

# 143 - Doseresponse

## Dose-response

142 The Maudsley® Prescribing Guidelines in Psychiatry CHAPTER 1 Time course Antipsychotic--induced weight gain occurs primarily in the first few months of treatment but continues for many months or even years afterwards. In a 10-year study of patients with first-episode schizophrenia, the mean weight gain was 15kg. Most of this (9kg) was gained in the first year.<sup>27</sup> In those gaining the most weight, increase in weight continues at the same rate for at least 2 years.<sup>28</sup>

Dose-response The relationship between dose and weight gain is complex and varies from one antipsychotic medication to another.<sup>22,29</sup> Two broad patterns have emerged: an increase in weight gained over a lower dose range, which then reaches a plateau (e.g. risperidone, haloperidol and quetiapine), and an increasing risk of weight gain up to and beyond the maximum dose (e.g. clozapine and olanzapine). Both patterns suggest that dose reduction might reverse or mitigate weight gain and there is some evidence that this is possible.<sup>30</sup> However, the dose-response relationships identified indicate that the risk of weight gain emerges at doses that are subtherapeutic for psychosis, meaning that there is no effective dose that does not carry a risk of weight gain. See following section for advice on the treatment of antipsychotic-induced weight gain. Risk/extent of weight gain Drug Low Amisulpride Aripiprazole Asenapine Brexpiprazole Cariprazine Lumateperone Lurasidone Sulpiride Trifluoperazine Ziprasidone \* Data on individual FGAs other than chlorpromazine and haloperidol are scarce but one comprehensive analysis showed that FGAs (not including haloperidol) had a moderate risk of weight gain: 20–30% of people gained more than 7% of original body weight in the medium term.<sup>16</sup> Individual FGAs are likely to vary in their propensity for weight gain. Traditionally low-potency FGAs (e.g. chlorpromazine) were considered to have a higher risk of weight gain. Table 1.31 (Continued)

---

Revision #1

Created 2026-01-04 20:12:47 UTC by Omar Ayman

Updated 2026-01-04 20:12:47 UTC by Omar Ayman