To determine if the student's conclusion is valid, we must analyze the data and statement carefully:

The student claims that people taking the new formula will tend to feel relief about 20 minutes sooner based on the average times.

From the dot plots:

- The new formula has a central grouping somewhere around 40-60 minutes.

- The old formula has a central grouping around 60-80 minutes.

The difference in central tendencies (mean/median) appears to be close to 20 minutes based on the provided plots.

### Conclusion:

\*\*(A) Valid.\*\*

The student's comparison of average times suggests a valid conclusion that there is a roughly 20-minute earlier relief time for the new formula compared to the old one. However, this conclusion assumes that both distributions have approximately similar variances and shapes, meaning that differences in underlying distributions have been accounted for by randomization, which typically holds in well-designed randomized trials.