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### Isotretinoin and mental health

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Isotretinoin and mental health; a survey of Scottish Dermatology Society members

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Daunton *et al* report a study exploring the practice of dermatologists prescribing isotretinoin in 4 different clinical scenarios with different degrees of theoretical risk of deterioration in emotional health / suicide.<sup>1</sup> The results show a degree of therapeutic timidity in some respondents which is to be expected and based on a number of variables including cognitive biases.<sup>2</sup> In May 2018 we recently surveyed members of the Scottish Dermatology Society (SDS) using survey-monkey® to assess their perception and experience of mood disturbance in patients taking isotretinoin for acne. We received 48 respondents (32 of which were Consultant Dermatologists (67% of total respondents)). The SDS membership is fluid but at the time of the survey there were 314 members of which 118 were Consultant Dermatologists. Not all members are clinicians. A conservative estimated response rate therefore was

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48/314 = 15%. 38% of respondents did not believe that isotretinoin can cause depression; however, 71% admit to worrying about patients' mental health and 87% had stopped isotretinoin due to concern about mental health. Self-rated confidence in dermatologists' ability to perform a psychiatric assessment varied with only 6% feeling extremely or very confident, but only 25% used a questionnaire to aid mental wellbeing assessment. 29% ask about suicidal thoughts in every consultation and 71% ask only if signs of low mood were present. Reassuringly, only 2 respondents reported a completed suicide of a patient while taking isotretinoin in their career to date (out of an approximate cumulative total of 695 years of clinical practice of respondents). There are approximately 700 cases of completed suicide in Scotland per year of which 250 occur in young adults.<sup>3</sup> We estimate the expected number of completed suicides for the number and age of patients seen to be 3.6 based on known population data for Scotland.<sup>3</sup> Therefore, our findings would be in keeping with the reports from previous studies that have not found an increased prevalence of completed suicide associated with isotretinoin use although no firm conclusions can be made due to the limitations of our study.

We agree that using a validated screening questionnaire eg the HADS and / or PHQ-9 helps in assessment and monitoring of distress, depressive symptoms, anxiety and suicidal ideation. We also agree that referral to psychiatry is rarely indicated.

Some individuals are constitutionally predisposed to depression and suicidal ideation. Acne can be an independent risk factor for depression and this risk may increase with lack of effective treatment for acne eg withholding or delaying isotretinoin therapy. Isotretinoin is usually a highly effective treatment for acne and so can improve wellbeing and reduce suicide risk.<sup>4</sup> However, in a minority of patients, isotretinoin appears to unmask depressive symptoms and suicidal

ideation. Unfortunately, no one can accurately predict suicide and no specific tests are capable of identifying a suicidal person. However, in the context of an individual with acne having isotretinoin we suggest that individuals may be more at risk if there is a disappointing response to treatment, recurrent acne requiring multiple courses of isotretinoin, first time suicidal thoughts whilst taking isotretinoin and a lack of improvement in wellbeing despite successful clearing of acne.<sup>5</sup> Other skin-associated risk factors include a disproportionate appearance concern / acne dysmorphia<sup>6</sup>, and general risk factors eg. feelings of hopelessness, social isolation and co-existing physical illness. Bipolar disorder often deteriorates with isotretinoin in our experience and others and we suggest this is a caution.<sup>7</sup> We agree that liaising with the GP and / or psychiatry is indicated in individual cases and more frequent follow-up. Clear communication is important and robust mechanisms should be in place should a crisis arise eg supplying emergency contact phone numbers.

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