

EXHIBIT 3

Lapetus Life Expectancy Comparison Study

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The main purpose of this study is to verify a recent Coventry Study of Lapetus Life Expectancies furnished between 1/1/2022 and 4/27/2024 that highlights: 1) the Lapetus life expectancies were shorter than other LE reports in approximately 85% of the cases; and 2) the average Lapetus life expectancy was shorter by approximately 31 months compared with other LE underwriters on the same underlying lives issued within a three-month window. We performed all analyses based on a data set provided by Coventry on 6/4/2024.

Table 1 below, “**Replicating Coventry Study**”, displays relevant results. The first three columns are structured to mimic the Coventry study in the exact same format. We observe that both the percentage where Lapetus is shorter and the average difference in LE are consistent with the Coventry study for each studied month, and hence confirm the accuracy of the Coventry study, contingent on the provided data. The next two columns investigate the difference in report date between Lapetus and another other LE underwriter on a monthly basis to check whether there is a systematic pattern. In particular, Column 4 calculates the difference in report dates (in months) between Lapetus and any other LE underwriter. Column 5 further adjusts the LE differences based on such a difference. For example, if Lapetus provided an LE on the same life two months later than another underwriter, then the calculated LE difference will be adjusted down by two months. As can be seen in the last row, we do not find any systematic deviation in the reporting dates (the average is 0.04 months for the entire study), which suggests the robustness of the identified difference of 31 months. The last column shows the fraction of comparison pairs on a monthly basis.

In addition to replicating the existing Coventry study, we also performed two supplementary studies. The first one looks at the LE differences based on different age cohorts. More specifically, instead of using calendar months as was done in the original Coventry study, we break down the cases into underlying lives aged 65-, 65-69, 70-74, 75-79, 80-84, 85-89, and 90+ at the time of Lapetus underwriting, and further compare the Lapetus report with others issued within the same 3-month window. The results are displayed in Table 2, “**Supplemental Analysis 1**”. We observe from the table that the percentage where Lapetus is shorter is consistently high and ranges from 78% to 89%. The average LE difference, on the other hand, tends to decrease with the individual’s age at underwriting, which is to be expected since a younger underwriting life has a higher absolute value of LE estimate.

In the second supplemental analysis, we remove the 3-month window restriction. The results are displayed in Table 3, “**Supplemental Analysis 2**”. More precisely, after removing the 3-month window restriction, we adjusted the life expectancies to factor in the timing of the report dates for each individual comparison pair. After the adjustment, we then calculate the percentage of Lapetus being shorter and the average difference in LE in the same way. Naturally, we were able to utilize more comparison pairs, and the results are still in line with the baseline study: we found that for the entire duration of the study, after removing the three-month restriction, the Lapetus LE was still shorter in approximately 83% of the cases, and the average Lapetus LE was also

shorter by approximately 29 months, compared with other LE underwriters.

In his “Letter from the CEO,” Lapetus Solutions’ Dr. Karl Ricanek expressed surprise about the Coventry Study. He alludes to Lapetus’ unique team structure and to “Documented Success.” However, in our opinion, the provided arguments intended to document success are not convincing. In particular, we believe the following statement is problematic:

“The Lapetus LEs were documented to be significantly closer to the observed duration of life in 57% of the maturations reviewed; the Lapetus LEs averaged 6 months away from the observed maturations, while the other LE provider averaged 25 months away from the observed maturations.”

This statement appears to be conditional on observed maturations for less than six years of LE data—which, by definition, are relatively early deaths. This statement could easily be true even if Lapetus’ LEs significantly understate true life expectancy.¹ The conclusion Lapetus is trying to assert should be determined by a comprehensive analysis of all expected deaths relative to those that actually took place in order to evaluate overall performance.

Lapetus’ contention that the relevant metric is the “distance from the observed event” is a perspective we have taken up in earlier peer-reviewed research, where we introduce metrics based on the *difference in (temporary) life expectancies*.² Our research shows, based on underwriting data prior to the publication date, that at least one of Lapetus’ competitors underwriting performance is reasonably accurate based on this perspective.

¹ Consider the following stylized example: Assume the realizations of deaths in a (homogeneous) portfolio of lives are given by a fair die taking values {1,2,3,4,5,6} years with equal probability. The “true” life expectancy for each life is 3.5 years in this example ($= \frac{1}{6} \sum_{i=1}^6 i$). However, when reviewing maturations after three years, these obviously only include lives that matured in years {1,2,3}, again with equal probability (i.e., the analysis will be “conditional on observed maturations”). The life expectancy of the matured lives will be 2 ($= \frac{1}{3} \sum_{i=1}^3 i$). Hence, a provider quoting an LE of 2 years, which substantially understates the true life expectancy, will be much closer in the *observed* maturations than a provider quoting an LE of 3.5 years, which is the correct life expectancy in this stylized example.

² See “Bauer, Daniel, Michael V. Fasano, Jochen Russ, and Nan Zhu. “Evaluating life expectancy evaluations.” *North American Actuarial Journal* 22, no. 2 (2018): 198-209.”

