How to analyze data in GraphPad Prism

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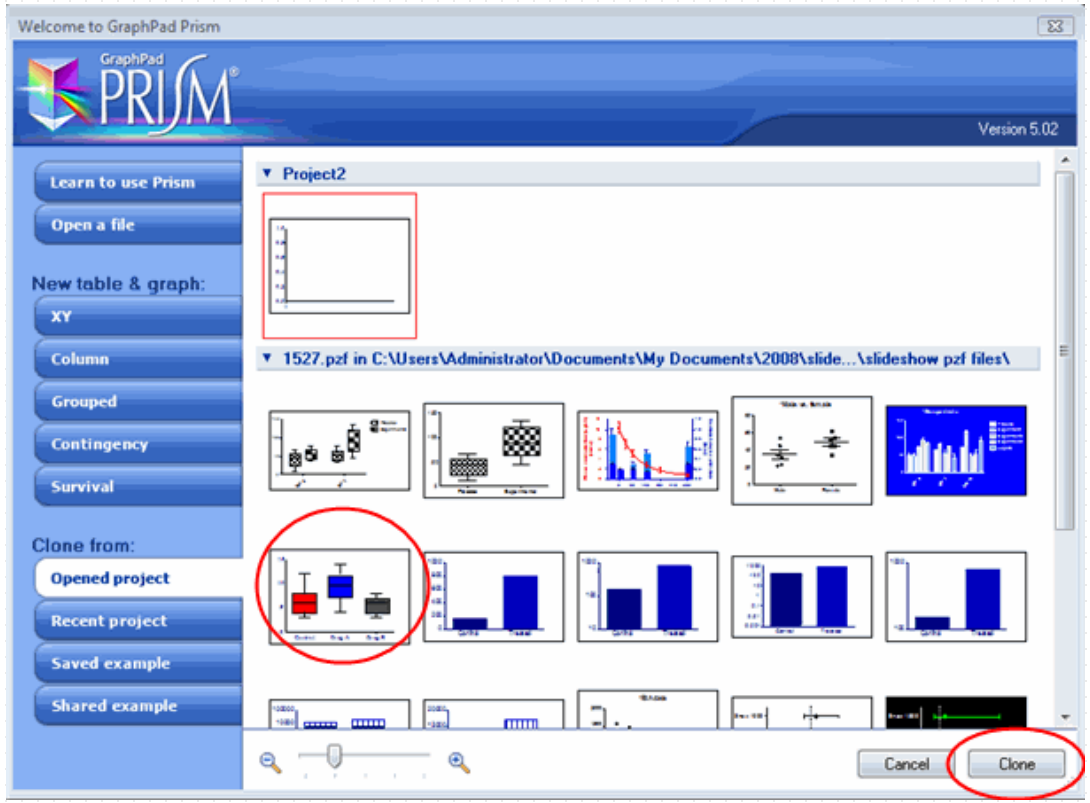
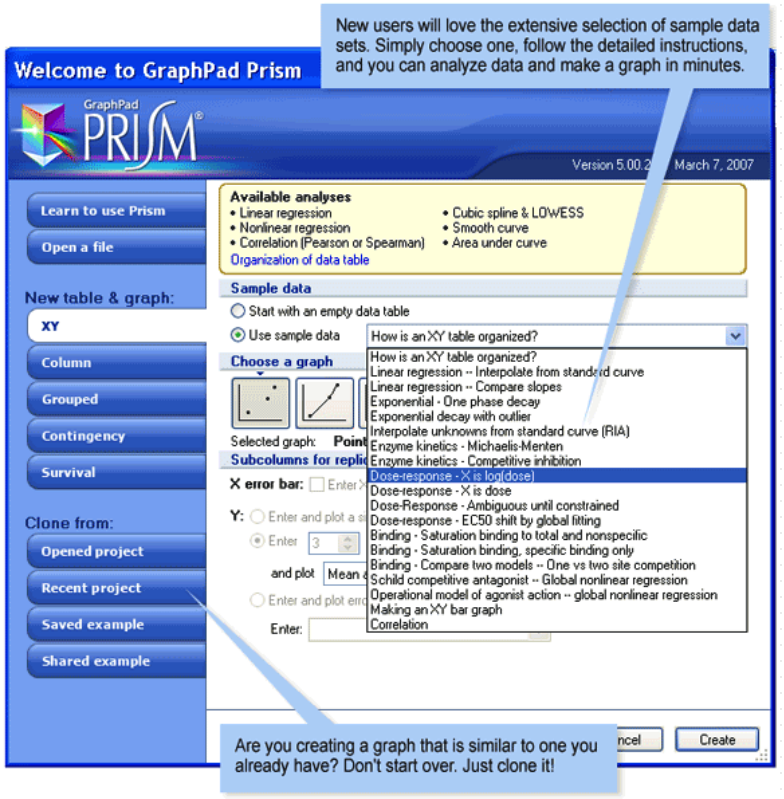
What is GraphPad Prism?

- **GraphPad Prism** is the data analysis and visualization software for scientific research.





What is GraphPad Prism?

- Combines nonlinear regression (curve fitting), basic biostatistics, and scientific graphing

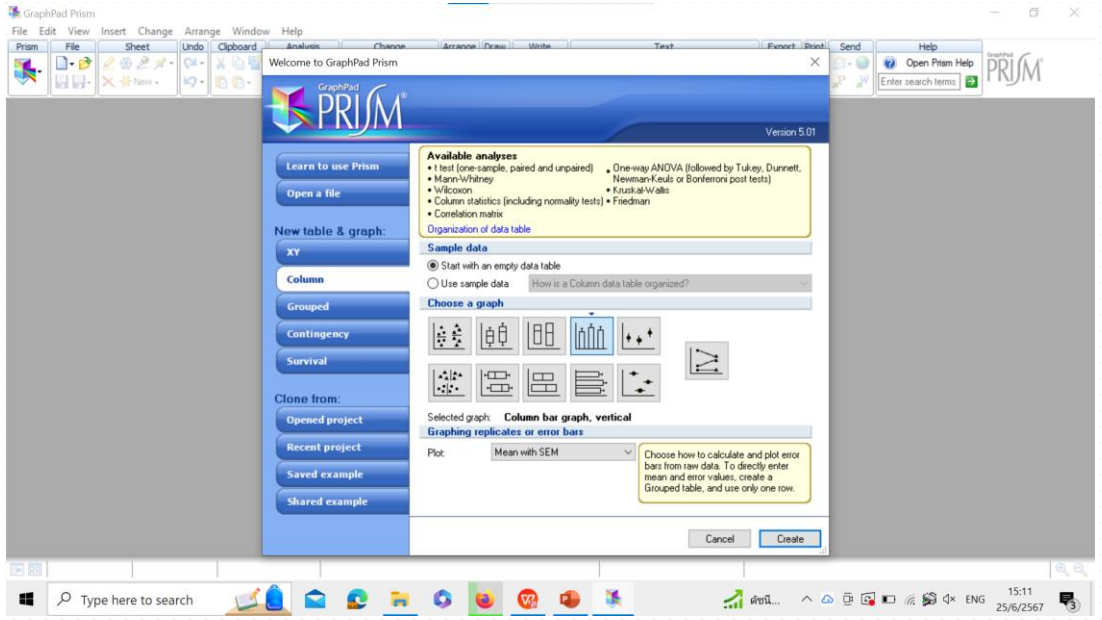
- Help you efficiently analyze, graph, and organize your experimental data. Notable features include:
  - Automatic error bars
  - Easy curve fitting. Fit curves in one step.
  - Automate routine analyses.
  - A complete record of your work. Prism stores all parts of an experiment (data, results, graphs, page layouts, and notes) in one organized file.

