Background: The Janus kinase-1 preferential inhibitor filgotinib (FIL) improved signs and symptoms of rheumatoid arthritis (RA) in the FIL clinical program.1,4

Objectives: To assess FIL safety across regions.

Methods: This was an analysis of patients (pts) meeting 2010 ACR/EULAR RA criteria randomised to once-daily FIL 100 mg (FIL100), FIL 200 mg (FIL200), or placebo (PBO) with background conventional synthetic disease-modifying antirheumatic drugs in DARWIN 1 (P2; up to week [W]12) and FINCH 1–2 (P3; up to W24) studies were evaluated. Data were analysed by region: North America, South and Central America, Western Europe, Eastern Europe, Asia, South East (SE) Asia, and Other. Week (W)12 placebo (PBO)-controlled analysis included data from pts receiving once-daily FIL 100 mg (FIL100), FIL 200 mg (FIL200), or PBO for <12W (D1–2, F1–2); long-term as-treated data included pts from all 7 studies receiving FIL100 or FIL200; data after rerandomization were included and contributed to treatment received. Data presented as exposure-adjusted incidence rates (EAIRs)/100 patient-years of exposure (PYE) of treatment-emergent (TE) adverse events (TEAEs).

Results: Table 1 shows EAIRs of TEAEs in PBO-controlled analysis. EAIRs/PYE of all TEAEs in Western Europe, Asia, and Other were higher than in remaining regions and for PBO vs FIL arms; EAIRs for FIL200/FIL100 in North America and South East Asia were higher vs PBO. EAIRs/PYE of TE serious AEs were higher in SE Asia for FIL100 and for FIL200/FIL100 in Other, with high PBO EAIRs in Western Europe. EAIRs/PYE of TEAEs leading to study discontinuation were higher in FIL arms vs PBO in Western Europe and Other (FIL200); in Asia and SE Asia, EAIRs were higher for PBO vs FIL200/FIL100.

Conclusion: Although EAIR of TEAEs varied between regions, no consistent trend was reflected in any particular region.

REFERENCES:

Disclosure of Interests: Bernard Combe Speakers bureau: BMS; Eli Lilly & Co.; Gilead Sciences, Inc.; MSD; Pfizer; Roche-Chugai; and UCB, Consultant of: AbbVie; Eli Lilly & Co.; Gilead Sciences, Inc.; Janssen; Pfizer; Roche-Chugai; and Sanofi, Grant/research support from: Novartis, Pfizer, and Roche-Chugai.  

Takata Matsubara Speakers bureau: Pfizer Japan, Nichi-Iko, Astellas, Meiji Seika, Bristol-Myers Squibb, AbbVie; Ge; Janssen, Eisai, AYUMI, Alena Pechonkina Shareholder of: Gilead Sciences, Inc., Employee of: Gilead Sciences, Inc., Ying-Mei Tan Shareholder of: Gilead Sciences, Inc., Employee of: Gilead Sciences, Inc., Zhauyu Yin Shareholder of: Gilead Sciences, Inc., Employee of: Gilead Sciences, Inc., Jaehyung Hong Shareholder of: Gilead Sciences, Inc., Employee of: Gilead Sciences, Inc., Robin Besuyen Shareholder of: Galapagos BV, Employee of: Galapagos BV, Antonio Gomez-Centeno Speakers bureau: AbbVie, Bristol-Myers Squibb, Eli Lilly & Co., Gebro, Janssen, Menarini, Merck Sharp & Dohme, Pfizer, Roche, Rubio, Sanofi, and UC, Consultant of: AbbVie; Biogen, Bristol-Myers Squibb, Celgene, Eli Lilly & Co., Gebro, Gilead Sciences, Inc., Hospira, Merck Sharp & Dohme, Pfizer, Roche, Rubio, Sanofi, Sanofi, Grant/research support from: Boehringer Ingelheim, Celtrion, Eli Lilly & Co., Galapagos NV, Gilead Sciences, Inc., Novartis, Pfizer, Roche, Sanofi, UCB, YL Biologics, Maya H Buch Speakers bureau: AbbVie; Eli Lilly and Company; Gilead Sciences, Inc.; Merck-Serono; Pfizer; Roche; Sandoz; Sanofi; and UCB, Consultant of: AbbVie; Eli Lilly and Company; Gilead Sciences, Inc.; Merck-Serono; Pfizer; Roche; Sandoz; Sanofi; and UCB, Consultant of: AbbVie; Eli Lilly and Company; Gilead Sciences, Inc., Grant/research support from: AbbVie; Eli Lilly and Company; Gilead Sciences, Inc.; Merck-Serono; Pfizer; Roche; Sandoz; Sanofi; and UCB, DOI: 10.1136/annrheumdis-2021-eular.643

Geographic variation of efficacy in the filgotinib rheumatoid arthritis program
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Background: The Janus kinase-1 preferential inhibitor filgotinib (FIL) improved signs and symptoms of rheumatoid arthritis (RA) across the FIL clinical program.1,3

Objectives: To assess FIL efficacy across geographic regions.