Table 1: Replicating Coventry Study

Month of Lapetus report	Percentage of comparisons where Lapetus is shorter	Average difference in life expectancy (months)	Difference in report date (months)	Adjusted average difference in life expectancy (months)	Fraction of Comparison Pairs
January 2022	83.51%	(37.13)	0.27	(36.86)	2.42%
February 2022	85.43%	(33.43)	0.27	(33.16)	3.79%
March 2022	89.42%	(39.28)	0.08	(39.20)	5.39%
April 2022	83.25%	(34.14)	0.05	(34.09)	5.39%
May 2022	82.70%	(27.78)	0.01	(27.77)	5.80%
June 2022	83.89%	(32.59)	(0.09)	(32.68)	6.34%
July 2022	86.23%	(30.41)	(0.11)	(30.52)	4.76%
August 2022	83.99%	(30.73)	0.02	(30.71)	4.78%
September 2022	82.40%	(27.75)	(0.06)	(27.81)	4.54%
October 2022	86.13%	(31.50)	(0.01)	(31.51)	6.99%
November 2022	89.56%	(35.67)	(0.09)	(35.76)	4.40%
December 2022	81.34%	(27.75)	(0.10)	(27.86)	4.56%
January 2023	80.77%	(27.00)	(0.00)	(27.00)	4.65%
February 2023	84.92%	(31.43)	0.03	(31.41)	3.39%
March 2023	91.43%	(28.90)	(0.09)	(28.99)	2.68%
April 2023	86.63%	(31.10)	(0.10)	(31.20)	3.31%
May 2023	86.28%	(32.12)	0.06	(32.06)	3.22%
June 2023	86.14%	(30.07)	0.13	(29.94)	3.44%
July 2023	88.89%	(34.38)	0.03	(34.36)	2.91%
August 2023	86.56%	(31.74)	0.00	(31.73)	2.15%
September 2023	82.16%	(28.46)	0.33	(28.13)	2.05%
October 2023	84.78%	(28.42)	0.11	(28.31)	1.96%
November 2023	86.30%	(29.12)	0.37	(28.75)	3.29%
December 2023	85.51%	(26.94)	0.29	(26.65)	1.76%
January 2024	84.93%	(31.60)	0.11	(31.49)	2.31%
February 2024	75.18%	(18.80)	0.12	(18.68)	1.20%
March 2024	81.74%	(25.97)	0.27	(25.70)	1.86%
April 2024	83.12%	(24.36)	(0.07)	(24.43)	0.66%
Entire study	84.98%	(31.06)	0.04	(31.02)	100%

Table 2: Supplemental Analysis 1

Age at Lapetus underwriting	Percentage of comparisons where Lapetus is shorter	Average difference in life expectancy (months)	Difference in report date (months)	Adjusted average difference in	Fraction of Comparison Pairs
<65	78.26%	(39.76)	0.20	(39.56)	6.53%
65 - 69	82.57%	(36.95)	(0.02)	(36.97)	19.43%
70 - 74	89.25%	(37.65)	0.04	(37.61)	20.50%
75 - 79	86.22%	(30.30)	0.04	(30.27)	19.94%
80 - 84	87.70%	(27.86)	0.07	(27.80)	15.56%
85 - 89	83.42%	(19.86)	0.05	(19.81)	11.14%
90+	78.18%	(14.17)	(0.02)	(14.18)	6.90%
Entire study	84.98%	(31.06)	0.04	(31.02)	100%

Table 3: Supplemental Analysis 2

Month of Lapetus report	Percentage of comparisons where Lapetus is shorter	Adjusted average difference in life expectancy (months)	Fraction of Comparison Pairs
January 2022	83.98%	(36.37)	3.08%
February 2022	87.03%	(33.22)	4.27%
March 2022	84.89%	(32.36)	5.28%
April 2022	82.58%	(32.57)	5.06%
May 2022	83.20%	(27.22)	5.64%
June 2022	83.26%	(31.36)	6.04%
July 2022	85.02%	(28.59)	4.49%
August 2022	81.80%	(27.90)	4.27%
September 2022	77.47%	(22.76)	4.80%
October 2022	81.28%	(27.35)	6.36%
November 2022	87.03%	(32.52)	4.65%
December 2022	80.22%	(27.24)	4.06%
January 2023	80.13%	(27.20)	4.49%
February 2023	84.19%	(30.14)	3.09%
March 2023	90.40%	(27.93)	2.49%
April 2023	85.76%	(31.01)	3.15%
May 2023	83.10%	(26.95)	3.24%
June 2023	83.47%	(28.43)	3.13%
July 2023	85.17%	(33.19)	2.62%
August 2023	85.46%	(30.64)	1.95%
September 2023	81.09%	(25.70)	2.56%
October 2023	80.39%	(25.73)	1.80%
November 2023	80.19%	(25.10)	3.60%
December 2023	84.47%	(28.73)	1.89%
January 2024	84.41%	(31.47)	2.40%
February 2024	67.31%	(13.44)	1.80%
March 2024	82.41%	(29.17)	2.89%
April 2024	83.33%	(26.59)	0.90%
Entire study	82.92%	(28.95)	100%