Analyzing the Influence of Race and Education on Menopause Onset: A Survival Analysis Approach

Ryan Wei UNI: rw2844

1 Introduction

Menopause is ascertained when a woman has had no menstrual periods for 12 consecutive months. Henceforth this ascertained menopause will be the condition of interest of this study and will be referred to simply as menopause.

2 Method

2.1 Study Design

The data set contains longitudinal information about 380 women who have not had a hysterectomy and have not experienced menopause before intake (recruitment). All 380 women were followed over time until they experienced menopause, died, or were censored due to either the woman dropping out or the study ending. Patient's age (in years) when the patient was recruited into the study was recorded (`intake_age`), as well as patient's menopause age (in years) or censoring age (in years), recorded as `menopause_age`. A binary indicator `menopause` is used to record whether or not a patient was observed to experience menopause, with `menopause = 1` if patient was observed to experience menopause and `menopause = 0` if patient was censored at `menopause_age`. Baseline demographic characters were also recorded. Patient's ethnicity was recorded as `race` with `race = 0` for White non-Hispanic patient; `race = 1` for Black, non-Hispanic patient; `race = 2` for Other Ethnicity patient. Patient's education level was recorded as `education` with `education = 0` if patient had Post-graduate education; `education = 1` if patient had Collage Graduate education; `education`

`= 2` if patient had Some Collage education; `education = 3` if patient had High School Education (or less) education. We will use the number codes to denote these categories in the analyses.

2.2 Research Interests

We seek to understand which exposure(s) might influence event time in this population. There were 75 women who experienced menopause during the follow-up time. Specifically, we are interested in two kinds of event time: 1) Menopause time, defined as `menopause_time = menopause_age - intake_age`, which is the duration from the enrollment to the event or the censoring. 2) Menopause age: the age of patient when she experienced the event or the censoring.

2.3 Statistical Analysis

2.3.1 Survival Data

We first introduce the notations used in the study. context whether the censoring time is random or fixed. In right censoring, it is convenient to use the following notation. For a specific individual i under study, we assume that there is a true menopause age Y_i and a fixed censoring time, C_i (C_i for "right" censoring time). The Y 's are assumed to be independent and identically distributed with probability density function $f(Y_i)$ and survival function $S(Y_i)$, where $S(t) = \int_0^t f(y)dy$. The exact menopause age Y of an individual will be known if, and only if, Y_i is less than or equal to C_i. If Y_i is greater than C_i, the individual is a survivor, and her event menopause time is censored at C_i. The data from this study can be conveniently represented by pairs of random variables (T_i, δ_i), where δ_i indicates whether the menopause age Y_i corresponds to an event ($\delta_i = 1$) or is censored ($\delta_i = 0$), and T_i is equal to Y_i, if the menopause age is observed, and to C_i if it is censored, i.e., $T_i = \min(Y_i, C_i)$.

2.3.2 Left Truncation

Since the event of interest for this study is menopause, subject will be enrolled in this study after a certain age. This is an unique nature of our data, which is left-truncated and right-censored. To deal with the left truncation, let X_i denotes the left truncation time, which is the intake age in this study. We can observe Y_i if and only if $X_i \leq Y_i$. We considered two ways to account for the left-truncated nature of our data. One way is to create the menopause time, denoted as $Y_i^* = \min(Y_i - X_i, C_i - X_i)$, the duration from the subject entered the study to the occurrence of the event or censoring, then conduct analyses on this new event time. Another way is analyzing T_i directly by accounting for the left truncation. Specifically, we assume assume that menopause age Y_i and intake age X_i are quasi-independent, i.e. the joint pdf $f(x, y)$ of (X_i, Y_i) can be written as $f(x, y) = Cf(y)g(x)$ for $y > x$, and 0 otherwise, where f and g are two density functions and C is a constant that makes $f(x, y)$ a genuine bivariate density function.

2.3.3 Non-parametric Methods

For the non-parametric estimator of the survival function, we adopted the standard Kaplan-Meier estimator of the survival function, proposed by Kaplan and Meier (Kaplan and Meier (1958)), is called the Product-Limit estimator. This estimator is defined as follows for all values of t in the range where there is data:

$$\hat{S}(t) = \begin{cases} 1 & \text{if } t < t_j, \\ \prod_{t_j \leq t} \left[1 - \frac{d_j}{n_j}\right], & \text{if } t_j \leq t \end{cases}.$$

where t_j's, $j = 1, 2, \ldots, D$ are the distinct event time observed in the data. n_j's are the number of subjects at risk at time t. For the analyses of the menopause time Y_i^*, n_j is the number of subjects who hadn't experienced menopause or the censoring just before t_j. For the analyses of the menopause age Y_i, n_j is the number of subjects who hadn't experienced menopause or the censoring just before t_j and the subject had been enrolled in the study, i.e., $X_i \geq t_j$. d_j's are the number of subjects who experience the event at time t_j.

The variance of the Product-Limit estimator is estimated by Greenwood's formula:

$$\hat{V}[\hat{S}(t)] = \hat{S}(t)^2 \sum_{t_j \le t} \frac{d_j}{n_j\,(n_j - d_j)}.$$

We adopted the so-called log-rank test (Jones and Crowley (1989)) to test whether there exists a difference in survival distributions between different strata defined by some covariates. For this study, we particularly interested in testing whether there are any differences in the survival distributions between different ethnicity groups. Let $k = 0, 1, 2$ denotes the index for White, non-Hispanic, Black, non-Hispanic and Other Ethnicity patient groups. We can write the above hypothesis as $H_0 : S_0(t) = S_1(t) = S_2(t)$ versus $H_1 :$ at least one of the sub-group survival function is different from others. Here $S_k(t)$'s are the subgroup's survival functions. Then, the log-rank test statistic can be written as

$$\chi^2 = \left(Z_1\left(t_D\right), Z_2\left(t_D\right), Z_3\left(t_D\right)\right)\Sigma^{-1}\left(Z_1\left(t_D\right), Z_2\left(t_D\right), Z_3\left(t_D\right)\right)^T,$$

where $Z_k\left(t_D\right) = \sum_{j=1}^{D} W\left(t_j\right)\left[d_{jk} - n_{jk}\left(\frac{d_j}{n_j}\right)\right], k = 1, 2, 3, j = 1, \ldots, D,$ here $W\left(t_j\right) \equiv 1$ for all t_j, which means we are giving equal weights to all event time. d_{jk} and n_{jk} are the number of event at time t_j and number of subjects at risk right before t_j for subgroup k, respectively. Σ is the variance covariance matrix of $\left(Z_1\left(t_D\right), Z_2\left(t_D\right), Z_3\left(t_D\right)\right)^T$, its components is estimated by $\widehat{\sigma}^2_{kk} = \sum_{j=1}^{D} W\left(t_j\right)^2 \frac{n_{jk}}{n_j}\left(1 - \frac{n_{jk}}{n_j}\right)\left(\frac{n_j - d_j}{n_j - 1}\right) d_j$ and $\widehat{\sigma}^2_{kg} = -\sum_{j=1}^{D} W\left(t_j\right)^2 \frac{n_{jk}}{n_j}\frac{n_{jg}}{n_j}\left(\frac{n_j - d_j}{n_j - 1}\right) d_j, g = 1, 2, 3, g \neq j.$ The test statistic follows a χ^2 distribution with degrees of freedom equal to 2. We reject the null hypothesis H_0 at an α level when χ^2 is larger than the α-th upper percentile of χ^2_2.

2.3.4 Parametric Methods

For the parametric estimator of the survival function, we only considered the exponential model for menopause time, i.e., Y_i^* follows an exponential distribution with density function $f(y^*) = \lambda e^{-\lambda y^*}$ and the hazard function is just a constant λ. For this model, we didn't consider any covariates and the parameter λ is estimated by maximizing the observed likelihood.

2.3.5 Semi-parametirc Methods

For semi-parametric method, we considered the Cox proportional hazard model (Enderlein (1987)). Let $\lambda(t \mid \mathbf{Z}_i)$ be the hazard rate at time t for i-th individual with baseline risk factors $\mathbf{Z}_i$. In this study $\mathbf{Z}_i$ contains subject's race and education level. Under non-informative censoring and proportional hazard assumption, the Cox proportional hazard model can be written as:

$$\lambda(t \mid \mathbf{Z}_i) = \lambda_0(t)\exp\{\boldsymbol{\beta}^T\mathbf{Z}_i\},$$

where $\lambda_0(t)$ is the baseline hazard for all subjects at time t, which is left unspecified. $\boldsymbol{\beta}$ is the parameter vector which can be estimated by maximizing partial likelihood. Notice that under quasi-independent assumption, we have $\lambda(t \mid \mathbf{Z}_i, X_i) = \lambda(t \mid \mathbf{Z}_i)$.

We are also interested in testing a hypothesis about a subset of the $\boldsymbol{\beta}$'s. The hypothesis is then $H_0 : \boldsymbol{\beta}_1 = \boldsymbol{\beta}_{10}$, where $\boldsymbol{\beta} = \left(\boldsymbol{\beta}_1^T, \boldsymbol{\beta}_2^T\right)^T$. Here $\boldsymbol{\beta}_1$ is a $q \times 1$ vector of the $\boldsymbol{\beta}$'s of interest and $\boldsymbol{\beta}_2$ is the vector of the remaining $p - q\boldsymbol{\beta}$'s. We can establish a Wald test of $H_0 : \boldsymbol{\beta}_1 = \boldsymbol{\beta}_{10}$, which is based on the maximum partial likelihood estimators of $\boldsymbol{\beta}$. Let $\mathbf{b} = \left(\mathbf{b}_1^T, \mathbf{b}_2^T\right)^T$ be the maximum partial likelihood estimator of $\boldsymbol{\beta}$. Suppose we partition the information matrix $\mathbf{I}$ as

$$\mathbf{I} = \begin{pmatrix} \mathbf{I}_{11} & \mathbf{I}_{12} \\ \mathbf{I}_{21} & \mathbf{I}_{22} \end{pmatrix},$$

where $\mathbf{I}_{11}\,(\mathbf{I}_{22})$ is the $q \times q[(p-q) \times (p-q)]$ submatrix of second partial derivatives of the minus log likelihood with respect to $\boldsymbol{\beta}_1\,(\boldsymbol{\beta}_2)$ and $\mathbf{I}_{12}$ and $\mathbf{I}_{21}$, the matrices of mixed second partial derivatives. The Wald test statistic is

$$\chi^2_W = (\mathbf{b}_1 - \boldsymbol{\beta}_{10})^T \left[\mathbf{I}^{11}(\mathbf{b})\right]^{-1} (\mathbf{b}_1 - \boldsymbol{\beta}_{10})$$

where $\mathbf{I}^{11}(\mathbf{b})$ is the upper $q \times q$ sub-matrix of $\mathbf{I}^{-1}(\mathbf{b})$. For large samples, this statistic has a chi-squared distribution with q degrees of freedom under H_0 (Klein and Moeschberger (2003)). We reject the null hypothesis H_0 at an α level when χ^2_W is larger than the α-th upper percentile of χ^2_q.

Another important analysis to do is to check the proportional hazard assumption for all covariates. One way is to plot the $\log\{-\log\{\hat{S}(t)\}\} = \hat{\boldsymbol{\beta}}^T \mathbf{Z}_i + \log\{-\log\{\hat{S}_0(t)\}\}$ against the time or the logarithm of time, where $\hat{S}_0(t)$ is the estimated baseline survival function. Under proportional assumption, for a categorical variable, if we plot the lines for all the categories, we expecting parallel lines. Another way is plot the weighted Schoenfeld residuals, which measures the deviation of a time-dependent log-hazard ratio $\beta(t)$ from time-constant β. If the proportional hazards assumption holds then the residuals should line on a horizontal line passing the origin. Formal score tests are also conducted to test whether the slope is zero, a linear fit to the plot would approximate the test.

2.4 Analysing Software

All analysis are performed by using `R`. Specifically, we used `survival` package (Therneau (2024)) to conduct the non-parametric analyses and semi-parametric analyses. Package `flexsurv` (Jackson (2016)) are used to conduct the parametric analyses.

3 Result

3.1 Baseline Characteristics of the Study Population

Table 1 shows the descriptive statistics of the baseline characteristics of the subjects in the study. From the table we can see that subjects who experienced menopause have a larger mean age at enrollment with a narrower range compare to subjects who censored. We also see more Black, non-Hispanic subjects in the menopause group.

Figure 1 shows the time to menopause and duration from age at enrollment to age at menopause for all subjects in this study, we can see that except for one subject who was enrolled when she was 59 years old, the majority of subjects was enrolled with age less than 55 years old.

