

TABLES OF REPRESENTATIVE PREMIUMS FOR CRITICAL ILLNESS INSURANCE POLICIES IN THE PRESENCE OF MODEL GENETIC DISORDERS

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1. INTRODUCTION

1.1 *Macdonald & Yang (2003)*

This document accompanies the paper Macdonald & Yang (2003). There, it was shown that the age-related penetrance (see Section 1.2) of genetic disorders could be quite well represented by simple one-parameter families of curves. Applying these to a suitable model of critical illness (CI) insurance, premium ratings could be found. If these were tabulated for a representative subset of these families of curves, then the implications, for CI insurance pricing, of new epidemiological estimates of rates of onset of genetic disorders could be quickly and directly found. This would be useful, because such new estimates may be expected to emerge rapidly in the near future.

Macdonald & Yang (2003) described the methodology, in particular how well the one-parameter families of curves represented estimates of the penetrance of several important single-gene disorders. The resulting tables, however, were too extensive to present in full in that paper, and they are given here.

We will summarise Macdonald & Yang (2003) very briefly, by way of background to the tables, but we refer the reader to that paper for full details.

1.2 *Penetrance and Rate of Onset of a Genetic Disorder*

One of the key features of the epidemiology of genetic disorders is the penetrance function, here denoted $q(x)$ and defined as the probability that disease has appeared by age x in a person known to carry a mutation in a gene that causes the disease. In the case that onset or diagnosis of the disease would lead to a claim under a CI insurance policy, this is the most important parameter in any actuarial model for pricing or reserving. Let μ_x denote the associated rate (also called ‘force’ or ‘intensity’) of onset defined by:

$$q(x) = 1 - \exp\left(-\int_0^x \mu_t dt\right). \quad (1)$$

This is the quantity needed to parameterise a multiple-state model, and clearly estimates of penetrance or rates of onset can be converted, one into the other, using Equation (1), provided such estimates can be found in the epidemiological literature. Such estimates are surprisingly scarce, because genetic epidemiology must follow behind the discoveries

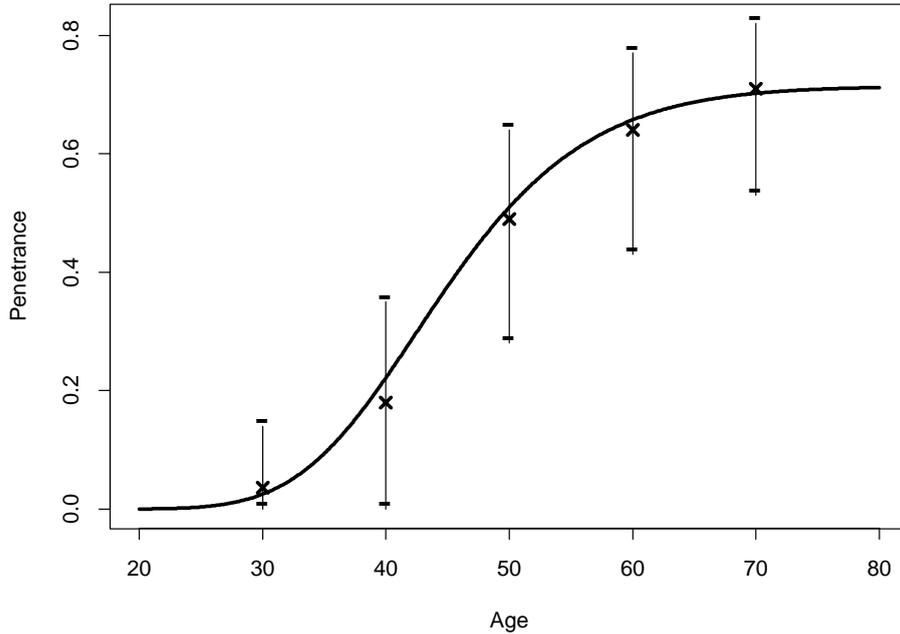


Figure 1: Observed values (\times) and 95% confidence intervals of breast cancer penetrance associated with BRCA1 mutations, based on Ford *et al.* (1997). Also shown is the fitted function from Macdonald, Waters & Wekwete (2003a).

of gene mutations in the laboratory, but when they exist it is usually the penetrance function that is estimated, often in the form of a Kaplan-Meier survival curve.

The main features of penetrance are:

- (a) the maximum reached by $q(x)$ (generally less than 1), denoted Q ;
- (b) the minimum age at which symptoms (or death) can occur (that is, at which $q(x) > 0$), denoted x_m ;
- (c) the age at which the maximum of $q(x)$ is attained, denoted x_M ; and
- (d) the shape of the function $q(x)$, which determines the severity of the disorder.

Figure 1 shows an example of a penetrance function, and also, incidentally, the original published estimates to which it was fitted. It is clear that the data were limited and the uncertainty correspondingly large, but this is a common feature of studies of fairly rare disorders.

1.3 Critical Illness Insurance

Given a multiple-state model of CI insurance that accounts for the major non-genetical claim causes (principally heart attack, stroke and cancers) it is straightforward to add a further claim state representing onset of a particular genetic disorder, and the rate of onset completes the parameterisation of the model. Figure 2 shows such a model, in which state 2 is the onset of the genetic disorder. Intensities of onset of ‘other’ CI claims (state 3) and of death, after adjustment, for these claims (state 4) were given in Gutiérrez & Macdonald (2003), and summarised briefly in Macdonald & Yang (2003).

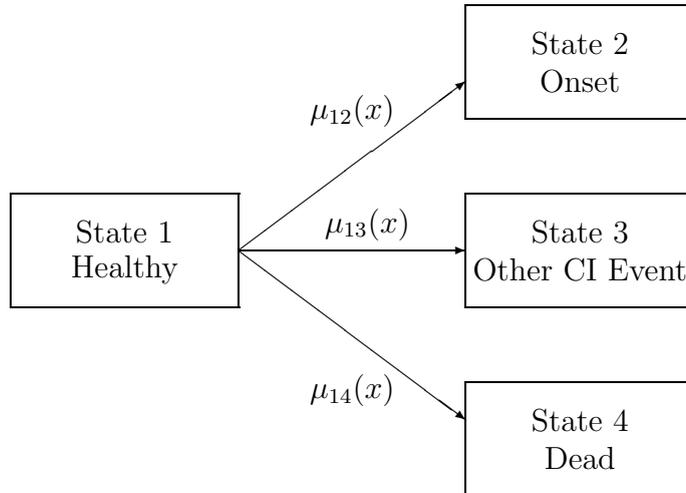


Figure 2: A multiple state model for onset of a genetic disorder in critical illness insurance.

2. MODEL FAMILIES OF PENETRANCE CURVES

A one-parameter family of curves, with the right general properties, can be found by taking a simple symmetric functions as a starting point, and applying suitable ‘distortions’ and re-scalings to represent penetrance that tends to lower of higher ages. Macdonald & Yang (2003) chose the following two baseline functions:

$$q^{\sin}(x) = \frac{1}{2} \left(\sin \left(\frac{2x - x_m - x_M}{2(x_M - x_m)} \pi \right) + 1 \right). \quad (2)$$

$$q^{\text{beta}}(x) = \int_0^x \frac{\Gamma(10)}{\Gamma(5)\Gamma(5)} \left(\frac{t - x_m}{x_M - x_m} \right)^4 \left(1 - \frac{t - x_m}{x_M - x_m} \right)^4 dt. \quad (3)$$

and a proportional hazards ‘distortion’ to represent earlier or later onset: if $q(x)$ is the basic symmetrical penetrance curve, and μ_x the corresponding hazard (rate of onset), then any positive constant k defines a new penetrance function $q_k(x)$ by:

$$q_k(x) = 1 - (1 - q(x))^k = 1 - \exp \left(- \int_0^x \mu_t dt \right)^k = 1 - \exp \left(- \int_0^x k \mu_t dt \right). \quad (4)$$

It is convenient to parameterise the distortion in terms of the penetrance itself. A one-parameter family may be uniquely specified in terms of the penetrance at any interior age, the middle age $(x_m + x_M)/2$ being an obvious choice. For the proportional hazards family above, penetrance of $(1 + r)Q/2$ at age $(x_m + x_M)/2$ (for $-1 < r < 1$) is obtained by choosing

$$k = 1 + \frac{\log(1 - r)}{\log(0.5)}. \quad (5)$$

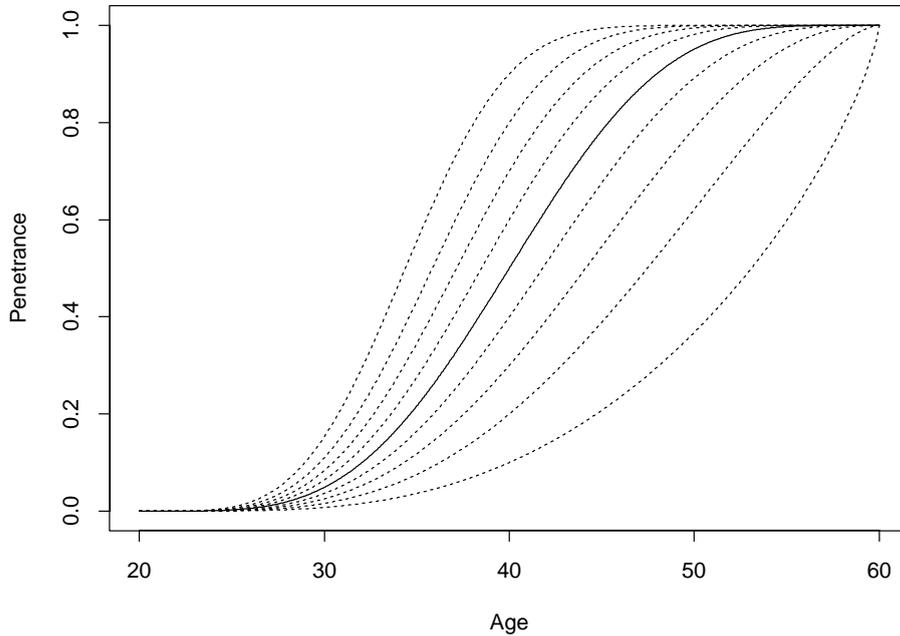


Figure 3: A Beta(5,5) distribution as a hypothetical penetrance curve, and a proportional hazards family based upon it (penetrances from 10% to 90% at age 40 (the middle age) shown).

Table 1: Standard Level net premium for level CI cover for females and males

Gender	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
females	0.000541	0.000892	0.001450	0.002141	0.001480	0.002405	0.003532	0.003977	0.005761	0.008924
males	0.000314	0.000616	0.001223	0.002120	0.001120	0.002181	0.003701	0.003989	0.006533	0.011135

Figure 3 gives an example, in which $x_m = 20$, $x_M = 60$, $Q = 1$, the basic symmetric function is Beta(5,5) (suitable scaled), distorted by proportional hazards to give penetrance of 10%, 20%, ..., 80%, 90% at the middle age, 40 years.

3. TABLES

The expected present value (EPVs) of a unit level benefit, and a level unit annuity payable continuously while healthy, are found by solving Thiele's equations for the model in Figure 2 numerically (we use a fourth-order Runge-Kutta procedure with step-size 0.0005 year, and a force of interest of $\delta = 0.05$ per annum) and the the insurance premium is their ratio, using the usual equivalence principle. Table 1 gives the standard level net premium for level CI cover of £1 for females and males: that is, the net premium in the absence of any severe genetic disorder.

The tables are arranged as follows. Each baseline function and age range is given a separate section, Beta functions and the sine functions, in this order:

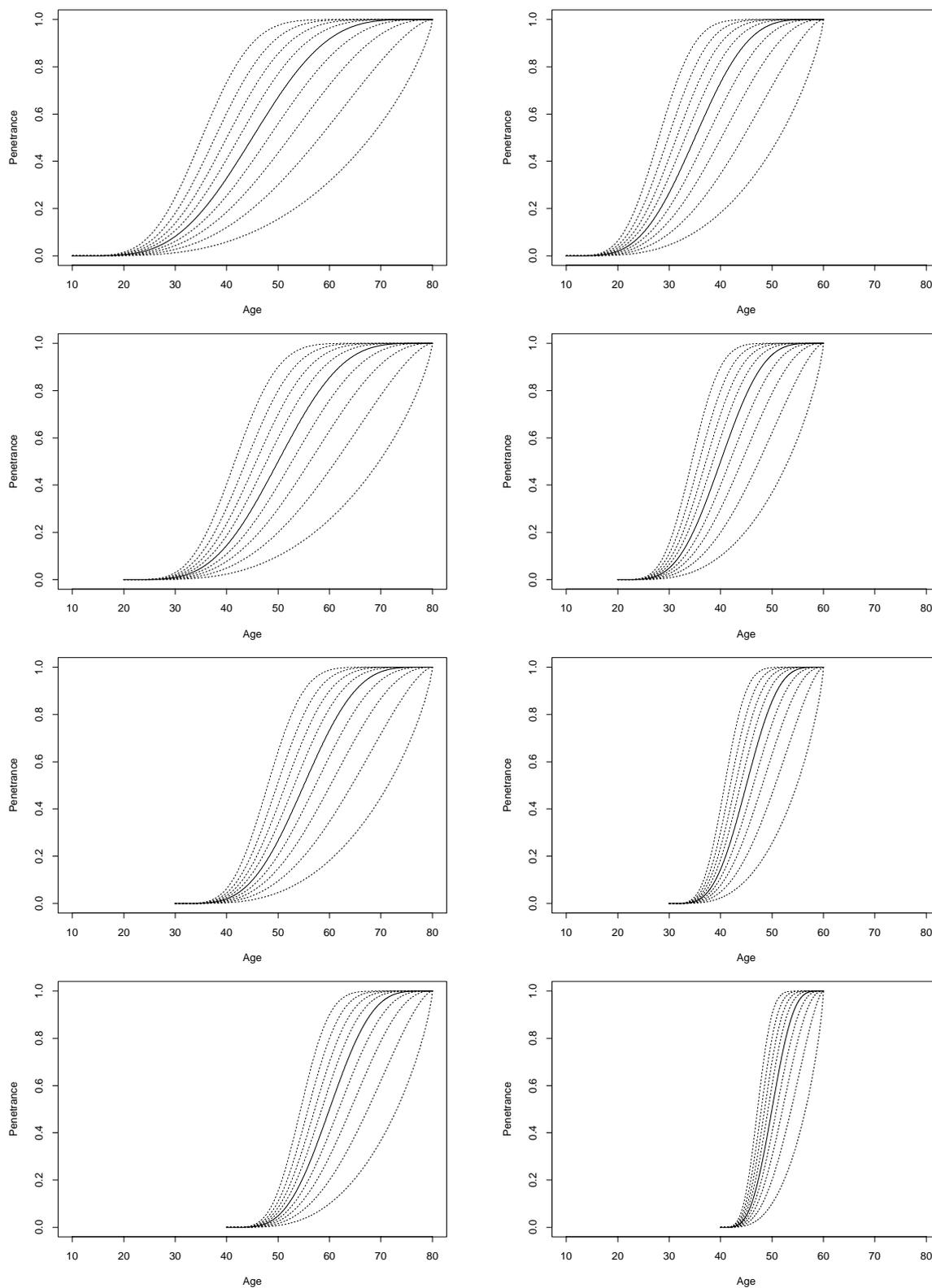


Figure 4: Hypothetical penetrance curves for different age ranges, based on Beta distributions and proportional hazards transforms, with penetrance of 10%, 20%, ..., 90% at the middle age of each range.

Function	Age Range	Function	Age Range
Beta	10–80		
Beta	10–60		
Beta	20–80	sine	20–80
Beta	20–60	sine	20–60
Beta	30–80	sine	30–80
Beta	30–60	sine	30–60
Beta	40–80	sine	40–80
Beta	40–60	sine	40–60

Notice that Beta functions are given with x_m as low as 10 years. This is not because there are significant disorders with noticeable penetrance at such low ages, but because the Beta distribution function is very small in magnitude in this tail. This was unnecessary for sine functions.

These tables cover the age ranges of financial importance to CI insurance. Within each section, we give graphs of the baseline functions for lifetime penetrance Q equal to 100%, 80%, 60%, 40% and 20%, and the full family with 100% lifetime penetrance and penetrance at the middle age of the range of 10%, 20%, . . . , 90%. Following these graphs are tables of percentage extra premiums, based on the standard premiums in Table 1, for all of these penetrance functions, for males and females.

ACKNOWLEDGEMENTS

This work was carried out at the Genetics and Insurance Research Centre at Heriot-Watt University. We would like to thank the sponsors for funding, and members of the Steering Committee for helpful comments at various stages.

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TABLES

Function: Beta

Age Range: 10–80

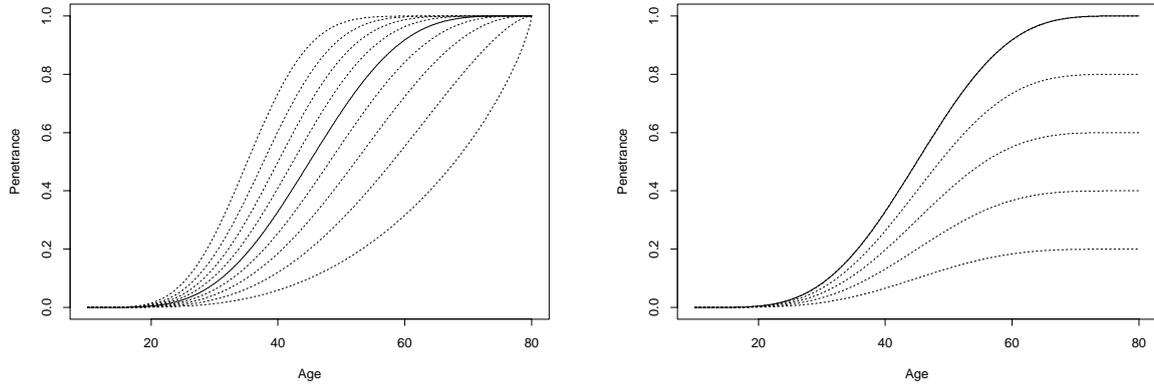


Figure 5: Proportional hazards family with Beta baseline curve for age range $[10,80]$ with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 2: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 20\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	41.9%	52.8%	49.7%	43.1%	59.8%	52.1%	44.2%	48.1%	41.0%	36.6%
20%	88.2%	108.9%	98.6%	80.7%	122.6%	102.7%	81.9%	92.1%	73.2%	60.5%
30%	140.0%	169.1%	146.8%	113.6%	188.9%	151.6%	113.9%	131.1%	96.9%	72.6%
40%	198.9%	234.3%	194.4%	142.9%	259.5%	198.4%	140.9%	164.2%	112.6%	74.3%
50%	267.4%	305.8%	241.7%	169.4%	335.1%	242.9%	163.4%	189.9%	120.7%	67.7%
60%	349.4%	386.0%	289.1%	194.3%	417.0%	284.6%	182.3%	206.3%	121.4%	55.1%
70%	452.4%	478.6%	337.5%	218.9%	507.0%	322.6%	197.7%	210.5%	114.7%	39.1%
80%	592.2%	591.1%	388.8%	245.3%	608.0%	355.3%	209.9%	197.6%	99.9%	22.3%
90%	817.9%	744.5%	449.2%	278.2%	723.9%	377.9%	216.9%	156.3%	73.5%	7.9%

Table 3: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 20\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	72.1%	76.5%	58.7%	42.8%	79.0%	57.4%	41.6%	47.9%	35.8%	29.2%
20%	151.8%	157.8%	116.5%	80.2%	161.9%	113.1%	77.2%	91.7%	63.9%	48.3%
30%	240.9%	245.0%	173.5%	113.2%	249.6%	166.8%	107.5%	130.6%	84.8%	58.0%
40%	342.3%	339.5%	229.9%	142.6%	342.9%	218.4%	133.1%	163.5%	98.6%	59.4%
50%	460.1%	443.2%	285.9%	169.3%	442.8%	267.5%	154.7%	189.1%	105.9%	54.2%
60%	601.2%	559.4%	342.0%	194.5%	551.0%	313.4%	172.8%	205.5%	106.7%	44.2%
70%	778.3%	693.6%	399.4%	219.5%	670.0%	355.3%	187.9%	209.8%	101.0%	31.3%
80%	1019.0%	856.7%	460.3%	246.4%	803.4%	391.5%	199.7%	197.0%	88.1%	18.0%
90%	1407.3%	1079.1%	532.1%	279.9%	956.5%	416.5%	206.8%	155.8%	65.0%	6.4%

Table 4: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 40\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	83.9%	105.8%	99.9%	87.1%	120.2%	105.5%	89.9%	98.2%	84.6%	76.8%
20%	176.8%	219.1%	199.6%	164.5%	248.3%	210.3%	169.6%	192.0%	155.4%	132.8%
30%	280.9%	341.3%	299.1%	233.8%	385.6%	314.2%	239.9%	279.6%	211.8%	166.4%
40%	399.6%	474.7%	398.9%	296.6%	534.0%	417.0%	301.7%	358.5%	253.3%	177.2%
50%	537.9%	622.5%	499.7%	354.9%	696.3%	518.1%	356.2%	425.4%	279.2%	167.1%
60%	704.2%	789.8%	602.6%	410.9%	876.4%	617.0%	404.4%	474.9%	288.7%	139.9%
70%	913.8%	985.3%	710.1%	467.7%	1080.4%	712.7%	447.3%	499.1%	280.4%	101.3%
80%	1200.3%	1227.1%	827.4%	530.3%	1319.3%	802.8%	485.2%	483.7%	250.7%	58.8%
90%	1666.6%	1565.3%	971.2%	610.7%	1615.2%	880.2%	515.6%	396.6%	189.5%	21.0%

Table 5: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 40\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	144.3%	153.4%	118.1%	86.4%	158.9%	116.1%	84.6%	97.8%	73.7%	61.2%
20%	304.1%	317.5%	235.9%	163.5%	328.1%	231.4%	159.7%	191.2%	135.7%	106.0%
30%	483.3%	494.6%	353.6%	232.8%	509.5%	345.9%	226.3%	278.4%	185.2%	132.8%
40%	687.5%	688.0%	471.7%	295.8%	705.6%	459.0%	285.0%	357.1%	221.7%	141.6%
50%	925.5%	902.2%	591.0%	354.5%	920.0%	570.4%	337.1%	423.7%	244.8%	133.7%
60%	1211.6%	1144.6%	712.9%	411.2%	1158.0%	679.4%	383.3%	473.1%	253.6%	112.1%
70%	1572.2%	1428.0%	840.3%	468.8%	1427.6%	784.9%	424.7%	497.3%	246.7%	81.3%
80%	2065.1%	1778.5%	979.5%	532.3%	1743.3%	884.5%	461.5%	482.1%	221.1%	47.3%
90%	2867.5%	2268.9%	1150.2%	614.1%	2134.3%	970.2%	491.3%	395.4%	167.5%	16.9%

Table 6: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 60\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	125.9%	159.2%	150.8%	131.9%	181.5%	160.0%	137.3%	150.3%	130.8%	121.1%
20%	265.6%	330.6%	303.0%	251.5%	377.3%	323.0%	263.6%	300.7%	248.3%	220.9%
30%	422.6%	516.9%	457.2%	360.9%	590.5%	489.2%	379.9%	449.1%	350.2%	292.4%
40%	602.0%	721.7%	614.3%	462.4%	825.0%	658.9%	487.1%	592.3%	434.0%	329.1%
50%	811.6%	950.7%	775.7%	558.9%	1086.8%	832.5%	586.9%	725.2%	496.6%	327.1%
60%	1064.5%	1212.5%	943.9%	654.0%	1384.8%	1010.5%	681.1%	839.1%	534.1%	287.0%
70%	1384.6%	1522.8%	1123.8%	753.1%	1734.1%	1193.9%	772.0%	919.0%	540.4%	216.2%
80%	1824.7%	1913.4%	1326.3%	865.4%	2162.9%	1383.8%	862.1%	934.8%	504.7%	129.2%
90%	2547.9%	2475.0%	1585.2%	1015.0%	2739.7%	1580.5%	952.7%	813.3%	400.0%	47.0%

Table 7: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 60\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	216.7%	230.7%	178.2%	130.9%	239.8%	176.1%	129.1%	149.7%	114.0%	96.5%
20%	457.0%	479.1%	358.2%	250.0%	498.5%	355.5%	248.2%	299.4%	216.7%	176.2%
30%	727.1%	749.0%	540.6%	359.3%	780.2%	538.4%	358.2%	447.2%	306.0%	233.4%
40%	1035.7%	1045.9%	726.3%	461.0%	1090.1%	725.2%	460.0%	589.9%	379.7%	262.9%
50%	1396.3%	1377.7%	917.3%	558.1%	1436.0%	916.4%	555.0%	722.3%	435.1%	261.6%
60%	1831.4%	1757.2%	1116.5%	654.1%	1829.8%	1112.6%	645.2%	835.9%	468.7%	229.9%
70%	2382.2%	2206.9%	1329.6%	754.3%	2291.2%	1314.8%	732.5%	915.6%	475.2%	173.4%
80%	3139.4%	2773.2%	1569.7%	868.2%	2857.8%	1524.4%	819.3%	931.6%	444.8%	103.9%
90%	4383.8%	3587.2%	1877.0%	1020.1%	3620.1%	1741.8%	907.3%	810.8%	353.4%	37.9%

Table 8: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 80\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	168.1%	212.9%	202.3%	177.5%	243.5%	215.8%	186.4%	204.7%	180.0%	170.2%
20%	354.8%	443.5%	409.1%	342.0%	509.8%	441.3%	364.7%	419.5%	354.2%	330.5%
30%	565.2%	695.8%	621.6%	495.8%	804.1%	678.0%	536.3%	644.5%	520.1%	470.6%
40%	806.1%	975.4%	841.5%	641.9%	1133.9%	928.2%	703.2%	878.7%	674.7%	575.9%
50%	1088.5%	1290.9%	1071.6%	784.3%	1510.3%	1195.0%	868.1%	1119.8%	813.4%	627.4%
60%	1430.3%	1655.7%	1316.6%	928.6%	1950.8%	1483.6%	1035.4%	1361.0%	928.8%	605.5%
70%	1865.0%	2094.0%	1585.6%	1083.5%	2486.1%	1802.4%	1211.9%	1586.0%	1007.8%	499.3%
80%	2466.2%	2656.2%	1898.6%	1265.0%	3179.2%	2168.5%	1409.4%	1751.4%	1022.8%	321.8%
90%	3463.7%	3488.7%	2317.9%	1517.4%	4202.5%	2624.8%	1653.9%	1713.7%	899.6%	123.1%

