

## Supplementary Material

**Article Title:** Five-Year Outcomes of First Suicide Attempts: Insights on Lethality, Recurrence, and Mortality

**Authors:** Eugènia Nicolau-Subires, MD; Maria Irigoyen-Otiñano, PhD, MD; Laura Arenas-Pijoan, MD; Marina Adrados-Pérez, MD; Carla Albert-Porcar, MD; Lucía Ibarra-Pertusa, MD; María Mur-Laín, MD, PhD; Jorge López-Castroman, MD, PhD; Vicent Llorca-Bofí, MD

**DOI Number:** 10.4088/JCP.24m15754

### **LIST OF SUPPLEMENTARY MATERIAL FOR THE ARTICLE**

1. [Table 1](#) Proportions of Major Clinical Outcomes and Their 95% Confidence Intervals During the 5-Year Follow-Up Period
2. [Table 2](#) Multivariable Logistic Regression Models For High-Lethality First Suicide Attempt, Any Suicide Reattempt, and Multiple Reattempts ( $\geq 3$ ) During 5-Year Follow-Up
3. [Table 3](#) Results of Multinomial Logistic Regression Predicting Suicide Reattempt Category (Reference = No Reattempt)
4. [Table 4](#) Multivariable Cox Regression Models For All-Cause, Suicide, and Non-Suicide Mortality During 5-Year Follow-Up
5. [Figure 1](#) Distribution of Lethality (Hospitalization Hours) at the First Suicide Attempt by 5-Year Follow-Up Outcomes
6. [Statistical Analysis for Figure 1](#)

### **DISCLAIMER**

This Supplementary Material has been provided by the authors as an enhancement to the published article. It has been approved by peer review; however, it has undergone neither editing nor formatting by in-house editorial staff. The material is presented in the manner supplied by the author.

## TABLES

**Supplementary Table 1.** Proportions of major clinical outcomes and their 95% confidence intervals during the 5-year follow-up period

Outcome	Proportion (n/N)	% (95% CI)
High lethality at FSA	67/387	17.3% (13.7%–21.5%)
Reattempts ( $\geq 1$ )	144/387	37.2% (32.4%–42.2%)
Frequent reattempts ( $\geq 3$ )	40/387	10.3% (7.5%–13.8%)
All-cause mortality	18/387	4.7% (2.8%–7.3%)
Suicide mortality	7/387	1.8% (0.7%–3.7%)
Non-suicidal death	11/387	2.8% (1.4% to 4.9%)

CI = Confidence Interval; FSA = First Suicide Attempt. Proportions were calculated based on the total sample ( $N = 387$ ). 95% confidence intervals were computed using the exact binomial method (Clopper–Pearson).

**Supplementary Table 2.** Multivariable logistic regression models for high-lethality first suicide attempt, any suicide reattempt, and multiple reattempts ( $\geq 3$ ) during 5-year follow-up

Outcome	Predictor	Unadjusted OR (95% CI)	p-value	Adjusted OR (95% CI)	p-value
High lethality at FES	Age	1.268 (1.023 to 1.787)	<b>0.031*</b>	1.015 (0.998 to 1.031)	0.126
	Employed	0.621 (0.355 to 1.151)	0.086	0.625 (0.337 to 1.158)	0.136
	Alcohol	2.508 (1.671 to 4.422)	<b>0.008*</b>	2.142 (1.231 to 3.724)	<b>0.021*</b>
Suicide reattempt	Single	1.944 (1.056 to 2.480)	<b>0.012*</b>	1.463 (0.829 to 2.581)	0.189
	Employed	0.501 (0.306 to 0.830)	<b>0.007*</b>	0.507 (0.307 to 0.835)	<b>0.032*</b>
	Non-alcohol-related Substance Use Disorder	3.656 (1.430 to 6.199)	<b>0.009*</b>	2.132 (0.903 to 5.035)	0.084
	Personality Disorder	0.509 (0.285 to 0.831)	<b>0.021*</b>	0.516 (0.287 to 0.928)	<b>0.039*</b>
Multiple reattempts ( $\geq 3$ )	Female	3.953 (1.667 to 7.805)	<b>0.016*</b>	2.388 (1.036 to 5.507)	<b>0.041*</b>
	Employed	0.721 (0.261 to 0.890)	<b>0.008*</b>	0.614 (0.189 to 1.401)	0.193
	Unemployed	1.931 (0.814 to 4.658)	0.083	1.933 (0.802 to 4.659)	0.142
	Other	1.019 (1.002 to 1.408)	<b>0.035*</b>	0.714 (0.244 to 1.890)	0.139

