

References:

- [1] Tanaka Y et al. *Mod Rheumatol*. 2018;28:583-91
 [2] Tanaka Y et al. *Mod Rheumatol*. 2018;28:20-9

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SAT0157

NINTEDANIB DOSE ADJUSTMENTS AND ADVERSE EVENTS IN PATIENTS WITH PROGRESSIVE AUTOIMMUNE DISEASE-RELATED INTERSTITIAL LUNG DISEASES IN THE INBUILD TRIAL

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Background: In the INBUILD trial in patients with progressive fibrosing ILDs, the adverse event (AE) profile of nintedanib was characterised predominantly by gastrointestinal AEs. Dose adjustments were used to manage AEs.

Objectives: Assess AEs and dose adjustments in patients with autoimmune disease-related ILDs in the INBUILD trial.

Methods: Patients with progressive fibrosing ILDs other than idiopathic pulmonary fibrosis were randomised to nintedanib 150mg bid or placebo. Dose reductions to 100mg bid and treatment interruptions were permitted to manage AEs. AEs over 52 weeks of treatment (or 28 days after last trial drug intake for patients who discontinued drug before week 52) were assessed in patients who received ≥ 1 dose of trial drug.

Results: Of 663 patients in the INBUILD trial, 170 (82 nintedanib, 88 placebo) had autoimmune disease-related ILDs (89 RA-ILD, 39 SSc-ILD, 19 MCTD-ILD, 23 other autoimmune ILDs). In the nintedanib and placebo groups of patients with autoimmune disease-related ILDs, respectively, over 52 weeks, the proportions of patients with ≥ 1 dose reduction were 28.0% and 3.4%, with ≥ 1 treatment interruption were 31.7% and 10.2%, and with ≥ 1 dose reduction and/or treatment interruption were 40.2% and 12.5% (Table). Dose intensity (amount of drug administered divided by amount that would have been received had 150mg bid been administered over 52 weeks or until permanent treatment discontinuation) was $>90\%$ in 80.5% of patients in the nintedanib group and 95.5% in the placebo group. AEs led to permanent treatment discontinuation in 17.1% and 10.2% of patients treated with nintedanib and placebo, respectively. Diarrhoea was the most common AE, reported in 63.4% and 27.3% of patients in the nintedanib and placebo groups, respectively. Diarrhoea AEs led to dose reduction, treatment interruption and permanent treatment discontinuation in 7.3%, 9.8% and 4.9% of patients in the nintedanib group, compared with 0%, 1.1% and 1.1% of patients in the placebo group, respectively. Of the nintedanib-treated patients who experienced ≥ 1 diarrhoea AE, 80.8% experienced 1 or 2 events and 76.9% experienced events that were mild at worst (Common Terminology Criteria for Adverse Events [CTCAE] grade 1).

Conclusion: In the INBUILD trial, management of AEs via dose adjustments enabled most patients with autoimmune disease-related ILDs to remain on treatment for 52 weeks. Diarrhoea was the AE that most commonly led to dose adjustment.

Table

	Nintedanib (n=82)	Placebo (n=88)
Patients with ≥ 1 dose reduction or treatment interruption	33 (40.2)	11 (12.5)
Patients with ≥ 1 dose reduction	23 (28.0)	3 (3.4)
Total number of dose reductions	25	3
Patients with ≥ 1 dose re-escalation after dose reduction	5 (6.1)	2 (2.3)
Patients with ≥ 1 treatment interruption	26 (31.7)	9 (10.2)
Total number of treatment interruptions	32	11
Total duration of treatment interruptions, days, mean (SD)	20.1 (15.1)	19.3 (20.7)

Data are n (%) of patients unless otherwise indicated.

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SAT0158

EFFICACY AND SAFETY OF FILGOTINIB IN METHOTREXATE-NAÏVE PATIENTS WITH RHEUMATOID ARTHRITIS: FINCH 3 52-WEEK RESULTS

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Background: Filgotinib (FIL) is a potent, selective JAK 1 inhibitor. FINCH 3 assessed FIL efficacy and safety in methotrexate (MTX)-naïve patients (pts) with rheumatoid arthritis (RA); week (W)24 primary outcome results were previously presented.¹

Objectives: To report FINCH 3 (NCT02886728) results through W52.