3.2 Analyses Results on Menopause Time

Menopause time is defined as the duration between subject's intake age and menopause age. Figure 2 shows the non-parametric Kaplan-Meier estimates of the survival function (see 1 in

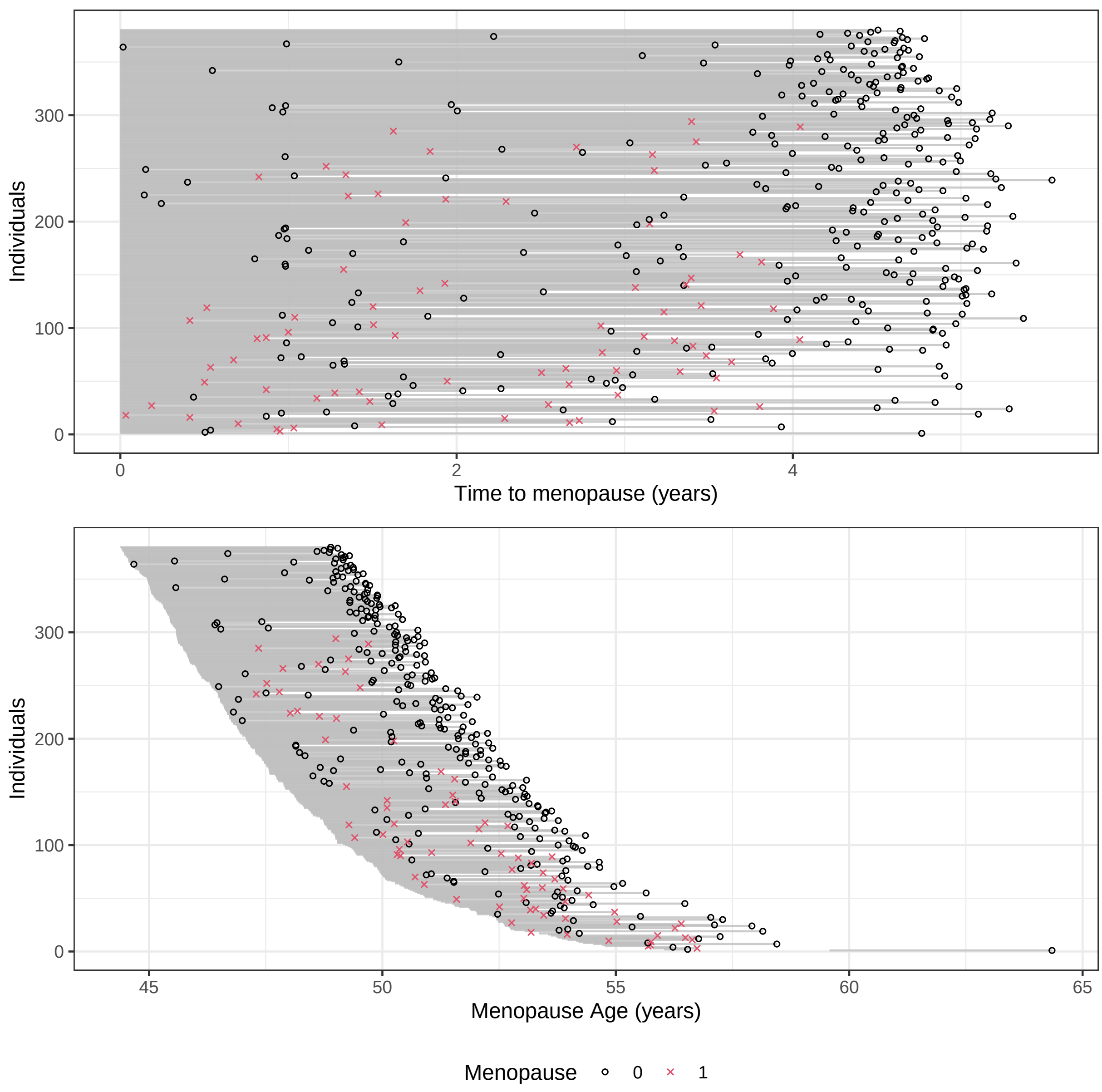


Figure 1: Subject's time to menopause (upper panel) and subject's age at enrollment to menopause age (lower panel). Each horizontal grey line denotes one subject's data.

Table 1: Descriptive statistics of baseline characteristics of the subjects by menopause status.

	Censoring	Menopause	Overall
	(N=305)	(N=75)	(N=380)
Age at enrollment			
Mean (SD)	47.4 (2.44)	49.7 (2.62)	47.9 (2.64)
Median [Min, Max]	46.9 [44.4, 59.6]	49.4 [45.6, 55.8]	47.2 [44.4, 59.6]
Race			
White, non-Hispanic (0)	248 (81.3%)	56 (74.7%)	304 (80.0%)
Black, non-Hispanic (1)	24 (7.9%)	13 (17.3%)	37 (9.7%)
Other Ethnicity (2)	33 (10.8%)	6 (8.0%)	39 (10.3%)
Education			
Post-graduate education (0)	132 (43.3%)	35 (46.7%)	167 (43.9%)
Collage graduate education (1)	81 (26.6%)	15 (20.0%)	96 (25.3%)
Some Collage education (2)	54 (17.7%)	16 (21.3%)	70 (18.4%)
High school or less education (3)	38 (12.5%)	9 (12.0%)	47 (12.4%)

the Appendix for full survival probability estimates). The estimated survival probabilities are above 76.6% and since the estimated survival probability never touches 50%, the Kaplan-Meier estimator does not give us an estimated median survival time.

The exponential survival model gives an estimated parameter $\hat{\lambda} = 0.057$ with a 95% CI (0.045 0.071). Since the exponential model can be used to extrapolate survival probabilities beyond the observed data range, we get an estimated median survival time 12.20 years.

Table 2 shows the hazard ratio (HR) estimates from the Cox proportional hazard model. From the table, we see that compared to White, non-Hispanic subjects, the Black, non-Hispanic subjects have 2.46 (95% CI: 1.29-4.72) times the hazard of experiencing menopause, holding everything else the same. We also see that compared to subjects with post-graduate education, subjects with collage graduate education have 0.41 (95% CI: 0.21-0.80) times the hazard of experiencing menopause, holding everything else the same. Age at enrollment is also an significant risk factor. For each year increase in the age at enrollment from the mean age at enrollment, the hazard of experiencing menopause increases 1.36 times (95% CI: 1.27-1.47), which is biologically reasonable since the older the subject is, the more likely she will experience menopause in the near future.

Figure 3 and figure 4 show the results from the graphical approach and the Schoenfeld

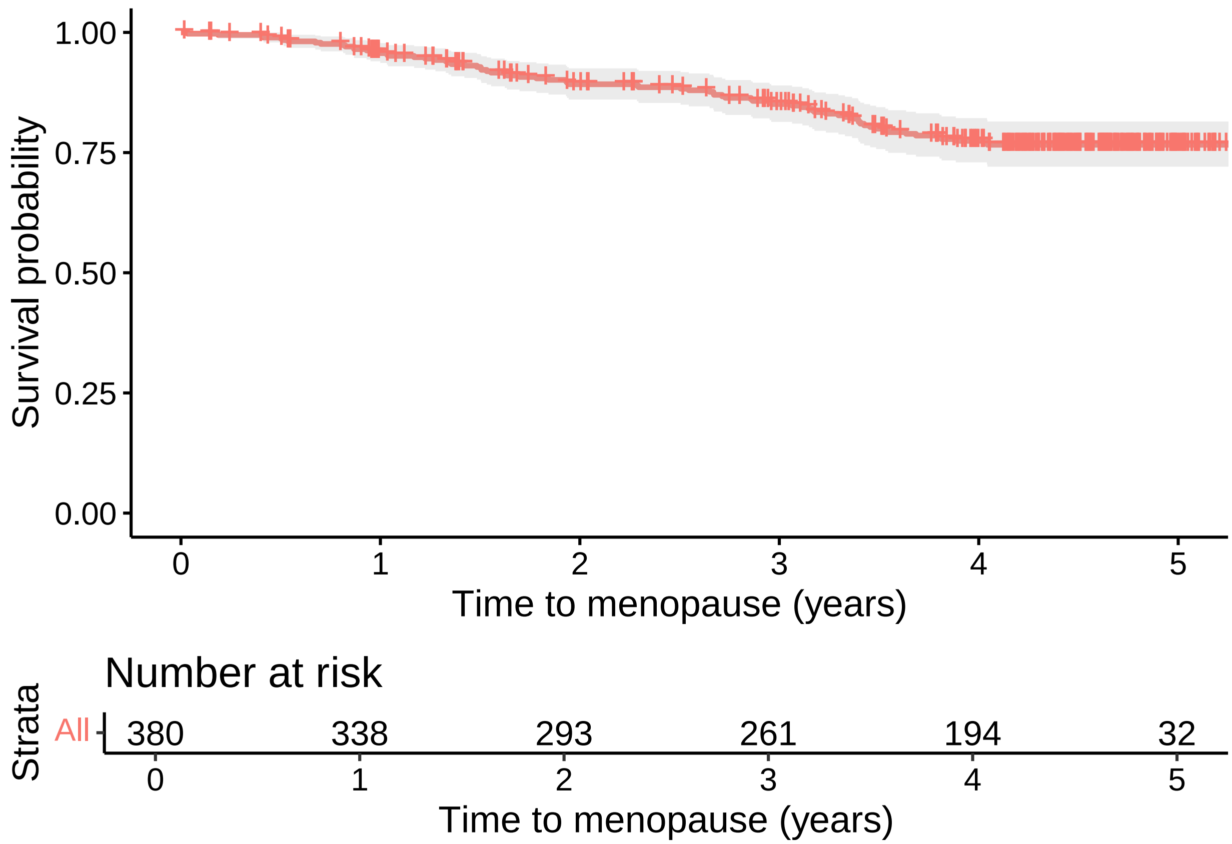


Figure 2: Kaplan-Meier estimates of the survival function of the study population and the number of subjects at risk at each time. The shaded area is the 95% confidence interval of the estimates. The red crosses indicates the censorings.

Table 2: Hazard ratio (HR) estimates from the Cox proportional hazard model and 95% confidence interval from the Cox proportional hazard model. The event time is the menopause time.

Characteristics	HR	95% CI	p-value
Race			
White, non-Hispanic (0)	—	—	
Black, non-Hispanic (1)	2.46	1.29, 4.72	0.007
Other Ethnicity (2)	1.02	0.43, 2.38	>0.9
Education level			
Post-graduate education (0)	—	—	
Collage graduate education (1)	0.41	0.21, 0.80	0.009
Some Collage education (2)	1.06	0.58, 1.93	0.9
High school or less education (3)	0.56	0.25, 1.22	0.14
Age at enrollment	1.36	1.27, 1.47	<0.001

residual based approach for checking proportional hazard assumptions. From figure 3, we see that the curves for Black, non-Hispanic subjects and other ethnicity subjects seem to be parallel to each other while they are not seem to be parallel to the curve for the White, non-Hispanic subjects. While for all education levels, the curves seem to be parallel to each other. The individual and global Schoenfeld residual test all show p-values less than 0.05, and we conclude that we cannot reject the null that the proportional hazard assumption holds at $\alpha = 0.05$ significance level.

3.3 Analyses Results on Menopause Age

For the analyses on menopause age, we accounted for the age at enrollment. Figure 5 shows the non-parametric Kaplan-Meier estimates of the survival function (see 2 in the Appendix for full survival probability estimates). The estimated median survival time is 55.0 years old. The exponential model gives us the same estimate as in the analyses on menopause time.

In order to know whether the survival distributions for the three race groups are equivalent or not, we first plotted the Kaplan-Meier estimates for the survival functions stratified by race groups, shown in figure 6. The log-rank test against equivalence results in a test statistics 6.66, with p-value 0.036. We reject the null at $\alpha = 0.05$ significance level and conclude the survival distributions for the three race groups are not equivalent.

