

Relative Risk of Breast Cancer Associated With Prolactin-Increasing Antipsychotic Use

To the Editor: We thank Dr Andrade for reading and commenting on our article¹ and calculation of the difference in breast cancer risk between prolactin-increasing and prolactin-sparing antipsychotic use.² Following his suggestion, we have now calculated relative risk (RR) for the main results of our study, with a doubling of cases method as is recommended for the special case of nested case control studies.³ These RRs are well in line with odds ratios (ORs) reported in our original study as can be expected when the outcome is rare, such as incident breast cancer examined in our study.

With the doubling of cases method, we calculated an RR = 1.47 (95% confidence interval, 1.20–1.79) for ≥ 5 years of prolactin-increasing antipsychotic use, versus < 1 year use) and RR = 1.12 (0.86–1.46) for ≥ 5 years of prolactin-sparing antipsychotic use, versus < 1 year use). These RRs are very close to the ORs reported in the original study, namely OR = 1.56 (1.27–1.92) and OR = 1.19 (0.90–1.58), respectively (Table 1). When dividing the RR of prolactin-increasing antipsychotic use by the RR of prolactin-sparing antipsychotic use (RR 1.47/1.12), we get a value of 1.3125, ie, 31.3% increase in the risk of breast cancer. This is very similar to the value of 37% increase in odds in the discussion section of our original study.¹

Of note, unfortunately, we cannot make direct comparisons between these exposure categories, as naturally the same persons have been prescribed both prolactin-sparing and prolactin-increasing antipsychotics during long follow-up times and, thus, exposure categories are not mutually exclusive, yet reciprocally controlled for each other in our analyses.

Table 1.

Risk of Breast Cancer During Prolactin-Increasing vs Prolactin-Sparing Antipsychotic Use as Relative Risk (RR) From “Doubling of Cases” Method and Odds Ratio (OR) From the Original Publication

	Doubling of cases method RR (95% CI)	Original publication ¹ OR (95% CI)
Duration of prolactin-increasing antipsychotic use		
< 1 year	Reference	Reference
1–4 years	1.01 (0.78–1.30)	1.04 (0.79–1.36)
≥ 5 years	1.47 (1.20–1.79)	1.56 (1.27–1.92)
Duration of prolactin-sparing antipsychotic use		
< 1 year	Reference	Reference
1–4 years	0.93 (0.70–1.24)	0.95 (0.73–1.25)
≥ 5 years	1.12 (0.86–1.46)	1.19 (0.90–1.58)

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