hessen State Medical Association, Frankfurt
HUNGARY
Medical Research Council Ethics Committee for Clinical Pharmacology, Budapest
LATVIA
Ethics Committee for Clinical Research at Development Society of Pauls Stradins, Riga
LITHUANIA
Lithuanian Bioethics Committee, Vilnius
MACEDONIA
Macedonian Agency for Medicines and Medical Devices, Ethics Committee for Clinical and Other
Trials Related to Medicines and Medical Devices, Skopje
POLAND
Bioethics Committee at the Regional Chamber of Physicians in Cracow, Kraków
ROMANIA
The National Ethics Committee for the Clinical Study of Medicine, Bucharest
RUSSIA
Ethics Committee under Federal State Budgetary Institution Federal Scientific Clinical Center of
Specialized Medical Care and Medical Technologies of Federal Medical and Biological Agency,
Moscow
Joint Local Ethics Committee of the Municipal Budgetary Healthcare Institution, Kemerovo
Cardiologic Healthcare Centre and Federal State Budgetary Institution Research Institute of
Complex Cardiovascular Problems of the Siberian Division of the Russian Academy of Medical
Sciences, Kemerovo Ethics Committee at the State Budgetary Educational Institution of Higher Professional
Education, Siberian State Medical University of the Ministry of Health of the Russian Federation,
Tomsk
Ethics Committee at the Municipal Budgetary Healthcare Institution City Clinical Hospital No. 3
named after M.A. Podgorbunskiy, Kemerovo
Ethics Committee at the Federal State Budgetary Institution Research Institute of Internal
Medicine and Preventative Care of the Siberian Branch of Russian Academy of Medical Sciences,
Novosibirsk

Local Ethics Committee at State Budgetary Healthcare Institution of Leningrad Region Centre for Occupational Pathology, Saint Petersburg

Ethics Committee at the State Budgetary Educational Institution of Higher Professional Education First Saint Petersburg State Medical University named after I.P. Pavlov of the Ministry of Health of the Russian Federation, Saint Petersburg

Ethics Committee at State Budgetary Healthcare Institution of Novosibirsk Region, City Clinical Hospital of Emergency Medical Care No. 2, Novosibirsk

Ethics Committee at State Budgetary Educational Institution of Higher Professional Education Orenburg State Medical Academy of the Ministry of Healthcare of the Russian Federation, Orenburg

Ethics Committee at First Moscow State Medical University named after I.M. Sechenov of the Ministry of Health of the Russian Federation, Moscow

Ethics Committee at State Healthcare Institution of Yaroslavl Region, Clinical Hospital No. 2, Yaroslavl

Ethics Committee at State Healthcare Institution, City Clinical Hospital No. 51 of the Department of Health of the city of Moscow, Moscow

SLOVAKIA

Ethics Committee Self-Governing Region of Kosice, Kosice

SOUTH AFRICA

Pharma-Ethics (Pty) Ltd, Pretoria

SOUTH KOREA

Konkuk University Medical Center IRB, Seoul

Seoul St. Mary's Hospital IRB, Seoul

Hallym University Sacred Heart Hospital IRB, Gyeonggi-do

Yonsei University Wonju Severance Christian Hospital IRB, Gangwon-do

Korea University Guro Hospital IRB, Seoul

Yeungnam University Hospital IRB, Daegu

Soon Chun Hyang University Hospital Bucheon IRB, Gyeonggi-do

Yonsei University Health System Severance Hospital IRB, Seoul

SPAIN

Clinical Research Ethics Committee Parc de Salut MAR, Barcelona

UKRAINE

Local Ethics Commission of the Communal Healthcare Institution "Kharkiv City Multidisciplinary Hospital No 18", Kharkiv

Local Ethics Commission of the State Institution "F.H. Yanovskyi National Phthisiology and Pulmonology Institute of the National Academy of Medical Sciences of Ukraine", Kyiv

Local Ethics Commission of the Communal Healthcare Institution "Oblast Clinical Hospital – Centre of Emergency Medical Care and Disaster Medicine", Kharkiv

Local Bioethics Commission of the Oblast Phthisiopulmonology Center of the City of Ivano-Frankivsk, Ivano-Frankivsk

Local Bioethics Commission of the State Institution "Ukrainian State Scientific Research Institute of the Medical and Social Problems of Disability of the Ministry of Health of Ukraine", Dnipropetrovsk

Local Ethics Commission of the Communal Institution of Sumy Oblast Council "Sumy Oblast Clinical Hospital", Sumy