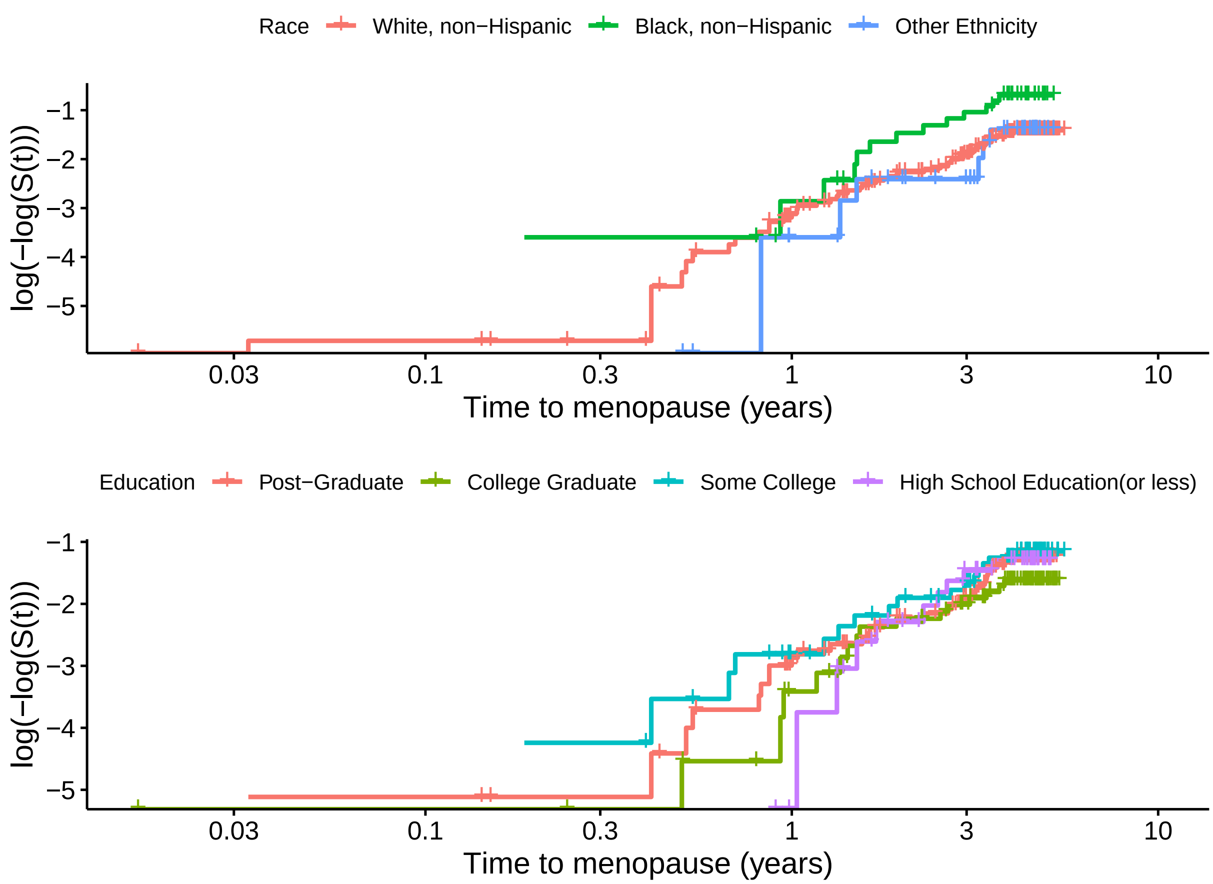


Figure 3: $\log\{-\log\{\hat{S}(t)\}\}$ against the time, stratified by race (upper panel) and education level (lower panel).

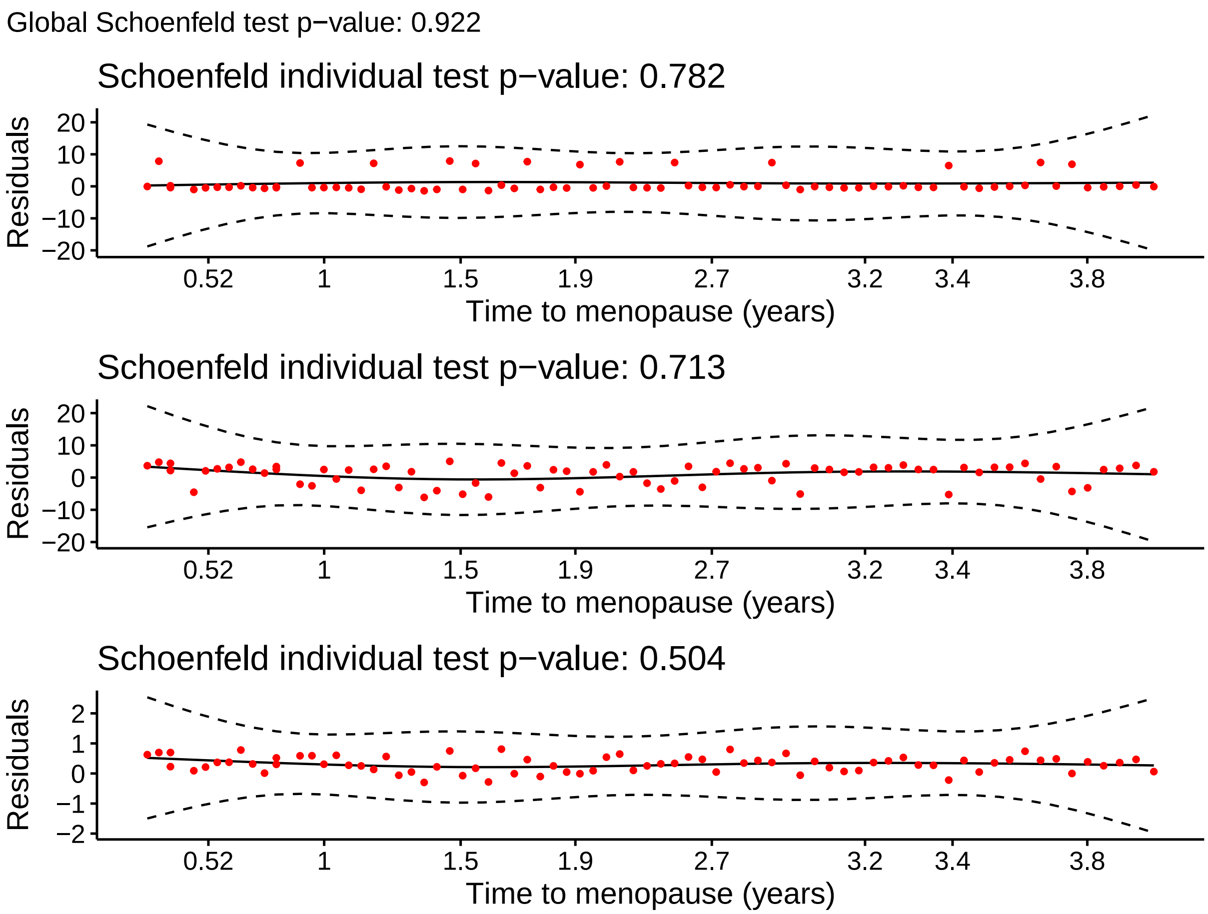


Figure 4: Schoenfeld residual plots with individual score test p-value and global test p-value. The solid lines are the smoothing curves and the dashed lines shows the 95% confidence band.

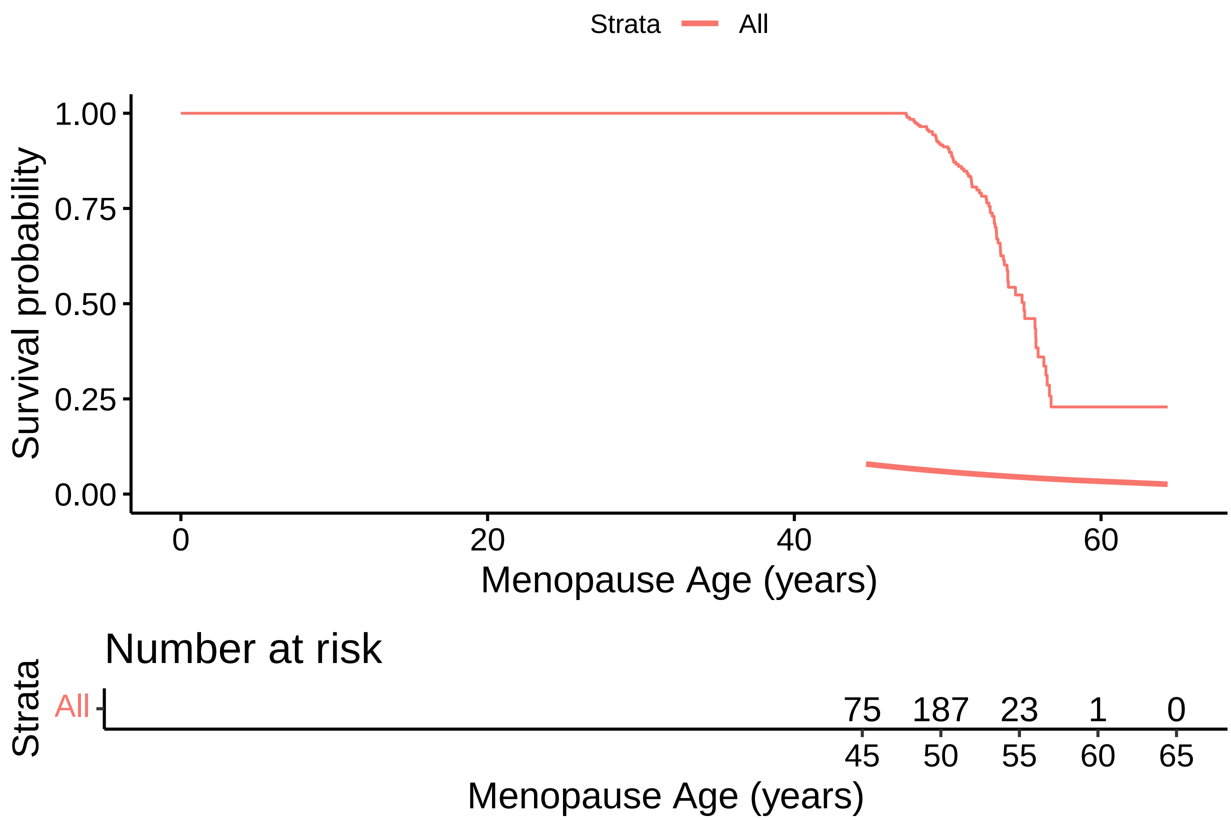


Figure 5: Kaplan-Meier survival function estimates (stepped curve) and the exponential survival function estimates (smooth curve) of the study population and the number of subjects at risk at each time.

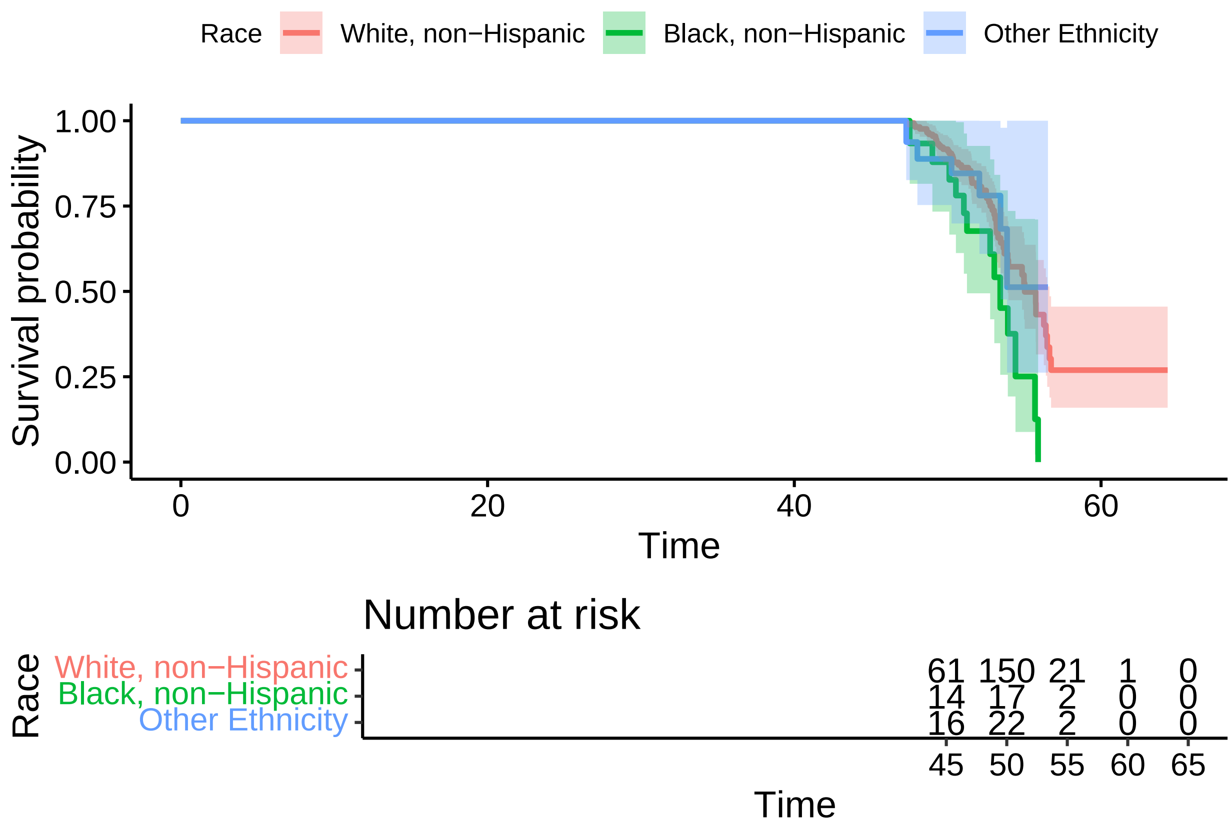


Figure 6: Kaplan-Meier survival function estimates of the study population and the number of subjects at risk at each time, stratified by race groups. The shaded areas are the 95% confidence intervals of the estimates.