How to use the GraphPad Prism?

Step 1. Start Prism

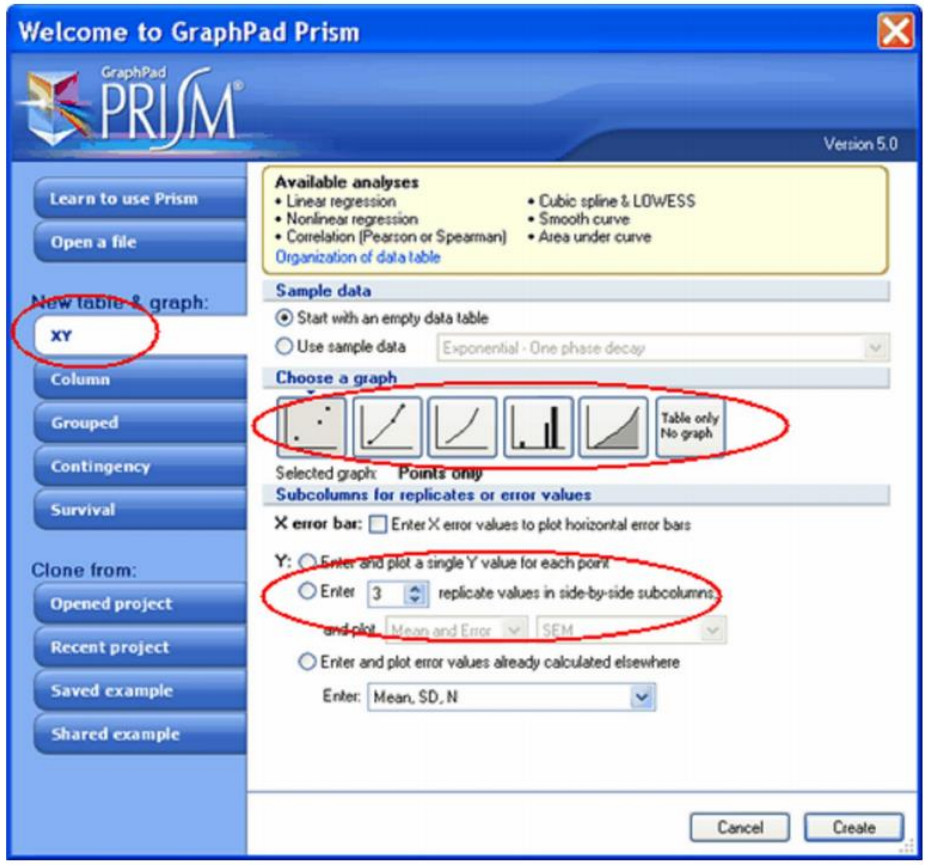
- Data
- Graph types
- Analyses from a one-way table:
  - t-test (one-sample, paired and unpaired)
  - One-way ANOVA (followed by Tukey, Dunnett, Newman-Keuls, or Bonferroni post-tests)

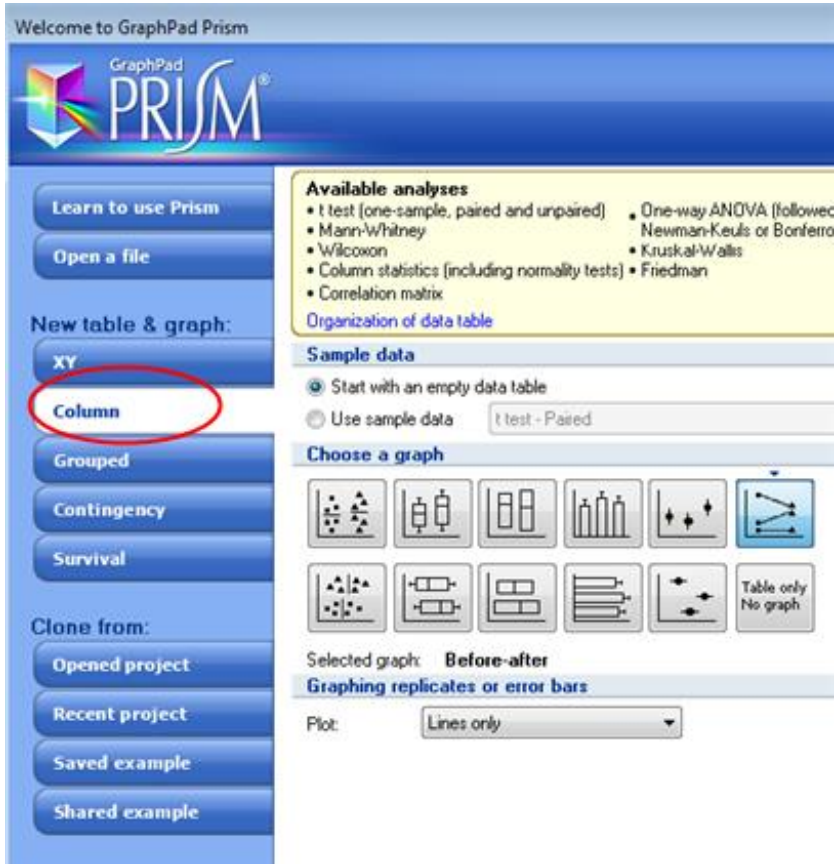
	FBG (mg/dL)			
No.	CON	DM2	DM2-ML	DM2-MP
1	92	330	225	165
2	89	328	230	160
3	92	310	262	164
4	91	350	234	174



How to use the GraphPad Prism?

