Supplementary Material

Influenza Adverse Events in Patients with Rheumatoid Arthritis, Ulcerative Colitis, or Psoriatic Arthritis in the Tofacitinib Clinical Development Programs

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SUPPLEMENTARY METHODS

Assessment of Respiratory Infections that may Overlap with Influenza in Clinical Presentation

This analysis was based on preferred and verbatim terms relating to viral and non-viral respiratory infections (Medical Dictionary for Regulatory Activities version 22.0). For viral respiratory infections, preferred terms that mention specific viral infections (e.g., cytomegalovirus) were excluded. For non-viral respiratory infections, preferred terms that mention chronic bacterial or fungal infections or abscesses were excluded. Preferred and verbatim terms are listed in Table S3.

Risk Factor Analysis

In the rheumatoid arthritis (RA) Overall tofacitinib cohort, univariate logistic regression analyses were conducted to assess the impact of risk factors on combined influenza adverse events (AEs; yes vs. no) and recurrent influenza AEs (1 vs. ≥ 2 influenza AEs). Covariates included the following baseline characteristics: age in years as a continuous and categorical (≥ 65 vs. < 65 years) variable, body mass index (BMI) as a continuous and categorical (≥ 30 vs. < 30 kg/m^2) variable, presence of chronic obstructive pulmonary disease (COPD), C-reactive protein (CRP; increase of 5 units), concomitant corticosteroid dose, concomitant corticosteroid use, Disease Activity Score in 28 joints, erythrocyte sedimentation rate (DAS28-4[ESR]), diabetes, Health Assessment Questionnaire-Disability Index (HAQ-DI), hypertension, methotrexate use, rheumatoid-factor positivity, anti-citrullinated protein antibodies (ACPA)-positivity, RA disease duration, race, region, sex, smoking status, and average tofacitinib dose. For analysis of combined influenza AEs, average tofacitinib dose

(for patients with at least one event, this was within 2 weeks prior to the first event, and for patients with no events, this was during the study period) was also included as a covariate. Additional covariates for the analysis of recurrent influenza AEs were average tofacitinib dose within 2 weeks prior to first influenza AE, concomitant corticosteroid use within 2 weeks prior to first influenza AE, and methotrexate use within 2 weeks prior to first influenza AE.

Covariates with a *p* value of < 0.20 from univariate logistic regression model were advanced as candidates for the multiple logistic regression analysis to identify independent risk factors for influenza AEs and recurrent influenza. For influenza AEs, these were continuous age, BMI, COPD at baseline, region, average tofacitinib dose (for patients with at least one event, this was within 2 weeks prior to first event, and for patients with no events, this was during the study period), corticosteroid use at baseline, methotrexate use at baseline, sex, and smoking status; for recurrent influenza AEs, these were CRP, DAS28-4(ESR), HAQ-DI, and ACPA-positive at baseline, RA disease duration, region, and average tofacitinib dose (within 2 weeks prior to first influenza AE). The multiple logistic regression model was used to select the potential risk factors from univariate models using a stepwise selection process with an entry criterion *p* value of 0.15 and stay criterion *p* value of 0.05. The final model was run including only selected covariates from multivariable logistic regression with stepwise procedure.

SUPPLEMENTARY TABLES

Table S1 Listing of trials in the RA, UC, and PsA tofacitinib clinical development programs (2005–2019)

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
RA clinical trials							
Phase 1							
NCT01262118 [1]	A3921130	36 (RA), 33 (healthy volunteers)	Active RA and healthy volunteers	10 mg BID (background MTX permitted)	None	6 weeks	Overall tofacitinib
NCT01484561 [2]	A3921152	97	Active RA with inadequate response to ≥ 1 DMARD	10 mg BID (background csDMARDs permitted)	Placebo	6 weeks (for tofacitinib treatment)	Overall tofacitinib
Phase 2							
NCT00147498 [3]	A3921019	199	Active RA with inadequate response or unacceptable	5, 15, or 30 mg BID monotherapy	Placebo	6 weeks	Phase 2–3b/4 Overall tofacitinib

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
			toxicity to MTX or to any of the following: etanercept, infliximab, or adalimumab				
NCT00413660 [4]	A3921025	438	Active RA with inadequate response to MTX	1, 3, 5, 10, or 15 mg BID or 20 mg QD with background MTX	Placebo	24 weeks	Phase 2–3b/4 Overall tofacitinib
NCT00550446 [5]	A3921035	272	Active RA with inadequate response or toxicity to ≥ 1 DMARD	1, 3, 5, 10, or 15 mg BID monotherapy	Adalimumab SC 40 mg Q2W; placebo	24 weeks	Phase 2–3b/4 Overall tofacitinib

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
NCT00603512 [6]	A3921039	108	Active RA with inadequate response to MTX	1, 3, 5, or 10 mg BID plus background MTX	Placebo	12 weeks	Phase 2–3b/4 Overall tofacitinib
NCT00687193 [7]	A3921040	265	Active RA with inadequate response to ≥ 1 DMARD	1, 3, 5, 10, or 15 mg BID monotherapy	Placebo	12 weeks	Phase 2–3b/4 Overall tofacitinib
NCT01164579 [8]	A3921068	72	Early active RA, MTX-naïve	10 mg BID plus MTX, 10 mg BID monotherapy	MTX	12 months	Phase 2–3b/4 Overall tofacitinib
NCT00976599 [9]	A3921073	15	Active RA with inadequate response to MTX	10 mg BID plus background MTX	Placebo	4 weeks	Phase 2–3b/4 Overall tofacitinib
NCT01059864 [10]	A3291109	111	Active RA	10 mg BID, half	None	12 weeks	Overall tofacitinib

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
				of patients received concomitant atorvastatin 10 mg QD for weeks 6–12			
NCT01359150 [11]	A3921129	102	Active RA	10 mg BID monotherapy (half of patients) or with background MTX	Placebo only (half of patients), or placebo plus MTX	9 weeks	Phase 2–3b/4 Overall tofacitinib
NCT02147587 [12]	A3921237	55	Moderate to severe RA inadequately controlled by MTX	5 mg BID plus background MTX; 2–3 weeks post-HZ vaccination	Placebo	14 weeks	Phase 2–3b/4 Overall tofacitinib

