

Supplementary Material

Supplemental Table 1. Quality assessment of included studies according to the Newcastle-Ottawa Scale

Study	Selection	Comparability	Outcome
Zampino et al, 2006	□□		□
Aktürk et al, 206	□□		□
Rubegni et al, 2006	□□□	□	□□□
Martins-Costa G.M, Bakos R, 2019	□□		□
Gunduz et al, 2003	□□		□
Strumia, 2002	□□		□

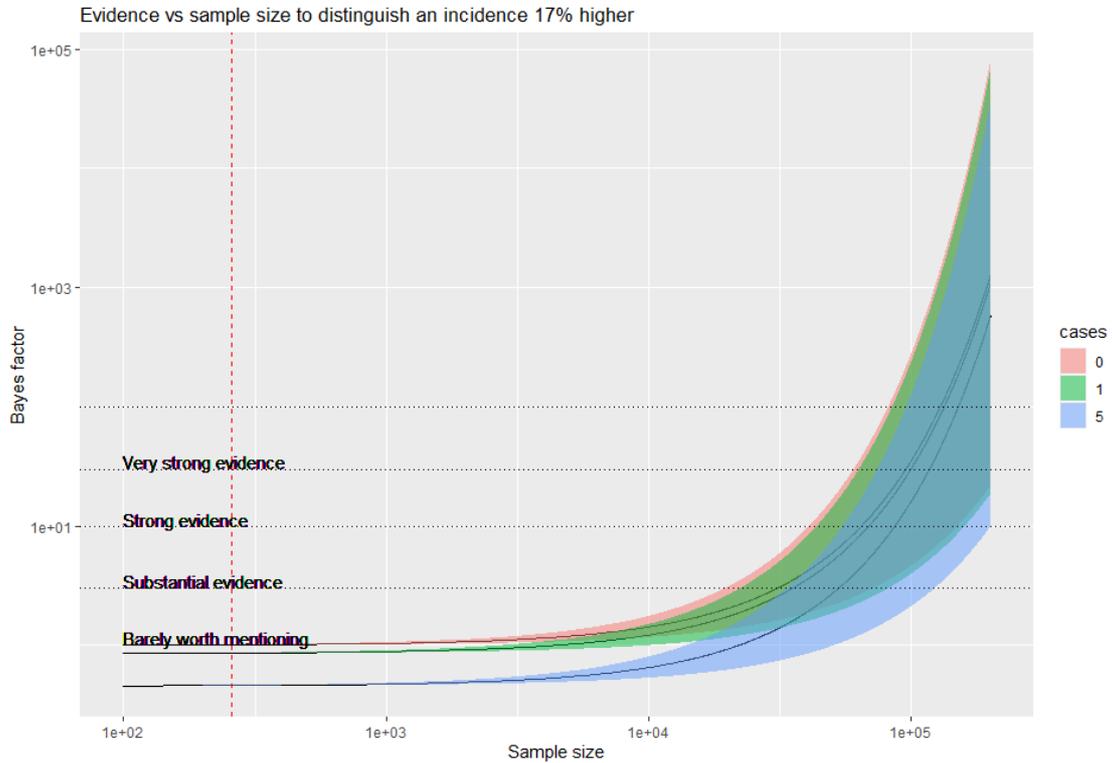
Supplemental Table 2. Risk of bias assessment of included studies according to the Cochrane Risk of Bias Tool

Study	Random sequence generation	Allocation concealment	Blinding participants and personnel	Blinding outcome assessment	Incomplete outcome data	Selective reporting
Zampino et al, 2006	no	no	no	no	no	no
Aktürk et al, 206	no	no	no	no	no	no
Rubegni et al, 2006	no	no	no	no	no	no
Martins-Costa G.M, Bakos R, 2019	no	no	no	no	no	no
Gunduz et al, 2003	no	no	no	no	no	yes
Strumia, 2002	no	no	no	no	no	no