Table 3 shows the hazard ratio (HR) estimates from the Cox proportional hazard model for menopause age. From the table, we see that compared to White, non-Hispanic subjects, the Black, non-Hispanic subjects have 2.49 (95% CI: 1.29-4.80) times the hazard of experiencing menopause, holding everything else the same. We also see that compared to subjects with post-graduate education, subjects with collage graduate education have 0.44 (95% CI: 0.23-0.83) times the hazard of experiencing menopause, holding everything else the same. These estimates are slightly different from what we got in the analyses on menopause time since we controlled for left truncation. The Wald test testing the null that the race is not a significant risk factor after controlling for education level results in a test statistic 6.69 with p-value 0.035, which leads to a conclusion that race is a significant risk factor after controlling for education level.

From these results, we can get estimates for HR of a specific sub-population. For example, the HR of experiencing menopause for a Black, non-Hispanic subject versus an other ethnicity subject controlling for education is 2.64 with 95% CI (0.98,7.09). This means that on average, after controlling for education level, the hazard of experiencing menopause for a Black, non-Hispanic subject is 2.64 times the hazard of an other ethnicity subjects experiencing the same event. However, this effect may not be statistically significant.

Table 3: Hazard ratio (HR) estimates from the Cox proportional hazard model and 95% confidence interval from the Cox proportional hazard model. The event time is the menopause age.

Characteristics	HR	95% CI	p-value
Race			
White, non-Hispanic (0)	—	—	
Black, non-Hispanic (1)	2.49	1.29, 4.80	0.006
Other Ethnicity (2)	0.89	0.38, 2.08	0.8
Education level			
Post-graduate education (0)	—	—	
Collage graduate education (1)	0.44	0.23, 0.83	0.011
Some Collage education (2)	0.94	0.51, 1.73	0.8
High school or less education (3)	0.46	0.21, 1.03	0.058

We can also get the estimated survival function for a specific sub-population. For example, for the reference group, i.e., White, non-Hispanic subjects with post-graduate education, the estimated survival function is shown in figure 7. The estimated median survival time is 54.42 years old (95% CI: 53.5-56.3) which is slightly smaller than the pooled population.

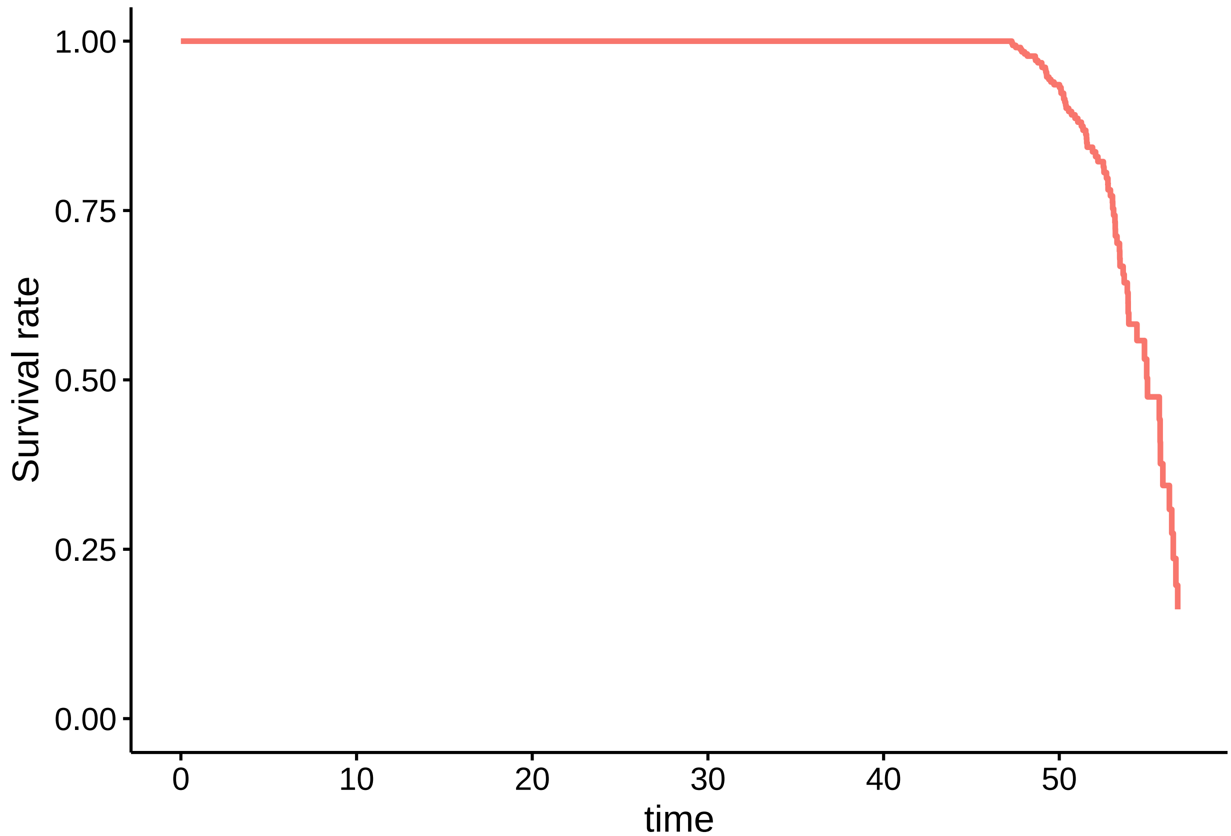


Figure 7: Estimated baseline survival function for the White, non-Hispanic with post-graduate education sub-population.

Figure 8 and figure **??** show the results from the graphical approach and the Schoenfeld residual based approach for checking proportional hazard assumptions. From the results from graphical approach, we see similar patterns as before, that the curves for Black, non-Hispanic subjects and other ethnicity subjects seem to be parallel to each other while they are not seem to be parallel to the curve for the White, non-Hispanic subjects. While for all education levels, the curves seem to be parallel to each other. The individual and global Schoenfeld residual test also show p-values less than 0.05, and we conclude that we cannot reject the null that the proportional hazard assumption holds at $\alpha = 0.05$ significance level.

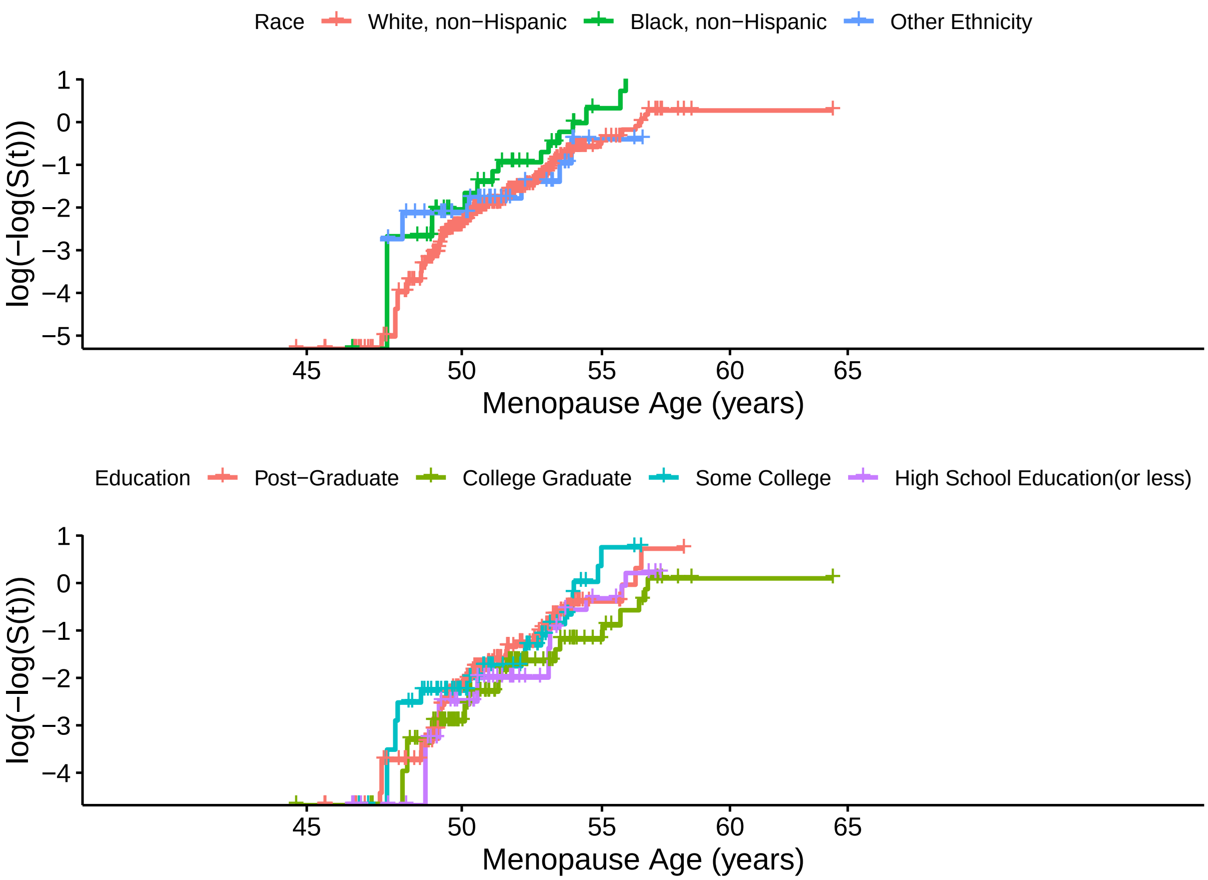
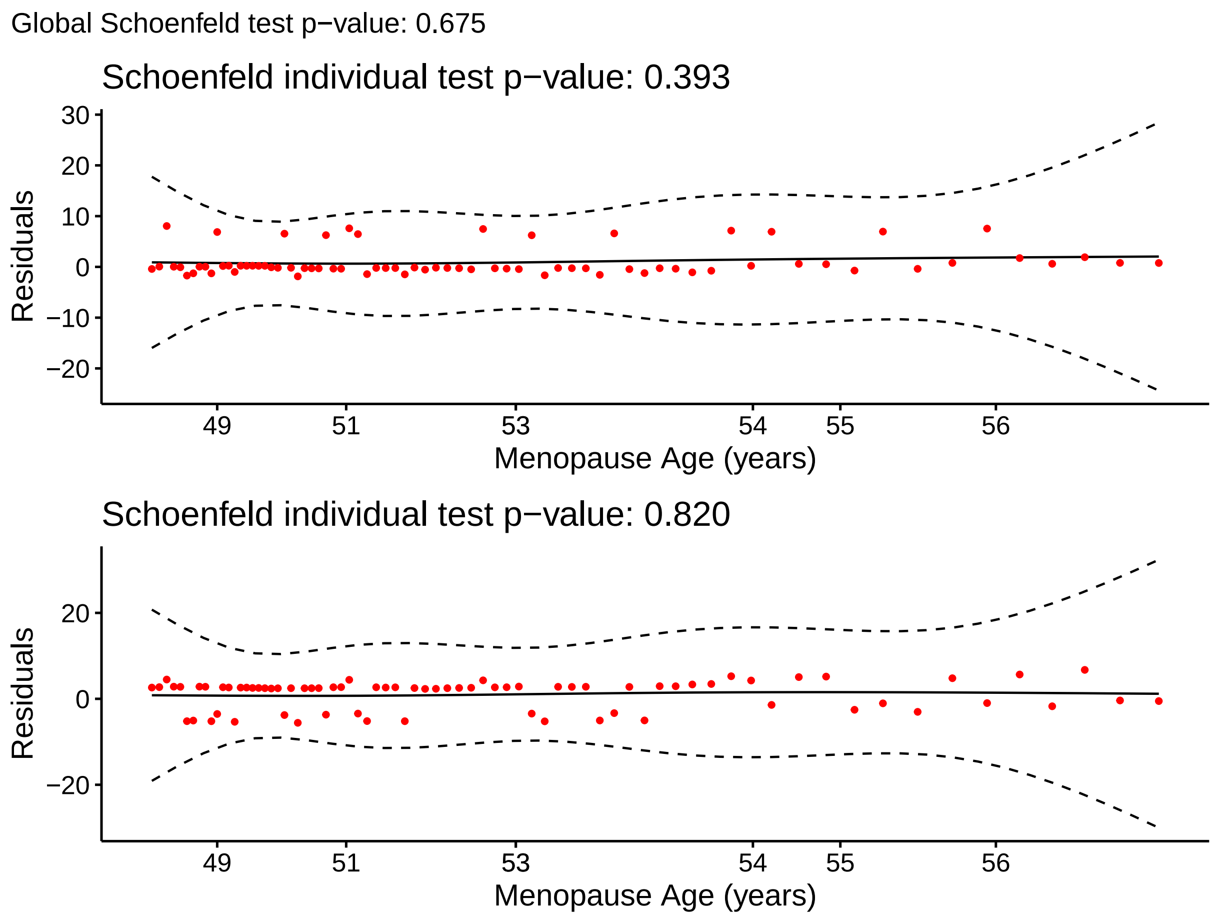


Figure 8: $\log\{-\log\{\hat{S}(t)\}\}$ against the time (menopause age), stratified by race (upper panel) and education level (lower panel).