Local Ethics Commission of the Kyiv City Clinical Hospital No.8, Kyiv

Local Ethics Commission of the Communal Institution "M.V. Sklifosovskyi Poltava Oblast Clinical
Hospital", Poltava
Local Ethics Commission of the Communal Institution "City Hospital No.7", Zaporizhzhia
Local Ethics Commission of the Communal Heathcare Institution "Prof. O.I Meshchaninov,
Kharkiv City Clinical Hospital of Emergency and Urgent Clinical Care", Kharkiv
Local Ethics Commission of the State Institution "F.H. Yanovskyi National Phthisiology and
Pulmonology Institute of the National Academy of Medical Sciences of Ukraine", Kyiv
Local Ethics Commission of the Communal Institution "Uzhhorod Raion Hospital", Uzhhorod
Local Ethics Commission of the Communal Institution "Zaporizhzhia City Clinical Hospital No. 10",
Zaporizhzhia
Local Ethics Commission of City Clinical Hospital No. 1 of the City of Vinnytsia, Vinnytsia
Local Ethics Commission of the Communal Institution "Odessa Oblast Clinical Hospital", Odesa
Local Ethics Commission of the Communal Institution "Sumy City Clinical Hospital No. 1", Sumy
Local Ethics Commission of the Scientific and Practical Medical Centre of Kharkiv National
Medical University, Kharkiv
UNITED KINGDOM

NRES Committee: South West – Exeter, Bristol

Table S2: Post hoc analysis of blood eosinophils at baseline (Full Analysis Population)

	FP/FORM 500/20	FP/FORM 250/10	FORM 12
Blood eosinophils (%)			
< 2%	37.3	36.9	39.8
≥ 2% to < 3%	22.7	24.8	23.2
≥ 3% to < 4%	15.8	16.7	13.9
≥ 4%	24.2	21.6	23.1

Fluticasone propionate, FP; Formoterol fumarate, FORM.

ophils <2% or ≥2%		
ine blood eosinor	ohils <2%	
FP/FORM	FP/FORM	FORM
500/20	250/10	12
N=219	N=217	N=235
0.70	0.77	0.84
0.83	0.92	
(0.63, 1.08)	(0.70, 1.20)	
p=0.170	p=0.532	
ine blood eosinop	ohils ≥2%	
FP/FORM	FP/FORM	FORM
500/20	250/10	
N=368	N=371	N=355
0.88	0.83	0.88
1.00	0.95	
(0.81, 1.24)	(0.77, 1.18)	
p=0.984	p=0.634	
ophils <3% or ≥3%	ó	
ine blood eosinor	ohils <3%	
		FORM
-	=	12
N=352	N=363	N=372
0.73		0.79
0.93	0.92	
		FORM
-	=	12
-		N=218
		0.98
0.97	0.94	
(0.74, 1.26)	(0.73, 1.22)	
p=0.803	p=0.654	
p=0.803 ophils <4% or ≥4%	p=0.654	
ophils <4% or ≥4%	ý D	
ophils <4% or ≥4% ine blood eosinor	s bhils <4%	FORM
ophils <4% or ≥4% ine blood eosinor FP/FORM	5 bhils <4% FP/FORM	FORM
ophils <4% or ≥4% ine blood eosinor	s bhils <4%	FORM 12 N=454
	ine blood eosinor FP/FORM 500/20 N=219 0.70 0.83 (0.63, 1.08) p=0.170 ine blood eosinor FP/FORM 500/20 N=368 0.88 1.00 (0.81, 1.24) p=0.984 0,88 0.88 1.00 (0.81, 1.24) p=0.984 0phils <3% or ≥3% ine blood eosinor FP/FORM 500/20 N=352 0.73 0.93 (0.74, 1.15) p=0.487 ine blood eosinor FP/FORM 500/20 N=352 0.73	500/20 250/10 N=219 N=217 0.70 0.77 0.83 0.92 (0.63, 1.08) (0.70, 1.20) p=0.170 p=0.532 ine blood eosino>HIS ≥2% FP/FORM FP/FORM 500/20 250/10 N=368 N=371 0.88 0.83 1.00 0.95 (0.81, 1.24) (0.77, 1.18) p=0.984 p=0.634 ophils <3% or ≥3%

 Table S3: Post hoc analysis of annualized rate of moderate / severe exacerbations by baseline blood eosinophil category (Full Analysis Population)

(events/patient/year)						
Rate ratio (95% Cls) versus FORM	0.88	0.93				
	(0.73, 1.07)	(0.77, 1.12)				
	p=0.202	p=0.438				
Subgroup with baseline blood eosinophils ≥4%						
	FP/FORM	FP/FORM	FORM			
	500/20	250/10	12			
	N=142	N=127	N=136			
LSM rate moderate / severe exacerbations	0.94	0.80	0.82			
(events/patient/year)						
Rate ratio (95% Cls) versus FORM	1.14	0.97				
	(0.81, 1.61)	(0.67, 1.39)				
	p=0.445	p=0.864				

Fluticasone propionate, FP; Formoterol fumarate, FORM; Least squares mean, LS mean; Confidence Interval, CI;