Table 9: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 80\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	289.2%	308.5%	239.1%	176.2%	321.7%	237.5%	175.2%	203.8%	156.9%	135.6%
20%	610.5%	642.7%	483.6%	339.9%	673.5%	485.6%	343.3%	417.7%	308.9%	263.5%
30%	972.4%	1008.3%	734.8%	493.3%	1062.4%	746.1%	505.5%	641.8%	454.1%	375.4%
40%	1386.9%	1413.5%	994.9%	639.6%	1498.2%	1021.5%	663.6%	875.1%	589.7%	459.7%
50%	1872.7%	1870.6%	1267.1%	782.7%	1995.5%	1315.3%	820.3%	1115.2%	711.8%	501.3%
60%	2460.8%	2399.4%	1557.1%	928.2%	2577.5%	1633.2%	979.9%	1355.5%	814.1%	484.5%
70%	3208.7%	3034.6%	1875.7%	1084.6%	3284.8%	1984.6%	1148.7%	1579.9%	885.0%	400.3%
80%	4243.1%	3849.5%	2246.7%	1268.4%	4200.7%	2388.2%	1338.2%	1745.0%	900.2%	258.5%
90%	5959.3%	5056.2%	2744.0%	1523.9%	5552.9%	2891.9%	1573.3%	1708.1%	794.0%	99.1%

Table 10: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 100\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	210.3%	266.9%	254.4%	224.1%	306.2%	273.0%	237.2%	261.4%	232.5%	224.8%
20%	444.4%	557.7%	517.8%	436.2%	645.7%	565.6%	473.7%	549.9%	475.9%	470.4%
30%	708.6%	878.1%	792.5%	639.0%	1027.0%	882.3%	712.5%	872.1%	733.7%	741.9%
40%	1012.0%	1236.1%	1081.4%	836.6%	1462.5%	1229.6%	958.1%	1238.0%	1011.2%	1046.9%
50%	1368.7%	1643.8%	1389.6%	1034.6%	1971.1%	1617.7%	1218.2%	1662.6%	1317.7%	1397.1%
60%	1801.9%	2120.7%	1725.4%	1241.4%	2584.4%	2063.0%	1505.1%	2171.1%	1668.9%	1812.4%
70%	2355.3%	2702.1%	2104.5%	1470.7%	3360.5%	2596.5%	1841.6%	2809.6%	2094.9%	2329.9%
80%	3125.5%	3462.8%	2562.0%	1750.0%	4427.5%	3286.5%	2276.9%	3680.5%	2664.0%	3034.3%
90%	4416.1%	4625.4%	3207.5%	2158.3%	6183.6%	4348.7%	2961.7%	5104.7%	3592.9%	4196.6%

Table 11: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 100\%$ age range $[10,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	361.8%	386.8%	300.7%	222.4%	404.6%	300.3%	223.0%	260.3%	202.6%	179.2%
20%	764.6%	808.2%	612.1%	433.3%	853.2%	622.3%	445.8%	547.5%	414.9%	374.9%
30%	1219.1%	1272.5%	936.8%	635.7%	1357.0%	970.8%	671.1%	868.4%	640.0%	591.4%
40%	1741.1%	1791.3%	1278.5%	833.4%	1932.3%	1353.2%	903.5%	1232.8%	882.7%	834.6%
50%	2354.8%	2382.1%	1643.0%	1032.1%	2604.4%	1780.4%	1150.1%	1655.7%	1151.2%	1114.0%
60%	3100.2%	3073.2%	2040.4%	1240.1%	3414.7%	2270.7%	1422.8%	2162.0%	1459.3%	1445.4%
70%	4052.3%	3915.7%	2489.2%	1471.3%	4440.1%	2858.3%	1743.2%	2798.0%	1833.6%	1858.9%
80%	5377.4%	5018.2%	3031.0%	1753.2%	5849.9%	3618.6%	2158.2%	3665.5%	2334.5%	2421.9%
90%	7597.7%	6703.1%	3796.0%	2165.6%	8170.2%	4789.4%	2811.6%	5084.4%	3152.7%	3351.9%

TABLES

Function: Beta

Age Range: 10–60

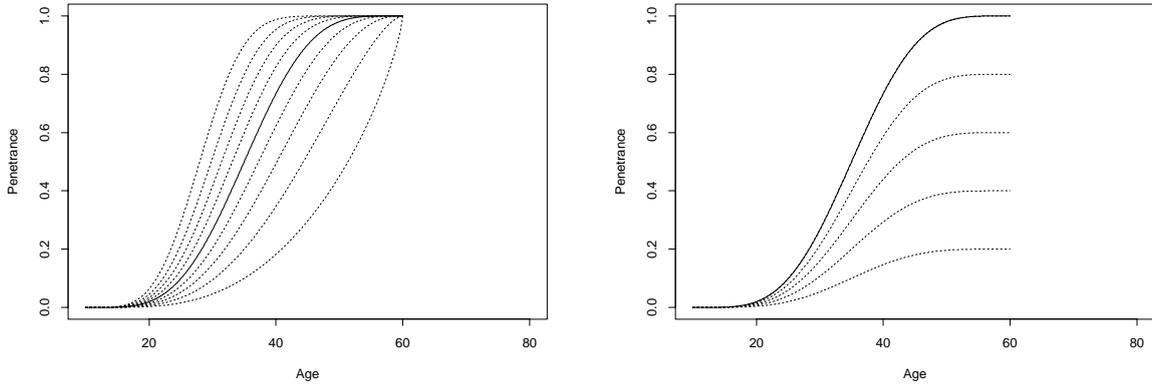


Figure 6: Proportional hazards family with Beta baseline curve for age range [10,60] with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 12: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [10,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	185.6%	208.8%	186.2%	154.1%	225.8%	190.8%	155.8%	173.4%	143.1%	125.4%
20%	384.4%	406.6%	322.1%	226.4%	429.1%	318.7%	216.3%	257.3%	165.0%	94.3%
30%	599.1%	593.4%	423.4%	275.3%	607.1%	399.2%	246.0%	275.1%	150.0%	50.3%
40%	833.6%	769.4%	501.8%	315.4%	755.9%	444.2%	261.0%	249.5%	123.2%	22.2%
50%	1093.3%	934.7%	566.0%	351.0%	870.8%	462.4%	265.7%	200.0%	93.2%	8.2%
60%	1387.1%	1090.0%	622.0%	384.0%	945.0%	458.9%	261.0%	142.1%	64.1%	2.4%
70%	1729.9%	1236.5%	674.4%	415.9%	968.3%	435.5%	246.5%	86.9%	38.6%	0.5%
80%	2151.6%	1376.9%	727.3%	448.6%	922.2%	389.1%	219.7%	41.8%	18.4%	0.0%
90%	2732.2%	1519.7%	786.5%	485.2%	762.6%	305.9%	172.4%	11.5%	5.1%	0.0%

Table 13: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [10,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	319.4%	302.6%	220.1%	153.2%	298.3%	210.0%	146.7%	172.7%	125.0%	100.3%
20%	661.4%	589.3%	380.9%	226.2%	567.0%	350.8%	204.7%	256.3%	144.8%	75.6%
30%	1030.9%	860.1%	501.1%	276.1%	802.1%	439.6%	233.6%	274.1%	132.1%	40.5%
40%	1434.3%	1115.2%	594.2%	316.9%	998.8%	489.5%	248.5%	248.7%	108.8%	17.9%
50%	1881.2%	1355.0%	670.4%	353.2%	1150.7%	509.7%	253.3%	199.4%	82.4%	6.6%
60%	2386.8%	1580.3%	737.1%	386.8%	1248.8%	506.1%	249.2%	141.8%	56.8%	1.9%
70%	2976.7%	1792.8%	799.5%	419.5%	1279.6%	480.4%	235.6%	86.7%	34.2%	0.4%
80%	3702.5%	1996.8%	862.6%	452.8%	1218.8%	429.3%	210.1%	41.7%	16.3%	0.0%
90%	4701.7%	2204.3%	933.2%	490.2%	1007.9%	337.6%	165.0%	11.5%	4.5%	0.0%

Table 14: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [10,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	372.4%	420.9%	377.4%	314.1%	460.6%	394.4%	326.5%	369.4%	313.6%	293.8%
20%	773.9%	826.6%	662.4%	471.3%	893.9%	680.3%	472.6%	580.1%	386.6%	239.2%
30%	1210.7%	1217.4%	884.0%	584.2%	1292.8%	879.4%	556.6%	651.7%	368.8%	131.9%
40%	1691.7%	1594.2%	1063.9%	680.6%	1647.9%	1008.8%	608.7%	615.4%	312.9%	58.9%
50%	2230.0%	1958.2%	1218.4%	769.2%	1946.4%	1080.9%	636.2%	508.8%	241.8%	21.7%
60%	2846.2%	2312.1%	1360.1%	854.4%	2169.7%	1102.5%	640.2%	369.5%	168.6%	6.3%
70%	3576.2%	2661.2%	1499.2%	940.1%	2288.5%	1073.8%	618.2%	229.1%	102.3%	1.2%
80%	4493.3%	3017.0%	1646.6%	1031.5%	2250.4%	983.8%	562.6%	111.0%	49.0%	0.1%
90%	5799.3%	3413.8%	1822.7%	1140.2%	1929.7%	792.9%	450.3%	30.7%	13.5%	0.0%

Table 15: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [10,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	640.8%	610.0%	446.2%	312.3%	608.6%	434.0%	307.5%	367.8%	273.7%	234.8%
20%	1331.5%	1198.0%	783.5%	471.0%	1181.1%	748.9%	447.1%	577.8%	339.0%	191.8%
30%	2083.1%	1764.5%	1046.0%	585.6%	1708.2%	968.4%	528.4%	649.3%	324.6%	106.1%
40%	2910.7%	2310.7%	1259.5%	683.6%	2177.5%	1111.4%	579.1%	613.3%	276.1%	47.5%
50%	3836.9%	2838.5%	1443.1%	773.7%	2571.9%	1191.3%	606.2%	507.2%	213.8%	17.5%
60%	4897.3%	3351.9%	1611.6%	860.4%	2867.0%	1215.7%	610.8%	368.5%	149.3%	5.1%
70%	6153.5%	3858.4%	1777.0%	947.6%	3024.3%	1184.5%	590.5%	228.6%	90.7%	1.0%
80%	7731.8%	4374.9%	1952.5%	1040.7%	2974.0%	1085.6%	537.9%	110.8%	43.5%	0.1%
90%	9979.4%	4951.2%	2162.1%	1151.5%	2550.4%	875.2%	431.0%	30.7%	12.0%	0.0%

Table 16: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [10,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	560.4%	636.4%	573.8%	479.3%	705.0%	611.8%	513.3%	592.3%	518.9%	531.1%
20%	1168.4%	1260.4%	1021.2%	734.8%	1398.8%	1092.7%	778.3%	996.5%	698.1%	489.8%
30%	1834.9%	1873.3%	1383.3%	929.4%	2072.8%	1464.7%	957.1%	1197.5%	715.3%	287.0%
40%	2575.2%	2477.7%	1691.6%	1103.1%	2714.6%	1744.7%	1089.3%	1202.5%	641.2%	131.3%
50%	3412.1%	3078.1%	1970.5%	1269.2%	3305.2%	1943.1%	1182.5%	1047.2%	515.6%	48.8%
60%	4381.8%	3682.7%	2239.3%	1435.6%	3814.2%	2062.0%	1234.6%	791.1%	369.2%	14.1%
70%	5548.8%	4306.7%	2516.9%	1610.3%	4188.0%	2091.3%	1236.5%	503.8%	227.5%	2.8%
80%	7046.8%	4983.3%	2827.6%	1806.5%	4319.7%	1998.5%	1167.2%	247.8%	110.0%	0.3%
90%	9256.4%	5810.1%	3226.5%	2056.7%	3932.6%	1685.3%	970.6%	69.0%	30.4%	0.0%

Table 17: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [10,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	964.2%	922.3%	678.3%	476.6%	931.5%	673.2%	483.2%	589.7%	452.6%	424.1%
20%	2010.3%	1826.6%	1207.7%	734.0%	1848.2%	1202.8%	736.0%	992.5%	611.6%	392.5%
30%	3157.1%	2715.0%	1636.7%	931.1%	2738.8%	1612.8%	908.0%	1192.9%	628.9%	230.8%
40%	4430.9%	3591.1%	2002.4%	1107.4%	3586.9%	1921.9%	1035.6%	1198.3%	565.4%	105.8%
50%	5870.8%	4461.7%	2333.4%	1276.0%	4367.4%	2141.3%	1126.1%	1043.9%	455.6%	39.4%
60%	7539.5%	5338.4%	2652.8%	1444.8%	5040.0%	2273.2%	1177.2%	789.0%	326.8%	11.4%
70%	9547.5%	6243.5%	2982.7%	1622.2%	5534.2%	2306.4%	1180.4%	502.6%	201.7%	2.3%
80%	12125.3%	7225.2%	3352.1%	1821.4%	5708.6%	2204.8%	1115.5%	247.3%	97.6%	0.2%
90%	15927.9%	8425.5%	3826.3%	2075.7%	5197.4%	1860.0%	928.7%	68.9%	27.0%	0.0%

Table 18: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [10,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	749.5%	855.2%	775.1%	648.3%	959.5%	844.2%	716.7%	848.0%	768.9%	888.3%
20%	1568.1%	1708.1%	1397.4%	1013.9%	1948.9%	1564.9%	1143.0%	1552.4%	1160.3%	1023.9%
30%	2472.2%	2561.8%	1919.8%	1309.5%	2966.8%	2186.3%	1481.9%	2054.5%	1336.7%	694.6%
40%	3485.1%	3422.3%	2385.5%	1586.1%	4009.6%	2729.2%	1780.5%	2291.2%	1336.6%	339.6%
50%	4641.9%	4300.1%	2828.7%	1862.3%	5068.6%	3205.2%	2046.1%	2215.4%	1179.4%	129.0%
60%	5999.1%	5213.9%	3279.3%	2151.5%	6124.2%	3612.6%	2271.4%	1837.0%	906.7%	37.5%
70%	7658.4%	6199.8%	3770.5%	2470.8%	7128.6%	3927.1%	2434.4%	1255.9%	585.6%	7.5%
80%	9835.7%	7336.9%	4355.1%	2851.5%	7950.9%	4073.8%	2483.3%	645.5%	290.3%	0.8%
90%	13165.4%	8862.7%	5170.2%	3379.9%	8122.0%	3809.6%	2267.4%	183.3%	81.0%	0.0%

Table 19: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 80\%$ age range $[10,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	1289.5%	1239.4%	916.2%	644.6%	1267.8%	928.9%	674.5%	844.4%	670.2%	708.8%
20%	2698.0%	2475.4%	1652.5%	1012.6%	2575.0%	1722.4%	1080.3%	1545.9%	1015.4%	819.5%
30%	4253.6%	3712.8%	2271.3%	1311.6%	3920.0%	2407.2%	1404.6%	2046.4%	1173.7%	558.0%
40%	5996.4%	4960.0%	2823.3%	1591.5%	5297.8%	3005.9%	1691.1%	2282.8%	1176.8%	273.6%
50%	7986.7%	6232.5%	3349.1%	1871.1%	6697.3%	3531.4%	1946.3%	2208.1%	1040.9%	104.2%
60%	10321.9%	7557.4%	3884.0%	2163.9%	8092.2%	3981.7%	2163.3%	1831.7%	801.9%	30.4%
70%	13177.0%	8987.0%	4467.1%	2487.3%	9419.6%	4329.8%	2321.3%	1252.9%	518.8%	6.1%
80%	16923.6%	10636.3%	5161.1%	2872.8%	10506.7%	4493.1%	2370.7%	644.3%	257.5%	0.6%
90%	22653.3%	12849.9%	6129.1%	3408.1%	10733.7%	4203.5%	2167.6%	183.1%	72.0%	0.0%

Table 20: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 100\%$ age range $[10,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	939.8%	1077.5%	981.0%	818.0%	1224.8%	1092.8%	934.9%	1144.1%	1073.9%	1477.2%
20%	1973.1%	2170.0%	1788.3%	1296.0%	2550.1%	2106.0%	1563.2%	2327.1%	1872.5%	2811.8%
30%	3122.9%	3283.3%	2483.9%	1704.6%	3999.6%	3077.5%	2149.6%	3568.3%	2641.5%	4100.7%
40%	4422.3%	4428.0%	3124.8%	2104.9%	5607.9%	4056.2%	2768.2%	4901.7%	3479.6%	5483.1%
50%	5921.6%	5622.3%	3761.2%	2521.3%	7428.6%	5102.9%	3456.7%	6384.4%	4442.8%	7075.6%
60%	7702.8%	6900.0%	4441.2%	2976.7%	9551.3%	6296.9%	4259.8%	8113.9%	5599.0%	9002.3%
70%	9915.7%	8327.8%	5223.8%	3505.4%	12145.0%	7761.2%	5253.8%	10270.0%	7068.0%	11446.8%
80%	12884.3%	10059.8%	6215.2%	4176.6%	15590.2%	9746.0%	6604.7%	13245.2%	9114.5%	14336.2%
90%	17590.3%	12585.7%	7724.1%	5198.4%	21108.4%	13019.6%	8833.8%	18263.0%	12576.5%	3611.6%

Table 21: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 100\%$ age range $[10,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	1616.9%	1561.5%	1159.6%	813.4%	1618.3%	1202.3%	879.7%	1139.1%	935.4%	1176.9%
20%	3394.8%	3144.7%	2114.7%	1294.5%	3369.4%	2317.8%	1477.0%	2317.0%	1636.2%	2241.6%
30%	5373.1%	4758.3%	2938.5%	1707.2%	5284.6%	3387.9%	2036.4%	3553.3%	2313.5%	3272.7%
40%	7608.8%	6417.3%	3698.0%	2111.6%	7409.6%	4466.7%	2626.8%	4881.6%	3052.2%	4380.1%
50%	10188.4%	8148.4%	4452.7%	2532.4%	9815.3%	5620.8%	3283.9%	6359.1%	3901.4%	5656.3%
60%	13253.1%	10000.4%	5259.1%	2992.5%	12620.1%	6937.7%	4050.4%	8082.9%	4920.8%	7200.6%
70%	17060.6%	12070.4%	6187.4%	3526.6%	16047.2%	8552.8%	4999.2%	10232.3%	6216.0%	9160.1%
80%	22168.3%	14581.6%	7363.3%	4204.7%	20599.7%	10742.1%	6288.6%	13198.6%	8020.5%	11480.5%
90%	30265.4%	18244.3%	9152.8%	5236.8%	27891.6%	14353.0%	8416.2%	18201.8%	11073.3%	2921.5%

TABLES

Function: Beta

Age Range: 20–80

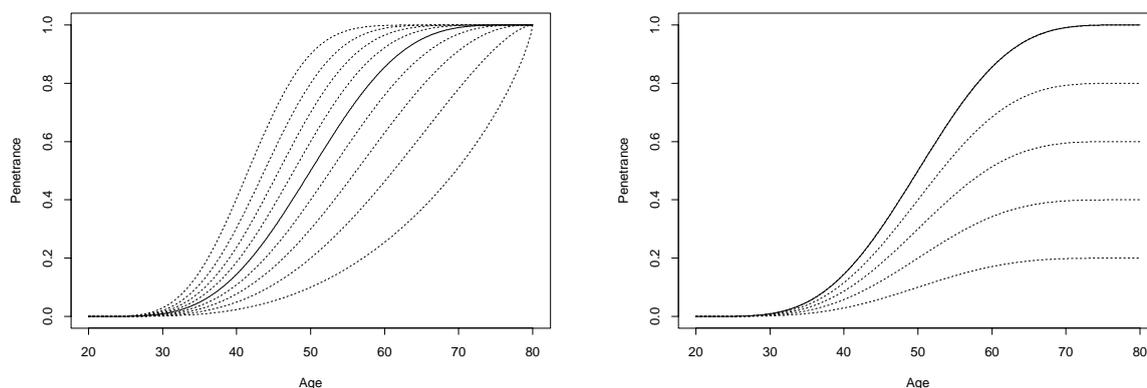


Figure 7: Proportional hazards family with Beta baseline curve for age range $[20,80]$ with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 22: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 20\%$ age range $[20,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
10%	4.3%	18.8%	27.5%	29.0%	27.7%	33.2%	32.8%	37.2%	35.2%	34.6%
20%	9.0%	39.3%	55.6%	55.1%	58.0%	67.3%	62.5%	74.5%	65.9%	61.4%
30%	14.4%	62.0%	84.4%	78.5%	91.6%	102.4%	89.3%	111.7%	92.3%	80.3%
40%	20.6%	87.5%	114.3%	99.6%	129.3%	138.8%	113.6%	148.8%	114.4%	91.0%
50%	27.9%	116.8%	145.4%	118.8%	172.4%	176.7%	135.6%	185.2%	132.0%	93.6%
60%	36.9%	151.2%	178.1%	136.5%	223.2%	216.8%	156.1%	220.4%	145.2%	88.4%
70%	48.4%	193.4%	213.3%	153.6%	285.6%	259.8%	175.6%	253.3%	153.5%	75.7%
80%	64.5%	249.2%	252.5%	171.2%	367.8%	307.4%	195.4%	281.0%	155.9%	56.3%
90%	91.9%	335.3%	300.2%	192.5%	494.1%	364.7%	218.6%	294.6%	148.4%	30.9%

Table 23: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 20\%$ age range $[20,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
10%	7.3%	27.2%	32.4%	28.6%	36.6%	36.5%	30.8%	37.0%	30.6%	27.6%
20%	15.5%	56.9%	65.6%	54.4%	76.7%	74.0%	58.7%	74.2%	57.5%	49.0%
30%	24.8%	89.8%	99.7%	77.7%	121.0%	112.6%	83.9%	111.3%	80.6%	64.0%
40%	35.4%	126.8%	134.9%	98.7%	170.8%	152.7%	106.8%	148.1%	100.0%	72.7%
50%	48.0%	169.1%	171.6%	117.9%	227.8%	194.4%	127.8%	184.4%	115.5%	74.8%
60%	63.4%	218.9%	210.3%	135.7%	294.9%	238.5%	147.3%	219.5%	127.3%	70.7%
70%	83.2%	280.2%	251.9%	153.0%	377.3%	285.8%	166.0%	252.3%	134.8%	60.7%
80%	110.9%	361.0%	298.3%	170.8%	485.9%	338.4%	185.1%	279.9%	137.2%	45.2%
90%	158.1%	485.6%	354.8%	192.5%	652.8%	401.5%	207.6%	293.6%	131.0%	24.8%

Table 24: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 40\%$ age range $[20,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
10%	8.5%	37.6%	55.0%	58.3%	55.5%	66.8%	66.3%	75.2%	71.7%	71.6%
20%	18.0%	78.7%	111.7%	111.3%	116.5%	136.0%	127.5%	152.3%	137.0%	131.6%
30%	28.8%	124.3%	170.2%	159.5%	184.2%	208.2%	184.0%	231.4%	195.7%	177.9%
40%	41.2%	175.6%	231.1%	203.4%	260.6%	283.9%	236.3%	312.4%	247.3%	208.5%
50%	55.9%	234.5%	294.9%	243.8%	348.6%	364.1%	285.2%	395.0%	291.5%	221.6%
60%	73.8%	304.0%	362.7%	281.8%	452.8%	450.2%	331.8%	478.5%	327.6%	215.8%
70%	96.8%	389.6%	436.3%	318.9%	581.7%	544.7%	377.7%	561.4%	354.4%	190.3%
80%	129.1%	503.1%	519.4%	357.9%	753.4%	652.5%	426.2%	639.0%	369.3%	145.0%
90%	184.0%	679.1%	622.4%	405.9%	1021.8%	787.6%	485.4%	694.6%	362.9%	81.1%

Table 25: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	14.7%	54.4%	65.0%	57.6%	73.3%	73.4%	62.1%	74.9%	62.4%	57.1%
20%	31.0%	114.0%	131.8%	110.0%	153.9%	149.5%	119.6%	151.7%	119.4%	104.9%
30%	49.5%	180.0%	200.9%	157.8%	243.3%	228.9%	172.8%	230.4%	170.7%	141.9%
40%	70.9%	254.3%	272.8%	201.5%	344.3%	312.2%	222.3%	311.0%	216.0%	166.5%
50%	96.1%	339.6%	348.2%	241.9%	460.5%	400.5%	268.6%	393.3%	254.9%	177.1%
60%	126.9%	440.3%	428.3%	280.0%	598.2%	495.3%	313.0%	476.5%	286.9%	172.7%
70%	166.4%	564.3%	515.3%	317.4%	768.5%	599.3%	356.9%	559.1%	311.0%	152.5%
80%	222.0%	728.6%	613.5%	356.9%	995.4%	718.0%	403.5%	636.6%	324.7%	116.4%
90%	316.4%	983.6%	735.5%	405.7%	1350.0%	867.0%	460.6%	692.2%	320.0%	65.3%

Table 26: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	12.8%	56.4%	82.8%	87.9%	83.4%	100.6%	100.4%	114.0%	109.6%	111.3%
20%	27.1%	118.2%	168.4%	168.7%	175.3%	206.1%	195.2%	233.7%	213.9%	212.4%
30%	43.2%	186.9%	257.3%	243.0%	277.9%	317.4%	284.6%	359.9%	312.1%	299.2%
40%	61.8%	264.2%	350.5%	311.6%	394.1%	435.8%	369.5%	493.2%	403.8%	366.3%
50%	83.8%	353.2%	448.8%	375.6%	528.6%	563.1%	451.1%	634.5%	487.9%	407.4%
60%	110.7%	458.5%	554.2%	436.7%	688.9%	702.3%	531.2%	784.8%	563.5%	415.6%
70%	145.2%	588.5%	669.7%	497.3%	888.9%	858.6%	613.1%	944.3%	628.7%	383.7%
80%	193.8%	761.6%	801.8%	562.2%	1158.3%	1042.5%	703.0%	1111.1%	679.2%	305.6%
90%	276.2%	1031.9%	969.0%	643.7%	1586.8%	1284.0%	818.4%	1268.9%	700.0%	177.7%