Discussion

This study provided a comprehensive statistical analysis of menopause timing among a diverse cohort of women. The non-parametric Kaplan-Meier estimates shows that when analyzing menopause time, the estimated survival probability never touches 50%, which may not be biological reasonable. After adjusting for the left-truncated nature of the data, we found that the median survival time for our study population is 55 years old, which may be more reasonable and more generalizable.

The Cox proportional hazard model highlighted significant disparities in menopause timing. Black, non-Hispanic women had a notably higher hazard ratio for experiencing menopause compared to their White, non-Hispanic counterparts, even when controlling for educational background. This finding suggests underlying genetic, environmental, or socio-economic factors that could precipitate earlier menopause, warranting further investigation. Interestingly, women with college education exhibited a lower hazard ratio, potentially indicating that lifestyle or environmental factors associated with higher educational attainment might delay the onset of menopause. However, since our study is observational, it cannot establish causality, and these associations may be confounded by other unmeasured factors.

Despite the robustness of our analyses, certain limitations must be acknowledged. One such limitation is our application of the log-rank test, where we assumed equal weighting across all event times. Alternative weighted versions of the log-rank test could provide a more nuanced understanding of the survival distributions across different strata. Weighted tests allow differential emphasis on events at various times, which could be particularly relevant if earlier or later events carry different clinical implications or if the proportional hazards assumption is questionable.

Additionally, while we addressed the methodological complexities associated with left truncation and right censoring, other forms of data censoring and truncation were not explored. Non-random censoring, if present, could introduce bias into our results, and further techniques might be needed to account for this.

In summary, while our study has provided valuable insights, these limitations highlight the importance of methodological rigor and the need for continuous refinement of statistical methods to better understand the complexities of menopause timing.

Overall, our findings contribute to a more stratified understanding of menopause timing, which could inform healthcare providers and policymakers. Targeted health education and preventive care could be tailored to women more likely to experience earlier menopause, possibly mitigating associated health risks. Further research should explore the biopsychosocial factors that influence menopause timing, with a particular focus on interventions that could equalize health outcomes across different demographic groups.

.1 A.1 Additional Survival Tables

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause.

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
0.0164271	380	0	1.0000000	1.0000000	1.0000000
0.0328542	379	1	0.9973615	0.9922102	1.0000000
0.1423682	378	0	0.9973615	0.9922102	1.0000000
0.1505818	377	0	0.9973615	0.9922102	1.0000000
0.1861739	376	1	0.9947089	0.9874222	1.0000000
0.2436687	375	0	0.9947089	0.9874222	1.0000000
0.3997262	374	0	0.9947089	0.9874222	1.0000000
0.4134155	373	2	0.9893754	0.9790727	0.9997865
0.4353183	371	0	0.9893754	0.9790727	0.9997865
0.5010267	370	1	0.9867014	0.9751899	0.9983487
0.5037645	369	0	0.9867014	0.9751899	0.9983487
0.5147159	368	1	0.9840201	0.9714173	0.9967865
0.5366188	367	1	0.9813389	0.9677389	0.9951300
0.5475702	365	0	0.9813389	0.9677389	0.9951300
0.6735113	364	1	0.9786429	0.9641105	0.9933944
0.7008898	363	1	0.9759469	0.9605444	0.9915964
0.7994524	362	0	0.9759469	0.9605444	0.9915964
0.8131417	361	1	0.9732434	0.9570187	0.9897433
0.8240931	360	1	0.9705400	0.9535380	0.9878451
0.8678987	359	2	0.9651331	0.9466895	0.9839360
0.9034908	356	0	0.9651331	0.9466895	0.9839360
0.9308693	355	1	0.9624144	0.9432900	0.9819265
0.9418207	354	0	0.9624144	0.9432900	0.9819265
0.9500342	353	1	0.9596880	0.9399070	0.9798853
0.9555099	352	0	0.9596880	0.9399070	0.9798853

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
0.9582478	351	0	0.9596880	0.9399070	0.9798853
0.9637235	350	0	0.9596880	0.9399070	0.9798853
0.9664613	349	0	0.9596880	0.9399070	0.9798853
0.9746749	348	0	0.9596880	0.9399070	0.9798853
0.9801506	347	0	0.9596880	0.9399070	0.9798853
0.9828884	345	0	0.9596880	0.9399070	0.9798853
0.9883641	342	0	0.9596880	0.9399070	0.9798853
0.9911020	340	0	0.9596880	0.9399070	0.9798853
0.9993155	339	1	0.9568571	0.9363945	0.9777668
1.0321697	338	1	0.9540261	0.9329088	0.9756215
1.0349076	337	0	0.9540261	0.9329088	0.9756215
1.0376454	336	1	0.9511868	0.9294352	0.9734474
1.0759754	335	0	0.9511868	0.9294352	0.9734474
1.1197810	334	0	0.9511868	0.9294352	0.9734474
1.1690623	333	1	0.9483304	0.9259593	0.9712418
1.2238193	332	1	0.9454739	0.9225047	0.9690151
1.2265572	331	0	0.9454739	0.9225047	0.9690151
1.2621492	330	0	0.9454739	0.9225047	0.9690151
1.2648871	329	0	0.9454739	0.9225047	0.9690151
1.2758385	328	1	0.9425914	0.9190324	0.9667543
1.3278576	327	1	0.9397088	0.9155788	0.9644748
1.3305955	326	0	0.9397088	0.9155788	0.9644748
1.3333333	325	0	0.9397088	0.9155788	0.9644748
1.3415469	324	1	0.9368085	0.9121177	0.9621677
1.3552361	323	1	0.9339082	0.9086733	0.9598439

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
1.3771389	322	0	0.9339082	0.9086733	0.9598439
1.3826146	321	0	0.9339082	0.9086733	0.9598439
1.3935661	320	0	0.9339082	0.9086733	0.9598439
1.4127310	319	0	0.9339082	0.9086733	0.9598439
1.4154689	318	0	0.9339082	0.9086733	0.9598439
1.4209446	317	1	0.9309621	0.9051809	0.9574776
1.4839151	316	1	0.9280160	0.9017040	0.9550958
1.5030801	315	1	0.9250699	0.8982418	0.9526994
1.5058179	314	1	0.9221238	0.8947933	0.9502892
1.5331964	313	1	0.9191778	0.8913578	0.9478660
1.5550992	312	1	0.9162317	0.8879347	0.9454304
1.5934292	311	0	0.9162317	0.8879347	0.9454304
1.6208077	310	0	0.9162317	0.8879347	0.9454304
1.6235455	309	1	0.9132665	0.8844977	0.9429711
1.6344969	308	1	0.9103014	0.8810720	0.9405004
1.6509240	307	0	0.9103014	0.8810720	0.9405004
1.6563997	306	0	0.9103014	0.8810720	0.9405004
1.6837782	305	0	0.9103014	0.8810720	0.9405004
1.6974675	303	1	0.9072971	0.8776050	0.9379937
1.7412731	302	0	0.9072971	0.8776050	0.9379937
1.7823409	301	1	0.9042828	0.8741357	0.9354696
1.8288843	300	0	0.9042828	0.8741357	0.9354696
1.8425736	299	1	0.9012585	0.8706636	0.9329284
1.9301848	298	1	0.8982341	0.8672016	0.9303770
1.9356605	297	1	0.8952097	0.8637495	0.9278158

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
1.9438741	295	1	0.8921751	0.8602934	0.9252384
1.9685147	294	0	0.8921751	0.8602934	0.9252384
2.0041068	293	0	0.8921751	0.8602934	0.9252384
2.0369610	292	0	0.8921751	0.8602934	0.9252384
2.0424367	291	0	0.8921751	0.8602934	0.9252384
2.2203970	290	0	0.8921751	0.8602934	0.9252384
2.2614648	289	0	0.8921751	0.8602934	0.9252384
2.2642026	288	0	0.8921751	0.8602934	0.9252384
2.2696783	287	0	0.8921751	0.8602934	0.9252384
2.2861054	286	1	0.8890556	0.8567352	0.9225953
2.2943190	285	1	0.8859361	0.8531869	0.9199425
2.3983573	284	0	0.8859361	0.8531869	0.9199425
2.4640657	283	0	0.8859361	0.8531869	0.9199425
2.5051335	282	1	0.8827945	0.8496191	0.9172654
2.5160849	281	0	0.8827945	0.8496191	0.9172654
2.5462012	280	1	0.8796417	0.8460460	0.9145715
2.6338125	279	0	0.8796417	0.8460460	0.9145715
2.6502396	278	1	0.8764775	0.8424672	0.9118608
2.6694045	277	1	0.8733133	0.8388973	0.9091413
2.6721424	276	1	0.8701491	0.8353359	0.9064132
2.7132101	275	1	0.8669850	0.8317828	0.9036769
2.7296372	274	1	0.8638208	0.8282377	0.9009327
2.7488022	273	0	0.8638208	0.8282377	0.9009327
2.8008214	272	0	0.8638208	0.8282377	0.9009327
2.8583162	271	1	0.8606333	0.8246704	0.8981644

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
2.8665298	270	1	0.8574457	0.8211108	0.8953885
2.8911704	269	0	0.8574457	0.8211108	0.8953885
2.9185489	268	0	0.8574457	0.8211108	0.8953885
2.9267625	267	0	0.8574457	0.8211108	0.8953885
2.9431896	266	0	0.8574457	0.8211108	0.8953885
2.9514031	265	1	0.8542101	0.8174976	0.8925713
2.9596167	264	1	0.8509744	0.8138919	0.8897465
2.9869952	262	0	0.8509744	0.8138919	0.8897465
3.0088980	261	0	0.8509744	0.8138919	0.8897465
3.0308008	260	0	0.8509744	0.8138919	0.8897465
3.0472279	259	0	0.8509744	0.8138919	0.8897465
3.0636550	258	1	0.8476761	0.8102141	0.8868702
3.0691307	257	0	0.8476761	0.8102141	0.8868702
3.0718686	256	0	0.8476761	0.8102141	0.8868702
3.1047228	254	0	0.8476761	0.8102141	0.8868702
3.1156742	253	1	0.8443256	0.8064779	0.8839495
3.1457906	252	0	0.8443256	0.8064779	0.8839495
3.1485284	251	1	0.8409617	0.8027328	0.8810113
3.1649555	250	1	0.8375979	0.7989955	0.8780653
3.1759069	249	1	0.8342341	0.7952658	0.8751117
3.1786448	248	0	0.8342341	0.7952658	0.8751117
3.2114990	247	0	0.8342341	0.7952658	0.8751117
3.2334018	246	1	0.8308429	0.7915092	0.8721312
3.2963723	244	1	0.8274378	0.7877426	0.8691333
3.3210130	243	0	0.8274378	0.7877426	0.8691333

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
3.3292266	242	1	0.8240186	0.7839656	0.8661179
3.3483915	241	0	0.8240186	0.7839656	0.8661179
3.3511294	240	0	0.8240186	0.7839656	0.8661179
3.3648186	238	1	0.8205563	0.7801419	0.8630644
3.3675565	237	0	0.8205563	0.7801419	0.8630644
3.3949350	236	1	0.8170794	0.7763073	0.8599929
3.3976728	235	1	0.8136025	0.7724801	0.8569140
3.4058864	234	1	0.8101255	0.7686600	0.8538280
3.4250513	233	1	0.8066486	0.7648469	0.8507350
3.4551677	232	1	0.8031717	0.7610406	0.8476352
3.4688569	231	0	0.8031717	0.7610406	0.8476352
3.4798084	230	0	0.8031717	0.7610406	0.8476352
3.4852841	229	1	0.7996644	0.7572033	0.8445065
3.5126626	228	0	0.7996644	0.7572033	0.8445065
3.5181383	227	0	0.7996644	0.7572033	0.8445065
3.5236140	226	0	0.7996644	0.7572033	0.8445065
3.5318275	225	1	0.7961103	0.7533149	0.8413369
3.5373032	224	0	0.7961103	0.7533149	0.8413369
3.5455168	223	1	0.7925403	0.7494137	0.8381487
3.6057495	222	0	0.7925403	0.7494137	0.8381487
3.6358658	221	1	0.7889541	0.7454995	0.8349418
3.6851472	220	1	0.7853680	0.7415920	0.8317280
3.7618070	219	0	0.7853680	0.7415920	0.8317280
3.7864476	218	0	0.7853680	0.7415920	0.8317280
3.7891855	217	0	0.7853680	0.7415920	0.8317280

