

## **Family history of breast cancer and cost of life assurance: a test case comparison of current UK industry practice**

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### **Introduction**

Under the current UK moratorium applicants for life assurance need not disclose the results of predictive genetic tests. However insurers can seek family histories and there is substantial epidemiological data that describes the relative risks of developing breast cancer depending on family history and age. Preventative action for women at risk can include early enrolment on surveillance programmes and prophylactic surgery.

### **Issue addressed in paper**

In this study 21 companies were surveyed (100% of the reinsurance market and 68% of the UK and pensions market). They were asked to assess a fictional proposal for a 20y policy (paying benefit only on death). The applicant was a 35y woman. Three different situations were analysed:

1. Unremarkable personal and family histories – except breast cancer diagnosed in mother at 35y.
2. Same applicant enrolled on mammographic surveillance programme with no adverse effects reported.
3. Same applicant who had undergone a prophylactic double mastectomy and oophorectomy.

### **Summary of Findings**

In total 16 companies responded. Of these 9 would not increase the premiums under any of the scenarios. 6 would increase under scenario 1 – of these 4 would not load under scenario 3 and 2 would not load under scenarios 2 or 3. One small company said they would not raise premiums under scenario 1 or 2, but would increase under scenario 3.

### **Conclusions**

Most life insurance companies would offer standard premiums under scenario 1 (even though this translates into a 20y breast cancer mortality risk that is 3x higher than that for the general population).

**It is reassuring that all companies that rated under scenario 1 removed the rating after prophylactic surgery, and that 2 companies gave credit for enrolment on a mammographic screening programme.**

No respondents said they would request a further family history although this may have been because the artificial nature of the survey implied that this information was not available. How access to adverse test results for BRCA1 and BRCA2 would affect the response to a similar survey is as yet unknown.