

ToxGenie

Quick Installation & User's Manual

ToxGenie.com

Quick Installation & Windows Security Note

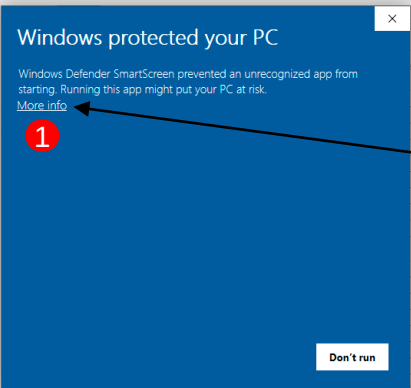
- ToxGenie is a dedicated toxicological statistical analysis program designed exclusively for researchers in the field. It is a versatile tool suitable for both professional GLP toxicology CROs and graduate students specializing in toxicology.
- To provide this specialized tool at an accessible subscription rate rather than passing on the high costs of commercial publisher certificates, ToxGenie is distributed directly to our users.
- As a result, Windows Defender SmartScreen may initially flag the installer.

SmartScreen Scenario 1:

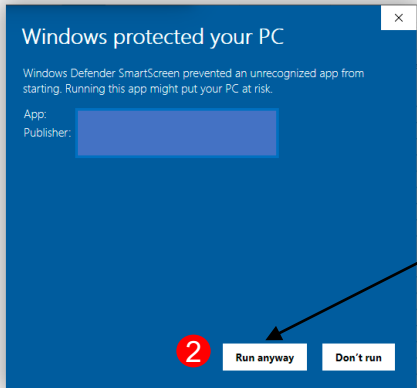


Click [Run]

SmartScreen Scenario 2:



Step 1: On the blue screen, click [More info].



Step 2: Click [Run anyway] to proceed with the installation.

License Activation (Online & Offline)

Upon first launch, ToxGenie requires registration to activate your 30-day free trial or paid subscription.

Standard Activation (Online):

The screenshot shows the 'ToxGenie License Activation' window. At the top, it says 'Activate Your ToxGenie License'. There is a blue button labeled 'Purchase License Key' with a red circle and the number 1 next to it. Below this is a text input field for 'Your Institutional Business Email:' with a red circle and the number 2 next to it. Underneath is a text input field for 'License Key:' with a red circle and the number 3 next to it. The text 'Please copy and paste the entire License Key from your email.' is above this field. At the bottom, there are two blue buttons: 'Activate License' with a red circle and the number 4 next to it, and 'Manual Offline'.

Click **[Get Free 30-Day License Key]** to receive your key via email, or use your purchased key.

Enter your Institutional Business Email and the License Key.

Click **[Activate License]**.

Offline Mode (Institutional Firewall):

If your institution's strict firewall blocks the activation server, ToxGenie will automatically switch to **Offline Mode**.

The screenshot shows the 'ToxGenie License Activation' window in 'Offline Mode'. It says 'ToxGenie Registration (Offline Mode)'. Below this, it states 'Online validation is blocked by your institution's firewall.' and 'How to activate offline:'. There are two numbered steps: 1. Email your 'Request Code' below to toxgenie@toxgenie.com using your institutional email. 2. Copy and paste the 'License Key' you receive from us into the field below. There is a text input field for 'Your Request Code:' containing 'REQ-C8F63236' with a red circle and the number 1 next to it. Below that is a text input field for 'Enter your License Key:' with a red circle and the number 2 next to it. At the bottom, there are two blue buttons: 'Activate Offline' with a red circle and the number 3 next to it, and 'Cancel'.

Copy the generated Request Code and email it to toxgenie@toxgenie.com.

Enter the manual offline key we provide to unlock the software.

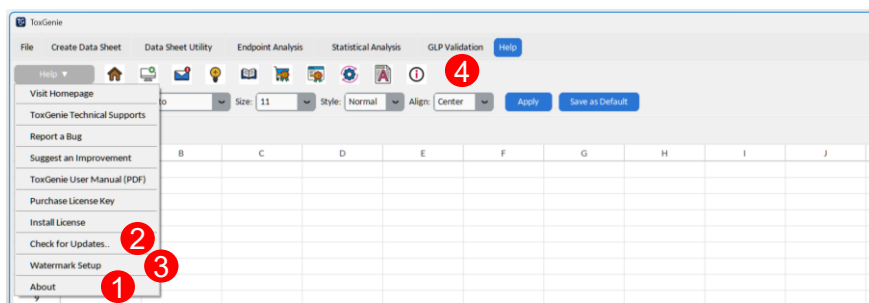
Click **[Activate License]**.

