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Lorecivivint (SM04690): An Intra-articular Wnt Pathway Inhibitor for Knee Osteoarthritis Treatment – Phase 2b Patient-Reported Outcomes

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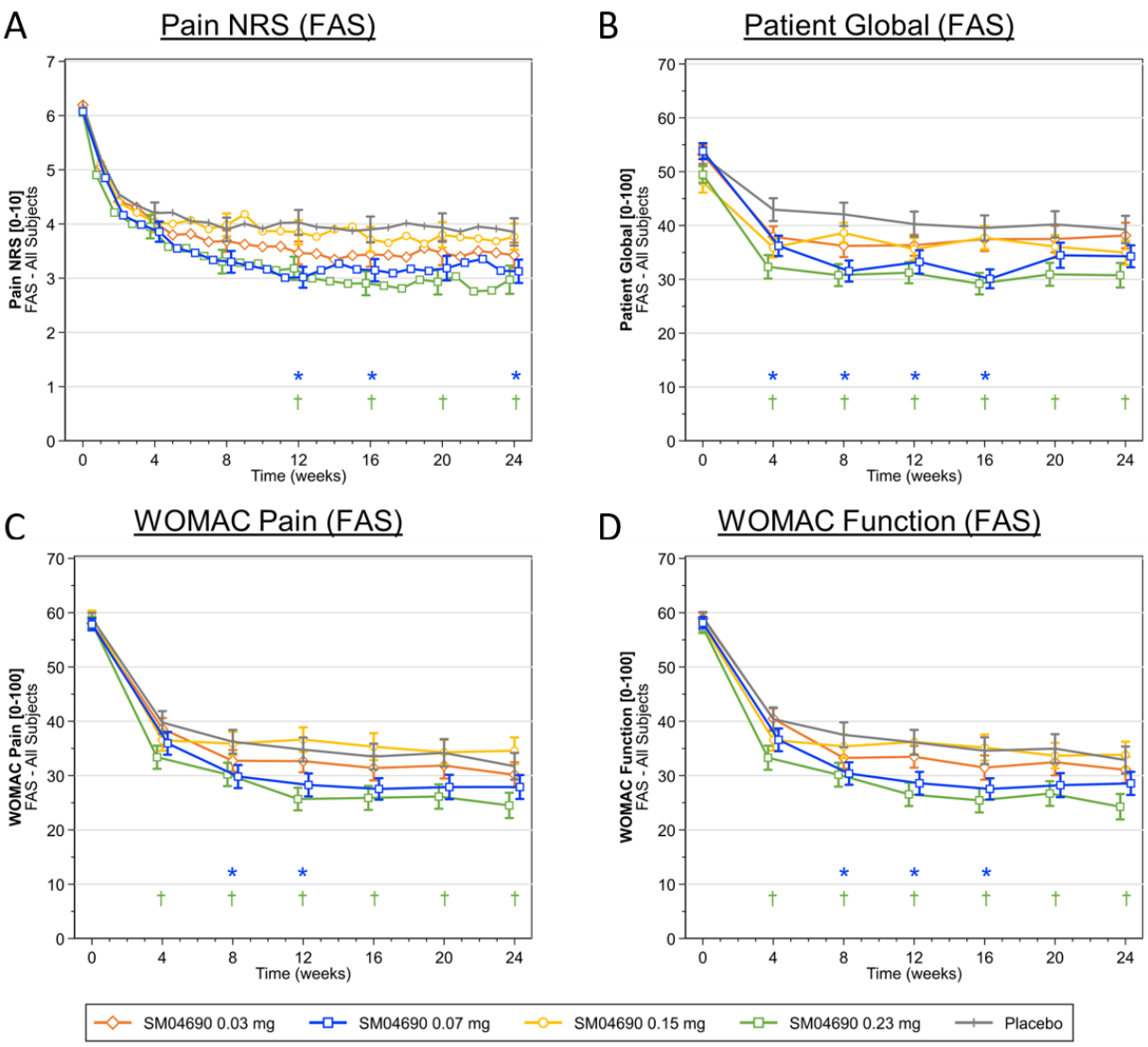
Background: In a 52-week study, Wnt pathway inhibitor lorecivivint (SM04690) showed subgroup improvements in knee osteoarthritis (KOA) pain, function, and joint space width compared to placebo (PBO). A 24-week study was conducted to refine patient-reported outcomes (PROs), target population, and dose. PROs from Weeks 12 and 24 are presented.

Methods: KOA subjects (KL grades 2-3, Pain Numeric Rating Scale [NRS] ≥4 and ≤8 in the target knee and <4 in the non-target knee) received a 2 mL, intra-articular, lorecivivint (0.03, 0.07, 0.15, 0.23 mg) or PBO/sham injection. Endpoints included change from baseline to Week 24 in weekly average of daily Pain NRS [0-10], WOMAC Pain [0-100], WOMAC Function [0-100], and Patient Global Assessment (PtGA [0-100]) compared to PBO.

Results: 695 subjects were dosed. Lorecivivint appeared well tolerated. Significant improvements from baseline compared to PBO were observed in Pain NRS for 0.07 mg and 0.23 mg groups at Weeks 12 and 24 (Figure). Similar improvements were observed in WOMAC Pain, WOMAC Function, and PtGA for 0.07 mg (Week 12) and 0.23 mg (Weeks 12 and 24) dose groups.

Conclusion: Lorecivivint, a potential disease-modifying KOA drug, demonstrated significant improvements in PROs compared to PBO up to 24 weeks for 0.07 mg and 0.23 mg dose groups.



Statistical comparisons of lorecivivint versus PBO using a baseline-adjusted ANCOVA. NRS statistics presented at 4-week intervals.
Data on x-axis is offset for visual clarity. *SM04690 0.07 mg $P<0.05$ †SM04690 0.23 mg $P<0.05$