

HIV gene 'immunity' tests: don't believe the hype

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Gay men are being urgently warned to be sceptical of a genetic test being marketed in Australia which purports to indicate whether an individual may be immune to HIV infection.

The National Association of People Living with HIV/AIDS (NAPWA) and the Australian Federation of AIDS Organisations ([AFAO](#) [1] Australian Federation of AIDS Organisations. AFAO is the peak non-government organisation representing Australia's community-based response to HIV/AIDS. AFAO's work includes education, policy, advocacy and international projects.) today issued the warning in response to online advertisements, placed by a Sydney company, offering genetic testing for a polymorphism, or naturally occurring variation in a gene, known as 'delta-32 deletion'.

Banner advertisements promoting the test have recently appeared on popular gay websites including [gaydar.com.au](#). The advert reads "Are you immune to HIV?" and suggests that the genetic test can provide information about whether an individual has the delta-32 polymorphism and may be therefore [resistant](#) [2] HIV which has mutated and is less susceptible to the effects of one or more anti-HIV drugs is said to be resistant. to HIV infection.

The test, being offered by Sydney company Syquip Pty Ltd, costs \$US160 per test, but such testing has not been subject to robust [clinical](#) [3] Pertaining to or founded on observation and treatment of participants, as distinguished from theoretical or basic science. trials to determine its validity as a marker of HIV 'immunity'.

The test detects the presence or absence of a co-receptor (CCR5) needed for the entry of HIV into cells. Research has linked an inherited variation on the gene for these cells to 'immunity' against HIV infection, because HIV cannot attach to cells without CCR5, and HIV predominantly uses CCR5 cells to infect the body. A variant gene can be inherited from one or both parents; but having two copies of this variant (which would be required for putative 'immunity') is rare, occurring in less than 2–3 percent of the Caucasian population.

Further, there is evidence that even with this variant, HIV infection can still occur and cause progressive HIV illness.

"These advertisements send a confusing and dangerous message," said Bill Whittaker, National Health and Treatments Portfolio Convenor for NAPWA. "While it's true that people with this deletion have some level of resistance to infection with most strains of HIV, it is extremely uncommon, for the vast majority of people this test can only tell them what they should already know: that they risk HIV infection if they have unsafe sex."

Results from this test should not be relied upon as an excuse to abandon safe sex, Whittaker warned. "There is not enough evidence to say that in all cases, people with this deletion are protected from HIV or its consequences: there may also be other factors involved."

"We're particularly concerned that the website promoting the test carries little concrete information about the company behind it, no information about the quality assurance of their testing procedures, and only a post office box address. It's unhelpful that a test of questionable practical usefulness is being marketed – at a cost of several hundred dollars – directly to gay men in this way," he said.

"Only a tiny proportion of people carry this particular genetic trait. For the vast majority of Australian gay men who don't, this test is likely to be little more than an expensive and futile waste of money," Whittaker said.

Note: NAPWA and AFAO have issued a [follow-up media release](#) [4], welcoming the decision of the publishers of the Gaydar website to withdraw the advertisement.

- [Gay and bisexual men](#)
- [HIV prevention](#)
- [Safe sex](#)

Links:

[1] <http://www.napwa.org.au/glossary/term/385>

[2] <http://www.napwa.org.au/glossary/term/109>

[3] <http://www.napwa.org.au/glossary/term/475>

[4] http://www.napwa.org.au/files/20061024_mr_delta32_2.pdf