Table 27: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	22.0%	81.6%	97.7%	86.8%	110.2%	110.6%	94.1%	113.5%	95.4%	88.7%
20%	46.5%	171.2%	198.7%	166.7%	231.6%	226.7%	183.0%	232.7%	186.3%	169.3%
30%	74.3%	270.6%	303.8%	240.4%	367.1%	349.0%	267.2%	358.3%	272.2%	238.6%
40%	106.3%	382.7%	413.7%	308.6%	520.6%	479.2%	347.4%	491.1%	352.4%	292.3%
50%	144.2%	511.5%	529.9%	372.6%	698.3%	619.3%	424.6%	631.8%	426.4%	325.5%
60%	190.3%	664.0%	654.4%	433.8%	910.2%	772.5%	500.8%	781.5%	493.2%	332.4%
70%	249.7%	852.4%	790.9%	494.8%	1174.4%	944.5%	578.9%	940.4%	551.2%	307.3%
80%	333.2%	1103.1%	947.1%	560.4%	1530.3%	1147.1%	665.1%	1106.7%	596.7%	245.2%
90%	475.0%	1494.6%	1145.0%	642.9%	2096.4%	1413.3%	776.0%	1264.3%	616.6%	143.0%

Table 28: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	17.0%	75.2%	110.6%	117.9%	111.4%	134.9%	135.3%	153.7%	149.0%	153.9%
20%	36.1%	157.8%	225.6%	227.4%	234.6%	277.8%	265.6%	319.0%	297.2%	306.6%
30%	57.6%	249.7%	345.9%	329.3%	372.6%	430.3%	391.6%	498.2%	444.4%	454.0%
40%	82.5%	353.4%	472.5%	424.6%	529.7%	594.9%	514.5%	694.1%	590.5%	589.2%
50%	111.8%	472.9%	607.3%	514.8%	712.5%	774.8%	636.0%	910.8%	735.8%	701.5%
60%	147.6%	614.7%	752.9%	602.2%	931.9%	975.4%	759.4%	1154.1%	880.6%	773.8%
70%	193.7%	790.3%	914.3%	690.5%	1207.9%	1206.2%	890.4%	1433.0%	1025.5%	780.4%
80%	258.5%	1025.1%	1101.3%	786.7%	1583.9%	1486.9%	1041.0%	1761.7%	1170.4%	684.2%
90%	368.7%	1394.0%	1343.0%	910.2%	2193.0%	1874.8%	1245.7%	2163.2%	1307.2%	438.4%

Table 29: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	29.3%	108.9%	130.6%	116.3%	147.1%	148.3%	126.7%	153.0%	129.7%	122.6%
20%	62.0%	228.6%	266.3%	224.7%	309.9%	305.4%	249.1%	317.6%	258.8%	244.4%
30%	99.1%	361.6%	408.2%	325.7%	492.2%	473.2%	367.6%	496.0%	387.2%	362.0%
40%	141.8%	511.8%	557.8%	420.4%	699.8%	654.2%	483.4%	691.1%	515.0%	470.0%
50%	192.3%	684.9%	716.9%	510.4%	941.3%	852.1%	598.3%	906.9%	642.4%	559.9%
60%	253.9%	890.2%	889.0%	598.0%	1231.2%	1072.8%	715.4%	1149.2%	769.9%	618.3%
70%	333.2%	1144.7%	1079.6%	686.7%	1595.8%	1326.8%	840.1%	1427.0%	897.9%	624.5%
80%	444.5%	1484.6%	1300.8%	783.7%	2092.6%	1635.9%	983.9%	1754.6%	1026.7%	548.6%
90%	633.9%	2019.0%	1586.7%	908.7%	2897.3%	2063.3%	1179.9%	2154.9%	1149.6%	352.6%

Table 30: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	21.3%	94.1%	138.6%	148.1%	139.5%	169.4%	170.8%	194.2%	190.1%	199.8%
20%	45.1%	197.5%	283.5%	287.3%	294.3%	350.9%	339.0%	408.4%	387.9%	417.8%
30%	72.0%	312.8%	435.8%	418.4%	468.4%	547.1%	505.7%	647.4%	595.8%	658.4%
40%	103.1%	443.1%	597.3%	542.7%	667.5%	761.8%	672.8%	918.6%	817.3%	928.3%
50%	139.8%	593.6%	770.5%	662.0%	900.6%	1000.5%	843.4%	1232.8%	1058.5%	1237.4%
60%	184.6%	772.6%	959.3%	779.5%	1182.1%	1272.2%	1023.1%	1608.3%	1329.6%	1602.7%
70%	242.3%	995.0%	1170.8%	900.2%	1539.3%	1593.2%	1222.2%	2078.3%	1650.7%	2055.8%
80%	323.3%	1293.5%	1419.5%	1034.6%	2031.8%	1997.9%	1463.1%	2716.1%	2067.5%	2668.0%
90%	461.2%	1765.8%	1747.6%	1211.2%	2845.3%	2589.9%	1814.0%	3748.1%	2725.4%	3667.7%

Table 31: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	36.6%	136.2%	163.6%	146.2%	184.2%	186.3%	160.0%	193.4%	165.4%	159.2%
20%	77.5%	286.1%	334.6%	283.8%	388.8%	385.9%	317.8%	406.6%	337.6%	332.8%
30%	123.9%	453.0%	514.4%	413.7%	618.8%	601.6%	474.5%	644.6%	518.9%	524.6%
40%	177.3%	641.8%	705.1%	537.2%	881.9%	837.7%	631.9%	914.5%	712.2%	739.7%
50%	240.4%	859.7%	909.6%	656.1%	1189.7%	1100.2%	793.0%	1227.4%	923.0%	986.2%
60%	317.5%	1118.9%	1132.6%	773.6%	1561.7%	1399.1%	963.1%	1601.2%	1160.4%	1277.6%
70%	416.6%	1441.1%	1382.4%	894.8%	2033.6%	1752.2%	1152.0%	2069.3%	1442.2%	1639.3%
80%	556.0%	1873.4%	1676.3%	1030.1%	2684.3%	2197.7%	1381.3%	2704.4%	1808.6%	2128.5%
90%	793.1%	2557.3%	2064.4%	1208.3%	3759.0%	2849.6%	1715.8%	3732.3%	2387.8%	2928.1%

TABLES

Function: Beta

Age Range: 20–60

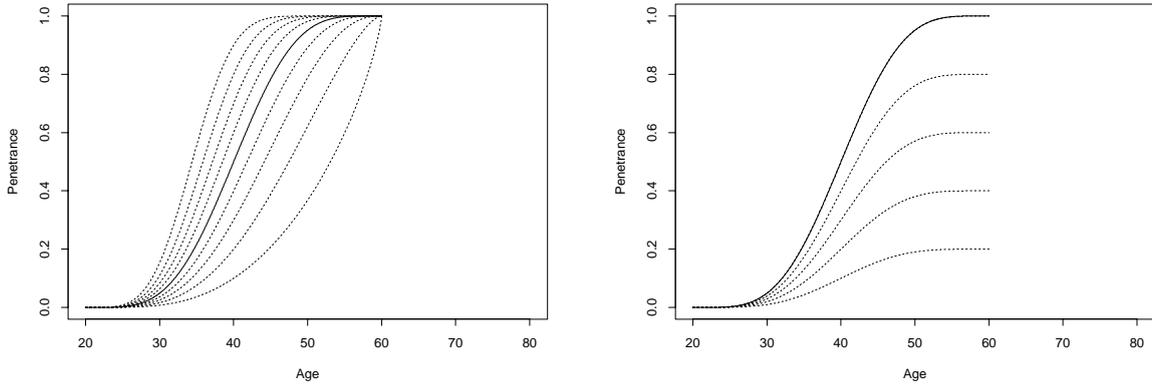


Figure 8: Proportional hazards family with Beta baseline curve for age range [20,60] with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 32: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [20,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	23.8%	81.6%	105.0%	103.1%	117.6%	126.2%	117.1%	135.0%	122.4%	118.4%
20%	50.3%	164.6%	186.6%	145.5%	237.2%	224.4%	165.1%	224.2%	153.4%	101.2%
30%	80.0%	249.5%	249.6%	171.9%	358.8%	299.8%	193.9%	273.3%	156.4%	63.9%
40%	114.0%	336.4%	298.8%	192.9%	482.5%	357.1%	215.7%	289.0%	147.9%	34.6%
50%	153.8%	426.1%	338.1%	211.4%	608.7%	400.8%	233.7%	277.5%	132.7%	16.2%
60%	201.8%	519.4%	371.0%	228.7%	737.5%	434.3%	249.0%	245.3%	112.5%	6.3%
70%	262.7%	617.7%	400.7%	245.9%	868.9%	460.6%	262.1%	197.8%	88.6%	1.8%
80%	346.7%	724.4%	430.8%	264.1%	1002.5%	481.4%	273.2%	139.2%	61.7%	0.3%
90%	485.3%	848.4%	466.7%	286.4%	1134.5%	495.9%	281.0%	72.9%	32.1%	0.0%

Table 33: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [20,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	41.0%	118.2%	124.0%	102.0%	155.4%	138.8%	109.9%	134.4%	106.7%	94.5%
20%	86.4%	238.5%	220.3%	144.7%	313.4%	246.9%	155.8%	223.2%	134.4%	81.1%
30%	137.5%	361.4%	294.9%	171.5%	474.0%	329.9%	183.6%	272.3%	137.6%	51.4%
40%	196.0%	487.3%	353.2%	192.9%	637.6%	393.2%	204.8%	287.9%	130.5%	27.9%
50%	264.4%	617.2%	399.7%	211.7%	804.3%	441.4%	222.2%	276.7%	117.2%	13.1%
60%	347.0%	752.4%	438.8%	229.4%	974.4%	478.6%	237.1%	244.6%	99.6%	5.1%
70%	451.8%	894.9%	474.2%	246.9%	1148.1%	507.8%	249.9%	197.3%	78.5%	1.5%
80%	596.3%	1049.5%	510.0%	265.5%	1324.6%	530.9%	260.7%	138.9%	54.7%	0.3%
90%	834.6%	1229.3%	552.8%	288.2%	1499.2%	547.1%	268.5%	72.8%	28.5%	0.0%

Table 34: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [20,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	47.6%	163.7%	212.2%	210.5%	237.1%	257.7%	243.5%	281.9%	264.1%	272.7%
20%	100.5%	331.4%	380.4%	301.1%	482.1%	467.3%	352.5%	488.1%	348.8%	251.6%
30%	160.1%	503.8%	513.4%	359.3%	735.8%	635.9%	422.9%	618.8%	369.8%	165.2%
40%	228.2%	682.0%	619.5%	406.6%	999.7%	771.2%	479.0%	677.9%	360.6%	91.1%
50%	308.0%	867.4%	706.3%	449.2%	1275.3%	880.5%	527.4%	672.3%	331.4%	43.0%
60%	404.5%	1062.3%	780.9%	489.6%	1565.0%	970.8%	570.8%	611.1%	286.8%	16.7%
70%	526.9%	1270.4%	850.0%	530.1%	1871.9%	1048.1%	610.5%	504.5%	229.6%	4.9%
80%	696.0%	1499.9%	921.3%	573.9%	2201.2%	1116.8%	647.1%	362.2%	161.9%	0.8%
90%	975.6%	1773.4%	1008.5%	628.5%	2560.0%	1178.3%	679.6%	192.5%	85.2%	0.0%

Table 35: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 40\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	81.9%	237.0%	250.5%	208.2%	313.3%	283.5%	228.5%	280.7%	230.1%	217.7%
20%	172.9%	480.0%	449.2%	299.2%	636.9%	514.0%	332.5%	486.1%	305.4%	201.6%
30%	275.3%	729.8%	606.5%	358.2%	972.2%	699.8%	400.2%	616.4%	325.0%	132.8%
40%	392.5%	987.9%	732.1%	406.4%	1320.8%	848.9%	454.4%	675.5%	317.7%	73.4%
50%	529.6%	1256.5%	835.0%	449.7%	1685.0%	969.7%	501.3%	670.1%	292.6%	34.7%
60%	695.5%	1538.7%	923.6%	490.7%	2067.7%	1069.6%	543.3%	609.3%	253.7%	13.5%
70%	906.1%	1840.3%	1005.7%	532.0%	2473.3%	1155.1%	581.8%	503.2%	203.3%	3.9%
80%	1196.8%	2172.9%	1090.5%	576.6%	2908.4%	1231.3%	617.4%	361.4%	143.5%	0.7%
90%	1677.7%	2569.4%	1194.2%	632.1%	3382.8%	1299.7%	649.1%	192.2%	75.6%	0.0%

Table 36: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 60\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	71.5%	246.2%	321.5%	322.3%	358.5%	394.8%	380.2%	442.6%	430.1%	482.3%
20%	150.9%	500.2%	581.9%	467.7%	735.1%	730.9%	567.2%	803.5%	606.0%	499.1%
30%	240.3%	763.2%	792.5%	564.4%	1132.7%	1015.3%	697.4%	1069.4%	677.8%	350.3%
40%	342.7%	1037.2%	964.5%	644.9%	1555.4%	1256.9%	807.5%	1229.7%	692.0%	199.9%
50%	462.7%	1324.8%	1108.9%	718.6%	2008.4%	1465.2%	907.9%	1278.4%	661.9%	95.9%
60%	608.0%	1630.3%	1236.2%	789.8%	2500.0%	1650.4%	1003.1%	1215.0%	592.8%	37.5%
70%	792.6%	1961.0%	1357.2%	862.5%	3042.7%	1823.0%	1096.1%	1044.6%	488.6%	11.0%
80%	1047.8%	2332.0%	1484.9%	942.5%	3660.0%	1993.8%	1190.2%	777.0%	353.0%	1.9%
90%	1471.0%	2785.9%	1644.8%	1044.2%	4404.8%	2176.6%	1289.3%	425.0%	189.3%	0.1%

Table 37: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 60\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	122.9%	356.6%	379.5%	318.7%	473.6%	434.2%	356.7%	440.6%	374.4%	384.7%
20%	259.5%	724.5%	687.1%	464.5%	971.1%	803.9%	534.6%	800.1%	530.1%	399.6%
30%	413.3%	1105.5%	936.1%	562.4%	1496.5%	1117.1%	659.5%	1065.1%	595.1%	281.4%
40%	589.4%	1502.4%	1139.8%	644.2%	2054.9%	1383.4%	765.4%	1225.1%	609.3%	161.1%
50%	795.7%	1919.0%	1310.9%	718.9%	2653.5%	1613.3%	862.2%	1274.0%	584.0%	77.4%
60%	1045.4%	2361.5%	1461.9%	791.2%	3303.0%	1817.9%	954.0%	1211.3%	524.0%	30.4%
70%	1362.9%	2840.7%	1605.6%	865.0%	4020.2%	2008.7%	1043.8%	1041.8%	432.6%	8.9%
80%	1801.8%	3378.2%	1757.3%	946.2%	4835.9%	2197.8%	1134.6%	775.3%	312.9%	1.5%
90%	2529.6%	4036.1%	1947.4%	1049.5%	5820.3%	2400.3%	1230.6%	424.2%	168.0%	0.1%

Table 38: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 80\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	95.3%	329.3%	433.1%	438.9%	481.7%	537.9%	528.7%	619.0%	627.1%	783.4%
20%	201.3%	671.2%	791.6%	646.5%	996.6%	1017.9%	815.5%	1187.1%	959.9%	981.9%
30%	320.7%	1027.8%	1088.3%	789.7%	1551.0%	1447.0%	1032.4%	1681.6%	1161.8%	795.9%
40%	457.5%	1402.3%	1336.8%	912.1%	2153.9%	1834.6%	1228.8%	2073.6%	1280.9%	495.8%
50%	618.0%	1799.2%	1551.0%	1026.4%	2818.5%	2193.4%	1420.0%	2327.8%	1320.3%	248.6%
60%	812.3%	2225.3%	1745.0%	1139.0%	3564.9%	2539.2%	1614.3%	2401.7%	1271.0%	99.3%
70%	1059.6%	2693.0%	1934.3%	1256.3%	4427.3%	2892.2%	1820.0%	2247.8%	1121.5%	29.2%
80%	1402.2%	3227.3%	2139.3%	1388.1%	5473.9%	3282.9%	2050.7%	1817.8%	861.7%	5.1%
90%	1971.5%	3898.9%	2403.1%	1560.1%	6885.7%	3776.1%	2338.1%	1072.7%	487.0%	0.3%

Table 39: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [20,60].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	163.9%	477.0%	511.2%	433.8%	636.5%	591.5%	495.7%	616.2%	545.5%	624.3%
20%	346.2%	972.2%	934.7%	641.9%	1316.6%	1119.6%	768.0%	1181.9%	838.5%	785.1%
30%	551.5%	1488.7%	1285.4%	786.6%	2049.1%	1591.9%	975.4%	1674.5%	1018.4%	638.7%
40%	786.7%	2031.2%	1579.5%	910.5%	2845.7%	2019.0%	1163.7%	2065.4%	1125.8%	399.2%
50%	1062.6%	2606.0%	1833.1%	1026.3%	3723.8%	2414.6%	1347.1%	2319.2%	1163.1%	200.6%
60%	1396.8%	3223.3%	2063.2%	1140.3%	4709.9%	2796.2%	1533.5%	2393.6%	1121.9%	80.2%
70%	1822.2%	3900.8%	2287.8%	1259.2%	5849.4%	3186.0%	1731.0%	2241.3%	991.7%	23.6%
80%	2411.1%	4674.8%	2531.1%	1392.7%	7232.3%	3617.7%	1952.7%	1813.4%	763.3%	4.1%
90%	3390.2%	5648.1%	2844.3%	1566.8%	9098.0%	4163.0%	2229.2%	1070.7%	432.1%	0.2%

Table 40: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [20,60].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	119.2%	412.9%	546.9%	560.6%	607.0%	687.3%	690.5%	813.4%	864.7%	1252.3%
20%	251.8%	844.4%	1009.9%	839.0%	1267.0%	1331.8%	1105.9%	1663.5%	1477.4%	2339.4%
30%	401.2%	1297.8%	1402.4%	1038.6%	1992.3%	1942.5%	1450.5%	2561.2%	2032.5%	3360.6%
40%	572.6%	1777.8%	1739.7%	1213.8%	2800.6%	2533.2%	1788.9%	3525.1%	2616.5%	4433.7%
50%	773.7%	2291.4%	2038.6%	1381.4%	3718.4%	3125.5%	2146.6%	4586.3%	3274.6%	5656.0%
60%	1017.5%	2849.3%	2317.2%	1550.4%	4788.8%	3751.1%	2544.4%	5800.8%	4052.9%	7128.1%
70%	1328.2%	3470.3%	2596.9%	1730.4%	6090.0%	4462.7%	3014.3%	7276.8%	5029.3%	9002.9%
80%	1759.1%	4193.1%	2908.4%	1938.0%	7790.4%	5363.6%	3621.9%	9260.1%	6373.5%	11547.9%
90%	2477.3%	5128.2%	3321.9%	2217.3%	10400.5%	6754.6%	4567.7%	12531.8%	8621.6%	12863.5%

Table 41: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [20,60].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	205.0%	598.1%	645.6%	553.9%	801.9%	755.7%	647.0%	809.7%	751.5%	996.5%
20%	433.0%	1223.0%	1192.4%	832.6%	1673.9%	1464.7%	1040.5%	1656.0%	1288.0%	1863.1%
30%	689.9%	1879.7%	1656.2%	1033.9%	2632.2%	2136.7%	1368.9%	2549.9%	1776.5%	2679.5%
40%	984.6%	2575.0%	2055.2%	1210.9%	3700.1%	2787.2%	1691.8%	3509.8%	2291.2%	3538.9%
50%	1330.4%	3318.8%	2409.0%	1380.2%	4912.6%	3439.7%	2033.2%	4566.9%	2871.2%	4518.5%
60%	1749.7%	4126.9%	2739.1%	1551.0%	6326.9%	4129.4%	2412.9%	5777.0%	3557.5%	5698.4%
70%	2284.0%	5026.4%	3070.7%	1732.9%	8046.0%	4914.1%	2861.4%	7248.1%	4418.3%	7201.2%
80%	3025.0%	6073.4%	3440.1%	1942.6%	10292.6%	5907.7%	3441.4%	9225.2%	5603.5%	9242.0%
90%	4259.9%	7428.3%	3930.5%	2224.8%	13741.2%	7442.1%	4344.2%	12487.1%	7585.8%	10324.7%

TABLES

Function: Beta

Age Range: 30–80

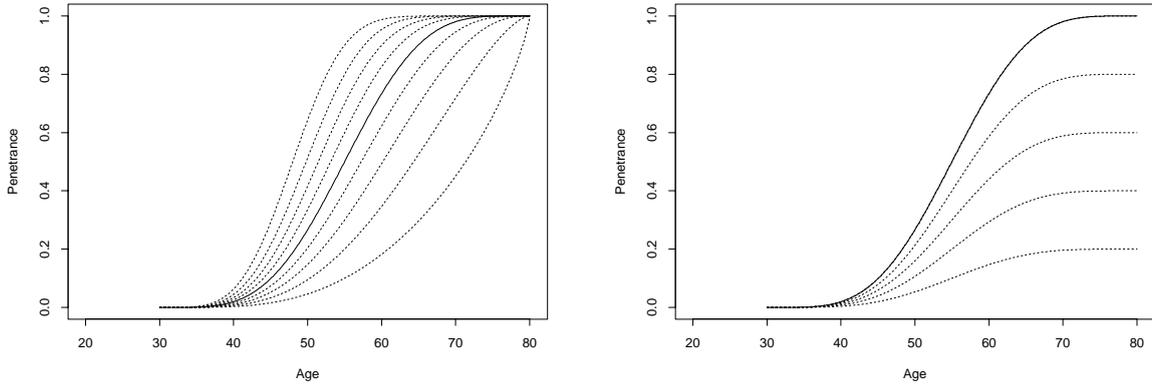


Figure 9: Proportional hazards family with Beta baseline curve for age range [30,80] with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 42: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [30,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	2.1%	10.9%	17.4%	3.4%	13.5%	19.9%	20.0%	25.0%	29.7%
20%	0.0%	4.5%	22.5%	33.8%	7.2%	28.0%	38.8%	41.5%	48.8%	56.5%
30%	0.0%	7.1%	35.1%	49.3%	11.5%	43.6%	56.7%	64.7%	71.4%	80.0%
40%	0.0%	10.2%	48.8%	63.8%	16.5%	60.7%	73.7%	90.1%	92.9%	99.7%
50%	0.0%	13.8%	64.0%	77.6%	22.3%	79.8%	89.8%	118.3%	113.2%	115.0%
60%	0.0%	18.2%	81.2%	90.6%	29.4%	101.4%	105.1%	150.1%	132.4%	125.0%
70%	0.0%	23.9%	101.4%	103.0%	38.5%	126.7%	120.0%	187.4%	150.6%	128.3%
80%	0.0%	31.7%	126.3%	115.4%	51.2%	158.2%	134.9%	233.2%	168.3%	122.5%
90%	0.0%	45.0%	161.1%	129.1%	72.6%	202.5%	151.7%	296.4%	186.5%	101.8%

Table 43: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [30,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	3.1%	12.8%	17.0%	4.5%	14.8%	18.5%	19.9%	21.7%	23.6%
20%	0.0%	6.5%	26.5%	33.2%	9.5%	30.7%	36.2%	41.3%	42.4%	45.0%
30%	0.0%	10.3%	41.3%	48.4%	15.2%	47.9%	52.9%	64.4%	62.1%	63.8%
40%	0.0%	14.8%	57.5%	62.8%	21.8%	66.7%	68.8%	89.7%	80.8%	79.5%
50%	0.0%	20.0%	75.4%	76.3%	29.5%	87.6%	83.9%	117.7%	98.5%	91.8%
60%	0.0%	26.4%	95.7%	89.2%	38.8%	111.3%	98.4%	149.4%	115.4%	99.9%
70%	0.0%	34.5%	119.5%	101.6%	50.8%	139.1%	112.4%	186.5%	131.5%	102.7%
80%	0.0%	45.9%	148.9%	114.0%	67.6%	173.7%	126.6%	232.1%	147.2%	98.2%
90%	0.0%	65.1%	190.0%	127.9%	95.9%	222.4%	142.7%	295.1%	163.6%	81.7%

Table 44: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [30,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	4.2%	21.8%	34.8%	6.8%	27.0%	40.0%	40.2%	50.4%	60.5%
20%	0.0%	9.0%	45.1%	67.9%	14.4%	56.1%	78.3%	83.6%	99.4%	117.7%
30%	0.0%	14.3%	70.3%	99.3%	23.1%	87.6%	115.0%	130.9%	147.1%	170.4%
40%	0.0%	20.4%	97.9%	129.0%	33.0%	122.2%	150.2%	183.1%	193.3%	217.5%
50%	0.0%	27.7%	128.5%	157.1%	44.6%	160.8%	183.9%	241.6%	238.2%	257.1%
60%	0.0%	36.5%	163.3%	183.9%	58.8%	204.9%	216.6%	308.7%	282.0%	286.8%
70%	0.0%	47.7%	204.0%	209.8%	77.1%	256.8%	248.6%	388.3%	325.4%	302.7%
80%	0.0%	63.5%	254.7%	235.9%	102.5%	321.9%	281.5%	488.4%	369.5%	298.0%
90%	0.0%	90.0%	325.8%	265.2%	145.5%	414.5%	319.6%	631.1%	418.7%	256.2%

Table 45: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [30,80].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	6.1%	25.6%	34.2%	9.0%	29.7%	37.2%	40.0%	43.7%	48.2%
20%	0.0%	13.0%	53.1%	66.7%	19.1%	61.6%	73.0%	83.2%	86.3%	93.7%
30%	0.0%	20.7%	82.8%	97.5%	30.5%	96.2%	107.3%	130.3%	127.7%	135.8%
40%	0.0%	29.6%	115.3%	126.8%	43.5%	134.2%	140.2%	182.2%	168.0%	173.4%
50%	0.0%	40.0%	151.4%	154.6%	59.0%	176.6%	171.8%	240.4%	207.3%	205.2%
60%	0.0%	52.8%	192.4%	181.2%	77.7%	225.0%	202.5%	307.2%	245.7%	229.1%
70%	0.0%	69.1%	240.5%	207.0%	101.8%	282.0%	232.8%	386.4%	283.9%	242.1%
80%	0.0%	91.9%	300.2%	233.1%	135.4%	353.5%	264.1%	486.1%	323.0%	238.7%
90%	0.0%	130.3%	384.1%	262.6%	192.2%	455.3%	300.5%	628.3%	366.9%	205.7%