Methods: This global, phase 3, double-blind, active-controlled study randomised MTX-naïve pts with moderately to severely active RA 2:1:1:2 to oral FIL 200mg once daily + MTX ≤ 20 mg weekly, FIL 100mg + MTX, FIL 200mg monotherapy (mono) + placebo (PBO), or PBO + MTX up to W52. Comparisons at W52 were not adjusted for multiplicity. Safety was assessed from adverse events and laboratory abnormalities.

Results: Of 1249 treated pts, 975 received study drug through W52. FIL efficacy was sustained up to W52. Treatment with FIL + MTX or FIL mono increased proportions of pts achieving ACR20/50/70 and clinical disease remission by DAS28(CRP) <2.6 (FIL 200mg + MTX, 53%; FIL mono, 46%), CDAI, SDAI, and Boolean criteria; improved HAQ-DI; and halted radiographic progression vs MTX alone (Table 1 and Figure). Safety was consistent with W24 data (Table 2).

Table 1. Efficacy outcomes at week 52

	FIL 200 mg + MTX (n = 416)	FIL 100 mg + MTX (n = 207)	FIL 200 mg (n = 210)	MTX (n = 416)
ACR20, %	75.0 ^{***}	73.4 ^{**}	74.8 ^{***}	61.8
ACR50, %	62.3 ^{***}	59.4 ^{**}	61.4 ^{***}	48.3
ACR70, %	47.8 ^{***}	40.1 [*]	45.2 ^{***}	29.8
mTSS ^a	0.21 ^{***}	0.27 [*]	0.23 [*]	0.74
HAQ-DI ^b	-1.00 ^{***}	-0.97	-0.95 [*]	-0.88

^aLeast-squares mean change from baseline.

^bMean change from baseline.

^{*}, p < 0.05; ^{**}, p < 0.01; ^{***}, p < 0.001 vs MTX alone; not adjusted for multiplicity.

FIL, filgotinib; mTSS, van der Heijde modified total Sharp score; MTX, methotrexate.

Table 2. Safety outcomes through week 52

Event, n (%)	FIL 200 mg + MTX (n = 416)	FIL 100 mg + MTX (n = 207)	FIL 200 mg (n = 210)	MTX (n = 416)
All AEs	318 (76.4)	164 (79.2)	143 (68.1)	305 (73.3)
Serious AEs	26 (6.3)	13 (6.3)	17 (8.1)	28 (6.7)
Infection	148 (35.6)	76 (36.7)	75 (35.7)	157 (37.7)
Serious infection	5 (1.2)	3 (1.4)	5 (2.4)	8 (1.9)
Herpes zoster	6 (1.4)	3 (1.4)	4 (1.9)	4 (1.0)
VTE	0	0	0	4 (1.0)
MACE (adjudicated)	4 (1.0)	1 (0.5)	2 (1.0)	2 (0.5)
Malignancy ^a	1 (0.2)	0	0	4 (1.0)
NMSC	2 (0.5)	0	0	1 (0.2)
Death	3 (0.7) ^b	1 (0.5) ^c	0	0

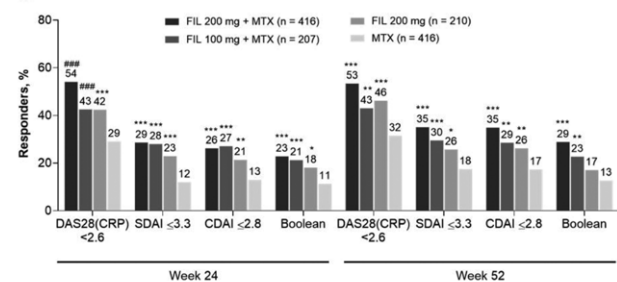
^aExcluding NMSC.

^b1 lupus cardiomyopathy, 1 atypical interstitial pneumonia, 1 non-treatment-emergent cardiovascular death.

^cDissecting cerebral and vertebral aneurysm.

AE, adverse event; FIL, filgotinib; MACE, major adverse cardiovascular event; MTX, methotrexate; NMSC, nonmelanoma skin cancer; VTE, venous thromboembolism.

Conclusion: Efficacy of FIL 200mg + MTX, FIL 100mg + MTX, and FIL 200mg mono was sustained through W52, with faster onset¹ and consistently numerically greater efficacy for FIL 200 vs 100mg. No new safety signals were observed.

Figure. Patients in clinical remission at week 52

***, p < 0.001 vs MTX alone adjusted for multiplicity.

*, p < 0.05; **, p < 0.01; ***, p < 0.001 vs MTX alone, not adjusted for multiplicity.