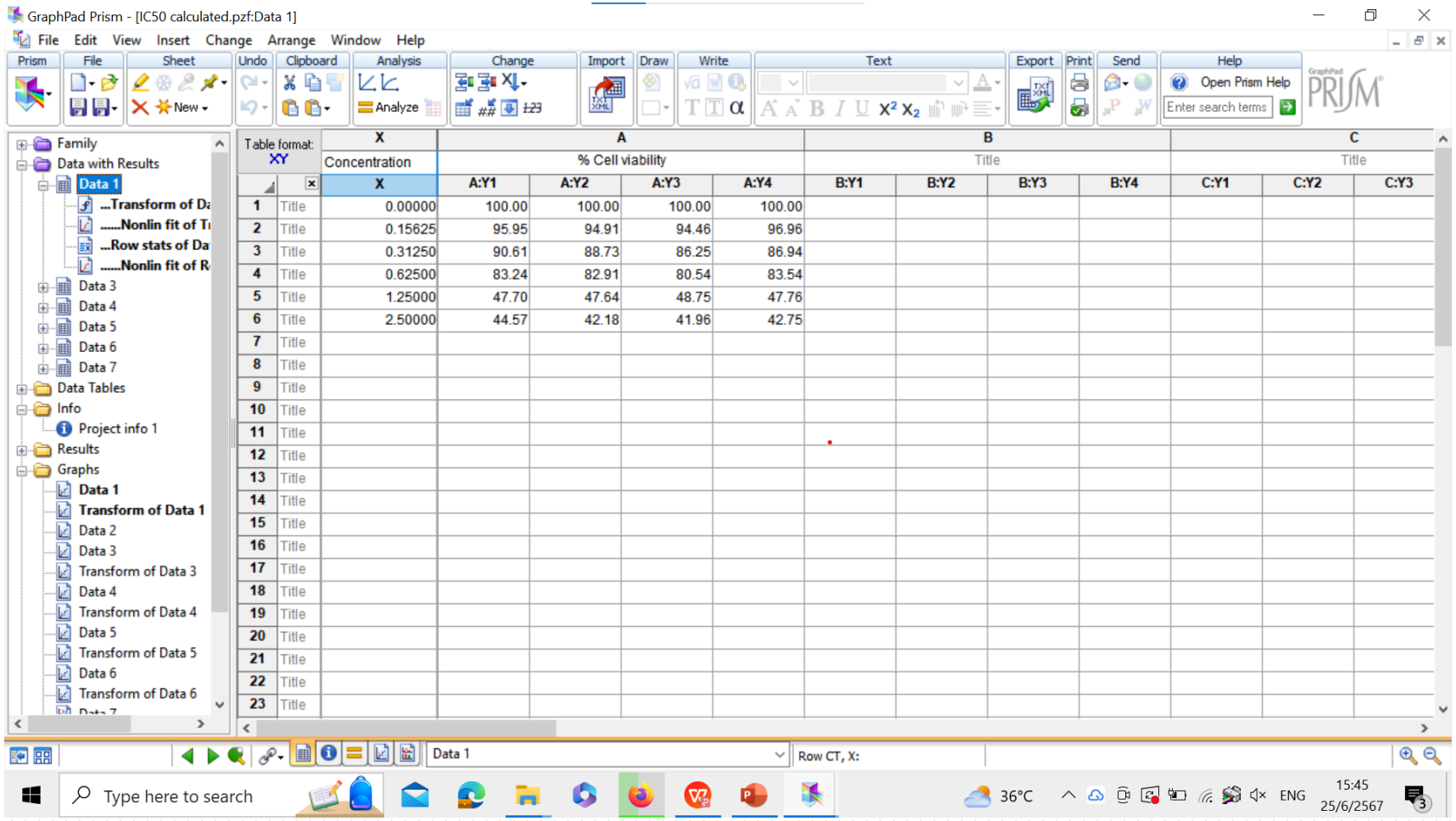
Step 2. Begin by choosing a graph type





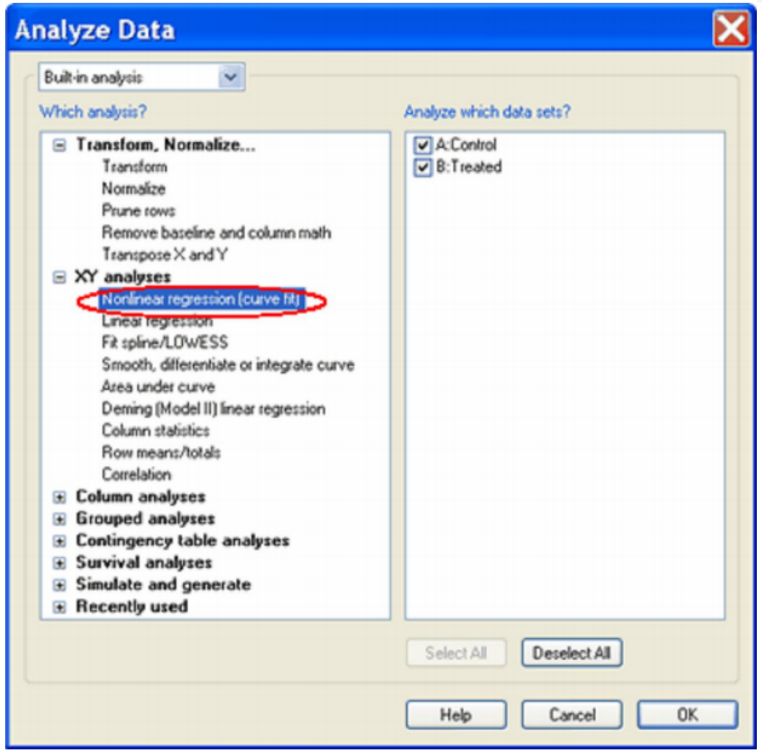
How to use the GraphPad Prism?

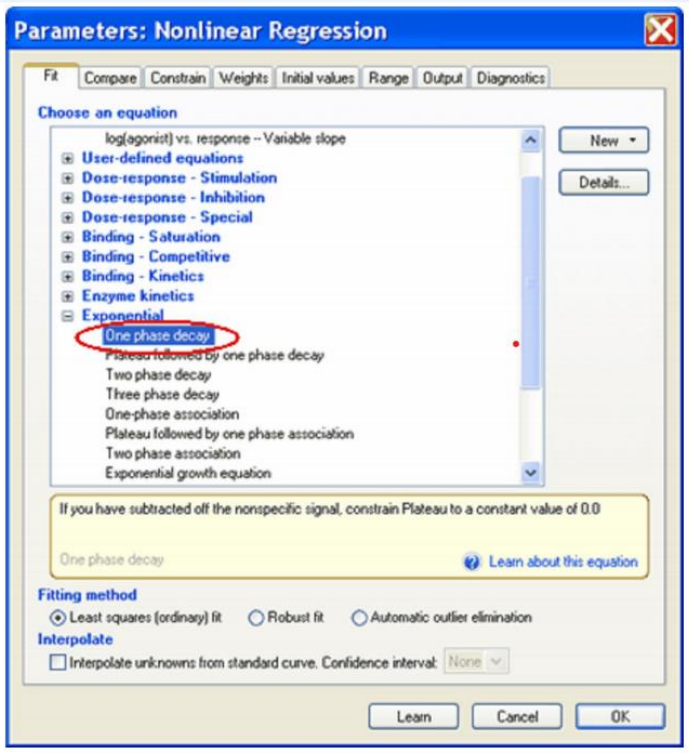
Step 3. Enter or import data

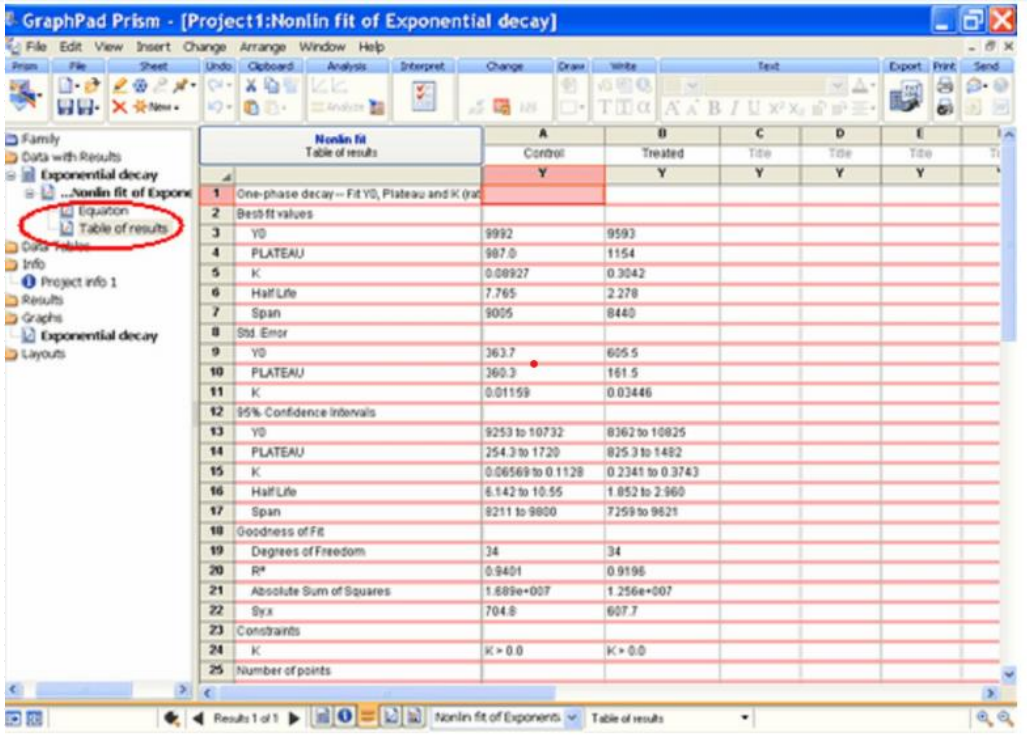


How to use the GraphPad Prism?