Table 46: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [30,80].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	6.4%	32.7%	52.4%	10.2%	40.6%	60.3%	60.5%	76.3%	92.7%
20%	0.0%	13.4%	67.7%	102.4%	21.7%	84.4%	118.6%	126.4%	152.1%	184.3%
30%	0.0%	21.5%	105.7%	150.0%	34.6%	132.0%	175.0%	198.7%	227.3%	273.6%
40%	0.0%	30.7%	147.2%	195.4%	49.5%	184.5%	229.6%	279.1%	302.2%	358.7%
50%	0.0%	41.5%	193.5%	238.7%	67.0%	243.2%	282.7%	370.4%	377.1%	437.1%
60%	0.0%	54.7%	246.1%	280.2%	88.3%	310.6%	334.8%	476.3%	452.7%	504.4%
70%	0.0%	71.6%	308.1%	320.8%	115.7%	390.5%	386.9%	604.2%	530.7%	553.4%
80%	0.0%	95.3%	385.2%	361.9%	154.0%	491.4%	441.5%	768.9%	614.5%	570.1%
90%	0.0%	135.1%	494.3%	408.9%	218.7%	636.7%	506.3%	1012.3%	715.4%	518.8%

Table 47: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [30,80].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	9.2%	38.5%	51.4%	13.5%	44.6%	56.1%	60.2%	66.2%	73.8%
20%	0.0%	19.5%	79.8%	100.5%	28.6%	92.6%	110.5%	125.7%	132.0%	146.8%
30%	0.0%	31.0%	124.5%	147.3%	45.7%	144.9%	163.1%	197.7%	197.4%	217.9%
40%	0.0%	44.4%	173.5%	192.0%	65.3%	202.6%	214.2%	277.8%	262.6%	285.9%
50%	0.0%	60.1%	228.0%	234.8%	88.5%	267.1%	264.0%	368.6%	328.0%	348.6%
60%	0.0%	79.2%	290.1%	276.0%	116.7%	341.0%	313.0%	474.0%	394.2%	402.6%
70%	0.0%	103.7%	363.1%	316.3%	152.8%	428.8%	362.1%	601.3%	462.7%	442.3%
80%	0.0%	137.9%	454.1%	357.5%	203.4%	539.7%	413.9%	765.2%	536.7%	456.3%
90%	0.0%	195.6%	582.7%	404.7%	288.8%	699.3%	475.7%	1007.6%	626.3%	416.3%

Table 48: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [30,80].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	8.5%	43.6%	70.0%	13.7%	54.2%	80.7%	81.0%	102.8%	126.2%
20%	0.0%	17.9%	90.4%	137.2%	28.9%	112.8%	159.6%	169.7%	206.8%	257.0%
30%	0.0%	28.6%	141.2%	201.5%	46.1%	176.8%	236.7%	267.9%	312.6%	392.2%
40%	0.0%	40.9%	196.9%	263.2%	66.0%	247.5%	312.2%	378.3%	420.7%	531.2%
50%	0.0%	55.4%	259.0%	322.4%	89.4%	327.0%	386.6%	504.9%	532.3%	672.4%
60%	0.0%	73.0%	329.9%	379.7%	117.9%	418.5%	460.6%	653.9%	649.2%	812.7%
70%	0.0%	95.6%	413.4%	436.0%	154.5%	527.9%	536.0%	837.0%	775.3%	944.6%
80%	0.0%	127.1%	518.0%	493.9%	205.6%	667.1%	616.7%	1078.6%	919.3%	1049.2%
90%	0.0%	180.3%	666.7%	560.9%	292.1%	869.9%	715.3%	1450.1%	1108.2%	1063.8%

Table 49: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 80\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	12.3%	51.3%	68.6%	18.1%	59.5%	75.1%	80.6%	89.1%	100.5%
20%	0.0%	25.9%	106.5%	134.6%	38.2%	123.9%	148.6%	168.8%	179.4%	204.7%
30%	0.0%	41.4%	166.3%	197.9%	61.0%	194.1%	220.6%	266.6%	271.3%	312.4%
40%	0.0%	59.2%	232.0%	258.6%	87.2%	271.7%	291.2%	376.5%	365.4%	423.2%
50%	0.0%	80.1%	305.2%	317.1%	118.0%	359.0%	360.8%	502.4%	462.6%	535.9%
60%	0.0%	105.6%	388.7%	373.8%	155.7%	459.6%	430.3%	650.8%	564.7%	648.1%
70%	0.0%	138.3%	487.3%	429.8%	204.0%	579.7%	501.3%	833.0%	675.2%	754.0%
80%	0.0%	184.0%	610.6%	487.6%	271.6%	732.5%	577.7%	1073.4%	801.8%	838.6%
90%	0.0%	261.0%	785.8%	554.9%	385.8%	955.4%	671.5%	1443.3%	968.7%	852.4%

Table 50: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 100\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	10.6%	54.5%	87.7%	17.1%	67.9%	101.3%	101.6%	129.7%	161.2%
20%	0.0%	22.4%	113.1%	172.3%	36.1%	141.4%	201.3%	213.6%	263.8%	336.8%
30%	0.0%	35.8%	176.8%	253.8%	57.7%	221.9%	300.1%	338.8%	403.4%	530.3%
40%	0.0%	51.1%	246.8%	332.3%	82.5%	311.3%	398.1%	480.9%	550.2%	746.5%
50%	0.0%	69.2%	325.1%	408.3%	111.8%	412.1%	495.8%	645.6%	706.8%	993.3%
60%	0.0%	91.3%	414.5%	482.3%	147.5%	528.9%	594.7%	842.4%	877.6%	1283.3%
70%	0.0%	119.5%	520.2%	555.8%	193.3%	669.2%	697.2%	1088.7%	1071.6%	1640.0%
80%	0.0%	159.0%	653.1%	632.2%	257.4%	849.2%	809.5%	1422.3%	1308.7%	2116.1%
90%	0.0%	225.6%	843.0%	721.8%	365.9%	1115.0%	950.8%	1958.4%	1652.6%	2877.6%

Table 51: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 100\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	15.3%	64.2%	86.0%	22.6%	74.5%	94.3%	101.1%	112.4%	128.3%
20%	0.0%	32.4%	133.3%	169.0%	47.7%	155.3%	187.5%	212.6%	228.8%	268.1%
30%	0.0%	51.8%	208.4%	249.1%	76.2%	243.7%	279.6%	337.1%	350.0%	422.1%
40%	0.0%	74.0%	290.9%	326.5%	109.0%	341.8%	371.1%	478.5%	477.6%	594.3%
50%	0.0%	100.2%	383.1%	401.4%	147.7%	452.5%	462.6%	642.4%	613.8%	790.9%
60%	0.0%	132.1%	488.4%	474.7%	194.8%	580.7%	555.3%	838.2%	762.7%	1022.0%
70%	0.0%	173.0%	613.1%	547.7%	255.3%	734.8%	651.7%	1083.4%	932.1%	1306.5%
80%	0.0%	230.1%	769.7%	623.8%	340.0%	932.4%	757.7%	1415.3%	1139.7%	1686.5%
90%	0.0%	326.5%	993.6%	713.7%	483.3%	1224.4%	891.8%	1948.9%	1441.6%	2295.0%

TABLES

Function: Beta

Age Range: 30–60

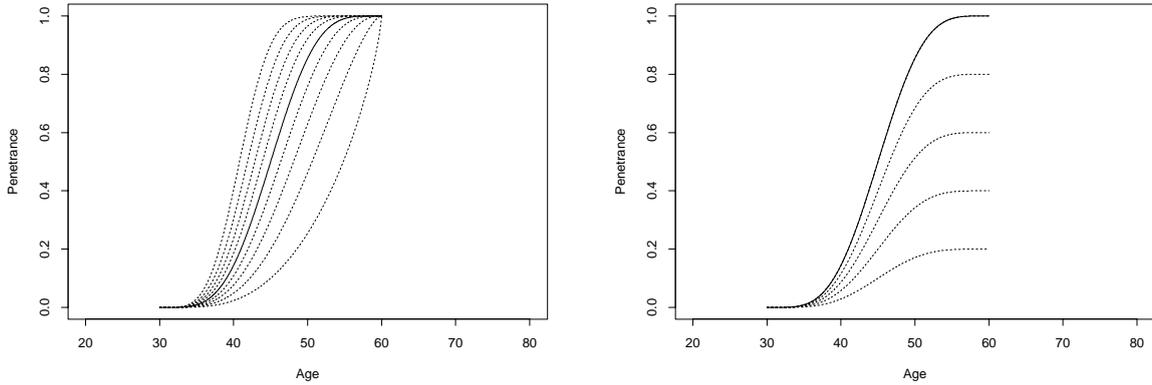


Figure 10: Proportional hazards family with Beta baseline curve for age range [30,60] with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 52: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	16.7%	61.9%	85.3%	27.0%	77.2%	98.7%	111.0%	123.7%	141.6%	
20%	0.0%	35.0%	115.1%	114.9%	56.5%	144.1%	134.2%	205.6%	165.3%	141.2%	
30%	0.0%	55.2%	160.3%	131.0%	89.1%	201.5%	154.0%	283.9%	184.7%	109.4%	
40%	0.0%	77.8%	198.2%	143.1%	125.7%	250.2%	169.2%	346.0%	196.0%	75.6%	
50%	0.0%	103.6%	229.7%	153.5%	167.5%	291.3%	182.2%	392.1%	202.4%	47.3%	
60%	0.0%	133.9%	255.9%	163.0%	216.7%	325.8%	194.2%	422.1%	204.8%	26.1%	
70%	0.0%	170.9%	277.8%	172.1%	277.0%	355.3%	206.0%	435.5%	202.8%	12.0%	
80%	0.0%	219.4%	297.2%	181.7%	356.2%	381.9%	218.3%	429.7%	195.1%	3.9%	
90%	0.0%	293.5%	317.2%	193.2%	477.8%	410.0%	233.1%	394.5%	176.5%	0.6%	

Table 53: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	24.2%	73.0%	83.8%	35.6%	84.8%	92.1%	110.5%	107.5%	112.9%	
20%	0.0%	50.7%	135.7%	113.4%	74.6%	158.3%	125.8%	204.6%	144.4%	113.1%	
30%	0.0%	79.9%	189.0%	129.8%	117.7%	221.4%	144.9%	282.6%	161.9%	87.9%	
40%	0.0%	112.6%	233.7%	142.1%	166.0%	275.0%	159.6%	344.5%	172.3%	60.9%	
50%	0.0%	150.0%	271.0%	152.7%	221.3%	320.2%	172.2%	390.6%	178.4%	38.2%	
60%	0.0%	193.8%	301.9%	162.4%	286.2%	358.2%	183.8%	420.6%	180.8%	21.1%	
70%	0.0%	247.4%	328.0%	171.7%	365.8%	390.8%	195.2%	434.1%	179.3%	9.7%	
80%	0.0%	317.6%	351.0%	181.5%	470.5%	420.2%	207.1%	428.4%	172.7%	3.2%	
90%	0.0%	424.8%	374.8%	193.2%	631.0%	451.3%	221.5%	393.5%	156.4%	0.5%	

Table 54: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	33.5%	124.3%	172.8%	54.0%	155.7%	202.4%	226.7%	260.8%	318.8%	
20%	0.0%	70.0%	232.0%	234.7%	113.2%	293.0%	279.6%	429.1%	361.4%	341.4%	
30%	0.0%	110.5%	324.3%	269.3%	178.7%	412.9%	324.8%	605.4%	415.1%	275.9%	
40%	0.0%	155.8%	402.4%	295.6%	252.3%	516.8%	360.2%	754.2%	450.9%	195.7%	
50%	0.0%	207.6%	468.2%	318.3%	336.8%	606.3%	391.4%	874.0%	475.3%	124.3%	
60%	0.0%	268.4%	523.4%	339.3%	436.3%	683.5%	420.6%	962.7%	490.0%	69.2%	
70%	0.0%	342.8%	570.4%	359.8%	558.7%	751.6%	449.5%	1017.1%	494.2%	31.8%	
80%	0.0%	440.6%	612.8%	381.3%	720.5%	815.4%	480.4%	1029.6%	484.4%	10.5%	
90%	0.0%	590.3%	657.2%	407.3%	970.4%	885.3%	518.3%	974.3%	447.5%	1.5%	

Table 55: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	48.5%	146.6%	169.8%	71.3%	171.0%	188.8%	225.7%	226.5%	254.1%
20%	0.0%	101.4%	273.5%	231.7%	149.5%	321.8%	262.0%	427.1%	315.5%	273.2%
30%	0.0%	159.9%	382.3%	266.7%	236.0%	453.6%	305.4%	602.7%	363.7%	221.6%
40%	0.0%	225.5%	474.6%	293.4%	333.3%	567.9%	339.5%	751.0%	396.1%	157.6%
50%	0.0%	300.5%	552.3%	316.6%	444.8%	666.3%	369.6%	870.4%	418.5%	100.3%
60%	0.0%	388.5%	617.6%	337.9%	576.3%	751.5%	397.8%	959.1%	432.2%	55.9%
70%	0.0%	496.3%	673.3%	358.8%	737.9%	826.6%	425.7%	1013.6%	436.6%	25.8%
80%	0.0%	637.9%	723.5%	380.7%	951.6%	897.1%	455.6%	1026.5%	428.5%	8.5%
90%	0.0%	854.5%	776.4%	407.1%	1281.8%	974.4%	492.2%	971.9%	396.5%	1.3%

Table 56: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	50.2%	187.3%	262.6%	81.1%	235.5%	311.5%	347.6%	413.9%	546.8%
20%	0.0%	105.1%	350.8%	359.9%	170.0%	446.8%	437.7%	672.9%	598.0%	647.1%
30%	0.0%	165.9%	492.1%	415.4%	268.7%	635.0%	515.2%	972.7%	710.9%	560.3%
40%	0.0%	234.0%	613.1%	458.4%	379.9%	801.3%	577.7%	1243.2%	795.9%	415.9%
50%	0.0%	311.9%	715.9%	495.9%	507.7%	948.0%	634.0%	1480.5%	863.2%	271.6%
60%	0.0%	403.6%	803.4%	530.8%	658.8%	1078.2%	687.8%	1679.5%	914.7%	153.7%
70%	0.0%	515.9%	879.0%	565.2%	845.3%	1196.7%	742.1%	1833.0%	948.5%	71.3%
80%	0.0%	663.7%	948.4%	601.6%	1093.0%	1311.7%	801.2%	1925.9%	957.6%	23.6%
90%	0.0%	890.6%	1022.6%	646.0%	1478.8%	1443.0%	875.5%	1910.4%	916.6%	3.5%

Table 57: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	72.7%	220.7%	258.0%	107.1%	258.6%	290.4%	345.9%	359.2%	435.5%
20%	0.0%	152.2%	413.5%	355.1%	224.6%	490.8%	409.9%	669.8%	521.4%	517.4%
30%	0.0%	240.1%	580.2%	411.2%	355.0%	697.5%	484.1%	968.3%	622.1%	449.7%
40%	0.0%	338.7%	723.0%	454.8%	501.8%	880.4%	544.2%	1237.8%	698.4%	334.7%
50%	0.0%	451.5%	844.5%	492.9%	670.6%	1041.8%	598.3%	1474.3%	759.1%	219.1%
60%	0.0%	584.2%	947.9%	528.3%	870.2%	1185.2%	650.0%	1673.0%	805.8%	124.2%
70%	0.0%	746.8%	1037.5%	563.2%	1116.5%	1315.8%	702.2%	1826.4%	837.0%	57.7%
80%	0.0%	960.8%	1119.7%	600.2%	1443.7%	1442.8%	759.1%	1919.7%	846.3%	19.1%
90%	0.0%	1289.2%	1207.8%	645.2%	1953.1%	1587.9%	830.6%	1905.3%	811.4%	2.8%

Table 58: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	67.0%	250.7%	354.9%	108.2%	316.6%	426.3%	473.8%	585.8%	851.3%
20%	0.0%	140.3%	471.5%	490.6%	227.1%	605.9%	610.3%	940.0%	888.9%	1171.9%
30%	0.0%	221.4%	664.0%	570.1%	359.3%	868.4%	728.9%	1396.2%	1104.2%	1156.6%
40%	0.0%	312.4%	830.5%	632.5%	508.5%	1105.7%	827.6%	1839.6%	1289.2%	950.9%
50%	0.0%	416.7%	973.5%	687.7%	680.4%	1320.1%	918.8%	2267.2%	1458.1%	667.1%
60%	0.0%	539.4%	1096.7%	739.4%	884.3%	1515.8%	1008.0%	2675.9%	1614.0%	394.5%
70%	0.0%	690.1%	1205.0%	790.9%	1136.9%	1699.9%	1100.1%	3060.8%	1755.1%	187.5%
80%	0.0%	888.7%	1306.0%	845.9%	1474.2%	1885.5%	1202.8%	3410.6%	1872.2%	62.6%
90%	0.0%	1194.3%	1416.3%	913.7%	2003.4%	2106.5%	1335.6%	3676.6%	1926.0%	9.3%

Table 59: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	97.0%	295.5%	348.6%	142.9%	347.7%	397.3%	471.5%	508.0%	677.4%	
20%	0.0%	203.1%	555.8%	483.9%	300.0%	665.4%	571.1%	935.6%	774.1%	935.5%	
30%	0.0%	320.4%	782.9%	564.1%	474.5%	953.9%	684.3%	1389.7%	964.9%	926.7%	
40%	0.0%	452.3%	979.3%	627.3%	671.6%	1214.7%	778.8%	1831.2%	1129.4%	764.3%	
50%	0.0%	603.2%	1148.2%	683.1%	898.7%	1450.5%	866.2%	2257.3%	1279.9%	537.6%	
60%	0.0%	780.8%	1293.9%	735.6%	1168.0%	1666.0%	951.6%	2664.7%	1419.2%	318.6%	
70%	0.0%	998.9%	1422.0%	787.7%	1501.6%	1868.8%	1039.9%	3048.8%	1545.8%	151.6%	
80%	0.0%	1286.4%	1541.7%	843.4%	1947.0%	2073.5%	1138.4%	3398.5%	1651.6%	50.7%	
90%	0.0%	1728.9%	1672.6%	912.1%	2646.1%	2317.5%	1265.7%	3665.4%	1702.3%	7.5%	

Table 60: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	83.8%	314.6%	449.7%	135.4%	399.1%	547.4%	605.8%	780.1%	1278.4%
20%	0.0%	175.4%	594.1%	627.3%	284.4%	770.4%	799.2%	1233.9%	1255.1%	2281.7%
30%	0.0%	277.0%	840.1%	734.1%	450.3%	1114.3%	970.2%	1889.9%	1652.7%	3198.0%
40%	0.0%	391.1%	1054.8%	819.3%	638.0%	1432.0%	1117.6%	2582.9%	2052.4%	4164.6%
50%	0.0%	521.9%	1241.5%	895.4%	854.9%	1726.7%	1257.8%	3328.5%	2486.1%	5268.8%
60%	0.0%	676.0%	1404.5%	967.6%	1112.8%	2003.8%	1398.6%	4154.7%	2981.8%	6597.1%
70%	0.0%	865.3%	1549.9%	1040.1%	1433.6%	2273.6%	1548.2%	5117.4%	3583.4%	8289.3%
80%	0.0%	1115.5%	1687.9%	1118.5%	1864.2%	2556.6%	1720.1%	6345.6%	4384.6%	10648.8%
90%	0.0%	1501.7%	1841.7%	1216.1%	2545.3%	2909.1%	1950.8%	8256.5%	5676.4%	14577.5%

Table 61: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	121.2%	370.8%	441.5%	178.8%	438.2%	509.9%	602.9%	675.9%	1015.8%
20%	0.0%	254.0%	700.3%	618.4%	375.6%	846.1%	747.4%	1227.9%	1091.3%	1815.4%
30%	0.0%	401.0%	990.3%	726.0%	594.7%	1223.8%	910.0%	1880.8%	1441.1%	2548.4%
40%	0.0%	566.1%	1243.7%	812.0%	842.7%	1573.0%	1050.6%	2570.7%	1793.3%	3322.8%
50%	0.0%	755.4%	1464.1%	889.0%	1129.1%	1897.0%	1184.4%	3313.0%	2175.6%	4207.9%
60%	0.0%	978.5%	1656.7%	962.0%	1469.8%	2202.0%	1318.8%	4135.9%	2612.6%	5272.5%
70%	0.0%	1252.6%	1828.7%	1035.2%	1893.5%	2499.0%	1461.6%	5094.9%	3143.0%	6628.8%
80%	0.0%	1614.8%	1992.2%	1114.4%	2462.1%	2810.8%	1625.7%	6318.9%	3849.4%	8520.1%
90%	0.0%	2173.7%	2174.5%	1213.1%	3361.8%	3199.5%	1845.8%	8223.7%	4988.4%	11670.0%

TABLES

Function: Beta

Age Range: 40–80

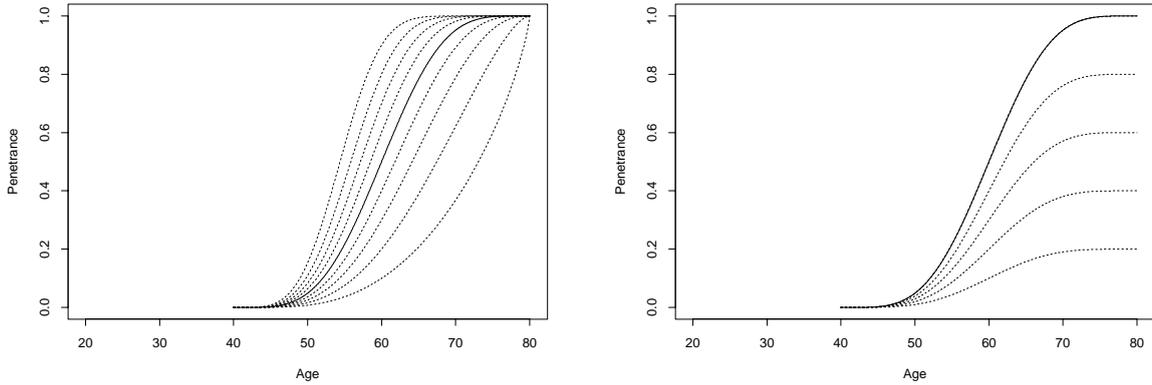


Figure 11: Proportional hazards family with Beta baseline curve for age range [40,80] with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 62: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	1.6%	8.1%	0.0%	1.9%	9.2%	3.2%	11.9%	19.2%
20%	0.0%	0.0%	3.3%	16.3%	0.0%	4.1%	18.6%	6.7%	24.1%	38.8%
30%	0.0%	0.0%	5.3%	24.7%	0.0%	6.5%	28.2%	10.7%	36.6%	58.7%
40%	0.0%	0.0%	7.5%	33.2%	0.0%	9.3%	38.0%	15.3%	49.4%	79.0%
50%	0.0%	0.0%	10.1%	42.0%	0.0%	12.6%	48.0%	20.6%	62.6%	99.7%
60%	0.0%	0.0%	13.3%	51.0%	0.0%	16.5%	58.5%	27.0%	76.4%	121.0%
70%	0.0%	0.0%	17.3%	60.5%	0.0%	21.5%	69.4%	35.2%	91.0%	142.8%
80%	0.0%	0.0%	22.8%	70.7%	0.0%	28.3%	81.3%	46.4%	107.0%	165.1%
90%	0.0%	0.0%	31.9%	82.5%	0.0%	39.6%	95.1%	65.0%	125.8%	187.5%

Table 63: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	1.8%	7.9%	0.0%	2.1%	8.5%	3.2%	10.3%	15.3%
20%	0.0%	0.0%	3.9%	15.9%	0.0%	4.5%	17.2%	6.7%	20.8%	30.8%
30%	0.0%	0.0%	6.2%	24.0%	0.0%	7.2%	26.1%	10.6%	31.5%	46.6%
40%	0.0%	0.0%	8.8%	32.4%	0.0%	10.2%	35.1%	15.2%	42.5%	62.8%
50%	0.0%	0.0%	11.9%	40.9%	0.0%	13.8%	44.4%	20.4%	54.0%	79.3%
60%	0.0%	0.0%	15.6%	49.8%	0.0%	18.1%	54.1%	26.8%	65.9%	96.3%
70%	0.0%	0.0%	20.4%	59.1%	0.0%	23.5%	64.3%	34.9%	78.6%	113.7%
80%	0.0%	0.0%	26.9%	69.1%	0.0%	31.0%	75.4%	46.1%	92.5%	131.6%
90%	0.0%	0.0%	37.5%	80.7%	0.0%	43.4%	88.3%	64.6%	108.9%	149.8%

Table 64: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	3.1%	16.2%	0.0%	3.9%	18.5%	6.4%	24.0%	38.7%
20%	0.0%	0.0%	6.6%	32.7%	0.0%	8.2%	37.4%	13.5%	48.5%	78.7%
30%	0.0%	0.0%	10.6%	49.5%	0.0%	13.1%	56.6%	21.4%	73.8%	120.3%
40%	0.0%	0.0%	15.0%	66.6%	0.0%	18.6%	76.4%	30.5%	100.0%	163.5%
50%	0.0%	0.0%	20.3%	84.3%	0.0%	25.1%	96.8%	41.2%	127.3%	208.8%
60%	0.0%	0.0%	26.6%	102.6%	0.0%	33.0%	118.1%	54.1%	156.1%	256.5%
70%	0.0%	0.0%	34.6%	121.8%	0.0%	42.9%	140.6%	70.5%	187.0%	307.2%
80%	0.0%	0.0%	45.7%	142.6%	0.0%	56.7%	165.1%	93.2%	221.2%	362.0%
90%	0.0%	0.0%	63.9%	166.7%	0.0%	79.3%	193.9%	130.6%	262.4%	422.4%

Table 65: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	3.7%	15.8%	0.0%	4.3%	17.1%	6.3%	20.6%	30.7%
20%	0.0%	0.0%	7.8%	31.8%	0.0%	9.0%	34.5%	13.4%	41.8%	62.6%
30%	0.0%	0.0%	12.4%	48.2%	0.0%	14.3%	52.4%	21.3%	63.6%	95.6%
40%	0.0%	0.0%	17.7%	64.9%	0.0%	20.4%	70.7%	30.3%	86.2%	130.0%
50%	0.0%	0.0%	23.9%	82.2%	0.0%	27.6%	89.6%	41.0%	109.7%	166.0%
60%	0.0%	0.0%	31.3%	100.1%	0.0%	36.2%	109.3%	53.8%	134.6%	204.0%
70%	0.0%	0.0%	40.7%	118.9%	0.0%	47.1%	130.2%	70.1%	161.3%	244.6%
80%	0.0%	0.0%	53.7%	139.3%	0.0%	62.1%	153.1%	92.6%	191.0%	288.5%
90%	0.0%	0.0%	75.2%	163.1%	0.0%	86.9%	180.0%	129.8%	226.9%	337.2%