⚠ Important: Institutional Email Required

Personal or commercial email accounts (e.g., @gmail.com, @yahoo.com) are **strictly prohibited**. You must use your official **institutional or business email address** (e.g., .edu, .ac, corporate domains) to receive a valid license key.

License Management & Features

ToxGenie provides a transparent way to manage your subscription and access advanced tools.



1 Checking License Validity:

To check your current subscription tier (Trial, Academic, Professional) and expiration date, navigate to the **[Help]** tab and click the **[About]** button.



2 Purchasing & Upgrading:

To purchase a new license or upgrade your current plan, click **[Buy License Key]** in the **Help** tab to visit our secure pricing page. Once you receive your key, click **[Install License]** to instantly activate it without losing your data.

3 Custom Watermarks (Acad & Pro):

Embed your official institutional watermarks and headers directly into the exported PDF and MS Word reports.

4 GLP Validation Kit (Pro Only):

Unlock the **[GLP Validation]** tab to automatically generate out-of-the-box 21 CFR Part 11 compliance documentation, including complete IQ/OQ Protocols.

 **Note on Email Delivery:** Due to strict institutional security filters, the automated license key email may be routed to your **Spam or Junk folder**. Please check there if you do not receive it within a few minutes.

The "Zero-Manual" Workflow

ToxGenie is designed with a core philosophy: **Eliminate thick, complicated manuals**. If you understand toxicology, you already know how to use ToxGenie. Just follow the tabs from left to right.

Data Types in ToxGenie

Select the data type that matches your endpoint. ToxGenie uses this selection to validate the data table and to apply the appropriate statistical method. The four data types listed below are identical to those available in the **Create Data Sheet** menu.

1. Count Data

What it is

- Non-negative whole numbers only: 0, 1, 2, 3, ...
- Each cell is a count, not a measured length or a fraction.

Typical endpoints

Revertant colonies, micronuclei per cell (or per group), other discrete event counts.

How to enter

One measurement column per endpoint. Dose and Replicate No. are added automatically. Do not enter decimals or negative values.

Examples

OECD TG 471 (bacterial reverse mutation), OECD TG 490 (in vitro mammalian cell gene mutation).

2. Quantal Data

What it is

A binary (all-or-none) outcome, recorded as two counts: how many were exposed, and how many responded.

Typical endpoints

Mortality, immobility, presence/absence of a finding (for example, micronucleus-positive cells).

How to enter

Two columns are required:

- Initial Count — number exposed (animals, daphnids, scored cells, ...)
- Affected — number that showed the response

The "Zero-Manual" Workflow

Both columns must be whole numbers ≥ 0 . Affected cannot be larger than Initial Count

Examples

OECD TG 202, 203 (acute aquatic tests); OECD TG 473, 474, 487 (cytogenetic tests).

3. Quantitative/Continuous Data

What it is

A measured value on a continuous scale. Decimals are allowed (for example, 12.4 g, 0.85).

Typical endpoints

Body weight, length, organ weight, biomass, enzyme activity, Comet assay measurements.

How to enter

One measurement column per endpoint. Dose and Replicate No. are added automatically.

Examples

OECD TG 210, 211 (fish / *Daphnia* reproduction); OECD TG 489 (in vivo Comet).

4. Ordinal Data

What it is

Ordered severity grades stored as whole numbers. The numbers show rank (none → mild → severe), not a physical measurement.

Typical endpoints

Histopathology severity, clinical signs, functional observational battery (FOB) scores.

How to enter

Use numeric grades only, for example:

0 = none, 1 = minimal, 2 = mild, 3 = moderate, 4 = severe

Do not enter text such as "mild" or "Grade 2". Negative values and decimals are not grades.

Examples

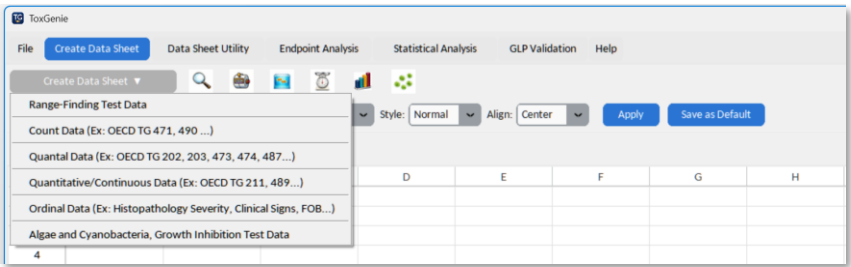
Histopathology severity scores; clinical signs; FOB.