Step 4. Analyze your data







How to use the GraphPad Prism?

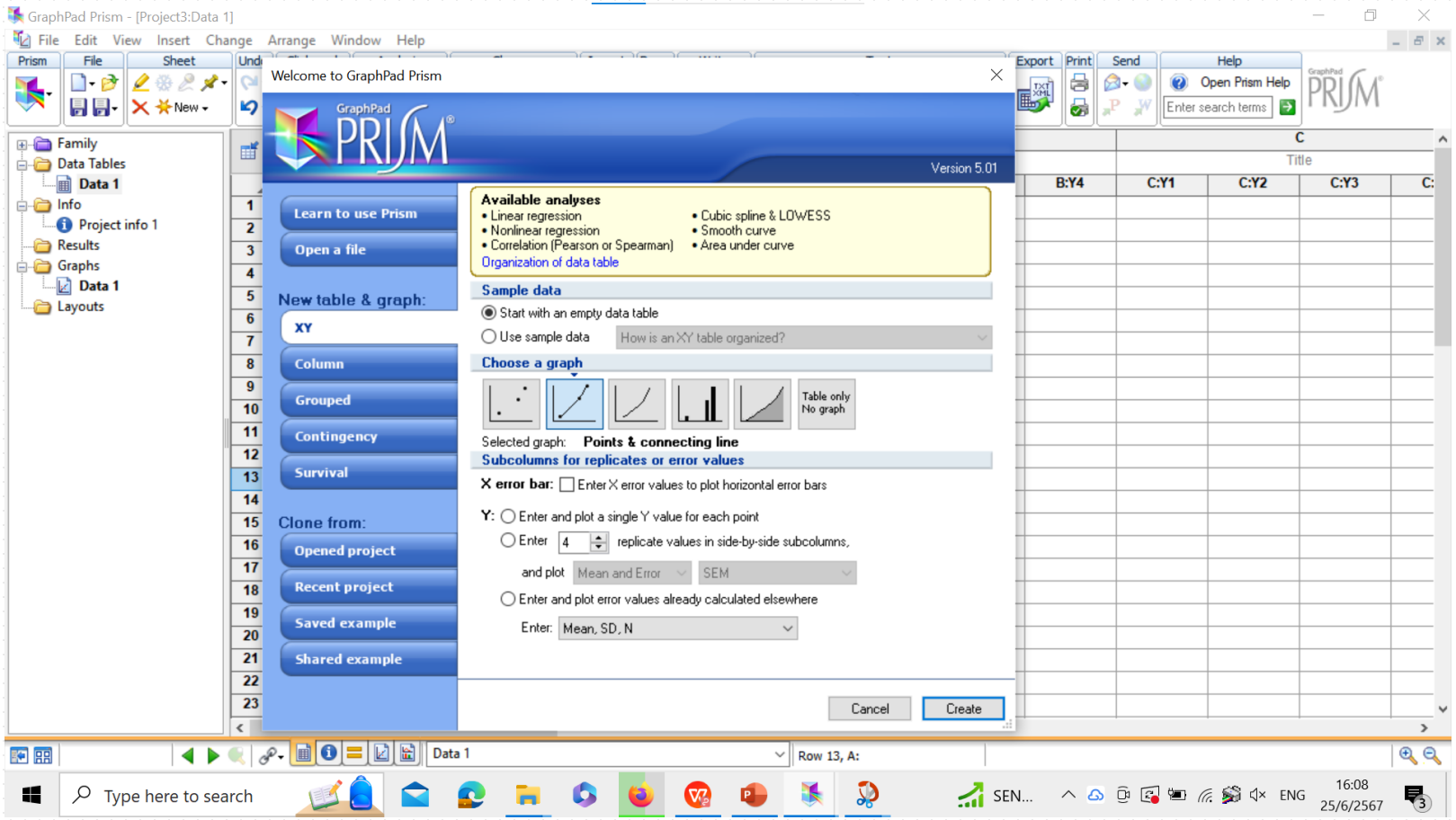
1. IC50 Calculation using GraphPad Prism