Table 66: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	4.7%	24.3%	0.0%	5.8%	27.8%	9.6%	36.0%	58.5%
20%	0.0%	0.0%	10.0%	49.1%	0.0%	12.3%	56.2%	20.2%	73.2%	120.0%
30%	0.0%	0.0%	15.8%	74.4%	0.0%	19.6%	85.3%	32.2%	111.8%	185.1%
40%	0.0%	0.0%	22.6%	100.3%	0.0%	28.0%	115.3%	45.9%	152.0%	254.2%
50%	0.0%	0.0%	30.4%	126.9%	0.0%	37.7%	146.4%	61.9%	194.3%	328.5%
60%	0.0%	0.0%	39.9%	154.7%	0.0%	49.5%	179.0%	81.4%	239.3%	409.2%
70%	0.0%	0.0%	52.0%	183.9%	0.0%	64.5%	213.6%	106.1%	288.2%	498.7%
80%	0.0%	0.0%	68.6%	215.7%	0.0%	85.1%	251.6%	140.3%	343.3%	600.9%
90%	0.0%	0.0%	95.9%	252.6%	0.0%	119.1%	296.7%	196.9%	411.3%	725.3%

Table 67: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	5.5%	23.7%	0.0%	6.4%	25.7%	9.5%	31.0%	46.5%
20%	0.0%	0.0%	11.7%	47.8%	0.0%	13.5%	51.9%	20.1%	63.0%	95.3%
30%	0.0%	0.0%	18.6%	72.5%	0.0%	21.5%	78.9%	32.0%	96.3%	147.0%
40%	0.0%	0.0%	26.5%	97.7%	0.0%	30.7%	106.6%	45.6%	130.9%	202.0%
50%	0.0%	0.0%	35.8%	123.8%	0.0%	41.4%	135.4%	61.5%	167.4%	261.1%
60%	0.0%	0.0%	47.0%	150.9%	0.0%	54.3%	165.6%	80.8%	206.2%	325.5%
70%	0.0%	0.0%	61.1%	179.5%	0.0%	70.7%	197.8%	105.4%	248.5%	396.8%
80%	0.0%	0.0%	80.7%	210.7%	0.0%	93.3%	233.2%	139.3%	296.3%	478.5%
90%	0.0%	0.0%	112.8%	247.1%	0.0%	130.6%	275.3%	195.6%	355.4%	578.4%

Table 68: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	6.3%	32.5%	0.0%	7.8%	37.1%	12.8%	48.2%	78.6%
20%	0.0%	0.0%	13.3%	65.6%	0.0%	16.4%	75.1%	26.9%	98.3%	162.7%
30%	0.0%	0.0%	21.1%	99.4%	0.0%	26.2%	114.3%	42.9%	150.5%	253.3%
40%	0.0%	0.0%	30.1%	134.1%	0.0%	37.3%	154.7%	61.2%	205.4%	351.8%
50%	0.0%	0.0%	40.6%	170.0%	0.0%	50.3%	196.8%	82.7%	263.6%	460.6%
60%	0.0%	0.0%	53.3%	207.3%	0.0%	66.1%	241.1%	108.7%	326.2%	582.9%
70%	0.0%	0.0%	69.3%	246.9%	0.0%	86.1%	288.5%	141.8%	395.1%	724.5%
80%	0.0%	0.0%	91.5%	290.0%	0.0%	113.6%	340.9%	187.7%	474.1%	896.8%
90%	0.0%	0.0%	128.0%	340.4%	0.0%	159.2%	403.7%	263.9%	574.2%	1130.7%

Table 69: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	7.4%	31.6%	0.0%	8.5%	34.3%	12.7%	41.5%	62.4%
20%	0.0%	0.0%	15.6%	63.9%	0.0%	18.0%	69.4%	26.8%	84.6%	129.2%
30%	0.0%	0.0%	24.8%	96.8%	0.0%	28.7%	105.6%	42.6%	129.5%	201.2%
40%	0.0%	0.0%	35.4%	130.7%	0.0%	40.9%	143.0%	60.8%	176.8%	279.5%
50%	0.0%	0.0%	47.7%	165.7%	0.0%	55.2%	182.0%	82.2%	227.0%	366.0%
60%	0.0%	0.0%	62.7%	202.2%	0.0%	72.4%	223.0%	108.0%	281.1%	463.3%
70%	0.0%	0.0%	81.6%	240.9%	0.0%	94.3%	267.0%	140.9%	340.6%	576.0%
80%	0.0%	0.0%	107.6%	283.2%	0.0%	124.5%	315.8%	186.4%	408.9%	713.5%
90%	0.0%	0.0%	150.6%	332.8%	0.0%	174.5%	374.4%	262.1%	495.8%	900.6%

Table 70: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	7.9%	40.6%	0.0%	9.7%	46.5%	16.0%	60.4%	99.1%
20%	0.0%	0.0%	16.6%	82.1%	0.0%	20.6%	94.2%	33.7%	123.6%	206.8%
30%	0.0%	0.0%	26.4%	124.5%	0.0%	32.7%	143.5%	53.7%	189.9%	325.2%
40%	0.0%	0.0%	37.6%	168.2%	0.0%	46.7%	194.6%	76.6%	260.2%	457.1%
50%	0.0%	0.0%	50.8%	213.4%	0.0%	63.0%	248.0%	103.6%	335.4%	607.0%
60%	0.0%	0.0%	66.6%	260.6%	0.0%	82.7%	304.5%	136.2%	417.2%	781.9%
70%	0.0%	0.0%	86.7%	310.7%	0.0%	107.7%	365.3%	177.8%	508.3%	994.7%
80%	0.0%	0.0%	114.4%	365.5%	0.0%	142.2%	433.0%	235.5%	614.7%	1273.0%
90%	0.0%	0.0%	160.2%	430.1%	0.0%	199.3%	515.2%	331.6%	753.1%	1701.2%

Table 71: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	9.2%	39.6%	0.0%	10.7%	42.9%	15.8%	52.0%	78.7%
20%	0.0%	0.0%	19.5%	79.9%	0.0%	22.5%	87.1%	33.5%	106.3%	164.2%
30%	0.0%	0.0%	31.1%	121.3%	0.0%	35.9%	132.6%	53.3%	163.5%	258.2%
40%	0.0%	0.0%	44.3%	163.9%	0.0%	51.1%	179.9%	76.1%	224.0%	363.1%
50%	0.0%	0.0%	59.7%	208.0%	0.0%	69.0%	229.3%	102.9%	288.8%	482.1%
60%	0.0%	0.0%	78.4%	254.1%	0.0%	90.6%	281.6%	135.3%	359.2%	621.1%
70%	0.0%	0.0%	102.0%	303.1%	0.0%	118.0%	338.0%	176.6%	437.9%	790.2%
80%	0.0%	0.0%	134.6%	356.8%	0.0%	155.9%	401.0%	233.9%	529.8%	1011.7%
90%	0.0%	0.0%	188.4%	420.4%	0.0%	218.5%	477.6%	329.4%	649.7%	1352.6%

TABLES

Function: Beta

Age Range: 40–60

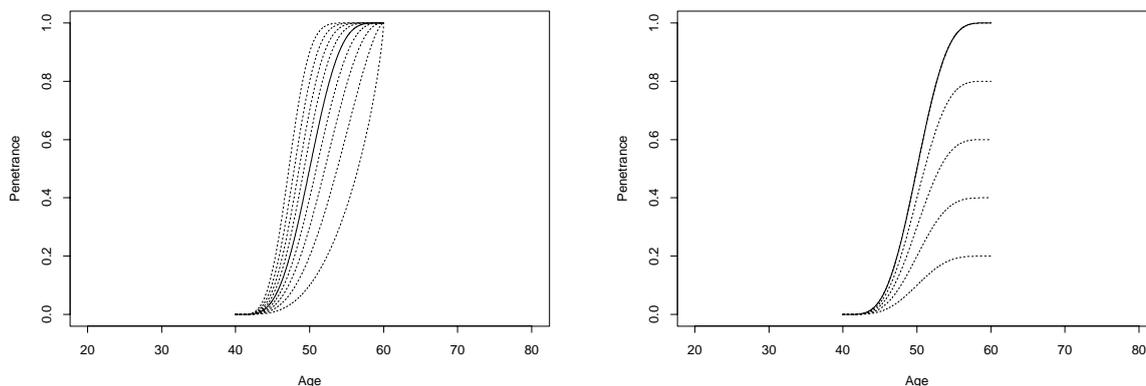


Figure 12: Proportional hazards family with Beta baseline curve for age range [40,60] with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 72: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	21.0%	71.4%	0.0%	26.1%	82.0%	42.8%	107.7%	168.5%
20%	0.0%	0.0%	42.2%	91.8%	0.0%	52.3%	106.0%	86.1%	140.8%	199.7%
30%	0.0%	0.0%	63.5%	100.9%	0.0%	78.9%	117.0%	130.2%	156.8%	194.6%
40%	0.0%	0.0%	85.1%	107.2%	0.0%	105.8%	124.7%	175.0%	168.2%	177.9%
50%	0.0%	0.0%	107.0%	112.4%	0.0%	133.1%	131.1%	220.9%	177.8%	155.4%
60%	0.0%	0.0%	129.2%	117.1%	0.0%	160.9%	136.8%	268.1%	186.5%	129.0%
70%	0.0%	0.0%	152.0%	121.5%	0.0%	189.6%	142.2%	317.0%	194.8%	99.7%
80%	0.0%	0.0%	175.7%	126.0%	0.0%	219.4%	147.8%	368.8%	203.4%	68.2%
90%	0.0%	0.0%	201.2%	131.3%	0.0%	251.9%	154.4%	426.3%	213.6%	35.0%

Table 73: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 20\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	24.7%	69.7%	0.0%	28.6%	75.9%	42.5%	92.9%	134.1%
20%	0.0%	0.0%	49.6%	89.9%	0.0%	57.4%	98.5%	85.6%	122.0%	159.6%
30%	0.0%	0.0%	74.8%	99.1%	0.0%	86.5%	109.1%	129.3%	136.3%	156.1%
40%	0.0%	0.0%	100.2%	105.5%	0.0%	116.0%	116.5%	173.9%	146.6%	143.0%
50%	0.0%	0.0%	125.9%	110.8%	0.0%	145.9%	122.7%	219.5%	155.3%	125.2%
60%	0.0%	0.0%	152.1%	115.6%	0.0%	176.5%	128.2%	266.4%	163.1%	104.1%
70%	0.0%	0.0%	178.9%	120.1%	0.0%	207.9%	133.5%	315.1%	170.6%	80.6%
80%	0.0%	0.0%	206.8%	124.7%	0.0%	240.7%	138.9%	366.7%	178.4%	55.2%
90%	0.0%	0.0%	236.9%	130.1%	0.0%	276.3%	145.3%	423.9%	187.7%	28.3%

Table 74: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	42.1%	143.8%	0.0%	52.2%	166.3%	85.8%	222.0%	366.7%
20%	0.0%	0.0%	84.5%	185.8%	0.0%	105.0%	216.9%	173.5%	296.0%	458.9%
30%	0.0%	0.0%	127.3%	205.0%	0.0%	158.5%	240.9%	263.4%	334.2%	465.1%
40%	0.0%	0.0%	170.7%	218.3%	0.0%	212.8%	257.9%	355.8%	362.4%	437.8%
50%	0.0%	0.0%	214.8%	229.3%	0.0%	268.2%	272.2%	451.2%	386.7%	391.2%
60%	0.0%	0.0%	259.7%	239.3%	0.0%	325.0%	285.2%	550.6%	409.2%	330.7%
70%	0.0%	0.0%	305.8%	248.8%	0.0%	383.7%	297.6%	655.5%	431.1%	259.4%
80%	0.0%	0.0%	353.9%	258.5%	0.0%	445.4%	310.4%	768.7%	454.2%	179.5%
90%	0.0%	0.0%	406.1%	269.9%	0.0%	513.2%	325.6%	898.5%	482.1%	92.7%

Table 75: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 40\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	49.5%	140.3%	0.0%	57.2%	154.0%	85.3%	191.4%	291.5%
20%	0.0%	0.0%	99.4%	181.9%	0.0%	115.1%	201.5%	172.4%	256.3%	366.4%
30%	0.0%	0.0%	149.8%	201.2%	0.0%	173.7%	224.5%	261.7%	290.2%	372.6%
40%	0.0%	0.0%	200.9%	214.7%	0.0%	233.3%	240.8%	353.5%	315.6%	351.7%
50%	0.0%	0.0%	252.7%	226.0%	0.0%	294.1%	254.6%	448.4%	337.4%	315.0%
60%	0.0%	0.0%	305.6%	236.1%	0.0%	356.4%	267.1%	547.3%	357.6%	266.7%
70%	0.0%	0.0%	359.9%	245.8%	0.0%	420.7%	279.1%	651.5%	377.3%	209.5%
80%	0.0%	0.0%	416.6%	255.7%	0.0%	488.4%	291.4%	764.1%	398.1%	145.2%
90%	0.0%	0.0%	478.1%	267.3%	0.0%	562.9%	306.1%	893.4%	423.2%	75.1%

Table 76: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	63.1%	217.4%	0.0%	78.4%	253.1%	129.2%	343.7%	602.9%
20%	0.0%	0.0%	126.9%	282.1%	0.0%	157.9%	333.1%	262.3%	467.8%	808.9%
30%	0.0%	0.0%	191.4%	312.2%	0.0%	238.7%	372.3%	399.8%	536.3%	866.1%
40%	0.0%	0.0%	256.8%	333.3%	0.0%	321.2%	400.6%	542.5%	589.2%	853.1%
50%	0.0%	0.0%	323.4%	351.0%	0.0%	405.5%	424.7%	691.6%	635.9%	791.8%
60%	0.0%	0.0%	391.3%	366.9%	0.0%	492.3%	446.7%	849.0%	680.0%	690.9%
70%	0.0%	0.0%	461.4%	382.2%	0.0%	582.5%	467.9%	1017.6%	724.0%	556.4%
80%	0.0%	0.0%	534.7%	397.9%	0.0%	678.1%	490.0%	1203.7%	771.3%	393.3%
90%	0.0%	0.0%	614.6%	416.4%	0.0%	784.4%	516.5%	1424.4%	830.0%	206.5%

Table 77: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 60\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	74.3%	212.1%	0.0%	85.9%	234.2%	128.4%	296.1%	479.0%
20%	0.0%	0.0%	149.3%	276.1%	0.0%	173.1%	309.3%	260.6%	404.6%	645.2%
30%	0.0%	0.0%	225.2%	306.4%	0.0%	261.7%	346.7%	397.2%	465.3%	693.2%
40%	0.0%	0.0%	302.2%	327.8%	0.0%	352.1%	373.8%	539.1%	512.4%	684.7%
50%	0.0%	0.0%	380.5%	345.7%	0.0%	444.6%	396.9%	687.3%	554.1%	636.9%
60%	0.0%	0.0%	460.5%	361.9%	0.0%	539.8%	418.0%	843.7%	593.5%	556.9%
70%	0.0%	0.0%	543.0%	377.4%	0.0%	638.7%	438.5%	1011.3%	632.8%	449.2%
80%	0.0%	0.0%	629.3%	393.3%	0.0%	743.6%	459.7%	1196.4%	675.1%	318.0%
90%	0.0%	0.0%	723.6%	412.1%	0.0%	860.3%	485.2%	1416.1%	727.5%	167.3%

Table 78: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	84.2%	292.1%	0.0%	104.6%	342.5%	172.9%	473.3%	889.5%
20%	0.0%	0.0%	169.4%	380.8%	0.0%	211.1%	454.8%	352.4%	659.0%	1307.6%
30%	0.0%	0.0%	255.8%	422.9%	0.0%	319.7%	511.9%	539.4%	768.9%	1522.7%
40%	0.0%	0.0%	343.4%	452.6%	0.0%	430.8%	553.8%	735.5%	857.4%	1623.0%
50%	0.0%	0.0%	432.8%	477.7%	0.0%	544.9%	589.9%	942.8%	938.0%	1622.6%
60%	0.0%	0.0%	524.2%	500.4%	0.0%	662.9%	623.1%	1164.4%	1016.2%	1517.5%
70%	0.0%	0.0%	618.8%	522.2%	0.0%	786.3%	655.5%	1406.0%	1096.3%	1301.6%
80%	0.0%	0.0%	718.0%	544.7%	0.0%	917.9%	689.6%	1678.8%	1184.9%	972.6%
90%	0.0%	0.0%	827.0%	571.5%	0.0%	1066.2%	730.6%	2013.9%	1298.2%	534.4%

Table 79: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 80\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	99.1%	284.9%	0.0%	114.7%	316.8%	171.8%	407.6%	706.0%
20%	0.0%	0.0%	199.4%	372.6%	0.0%	231.4%	422.1%	350.1%	569.5%	1041.2%
30%	0.0%	0.0%	300.9%	414.9%	0.0%	350.5%	476.3%	536.0%	666.3%	1216.4%
40%	0.0%	0.0%	404.1%	445.0%	0.0%	472.3%	516.4%	730.8%	744.6%	1300.0%
50%	0.0%	0.0%	509.2%	470.3%	0.0%	597.4%	550.9%	936.8%	816.1%	1302.8%
60%	0.0%	0.0%	616.9%	493.3%	0.0%	726.8%	582.7%	1157.1%	885.5%	1221.1%
70%	0.0%	0.0%	728.2%	515.4%	0.0%	862.1%	613.8%	1397.2%	956.6%	1049.6%
80%	0.0%	0.0%	845.1%	538.3%	0.0%	1006.6%	646.4%	1668.4%	1035.2%	785.8%
90%	0.0%	0.0%	973.5%	565.3%	0.0%	1169.3%	685.7%	2001.7%	1135.9%	432.6%

Table 80: Extra percentage of level net premium for level CI cover for females with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	105.4%	367.9%	0.0%	131.0%	434.5%	217.0%	611.8%	1244.2%
20%	0.0%	0.0%	212.1%	481.9%	0.0%	264.6%	582.6%	443.9%	873.1%	2074.4%
30%	0.0%	0.0%	320.4%	537.0%	0.0%	401.4%	660.4%	682.5%	1039.3%	2793.0%
40%	0.0%	0.0%	430.5%	576.4%	0.0%	541.7%	718.7%	935.2%	1179.6%	3539.7%
50%	0.0%	0.0%	543.0%	609.8%	0.0%	686.5%	769.5%	1205.4%	1312.1%	4380.8%
60%	0.0%	0.0%	658.4%	640.1%	0.0%	836.9%	816.7%	1498.5%	1444.9%	5377.4%
70%	0.0%	0.0%	778.0%	669.3%	0.0%	995.1%	863.2%	1823.6%	1585.6%	6629.3%
80%	0.0%	0.0%	904.1%	699.7%	0.0%	1165.2%	912.5%	2199.6%	1746.9%	8355.2%
90%	0.0%	0.0%	1043.2%	735.9%	0.0%	1359.1%	972.6%	2679.1%	1962.7%	11245.7%

Table 81: Extra percentage of level net premium for level CI cover for males with Beta baseline curve, maximum penetrance $Q = 100\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	124.0%	358.7%	0.0%	143.6%	401.8%	215.6%	526.5%	986.3%
20%	0.0%	0.0%	249.5%	471.4%	0.0%	290.1%	540.4%	441.0%	753.6%	1647.9%
30%	0.0%	0.0%	377.0%	526.7%	0.0%	440.0%	614.1%	678.1%	899.3%	2222.9%
40%	0.0%	0.0%	506.6%	566.4%	0.0%	593.9%	669.7%	929.2%	1022.8%	2821.2%
50%	0.0%	0.0%	638.9%	600.1%	0.0%	752.6%	718.1%	1197.6%	1139.5%	3495.4%
60%	0.0%	0.0%	774.8%	630.7%	0.0%	917.5%	763.1%	1488.9%	1256.4%	4294.1%
70%	0.0%	0.0%	915.5%	660.3%	0.0%	1091.0%	807.4%	1812.0%	1380.4%	5297.6%
80%	0.0%	0.0%	1064.0%	691.0%	0.0%	1277.6%	854.5%	2185.7%	1522.5%	6681.0%
90%	0.0%	0.0%	1227.9%	727.6%	0.0%	1490.4%	911.9%	2662.3%	1712.6%	8997.9%

TABLES

Function: Sin

Age Range: 20–80

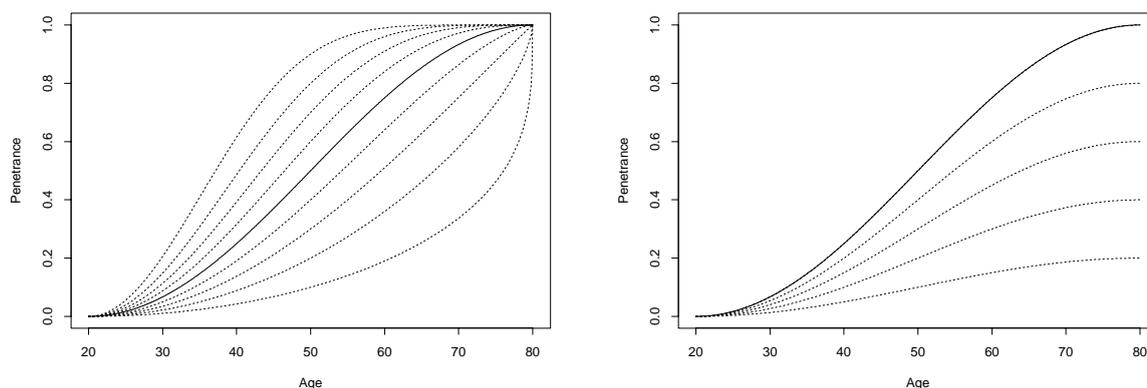


Figure 13: Proportional hazards family with sine baseline curve for age range $[20,80]$ with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 82: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[20,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
10%	35.5%	39.7%	33.7%	27.7%	42.5%	33.6%	27.2%	28.4%	23.5%	20.2%
20%	74.8%	82.5%	68.5%	54.6%	87.9%	68.0%	53.2%	56.4%	45.0%	37.1%
30%	118.9%	129.2%	104.7%	81.0%	136.8%	103.2%	78.2%	83.6%	64.1%	50.3%
40%	169.2%	180.7%	142.7%	107.0%	190.0%	139.4%	102.1%	109.7%	80.5%	59.5%
50%	227.8%	238.5%	182.9%	132.9%	248.6%	176.6%	124.8%	134.2%	93.8%	64.0%
60%	298.5%	304.9%	226.1%	158.9%	314.2%	215.1%	146.3%	156.0%	103.3%	63.6%
70%	387.7%	384.1%	273.7%	186.0%	389.9%	254.9%	166.5%	173.4%	107.9%	57.6%
80%	510.0%	484.6%	328.6%	215.8%	480.6%	296.2%	185.3%	182.9%	105.8%	45.6%
90%	709.8%	630.4%	398.8%	253.1%	599.1%	338.3%	201.9%	174.2%	91.8%	26.8%

Table 83: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[20,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
10%	61.0%	57.5%	39.8%	27.5%	56.1%	37.0%	25.6%	28.3%	20.5%	16.1%
20%	128.6%	119.6%	81.0%	54.4%	116.1%	74.9%	50.2%	56.2%	39.2%	29.6%
30%	204.5%	187.2%	123.9%	80.8%	180.7%	113.6%	73.8%	83.3%	56.0%	40.2%
40%	291.0%	261.9%	168.8%	106.8%	251.0%	153.5%	96.4%	109.3%	70.4%	47.5%
50%	392.0%	345.7%	216.4%	132.7%	328.4%	194.5%	118.0%	133.7%	82.1%	51.2%
60%	513.5%	442.0%	267.5%	158.9%	415.2%	236.8%	138.5%	155.4%	90.5%	50.8%
70%	667.0%	556.7%	323.9%	186.2%	515.1%	280.8%	157.9%	172.8%	94.7%	46.1%
80%	877.3%	702.4%	388.9%	216.4%	635.1%	326.3%	176.0%	182.2%	93.0%	36.5%
90%	1221.2%	913.8%	472.3%	254.3%	791.7%	372.8%	192.2%	173.6%	80.9%	21.5%

Table 84: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 40\%$ age range $[20,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
10%	71.0%	79.5%	67.6%	55.7%	85.4%	67.8%	54.9%	57.6%	47.9%	41.5%
20%	149.7%	165.7%	138.2%	110.7%	177.5%	138.3%	109.0%	116.0%	93.5%	78.6%
30%	238.2%	260.2%	212.3%	165.3%	277.9%	211.9%	162.2%	174.8%	136.0%	110.0%
40%	339.3%	365.0%	290.8%	219.9%	388.5%	289.1%	214.5%	233.4%	174.7%	134.0%
50%	457.5%	483.4%	375.0%	275.1%	512.1%	370.6%	266.0%	291.0%	208.3%	149.0%
60%	600.1%	620.6%	466.7%	331.8%	653.4%	457.3%	316.8%	345.7%	235.2%	152.7%
70%	780.7%	785.6%	569.4%	392.1%	819.7%	550.7%	367.1%	394.2%	252.5%	142.6%
80%	1029.2%	997.7%	690.3%	459.9%	1025.9%	652.9%	417.4%	428.5%	255.0%	116.1%
90%	1437.9%	1311.4%	850.0%	547.7%	1309.5%	767.4%	468.0%	424.8%	229.3%	70.2%

Table 85: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 40\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	122.1%	115.3%	79.9%	55.4%	112.8%	74.6%	51.7%	57.4%	41.8%	33.1%
20%	257.6%	240.2%	163.4%	110.2%	234.6%	152.2%	102.7%	115.5%	81.6%	62.7%
30%	409.8%	377.1%	251.1%	164.7%	367.2%	233.2%	153.0%	174.1%	118.8%	87.8%
40%	583.7%	529.0%	344.0%	219.3%	513.3%	318.3%	202.5%	232.5%	152.7%	107.0%
50%	787.1%	700.6%	443.6%	274.6%	676.7%	408.0%	251.4%	289.8%	182.3%	119.0%
60%	1032.5%	899.5%	552.1%	331.7%	863.3%	503.6%	299.8%	344.4%	206.0%	122.0%
70%	1343.2%	1138.7%	673.8%	392.4%	1083.1%	606.5%	347.9%	392.7%	221.5%	114.1%
80%	1770.6%	1446.0%	817.1%	461.0%	1355.6%	719.2%	396.1%	427.0%	224.1%	93.0%
90%	2473.7%	1900.9%	1006.4%	550.0%	1730.4%	845.6%	445.2%	423.4%	202.0%	56.3%