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
Phase 3							
NCT00960440 [13]	ORAL Step, A3921032	267	Moderate to severe RA with inadequate response to TNFi	5 or 10 mg BID with background MTX	Placebo (advanced to tofacitinib at month 3)	6 months	Phase 2–3b/4 Overall tofacitinib
NCT00847613 [14]	ORAL Scan, A3921044	637	Active RA with inadequate response to MTX	5 or 10 mg BID with background MTX	Placebo (advanced to tofacitinib at month 3 [non-responders] or month 6 [remaining patients])	24 months	Phase 2–3b/4 Overall tofacitinib
NCT00814307 [15]	ORAL Solo, A3921045	488	Active RA with inadequate response to ≥ 1 DMARD	5 or 10 mg BID monotherapy	Placebo (advanced to tofacitinib at month 3)	6 months	Phase 2–3b/4 Overall tofacitinib

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
NCT00856544 [16]	ORAL Sync, A3921046	633	Active RA with inadequate response to ≥ 1 DMARD	5 or 10 mg BID with background csDMARD	Placebo (advanced to tofacitinib at month 3 [non-responders] or month 6 [remaining patients])	12 months	Phase 2–3b/4 Overall tofacitinib
NCT00853385[17]	ORAL Standard, A3921064	405	Active RA with incomplete response to MTX	5 or 10 mg BID with background MTX	Adalimumab 40 mg SC Q2W; placebo (patients receiving placebo were advanced to tofacitinib at month 3 [non-responders] or month 6 [remaining patients])	12 months	Phase 2–3b/4 Overall tofacitinib

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
NCT01039688 [18]	ORAL Start, A3921069	770	Active RA, MTX-naïve	5 or 10 mg BID monotherapy	MTX	24 months	Phase 2–3b/4 Overall tofacitinib
NCT02281552 [19]	A3921215	209	Japanese patients with active RA with inadequate response to MTX	11 mg MR QD or 5 mg IR BID with background MTX	None	12 weeks	Overall tofacitinib
Phase 3b/4							
NCT02187055 [20]	ORAL Strategy, A3921187	760	Active RA with inadequate response to MTX	5 mg BID monotherapy or with background MTX	Adalimumab 40 mg SC Q2W with background MTX	12 months	Phase 2–3b/4 Overall tofacitinib
NCT02831855 [21]	ORAL Shift, A3921192	623	Moderate to severe RA with inadequate	11 mg MR QD monotherapy or with	None	48 weeks	Overall tofacitinib

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
			response to MTX	background MTX			
LTE							
NCT00413699 [22]	ORAL Sequel, A3921024	4481	Active RA who participated in the above studies	5 or 10 mg BID, concomitant DMARDs permitted	None	Up to 114 months	Overall tofacitinib
NCT00661661 [23]	A3921041	486	Japanese patients with active RA who participated in studies A3921039, A3921040 or A3921044	5 or 10 mg BID, concomitant DMARDs permitted after week 12	None	Up to 288 weeks	Overall tofacitinib
UC clinical trials							
Phase 2							

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
NCT00787202 [24]	A3921063	146	Moderate to severe UC	0.5, 3, 10, or 15 mg BID	Placebo	8 weeks	Phase 2/3 induction Overall tofacitinib
Phase 3							
NCT01465763 [25]	OCTAVE Induction 1, A3921094	492	Moderate to severe UC with prior failure/intol-erance to corticosteroids, immuno-modulators and/or TNFi	10 or 15 mg BID	Placebo	8 weeks	Phase 2/3 induction Overall tofacitinib
NCT01458951 [25]	OCTAVE Induction 2, A3921095	435	Moderate to severe UC with prior failure/intol-erance to corticosteroids, immuno-	10 or 15 mg BID	Placebo	8 weeks	Phase 2/3 induction Overall tofacitinib

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
			modulators and/or TNFi				
NCT01458574 [25]	OCTAVE Sustain, A3921096	395	Moderate to severe UC, completing OCTAVE Induction 1 or 2 with clinical response	5 or 10 mg BID	Placebo	52 weeks	Phase 3 maintenance Overall tofacitinib
LTE							
NCT01470612 [26]	OCTAVE Open, A3921139[a]	944	Patients from OCTAVE Induction 1, A3921094; OCTAVE Induction 2, A3921095; and OCTAVE Sustain, A3921096	5 or 10 mg BID	None	≥ 12 months	Overall tofacitinib

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
PsA clinical trials							
Phase 3							
NCT01877668 [27]	OPAL Broaden, A3921091	211	Active PsA, TNFi-naïve with an inadequate response to ≥ 1 csDMARD	5 or 10 mg BID with a stable dose of a single DMARD	Placebo, adalimumab 40 mg SC Q2W	12 months	Placebo-controlled (excluding patients who received adalimumab) Active-controlled Overall tofacitinib
NCT01882439 [28]	OPAL Beyond, A3921125	263	Active PsA with an inadequate response to ≥ 1 TNFi	5 or 10 mg BID with a stable dose of a single DMARD	Placebo	6 months	Placebo-controlled Overall tofacitinib
LTE							

ClinicalTrials.gov identifier	Protocol number	Patients initially receiving tofacitinib, *n*	Patient population	Tofacitinib doses	Control arm	Study duration	Cohort
NCT01976364 [29]	OPAL Balance, A3921092	686	Patients from OPAL Broaden A3921091 and OPAL Beyond A3921125	5 mg BID or 10 mg BID, concomitant DMARDs permitted	None	Up to 48 months, including a 12-month sub-study	Overall tofacitinib

[a]Including interim data up to May 2019; database not locked
BID twice daily, *csDMARD* conventional synthetic disease-modifying antirheumatic drug, *DMARD* disease-modifying antirheumatic drug, *HZ* herpes zoster, *IR* immediate release, *LTE* long-term extension, *MR* modified release, *MTX* methotrexate, *n* number of patients, *PsA* psoriatic arthritis, *Q2W* every 2 weeks, *QD* once daily, *RA* rheumatoid arthritis, *SC* subcutaneous, *TNFi* tumor necrosis factor inhibitor, *UC* ulcerative colitis

Table S2 Verbatim terms for a) influenza AEs,[a] b) influenza complications AEs,[b] and c) influenza-like illness[c]

Further medical review of databased investigator text (verbatim, i.e., raw text or not-coded) was conducted to investigate the verbatim terms that are considered the same as the verbatim terms listed here.