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
3.7946612	216	0	0.7853680	0.7415920	0.8317280
3.8028747	215	1	0.7817151	0.7376090	0.8284586
3.8138261	214	1	0.7780622	0.7336331	0.8251821
3.8193018	213	0	0.7780622	0.7336331	0.8251821
3.8384668	212	0	0.7780622	0.7336331	0.8251821
3.8740589	210	0	0.7780622	0.7336331	0.8251821
3.8767967	209	0	0.7780622	0.7336331	0.8251821
3.8850103	208	1	0.7743216	0.7295558	0.8218342
3.8932238	207	0	0.7743216	0.7295558	0.8218342
3.9178645	206	0	0.7743216	0.7295558	0.8218342
3.9315537	205	0	0.7743216	0.7295558	0.8218342
3.9342916	204	0	0.7743216	0.7295558	0.8218342
3.9589322	203	0	0.7743216	0.7295558	0.8218342
3.9671458	201	0	0.7743216	0.7295558	0.8218342
3.9780972	198	0	0.7743216	0.7295558	0.8218342
3.9863107	197	0	0.7743216	0.7295558	0.8218342
3.9972621	196	0	0.7743216	0.7295558	0.8218342
4.0164271	194	0	0.7743216	0.7295558	0.8218342
4.0246407	192	0	0.7743216	0.7295558	0.8218342
4.0410678	191	1	0.7702675	0.7250961	0.8182529
4.0438056	190	1	0.7662135	0.7206464	0.8146619
4.0520192	189	0	0.7662135	0.7206464	0.8146619
4.0547570	188	0	0.7662135	0.7206464	0.8146619
4.1232033	187	0	0.7662135	0.7206464	0.8146619
4.1286790	186	0	0.7662135	0.7206464	0.8146619

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
4.1396304	185	0	0.7662135	0.7206464	0.8146619
4.1478439	184	0	0.7662135	0.7206464	0.8146619
4.1533196	183	0	0.7662135	0.7206464	0.8146619
4.1615332	182	0	0.7662135	0.7206464	0.8146619
4.1724846	181	0	0.7662135	0.7206464	0.8146619
4.1861739	180	0	0.7662135	0.7206464	0.8146619
4.1916496	179	0	0.7662135	0.7206464	0.8146619
4.1998631	178	0	0.7662135	0.7206464	0.8146619
4.2053388	177	0	0.7662135	0.7206464	0.8146619
4.2162902	176	0	0.7662135	0.7206464	0.8146619
4.2217659	175	0	0.7662135	0.7206464	0.8146619
4.2299795	174	0	0.7662135	0.7206464	0.8146619
4.2354552	173	0	0.7662135	0.7206464	0.8146619
4.2436687	172	0	0.7662135	0.7206464	0.8146619
4.2546201	171	0	0.7662135	0.7206464	0.8146619
4.2573580	170	0	0.7662135	0.7206464	0.8146619
4.2683094	169	0	0.7662135	0.7206464	0.8146619
4.2737851	168	0	0.7662135	0.7206464	0.8146619
4.2874743	167	0	0.7662135	0.7206464	0.8146619
4.2984257	166	0	0.7662135	0.7206464	0.8146619
4.3011636	165	0	0.7662135	0.7206464	0.8146619
4.3175907	164	0	0.7662135	0.7206464	0.8146619
4.3258042	162	0	0.7662135	0.7206464	0.8146619
4.3285421	160	0	0.7662135	0.7206464	0.8146619
4.3477070	159	0	0.7662135	0.7206464	0.8146619

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
4.3559206	156	0	0.7662135	0.7206464	0.8146619
4.3586585	155	0	0.7662135	0.7206464	0.8146619
4.3750856	154	0	0.7662135	0.7206464	0.8146619
4.3805613	153	0	0.7662135	0.7206464	0.8146619
4.3832991	152	0	0.7662135	0.7206464	0.8146619
4.3887748	151	0	0.7662135	0.7206464	0.8146619
4.3969884	150	0	0.7662135	0.7206464	0.8146619
4.4024641	149	0	0.7662135	0.7206464	0.8146619
4.4052019	148	0	0.7662135	0.7206464	0.8146619
4.4106776	147	0	0.7662135	0.7206464	0.8146619
4.4134155	146	0	0.7662135	0.7206464	0.8146619
4.4216290	145	0	0.7662135	0.7206464	0.8146619
4.4243669	144	0	0.7662135	0.7206464	0.8146619
4.4353183	143	0	0.7662135	0.7206464	0.8146619
4.4462697	142	0	0.7662135	0.7206464	0.8146619
4.4490075	141	0	0.7662135	0.7206464	0.8146619
4.4572211	140	0	0.7662135	0.7206464	0.8146619
4.4626968	139	0	0.7662135	0.7206464	0.8146619
4.4681725	137	0	0.7662135	0.7206464	0.8146619
4.4791239	136	0	0.7662135	0.7206464	0.8146619
4.4845996	135	0	0.7662135	0.7206464	0.8146619
4.4928131	134	0	0.7662135	0.7206464	0.8146619
4.4955510	133	0	0.7662135	0.7206464	0.8146619
4.5010267	132	0	0.7662135	0.7206464	0.8146619
4.5065024	129	0	0.7662135	0.7206464	0.8146619

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
4.5092402	127	0	0.7662135	0.7206464	0.8146619
4.5366188	125	0	0.7662135	0.7206464	0.8146619
4.5420945	123	0	0.7662135	0.7206464	0.8146619
4.5448323	122	0	0.7662135	0.7206464	0.8146619
4.5475702	120	0	0.7662135	0.7206464	0.8146619
4.5557837	119	0	0.7662135	0.7206464	0.8146619
4.5612594	118	0	0.7662135	0.7206464	0.8146619
4.5639973	117	0	0.7662135	0.7206464	0.8146619
4.5749487	116	0	0.7662135	0.7206464	0.8146619
4.6023272	115	0	0.7662135	0.7206464	0.8146619
4.6078029	113	0	0.7662135	0.7206464	0.8146619
4.6105407	111	0	0.7662135	0.7206464	0.8146619
4.6160164	110	0	0.7662135	0.7206464	0.8146619
4.6187543	109	0	0.7662135	0.7206464	0.8146619
4.6214921	108	0	0.7662135	0.7206464	0.8146619
4.6242300	106	0	0.7662135	0.7206464	0.8146619
4.6269678	105	0	0.7662135	0.7206464	0.8146619
4.6297057	103	0	0.7662135	0.7206464	0.8146619
4.6379192	102	0	0.7662135	0.7206464	0.8146619
4.6406571	100	0	0.7662135	0.7206464	0.8146619
4.6433949	99	0	0.7662135	0.7206464	0.8146619
4.6461328	98	0	0.7662135	0.7206464	0.8146619
4.6516085	97	0	0.7662135	0.7206464	0.8146619
4.6570842	95	0	0.7662135	0.7206464	0.8146619
4.6598220	94	0	0.7662135	0.7206464	0.8146619

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
4.6652977	93	0	0.7662135	0.7206464	0.8146619
4.6789870	92	0	0.7662135	0.7206464	0.8146619
4.6817248	91	0	0.7662135	0.7206464	0.8146619
4.6844627	90	0	0.7662135	0.7206464	0.8146619
4.6872005	89	0	0.7662135	0.7206464	0.8146619
4.6954141	87	0	0.7662135	0.7206464	0.8146619
4.7008898	86	0	0.7662135	0.7206464	0.8146619
4.7145791	85	0	0.7662135	0.7206464	0.8146619
4.7173169	84	0	0.7662135	0.7206464	0.8146619
4.7200548	83	0	0.7662135	0.7206464	0.8146619
4.7255305	81	0	0.7662135	0.7206464	0.8146619
4.7364819	80	0	0.7662135	0.7206464	0.8146619
4.7446954	79	0	0.7662135	0.7206464	0.8146619
4.7501711	78	0	0.7662135	0.7206464	0.8146619
4.7529090	77	0	0.7662135	0.7206464	0.8146619
4.7611225	75	0	0.7662135	0.7206464	0.8146619
4.7665982	73	0	0.7662135	0.7206464	0.8146619
4.7693361	72	0	0.7662135	0.7206464	0.8146619
4.7720739	71	0	0.7662135	0.7206464	0.8146619
4.7830253	69	0	0.7662135	0.7206464	0.8146619
4.7939767	68	0	0.7662135	0.7206464	0.8146619
4.7967146	67	0	0.7662135	0.7206464	0.8146619
4.7994524	66	0	0.7662135	0.7206464	0.8146619
4.8076660	65	0	0.7662135	0.7206464	0.8146619
4.8295688	63	0	0.7662135	0.7206464	0.8146619

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
4.8323066	62	0	0.7662135	0.7206464	0.8146619
4.8350445	60	0	0.7662135	0.7206464	0.8146619
4.8459959	59	0	0.7662135	0.7206464	0.8146619
4.8569473	57	0	0.7662135	0.7206464	0.8146619
4.8596851	56	0	0.7662135	0.7206464	0.8146619
4.8706366	55	0	0.7662135	0.7206464	0.8146619
4.8898015	53	0	0.7662135	0.7206464	0.8146619
4.8925394	52	0	0.7662135	0.7206464	0.8146619
4.9034908	49	0	0.7662135	0.7206464	0.8146619
4.9062286	48	0	0.7662135	0.7206464	0.8146619
4.9089665	47	0	0.7662135	0.7206464	0.8146619
4.9117043	46	0	0.7662135	0.7206464	0.8146619
4.9199179	45	0	0.7662135	0.7206464	0.8146619
4.9253936	43	0	0.7662135	0.7206464	0.8146619
4.9445585	42	0	0.7662135	0.7206464	0.8146619
4.9609856	41	0	0.7662135	0.7206464	0.8146619
4.9691992	40	0	0.7662135	0.7206464	0.8146619
4.9719370	39	0	0.7662135	0.7206464	0.8146619
4.9746749	38	0	0.7662135	0.7206464	0.8146619
4.9801506	37	0	0.7662135	0.7206464	0.8146619
4.9856263	36	0	0.7662135	0.7206464	0.8146619
4.9883641	34	0	0.7662135	0.7206464	0.8146619
4.9965777	33	0	0.7662135	0.7206464	0.8146619
5.0075291	32	0	0.7662135	0.7206464	0.8146619
5.0184805	30	0	0.7662135	0.7206464	0.8146619

A.1: Kaplan-Meier estimates of the survival probabilities. The event time is time to menopause. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
5.0239562	29	0	0.7662135	0.7206464	0.8146619
5.0294319	28	0	0.7662135	0.7206464	0.8146619
5.0349076	25	0	0.7662135	0.7206464	0.8146619
5.0485969	23	0	0.7662135	0.7206464	0.8146619
5.0677618	22	0	0.7662135	0.7206464	0.8146619
5.0841889	20	0	0.7662135	0.7206464	0.8146619
5.0924025	19	0	0.7662135	0.7206464	0.8146619
5.0978782	18	0	0.7662135	0.7206464	0.8146619
5.1033539	17	0	0.7662135	0.7206464	0.8146619
5.1334702	16	0	0.7662135	0.7206464	0.8146619
5.1526352	15	0	0.7662135	0.7206464	0.8146619
5.1581109	14	0	0.7662135	0.7206464	0.8146619
5.1718001	12	0	0.7662135	0.7206464	0.8146619
5.1772758	11	0	0.7662135	0.7206464	0.8146619
5.1827515	10	0	0.7662135	0.7206464	0.8146619
5.1854894	9	0	0.7662135	0.7206464	0.8146619
5.2073922	8	0	0.7662135	0.7206464	0.8146619
5.2402464	7	0	0.7662135	0.7206464	0.8146619
5.2813142	6	0	0.7662135	0.7206464	0.8146619
5.2867899	5	0	0.7662135	0.7206464	0.8146619
5.3086927	4	0	0.7662135	0.7206464	0.8146619
5.3278576	3	0	0.7662135	0.7206464	0.8146619
5.3716632	2	0	0.7662135	0.7206464	0.8146619
5.5414100	1	0	0.7662135	0.7206464	0.8146619

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age.

