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2 Figure S1. The impact of the loss of genome coverage on false positives.

3 The vertical axis shows the false positive rate, which is the number of erroneously inferred nucleotides. The horizontal axis indicates the percentage of missing nucleotides $(10 \%-90 \%)$ in the

5 partial mitochondrial genome sequences. Error bars indicate the standard error of the mean (SEM).
6 The results in the case of the "ALL" panel including all macro-haplogroup lineages are indicated
7 by the blue line, and those of the "Haplogroup" panel consisting of the same macro-haplogroup
8 lineages are indicated by the orange line.


2 Figure S2. Scatter plot between the pairwise allele-sharing distance and the missing mitochondrial genome coverage.
3 This figure shows the correlation between the pairwise allele-sharing distances and the loss of mitochondrial genome coverage for the 4 partial human mitochondrial genome sequences from Lipson et al. (2018). Pearson's correlation test was performed in $R\left(R^{2}=0.548\right.$, 5 p-value $=2.384 \mathrm{e}-13)$.