Table 86: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 60\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	106.5%	119.5%	101.8%	84.0%	128.7%	102.5%	83.4%	87.7%	73.3%	64.2%
20%	224.9%	249.7%	209.1%	168.3%	269.0%	210.9%	167.5%	179.1%	146.0%	125.5%
30%	358.0%	393.1%	322.8%	253.1%	423.5%	326.4%	252.5%	274.6%	217.4%	181.9%
40%	510.5%	553.1%	444.7%	339.2%	596.1%	450.3%	338.9%	373.9%	286.4%	230.4%
50%	689.0%	735.1%	576.9%	427.8%	792.2%	584.6%	427.1%	476.7%	351.3%	267.1%
60%	904.9%	947.6%	723.1%	520.7%	1020.4%	732.2%	518.1%	581.5%	409.5%	286.3%
70%	1179.2%	1205.8%	889.8%	621.6%	1296.1%	898.0%	613.4%	684.8%	456.2%	280.6%
80%	1558.0%	1541.9%	1090.6%	738.3%	1649.9%	1090.5%	716.3%	776.1%	481.4%	240.0%
90%	2184.9%	2049.5%	1364.5%	894.7%	2165.4%	1329.6%	834.4%	816.6%	458.1%	152.0%

Table 87: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 60\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	183.3%	173.2%	120.4%	83.6%	170.0%	112.8%	78.5%	87.3%	63.9%	51.2%
20%	386.8%	361.9%	247.2%	167.5%	355.4%	232.2%	157.8%	178.4%	127.4%	100.1%
30%	615.9%	569.7%	381.8%	252.1%	559.6%	359.3%	238.2%	273.5%	189.8%	145.1%
40%	878.2%	801.6%	525.9%	338.2%	787.6%	495.7%	319.9%	372.4%	250.3%	183.9%
50%	1185.4%	1065.3%	682.4%	426.9%	1046.7%	643.6%	403.5%	474.8%	307.3%	213.2%
60%	1556.8%	1373.3%	855.4%	520.2%	1348.3%	806.2%	490.0%	579.2%	358.5%	228.8%
70%	2028.7%	1747.6%	1052.8%	621.8%	1712.5%	988.8%	580.9%	682.2%	399.9%	224.4%
80%	2680.3%	2234.7%	1290.7%	739.7%	2180.1%	1201.1%	679.5%	773.2%	422.7%	192.2%
90%	3758.9%	2970.5%	1615.4%	898.1%	2861.3%	1464.9%	793.2%	813.7%	403.3%	122.0%

Table 88: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 80\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	142.1%	159.7%	136.4%	112.8%	172.4%	137.8%	112.4%	118.5%	99.6%	88.2%
20%	300.2%	334.5%	281.2%	227.3%	362.2%	286.1%	228.8%	246.1%	203.0%	178.7%
30%	478.4%	527.9%	436.5%	344.5%	573.9%	447.3%	350.0%	384.3%	310.1%	270.1%
40%	682.6%	745.1%	604.6%	465.4%	813.5%	624.3%	477.3%	534.8%	420.9%	359.6%
50%	922.4%	993.7%	789.4%	592.0%	1090.2%	821.8%	612.7%	700.0%	534.9%	442.4%
60%	1213.0%	1286.4%	997.0%	727.7%	1419.1%	1046.8%	759.4%	882.5%	650.7%	509.3%
70%	1583.2%	1645.8%	1238.2%	878.8%	1826.9%	1311.5%	923.1%	1084.8%	764.5%	543.7%
80%	2096.5%	2120.1%	1535.9%	1058.8%	2370.8%	1640.3%	1116.0%	1305.6%	865.7%	514.3%
90%	2951.7%	2852.0%	1956.9%	1309.6%	3216.5%	2098.2%	1371.3%	1515.1%	913.9%	365.0%

Table 89: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 80\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	244.5%	231.5%	161.2%	112.2%	227.7%	151.6%	105.9%	118.0%	86.9%	70.3%
20%	516.5%	484.8%	332.6%	226.2%	478.6%	314.9%	215.6%	245.1%	177.1%	142.5%
30%	823.0%	765.1%	516.1%	343.1%	758.3%	492.3%	330.1%	382.7%	270.7%	215.4%
40%	1174.4%	1079.8%	715.0%	463.8%	1074.9%	687.2%	450.4%	532.6%	367.6%	286.9%
50%	1586.8%	1440.1%	933.7%	590.6%	1440.5%	904.7%	578.6%	697.2%	467.5%	353.0%
60%	2086.8%	1864.4%	1179.3%	726.8%	1875.0%	1152.5%	717.8%	879.0%	569.2%	406.7%
70%	2723.7%	2385.3%	1464.9%	878.7%	2413.9%	1444.1%	873.6%	1080.5%	669.5%	434.4%
80%	3606.8%	3072.7%	1817.3%	1060.2%	3132.6%	1806.3%	1057.7%	1300.6%	759.3%	411.5%
90%	5078.0%	4133.5%	2316.3%	1313.7%	4250.1%	2311.2%	1302.1%	1509.6%	803.5%	292.7%

Table 90: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 100\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	177.8%	200.1%	171.2%	141.9%	216.5%	173.6%	142.2%	150.3%	127.0%	113.8%
20%	375.7%	420.0%	354.7%	288.0%	457.4%	363.9%	293.3%	317.3%	265.1%	239.7%
30%	599.2%	664.7%	553.3%	439.7%	729.3%	575.0%	455.6%	505.4%	416.8%	381.0%
40%	855.8%	941.0%	771.0%	599.1%	1041.4%	812.9%	632.3%	720.9%	586.1%	542.0%
50%	1157.6%	1259.6%	1013.5%	769.3%	1408.1%	1086.4%	828.8%	973.7%	779.2%	729.9%
60%	1524.3%	1637.9%	1290.3%	955.8%	1853.5%	1410.5%	1053.9%	1280.0%	1006.1%	956.2%
70%	1992.8%	2107.3%	1618.4%	1169.0%	2422.1%	1812.3%	1324.4%	1669.9%	1286.0%	1242.4%
80%	2645.2%	2735.7%	2034.1%	1431.7%	3213.1%	2351.5%	1677.8%	2210.6%	1661.4%	1636.3%
90%	3738.9%	3727.9%	2646.2%	1814.5%	4538.2%	3212.3%	2233.5%	3112.5%	2268.0%	2288.4%

Table 91: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 100\%$ age range [20,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	305.8%	290.0%	202.4%	141.1%	286.0%	191.1%	133.9%	149.6%	110.8%	90.7%
20%	646.4%	608.7%	419.4%	286.6%	604.4%	400.5%	276.4%	316.0%	231.2%	191.1%
30%	1030.8%	963.3%	654.3%	437.9%	963.6%	632.9%	429.4%	503.3%	363.7%	303.7%
40%	1472.4%	1363.7%	911.7%	596.9%	1376.0%	894.7%	596.4%	718.0%	511.6%	432.2%
50%	1991.5%	1825.5%	1198.6%	767.2%	1860.5%	1195.9%	782.3%	969.7%	680.4%	582.0%
60%	2622.4%	2373.7%	1526.1%	954.1%	2449.0%	1552.7%	995.5%	1274.7%	879.0%	762.5%
70%	3428.4%	3053.9%	1914.3%	1168.2%	3200.3%	1995.2%	1252.2%	1663.1%	1124.2%	990.8%
80%	4550.6%	3964.7%	2406.5%	1432.6%	4245.5%	2589.1%	1588.1%	2201.6%	1453.6%	1305.2%
90%	6432.3%	5402.6%	3131.4%	1818.6%	5996.4%	3537.5%	2117.4%	3100.0%	1986.7%	1826.1%

TABLES

Function: Sin

Age Range: 20–60

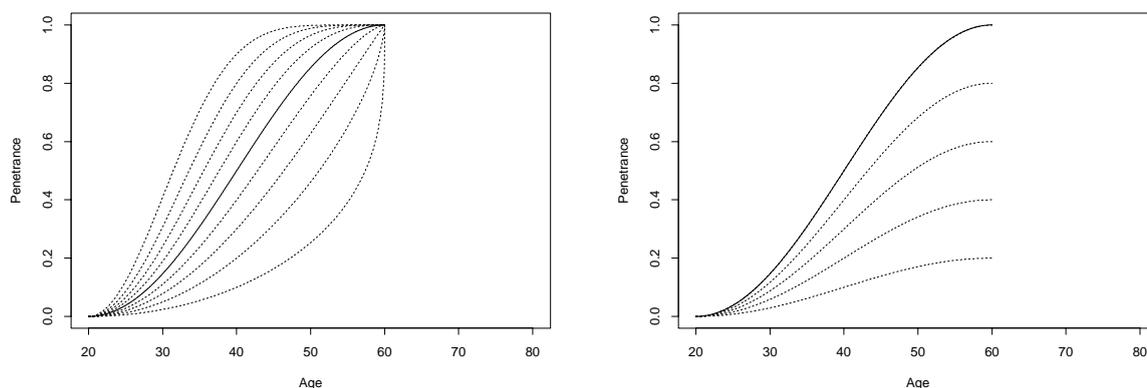


Figure 14: Proportional hazards family with sine baseline curve for age range $[20,60]$ with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 92: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	80.5%	92.5%	83.3%	103.3%	100.6%	85.2%	108.7%	76.9%	114.4%	149.5%
20%	168.6%	187.4%	158.5%	139.7%	201.4%	159.7%	140.6%	136.5%	129.0%	128.9%
30%	266.2%	285.4%	226.4%	170.3%	302.1%	223.3%	164.4%	178.3%	131.7%	98.7%
40%	375.8%	386.9%	287.8%	198.1%	402.0%	276.3%	183.0%	202.0%	126.9%	69.3%
50%	501.5%	493.0%	343.7%	224.4%	500.3%	318.3%	197.3%	207.7%	116.2%	44.1%
60%	649.7%	605.2%	395.4%	250.2%	595.2%	349.3%	207.4%	196.0%	100.5%	24.8%
70%	831.9%	726.0%	444.9%	276.7%	683.3%	368.2%	212.9%	167.8%	80.6%	11.5%
80%	1072.6%	860.9%	495.4%	305.6%	757.1%	372.6%	212.2%	124.6%	57.1%	3.9%
90%	1444.4%	1024.7%	555.4%	341.8%	792.0%	352.9%	199.4%	68.2%	30.3%	0.6%

Table 93: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	138.4%	134.0%	98.4%	101.7%	132.9%	93.8%	101.3%	76.6%	98.7%	118.0%
20%	290.0%	271.6%	187.4%	138.7%	266.1%	175.7%	132.2%	136.0%	112.2%	102.4%
30%	457.9%	413.6%	267.8%	169.9%	399.1%	245.9%	155.2%	177.6%	115.2%	78.8%
40%	646.6%	560.8%	340.5%	198.2%	531.2%	304.2%	173.4%	201.2%	111.4%	55.5%
50%	862.9%	714.6%	406.8%	225.0%	661.1%	350.6%	187.4%	206.9%	102.2%	35.4%
60%	1117.8%	877.2%	468.1%	251.3%	786.5%	384.9%	197.4%	195.3%	88.6%	19.9%
70%	1431.2%	1052.5%	526.9%	278.3%	903.0%	405.9%	202.9%	167.3%	71.2%	9.3%
80%	1845.3%	1248.0%	587.1%	307.8%	1000.5%	410.9%	202.5%	124.2%	50.6%	3.1%
90%	2485.1%	1485.7%	658.4%	344.7%	1046.6%	389.3%	190.6%	68.0%	26.9%	0.5%

Table 94: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 40\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	161.2%	185.8%	168.2%	210.0%	203.4%	173.8%	224.2%	159.2%	241.3%	327.7%
20%	338.2%	378.7%	323.5%	288.2%	412.0%	332.0%	297.8%	292.3%	284.8%	302.6%
30%	534.8%	579.9%	466.7%	355.7%	626.0%	473.8%	356.4%	394.9%	302.3%	243.5%
40%	756.6%	791.2%	599.3%	418.7%	845.1%	598.1%	405.8%	462.6%	301.3%	176.7%
50%	1012.0%	1015.1%	723.1%	479.5%	1068.4%	703.9%	446.9%	491.4%	283.9%	115.0%
60%	1314.6%	1255.9%	840.9%	540.6%	1294.1%	789.6%	479.7%	478.2%	251.8%	65.4%
70%	1688.9%	1520.5%	957.2%	604.6%	1517.5%	852.2%	503.1%	421.3%	206.4%	30.6%
80%	2187.9%	1823.6%	1080.2%	676.3%	1725.9%	885.0%	513.0%	320.8%	148.9%	10.3%
90%	2969.0%	2206.4%	1231.5%	768.5%	1872.1%	865.1%	495.5%	179.2%	80.1%	1.5%

Table 95: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 40\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	277.3%	269.3%	198.8%	206.8%	268.7%	191.2%	208.9%	158.5%	208.2%	258.6%
20%	581.7%	548.8%	382.4%	286.0%	544.4%	365.4%	279.8%	291.1%	247.6%	240.4%
30%	920.1%	840.4%	551.9%	354.6%	827.2%	521.5%	336.5%	393.3%	264.2%	194.3%
40%	1301.7%	1146.6%	709.0%	418.7%	1116.6%	658.6%	384.3%	460.8%	264.2%	141.5%
50%	1741.1%	1471.3%	855.7%	480.6%	1411.7%	775.3%	424.2%	489.6%	249.7%	92.3%
60%	2261.6%	1820.3%	995.4%	542.7%	1710.0%	869.9%	456.2%	476.6%	221.9%	52.6%
70%	2905.2%	2204.0%	1133.5%	607.8%	2005.3%	939.2%	479.2%	420.0%	182.3%	24.7%
80%	3764.2%	2643.6%	1279.7%	680.8%	2280.7%	975.7%	489.3%	319.9%	131.7%	8.3%
90%	5108.0%	3198.8%	1459.8%	774.7%	2474.0%	954.3%	473.4%	178.8%	71.0%	1.3%

Table 96: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 60\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	242.1%	280.2%	254.9%	320.5%	308.4%	265.8%	347.1%	247.2%	383.1%	543.7%
20%	508.7%	574.0%	495.2%	446.3%	632.6%	518.5%	474.6%	471.6%	476.7%	549.5%
30%	805.9%	884.0%	722.0%	558.3%	974.3%	756.5%	583.9%	663.7%	531.9%	476.4%
40%	1142.5%	1213.9%	937.3%	665.7%	1335.7%	977.9%	682.9%	811.8%	555.7%	365.7%
50%	1531.6%	1568.9%	1144.0%	772.1%	1719.0%	1180.6%	772.6%	902.4%	547.2%	247.3%
60%	1995.1%	1957.3%	1346.7%	881.5%	2126.4%	1361.8%	853.1%	919.9%	505.6%	144.0%
70%	2572.3%	2393.6%	1553.5%	999.3%	2558.7%	1516.6%	922.0%	848.7%	430.0%	68.4%
80%	3348.7%	2907.6%	1780.7%	1135.3%	3009.8%	1634.1%	972.6%	675.3%	320.3%	23.1%
90%	4580.7%	3584.2%	2072.7%	1316.5%	3432.7%	1676.0%	980.9%	392.2%	177.1%	3.5%

Table 97: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 60\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	416.5%	406.0%	301.3%	315.4%	407.5%	292.5%	323.4%	246.2%	330.3%	428.9%
20%	875.2%	831.8%	585.4%	442.8%	835.9%	570.6%	445.7%	469.6%	414.2%	436.2%
30%	1386.5%	1281.1%	853.9%	556.4%	1287.4%	832.7%	550.9%	661.0%	464.5%	380.0%
40%	1965.5%	1759.3%	1108.8%	665.3%	1764.8%	1076.6%	646.2%	808.6%	487.0%	292.8%
50%	2635.0%	2273.8%	1353.6%	773.4%	2271.3%	1300.1%	732.9%	898.9%	480.9%	198.5%
60%	3432.3%	2836.8%	1593.9%	884.4%	2809.7%	1500.1%	810.7%	916.6%	445.3%	115.9%
70%	4425.4%	3469.3%	1839.4%	1004.0%	3381.0%	1671.2%	877.6%	845.9%	379.6%	55.2%
80%	5761.0%	4214.6%	2109.2%	1142.1%	3977.2%	1801.3%	927.2%	673.4%	283.3%	18.6%
90%	7880.7%	5195.8%	2456.2%	1326.2%	4536.2%	1848.5%	936.6%	391.2%	156.9%	2.8%

Table 98: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 80\%$ age range $[20,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	323.2%	375.4%	343.3%	434.8%	415.9%	361.6%	478.3%	341.8%	542.4%	810.9%
20%	680.3%	773.3%	674.1%	615.0%	863.8%	721.1%	675.1%	680.3%	718.9%	928.3%
30%	1079.6%	1198.2%	993.9%	780.7%	1349.8%	1078.2%	857.6%	1006.1%	857.7%	913.1%
40%	1533.5%	1656.4%	1305.6%	944.1%	1882.0%	1432.7%	1036.9%	1304.2%	961.9%	786.1%
50%	2060.7%	2157.3%	1613.6%	1110.9%	2471.5%	1785.0%	1215.8%	1550.9%	1020.7%	582.5%
60%	2691.9%	2715.7%	1925.9%	1287.4%	3134.3%	2135.6%	1396.4%	1709.1%	1019.3%	361.4%
70%	3483.3%	3357.5%	2256.5%	1483.6%	3894.9%	2485.5%	1579.3%	1722.4%	938.3%	178.1%
80%	4557.6%	4137.1%	2635.3%	1718.3%	4792.3%	2833.0%	1762.0%	1509.3%	755.3%	61.2%
90%	6287.1%	5211.2%	3147.7%	2045.7%	5885.9%	3154.3%	1922.7%	966.5%	448.3%	9.3%

Table 99: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 80\%$ age range [20,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	556.1%	544.0%	405.8%	427.8%	549.5%	397.8%	445.4%	340.4%	467.4%	639.3%
20%	1170.3%	1120.6%	796.9%	609.9%	1141.3%	793.5%	633.6%	677.4%	624.1%	736.1%
30%	1857.3%	1736.4%	1175.3%	777.7%	1783.5%	1186.7%	808.5%	1001.9%	748.0%	727.3%
40%	2638.2%	2400.5%	1544.2%	943.2%	2486.7%	1577.2%	980.4%	1298.8%	841.7%	628.5%
50%	3545.1%	3126.5%	1909.0%	1112.1%	3265.6%	1965.4%	1152.1%	1544.8%	895.7%	467.2%
60%	4631.0%	3935.8%	2279.0%	1290.9%	4141.5%	2352.1%	1325.6%	1702.7%	896.6%	290.7%
70%	5992.7%	4866.1%	2671.2%	1489.6%	5146.4%	2738.2%	1501.6%	1716.5%	827.3%	143.6%
80%	7840.7%	5996.2%	3120.6%	1727.4%	6332.3%	3122.1%	1677.9%	1504.7%	667.5%	49.4%
90%	10816.3%	7553.6%	3729.0%	2059.0%	7777.7%	3477.9%	1833.9%	964.2%	397.1%	7.5%

Table 100: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 100\%$ age range [20,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	404.6%	471.6%	433.5%	553.1%	525.7%	461.3%	618.3%	443.7%	722.7%	1149.8%
20%	852.8%	976.8%	860.7%	795.3%	1106.4%	941.9%	904.2%	926.3%	1034.2%	1582.8%
30%	1355.9%	1523.0%	1284.1%	1025.9%	1755.8%	1447.5%	1193.2%	1457.1%	1356.0%	2028.6%
40%	1929.8%	2120.2%	1708.3%	1260.5%	2494.1%	1987.4%	1505.2%	2050.1%	1713.2%	2532.9%
50%	2599.4%	2783.8%	2141.0%	1507.9%	3351.9%	2576.3%	1853.9%	2726.6%	2122.7%	3120.6%
60%	3405.5%	3538.3%	2595.7%	1779.0%	4380.1%	3240.5%	2260.0%	3522.4%	2611.3%	3831.6%
70%	4423.3%	4427.3%	3097.5%	2092.0%	5672.0%	4030.3%	2760.1%	4505.0%	3227.4%	4739.5%
80%	5817.7%	5543.7%	3700.9%	2483.7%	7433.6%	5060.9%	3434.4%	5826.2%	4078.8%	6008.9%
90%	8096.9%	7162.0%	4569.7%	3063.9%	10304.2%	6700.0%	4534.8%	7973.7%	5507.1%	8163.2%

Table 101: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 100\%$ age range [20,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	696.1%	683.4%	512.4%	544.1%	694.7%	507.5%	575.6%	441.8%	622.4%	905.9%
20%	1467.2%	1415.6%	1017.5%	788.5%	1461.9%	1036.4%	848.0%	922.3%	896.8%	1252.9%
30%	2332.6%	2207.0%	1518.2%	1021.4%	2319.9%	1593.0%	1123.8%	1450.9%	1180.4%	1610.7%
40%	3319.9%	3072.5%	2020.2%	1258.5%	3295.4%	2187.4%	1421.5%	2041.4%	1495.3%	2015.1%
50%	4471.9%	4034.2%	2532.5%	1508.4%	4428.9%	2836.1%	1754.3%	2715.1%	1856.3%	2486.4%
60%	5858.7%	5127.6%	3071.0%	1782.4%	5787.4%	3567.9%	2141.8%	3507.8%	2287.0%	3056.4%
70%	7609.6%	6416.1%	3665.7%	2098.6%	7494.4%	4438.5%	2619.1%	4486.6%	2830.0%	3784.1%
80%	10008.5%	8034.0%	4381.1%	2494.3%	9822.1%	5574.8%	3262.8%	5803.0%	3580.6%	4801.5%
90%	13929.4%	10379.7%	5411.4%	3080.5%	13615.1%	7382.4%	4313.0%	7943.3%	4839.9%	6528.0%

TABLES

Function: Sin

Age Range: 30–80

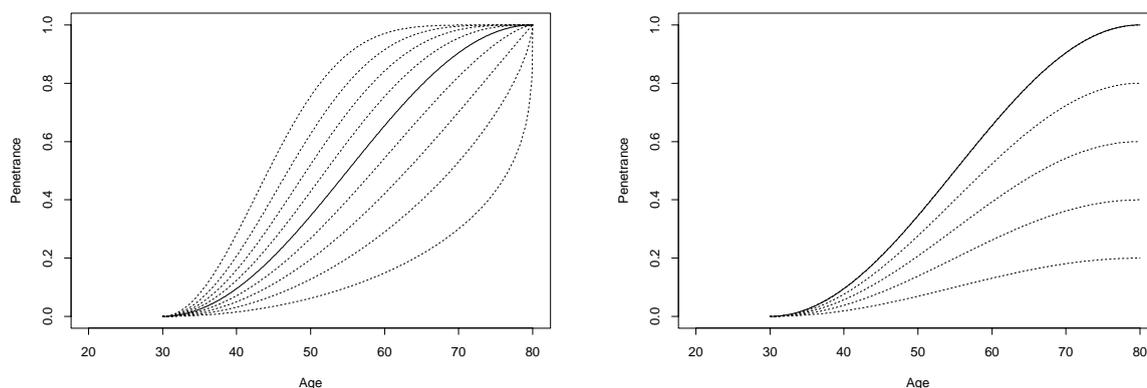


Figure 15: Proportional hazards family with sine baseline curve for age range $[30,80]$ with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 102: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		10 Yrs	20 Yrs	30 Yrs	40 Yrs	Term	10 Yrs	20 Yrs	30 Yrs	Term	10 Yrs
10%	0.0%	11.6%	17.0%	17.2%	18.7%	21.2%	19.8%	23.1%	20.6%	19.2%	
20%	0.0%	24.3%	35.0%	34.3%	39.3%	43.7%	39.5%	47.2%	40.8%	36.8%	
30%	0.0%	38.6%	54.2%	51.2%	62.3%	67.8%	59.2%	72.5%	60.4%	52.5%	
40%	0.0%	54.7%	74.9%	68.0%	88.5%	93.8%	78.9%	99.3%	79.3%	65.9%	
50%	0.0%	73.4%	97.4%	84.8%	118.8%	122.3%	98.8%	127.8%	97.4%	76.3%	
60%	0.0%	95.6%	122.4%	101.7%	155.0%	154.2%	119.1%	158.3%	114.5%	83.0%	
70%	0.0%	123.4%	151.1%	119.2%	200.3%	190.9%	140.2%	191.2%	130.2%	84.7%	
80%	0.0%	160.8%	185.5%	138.0%	261.6%	235.4%	163.2%	227.2%	143.6%	79.4%	
90%	0.0%	220.6%	231.6%	160.4%	359.9%	295.9%	191.1%	266.3%	152.4%	62.3%	

Table 103: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		10 Yrs	20 Yrs	30 Yrs	40 Yrs	Term	10 Yrs	20 Yrs	30 Yrs	Term	10 Yrs
10%	0.0%	16.8%	20.1%	17.0%	24.7%	23.3%	18.6%	23.0%	18.0%	15.3%	
20%	0.0%	35.2%	41.3%	33.9%	51.9%	48.0%	37.1%	47.0%	35.5%	29.4%	
30%	0.0%	55.8%	64.0%	50.6%	82.3%	74.5%	55.6%	72.2%	52.7%	41.9%	
40%	0.0%	79.2%	88.4%	67.3%	116.9%	103.2%	74.2%	98.9%	69.2%	52.6%	
50%	0.0%	106.2%	115.0%	84.0%	156.9%	134.5%	93.0%	127.3%	85.1%	60.9%	
60%	0.0%	138.5%	144.5%	100.9%	204.7%	169.6%	112.2%	157.6%	100.2%	66.3%	
70%	0.0%	178.7%	178.4%	118.4%	264.6%	210.0%	132.3%	190.5%	114.0%	67.7%	
80%	0.0%	232.9%	219.0%	137.3%	345.6%	259.0%	154.2%	226.4%	126.0%	63.5%	
90%	0.0%	319.4%	273.6%	159.8%	475.4%	325.7%	181.0%	265.4%	134.0%	49.9%	