2. One-way ANOVA

3. Two-way ANOVA

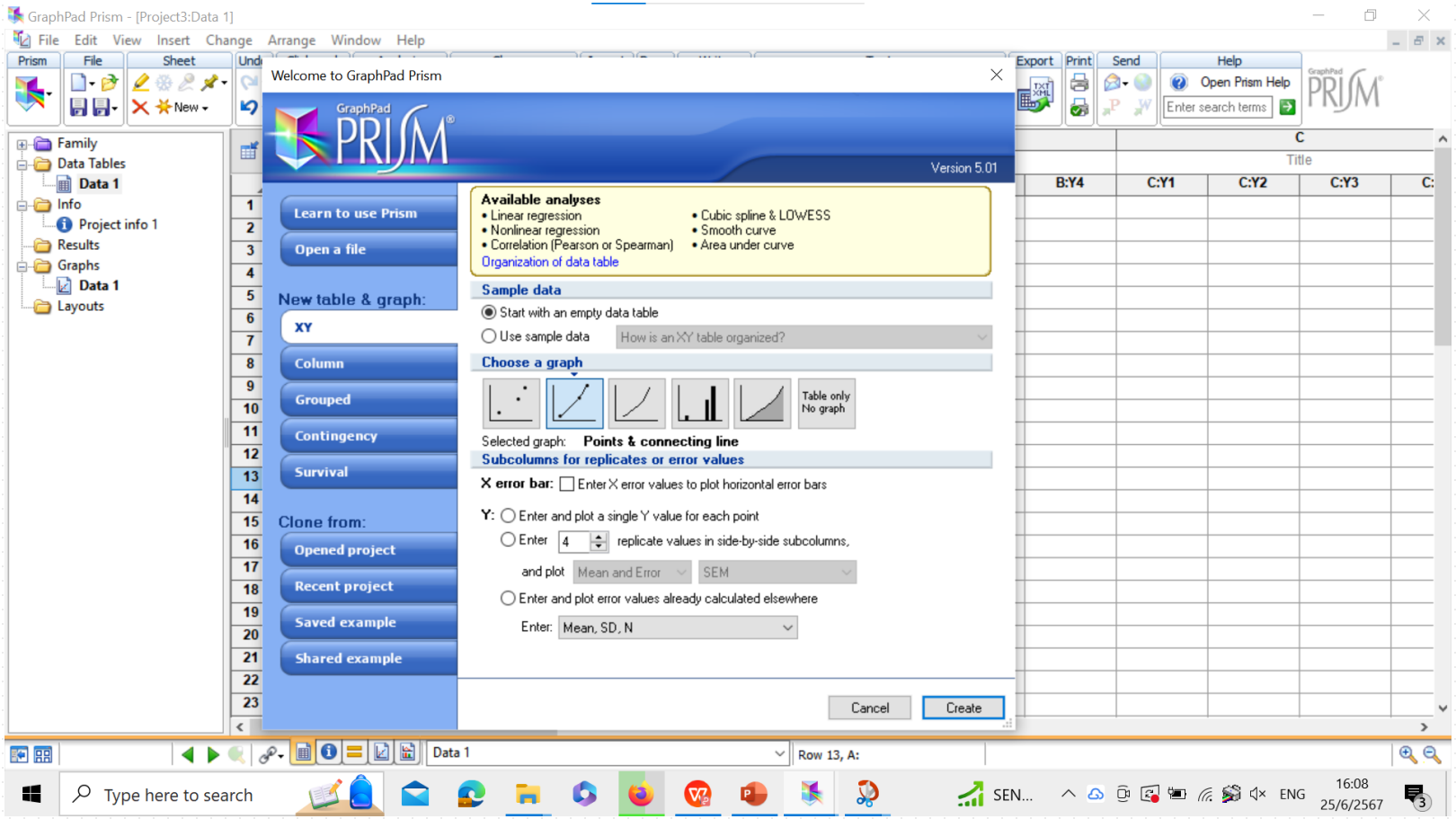
IC50 Calculation using GraphPad Prism

Step 1. Choose the XY tab, drop the list of sample data sets



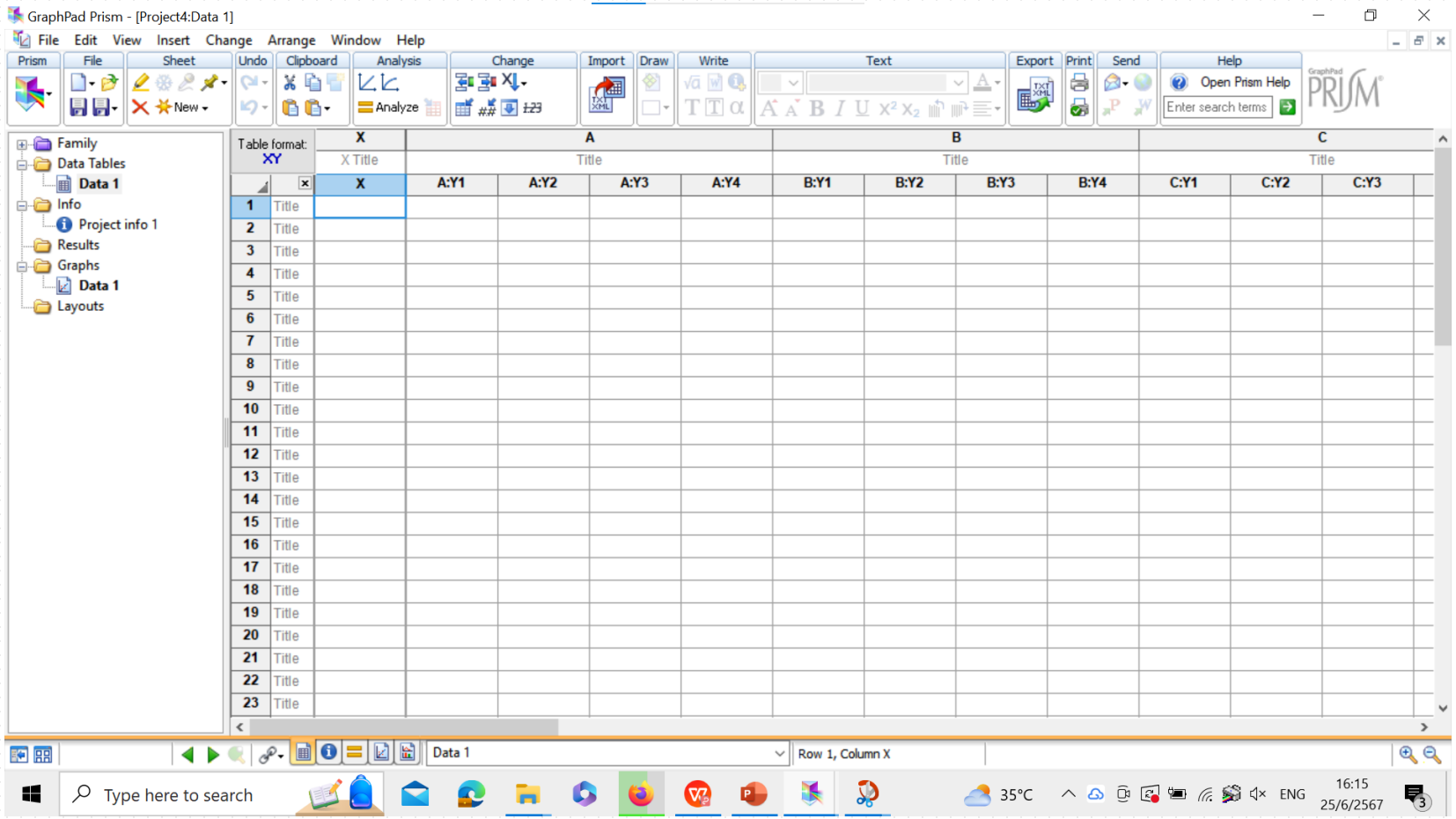
IC50 Calculation using GraphPad Prism

Step 1. Choose the XY tab



