The best answer here is \*\*(A) To increase the accuracy of the research results.\*\* Here's a breakdown of why:

\* \*\*Randomization's Primary Goal: Control for Confounding Variables:\*\* In experimental studies like this one, randomization is the cornerstone for establishing causal relationships. It aims to distribute both \*known\* and \*unknown\* confounding variables (factors that could influence cancer development other than Vitamin E) evenly across the treatment groups. This ensures that any differences in cancer rates observed at the end of the study are \*more likely\* attributable to the different Vitamin E doses (including the placebo) and \*less likely\* due to pre-existing differences between the participants.

\* \*\*Why the Other Options are Less Suitable:\*\*

\* \*\*(B) To ensure that all potential cancer patients had an equal chance of being selected for the study:\*\* Randomization \*in this study\* is not about selecting the \*participants\* themselves (the random selection of participants would be more directly related to the sample selection process which contributes to external validity). The participants were already \*in\* the study; randomization occurs within the study, by randomly assigning the participants to the different Vitamin E groups.

\* \*\*(C) To reduce the amount of sampling error:\*\* While proper sampling techniques \*do\* aim to reduce sampling error, randomization in \*this context\* is about controlling \*bias\* in the \*assignment to treatment groups\*. Randomization helps ensure that groups are comparable at the start, which is different than sampling error.

\* \*\*(D) & (E) To prevent skewness in the results:\*\* While data can be skewed (asymmetrical), randomization does \*not\* directly control for skewness. Skewness is a characteristic of the \*distribution of the data\*, which is influenced by the underlying mechanism. Randomization is about the assignment of individuals to groups.

\* \*\*Accuracy and Validity:\*\* By minimizing the influence of confounding variables, randomization increases the \*internal validity\* of the study. Better internal validity leads to more accurate results and a stronger ability to infer a causal relationship between Vitamin E and cancer risk (if a relationship exists).

\*\*In summary:\*\* Randomization in this type of study is all about control, by balancing out any potential differences between participants \*before\* they begin to receive the treatments.