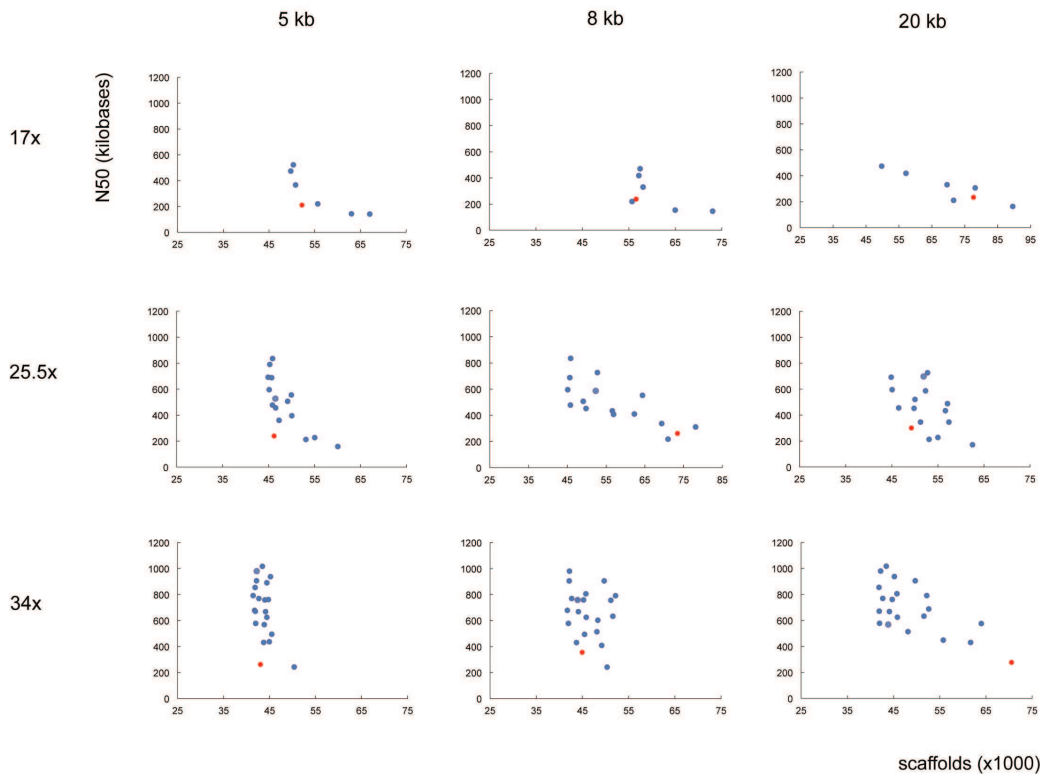


## Additional File 4



**Additional file 4) Combining insert sizes results in a more dramatic increase in N50 values than increasing only the physical coverage of one insert.** The effect of increased physical coverage (from 8.5x to 17x, 25.5x or 34x) during scaffolding using either a single insert (5 kb, 8 kb, 20 kb) or combinations of inserts is depicted (N50 on the y-axis, number of scaffolds on the x-axis). The results for single-insert libraries are depicted as red dots. The blue dots represent all other combinations of inserts that together make up 34x (8.5x per library; Additional File 9). For each insert, a clear increase in N50 is visible when combinations are used instead of solely increasing the coverage for that one insert. This supports a scaffolding approach that uses a range of insert sizes.