	FP/FORM 500/20		FP/FORM 250/10			RM .2
	Value	Change from	Value	Change from	Value	Change from
	(ng/mL)	Baseline	(ng/mL)	Baseline	(ng/mL)	Baseline
			Baseline			
n	117		114		111	
Mean (SD)	202.2(111.1)		191.7 (108.8)		196.5 (126.5)	
Median	187.0		175.5		175.0	
Q1, Q3	124.0, 263.0		118.0, 254.0		119.0, 254.0	
Min, Max	35.4, 682.0		39.7, 612.0		36.6, 878.0	
			Week 6			
n	105	100	102	98	101	94
Mean (SD)	191.8 (110.3)	-4.1 (68.4)	194.4 (102.6)	5.2 (49.2)	178.9 (96.0)	-3.1 (62.6)
Median	185.0	-4.5	182.0	1.0	159.0	-3.5
Q1, Q3	123.0, 248.0	-22.5, 22.5	123.0, 246.0	-24.0, 22.0	118.0, 213.0	-25.0, 14.0
Min, Max	31.4, 633.0	-410.0, 187.0	34.8, 578.0	-87.0, 223.0	25.8, 576.0	-208.0, 366.9

Table S4: SP-D at baseline and week 6 (Full Analysis Population)

Surfactant protein D, SP-D; Fluticasone propionate, FP; Formoterol fumarate, FORM; Standard Deviation, SD; Quartile, Q; Minimum, Min; Maximum, Max.

	FP/FORM 500/20				FORM 12	
	Value	Change from	Value	Change from	Value	Change from
	(ng/mL)	Baseline	(ng/mL)	Baseline	(ng/mL)	Baseline
			Baseline			
n	120		115		111	
Mean (SD)	137.2 (68.7)		141.3 (77.7)		141.2 (68.4)	
Median	127.5		117.0		130.0	
Q1, Q3	84.0, 171.5		92.0, 189.0		87.0, 168.0	
Min, Max	1, 361		41, 553		32, 383	
			Week 6			
n	103	100	103	100	101	94
Mean (SD)	147.8 (79.8)	9.8 (62.0)	138.5 (69.2)	-1.5 (49.7)	137.7 (73.8)	-4.9 (43.7)
Median	133.0	6.0	119.0	0.5	121.0	-5.0
Q1, Q3	96.0, 180.0	-12.0, 20.5	89.0, 176.0	-24.0, 19.0	87.0, 163.0	-24.0, 11.0
Min, Max	48, 645	-130, 470	44, 483	-152, 285	35, 461	-191, 123

Table S5: CCL-18 at baseline and week 6 (Full Analysis Population)

CC chemokine ligand 18, CCL-18; Fluticasone propionate, FP; Formoterol fumarate, FORM; Standard Deviation, SD; Quartile, Q; Minimum, Min; Maximum, Max.

	FP/FORM	FP/FORM	FORM
	500/20	250/10	12
CARDIAC DISORDERS			
Angina pectoris	3 (0.5)	7 (1.2)	2 (0.3)
Atrial fibrillation	5 (0.9)	4 (0.7)	10 (1.7)
Cardiac failure	9 (1.5)	6 (1.0)	3 (0.5)
Tachycardia	7 (1.2)	2 (0.3)	4 (0.7)
Ventricular extrasystoles	4 (0.7)	6 (1.0)	4 (0.7)
Ventricular tachycardia	6 (1.0)	9 (1.5)	4 (0.7)
GENERAL DISORDERS	<u>.</u>		
Oedema peripheral	4 (0.7)	3 (0.5)	6 (1.0)
INFECTIONS AND INFESTATIONS		·	
Influenza	2 (0.3)	7 (1.2)	5 (0.8)
Nasopharyngitis	31 (5.3)	30 (5.1)	30 (5.1)
Pneumonia	17 (2.9)	21 (3.6)	11 (1.9)
Respiratory tract infection	4 (0.7)	6 (1.0)	4 (0.7)
Respiratory tract infection viral	2 (0.3)	3 (0.5)	8 (1.4)
Upper respiratory tract infection	9 (1.5)	9 (1.5)	9 (1.5)
INVESTIGATIONS			
Blood uric acid increased	1 (0.2)	7 (1.2)	3 (0.5)
Gamma-glutamyltransferase increased	2 (0.3)	7 (1.2)	3 (0.5)
METABOLISM AND NUTRITION DISORDERS	<u>.</u>	· · · · ·	
Hypercholesterolaemia	6 (1.0)	7 (1.2)	6 (1.0)
Hypertriglyceridaemia	3 (0.5)	6 (1.0)	4 (0.7)
MUSCULOSKELETAL AND CONNECTIVE TISS	JE DISORDERS		
Back pain	6 (1.0)	9 (1.5)	3 (0.5)
Muscle spasms	1 (0.2)	6 (1.0)	1 (0.2)
NERVOUS SYSTEM DISORDERS		·	
Headache	7 (1.2)	8 (1.4)	8 (1.4)
RESPIRATORY, THORACIC AND MEDIASTINA	L DISORDERS	·	
Chronic obstructive pulmonary disease	8 (1.4)	6 (1.0)	4 (0.7)
Cough	5 (0.9)	9 (1.5)	1 (0.2)
Dyspnoea	10 (1.7)	6 (1.0)	10 (1.7)
VASCULAR DISORDERS		•••	
Hypertension	19 (3.2)	16 (2.7)	13 (2.2)

Table S6: Incidence (n [%]) of individual adverse events occurring in ≥1% of patients in any treatment group

Fluticasone propionate, FP; Formoterol fumarate, FORM.