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PREDICTIVE ANALYTICS: WHY LIFE SCIENCE ORGANIZATIONS NEED TO LEVERAGE THE POWER OF MACHINE LEARNING

What is Machine Learning?

Machine Learning (ML) is a subset of artificial intelligence that uses algorithms to self-learn

- ML algorithms use statistics to find patterns in large amounts of data
- Supervised ML algorithms label the data to tell the machine the specific patterns to look for
- Unsupervised ML algorithms have no labels and seek out whatever patterns it can discover

What is Data Science?

Data Science uses the scientific method to turn data into value resulting in prescriptive and predictive models

Data Science uses ML techniques to examine covariates, identify predictors and perform advanced analysis to leverage the full potential of data

Growing Reliance on Machine Learning

95%

Of life science executives expect to use machine learning to glean real-world evidence from growing amounts of data

Economic Benefits of Machine Learning

Recent reports suggest:

75%

45%

+$100 Billion

Advanced analytics could improve EBITDA for pharma companies by 45-75%

Big data and ML in pharma and medicine could generate up to $100 billion annually in new revenue and cost savings

Uncovering Novel Insights Across the Product Lifecycle with ML and Data Science

Research and Development

- Discover unmet medical needs to guide potential drug development
- Identify target populations for new therapeutics
- Detect novel predictors by therapeutic area

Epidemiology

- Predict treatment effectiveness and patient response
- Minimize confounding when mimicking a randomized control trial (RCT)
- Calculate propensity scores more effectively

HEOR

- Predict undiagnosed disease
- Calculate likelihood of disease development
- Forecast readmissions or relapses
- Document patient milestones & disease activity scores

Commercial

- Identify patients most likely to respond to a therapeutic
- Produce inputs for drug forecasting models
- Gain insight into prescribing patterns

Combining the Power of Machine Learning with the Speed of IHD Analytics

Easily train, validate and test models against multiple datasets to generate new findings in one single environment

Execute modern statistical and machine learning techniques with healthcare data to drive product success

Produce novel insights through a closed-loop, customized modeling solution

Leverage real-world data to answer your most pressing questions and develop more accurate predictions

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About Panalgo

Panalgo, formerly BHE, provides software that streamlines healthcare data analytics by removing complex programming from the equation. Our Instant Health Data (IHD) software empowers teams to generate and share trustworthy results faster, enabling more impactful decisions. To learn more visit us at *www.panalgo.com*.