MINISTRY OF HEALTH (MOH) – LIFE INSURANCE ASSOCIATION (LIA) MORATORIUM ON GENETIC TESTING AND INSURANCE - FREQUENTLY ASKED QUESTIONS (FAQs)

| Q1: | What is a Moratorium? | | |
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| A: | The MOH-LIA 'Moratorium on Genetic Testing and Insurance' is an agreement between MOH and LIA on the use of genetic test results in insurance underwriting, and will apply to all relevant LIA members, including life insurers and reinsurers that are licensed to operate in Singapore. Please refer to LIA's website at https://www.lia.org.sg/industry-guidelines/moratorium-on-genetic-testing-and-insurance/whitelist-of-life-insurers/ for the list of relevant LIA members. | | |
| Q2: | Why was the Moratorium developed? | | |
| A: | The Moratorium was developed as part of our efforts to support the roll-out of Precision Medicine (PM) in Singapore. The Moratorium aims to prevent individuals from being deterred to undergo clinical genetic testing for medical indications and/or participate in PM research due to concerns about insurability. Compared to enacting legislation, the Moratorium will be more agile to better enable MOH and LIA to update the controls where necessary to keep up with the rapidly evolving developments in genetic testing. | | |
| Q3: | What is the scope of the Moratorium? What does it cover? | | |
| A: | The Moratorium controls the use of research, direct-to-consumer (DTC) and predictive genetic test results in insurance underwriting, with a distinction made between the predictive and diagnostic genetic tests. | | |
| | From 27 Jan 2021, the Moratorium imposes a ban on the use of <u>all</u> genetic test results from human <u>biomedical research</u> in insurance underwriting. | | |
| | From 27 Oct 2021, in addition to upholding the above-mentioned ban, the Moratorium introduces additional controls on the use of <u>predictive</u> genetic test results from <u>clinical care</u> in insurance underwriting. The Moratorium categorises insurance policies into seven financial products: (a) life, (b) total permanent disability, (c) long-term care, (d) critical illness, (e) disability income, (f) health and integrated shield plans, and (g) general and other insurance products not covered in the Moratorium (e.g. motor vehicle and personal accident insurance). | | |
| | Only products (a) to (e) are covered by a 'double key' model. This means that the insurer can <u>only</u> request the disclosure of and/or use predictive genetic test results to underwrite these five products <u>if two conditions are met</u> : | | |
| | (i) the sum assured/pay-out exceeds the financial limits specified in the Moratorium; and | | |
| | (ii) the applicant has taken a predictive genetic test from the list of approved predictive genetic tests specified in the Moratorium. For the avoidance of doubt, if only one condition is met, the 'double key' model | | |

is not fulfilled, and the insurer cannot request the disclosure of and/or use predictive genetic test results to underwrite the product.

 Insurers cannot request the disclosure of and/or use predictive genetic test results for the purpose of underwriting products (f) and (g).

Under the Moratorium, <u>DTC</u> genetic test results (whether predictive or diagnostic) cannot be used in insurance underwriting.

The use of <u>diagnostic</u> genetic test results done while under clinical care is left to the discretion of individual insurers, similar to other diagnostic test results.

Q4: Who does the Moratorium apply to?

A:

A: The Moratorium applies to Singapore Citizens, Permanent Residents of Singapore, as well as Residents with an Employment Pass / Work Permit / Pass Permit.

The Moratorium also applies to non-residents, with the exception of the 'double key' model, which is only applicable to Singapore residents. For non-residents, the use of predictive genetic test results in insurance underwriting for the aforementioned five products is left to the insurer's discretion.

Q5: What is a genetic test? What are the different types of genetic tests? How do you differentiate between diagnostic or predictive genetic tests?

A: A genetic test is a test which analyses human chromosomes, DNA, RNA, genes and/or gene product such as proteins and/or metabolites with the purpose of detecting a germline or somatic variant(s), genotype(s), phenotype(s) or karyotype(s). This is regardless whether the test was carried out as part of a single-gene test, a panel, or whole genome sequencing. Examples of genetic tests include diagnostic genetic tests and predictive genetic tests.

The Moratorium distinguishes between diagnostic and predictive genetic tests. In the context of the Moratorium, diagnostic and predictive genetic tests are defined as follows:

- Diagnostic genetic tests confirm or rule out a diagnosis based on existing symptoms, signs or abnormal non-genetic test results which indicate that the condition in question may be present (i.e. testing in symptomatic individuals).
- Predictive genetic tests predict a future risk of disease in individuals without symptoms or signs of a genetic disorder (i.e. testing in asymptomatic individuals).

Q6: Can a clinical genetic test be a diagnostic genetic test and a predictive genetic test?

Yes, a clinical genetic test can be either a diagnostic or predictive genetic test, depending on whether the individual tested has any signs or symptoms of the genetic condition at the point of taking the genetic test.