OR = Odds Ratio; CI = Confidence Interval; FSA = first suicide attempt; P-values were corrected for multiple comparisons using the Benjamini-Hochberg procedure within each outcome model. Statistically significant associations after correction ( $p < 0.05$ ) are marked with an asterisk (\*).

**Supplementary Table 3.** Results of multinomial logistic regression predicting suicide reattempt category (reference = no reattempt)

Predictor	Comparison	OR	p-value
Female	Frequent vs. No reattempt	2.49 (1.12 – 5.53)	0.026
Personality disorder	Infrequent vs. No	1.91 (1.00 – 3.65)	0.049
	Frequent vs. No	3.02 (0.99 – 9.20)	0.051
Single	Infrequent vs. No	0.43 (0.23 – 0.78)	0.006
Alcohol use	Infrequent vs. No	4.61 (0.97 – 21.86)	0.054

A multinomial logistic regression was conducted to examine predictors of suicide reattempt category, using “no reattempt” as the reference group. Female gender was significantly associated with higher odds of frequent reattempts compared to no reattempts (OR = 2.49, 95% CI: 1.12–5.53,  $p = 0.026$ ). Having a personality disorder increased the odds of both infrequent (OR = 1.91, 95% CI: 1.00–3.65,  $p = 0.049$ ) and frequent reattempts (OR = 3.02, 95% CI: 0.99–9.20,  $p = 0.051$ ). In contrast, being single was associated with lower odds of infrequent reattempts (OR = 0.43, 95% CI: 0.23–0.78,  $p = 0.006$ ). Alcohol use showed a marginal association with infrequent reattempts (OR = 4.61, 95% CI: 0.97–21.86,  $p = 0.054$ ).

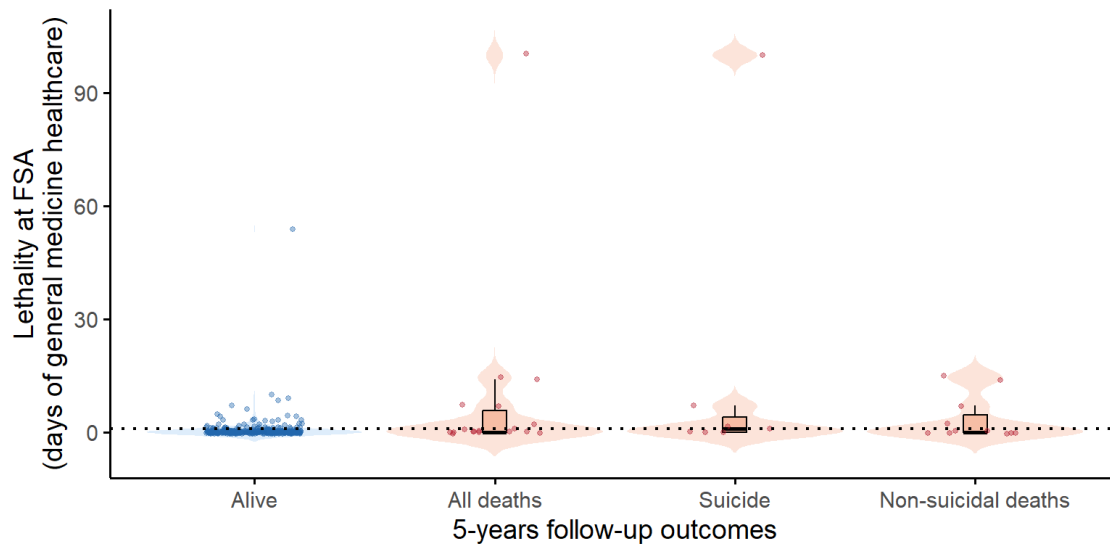
**Supplementary Table 4.** Multivariable Cox regression models for all-cause, suicide, and non-suicide mortality during 5-year follow-up