Verbatim term	Under preferred term
a) Influenza AEs[a]	
Common upper respiratory system viral infection (flu)	Viral upper respiratory tract infection
Respiratory tract infection (flu)	Respiratory tract infection viral
Upper airway infection (flu)	Viral upper respiratory tract infection
b) Influenza complication AEs[b]	
Broncho-pneumonia flu	Pneumonia
Chronic obstructive pulmonary disease exacerbation due to flu	Chronic obstructive pulmonary disease
Insomnia due to cough of flu	Sleep disorder due to a general medical condition
Irreversible sepsis after an episode of flu	Viral sepsis
c) Influenza-like illness[c]	
Flu like symptoms/unknown viral illness	Viral infection
Flu like viral infection	Viral infection

Flu-like illness (viral illness)	Viral infection
Flu-like infection	Infection
Flu-like infection of the upper respiratory tract	Upper respiratory tract infection
Flu-like symptoms - virus	Viral infection
Flu-like symptoms most probably due to viral infection	Viral infection
Flu-like viral illness	Viral infection
Flu-like viral syndrome	Viral infection
Flu-like, upper respiratory infection	Upper respiratory tract infection
Upper respiratory tract infection (flu-like illness)	Upper respiratory tract infection
Viral/flu like illness	Viral infection
Viral flu like illness	Viral infection
Viral flu-like illness	Viral infection
Viral infection (flu like)	Viral infection
Viral infection: flu like symptoms	Viral infection
Viral syndrome, flu like symptoms	Viral infection

Virus (flu-like symptoms)	Viral infection
Virus infection (flu like)	Viral infection

[a]Included all preferred terms under HLT ‘Influenza viral infections’: ‘influenza’, ‘avian influenza’, ‘encephalitis influenzal’, ‘H1N1 influenza’, ‘H2N2 influenza’, ‘H3N2 influenza’, ‘pneumonia influenzal’ and the verbatim terms listed in the table above
[b]Included the preferred terms ‘Pneumonia influenzal’ and ‘Encephalitis influenzal’, and the verbatim terms listed in the table above
[c]Included the preferred term ‘Influenza like illness’ and the verbatim terms listed in the table above
AE adverse event, *HLT* high-level term

Table S3 Preferred terms, with verbatim terms, for viral and non-viral respiratory infections

Preferred term
Bronchitis viral
Lower respiratory tract infection viral
Pneumonia viral
Tracheobronchitis viral
Laryngitis viral
Viral epiglottitis
Viral pharyngitis
Viral rhinitis
Viral sinusitis
Viral tonsillitis
Viral tracheitis
Viral upper respiratory tract infection[a]
Acute sinusitis
Laryngitis
Nasopharyngitis
Peritonsillitis
Pharyngitis
Pharyngotonsillitis
Rhinitis
Rhinolaryngitis
Rhinotracheitis
Sinobronchitis

Sinusitis

Subglottic laryngitis

Tonsillitis

Tracheitis

Upper aerodigestive tract infection

Upper respiratory tract infection

Respiratory tract infection

Respiratory tract infection – viral[b]

Bronchitis

Lower respiratory tract infection viral

Pneumonia

Tracheobronchitis

Viral esophagitis

Influenza-like illness

Avian influenza

Encephalitis influenza

H1N1 influenza

H2N2 influenza

H3N2 influenza

Influenza

Pneumonia influenzal

Viral infection[c]

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[a]Includes verbatim terms ‘common upper respiratory system viral infection (flu)’ and ‘upper airway infection (flu)’
[b]Includes verbatim term ‘respiratory tract infection (flu)’
[c]Includes verbatim terms ‘flu-like illness (viral illness)’; ‘flu-like symptoms – virus’; ‘flu-like symptoms most probably due to viral infection’; ‘flu-like viral illness’; ‘flu-like viral syndrome’;

‘viral/flu like illness’; ‘viral flu like illness’; ‘viral flu-like illness’; ‘viral infection (flu like)’; ‘viral infection: flu like symptoms’; ‘viral syndrome, flu like symptoms’; ‘virus (flu-like symptoms)’; ‘virus infection (flu like)’

Table S4 Baseline demographics and clinical characteristics of patients receiving average tofacitinib 5 and 10 mg BID in the RA, UC, and PsA Overall tofacitinib cohorts

	RA		**UC**		**PsA**	
	Average tofacitinib 5 mg BID (*N* = 3969)	**Average tofacitinib 10 mg BID (*N* = 3995)**	**Average tofacitinib 5 mg BID (*N* = 198)**	**Average tofacitinib 10 mg BID (*N* = 959)**	**Average tofacitinib 5 mg BID (*N* = 458)**	**Average tofacitinib 10 mg BID (*N* = 325)**
Age, years, mean (SD)	53.3 (12.4)	52.0 (11.6)	44.6 (14.5)	40.6 (13.7)	49.2 (11.9)	48.0 (12.2)
≥ 65 years, *n* (%)	722 (18.2)	548 (13.7)	18 (9.1)	59 (6.2)	42 (9.2)	30 (9.2)
Female, *n* (%)	3236 (81.5)	3286 (82.3)	86 (43.4)	392 (40.9)	258 (56.3)	170 (52.3)
BMI, kg/m^2, mean (SD)	26.7 (6.2)	27.5 (6.5)	25.2 (5.4)	24.8 (4.9)[a]	29.5 (5.9)	29.8 (6.2)
Obesity (BMI ≥ 30 kg/m^2), *n* (%)	982 (24.7)[b]	1156 (28.9)[b]	28 (14.1)	131 (13.7)[a]	196 (42.8)	137 (42.2)
Smoking status, *n* (%)						
Never smoked	2522 (63.5)	2474 (61.9)	135 (68.2)	605 (63.1)	289 (63.1)	196 (60.3)

Current smoker	648 (16.3)	718 (18.0)	5 (2.5)	54 (5.6)	92 (20.1)	48 (14.8)
Ex-smoker	689 (17.4)	699 (17.5)	58 (29.3)	299 (31.2)	77 (16.8)	81 (24.9)
Missing/unknown	110 (2.8)	104 (2.6)	0 (0.0)	1 (0.1)	0 (0.0)	0 (0.0)
Disease duration, years, mean (SD)	8.4 (8.2)	7.8 (8.1)	8.2 (6.5)	8.2 (7.1)	7.8 (7.5)	7.5 (6.7)
Concomitant oral corticosteroid use, *n* (%)[c]	2070 (52.2)	2184 (54.7)	81 (40.9)	442 (46.1)	109 (23.8)	62 (19.1)
Diabetes, *n* (%)[d]	365 (9.2)	286 (7.2)	9 (4.5)	39 (4.1)	61 (13.3)	46 (14.2)
Hypertension, *n* (%)[d]	1405 (35.4)	1413 (35.4)	29 (14.6)	132 (13.8)	180 (39.3)	119 (36.6)
Coronary heart disease, *n* (%)[d]	13 (<1.0)	17 (<1.0)	5 (2.5)	17 (1.8)	23 (5.0)	16 (4.9)
Influenza vaccination, *n* (%)[e]	312 (7.9)	410 (10.3)	23 (11.6)	39 (4.1)	N/A	N/A
RF-positive, *n* (%)	2559 (70.3)	2587 (71.9)	N/A	N/A	28 (6.1)	8 (2.5)
ACPA-positive, *n* (%)	1352 (34.1)	2371 (59.3)	N/A	N/A	24 (5.2)	12 (3.7)
Prior TNFi treatment, *n* (%)	463 (11.7)	782 (19.6)	87 (43.9)	525 (56.7)	190 (41.5)	187 (57.5)

