Data supplement for Walsh et al., Time Course of Relapse Following Acute Treatment for Anorexia Nervosa. Am J Psychiatry (doi: 10.1176/appi.ajp.2021.21010026)

Figures

The analyses described in Figures S1 and S2 were based on the criterion that all 53 patients who failed to complete the full 52-week study were considered to have relapsed. This criterion was used in the primary analysis in the original study (Walsh et al., 2006).





^a The line in gray is the step function showing the nonparametric Kaplan Meier estimator. The fitted gamma function is shown by the black line; the dashed lines show the 95% confidence intervals. The fitted parameters are $\hat{\alpha} = -0.0125$ (95% CI: -0.0129, -0.0122), $\hat{\gamma} = 0.0073$ (95% CI: 0.0071, 0.0076), and $\hat{c} = -27.03$ (95% CI: -30.35, -23.72). At day 0, the probability of relapse within next 60 days was 14.3% \pm 3.3%. The maximum risk of relapse was on day 53 when the probability was 21.7% \pm 3.2%. After day 272, the relapse risk declined to below 5%.



FIGURE S2. Probability of relapse in the subsequent 90 days versus time after study entry^a

^a The line in gray is the step function showing the nonparametric Kaplan Meier estimator. The fitted gamma function is shown by the black line; the dashed lines show the 95% confidence intervals. The fitted parameters are $\hat{\alpha} = -0.0119$ (95% CI: -0.0122, -0.0115), $\hat{\gamma} = 0.0097$ (95% CI: 0.0093, 0.0100), and $\hat{c} = -46.20$ (95% CI: -50.88, -41.52). At day 0, the probability of relapse within next 90 days was 26.1% \pm 3.5%. The maximum risk of relapse was on day 38 when the probability was $30.0\% \pm 3.4\%$. After day 311, the relapse risk declined to below 5%.

Additional Statistical Analyses

We compared the estimated peak relapse rates over the next 90 days for the following: relapse judged clinically at the time of study withdrawal versus any withdrawal viewed as a relapse, site (New York vs Toronto), and subtype (binge-eating/purging vs restricting). The peak risks of relapse for the two criteria for judging relapse (dropouts classified clinically versus all dropouts classified as having relapsed) did not differ significantly (26.8 ± 1.4 (SD) vs $30.0 \pm 1.7\%$, p=0.07). The peak risk of relapse at the New York site was significantly greater than that at the Toronto site (43.5 ± 2.4 vs $15.7 \pm 3.0\%$, p<0.001), and the peak risk of relapse for patients with the binge-eating/purging subtype was significantly greater than for patients with the restricting subtype ($34.4 \pm 3.4 \text{ vs } 21.3 \pm 2.0\%$, p<0.001). The days of peak relapse differed significantly for all these comparisons. For study withdrawal judged clinically versus all withdrawals classified as having relapsed, the days of peak relapse were $54.3 \pm 0.4 \text{ vs } 38.1 \pm 1.8$ days, p<0.001. For New York versus Toronto, the days of peak relapse were 45.7 ± 0.3 vs 99.6 ± 2.3 days, p<0.001. For the binge-eating/purging versus the restricting subtype, the days of peak relapse were 60.9 ± 1.3 vs 49.5 ± 3.4 days, p<0.002.