Abrocitinib For Moderate-to-severe Atopic Dermatitis In Australian Patients: A Post Hoc Analysis Of Jade Clinical Trials

Rodney Sinclair¹

Pablo Fernandez Penas², Dedee F. Murrell³, Peter Foley⁴, Michael Freeman⁵, John C. Su⁶, Samantha Eisman¹, Diana Rubel⁷, Lynda Spelman⁸, Fiona H. Tan⁹ and Christine Surian⁹ ¹ Sinclair Dermatology

² The University of Sydney, Westmead Hospital

³ St George Hospital

⁴ The University of Melbourne, St. Vincent's Hospital Melbourne, Fitzroy and Probity Medical Research Inc., Skin Health Institute, Carlton, VIC, Australia

⁵ Bond University; Gold Coast University Hospital

⁶ Murdoch Children's Research Institute, University of Melbourne; Monash University, Eastern Health

⁷ Woden Dermatology

⁸ Veracity Clinical Research

⁹ Pfizer

Abrocitinib, an oral selective Janus kinase 1 inhibitor, was effective and safe for patients with moderate-to-severe atopic dermatitis (AD) in the international phase 3 clinical trials JADE MONO-1, JADE MONO-2, and JADE COMPARE. We evaluated abrocitinib efficacy and safety for Australian patients in these trials. Patients were randomly assigned to abrocitinib (200mg/100mg) monotherapy or placebo in MONO-1 (NCT03349060) and MONO-2 (NCT03575871) or to abrocitinib (200mg/100mg), dupilumab (300mg), or placebo plus background topical therapy in COMPARE (NCT03720470). We assessed ≥90% improvement in the Eczema Area and Severity Index (EASI-90), ≥4-point improvement on the Peak Pruritus Numerical Rating Scale (PP-NRS4), and safety. MONO-1/2 data were pooled.

Overall, 83/778 (11%) and 38/837 (4%) patients were recruited in Australia in MONO1/2 and COMPARE. At week 12, abrocitinib resulted in EASI-90 for more patients than did placebo in MONO-1/2 (abrocitinib 200mg: n=10 [35.7%; 95% CI 18.0-53.5]; 100mg: n=10 [23.3%; 10.6-35.9]; placebo: n=2 [20.0%; 0.0-44.8]). PP-NRS4 was achieved by more patients receiving abrocitinib than placebo (abrocitinib 200mg: n=13 [61.9%; 41.1-82.7]; 100mg: n=17 [48.6%; 32.0-65.1]; placebo: n=2 [20.0%; 0.0-44.8]). In COMPARE, more patients achieved EASI-90 with abrocitinib than with dupilumab or placebo (abrocitinib 200mg: n=3 [33.3%; 2.5-64.1]; 100mg: n=5 [55.6%; 23.1-88.0]; dupilumab: n=2 [18.2%; 0.0-41.0]; placebo: n=1 [11.1%; 0.0-31.6]). Similar proportions achieved PP-NRS4, irrespective of treatment (abrocitinib 200mg: n=2 [28.6%; 0.0-62.0]; 100mg: n=2 [22.2%; 0.0-49.4]; dupilumab: n=3 [27.3%; 1.0-53.6]; placebo: n=2 [22.2%; 0.0-49.4]). AEs were mainly mild-moderate in severity and resulted in discontinuation for 5 patients in MONO-1/2 (2 abrocitinib 200mg, 1 abrocitinib 100mg, 2 placebo) and in 1 patient (dupilumab) in COMPARE.

Although this analysis was limited by a small sample size, abrocitinib was safe and effective in reducing the severity and extent of moderate-to-severe AD in Australian patients.