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EDITORIAL ON MOLECULAR SIGNALING

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EDITORIAL

Biostatistics is defined as an application of the mathematical tools used in statistics to the fields of biological sciences and medicine. [1] Statistics is actually a way of thinking about data which are variable. This article deals with the basic biostatistical method and concepts and their applications to enable postgraduate allied science and medical students to interpret and analyze their study data and to critically interpret published literature [2].

Type of statistics [3]

- Descriptive statistics
- Analytical statistics
- Inductive statistics
- Inferential statistics

Applications of statistics

1. It is very useful in research; none of the research is complete without statistics.
2. It is used in the study of inheritance patterns of genes.
3. Useful in taxonomy with numbers.
4. Used for weather forecasting
5. Used for conducting drug treatment trials.

Limitations of statistics

1. Laws are not always true.
2. Statistics methods cannot be applied to heterogeneous data.
3. It can be handled by the person who is expertise in this field.
4. Statistical tools needs proper professional.

5. It is only best forb quantitative data.

Types of data

1) Nominal data
2) Ordinal data
3) Interval data

Translational science biostatistics

Biostatistics represents a key element of successful translational processes that often generate an abundance of data on in vitro tests, including "omics" approaches, animal and clinical biomarkers, and clinical endpoints, and require profiling against epidemiological background data. Finding the correct mathematical hypotheses, biological models, and statistical tests is essential for adequate study designs as a mandatory prerequisite for useful study outcomes.

Biostatistics clinical trials

Biostatistics and bioinformatics pertain to the acquisition and interpretation of quantitative information in medical research. Both disciplines involve data analysis and experimental design. No sharp delineation exists between the two, but bioinformatics tends to deal with data in many dimensions, so-called "big data," such as in genomics.

References

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3. Biostatistics. Easy Biology class. https://www.easybiologyclass.com/biostatistics-introduction-significance-applications-and-limitations-of-statistics/