Using clinical genetic testing for Huntington's disease (i.e. HTT genetic test) as an example: Diagnostic genetic test: The individual has the relevant signs and symptoms (e.g. involuntary jerking or writhing movements) or abnormal non-genetic test results (e.g. MRI changes) which indicate that the condition in question may be present. The HTT genetic test confirms the diagnosis of Huntington's disease. Predictive genetic test: The individual has no sign or symptom of Huntington's Disease. There are no abnormal non-genetic test results which indicate that this condition is present. If the HTT genetic test result is abnormal, it predicts that this individual will develop the disease in the future. Q7: What is the definition of biomedical research? How will an individual know if he/she has participated in biomedical research? A: In the context of the Moratorium, biomedical research refers to any systematic investigation with the intention of developing or contributing to generalisable knowledge, regardless of where or when the research was conducted or the nature of the research. If an individual has participated in biomedical research, the principal investigators and/or research teams would have informed him/her during recruitment, consent taking and/or counselling regarding the ban on the use of all forms of genetic test results from biomedical research in insurance applications. **Q8**: Can the insurer ask the applicant to undergo genetic testing as part of his/her insurance application? A: No, the insurer cannot require or pressure (directly or indirectly) the applicant to undertake a genetic test (diagnostic or predictive) for the purpose of insurance application, even if he/she has a family history of a genetic condition(s). **Examples of possible case scenarios** Q9: I have taken a genetic test that was purchased directly from the manufacturer or supplier of the test (i.e. direct-to-consumer (DTC) genetic tests). Can my insurer ask for or use my test results for assessing my insurance application? A: No, your insurer cannot ask for or use your DTC genetic test results for assessing your insurance application. Q10: If I have taken a: (i) genetic test done as part of biomedical research; predictive genetic test; or (ii) (iii) diagnostic genetic test,

| | can the insurer request the disclosure of or use my results for my insurance application if the test was taken before the Moratorium is implemented? | | |
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| A: | For (i): No , the insurer cannot request the disclosure of or use the genetic test results from biomedical research for your insurance application, regardless of when the test was done. | | |
| | For (ii): No , the insurer cannot request the disclosure of or use the predictive genetic test results for your insurance application unless the 'double key' conditions are fulfilled for financial products covered by the 'double key' mode | | |
| | For (iii): The Moratorium does not control the use of your diagnostic genetic test results for your insurance application. Its use is left to the discretion of individual insurers, similar to other diagnostic test results. | | |
| Q11: | For insurance policies that were already in effect <u>before</u> the roll-out of the Moratorium, can the insurer now request and use the results of a: | | |
| | (i) | genetic test done as part of biomedical research; | |
| | (ii) | predictive genetic test; or | |
| | (iii) | diagnostic genetic test | |
| | in insura | ince underwriting? | |
| A: | For (i) and (ii): No . As the policy is already in effect, the claims process a outcome of such insurance policies continue to be subject to the terms of insurance contract as they were agreed by the insurer and you before Moratorium is implemented. | | |
| | For (iii): The Moratorium does not control the use of your diagnostic genetic test results for assessing your insurance application. Its use is left to the discretion of individual insurers, similar to other diagnostic test results. | | |
| Q12: | If I have taken a: | | |
| | (i) | genetic test done as part of biomedical research; | |
| | (ii) | predictive genetic test; or | |
| | (iii) | diagnostic genetic test, | |
| | can the insurer use the results for my insurance application accidentally/voluntarily disclosed the results? | | |
| A: | For (i): No . Even in the event of accidental/voluntary disclosure of your genetic test results from biomedical research, the insurer cannot use these results fo your insurance application. | | |
| | For (ii): Possible . The insurer may take into account the test results if they a favourable/beneficial to you. However, if the results are unfavourable to yo the insurer should not use them unless the 'double key' conditions are fulfille | | |
| | ` ' | The Moratorium does not control the use of your diagnostic genetic lts in insurance underwriting. In the event of accidental/voluntary | |

| | disclosure, the use of such results is left to the discretion of individual insurers, similar to other diagnostic test results. | | |
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| Q13: | If a family member (i.e. blood relative) takes a: | | |
| | (i) genetic test done as part of biomedical research; | | |
| | (ii) predictive genetic test; or | | |
| | (iii) diagnostic genetic test, | | |
| | do I need to declare my family member's results when I am applying for insurance? | | |
| A: | For (i) and (ii): No , the insurer cannot request the disclosure of or use these types of genetic test results of any family members for your insurance application. | | |
| | For (iii): The Moratorium does not control the use of the diagnostic genetic test results of your family members for your insurance application. Insurers may request for you to declare your family member's results and use them to inform decision about an insurance application, similar to other diagnostic test results. | | |
| Q14: | Does the Moratorium have an expiry date and will it be amended in future? What will happen to the policies after the Moratorium is amended? Will the changes be applied retrospectively? | | |
| A: | The Moratorium is open-ended with no expiry date. It will be reviewed regularly and updated where necessary to keep up with the rapidly evolving developments in genetic testing. | | |
| | Policies that were already in effect before the roll-out of the Moratorium will remain subject to the terms and conditions of the insurance contract as agreed between the insured and insurer at the point of signing the contract. Only new policies that are signed after the implementation of the amended Moratorium will be subject to the new terms and conditions of the amended Moratorium. | | |
| Q15: | Whom should I contact if I have further queries on the Moratorium? | | |
| A: | You may write in to <u>eLIS@moh.gov.sg</u> . | | |
| Q16: | Whom should I contact if I have concerns/disputes with my insurance company? | | |
| A: | For all disputes/concerns: You can approach your insurers directly to resolve the issue. Insurers will maintain a log of complaints and how they were handled. | | |
| | <u>For complaints on insurance claims:</u> You can approach the Financial Industry Disputes Resolution Centre (FIDReC) as the first port of call for mediation, or as an independent arbitrator or adjudicator. | | |
| | Where there is no existing relationship with the insurer, you can approach the Singapore Mediation Centre (SMC) for mediation. | | |

(Please refer to MAS's Dispute Resolution Guide (2005) for further details. The guide can be accessed at https://www.moneysense.gov.sg/-/media/moneysense/guides-publication/disputeresolutionguide.pdf).