Outcome	Predictor	Unadjusted HR (95% CI)	p-value	Adjusted HR (95% CI)	p-value
All-cause death	Age	1.069 (1.032 to 1.107)	<b>&lt;0.001*</b>	1.069 (1.032 to 1.107)	<b>&lt;0.001*</b>
	Employed	0.409 (0.079 to 2.097)	<b>0.005*</b>	0.409 (0.079 to 2.097)	0.284
	Disabled	0.475 (0.139 to 1.612)	0.233	0.475 (0.139 to 1.612)	0.233
	High lethality	3.954 (1.560 to 10.018)	<b>0.013*</b>	2.803 (1.072 to 6.755)	<b>0.041*</b>
Suicide death	Age	1.925 (1.146 to 2.475)	<b>0.012*</b>	1.036 (0.995 to 1.076)	0.080
	High lethality	6.528 (1.461 to 29.168)	<b>0.015*</b>	5.430 (1.189 to 24.792)	<b>0.029*</b>
Non-suicidal death	Age	1.093 (1.035 to 1.153)	<b>0.001*</b>	1.093 (1.035 to 1.153)	<b>0.001*</b>
	Employed	0.514 (0.238 to 0.811)	<b>0.017*</b>	0.446 (0.043 to 2.621)	0.499
	Disabled	0.406 (0.072 to 2.285)	0.288	0.410 (0.073 to 2.268)	0.307
	Reattempt (yes)	0.831 (0.471. to 0.914)	<b>0.021*</b>	0.297 (0.036 to 2.423)	0.257

HR = Hazard Ratio; CI = Confidence Interval. *P*-values were corrected for multiple comparisons using the Benjamini-Hochberg procedure within each mortality outcome model. Statistically significant associations after correction ( $p < 0.05$ ) are marked with an asterisk (\*). The proportional hazards assumption was tested using Schoenfeld residuals; no violations were detected (global  $p > 0.05$ ).

## FIGURES

**Supplementary Figure 1.** Distribution of lethality (hospitalization hours) at the first suicide attempt by 5-year follow-up outcomes.



**Note:** Violin and box plots with individual data points illustrate the distribution of somatic lethality, measured as days of general medical care required. The plot highlights the presence of extreme values, particularly among participants who died during follow-up. This visualization was added to address potential skewness in the data and complements the group comparisons shown in Figure 1B of the main manuscript.

### Supplementary Statistical Analysis for Figure 1. Comparison of hospitalization duration by outcome group.

A Kruskal–Wallis test revealed significant differences in hospitalization duration following the first suicide attempt across the four outcome groups ( $\chi^2 = 22.96$ ,  $df = 3$ ,  $p < 0.001$ ). Median (IQR) values for general medical care days were:

- Alive: 0 (0–0)
- All deaths: 0 (0–5.75)
- Suicide deaths: 1 (0–4)
- Non-suicidal deaths: 0 (0–4.5)

Pairwise Wilcoxon rank-sum tests with Benjamini–Hochberg correction showed significant differences between:

- Suicide deaths vs. Alive ( $p = 0.0074$ ,  $r = 0.16$ )
- All deaths vs. Alive ( $p = 0.0029$ )

No other pairwise comparisons reached statistical significance. Exact p-values could not be computed due to tied ranks.