The "Zero-Manual" Workflow

Every Toxicity Data Analysis in 3 Simple Steps.

The sequence is the same for every endpoint. ToxGenie handles the rest.

Step 1: Prepare Data (Create Data Sheet Tab):

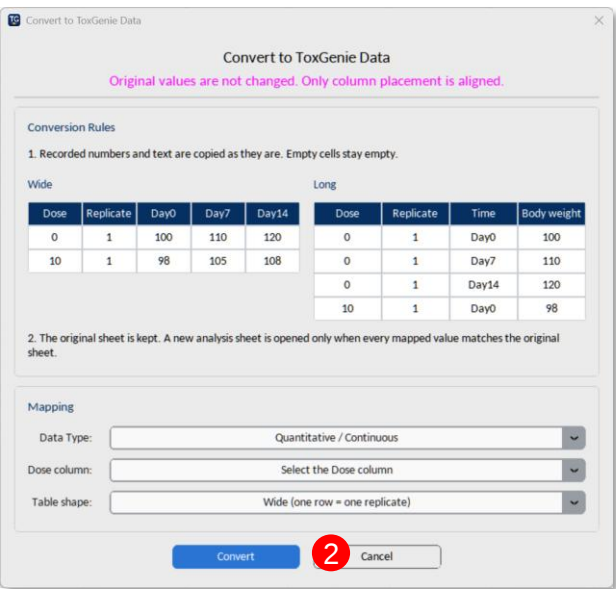
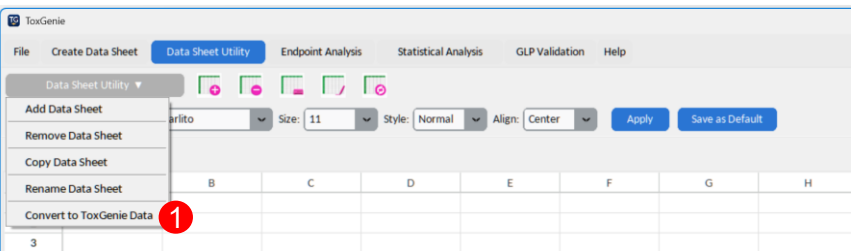


- Go to [Create Data Sheet] and click your study type (e.g., Quantal Data for OECD TG 203; Ordinal Data for histopathology or clinical signs).
- A template opens instantly. Or use [File] to import Excel/CSV.

💡 Tip: For a quicker workflow, we recommend modifying the template files located in the **sample data folder**. You can easily load them directly for analysis by selecting [File] > [Open Excel Data].