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
44.67625	18	0	1.0000000	1.0000000	1.0000000
45.54689	75	0	1.0000000	1.0000000	1.0000000
45.57426	76	0	1.0000000	1.0000000	1.0000000
46.41205	132	0	1.0000000	1.0000000	1.0000000
46.45585	133	0	1.0000000	1.0000000	1.0000000
46.49144	137	0	1.0000000	1.0000000	1.0000000
46.53799	140	0	1.0000000	1.0000000	1.0000000
46.62012	145	0	1.0000000	1.0000000	1.0000000
46.68857	150	0	1.0000000	1.0000000	1.0000000
46.80903	158	0	1.0000000	1.0000000	1.0000000
46.91581	162	0	1.0000000	1.0000000	1.0000000
46.99795	166	0	1.0000000	1.0000000	1.0000000
47.06092	167	0	1.0000000	1.0000000	1.0000000
47.29637	182	1	0.9945055	0.9838239	1.0000000
47.34839	182	1	0.9890412	0.9740516	1.0000000
47.41684	184	0	0.9890412	0.9740516	1.0000000
47.50719	189	0	0.9890412	0.9740516	1.0000000
47.52361	190	1	0.9838357	0.9658557	1.0000000
47.55647	190	0	0.9838357	0.9658557	1.0000000
47.79192	202	1	0.9789652	0.9587630	0.9995931
47.86858	202	1	0.9741189	0.9519610	0.9967925
47.90418	204	0	0.9741189	0.9519610	0.9967925
48.02464	208	1	0.9694356	0.9456206	0.9938503
48.10130	210	0	0.9694356	0.9456206	0.9938503
48.14511	212	0	0.9694356	0.9456206	0.9938503

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
48.18070	213	1	0.9648843	0.9396247	0.9908229
48.22450	214	0	0.9648843	0.9396247	0.9908229
48.26557	214	0	0.9648843	0.9396247	0.9908229
48.34223	217	0	0.9648843	0.9396247	0.9908229
48.41068	217	0	0.9648843	0.9396247	0.9908229
48.43532	217	0	0.9648843	0.9396247	0.9908229
48.51198	220	0	0.9648843	0.9396247	0.9908229
48.59959	221	0	0.9648843	0.9396247	0.9908229
48.63244	220	1	0.9604984	0.9339867	0.9877627
48.65161	219	1	0.9561126	0.9284192	0.9846321
48.66804	219	0	0.9561126	0.9284192	0.9846321
48.74743	223	0	0.9561126	0.9284192	0.9846321
48.75017	222	0	0.9561126	0.9284192	0.9846321
48.77481	223	0	0.9561126	0.9284192	0.9846321
48.78029	222	1	0.9518058	0.9230335	0.9814749
48.82957	224	0	0.9518058	0.9230335	0.9814749
48.86242	224	0	0.9518058	0.9230335	0.9814749
48.88159	222	0	0.9518058	0.9230335	0.9814749
48.88980	221	0	0.9518058	0.9230335	0.9814749
48.89254	220	0	0.9518058	0.9230335	0.9814749
48.94182	222	0	0.9518058	0.9230335	0.9814749
48.95277	222	0	0.9518058	0.9230335	0.9814749
48.95551	221	0	0.9518058	0.9230335	0.9814749
48.97194	220	0	0.9518058	0.9230335	0.9814749
49.00205	224	1	0.9475566	0.9177850	0.9782940

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
49.01574	221	1	0.9432690	0.9125233	0.9750507
49.03217	223	0	0.9432690	0.9125233	0.9750507
49.04312	223	0	0.9432690	0.9125233	0.9750507
49.10335	222	0	0.9432690	0.9125233	0.9750507
49.11704	221	0	0.9432690	0.9125233	0.9750507
49.12252	220	0	0.9432690	0.9125233	0.9750507
49.14990	219	0	0.9432690	0.9125233	0.9750507
49.15264	218	0	0.9432690	0.9125233	0.9750507
49.15811	217	0	0.9432690	0.9125233	0.9750507
49.19918	217	0	0.9432690	0.9125233	0.9750507
49.20192	216	0	0.9432690	0.9125233	0.9750507
49.20739	216	1	0.9389021	0.9071863	0.9717266
49.22656	215	0	0.9389021	0.9071863	0.9717266
49.23203	214	1	0.9345147	0.9018596	0.9683521
49.27036	214	0	0.9345147	0.9018596	0.9683521
49.27584	213	1	0.9301273	0.8965702	0.9649404
49.28405	212	1	0.9257399	0.8913150	0.9614944
49.29500	211	0	0.9257399	0.8913150	0.9614944
49.30322	210	0	0.9257399	0.8913150	0.9614944
49.30595	210	0	0.9257399	0.8913150	0.9614944
49.31691	208	0	0.9257399	0.8913150	0.9614944
49.31964	207	0	0.9257399	0.8913150	0.9614944
49.37440	208	0	0.9257399	0.8913150	0.9614944
49.37988	207	0	0.9257399	0.8913150	0.9614944
49.38261	206	0	0.9257399	0.8913150	0.9614944

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
49.39357	206	0	0.9257399	0.8913150	0.9614944
49.39904	205	0	0.9257399	0.8913150	0.9614944
49.40726	205	1	0.9212241	0.8859094	0.9579465
49.43737	206	0	0.9212241	0.8859094	0.9579465
49.44011	205	0	0.9212241	0.8859094	0.9579465
49.47570	205	0	0.9212241	0.8859094	0.9579465
49.50034	204	0	0.9212241	0.8859094	0.9579465
49.50308	203	0	0.9212241	0.8859094	0.9579465
49.52224	202	1	0.9166636	0.8804735	0.9543411
49.54689	201	0	0.9166636	0.8804735	0.9543411
49.57700	200	0	0.9166636	0.8804735	0.9543411
49.58795	200	0	0.9166636	0.8804735	0.9543411
49.62081	201	0	0.9166636	0.8804735	0.9543411
49.63450	201	0	0.9166636	0.8804735	0.9543411
49.63997	200	0	0.9166636	0.8804735	0.9543411
49.64545	200	0	0.9166636	0.8804735	0.9543411
49.66188	199	0	0.9166636	0.8804735	0.9543411
49.67283	199	0	0.9166636	0.8804735	0.9543411
49.67830	197	0	0.9166636	0.8804735	0.9543411
49.68652	196	0	0.9166636	0.8804735	0.9543411
49.69199	195	0	0.9166636	0.8804735	0.9543411
49.70021	194	1	0.9119385	0.8748372	0.9506132
49.70568	193	0	0.9119385	0.8748372	0.9506132
49.72758	192	0	0.9119385	0.8748372	0.9506132
49.75496	192	0	0.9119385	0.8748372	0.9506132

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
49.76318	191	0	0.9119385	0.8748372	0.9506132
49.77413	190	0	0.9119385	0.8748372	0.9506132
49.80424	191	0	0.9119385	0.8748372	0.9506132
49.82067	191	0	0.9119385	0.8748372	0.9506132
49.83984	191	0	0.9119385	0.8748372	0.9506132
49.84257	190	0	0.9119385	0.8748372	0.9506132
49.84805	189	0	0.9119385	0.8748372	0.9506132
49.85900	188	0	0.9119385	0.8748372	0.9506132
49.87269	187	0	0.9119385	0.8748372	0.9506132
49.88090	186	0	0.9119385	0.8748372	0.9506132
49.89185	186	0	0.9119385	0.8748372	0.9506132
49.89733	185	0	0.9119385	0.8748372	0.9506132
49.93566	186	0	0.9119385	0.8748372	0.9506132
49.94935	186	0	0.9119385	0.8748372	0.9506132
49.96030	186	0	0.9119385	0.8748372	0.9506132
49.99589	187	0	0.9119385	0.8748372	0.9506132
50.01232	187	1	0.9070618	0.8690207	0.9467681
50.02327	186	0	0.9070618	0.8690207	0.9467681
50.03970	186	0	0.9070618	0.8690207	0.9467681
50.09719	187	0	0.9070618	0.8690207	0.9467681
50.09993	187	1	0.9022112	0.8632764	0.9429020
50.10267	186	1	0.8973606	0.8575645	0.9390035
50.14921	185	0	0.8973606	0.8575645	0.9390035
50.17659	184	0	0.8973606	0.8575645	0.9390035
50.18754	183	0	0.8973606	0.8575645	0.9390035

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
50.19576	183	0	0.8973606	0.8575645	0.9390035
50.20123	182	0	0.8973606	0.8575645	0.9390035
50.20397	181	0	0.8973606	0.8575645	0.9390035
50.24504	180	1	0.8923753	0.8516960	0.9349975
50.25325	179	1	0.8873899	0.8458591	0.9309599
50.26146	178	0	0.8873899	0.8458591	0.9309599
50.27242	178	0	0.8873899	0.8458591	0.9309599
50.27515	177	0	0.8873899	0.8458591	0.9309599
50.27789	177	0	0.8873899	0.8458591	0.9309599
50.28611	175	0	0.8873899	0.8458591	0.9309599
50.29979	173	0	0.8873899	0.8458591	0.9309599
50.30801	172	0	0.8873899	0.8458591	0.9309599
50.31622	171	1	0.8822005	0.8397704	0.9267745
50.32444	170	0	0.8822005	0.8397704	0.9267745
50.34086	169	0	0.8822005	0.8397704	0.9267745
50.34908	168	0	0.8822005	0.8397704	0.9267745
50.35181	167	0	0.8822005	0.8397704	0.9267745
50.36277	167	1	0.8769179	0.8335855	0.9225028
50.37919	166	0	0.8769179	0.8335855	0.9225028
50.39014	165	1	0.8716032	0.8273894	0.9181798
50.39562	165	0	0.8716032	0.8273894	0.9181798
50.41752	164	0	0.8716032	0.8273894	0.9181798
50.43121	163	0	0.8716032	0.8273894	0.9181798
50.43395	162	0	0.8716032	0.8273894	0.9181798
50.48323	163	0	0.8716032	0.8273894	0.9181798

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
50.49966	162	0	0.8716032	0.8273894	0.9181798
50.51608	161	0	0.8716032	0.8273894	0.9181798
50.52977	160	0	0.8716032	0.8273894	0.9181798
50.53525	159	1	0.8661215	0.8209956	0.9137276
50.54073	158	0	0.8661215	0.8209956	0.9137276
50.54346	157	0	0.8661215	0.8209956	0.9137276
50.55989	157	0	0.8661215	0.8209956	0.9137276
50.57084	156	0	0.8661215	0.8209956	0.9137276
50.58179	155	0	0.8661215	0.8209956	0.9137276
50.60643	155	0	0.8661215	0.8209956	0.9137276
50.63107	154	0	0.8661215	0.8209956	0.9137276
50.63929	153	0	0.8661215	0.8209956	0.9137276
50.67762	153	0	0.8661215	0.8209956	0.9137276
50.69952	152	1	0.8604233	0.8143379	0.9091168
50.71595	152	0	0.8604233	0.8143379	0.9091168
50.73238	151	0	0.8604233	0.8143379	0.9091168
50.73785	150	0	0.8604233	0.8143379	0.9091168
50.75975	150	0	0.8604233	0.8143379	0.9091168
50.76249	149	0	0.8604233	0.8143379	0.9091168
50.76797	148	0	0.8604233	0.8143379	0.9091168
50.77070	147	0	0.8604233	0.8143379	0.9091168
50.79808	146	0	0.8604233	0.8143379	0.9091168
50.81177	146	0	0.8604233	0.8143379	0.9091168
50.82272	145	0	0.8604233	0.8143379	0.9091168
50.84189	144	0	0.8604233	0.8143379	0.9091168

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
50.89665	144	1	0.8544481	0.8073341	0.9043116
50.90212	144	0	0.8544481	0.8073341	0.9043116
50.90486	143	0	0.8544481	0.8073341	0.9043116
50.91581	143	0	0.8544481	0.8073341	0.9043116
50.92129	141	0	0.8544481	0.8073341	0.9043116
50.92950	140	0	0.8544481	0.8073341	0.9043116
50.93771	139	0	0.8544481	0.8073341	0.9043116
50.94045	138	0	0.8544481	0.8073341	0.9043116
50.94593	137	0	0.8544481	0.8073341	0.9043116
50.99247	136	0	0.8544481	0.8073341	0.9043116
51.04723	135	0	0.8544481	0.8073341	0.9043116
51.05544	133	1	0.8480237	0.7997452	0.8992167
51.06639	132	0	0.8480237	0.7997452	0.8992167
51.07734	131	0	0.8480237	0.7997452	0.8992167
51.11567	132	0	0.8480237	0.7997452	0.8992167
51.12115	131	0	0.8480237	0.7997452	0.8992167
51.14031	130	0	0.8480237	0.7997452	0.8992167
51.21150	130	0	0.8480237	0.7997452	0.8992167
51.21697	129	0	0.8480237	0.7997452	0.8992167
51.22245	128	0	0.8480237	0.7997452	0.8992167
51.24709	127	0	0.8480237	0.7997452	0.8992167
51.24983	127	0	0.8480237	0.7997452	0.8992167
51.25804	126	1	0.8412934	0.7917773	0.8939061
51.32923	125	0	0.8412934	0.7917773	0.8939061
51.35113	125	1	0.8345630	0.7838663	0.8885386