Table 104: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 40\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		10 Yrs	20 Yrs	30 Yrs	40 Yrs	Term	10 Yrs	20 Yrs	30 Yrs	Term	10 Yrs
10%	0.0%	23.2%	34.1%	34.6%	37.4%	42.5%	39.9%	46.4%	41.7%	39.2%	
20%	0.0%	48.7%	70.2%	69.0%	78.7%	87.9%	80.0%	95.7%	83.5%	76.8%	
30%	0.0%	77.2%	108.9%	103.3%	125.0%	136.9%	120.7%	148.4%	125.2%	112.0%	
40%	0.0%	109.5%	150.8%	137.8%	177.7%	190.3%	162.0%	205.1%	166.9%	143.9%	
50%	0.0%	147.0%	196.6%	172.5%	238.9%	249.3%	204.4%	266.6%	208.2%	171.0%	
60%	0.0%	191.8%	247.7%	208.0%	312.3%	316.0%	248.4%	334.4%	249.0%	191.1%	
70%	0.0%	247.7%	306.6%	244.9%	404.5%	393.8%	295.3%	410.2%	288.7%	200.9%	
80%	0.0%	323.2%	377.9%	285.1%	530.0%	489.8%	347.8%	497.3%	326.2%	194.4%	
90%	0.0%	444.1%	474.8%	333.8%	732.8%	623.8%	413.7%	600.6%	357.3%	158.2%	

Table 105: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 40\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	33.5%	40.2%	34.1%	49.4%	46.7%	37.4%	46.2%	36.3%	31.3%
20%	0.0%	70.5%	82.9%	68.2%	104.0%	96.7%	75.1%	95.3%	72.8%	61.2%
30%	0.0%	111.8%	128.6%	102.2%	165.2%	150.6%	113.3%	147.8%	109.2%	89.3%
40%	0.0%	158.6%	178.0%	136.4%	234.7%	209.3%	152.3%	204.2%	145.7%	114.8%
50%	0.0%	212.9%	232.0%	170.9%	315.6%	274.2%	192.3%	265.5%	181.9%	136.5%
60%	0.0%	277.7%	292.5%	206.2%	412.6%	347.6%	233.9%	333.0%	217.7%	152.6%
70%	0.0%	358.6%	362.0%	243.1%	534.4%	433.2%	278.5%	408.6%	252.7%	160.6%
80%	0.0%	468.0%	446.3%	283.4%	700.1%	538.9%	328.4%	495.3%	286.0%	155.6%
90%	0.0%	643.0%	560.8%	332.6%	968.1%	686.4%	391.5%	598.4%	314.0%	126.8%

Table 106: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 60\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	34.7%	51.2%	52.0%	56.2%	64.0%	60.1%	70.1%	63.3%	60.0%
20%	0.0%	73.1%	105.7%	104.1%	118.3%	132.8%	121.5%	145.7%	128.3%	120.3%
30%	0.0%	115.9%	164.2%	156.6%	188.1%	207.5%	184.5%	227.8%	195.2%	179.9%
40%	0.0%	164.6%	227.7%	209.5%	267.6%	289.5%	249.5%	317.9%	264.2%	237.7%
50%	0.0%	221.0%	297.6%	263.4%	360.4%	381.2%	317.4%	418.1%	335.4%	291.5%
60%	0.0%	288.4%	376.0%	319.0%	472.0%	485.9%	389.3%	531.6%	409.2%	337.8%
70%	0.0%	372.9%	466.9%	377.6%	612.7%	609.8%	467.8%	663.6%	486.0%	370.2%
80%	0.0%	487.2%	577.8%	442.2%	805.4%	765.5%	558.0%	823.5%	565.9%	376.2%
90%	0.0%	670.6%	730.4%	522.1%	1119.6%	989.0%	676.1%	1032.7%	647.6%	325.0%

Table 107: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 60\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	50.3%	60.4%	51.4%	74.2%	70.3%	56.4%	69.8%	55.2%	47.8%
20%	0.0%	105.8%	124.8%	102.9%	156.3%	146.0%	114.1%	145.1%	111.8%	95.9%
30%	0.0%	167.9%	193.8%	154.8%	248.5%	228.1%	173.3%	226.8%	170.2%	143.5%
40%	0.0%	238.3%	268.8%	207.3%	353.6%	318.4%	234.5%	316.6%	230.5%	189.6%
50%	0.0%	320.0%	351.3%	260.9%	476.1%	419.3%	298.5%	416.3%	292.8%	232.6%
60%	0.0%	417.7%	443.9%	316.2%	623.5%	534.5%	366.5%	529.4%	357.6%	269.7%
70%	0.0%	539.9%	551.2%	374.7%	809.5%	670.8%	440.8%	660.8%	425.1%	295.8%
80%	0.0%	705.4%	682.3%	439.4%	1064.0%	842.2%	526.6%	820.2%	495.8%	301.0%
90%	0.0%	971.0%	862.6%	519.9%	1479.1%	1088.3%	639.4%	1028.7%	568.6%	260.5%

Table 108: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 80\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry			Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	46.3%	68.4%	69.6%	74.9%	85.5%	80.7%	94.2%	85.4%	81.7%
20%	0.0%	97.5%	141.4%	139.8%	158.1%	178.2%	164.1%	197.2%	175.4%	167.8%
30%	0.0%	154.7%	220.0%	210.9%	251.5%	279.5%	250.9%	311.0%	270.9%	258.1%
40%	0.0%	219.8%	305.7%	283.3%	358.4%	391.7%	341.9%	438.5%	372.8%	352.6%
50%	0.0%	295.3%	400.5%	357.7%	483.3%	518.3%	438.6%	583.9%	482.8%	450.1%
60%	0.0%	385.7%	507.4%	435.1%	634.1%	664.7%	543.4%	753.9%	603.3%	548.1%
70%	0.0%	499.0%	632.0%	517.8%	825.1%	840.3%	660.6%	959.9%	738.2%	639.7%
80%	0.0%	652.7%	785.6%	610.3%	1088.1%	1065.5%	799.8%	1225.4%	894.8%	706.6%
90%	0.0%	900.1%	999.4%	727.1%	1521.0%	1398.4%	990.2%	1612.6%	1090.7%	687.9%

Table 109: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 80\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	67.1%	80.7%	68.7%	99.0%	94.1%	75.7%	93.8%	74.4%	65.1%	
20%	0.0%	141.2%	166.9%	138.1%	208.8%	195.9%	154.0%	196.3%	152.9%	133.7%	
30%	0.0%	224.1%	259.7%	208.5%	332.3%	307.3%	235.5%	309.7%	236.1%	205.8%	
40%	0.0%	318.2%	360.9%	280.3%	473.4%	430.8%	321.2%	436.7%	325.1%	281.1%	
50%	0.0%	427.6%	472.7%	354.2%	638.5%	570.0%	412.4%	581.5%	421.3%	359.0%	
60%	0.0%	558.4%	598.9%	431.2%	837.7%	731.0%	511.3%	750.7%	526.8%	437.3%	
70%	0.0%	722.5%	746.1%	513.7%	1090.1%	924.3%	622.2%	955.9%	645.2%	510.7%	
80%	0.0%	945.1%	927.5%	606.3%	1437.5%	1172.1%	754.2%	1220.4%	783.0%	564.7%	
90%	0.0%	1303.4%	1180.2%	723.7%	2009.4%	1538.6%	935.6%	1606.1%	956.3%	550.7%	

Table 110: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 100\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	57.9%	85.6%	87.2%	93.8%	107.3%	101.4%	118.5%	108.0%	104.4%	
20%	0.0%	122.0%	177.3%	175.9%	198.0%	224.2%	207.7%	250.2%	225.0%	219.8%	
30%	0.0%	193.6%	276.4%	266.3%	315.4%	353.0%	319.9%	398.3%	352.9%	349.2%	
40%	0.0%	275.2%	384.9%	359.2%	449.9%	497.0%	439.5%	567.8%	495.0%	496.6%	
50%	0.0%	369.9%	505.3%	455.4%	607.6%	661.0%	569.1%	766.3%	655.9%	668.3%	
60%	0.0%	483.4%	641.9%	556.8%	798.7%	852.9%	712.7%	1006.4%	843.4%	874.9%	
70%	0.0%	626.0%	802.2%	666.2%	1041.8%	1086.8%	877.7%	1311.4%	1072.0%	1135.6%	
80%	0.0%	819.8%	1001.6%	790.7%	1378.5%	1393.0%	1080.8%	1732.9%	1373.9%	1493.4%	
90%	0.0%	1132.8%	1283.0%	951.2%	1937.9%	1860.6%	1372.8%	2432.1%	1850.3%	2083.1%	

Table 111: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 100\%$ age range $[30,80]$.

Percentage of Penetrance Q at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	83.9%	101.0%	86.2%	123.9%	117.9%	95.1%	118.0%	94.1%	83.2%	
20%	0.0%	176.6%	209.2%	173.8%	261.5%	246.5%	194.9%	249.1%	196.0%	175.2%	
30%	0.0%	280.4%	326.2%	263.3%	416.6%	388.2%	300.3%	396.6%	307.6%	278.3%	
40%	0.0%	398.4%	454.2%	355.3%	594.3%	546.5%	412.8%	565.4%	431.5%	395.8%	
50%	0.0%	535.6%	596.3%	450.8%	802.7%	726.9%	534.8%	763.0%	571.9%	532.7%	
60%	0.0%	700.0%	757.7%	551.6%	1055.1%	938.0%	670.2%	1002.1%	735.8%	697.4%	
70%	0.0%	906.4%	947.0%	660.7%	1376.3%	1195.3%	826.1%	1305.8%	935.8%	905.3%	
80%	0.0%	1187.1%	1182.4%	785.1%	1821.0%	1532.1%	1018.4%	1725.5%	1200.3%	1190.8%	
90%	0.0%	1640.3%	1514.8%	946.2%	2560.1%	2046.8%	1295.7%	2421.9%	1618.5%	1661.7%	

TABLES

Function: Sin

Age Range: 30–60

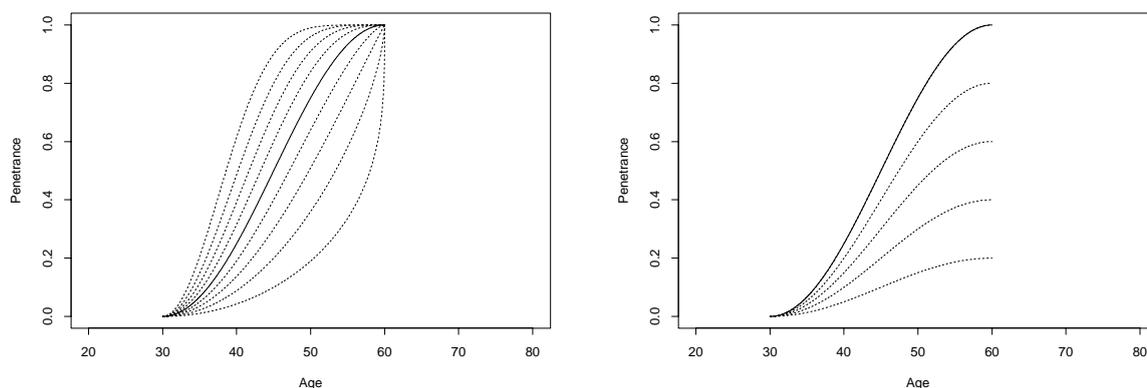


Figure 16: Proportional hazards family with sine baseline curve for age range $[30,60]$ with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 112: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[30,60]$.

Percentage of Penetrance Level at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	32.7%	51.2%	87.7%	52.8%	63.9%	101.0%	72.2%	117.8%	160.0%	
20%	0.0%	67.8%	99.1%	110.5%	109.7%	124.3%	128.7%	137.1%	140.2%	150.3%	
30%	0.0%	105.7%	143.7%	128.5%	171.5%	181.2%	150.9%	193.6%	153.4%	127.5%	
40%	0.0%	147.3%	185.0%	144.3%	239.4%	234.6%	170.7%	240.7%	160.9%	101.0%	
50%	0.0%	193.6%	223.3%	158.9%	315.3%	284.6%	189.0%	276.9%	163.5%	74.3%	
60%	0.0%	246.1%	258.7%	172.7%	402.1%	331.6%	206.7%	300.4%	161.3%	49.7%	
70%	0.0%	307.9%	291.8%	186.6%	504.7%	376.2%	224.5%	308.2%	153.6%	29.0%	
80%	0.0%	384.7%	323.5%	201.3%	633.6%	420.0%	243.7%	294.9%	138.9%	13.3%	
90%	0.0%	492.7%	357.1%	219.1%	817.2%	467.7%	267.1%	247.3%	111.8%	3.4%	

Table 113: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[30,60]$.

Percentage of Penetrance Level at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	47.3%	60.4%	85.8%	69.8%	70.3%	93.8%	71.9%	101.6%	126.3%	
20%	0.0%	98.1%	116.9%	108.9%	144.9%	136.7%	120.5%	136.5%	121.8%	119.4%	
30%	0.0%	153.1%	169.6%	127.2%	226.5%	199.3%	141.9%	192.8%	133.9%	101.8%	
40%	0.0%	213.3%	218.4%	143.4%	316.3%	258.0%	161.1%	239.7%	141.0%	80.9%	
50%	0.0%	280.3%	263.7%	158.2%	416.6%	313.1%	178.8%	275.9%	143.7%	59.7%	
60%	0.0%	356.4%	305.6%	172.3%	531.2%	364.9%	195.9%	299.3%	142.1%	40.0%	
70%	0.0%	445.8%	344.7%	186.4%	666.8%	414.2%	213.2%	307.1%	135.6%	23.4%	
80%	0.0%	557.1%	382.4%	201.4%	837.0%	462.6%	231.7%	294.0%	122.8%	10.7%	
90%	0.0%	713.6%	422.3%	219.6%	1079.7%	515.3%	254.4%	246.7%	99.0%	2.8%	

Table 114: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 40\%$ age range $[30,60]$.

Percentage of Penetrance Level at Mid Age	Term 10 Yrs	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs	
10%	0.0%	65.4%	102.8%	177.2%	105.9%	129.0%	206.1%	147.4%	245.3%	345.9%	
20%	0.0%	135.8%	199.9%	225.3%	220.5%	253.3%	267.0%	285.8%	302.0%	345.5%	
30%	0.0%	212.1%	291.2%	263.8%	345.8%	372.6%	317.6%	412.7%	340.3%	307.5%	
40%	0.0%	295.9%	376.7%	298.3%	484.4%	487.2%	363.9%	525.1%	366.8%	252.4%	
50%	0.0%	389.3%	456.8%	330.3%	640.5%	597.2%	408.0%	619.2%	382.1%	190.5%	
60%	0.0%	495.9%	531.9%	361.1%	820.5%	703.6%	451.5%	689.2%	385.9%	129.8%	
70%	0.0%	621.6%	603.1%	392.3%	1035.9%	808.1%	496.4%	726.7%	376.1%	76.6%	
80%	0.0%	778.8%	672.8%	425.9%	1310.2%	915.0%	546.0%	716.5%	347.8%	35.3%	
90%	0.0%	1001.7%	748.4%	467.0%	1710.3%	1037.6%	608.5%	622.0%	286.7%	9.1%	

Table 115: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 40\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		10 Yrs	Term	Term	Term	Term	Term	Term	Term	Term	Term
10%	0.0%	94.8%	121.3%	173.3%	139.9%	141.9%	191.4%	146.8%	211.4%	272.9%	
20%	0.0%	196.6%	235.9%	222.0%	291.3%	278.5%	249.8%	284.6%	262.2%	274.4%	
30%	0.0%	307.1%	343.7%	261.2%	456.8%	409.8%	298.5%	410.9%	297.0%	245.3%	
40%	0.0%	428.5%	444.7%	296.2%	639.9%	535.9%	343.2%	523.0%	321.2%	202.0%	
50%	0.0%	563.8%	539.4%	328.7%	846.1%	657.1%	385.7%	616.7%	335.6%	152.9%	
60%	0.0%	718.1%	628.3%	360.1%	1083.9%	774.3%	427.7%	686.6%	339.7%	104.4%	
70%	0.0%	900.1%	712.5%	391.8%	1368.5%	889.6%	471.0%	724.2%	331.7%	61.7%	
80%	0.0%	1127.8%	795.1%	425.9%	1731.0%	1007.5%	518.8%	714.3%	307.3%	28.5%	
90%	0.0%	1450.5%	884.9%	467.8%	2259.6%	1143.1%	579.2%	620.3%	253.8%	7.4%	

Table 116: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 60\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		10 Yrs	Term	Term	Term	Term	Term	Term	Term	Term	Term
10%	0.0%	98.2%	154.9%	268.6%	159.3%	195.3%	315.6%	225.8%	383.7%	564.8%	
20%	0.0%	204.1%	302.5%	344.6%	332.5%	387.0%	416.0%	447.7%	490.7%	609.5%	
30%	0.0%	319.1%	442.6%	406.6%	522.9%	575.1%	502.6%	662.7%	573.1%	580.4%	
40%	0.0%	445.8%	575.5%	462.8%	735.1%	759.9%	584.4%	866.5%	639.4%	504.1%	
50%	0.0%	587.4%	701.3%	515.7%	975.9%	942.3%	664.5%	1052.8%	689.2%	397.6%	
60%	0.0%	749.4%	820.9%	567.5%	1256.3%	1124.1%	745.8%	1212.0%	720.1%	279.9%	
70%	0.0%	941.4%	936.1%	620.3%	1595.6%	1309.2%	832.3%	1327.8%	726.8%	168.8%	
80%	0.0%	1182.7%	1051.1%	678.0%	2034.5%	1507.0%	930.8%	1369.1%	697.5%	78.9%	
90%	0.0%	1527.6%	1179.1%	749.9%	2690.2%	1747.4%	1059.9%	1256.4%	599.7%	20.5%	

Table 117: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 60\%$ age range [30,60].

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
		10 Yrs	Term	Term	Term	Term	Term	Term	Term	Term	Term
10%	0.0%	142.3%	182.8%	262.7%	210.4%	214.7%	292.9%	224.8%	330.4%	445.4%	
20%	0.0%	295.5%	357.0%	339.4%	439.2%	425.5%	389.0%	445.7%	425.8%	483.6%	
30%	0.0%	462.1%	522.4%	402.3%	690.8%	632.4%	472.1%	659.8%	499.7%	462.6%	
40%	0.0%	645.5%	679.3%	459.3%	971.2%	835.8%	550.7%	862.9%	559.4%	403.2%	
50%	0.0%	850.5%	828.0%	513.0%	1289.3%	1036.6%	627.7%	1048.6%	604.6%	319.0%	
60%	0.0%	1085.2%	969.4%	565.5%	1659.6%	1236.8%	705.9%	1207.3%	633.2%	225.1%	
70%	0.0%	1363.1%	1105.8%	619.2%	2107.9%	1440.9%	789.1%	1323.0%	640.4%	136.1%	
80%	0.0%	1712.5%	1242.0%	677.8%	2687.8%	1659.2%	883.9%	1364.5%	615.8%	63.7%	
90%	0.0%	2212.0%	1393.9%	750.7%	3554.1%	1924.7%	1008.1%	1252.9%	530.6%	16.6%	

Table 118: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 80\%$ age range $[30,60]$.

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry				Age 40 at Entry		Age 50 at Entry
		10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	Term
10%	0.0%	131.1%	207.5%	362.1%	212.9%	262.8%	429.6%	307.6%	534.4%	826.1%		
20%	0.0%	272.6%	406.9%	468.6%	445.6%	525.9%	577.0%	624.7%	713.6%	986.3%		
30%	0.0%	426.8%	598.3%	557.4%	703.1%	789.7%	709.1%	950.6%	871.1%	1043.6%		
40%	0.0%	596.9%	781.6%	639.0%	991.9%	1055.4%	838.3%	1283.7%	1017.6%	1005.4%		
50%	0.0%	787.7%	957.5%	717.0%	1322.2%	1325.1%	969.1%	1620.3%	1152.1%	871.7%		
60%	0.0%	1006.7%	1127.0%	794.3%	1710.5%	1603.0%	1106.6%	1952.7%	1270.1%	663.8%		
70%	0.0%	1267.3%	1293.0%	874.4%	2186.2%	1897.3%	1258.0%	2264.4%	1361.6%	424.4%		
80%	0.0%	1596.6%	1462.2%	963.2%	2811.6%	2227.7%	1437.5%	2513.7%	1402.6%	205.8%		
90%	0.0%	2071.4%	1655.5%	1075.6%	3770.3%	2655.7%	1684.9%	2563.9%	1320.3%	54.4%		

Table 119: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 80\%$ age range $[30,60]$.

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry				Age 40 at Entry		Age 50 at Entry
		10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	Term
10%	0.0%	189.9%	244.8%	354.1%	281.2%	289.0%	398.7%	306.2%	460.0%	651.2%		
20%	0.0%	394.8%	480.2%	461.5%	588.7%	578.2%	539.2%	621.9%	618.7%	781.8%		
30%	0.0%	618.0%	706.1%	551.3%	928.8%	868.4%	665.7%	946.5%	758.6%	830.8%		
40%	0.0%	864.4%	922.6%	634.0%	1310.4%	1160.7%	789.4%	1278.2%	889.1%	803.1%		
50%	0.0%	1140.6%	1130.4%	713.0%	1746.8%	1457.6%	914.7%	1613.5%	1009.2%	698.5%		
60%	0.0%	1457.8%	1330.8%	791.2%	2259.7%	1763.5%	1046.3%	1944.8%	1115.0%	533.4%		
70%	0.0%	1835.0%	1527.2%	872.3%	2888.1%	2087.8%	1191.4%	2255.6%	1197.8%	341.8%		
80%	0.0%	2312.0%	1727.6%	962.2%	3714.4%	2452.1%	1363.5%	2504.7%	1236.5%	166.1%		
90%	0.0%	2999.4%	1956.8%	1076.1%	4981.0%	2924.4%	1600.7%	2556.0%	1166.7%	44.0%		

Table 120: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 100\%$ age range $[30,60]$.

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry				Age 40 at Entry		Age 50 at Entry
		10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	Term
10%	0.0%	164.1%	260.5%	457.5%	266.7%	331.6%	548.5%	392.9%	699.0%	1143.3%		
20%	0.0%	341.5%	513.3%	597.7%	560.0%	670.1%	751.4%	818.9%	981.1%	1567.8%		
30%	0.0%	535.2%	758.3%	716.8%	886.3%	1017.5%	941.2%	1285.9%	1266.0%	2002.6%		
40%	0.0%	749.4%	995.7%	828.3%	1254.8%	1376.5%	1134.0%	1805.3%	1577.5%	2492.8%		
50%	0.0%	990.4%	1226.2%	936.4%	1679.9%	1752.3%	1336.9%	2394.7%	1929.9%	3062.8%		
60%	0.0%	1268.0%	1451.9%	1045.0%	2184.4%	2153.5%	1559.0%	3083.3%	2344.7%	3750.6%		
70%	0.0%	1599.6%	1676.6%	1159.4%	2810.3%	2597.5%	1814.9%	3925.6%	2861.3%	4627.0%		
80%	0.0%	2021.1%	1910.6%	1288.2%	3647.7%	3124.1%	2134.7%	5043.9%	3565.9%	5849.8%		
90%	0.0%	2633.9%	2185.3%	1454.8%	4966.8%	3859.3%	2607.6%	6827.0%	4731.3%	7921.2%		

Table 121: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 100\%$ age range $[30,60]$.

