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**PS04 Suicide risk in patients with psoriasis: results from the British Association of Dermatologists Biologics and Immunomodulators Register (BADBIR)**

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Psoriasis is associated with poor mental health, high prevalence of depression and reduced quality of life. However, suicide risk in this group is unclear. Previous meta-analyses have provided conflicting results regarding risk of suicidality outcomes, including suicidal thoughts and attempts and suicide. Existing literature has not investigated patients with clinically confirmed moderate-to-severe disease. Our aims were to investigate (i) the risk of suicide among patients with moderate-to-severe psoriasis compared with the general population and (ii) whether psychiatric comorbidity or history of suicidality increases suicidality risk in patients with

psoriasis. We further estimated the incidence of suicidal and self-injurious behaviours in patients. We analysed suicidality outcomes from the British Association of Dermatologists Biologics and Immunomodulators Register (BADBIR). For controls, we used mortality and suicide data from the general population [Office for National Statistics (ONS)]. Data were collected before the COVID-19 lockdowns. The BADBIR cutoff was February 2020 and ONS data were 2019 entries. There were nine suicides in BADBIR. The incidence rate of suicide was 12.5 per 100 000 person-years [95% confidence interval (CI) 6.53–24.1] in BADBIR vs. 11.0 per 100 000 person-years (95% CI 10.7–11.3) in the general population in England and Wales. The incidence rate for the combined event of suicidal or self-injurious behaviour was 186 per 100 000 person-years for all patients with moderate-to-severe psoriasis (95% CI 157–221). History of psychiatric comorbidity or past suicidality significantly increased the risk for all suicidality outcomes apart from suicide, including suicide attempts and suicidal ideation, as well as self-harm behaviours. Suicide incidence was higher in patients with past psychiatric history than in those without; however, the difference was not statistically significant (23.0 per 100 000 person-years, 95% CI 8.62–61.2; vs. 9.20 per 100 000 person-years, 95% CI 3.83–22.1). In BADBIR, we could not find an increased suicide risk among patients with moderate-to-severe psoriasis compared with the general population. Further research is needed to replicate this result. Our findings highlight an increased overall suicidal and self-harm burden in patients with psychiatric comorbidities. Also, given the high prevalence of depression and anxiety in people with psoriasis, there is a need for mental health monitoring in these patients. Clinicians should ask patients openly about past and present suicidal thoughts or behaviour to ensure early intervention. BADBIR is a registered company within the BAD and funds the BADBIR study. BADBIR is coordinated by the University of Manchester as research sponsor. BADBIR receives income from AbbVie, Ammiral, Bristol Myers Squibb, Boehringer Ingelheim, Eli Lilly, Janssen Cilag, LEO Pharma, Novartis, Samsung Bioepis and UCB for providing pharmacovigilance services. All decisions concerning analysis, interpretation and publication are made independently of any industry contribution.