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
51.35661	124	0	0.8345630	0.7838663	0.8885386
51.38672	122	0	0.8345630	0.7838663	0.8885386
51.40315	121	0	0.8345630	0.7838663	0.8885386
51.41410	120	0	0.8345630	0.7838663	0.8885386
51.49897	120	0	0.8345630	0.7838663	0.8885386
51.50719	119	1	0.8275499	0.7756130	0.8829646
51.52635	118	0	0.8275499	0.7756130	0.8829646
51.53183	118	0	0.8275499	0.7756130	0.8829646
51.54825	117	1	0.8204768	0.7673339	0.8773002
51.56194	117	1	0.8134642	0.7591939	0.8716139
51.56468	116	0	0.8134642	0.7591939	0.8716139
51.58385	115	0	0.8134642	0.7591939	0.8716139
51.58932	114	1	0.8063285	0.7509356	0.8658075
51.61396	113	0	0.8063285	0.7509356	0.8658075
51.61944	112	0	0.8063285	0.7509356	0.8658075
51.62765	111	0	0.8063285	0.7509356	0.8658075
51.66598	111	0	0.8063285	0.7509356	0.8658075
51.68789	110	0	0.8063285	0.7509356	0.8658075
51.70157	109	0	0.8063285	0.7509356	0.8658075
51.72895	108	0	0.8063285	0.7509356	0.8658075
51.73990	107	0	0.8063285	0.7509356	0.8658075
51.77823	106	0	0.8063285	0.7509356	0.8658075
51.78371	105	0	0.8063285	0.7509356	0.8658075
51.83299	103	0	0.8063285	0.7509356	0.8658075
51.84668	102	0	0.8063285	0.7509356	0.8658075

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
51.89322	103	1	0.7985001	0.7417704	0.8595685
51.90691	103	0	0.7985001	0.7417704	0.8595685
51.92608	102	0	0.7985001	0.7417704	0.8595685
51.98631	101	0	0.7985001	0.7417704	0.8595685
51.99452	100	0	0.7985001	0.7417704	0.8595685
52.01369	100	0	0.7985001	0.7417704	0.8595685
52.01917	100	0	0.7985001	0.7417704	0.8595685
52.02738	100	0	0.7985001	0.7417704	0.8595685
52.06845	100	1	0.7905151	0.7324552	0.8531773
52.07118	99	0	0.7905151	0.7324552	0.8531773
52.10130	98	0	0.7905151	0.7324552	0.8531773
52.10404	97	0	0.7905151	0.7324552	0.8531773
52.11773	96	0	0.7905151	0.7324552	0.8531773
52.19713	95	0	0.7905151	0.7324552	0.8531773
52.19986	94	1	0.7821054	0.7226168	0.8464913
52.25188	92	0	0.7821054	0.7226168	0.8464913
52.25736	91	0	0.7821054	0.7226168	0.8464913
52.27652	90	0	0.7821054	0.7226168	0.8464913
52.28200	88	0	0.7821054	0.7226168	0.8464913
52.35866	89	0	0.7821054	0.7226168	0.8464913
52.36413	88	0	0.7821054	0.7226168	0.8464913
52.46817	90	0	0.7821054	0.7226168	0.8464913
52.48734	91	0	0.7821054	0.7226168	0.8464913
52.50924	90	1	0.7734153	0.7124648	0.8395800
52.52293	89	0	0.7734153	0.7124648	0.8395800

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
52.54209	88	0	0.7734153	0.7124648	0.8395800
52.54483	87	1	0.7645255	0.7021168	0.8324814
52.56126	86	0	0.7645255	0.7021168	0.8324814
52.63518	89	0	0.7645255	0.7021168	0.8324814
52.65161	88	0	0.7645255	0.7021168	0.8324814
52.68720	87	1	0.7557378	0.6919930	0.8253547
52.68994	86	0	0.7557378	0.6919930	0.8253547
52.73101	86	0	0.7557378	0.6919930	0.8253547
52.76934	87	1	0.7470512	0.6820810	0.8182100
52.77755	86	1	0.7383645	0.6722356	0.8109987
52.79124	85	0	0.7383645	0.6722356	0.8109987
52.79945	84	0	0.7383645	0.6722356	0.8109987
52.83231	84	0	0.7383645	0.6722356	0.8109987
52.85147	83	0	0.7383645	0.6722356	0.8109987
52.91170	82	1	0.7293601	0.6620267	0.8035419
52.93361	81	0	0.7293601	0.6620267	0.8035419
52.95551	80	0	0.7293601	0.6620267	0.8035419
52.96372	79	0	0.7293601	0.6620267	0.8035419
53.00753	78	0	0.7293601	0.6620267	0.8035419
53.02943	77	1	0.7198879	0.6512558	0.7957527
53.03217	76	0	0.7198879	0.6512558	0.7957527
53.04038	75	1	0.7102894	0.6403936	0.7878139
53.05133	75	0	0.7102894	0.6403936	0.7878139
53.07871	74	0	0.7102894	0.6403936	0.7878139
53.08693	73	0	0.7102894	0.6403936	0.7878139

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
53.09240	72	1	0.7004243	0.6292515	0.7796471
53.10062	71	0	0.7004243	0.6292515	0.7796471
53.14168	70	0	0.7004243	0.6292515	0.7796471
53.15264	69	0	0.7004243	0.6292515	0.7796471
53.16906	69	1	0.6902732	0.6178080	0.7712381
53.18275	68	0	0.6902732	0.6178080	0.7712381
53.18549	67	1	0.6799706	0.6062487	0.7626573
53.19370	66	1	0.6696680	0.5947764	0.7539896
53.19644	65	0	0.6696680	0.5947764	0.7539896
53.27036	64	0	0.6696680	0.5947764	0.7539896
53.28679	63	1	0.6590384	0.5829544	0.7450523
53.31417	62	0	0.6590384	0.5829544	0.7450523
53.32512	61	0	0.6590384	0.5829544	0.7450523
53.33607	60	0	0.6590384	0.5829544	0.7450523
53.37166	60	0	0.6590384	0.5829544	0.7450523
53.42642	59	1	0.6478682	0.5705047	0.7357227
53.44285	58	1	0.6366981	0.5581569	0.7262911
53.45654	57	1	0.6255279	0.5459060	0.7167630
53.46475	56	0	0.6255279	0.5459060	0.7167630
53.48392	55	0	0.6255279	0.5459060	0.7167630
53.50308	54	0	0.6255279	0.5459060	0.7167630
53.61259	55	0	0.6255279	0.5459060	0.7167630
53.62628	54	0	0.6255279	0.5459060	0.7167630
53.63450	53	1	0.6137255	0.5329206	0.7067826
53.64545	52	0	0.6137255	0.5329206	0.7067826

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
53.69199	51	0	0.6137255	0.5329206	0.7067826
53.69473	50	1	0.6014510	0.5194246	0.6964308
53.70021	49	0	0.6014510	0.5194246	0.6964308
53.75222	49	0	0.6014510	0.5194246	0.6964308
53.76591	49	0	0.6014510	0.5194246	0.6964308
53.76865	48	0	0.6014510	0.5194246	0.6964308
53.78508	47	0	0.6014510	0.5194246	0.6964308
53.81246	46	0	0.6014510	0.5194246	0.6964308
53.84531	45	0	0.6014510	0.5194246	0.6964308
53.85626	45	0	0.6014510	0.5194246	0.6964308
53.86448	44	0	0.6014510	0.5194246	0.6964308
53.87269	43	1	0.5874638	0.5037645	0.6850695
53.89459	42	0	0.5874638	0.5037645	0.6850695
53.90828	41	0	0.5874638	0.5037645	0.6850695
53.91650	40	1	0.5727772	0.4873484	0.6731811
53.92197	39	1	0.5580906	0.4711467	0.6610788
53.93018	38	0	0.5580906	0.4711467	0.6610788
53.95756	37	1	0.5430071	0.4546190	0.6485797
53.97125	36	0	0.5430071	0.4546190	0.6485797
53.97399	35	0	0.5430071	0.4546190	0.6485797
53.99863	34	0	0.5430071	0.4546190	0.6485797
54.06160	33	0	0.5430071	0.4546190	0.6485797
54.08898	32	0	0.5430071	0.4546190	0.6485797
54.09172	31	0	0.5430071	0.4546190	0.6485797
54.13552	30	0	0.5430071	0.4546190	0.6485797

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
54.17385	30	0	0.5430071	0.4546190	0.6485797
54.21766	30	0	0.5430071	0.4546190	0.6485797
54.28063	29	0	0.5430071	0.4546190	0.6485797
54.34908	29	0	0.5430071	0.4546190	0.6485797
54.39836	28	0	0.5430071	0.4546190	0.6485797
54.42026	27	1	0.5228957	0.4313562	0.6338611
54.51608	26	0	0.5228957	0.4313562	0.6338611
54.64476	26	0	0.5228957	0.4313562	0.6338611
54.65572	25	0	0.5228957	0.4313562	0.6338611
54.85010	26	1	0.5027843	0.4086777	0.6185609
54.95962	25	0	0.5027843	0.4086777	0.6185609
54.97604	24	1	0.4818350	0.3853711	0.6024451
55.02259	23	1	0.4608856	0.3626233	0.5857748
55.14579	22	0	0.4608856	0.3626233	0.5857748
55.34839	21	0	0.4608856	0.3626233	0.5857748
55.52909	20	0	0.4608856	0.3626233	0.5857748
55.64956	19	0	0.4608856	0.3626233	0.5857748
55.68515	18	0	0.4608856	0.3626233	0.5857748
55.69336	18	1	0.4352809	0.3340599	0.5671721
55.73990	17	1	0.4096761	0.3065067	0.5475721
55.75633	16	1	0.3840713	0.2798675	0.5270738
55.89596	16	1	0.3600669	0.2560644	0.5063107
56.22450	16	0	0.3600669	0.2560644	0.5063107
56.26831	15	1	0.3360624	0.2328940	0.4849328
56.40246	14	1	0.3120580	0.2103443	0.4629562

A.2: Kaplan-Meier estimates of the survival probabilities. The event time is menopause age. *(continued)*

t_i	n_i	d_i	$\hat{S}(t_i)$	Lower 95 % CI	Upper 95 % CI
56.47912	13	0	0.3120580	0.2103443	0.4629562
56.49008	12	1	0.2860531	0.1861262	0.4396287
56.53936	11	0	0.2860531	0.1861262	0.4396287
56.63792	10	1	0.2574478	0.1598096	0.4147396
56.74196	9	1	0.2288425	0.1347202	0.3887234
56.77481	8	0	0.2288425	0.1347202	0.3887234
57.03491	7	0	0.2288425	0.1347202	0.3887234
57.11431	6	0	0.2288425	0.1347202	0.3887234
57.23477	5	0	0.2288425	0.1347202	0.3887234
57.28953	4	0	0.2288425	0.1347202	0.3887234
57.91650	3	0	0.2288425	0.1347202	0.3887234
58.14921	2	0	0.2288425	0.1347202	0.3887234
58.45038	1	0	0.2288425	0.1347202	0.3887234
64.34497	1	0	0.2288425	0.1347202	0.3887234

References

Enderlein, G. (1987). Cox, d. r.; oakes, d.: Analysis of survival data. chapman and hall, london ??? new york 1984, 201 s., ?? 12, ??? *Biometrical Journal*, 29(1):114???114.

Jackson, C. (2016). flexsurv: A platform for parametric survival modeling in R. *Journal of Statistical Software*, 70(8):1–33.

Jones, M. P. and Crowley, J. (1989). A general class of nonparametric tests for survival analysis. *Biometrics*, 45(1):157.

Kaplan, E. L. and Meier, P. (1958). Nonparametric estimation from incomplete observations. *Journal of the American Statistical Association*, 53(282):457.

Klein, J. P. and Moeschberger, M. L. (2003). *Semiparametric Proportional Hazards Regression with Fixed Covariates*, page 243???293. Springer New York.

Therneau, T. M. (2024). *A Package for Survival Analysis in R*. R package version 3.5-8.