Online Supplement

Higher COPD Assessment Test Score Associated With Greater Exacerbations Risk: A Post Hoc Analysis of the IMPACT Trial

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Table S1: Incidence of on-treatment AESIs by CAT score subgroup*

AESI	FF/UMEC/VI		FF/VI		UMEC/VI	
	CAT <20 (n=2429)	**CAT ≥20 (n=1647)**	**CAT <20 (n=2327)**	**CAT ≥20 (n=1720)**	**CAT <20 (n=1196)**	**CAT ≥20 (n=838)**
Total duration at risk (subject-years)	2198.8	1450.0	1976.7	1412.1	998.7	671.2
Anticholinergic syndrome (SMQ)						
n (%)	100 (4)	76 (5)	78 (3)	57 (3)	37 (3)	33 (4)
Event rate (#)	55.0 (121)	65.5 (95)	47.0 (93)	46.0 (65)	45.1 (45)	53.6 (36)
Asthma/bronchospasm (SMQ)						
n (%)	8 (<1)	19 (1)	21 (<1)	13 (<1)	13 (1)	3 (<1)
Event rate (#)	3.6 (8)	13.8 (20)	11.1 (22)	9.2 (13)	13.0 (13)	4.5 (3)
Cardiovascular effects						
n (%)	246 (10)	198 (12)	222 (10)	200 (12)	114 (10)	109 (13)
Event rate (#)	143.3 (315)	204.8 (297)	142.7 (282)	176.3 (249)	146.2 (146)	202.6 (136)

Decreased BMD and associated fractures						
n (%)	47 (2)	50 (3)	46 (2)	38 (2)	21 (2)	15 (2)
Event rate (#)	22.7 (50)	48.3 (70)	25.3 (50)	29.7 (42)	22.0 (22)	28.3 (19)
Effects on potassium						
n (%)	17 (<1)	17 (1)	9 (<1)	16 (<1)	2 (<1)	6 (<1)
Event rate (#)	7.7 (17)	11.7 (17)	4.6 (9)	12 (17)	2.0 (2)	8.9 (6)
Gastrointestinal obstruction (SMQ)						
n (%)	4 (<1)	4 (<1)	3 (<1)	7 (<1)	0	1 (<1)
Event rate (#)	1.8 (4)	3.4 (5)	1.5 (3)	5.0 (7)	0	1.5 (1)
Hyperglycemia/new-onset diabetes mellitus (SMQ)						
n (%)						
Event rate (#)	80 (3)	70 (4)	60 (3)	55 (3)	33 (3)	39 (5)
	39.6 (87)	60.0 (87)	33.9 (67)	43.9 (62)	34.0 (34)	65.6 (44)
Hypersensitivity						
n (%)	113 (5)	83 (5)	109 (5)	83 (5)	55 (5)	37 (4)
Event rate (#)	58.7 (129)	68.3 (99)	63.7 (126)	67.3 (95)	57.1 (57)	61.1 (41)
LRTI excluding pneumonia						
n (%)	104 (4)	95 (6)	106 (5)	90 (5)	59 (5)	48 (6)
Event rate (#)	51.8 (114)	81.4 (118)	63.7 (126)	79.3 (112)	64.1 (64)	95.3 (64)
Local steroid effects						
n (%)	192 (8)	138 (8)	162 (7)	133 (8)	58 (5)	49 (6)
Event rate (#)	107.8 (237)	124.8 (181)	98.1 (194)	120.4 (170)	75.1 (75)	89.4 (60)
Ocular effects						
n (%)	34 (1)	18 (1)	32 (1)	13 (<1)	20 (2)	5 (<1)
Event rate (#)	16.8 (37)	15.2 (22)	18.7 (37)	9.9 (14)	20.0 (20)	7.4 (5)
Pneumonia						
n (%)	175 (7)	138 (8)	170 (7)	120 (7)	55 (5)	40 (5)
Event rate (#)	91.4 (201)	104.1 (151)	98.7 (195)	96.3 (136)	59.1 (59)	64.1 (43)
Tremor						
n (%)	3 (<1)	5 (<1)	3 (<1)	1 (<1)	2 (<1)	3 (<1)
Event rate (#)	1.4 (3)	3.4 (5)	1.5 (3)	0.7 (1)	2.0 (2)	4.5 (3)
Urinary retention						
n (%)	4 (<1)	4 (<1)	7 (<1)	5 (<1)	6 (<1)	3 (<1)
Event rate (#)	2.7 (6)	2.8 (4)	3.5 (7)	3.5 (5)	6.0 (6)	4.5 (3)

*Baseline CAT scores were assessed on the randomization study visit (Day 1), approximately 2 weeks following the screening visit. Event rate is per 1000 subject-years, calculated as the number of events x 1000, divided by the total duration at risk. AESI (AEs which have specified areas of interest for FF, UMEC or VI or for patients with COPD); AESI, adverse events of special

interest; BMD, bone mineral density; CAT, COPD assessment test; FF, fluticasone furoate; LRTI, lower respiratory tract infection; MedDRA, Medical Dictionary for Regulatory Activities; n, number of patients; SMQ, Standardized MedDRA Query; UMEC, umeclidinium; VI, vilanterol; #, number of events.