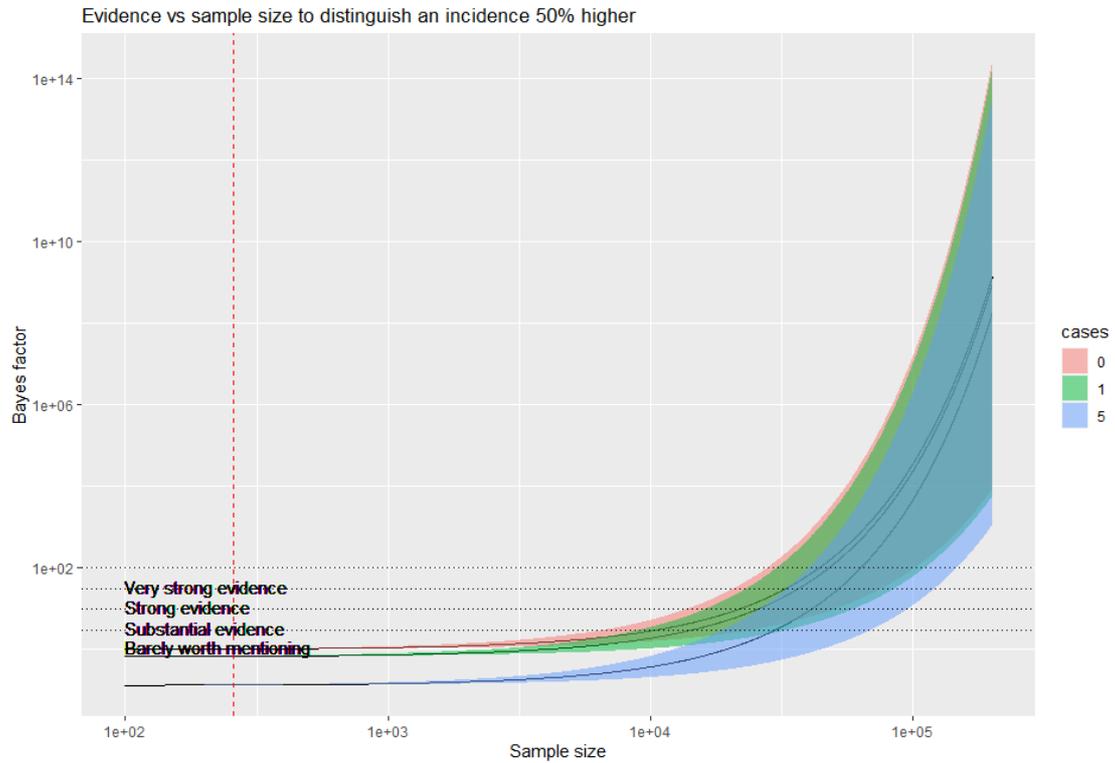
Discussion

As mentioned in our manuscript, none of the 258 women reported in the studies developed melanoma. Considering an age-standardised incidence for melanoma between 9 and 33 per 100,000 people in the female population (1), even when considering the highest incidence of melanoma, the likelihood of no woman developing a melanoma in our analysis lies at 92% (calculated using the binominal distribution, where $(1-33/100000)^{258}=0.918$). In order to accept or reject a hypothetical increase in the incidence of melanoma of 17% (considered based on the increase in mortality from melanoma in pregnant women), a study would have to include between 30,000 and 100,000 women, taking a Bayes factor of at least 3 which is the minimal value for the evidence to be considered substantial using the Jeffrey's scale (2, 3). See Supplemental Figures 1A, 1B and 1C.

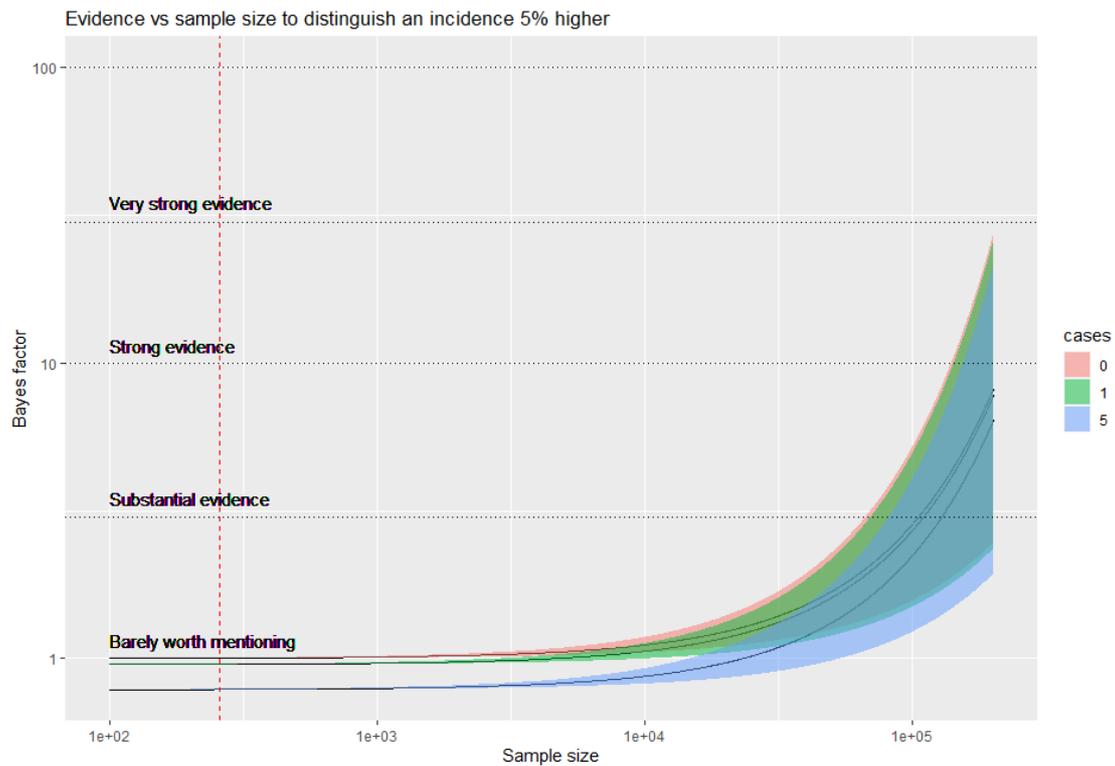
Supplemental Figure 1A. Evidence (as Bayer factor) vs sample of size needed to prove or disprove an incidence 17% higher, in case 0, 1, or 5 cases of melanoma are eventually diagnosed. An average incidence of 21 per 100,000 people and year in the female population, with error envelopes for incidences between 9 and 33 per 100,000 people and year. The red dashed line shows the evidence for a sample of 226 women



Supplemental Figure 1B. Same information, considering as alternative hypothesis with an incidence 50% higher.



Supplemental Figure 1C. Same information, considering as alternative hypothesis with an incidence 5% higher.



References

1. Fund WCR. Data: Skin cancer statistics 2021 [Available from: <http://www.wcrf.org/dietandcancer/cancer-trends/skin-cancer-statistics>. accessed on 24th May, 2021.
2. Z. D. How Bayes factors change scientific practice. *Journal of Mathematical Psychology*. 2016;72:78-89.
3. Ly A VJ, Wagenmakers EJ, . Harold Jeffrey's default Bayes factor hypothesis tests: Explanation, extension, and application in psychology. *Journal of Mathematical Psychology*. 2016;72:19-32.