[a]*N* = 958

[b]Data were missing for some patients: average tofacitinib 5 mg BID, *n* = 8; average tofacitinib 10 mg BID, *n* = 2

[c]Data based on day 1 of active tofacitinib treatment in the RA/UC/PsA clinical development program

[d]Data based on patient medical history

[e]Patient-reported data on influenza vaccines received within 12 months prior to combined influenza AEs, or if without combined influenza AEs, any influenza vaccine received during the study period

ACPA anti-citrullinated protein antibody, *AE* adverse event, *BID* twice daily, *BMI* body mass index, *n* number of patients with the specified characteristic, *N* number of evaluable patients, *PsA* psoriatic arthritis, *RA* rheumatoid arthritis, *RF* rheumatoid factor, *SD* standard deviation, *TNFi* tumor necrosis factor inhibitor, *UC* ulcerative colitis

Table S5 Serious AEs reported within 28 days of the onset of an influenza event in the RA Overall tofacitinib cohort

Preferred term, *n* (%)	**Average tofacitinib 5 mg BID (*N* = 204)**	**Average tofacitinib 10 mg BID (*N* = 313)**	**All tofacitinib (*N* = 517)**
Abdominal pain	0 (0.0)	1 (0.3)	1 (0.2)
Acute respiratory distress syndrome	1 (0.5)	1 (0.3)	2 (0.4)
Acute respiratory failure	0 (0.0)	1 (0.3)	1 (0.2)
Arthritis bacterial	0 (0.0)	1 (0.3)	1 (0.2)
Atypical pneumonia	1 (0.5)	0 (0.0)	1 (0.2)
Chest pain	1 (0.5)	0 (0.0)	1 (0.2)
Confusional state	0 (0.0)	1 (0.3)	1 (0.2)
Device-related infection	0 (0.0)	1 (0.3)	1 (0.2)
Disseminated tuberculosis	1 (0.5)	0 (0.0)	1 (0.2)
Hypovolemia	1 (0.5)	0 (0.0)	1 (0.2)
Meniscal degeneration	1 (0.5)	0 (0.0)	1 (0.2)
Metabolic encephalopathy	0 (0.0)	1 (0.3)	1 (0.2)
Myocardial infarction	0 (0.0)	1 (0.3)	1 (0.2)
Pneumonia	1 (0.5)	1 (0.3)	2 (0.4)
Pyrexia	0 (0.0)	1 (0.3)	1 (0.2)
Respiratory failure	0 (0.0)	1 (0.3)	1 (0.2)
Rheumatoid arthritis	0 (0.0)	1 (0.3)	1 (0.2)
Rib fracture	0 (0.0)	1 (0.3)	1 (0.2)
Sepsis	0 (0.0)	1 (0.3)	1 (0.2)
Urinary tract infection	0 (0.0)	1 (0.3)	1 (0.2)
Overall	6 (2.9)	6 (1.9)	12 (2.3)

AE adverse event, *BID* twice daily, *n* number of patients with the specified characteristic, *N* number of evaluable patients, *RA* rheumatoid arthritis

Table S6 Antiviral treatment in patients with combined influenza AEs in the a) RA Overall tofacitinib cohort, b) UC Overall tofacitinib cohort, and c) PsA Overall tofacitinib cohort

Antiviral treatment, *n* (%)[a]			
a) RA Overall tofacitinib cohort	**Average tofacitinib 5 mg BID (*N* = 204)**	**Average tofacitinib 10 mg BID (*N* = 313)**	**All tofacitinib (*N* = 517)**
Oseltamivir/oseltamivir phosphate/Tamiflu	22 (10.8)	27 (8.6)	49 (9.5)
Laninamivir octanoate hydrate	2 (1.0)	0 (0.0)	2 (0.4)
Umifenovir	0 (0.0)	3 (1.0)	3 (0.6)
Zanamivir	2 (1.0)	0 (0.0)	2 (0.4)
Amantadine	0 (0.0)	1 (0.3)	1 (0.2)
Overall	26 (12.7)	31 (9.9)	57 (11.0)
b) UC Overall tofacitinib cohort	**Average tofacitinib 5 mg BID (*N* = 23)**	**Average tofacitinib 10 mg BID (*N* = 92)**	**All tofacitinib (*N* = 115)**
Oseltamivir/oseltamivir phosphate	3 (13.0)	5 (5.4)	8 (7.0)
Laninamivir/laninamivir octanoate hydrate/laninamivir octanoate monohydrate	2 (8.7)	4 (4.3)	6 (5.2)
Baloxavir marboxil	1 (4.3)	0 (0.0)	1 (0.9)

Overall	6 (26.1)	9 (9.8)	15 (13.0)

c) PsA Overall tofacitinib cohort	**Average tofacitinib 5 mg BID (*N* = 23)**	**Average tofacitinib 10 mg BID (*N* = 10)**	**All tofacitinib (*N* = 33)**
Oseltamivir/oseltamivir phosphate	3 (13.0)	1 (10.0)	4 (12.1)
Zanamivir	1 (4.3)	0 (0.0)	1 (3.0)
Overall	4 (17.4)	1 (10.0)	5 (15.2)

[a]Antivirals used for influenza
AE adverse event, *BID* twice daily, *n* number of patients receiving specified treatment, *N* number of evaluable patients, *PsA* psoriatic arthritis, *RA* rheumatoid arthritis, *UC* ulcerative colitis

Table S7 Baseline characteristics by combined influenza AEs (yes vs. no) in the RA Overall tofacitinib cohort