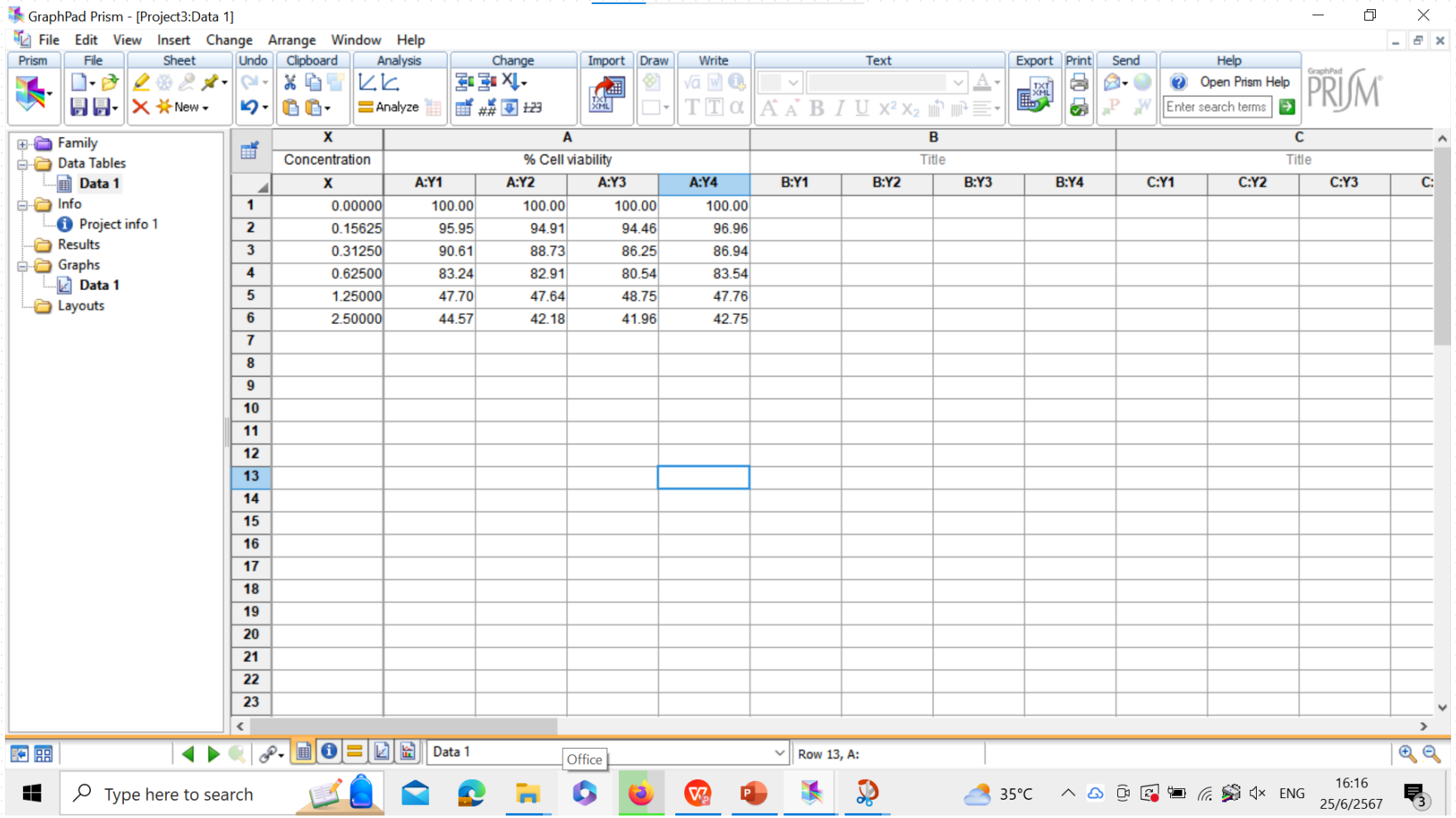
IC50 Calculation using GraphPad Prism

Step 2. Drop the list of sample data sets



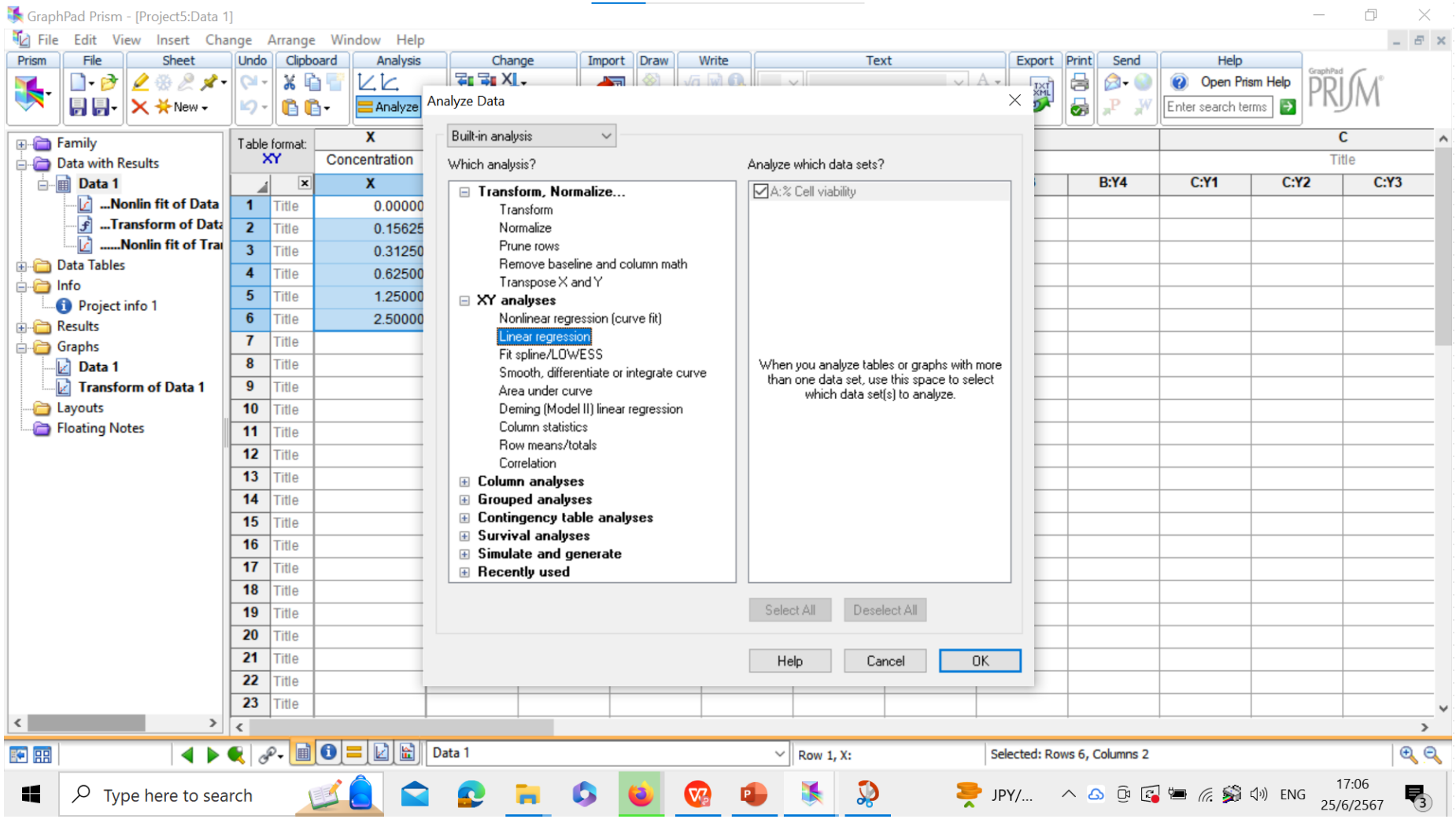
IC50 Calculation using GraphPad Prism

Step 2. Drop the list of sample data sets



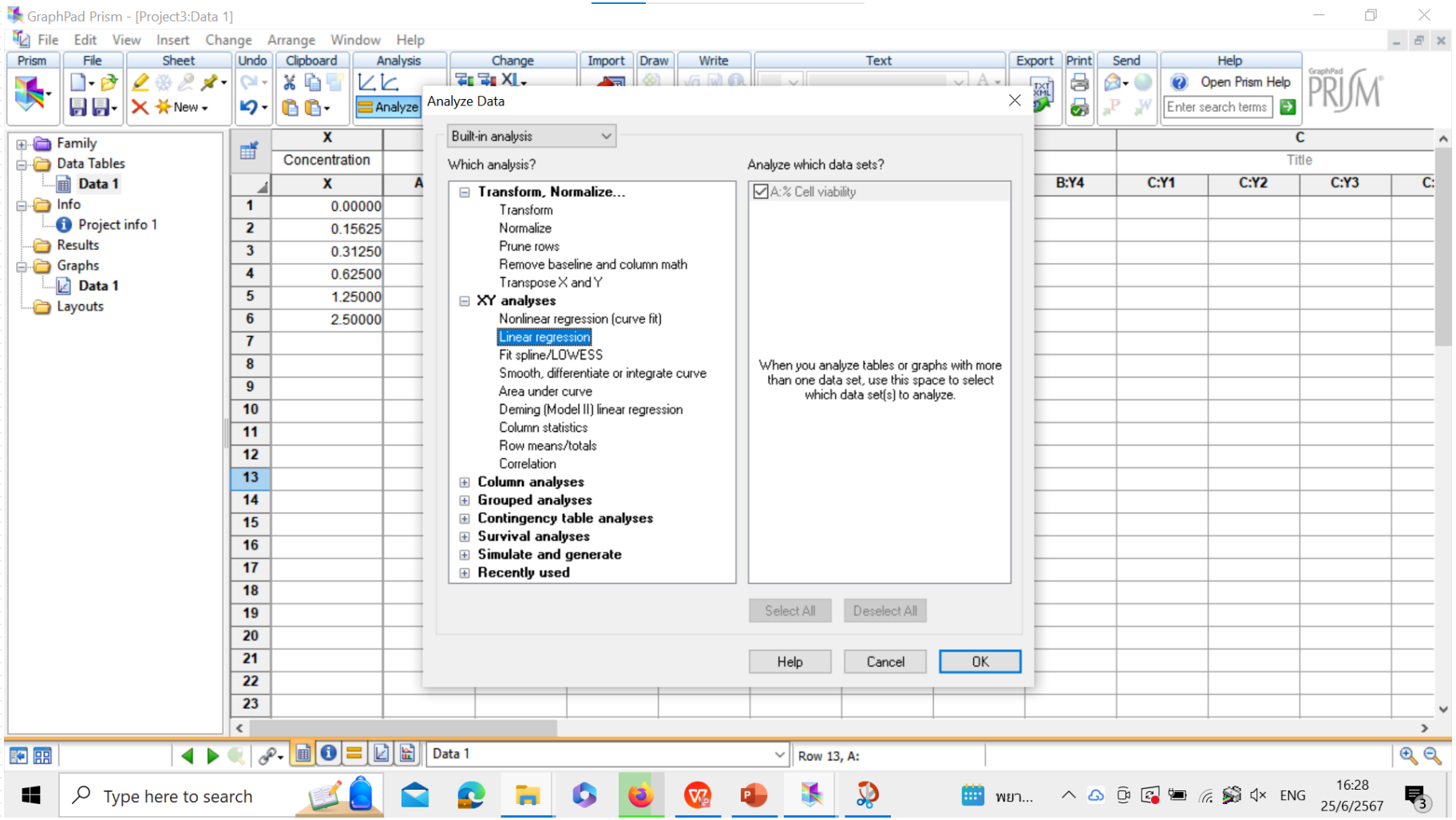