Percentage of Penetrance Q at Mid Age	Term	Age 20 at Entry				Age 30 at Entry				Age 40 at Entry		Age 50 at Entry
		10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	Term
10%	0.0%	237.5%	307.4%	447.3%	352.4%	364.5%	508.8%	391.1%	601.5%	900.6%		
20%	0.0%	494.4%	605.7%	588.4%	739.8%	736.8%	701.9%	815.2%	849.7%	1240.8%		
30%	0.0%	774.9%	894.9%	708.7%	1170.8%	1118.8%	882.9%	1280.1%	1100.9%	1589.7%		
40%	0.0%	1085.2%	1175.2%	821.3%	1657.7%	1513.7%	1066.8%	1797.3%	1375.5%	1982.9%		
50%	0.0%	1434.1%	1447.5%	930.5%	2219.2%	1927.1%	1260.4%	2384.2%	1686.0%	2439.9%		
60%	0.0%	1836.0%	1714.2%	1040.3%	2885.7%	2368.7%	1472.3%	3069.9%	2051.7%	2991.3%		
70%	0.0%	2316.2%	1980.0%	1155.9%	3712.6%	2857.6%	1716.5%	3909.0%	2507.0%	3693.8%		
80%	0.0%	2926.5%	2256.9%	1286.0%	4818.8%	3437.9%	2021.7%	5023.0%	3128.2%	4674.0%		
90%	0.0%	3813.9%	2582.3%	1454.3%	6561.6%	4248.4%	2473.1%	6800.0%	4155.6%	6334.1%		

TABLES

Function: Sin

Age Range: 40–80

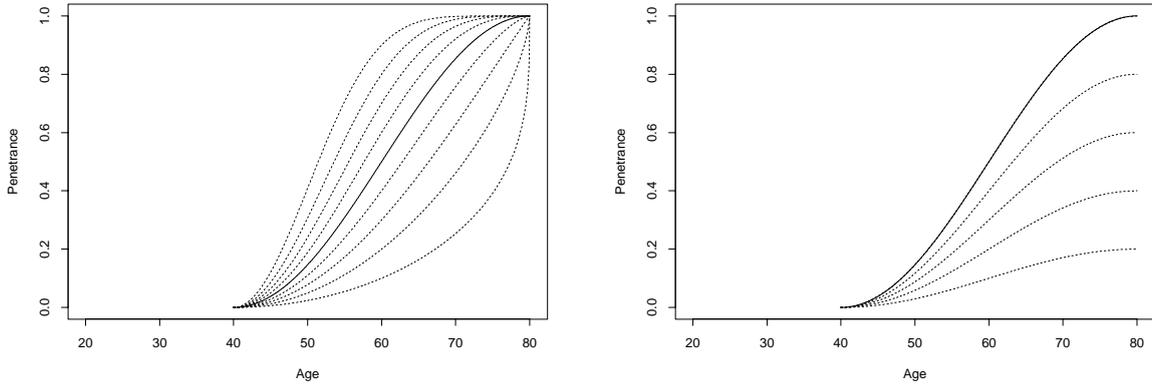


Figure 17: Proportional hazards family with sine baseline curve for age range [40,80] with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 122: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 20\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	5.3%	9.3%	0.0%	6.6%	10.6%	10.8%	13.8%	16.5%
20%	0.0%	0.0%	11.1%	18.7%	0.0%	13.8%	21.5%	22.7%	28.0%	33.1%
30%	0.0%	0.0%	17.6%	28.4%	0.0%	21.8%	32.6%	35.9%	42.6%	49.7%
40%	0.0%	0.0%	24.8%	38.4%	0.0%	30.7%	44.1%	50.6%	57.9%	66.2%
50%	0.0%	0.0%	33.0%	48.8%	0.0%	41.0%	56.1%	67.6%	73.9%	82.4%
60%	0.0%	0.0%	42.6%	59.6%	0.0%	53.0%	68.7%	87.6%	90.8%	98.1%
70%	0.0%	0.0%	54.4%	71.2%	0.0%	67.7%	82.2%	112.1%	109.2%	112.8%
80%	0.0%	0.0%	69.9%	83.9%	0.0%	87.1%	97.2%	144.6%	129.9%	125.3%
90%	0.0%	0.0%	93.7%	99.1%	0.0%	116.8%	115.3%	194.8%	155.4%	131.5%

Table 123: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 20\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	6.3%	9.1%	0.0%	7.2%	9.9%	10.8%	12.0%	13.2%
20%	0.0%	0.0%	13.1%	18.4%	0.0%	15.2%	20.0%	22.6%	24.3%	26.4%
30%	0.0%	0.0%	20.7%	27.9%	0.0%	23.9%	30.4%	35.7%	37.0%	39.6%
40%	0.0%	0.0%	29.2%	37.7%	0.0%	33.7%	41.1%	50.4%	50.3%	52.7%
50%	0.0%	0.0%	38.8%	47.9%	0.0%	45.0%	52.3%	67.2%	64.2%	65.7%
60%	0.0%	0.0%	50.2%	58.5%	0.0%	58.2%	64.1%	87.1%	79.0%	78.3%
70%	0.0%	0.0%	64.1%	69.9%	0.0%	74.3%	76.7%	111.5%	95.0%	90.1%
80%	0.0%	0.0%	82.4%	82.6%	0.0%	95.6%	90.8%	143.9%	113.2%	100.1%
90%	0.0%	0.0%	110.3%	97.7%	0.0%	128.1%	107.8%	193.8%	135.6%	105.3%

Table 124: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 40\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	10.7%	18.6%	0.0%	13.2%	21.3%	21.7%	27.7%	33.4%
20%	0.0%	0.0%	22.3%	37.6%	0.0%	27.7%	43.1%	45.6%	56.5%	67.7%
30%	0.0%	0.0%	35.2%	57.1%	0.0%	43.7%	65.7%	72.0%	86.6%	102.9%
40%	0.0%	0.0%	49.6%	77.3%	0.0%	61.6%	89.2%	101.9%	118.3%	139.0%
50%	0.0%	0.0%	66.1%	98.2%	0.0%	82.2%	113.7%	136.4%	151.9%	175.9%
60%	0.0%	0.0%	85.5%	120.3%	0.0%	106.4%	139.7%	177.1%	188.2%	213.2%
70%	0.0%	0.0%	109.2%	143.9%	0.0%	136.2%	167.9%	227.6%	228.4%	250.4%
80%	0.0%	0.0%	140.4%	170.1%	0.0%	175.4%	199.4%	294.9%	274.6%	285.3%
90%	0.0%	0.0%	188.2%	201.7%	0.0%	235.8%	238.1%	400.3%	333.7%	310.5%

Table 125: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 40\%$ age range $[40,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	12.5%	18.2%	0.0%	14.5%	19.8%	21.6%	24.0%	26.6%
20%	0.0%	0.0%	26.2%	36.8%	0.0%	30.4%	40.1%	45.3%	49.0%	53.9%
30%	0.0%	0.0%	41.4%	56.0%	0.0%	47.9%	61.2%	71.7%	75.1%	82.0%
40%	0.0%	0.0%	58.4%	75.8%	0.0%	67.6%	83.0%	101.4%	102.7%	110.8%
50%	0.0%	0.0%	77.8%	96.4%	0.0%	90.2%	105.9%	135.6%	132.0%	140.2%
60%	0.0%	0.0%	100.6%	118.1%	0.0%	116.8%	130.2%	176.2%	163.6%	170.1%
70%	0.0%	0.0%	128.6%	141.4%	0.0%	149.4%	156.5%	226.4%	198.6%	199.9%
80%	0.0%	0.0%	165.3%	167.3%	0.0%	192.5%	186.2%	293.4%	239.1%	227.9%
90%	0.0%	0.0%	221.7%	198.6%	0.0%	258.8%	222.6%	398.3%	291.1%	248.4%

Table 126: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 60\%$ age range $[40,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	16.0%	27.9%	0.0%	19.8%	32.0%	32.6%	41.8%	50.7%
20%	0.0%	0.0%	33.5%	56.5%	0.0%	41.6%	65.0%	68.5%	85.6%	103.9%
30%	0.0%	0.0%	52.8%	86.0%	0.0%	65.6%	99.3%	108.6%	131.9%	160.1%
40%	0.0%	0.0%	74.5%	116.5%	0.0%	92.7%	135.1%	153.9%	181.3%	219.6%
50%	0.0%	0.0%	99.3%	148.4%	0.0%	123.7%	172.9%	206.3%	234.6%	282.8%
60%	0.0%	0.0%	128.4%	182.0%	0.0%	160.3%	213.2%	268.8%	293.0%	350.1%
70%	0.0%	0.0%	164.2%	218.2%	0.0%	205.4%	257.1%	346.6%	358.8%	421.7%
80%	0.0%	0.0%	211.3%	258.6%	0.0%	265.0%	307.0%	451.2%	436.9%	496.9%
90%	0.0%	0.0%	283.6%	307.8%	0.0%	357.2%	369.3%	617.4%	540.6%	568.4%

Table 127: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 60\%$ age range $[40,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	18.8%	27.3%	0.0%	21.8%	29.7%	32.4%	36.2%	40.3%
20%	0.0%	0.0%	39.4%	55.4%	0.0%	45.6%	60.5%	68.2%	74.2%	82.8%
30%	0.0%	0.0%	62.1%	84.3%	0.0%	72.0%	92.4%	108.0%	114.5%	127.6%
40%	0.0%	0.0%	87.7%	114.3%	0.0%	101.7%	125.8%	153.1%	157.4%	175.0%
50%	0.0%	0.0%	116.9%	145.6%	0.0%	135.8%	161.0%	205.3%	203.6%	225.4%
60%	0.0%	0.0%	151.3%	178.7%	0.0%	175.9%	198.6%	267.4%	254.5%	279.1%
70%	0.0%	0.0%	193.4%	214.4%	0.0%	225.4%	239.7%	344.8%	311.9%	336.4%
80%	0.0%	0.0%	248.8%	254.3%	0.0%	290.8%	286.5%	448.9%	380.2%	396.7%
90%	0.0%	0.0%	334.1%	303.1%	0.0%	392.0%	345.2%	614.2%	471.2%	454.4%

Table 128: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 80\%$ age range $[40,80]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	21.3%	37.2%	0.0%	26.5%	42.7%	43.5%	56.0%	68.3%
20%	0.0%	0.0%	44.6%	75.5%	0.0%	55.5%	87.1%	91.6%	115.3%	141.9%
30%	0.0%	0.0%	70.4%	115.1%	0.0%	87.6%	133.4%	145.4%	178.7%	221.7%
40%	0.0%	0.0%	99.4%	156.2%	0.0%	123.9%	182.0%	206.6%	247.2%	309.2%
50%	0.0%	0.0%	132.6%	199.2%	0.0%	165.5%	233.6%	277.6%	322.1%	406.2%
60%	0.0%	0.0%	171.6%	244.9%	0.0%	214.7%	289.1%	362.6%	405.9%	515.5%
70%	0.0%	0.0%	219.5%	294.2%	0.0%	275.3%	350.3%	469.3%	502.4%	641.0%
80%	0.0%	0.0%	282.7%	349.6%	0.0%	355.9%	420.5%	614.0%	620.1%	789.6%
90%	0.0%	0.0%	380.0%	417.6%	0.0%	481.1%	509.8%	847.1%	783.5%	972.1%

Table 129: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 80\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	25.1%	36.5%	0.0%	29.0%	39.7%	43.3%	48.5%	54.4%
20%	0.0%	0.0%	52.6%	74.0%	0.0%	60.9%	81.0%	91.2%	100.0%	113.0%
30%	0.0%	0.0%	82.9%	112.8%	0.0%	96.2%	124.1%	144.7%	155.0%	176.6%
40%	0.0%	0.0%	117.0%	153.2%	0.0%	135.9%	169.4%	205.5%	214.5%	246.3%
50%	0.0%	0.0%	156.1%	195.5%	0.0%	181.6%	217.5%	276.1%	279.6%	323.7%
60%	0.0%	0.0%	202.1%	240.3%	0.0%	235.6%	269.3%	360.7%	352.4%	410.8%
70%	0.0%	0.0%	258.5%	289.0%	0.0%	302.1%	326.4%	466.8%	436.4%	511.1%
80%	0.0%	0.0%	332.9%	343.7%	0.0%	390.5%	392.3%	610.8%	539.1%	629.9%
90%	0.0%	0.0%	447.5%	411.1%	0.0%	527.9%	476.2%	842.7%	682.1%	776.3%

Table 130: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 100\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	26.6%	46.6%	0.0%	33.1%	53.5%	54.5%	70.3%	86.3%
20%	0.0%	0.0%	55.8%	94.7%	0.0%	69.4%	109.4%	114.9%	145.6%	181.7%
30%	0.0%	0.0%	88.1%	144.4%	0.0%	109.7%	168.0%	182.6%	227.0%	288.3%
40%	0.0%	0.0%	124.4%	196.3%	0.0%	155.2%	229.9%	259.9%	316.1%	409.5%
50%	0.0%	0.0%	166.0%	250.8%	0.0%	207.5%	296.0%	350.1%	415.2%	550.4%
60%	0.0%	0.0%	214.9%	308.9%	0.0%	269.5%	367.8%	458.7%	527.9%	719.4%
70%	0.0%	0.0%	275.1%	371.9%	0.0%	346.1%	447.6%	595.8%	661.0%	931.7%
80%	0.0%	0.0%	354.6%	443.2%	0.0%	448.1%	540.4%	783.6%	828.6%	1221.4%
90%	0.0%	0.0%	477.3%	531.4%	0.0%	607.4%	660.6%	1090.6%	1072.5%	1694.1%

Table 131: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 100\%$ age range [40,80].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	31.4%	45.7%	0.0%	36.3%	49.8%	54.2%	60.9%	68.7%
20%	0.0%	0.0%	65.7%	92.8%	0.0%	76.2%	101.7%	114.3%	126.2%	144.7%
30%	0.0%	0.0%	103.8%	141.6%	0.0%	120.4%	156.3%	181.7%	196.9%	229.6%
40%	0.0%	0.0%	146.5%	192.5%	0.0%	170.3%	213.9%	258.6%	274.2%	326.1%
50%	0.0%	0.0%	195.4%	246.0%	0.0%	227.7%	275.5%	348.3%	360.2%	438.4%
60%	0.0%	0.0%	253.1%	303.1%	0.0%	295.7%	342.4%	456.3%	458.1%	573.0%
70%	0.0%	0.0%	324.0%	365.2%	0.0%	379.7%	416.9%	592.7%	573.9%	742.2%
80%	0.0%	0.0%	417.6%	435.5%	0.0%	491.6%	503.8%	779.5%	719.7%	973.1%
90%	0.0%	0.0%	562.1%	522.9%	0.0%	666.5%	616.6%	1084.9%	932.7%	1350.1%

TABLES

Function: Sin

Age Range: 40–60

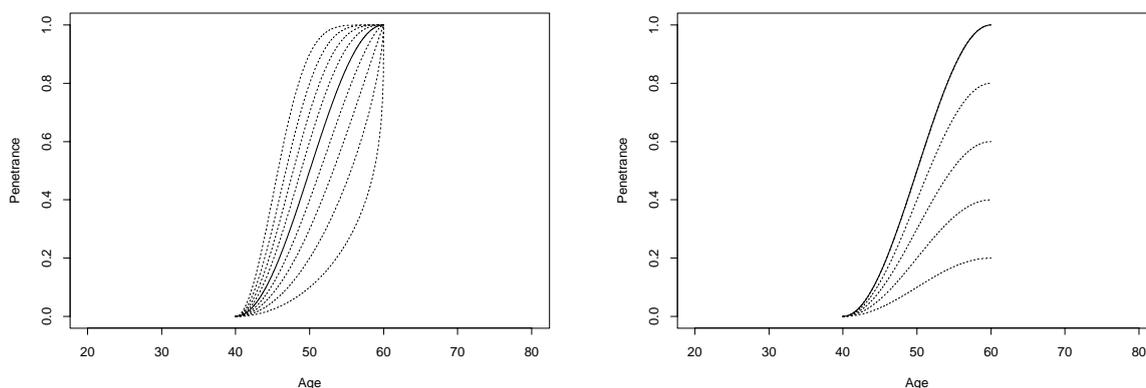


Figure 18: Proportional hazards family with sine baseline curve for age range $[40,60]$ with maximum penetrance Q of 100%, 80%, 60%, 40% and 20%.

Table 132: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[40,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	22.3%	75.9%	0.0%	27.7%	86.9%	45.6%	113.4%	173.6%
20%	0.0%	0.0%	44.9%	89.3%	0.0%	55.8%	102.9%	92.1%	136.2%	181.4%
30%	0.0%	0.0%	67.7%	98.9%	0.0%	84.3%	114.5%	139.8%	153.0%	175.2%
40%	0.0%	0.0%	90.9%	107.0%	0.0%	113.3%	124.4%	188.7%	167.8%	161.9%
50%	0.0%	0.0%	114.5%	114.2%	0.0%	142.9%	133.3%	239.3%	181.1%	143.3%
60%	0.0%	0.0%	138.7%	121.0%	0.0%	173.4%	141.6%	291.9%	193.8%	120.5%
70%	0.0%	0.0%	163.7%	127.5%	0.0%	205.0%	149.7%	347.4%	206.3%	94.3%
80%	0.0%	0.0%	190.0%	134.3%	0.0%	238.6%	158.1%	407.4%	219.5%	65.3%
90%	0.0%	0.0%	219.1%	142.3%	0.0%	276.0%	168.1%	476.4%	235.3%	33.8%

Table 133: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 20\%$ age range $[40,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	26.3%	73.8%	0.0%	30.4%	80.2%	45.4%	97.4%	137.0%
20%	0.0%	0.0%	52.8%	87.3%	0.0%	61.2%	95.5%	91.7%	117.7%	144.1%
30%	0.0%	0.0%	79.7%	97.0%	0.0%	92.5%	106.7%	139.1%	133.0%	139.7%
40%	0.0%	0.0%	107.0%	105.3%	0.0%	124.3%	116.2%	187.8%	146.2%	129.5%
50%	0.0%	0.0%	134.8%	112.7%	0.0%	156.8%	124.8%	238.1%	158.3%	115.0%
60%	0.0%	0.0%	163.3%	119.6%	0.0%	190.3%	132.9%	290.5%	169.8%	96.9%
70%	0.0%	0.0%	192.8%	126.2%	0.0%	225.0%	140.7%	345.7%	181.1%	76.0%
80%	0.0%	0.0%	223.9%	133.2%	0.0%	261.9%	148.9%	405.5%	193.0%	52.7%
90%	0.0%	0.0%	258.3%	141.3%	0.0%	303.1%	158.6%	474.3%	207.3%	27.4%

Table 134: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 40\%$ age range $[40,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	44.7%	152.7%	0.0%	55.5%	175.8%	91.7%	232.3%	368.2%
20%	0.0%	0.0%	89.9%	180.5%	0.0%	112.0%	210.0%	186.5%	284.3%	403.7%
30%	0.0%	0.0%	135.9%	200.6%	0.0%	169.6%	235.3%	284.7%	324.9%	405.7%
40%	0.0%	0.0%	182.6%	217.8%	0.0%	228.6%	257.3%	387.1%	361.3%	387.7%
50%	0.0%	0.0%	230.3%	233.2%	0.0%	289.2%	277.2%	494.7%	395.4%	353.0%
60%	0.0%	0.0%	279.4%	247.6%	0.0%	352.0%	296.1%	608.9%	428.5%	304.0%
70%	0.0%	0.0%	330.3%	261.7%	0.0%	417.7%	314.7%	732.3%	462.1%	242.6%
80%	0.0%	0.0%	384.3%	276.4%	0.0%	488.2%	334.3%	870.0%	498.5%	170.6%
90%	0.0%	0.0%	444.3%	293.8%	0.0%	568.1%	357.8%	1036.0%	543.4%	89.5%

Table 135: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 40\%$ age range $[40,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
	10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	30 Yrs	10 Yrs	20 Yrs	10 Yrs
10%	0.0%	0.0%	52.6%	148.5%	0.0%	60.9%	162.1%	91.2%	199.4%	290.4%
20%	0.0%	0.0%	105.9%	176.5%	0.0%	122.9%	194.8%	185.5%	245.7%	320.4%
30%	0.0%	0.0%	160.0%	196.8%	0.0%	186.1%	219.1%	283.2%	282.0%	323.3%
40%	0.0%	0.0%	215.0%	214.2%	0.0%	250.8%	240.3%	385.1%	314.7%	310.0%
50%	0.0%	0.0%	271.2%	229.9%	0.0%	317.4%	259.5%	492.2%	345.3%	283.1%
60%	0.0%	0.0%	329.1%	244.6%	0.0%	386.3%	277.7%	605.9%	375.1%	244.3%
70%	0.0%	0.0%	389.1%	259.0%	0.0%	458.5%	295.6%	728.7%	405.3%	195.4%
80%	0.0%	0.0%	452.7%	273.9%	0.0%	535.9%	314.5%	865.9%	438.0%	137.7%
90%	0.0%	0.0%	523.6%	291.6%	0.0%	623.7%	337.2%	1031.4%	478.4%	72.4%

Table 136: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 60\%$ age range $[40,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
	10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	30 Yrs	10 Yrs	20 Yrs	10 Yrs
10%	0.0%	0.0%	67.1%	230.4%	0.0%	83.5%	266.6%	138.4%	357.1%	587.9%
20%	0.0%	0.0%	135.2%	273.7%	0.0%	168.8%	321.5%	283.0%	446.1%	682.5%
30%	0.0%	0.0%	204.4%	305.2%	0.0%	256.2%	362.9%	435.1%	519.1%	722.6%
40%	0.0%	0.0%	275.1%	332.5%	0.0%	346.1%	399.5%	596.0%	587.2%	724.6%
50%	0.0%	0.0%	347.5%	357.2%	0.0%	439.1%	433.2%	768.0%	652.9%	689.2%
60%	0.0%	0.0%	422.1%	380.3%	0.0%	536.1%	465.4%	954.5%	718.8%	617.3%
70%	0.0%	0.0%	499.9%	403.1%	0.0%	638.5%	497.5%	1161.2%	787.8%	509.9%
80%	0.0%	0.0%	582.8%	427.0%	0.0%	749.6%	531.8%	1399.8%	865.1%	369.3%
90%	0.0%	0.0%	675.8%	455.4%	0.0%	877.7%	573.3%	1702.7%	964.7%	198.4%

Table 137: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 60\%$ age range $[40,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
	10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	30 Yrs	10 Yrs	20 Yrs	10 Yrs
10%	0.0%	0.0%	79.0%	224.0%	0.0%	91.6%	245.9%	137.6%	306.4%	463.4%
20%	0.0%	0.0%	159.2%	267.5%	0.0%	185.2%	298.1%	281.5%	385.3%	541.1%
30%	0.0%	0.0%	240.7%	299.4%	0.0%	281.1%	337.8%	432.8%	450.3%	575.4%
40%	0.0%	0.0%	324.0%	327.1%	0.0%	379.7%	372.9%	592.9%	510.9%	578.9%
50%	0.0%	0.0%	409.2%	352.0%	0.0%	481.8%	405.2%	764.1%	569.5%	552.2%
60%	0.0%	0.0%	497.2%	375.6%	0.0%	588.3%	436.1%	949.6%	628.3%	495.7%
70%	0.0%	0.0%	588.9%	398.7%	0.0%	700.8%	467.0%	1155.4%	690.0%	410.4%
80%	0.0%	0.0%	686.6%	422.9%	0.0%	822.8%	499.9%	1393.0%	759.1%	297.9%
90%	0.0%	0.0%	796.4%	451.8%	0.0%	963.6%	539.9%	1694.9%	848.2%	160.4%

Table 138: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 80\%$ age range $[40,60]$.

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term	Term	Term	Term	Term	Term	Term	Term	Term	Term
	10 Yrs	20 Yrs	30 Yrs	40 Yrs	10 Yrs	20 Yrs	30 Yrs	10 Yrs	20 Yrs	10 Yrs
10%	0.0%	0.0%	89.5%	309.1%	0.0%	111.5%	359.6%	185.5%	488.2%	837.8%
20%	0.0%	0.0%	180.6%	368.9%	0.0%	226.0%	437.7%	381.9%	623.6%	1042.2%
30%	0.0%	0.0%	273.5%	413.0%	0.0%	343.9%	498.1%	591.2%	740.6%	1186.0%
40%	0.0%	0.0%	368.4%	451.5%	0.0%	465.8%	552.2%	816.2%	854.0%	1281.4%
50%	0.0%	0.0%	466.0%	486.5%	0.0%	592.7%	602.7%	1061.2%	968.0%	1316.0%
60%	0.0%	0.0%	567.0%	519.6%	0.0%	725.9%	651.7%	1332.7%	1086.8%	1273.6%
70%	0.0%	0.0%	672.7%	552.3%	0.0%	868.0%	701.2%	1642.1%	1216.4%	1135.6%
80%	0.0%	0.0%	785.8%	586.9%	0.0%	1023.7%	754.7%	2012.7%	1368.4%	884.0%
90%	0.0%	0.0%	913.9%	628.2%	0.0%	1206.6%	820.5%	2510.7%	1575.1%	505.9%

Table 139: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 80\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	105.4%	300.4%	0.0%	122.4%	331.5%	184.5%	418.8%	660.1%
20%	0.0%	0.0%	212.7%	360.4%	0.0%	247.9%	405.7%	379.9%	538.2%	825.5%
30%	0.0%	0.0%	322.0%	405.0%	0.0%	377.3%	463.3%	588.0%	641.7%	943.0%
40%	0.0%	0.0%	433.9%	443.9%	0.0%	511.1%	515.1%	811.9%	742.2%	1022.0%
50%	0.0%	0.0%	548.8%	479.3%	0.0%	650.3%	563.4%	1055.6%	843.3%	1052.5%
60%	0.0%	0.0%	667.8%	512.8%	0.0%	796.5%	610.2%	1325.7%	948.6%	1021.1%
70%	0.0%	0.0%	792.3%	546.0%	0.0%	952.5%	657.6%	1633.6%	1063.6%	912.7%
80%	0.0%	0.0%	925.7%	581.0%	0.0%	1123.5%	708.8%	2002.5%	1198.6%	712.3%
90%	0.0%	0.0%	1076.8%	622.9%	0.0%	1324.5%	771.9%	2498.6%	1382.3%	408.7%

Table 140: Extra percentage of level net premium for level CI cover for females with sine baseline curve, maximum penetrance $Q = 100\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	112.0%	388.7%	0.0%	139.7%	454.7%	233.3%	626.0%	1124.4%
20%	0.0%	0.0%	226.3%	466.2%	0.0%	283.7%	558.9%	483.2%	819.1%	1524.4%
30%	0.0%	0.0%	342.9%	524.1%	0.0%	432.7%	641.4%	753.4%	995.3%	1927.4%
40%	0.0%	0.0%	462.6%	574.9%	0.0%	587.7%	716.5%	1048.7%	1174.3%	2377.5%
50%	0.0%	0.0%	585.9%	621.5%	0.0%	750.0%	787.7%	1376.4%	1362.7%	2896.4%
60%	0.0%	0.0%	714.0%	665.8%	0.0%	921.8%	857.6%	1748.3%	1568.7%	3517.7%
70%	0.0%	0.0%	848.6%	710.0%	0.0%	1106.5%	929.4%	2184.9%	1805.9%	4303.8%
80%	0.0%	0.0%	993.5%	756.8%	0.0%	1311.4%	1008.2%	2729.8%	2102.0%	5393.0%
90%	0.0%	0.0%	1158.9%	813.4%	0.0%	1556.4%	1106.9%	3510.1%	2539.3%	7225.0%

Table 141: Extra percentage of level net premium for level CI cover for males with sine baseline curve, maximum penetrance $Q = 100\%$ age range [40,60].

Percentage of Penetrance Q at Mid Age	Age 20 at Entry				Age 30 at Entry			Age 40 at Entry		Age 50 at Entry
	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 40 Yrs	Term 10 Yrs	Term 20 Yrs	Term 30 Yrs	Term 10 Yrs	Term 20 Yrs	Term 10 Yrs
10%	0.0%	0.0%	131.9%	377.7%	0.0%	153.3%	419.0%	232.0%	536.8%	885.4%
20%	0.0%	0.0%	266.4%	455.4%	0.0%	311.3%	517.7%	480.6%	706.3%	1205.8%
30%	0.0%	0.0%	403.8%	513.7%	0.0%	474.8%	596.3%	749.3%	861.4%	1529.2%
40%	0.0%	0.0%	544.8%	565.0%	0.0%	644.8%	667.9%	1043.0%	1019.1%	1890.2%
50%	0.0%	0.0%	690.0%	612.1%	0.0%	822.9%	735.7%	1369.0%	1185.0%	2306.2%
60%	0.0%	0.0%	840.9%	656.9%	0.0%	1011.4%	802.4%	1739.0%	1366.5%	2804.3%
70%	0.0%	0.0%	999.5%	701.5%	0.0%	1214.2%	870.8%	2173.3%	1575.4%	3434.4%
80%	0.0%	0.0%	1170.3%	748.8%	0.0%	1439.2%	945.9%	2715.5%	1836.3%	4307.5%
90%	0.0%	0.0%	1365.3%	806.0%	0.0%	1708.3%	1040.1%	3492.1%	2221.8%	5775.8%