	Average tofacitinib 5 mg BID (*N* = 3969)		**Average tofacitinib 10 mg BID (*N* = 3995)**		**All tofacitinib (*N* = 7964)**	
	Yes (*N1* = 204)	**No (*N1* = 3765)**	**Yes (*N1* = 313)**	**No (*N1* = 3682)**	**Yes (*N1* = 517)**	**No (*N1* = 7447)**
Age, years, mean (SD)	51.0 (13.1)	53.4 (12.4)	52.0 (11.5)	52.0 (11.7)	51.6 (12.1)	52.7 (12.0)
≥ 65 years, *n* (%)	29 (14.2)	693 (18.4)	40 (12.8)	508 (13.8)	69 (13.3)	1201 (16.1)
Female, *n* (%)	176 (86.3)	3060 (81.3)	265 (84.7)	3021 (82.0)	441 (85.3)	6081 (81.7)
BMI, kg/m^2, mean (SD)	27.1 (6.4)	26.7 (6.2)	28.1 (7.0)	27.4 (6.5)	27.7 (6.8)	27.1 (6.4)
BMI ≥ 30 kg/m^2, *n* (%)	58 (28.4)	924 (24.5)	104 (33.2)	1052 (28.6)	162 (31.3)	1976 (26.5)
Smoking status, *n* (%)						
Never smoked	122 (59.8)	2400 (63.7)	180 (57.5)	2294 (62.3)	302 (58.4)	4694 (63.0)
Current smoker	32 (15.7)	616 (16.4)	63 (20.1)	655 (17.8)	95 (18.4)	1271 (17.1)
Ex-smoker	38 (18.6)	651 (17.3)	65 (20.8)	634 (17.2)	103 (19.9)	1285 (17.3)
Unknown	12 (5.9)	98 (2.6)	5 (1.6)	99 (2.7)	17 (3.3)	197 (2.6)
RA duration, years, mean (SD)	8.6 (8.1)	8.4 (8.2)	7.7 (7.6)	7.8 (8.1)	8.0 (7.8)	8.1 (8.2)

Prior TNFi, *n* (%)	32 (15.7)	431 (11.4)	73 (23.3)	709 (19.3)	105 (20.3)	1140 (15.3)
RF-positive, *n* (%)	130 (63.7)	2429 (64.5)	205 (65.5)	2382 (64.7)	335 (64.8)	4811 (64.6)
ACPA-positive, *n* (%)	47 (23.0)	1305 (34.7)	192 (61.3)	2179 (59.2)	239 (46.2)	3484 (46.8)
MTX use, *n* (%)	107 (52.5)	1592 (42.3)	167 (53.4)	1919 (52.1)	274 (53.0)	3511 (47.1)
Concomitant oral corticosteroid use, *n* (%)[a]	125 (61.3)	1945 (51.7)	184 (58.8)	2000 (54.3)	309 (59.8)	3945 (53.0)
Diabetes, *n* (%)[a]	19 (9.3)	346 (9.2)	26 (8.3)	260 (7.1)	45 (8.7)	606 (8.1)
Hypertension, *n* (%)[a]	65 (31.9)	1340 (35.6)	118 (37.7)	1295 (35.2)	183 (35.4)	2635 (35.4)
Coronary heart disease, *n* (%)[a]	1 (< 1.0)	12 (< 1.0)	1 (< 1.0)	16 (< 1.0)	2 (< 1.0)	28 (< 1.0)
COPD, *n* (%)[a]	16 (7.8)	243 (6.5)	30 (9.6)	276 (7.5)	46 (8.9)	519 (7.0)

N values may vary based on available data
[a]Data based on day 1 of active tofacitinib treatment in the RA clinical development program
ACPA anti-citrullinated protein antibody, *AE* adverse event, *BID* twice daily, *BMI* body mass index, *COPD* chronic obstructive pulmonary disease, *MTX* methotrexate, *n* number of patients with the specified characteristic, *N* number of evaluable patients, *N1* number of patients with event or no event, *RA* rheumatoid arthritis, *RF* rheumatoid factor, *SD* standard deviation, *TNFi* tumor necrosis factor inhibitors

Table S8 Baseline characteristics by number of combined influenza AEs (1 vs. ≥ 2) in the RA Overall tofacitinib cohort

	Average tofacitinib 5 mg BID (*N* = 204)		**Average tofacitinib 10 mg BID (*N* = 313)**		**All tofacitinib (*N* = 517)**	
	1 AE (*N1* = 177)	**≥ 2 AE (*N1* = 27)**	**1 AE (*N1* = 258)**	**≥ 2 AE (*N1* = 55)**	**1 AE (*N1* = 435)**	**≥ 2 AE (*N1* = 82)**
Age, years, mean (SD)	51.0 (13.1)	50.6 (13.2)	52.0 (11.3)	51.9 (12.3)	51.6 (12.1)	51.5 (12.5)
≥ 65 years, *n* (%)	25 (14.1)	4 (14.8)	31 (12.0)	9 (16.4)	56 (12.9)	13 (15.9)
Female, *n* (%)	153 (86.4)	23 (85.2)	215 (83.3)	50 (90.9)	368 (84.6)	73 (89.0)
BMI, kg/m^2, mean (SD)	26.8 (6.3)	29.2 (7.0)	28.0 (6.9)	28.2 (7.2)	27.5 (6.7)	28.5 (7.1)
BMI ≥ 30 kg/m^2, *n* (%)	50 (28.2)	8 (29.6)	83 (32.2)	21 (38.2)	133 (30.6)	29 (35.4)
Smoking status, *n* (%)						
Never smoked	104 (58.8)	18 (66.7)	145 (56.2)	35 (63.6)	249 (57.2)	53 (64.6)
Smoker	29 (16.4)	3 (11.1)	53 (20.5)	10 (18.2)	82 (18.9)	13 (15.9)
Ex-smoker	34 (19.2)	4 (14.8)	55 (21.3)	10 (18.2)	89 (20.5)	14 (17.1)
Unknown	10 (5.6)	2 (7.4)	5 (1.9)	0 (0.0)	15 (3.4)	2 (2.4)
RA duration, years, mean (SD)	8.1 (7.5)	11.3 (10.9)	7.4 (7.4)	8.8 (8.5)	7.7 (7.5)	9.6 (9.4)