CDAI, Clinical Disease Activity Index; DAS28(CRP), Disease Activity Score in 28 joints with C-reactive protein; FIL, filgotinib; MTX, methotrexate; SDAI, Simplified Disease Activity Index.

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[1] Westhovens, et al. *Ann Rheum Dis.* 2019;78(Suppl2):259–60.

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ASSOCIATION BETWEEN JANUS KINASE INHIBITORS AND ALL-CAUSE MORTALITY IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: According to preliminary analysis of study A3921133, tofacitinib 10mg twice daily was associated with increased occurrence of all-cause mortality and pulmonary embolism compared with anti-tumor necrosis factor (anti-TNF), whereas 5mg tofacitinib twice daily exhibited similar safety profile with anti-TNF.

Objectives: We aim to investigate the role of Janus kinase inhibitors (Jakinibs) in all-cause mortality among RA population via a meta-analysis of RCTs.

Methods: PubMed, Embase and Cochrane Library were systematically searched for RCTs reporting adverse events in RA patients receiving Jakinibs, from inception to October 2018. Absolute risk differences (RD) and 95% confidence interval (CI) were used as an effect measure using the Mantel-Haenszel fixed-effect method.

Results: A total of 31 RCTs randomizing 13,065 patients met the inclusion criteria. During the placebo-controlled phase, there were 16 and 6 deaths in Jakinibs and placebo respectively, accompanied by a numerically higher absolute incidence mortality rate in Jakinibs than in placebo (0.651 vs. 0.531 per 100 patient-years). In direct pairwise comparisons, 2,194 and 2,246 patient-years of exposure in lower and higher Jakinibs reported a total of 19 deaths (10 with lower dose [0.456 per 100 patient-years] and 9 with higher dose [0.401 per 100 patient-years]). Compared with placebo, no significant difference was observed in tofacitinib (RD, 0.01 events/person-year; 95% CI, -0.01 to 0.02; P = 0.52); baricitinib (RD, -0.00 events/person-year; 95% CI, -0.01 to 0.01; P = 0.59); upadacitinib (RD, 0.00 events/person-year; 95% CI, -0.02 to 0.03; P = 0.71); perfcitinib (RD, 0.00 events/person-year; 95% CI, -0.05 to 0.06; P = 0.86); decernotinib (RD, 0.02 events/person-year; 95% CI, -0.03 to 0.06; P = 0.44); filgotinib (RD, 0.00 events/person-year; 95% CI, -0.05 to 0.06; P = 0.85). In pairwise comparisons, no dose-dependent impact of Jakinibs on all-cause mortality was not observed in tofacitinib (5mg vs. 10mg, bid), baricitinib (2mg vs. 4mg, qd) upadacitinib (15mg vs. 30mg, qd).

Conclusion: Compared with placebo, there was no significant difference in the all-cause mortality rate observed in patients receiving Jakinibs treatments, but post-marketing data in real-life setting are sorely needed to ascertain their safety in general population.

Large, prospective, well-designed studies are needed to explore the effects of such drugs on diabetes development in the RA patients with high-risk diabetes.

Disclosure of Interests: None declared

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SAT0160

EFFICACY AND SAFETY OF UPADACITINIB IN PATIENTS FROM CHINA, BRAZIL, AND SOUTH KOREA WITH RHEUMATOID ARTHRITIS WHO HAVE HAD INADEQUATE RESPONSE TO CONVENTIONAL SYNTHETIC DISEASE-MODIFYING ANTIRHEUMATIC DRUGS

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Background: Upadacitinib (UPA), an oral, selective JAK-1 inhibitor was effective in global ph 3 trials in rheumatoid arthritis (RA) patients with inadequate response (IR)/intolerance to csDMARDs and bDMARDs.

Objectives: This Phase 3, randomized, double-blind, placebo (PBO)-controlled study assessed the efficacy and safety of UPA in combination with csDMARDs in csDMARD-IR patients with RA from China, Brazil, and South Korea.

Methods: Patients were randomized 1:1 to receive UPA 15mg once daily (OD) or PBO in combination with csDMARDs. The primary endpoint was ACR20 response at Week 12, using non-responder imputation.

Results: 338 patients were randomized, and 310 (91.7%) completed Week 12. At Week 12, statistically significantly more patients receiving UPA vs PBO achieved