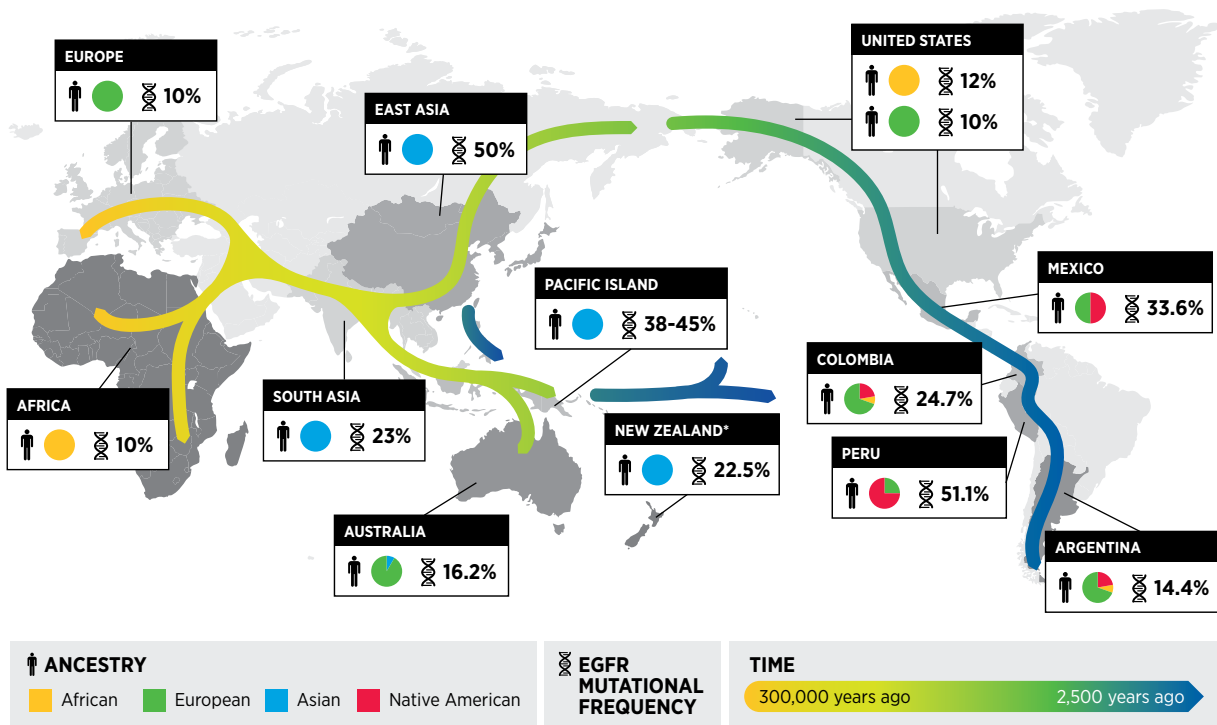


FIGURE 6

Ancestry Contributes to the Prevalence of Cancer-associated Genetic Alterations



*This study exclusively profiled the EGFR mutational frequency in the native Māori population.

Acquired mutations of the *EGFR* gene are commonly observed in patients with lung cancer and represent a key target for molecularly targeted therapeutics. The frequency of overall somatic mutations in the *EGFR* gene differ based on ancestry of the patient, with the highest mutation rates observed in East Asian groups (50%) and the lowest rates observed in African (10%) and European (10%) populations. The frequency of this

mutation follows patterns that are a result of the human diaspora out of Africa as well as more recent migration (forced or otherwise) of population groups to new geographic locations. For example, Peru has a high genetic admixture (i.e., inferring someone's geographical origins based on an analysis of their genetic ancestry) of Native American ancestry while Argentina has more admixture of European ancestry.