Prior TNFi, *n* (%)	27 (15.3)	5 (18.5)	63 (24.4)	10 (18.2)	90 (20.7)	15 (18.3)
RF-positive, *n* (%)	113 (63.8)	17 (63.0)	160 (62.0)	45 (81.8)	273 (62.8)	62 (75.6)
ACPA-positive, *n* (%)	38 (21.5)	9 (33.3)	146 (56.6)	46 (83.6)	184 (42.3)	55 (67.1)
MTX use, *n* (%)[a]	93 (52.5)	14 (51.9)	135 (52.3)	32 (58.2)	228 (52.4)	46 (56.1)
Concomitant oral corticosteroid use, *n* (%)[a]	111 (62.7)	14 (51.9)	154 (59.7)	30 (54.5)	265 (60.9)	44 (53.7)
Diabetes, *n* (%)[a]	15 (8.5)	4 (14.8)	22 (8.5)	4 (7.3)	37 (8.5)	8 (9.8)
Hypertension, *n* (%)[a]	57 (32.2)	8 (29.6)	97 (37.6)	21 (38.2)	154 (35.4)	29 (35.4)
Coronary heart disease, *n* (%)[a]	1 (< 1.0)	0 (0.0)	1 (< 1.0)	0 (0.0)	2 (< 1.0)	0 (0.0)
COPD, *n* (%)[a]	16 (9.0)	0 (0.0)	23 (8.9)	7 (12.7)	39 (9.0)	7 (8.5)

N values may vary based on available data
[a]Data based on day 1 of active tofacitinib treatment in the RA clinical development program
ACPA anti-citrullinated protein antibody, *AE* adverse event, *BID* twice daily, *BMI* body mass index, *COPD* chronic obstructive pulmonary disease, *MTX* methotrexate, *n* number of patients with the specified characteristic, *N* number of evaluable patients, *N1* number of patients with 1 or ≥ 2 AEs, *RA* rheumatoid arthritis, *RF* rheumatoid factor, *SD* standard deviation, *TNFi* tumor necrosis factor inhibitors

Table S9 Univariate logistic regression model for risk factors for combined influenza AEs and recurrent influenza AEs in the RA Overall tofacitinib cohort

Parameter	**RA**	
	Influenza AE, OR (95% CI)	**Recurrent influenza AE, OR (95% CI)**
Age (years)	0.99 (0.99–1.00)*	1.00 (0.98–1.02)
Age categorical (≥ 65 vs. < 65)	0.80 (0.62–1.04)	1.28 (0.66–2.46)
BMI	1.01 (1.00–1.03)*	1.02 (0.99–1.06)
BMI categorical (≥ 30 vs. < 30)	1.26 (1.04–1.53)*	1.24 (0.76–2.04)
COPD at baseline (yes vs. no)	1.30 (0.95–1.79)	0.95 (0.41–2.20)
CRP at baseline (per 5-unit increase)	1.01 (0.99–1.03)	1.05 (1.01–1.09)*
Corticosteroid dose at baseline	1.01 (0.99–1.02)	1.00 (0.94–1.07)
Corticosteroid use at baseline (yes vs. no)	1.32 (1.10–1.58)*	0.74 (0.46–1.19)
Corticosteroid use within 2 weeks prior to first influenza AE (yes vs. no)	NA	0.74 (0.46–1.20)
DAS28-4(ESR) at baseline	1.01 (0.92–1.11)	1.35 (1.04–1.75)*
Total Mayo score at baseline	NA	NA

Diabetes at baseline (yes vs. no)	1.08 (0.78–1.48)	1.16 (0.52–2.60)
HAQ-DI at baseline	1.08 (0.94–1.24)	1.61 (1.10–2.35)*
Hypertension at baseline (yes vs. no)	1.00 (0.83–1.21)	1.00 (0.61–1.64)
MTX use (yes vs. no)	1.26 (1.06–1.51)*	1.16 (0.72–1.87)
MTX use within 2 weeks prior to first influenza AE (yes vs. no)	NA	1.03 (0.64–1.65)
RF+ at baseline (yes vs. no)	1.06 (0.86– 1.31)	1.40 (0.79–2.47)
ACPA-positive at baseline (yes vs. no)	0.98 (0.82– 1.17)	2.78 (1.69–4.57)*
Disease duration	1.00 (0.99– 1.01)	1.03 (1.00–1.06)
Race		
Asian vs. other	0.26 (0.19–0.35)*	0.28 (0.11–0.72)*
Black vs. other	0.50 (0.29–0.84)*	0.58 (0.16–2.19)
White vs. other	0.44 (0.35–0.56)*	0.49 (0.29–0.85)*
Asian vs. White	NA	NA
Black vs. White	NA	NA
Other vs. White	NA	NA

Unspecified vs. White	NA	NA
Region		
Europe vs. North America	0.61 (0.47–0.78)*	0.68 (0.32–1.41)
Latin America vs. North America	1.59 (1.26–2.01)*	1.77 (1.00–3.11)*
East/South Asia vs. North America	0.45 (0.33–0.60)*	0.44 (1.16–1.21)
Rest of World vs. North America	0.54 (0.37–0.80)*	0.54 (0.15–1.91)
Sex (female vs. male)	1.30 (1.01–1.67)*	1.48 (0.70–3.09)
Smoking		
Ex-smoker vs. never smoked	1.25 (0.99–1.57)	0.74 (0.39–1.40)
Smoker vs. never smoked	1.16 (0.92–1.48)	0.75 (0.39–1.44)
Tofacitinib dose (average 10 mg vs. 5 mg BID)	1.57 (1.31–1.88)*	1.40 (0.85–2.30)
Tofacitinib dose[a] (average 10 mg vs. 5 mg BID)	1.52 (1.27–1.82)*	1.46 (0.89–2.40)

*$p < 0.05$

[a]In patients with ≥ 1 event, this is the average tofacitinib dose within 2 weeks prior to the first event (influenza AE and recurrent influenza AE), and in patients with no event, this is the average tofacitinib dose during the study period (influenza AE)

ACPA anti-citrullinated protein antibody, *AE* adverse event, *BID* twice daily, *BMI* body mass index, *CI* confidence interval, *COPD* chronic obstructive pulmonary disease, *CRP* C-reactive protein, *DAS28-4(ESR)* Disease Activity Score in 28 joints, erythrocyte sedimentation rate, *HAQ-DI* Health Assessment Questionnaire-Disability Index, *MTX* methotrexate, *NA* not applicable, *OR* odds ratio, *RA* rheumatoid arthritis, *RF* rheumatoid factor

Table S10 IRs of viral respiratory infections that may overlap with influenza in clinical presentation in the RA phase 2–3b/4 cohort