Methods: Pooled data from patients (pts) meeting 2010 ACR/EULAR RA criteria randomised to once-daily FIL 200 mg (FIL200), FIL 100 mg (FIL100), or placebo (PBO) with background conventional synthetic disease-modifying antirheumatic drugs in DARWIN 1 (P2; up to week [W]12) and FINCH 1–2 (P3; up to W24) studies were evaluated. Data were analysed by region: North America, South and Central America, Western Europe, Eastern Europe, Asia, South East (SE) Asia, and Other. Week (W)12 FIL200/FIL100/PBO–controlled analysis included data from pts receiving once-daily FIL 100 mg (FIL100), FIL 200 mg (FIL200), or PBO for <12W (D1–2, F1–2); long-term as-treated data included pts from all 7 studies receiving FIL100 or FIL200; data after rerandomization were included and contributed to treatment received. Data presented as exposure-adjusted incidence rates (EAIRs)/100 patient-years of exposure (PYE) of treatment-emergent (TE) adverse events (TEAEs). Figure shows serious infections (SI), venous thromboembolism (VTE) and herpes zoster (HZ) EAIRs.

Table 1. EAIRs of TEAEs (placebo-controlled).
Index (HAQ-DI) at W12 was analysed by a mixed-effects model for repeated measures. Analyses were exploratory and not adjusted for multiplicity.

**Results:** Despite high PBO response rates in Eastern Europe and South and Central America, greater proportions of pts receiving FIL200 or FIL100 vs PBO achieved ACR20 at W12 (P <0.05) in all regions, except SE Asia, where improvement was numeric (Table 1). At W12, least-squares mean CFB in HAQ-DI improved for pts receiving FIL200 or FIL100 vs PBO (P <0.05) in all regions, except SE Asia, where improvement was numeric (Table 1).

**Table 1.** Proportion of pts achieving ACR20 and LSM change from baseline HAQ-DI at week 1

**ACR20**

<table>
<thead>
<tr>
<th>Region</th>
<th>FIL200</th>
<th>FIL100</th>
<th>FIL200</th>
<th>FIL100</th>
<th>FIL200</th>
<th>FIL100</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>64.6%</td>
<td>58.3%</td>
<td>33.8%</td>
<td>−0.63</td>
<td>−0.58</td>
<td>−0.34</td>
</tr>
<tr>
<td>South and Central America</td>
<td>77.2</td>
<td>77.3</td>
<td>54.7</td>
<td>−0.77</td>
<td>−0.67</td>
<td>−0.43</td>
</tr>
<tr>
<td>Western Europe</td>
<td>69.4%</td>
<td>68.3%</td>
<td>24.4%</td>
<td>−0.69</td>
<td>−0.61</td>
<td>−0.28</td>
</tr>
<tr>
<td>South East Asia</td>
<td>77.1%</td>
<td>69.1%</td>
<td>54.6%</td>
<td>−0.62</td>
<td>−0.51</td>
<td>−0.34</td>
</tr>
<tr>
<td>Europe</td>
<td>60.2%</td>
<td>60.8%</td>
<td>32.7%</td>
<td>−0.63</td>
<td>−0.67</td>
<td>−0.42</td>
</tr>
<tr>
<td>Asia</td>
<td>83.0%</td>
<td>61.0%</td>
<td>27.6%</td>
<td>−0.67</td>
<td>−0.68</td>
<td>−0.39</td>
</tr>
<tr>
<td>South East Asia</td>
<td>71.7%</td>
<td>71.1%</td>
<td>39.5%</td>
<td>−0.56</td>
<td>−0.52</td>
<td>−0.33</td>
</tr>
<tr>
<td>Asia</td>
<td>59.3%</td>
<td>47.0%</td>
<td>23.7%</td>
<td>−0.66</td>
<td>−0.67</td>
<td>−0.42</td>
</tr>
</tbody>
</table>

includes only patients initially randomised to the treatment groups in each study for the comparison of interest. ACR20 presented as percentage (95% CI); 95% CI was based on normal approximation method with a continuity correction; P values calculated from the logistic regression. HAQ-DI presented as LSM (95% CI); LSM, 95% CI, P and V value calculated from a mixed-effects model for repeated measures. P <0.001, †P <0.01, ‡P <0.05; not adjusted for multiplicity.

**Conclusion:** In exploratory analyses, ACR20, DAS28(CRP) <2.6 and ≤3.2 response rates were higher for both doses of FIL vs PBO (P <0.05) in all regions, with the exception of Other, where PBO was higher than FIL100 for DAS28(CRP) <2.6 (Figure 1).

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**References:**