IC50 Calculation using GraphPad Prism

Step 3. Transformation the data



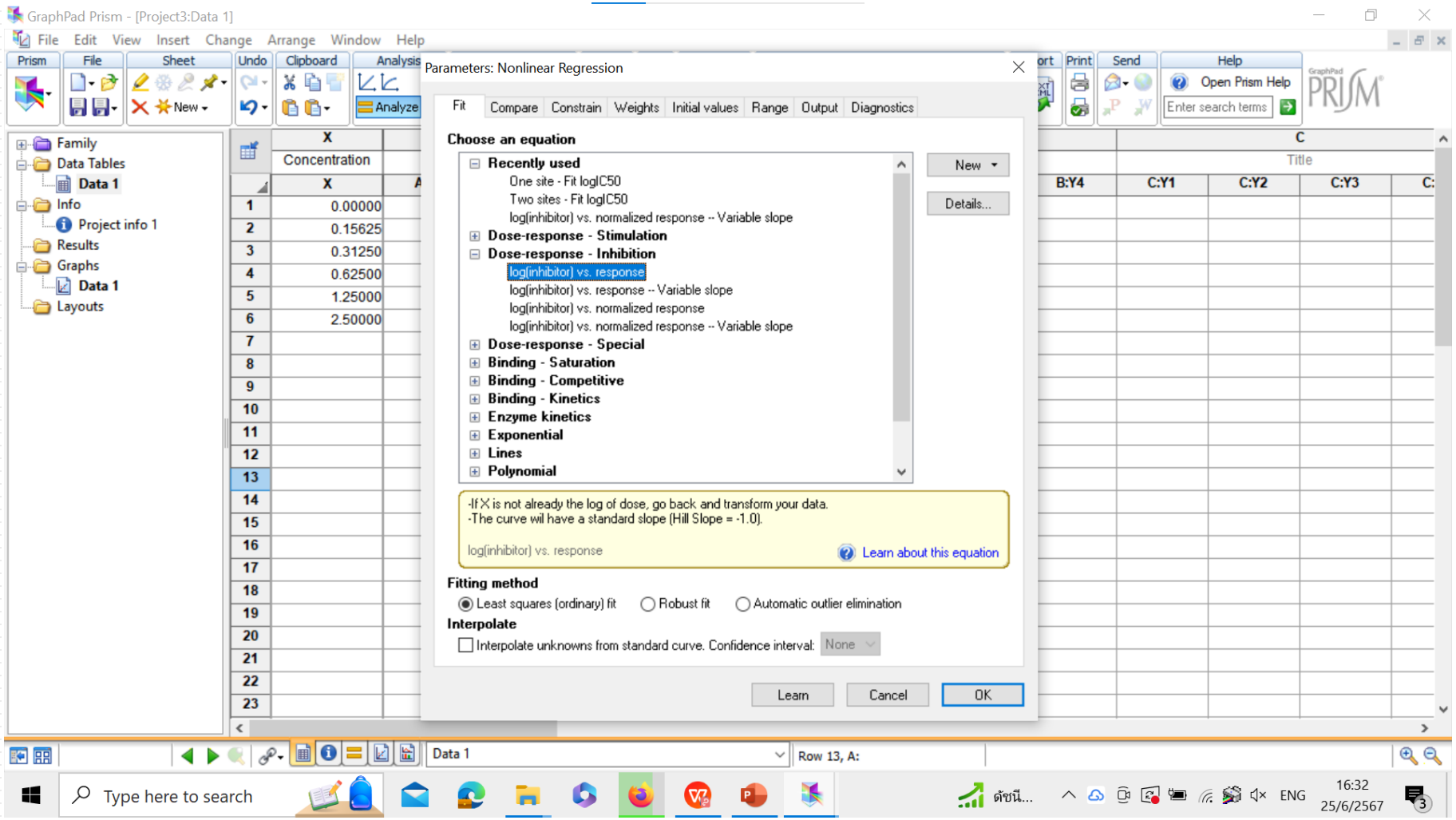
IC50 Calculation using GraphPad Prism

Step 4. Analyze the data: Click Nonlinear regression



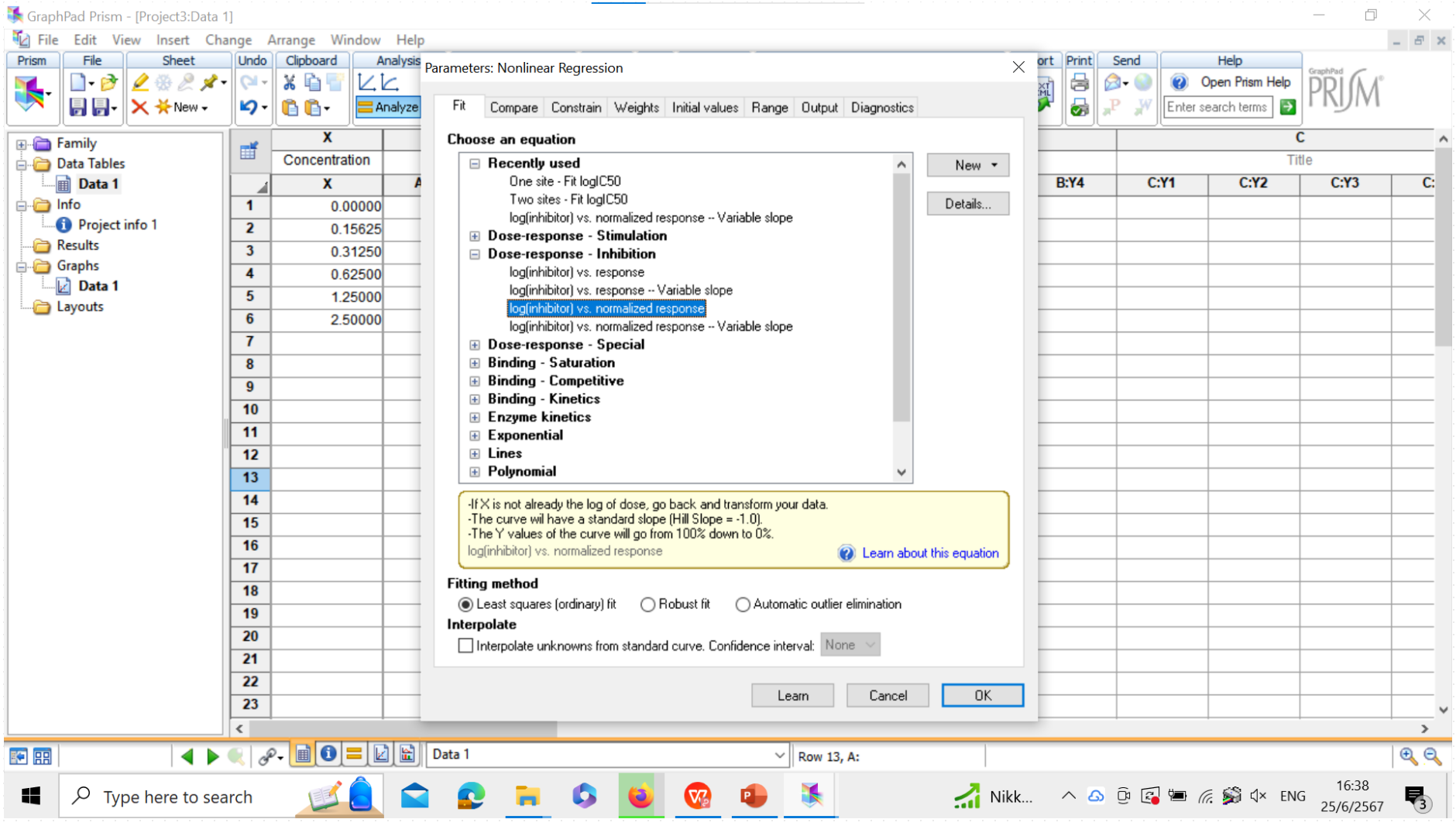
IC50 Calculation using GraphPad Prism

Step 5. Choose the "Dose-Response - Inhibition"