Preferred term	Tofacitinib 5 mg BID (*N* = 2664)			Tofacitinib 10 mg BID (*N* = 2024)			Placebo (*N* = 1136)			Adalimumab (*N* = 643)			MTX (*N* = 223)		
	n **(%)**	**PY**	**IR (95% CI)**	***n*** **(%)**	**PY**	**IR (95% CI)**	***n*** **(%)**	**PY**	**IR (95% CI)**	***n*** **(%)**	**PY**	**IR (95% CI)**	***n*** **(%)**	**PY**	**IR (95% CI)**
Naso-pharyngitis	171 (6.4)	2463.6	6.94 (5.94–8.06)	123 (6.1)	1896.6	6.49 (5.39–7.74)	33 (2.9)	304.7	10.83 (7.46–15.21)	27 (4.2)	541.3	4.99 (3.29–7.26)	12 (5.4)	287.9	4.17 (2.15–7.28)
Upper respiratory tract infection	104 (3.9)	2516.3	4.13 (3.38–5.01)	84 (4.2)	1935.9	4.34 (3.46–5.37)	15 (1.3)	308.9	4.86 (2.72–8.01)	19 (3.0)	542.4	3.50 (2.11–5.47)	11 (4.9)	291.7	3.77 (1.88–6.75)
Pharyngitis	25 (0.9)	2568.5	0.97 (0.63–1.44)	22 (1.1)	1981.4	1.11 (0.70–1.68)	4 (0.4)	310.6	1.29 (0.35–3.30)	0 (0.0)	554.4	0.00 (0.00–0.67)	3 (1.3)	299.0	1.00 (0.21–2.93)
Bronchitis	20 (0.8)	2568.9	0.78 (0.48–1.20)	22 (1.1)	1977.2	1.11 (0.70–1.68)	2 (0.2)	311.1	0.64 (0.08–2.32)	5 (0.8)	553.1	0.90 (0.29–2.11)	1 (0.4)	300.9	0.33 (0.01–1.85)
Rhinitis	15 (0.6)	2576.3	0.58 (0.33–0.96)	18 (0.9)	1985.4	0.91 (0.54–1.43)	2 (0.2)	310.7	0.64 (0.08–2.33)	3 (0.5)	552.5	0.54 (0.11–1.59)	3 (1.3)	297.8	1.01 (0.21–2.94)

Viral upper respiratory tract infection	14 (0.5)	2570.6	0.54 (0.30–0.91)	13 (0.6)	1990.8	0.65 (0.35–1.12)	2 (0.2)	311.0	0.64 (0.08–2.32)	4 (0.6)	551.9	0.72 (0.20–1.86)	0 (0.0)	301.4	0.00 (0.00–1.22)
Respiratory tract infection viral	16 (0.6)	2569.1	0.62 (0.36–1.01)	8 (0.4)	1990.0	0.40 (0.17–0.79)	2 (0.2)	310.8	0.64 (0.08–2.32)	4 (0.6)	551.8	0.72 (0.20–1.86)	4 (1.8)	297.1	1.35 (0.37–3.45)
Respiratory tract infection	9 (0.3)	2576.0	0.35 (0.16–0.66)	4 (0.2)	1994.7	0.20 (0.05–0.51)	2 (0.2)	310.6	0.64 (0.08–2.33)	1 (0.2)	553.3	0.18 (0.00–1.01)	1 (0.4)	299.6	0.33 (0.01–1.86)
Sinusitis	9 (0.3)	2579.7	0.35 (0.16–0.66)	3 (0.1)	1997.0	0.15 (0.03–0.44)	0 (0.0)	311.3	0.00 (0.00–1.19)	3 (0.5)	552.6	0.54 (0.11–1.59)	0 (0.0)	301.4	0.00 (0.00–1.22)
Pneumonia	7 (0.3)	2583.6	0.27 (0.11–0.56)	4 (0.2)	1997.4	0.20 (0.05–0.51)	0 (0.0)	311.3	0.00 (0.00–1.19)	0 (0.0)	554.4	0.00 (0.00–0.67)	0 (0.0)	301.4	0.00 (0.00–1.22)
Laryngitis	1 (0.0)	2583.7	0.04 (0.00–0.22)	5 (0.2)	1995.2	0.25 (0.08–0.58)	0 (0.0)	311.3	0.00 (0.00–1.19)	1 (0.2)	553.7	0.18 (0.00–1.01)	0 (0.0)	301.4	0.00 (0.00–1.22)
Lower respiratory tract infection	0 (0.0)	2584.4	0.00 (0.00–0.14)	5 (0.2)	1994.9	0.25 (0.08–0.58)	1 (0.1)	311.1	0.32 (0.01–1.79)	1 (0.2)	554.2	0.18 (0.00–1.01)	0 (0.0)	301.4	0.00 (0.00–1.22)

Tonsillitis	0 (0.0)	2584.4	0.00 (0.00–0.14)	4 (0.2)	1996.2	0.20 (0.05–0.51)	0 (0.0)	311.3	0.00 (0.00–1.19)	0 (0.0)	554.4	0.00 (0.00–0.67)	1 (0.4)	301.2	0.33 (0.01–1.85)
Bronchitis viral	0 (0.0)	2584.4	0.00 (0.00–0.14)	4 (0.2)	1995.1	0.20 (0.05–0.51)	0 (0.0)	311.3	0.00 (0.00–1.19)	0 (0.0)	554.4	0.00 (0.00–0.67)	0 (0.0)	301.4	0.00 (0.00–1.22)
Viral pharyngitis	3 (0.1)	2582.2	0.12 (0.02–0.34)	0 (0.0)	1998.7	0.00 (0.00–0.18)	0 (0.0)	311.3	0.00 (0.00–1.19)	0 (0.0)	554.4	0.00 (0.00–0.67)	0 (0.0)	301.4	0.00 (0.00–1.22)
Viral tonsillitis	2 (0.1)	2583.5	0.08 (0.01–0.28)	1 (0.0)	1998.6	0.05 (0.00–0.28)	0 (0.0)	311.3	0.00 (0.00–1.19)	0 (0.0)	554.4	0.00 (0.00–0.67)	0 (0.0)	301.4	0.00 (0.00–1.22)
Tracheitis	1 (0.0)	2583.9	0.04 (0.00–0.22)	1 (0.0)	1997.8	0.05 (0.00–0.28)	1 (0.1)	311.1	0.32 (0.01–1.79)	0 (0.0)	554.4	0.00 (0.00–0.67)	0 (0.0)	301.4	0.00 (0.00–1.22)
Pharyngotonsillitis	1 (0.0)	2584.4	0.04 (0.00–0.22)	1 (0.0)	1997.5	0.05 (0.00–0.28)	0 (0.0)	311.3	0.00 (0.00–1.19)	0 (0.0)	554.4	0.00 (0.00–0.67)	0 (0.0)	301.4	0.00 (0.00–1.22)
Pneumonia viral	1 (0.0)	2584.4	0.04 (0.00–0.22)	0 (0.0)	1998.7	0.00 (0.00–0.18)	0 (0.0)	311.3	0.00 (0.00–1.19)	0 (0.0)	554.4	0.00 (0.00–0.67)	0 (0.0)	301.4	0.00 (0.00–1.22)