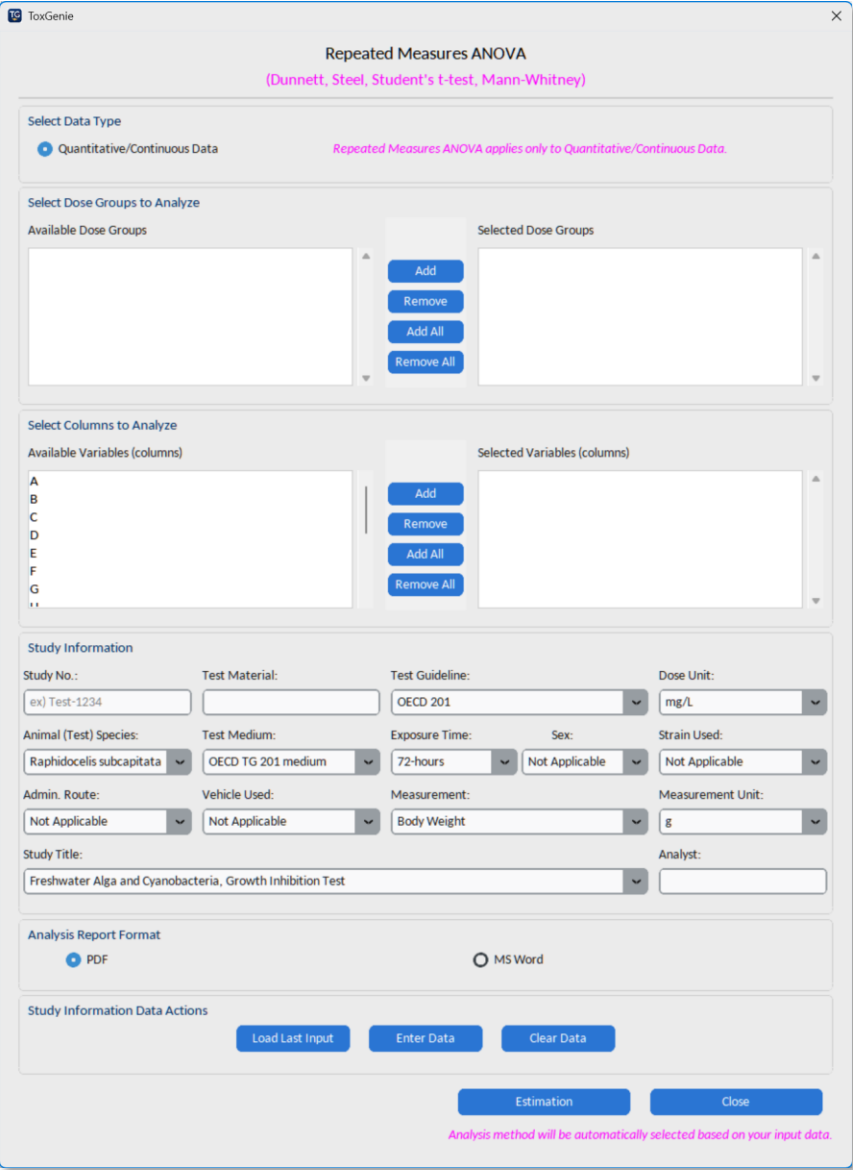
Step 1-2: Convert to ToxGenie Data Format:

- If the sheet is not a ToxGenie template: [Data Sheet Utility] > [Convert to ToxGenie Data] (original sheet is kept).
- Load the file you wish to convert via the **File** menu, then follow the steps below to complete the conversion.



“Zero-Manual” Workflow

Step 2: Run Analysis (Endpoint / Statistics Tab)



ToxGenie

Repeated Measures ANOVA
(Dunnett, Steel, Student's t-test, Mann-Whitney)

Select Data Type

☒ Quantitative/Continuous Data *Repeated Measures ANOVA applies only to Quantitative/Continuous Data.*

Select Dose Groups to Analyze

Available Dose Groups

Selected Dose Groups

Add
Remove
Add All
Remove All

Select Columns to Analyze

Available Variables (columns)

Selected Variables (columns)

A
B
C
D
E
F
G
H

Add
Remove
Add All
Remove All

Study Information

Study No.: Test Material: Test Guideline: Dose Unit:

Animal (Test) Species: Test Medium: Exposure Time: Sex: Strain Used:

Admin. Route: Vehicle Used: Measurement: Measurement Unit:

Study Title: Analyst:

Analysis Report Format

☒ PDF ☐ MS Word

Study Information Data Actions

Load Last Input Enter Data Clear Data

Estimation Close

Analysis method will be automatically selected based on your input data.

Navigate to the **[Endpoint]** or **[Statistical Analysis]** tab and select a method (e.g., Hypothesis Tests). In the analysis window:

- Select your Data Type.
- Move target Doses and Variables to the 'Selected' boxes.
- Enter Study Information and choose the report format (PDF/Word).

The "Zero-Manual" Workflow

Step 3: Generate Report

Click **[Estimation]**. Validated reports and graphs are generated instantly.

Critical Input Rules for Analysis

To ensure statistical integrity and avoid errors, ToxGenie enforces strict GLP validation rules:

- ✓ **Study No.:** Must be a combination of letters and numbers (e.g., Test-123). Entering numbers only is not allowed.
- ✓ **Quantal Data:** When selecting the Quantal Data type, you must specify the Initial Exposed Data Column from the dropdown list.
- ✓ **Dose Groups & Error Messages:** Depending on the specific statistical method you choose, non-numeric dose groups (e.g., "Positive Control") may or may not cause an error. **If an error or warning message box appears during estimation, please read the instructions carefully and follow them** (e.g., removing the non-numeric group from the Selected Dose Groups list if prompted).