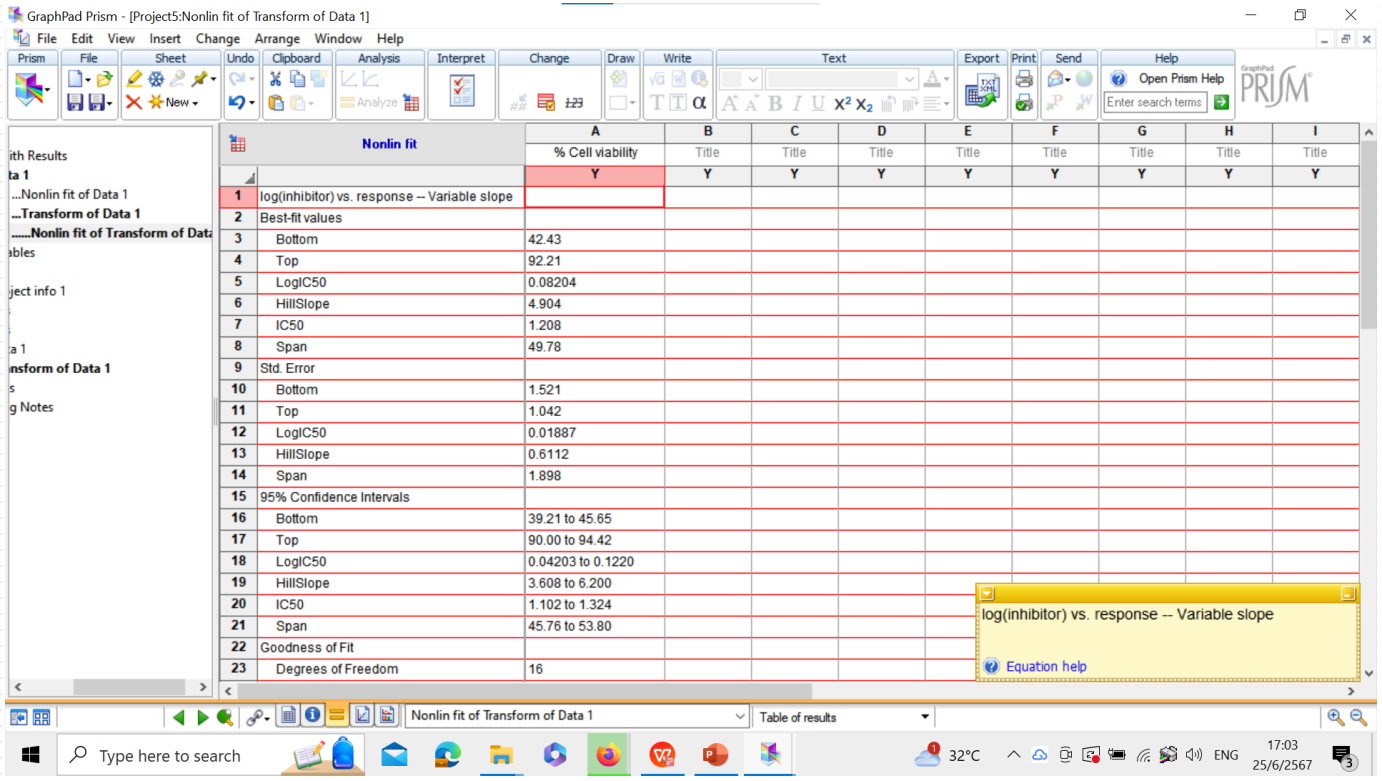
IC50 Calculation using GraphPad Prism

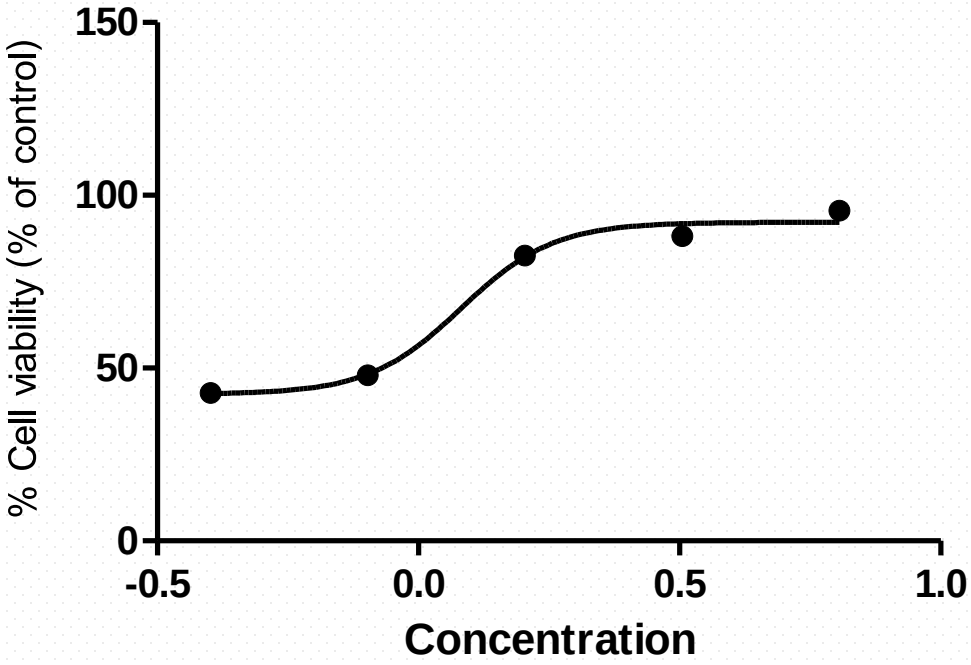
Step 6. Choose "log(inhibitor) vs. response - Variable slope"



IC50 Calculation using GraphPad Prism

Step 7. Click OK and view the results





Thank you