Viral sinusitis	0 (0.0)	2584.4	0.00 (0.00–0.14)	1 (0.0)	1998.7	0.05 (0.00–0.28)	0 (0.0)	311.3	0.00 (0.00–1.19)	0 (0.0)	554.4	0.00 (0.00–0.67)	0 (0.0)	301.4	0.00 (0.00–1.22)

IRs were calculated as the number of patients with events/100 PY
PY are total follow-up time calculated up to the earliest of: day of the first event, time to data cut-off or progression to next study, or time to last dose + 28 days
BID twice daily, *CI* confidence interval, *IR* incidence rate, *MTX* methotrexate, *n* number of patients with the specified event, *N* number of evaluable patients, *PY* patient-years, *RA* rheumatoid arthritis

Table S11 IRs of viral respiratory infections that may overlap with influenza in clinical presentation in the UC phase 2/3 induction cohort

	Tofacitinib 10 mg BID (*N* = 938)			**Placebo (*N* = 282)**		
Preferred term	***n* (%)**	**PY**	**IR (95% CI)**	***n* (%)**	**PY**	**IR (95% CI)**
Nasopharyngitis	53 (5.7)	160.9	32.94 (24.68–43.09)	13 (4.6)	49.1	26.49 (14.10–45.30)
Upper respiratory tract infection	17 (1.8)	164.5	10.33 (6.02–16.55)	5 (1.8)	50.0	9.99 (3.24–23.32)
Pharyngitis	4 (0.4)	165.6	2.41 (0.66–6.18)	1 (0.4)	50.4	1.98 (0.05–11.05)
Rhinitis	3 (0.3)	165.7	1.81 (0.37–5.29)	0 (0.0)	50.5	0.00 (0.00–7.30)
Viral upper respiratory tract infection	3 (0.3)	165.7	1.81 (0.37–5.29)	0 (0.0)	50.5	0.00 (0.00–7.30)
Respiratory tract infection	1 (0.1)	166.0	0.60 (0.02–3.36)	1 (0.4)	50.5	1.98 (0.05–11.04)
Sinusitis	2 (0.2)	166.0	1.20 (0.15–4.35)	0 (0.0)	50.5	0.00 (0.00–7.30)
Acute sinusitis	1 (0.1)	166.0	0.60 (0.02–3.36)	0 (0.0)	50.5	0.00 (0.00–7.30)
Lower respiratory tract infection viral	0 (0.0)	166.1	0.00 (0.00–2.22)	1 (0.4)	50.5	1.98 (0.05–11.04)
Pneumonia	1 (0.1)	166.0	0.60 (0.02–3.36)	0 (0.0)	50.5	0.00 (0.00–7.30)
Viral pharyngitis	0 (0.0)	166.1	0.00 (0.00–2.22)	1 (0.4)	50.4	1.98 (0.05–11.05)

IRs were calculated as the number of patients with events/100 PY
PY are total follow-up time calculated up to the earliest of: day of the first event, time to data cut-off or progression to next study, or time to last dose

+ 28 days
BID twice daily, *CI* confidence interval, *IR* incidence rate, *n* number of patients with the specified event, *N* number of evaluable patients, *PY* patient-years, *UC* ulcerative colitis

Table S12 IRs of viral respiratory infections that may overlap with influenza in clinical presentation in the UC phase 3 maintenance cohort

Preferred term	Tofacitinib 5 mg BID (*N* = 198)			Tofacitinib 10 mg BID (*N* = 196)			Placebo (*N* = 198)		
	***n* (%)**	**PY**	**IR (95% CI)**	***n* (%)**	**PY**	**IR (95% CI)**	***n* (%)**	**PY**	**IR (95% CI)**
Nasopharyngitis	16 (8.1)	142.2	11.25 (6.43–18.27)	24 (12.2)	143.2	16.76 (10.74–24.94)	12 (6.1)	96.8	12.40 (6.41–21.66)
Upper respiratory tract infection	8 (4.0)	146.9	5.45 (2.35–10.73)	7 (3.6)	154.8	4.52 (1.82–9.32)	5 (2.5)	102.5	4.88 (1.58–11.39)
Pharyngitis	3 (1.5)	147.0	2.04 (0.42–5.96)	1 (0.5)	156.9	0.64 (0.02–3.55)	2 (1.0)	103.0	1.94 (0.24–7.01)
Bronchitis	1 (0.5)	148.4	0.67 (0.02–3.76)	3 (1.5)	155.5	1.93 (0.40–5.64)	1 (0.5)	102.9	0.97 (0.02–5.42)
Respiratory tract infection	0 (0.0)	148.8	0.00 (0.00–2.48)	2 (1.0)	155.9	1.28 (0.16–4.63)	0 (0.0)	103.4	0.00 (0.00–3.57)
Sinusitis	1 (0.5)	148.4	0.67 (0.02–3.75)	0 (0.0)	157.3	0.00 (0.00–2.35)	1 (0.5)	102.5	0.98 (0.02–5.44)
Bronchitis viral	0 (0.0)	148.8	0.00 (0.00–2.48)	0 (0.0)	157.3	0.00 (0.00–2.35)	1 (0.5)	102.7	0.97 (0.02–5.42)
Rhinitis	0 (0.0)	148.8	0.00 (0.00–2.48)	1 (0.5)	156.7	0.64 (0.02–3.56)	0 (0.0)	103.4	0.00 (0.00–3.57)

IRs were calculated as the number of patients with events/100 PY
PY are total follow-up time calculated up to the earliest of: day of the first event, time to data cut-off or progression to next study, or time to last dose + 28 days
BID twice daily, *CI* confidence interval, *IR* incidence rate, *n* number of patients with the specified event, *N* number of evaluable patients, *PY* patient-years, *UC* ulcerative colitis

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