Accounting for a missing section

The issue of missing sections occurs regularly in biological work. Sections are damaged during processing or mounting and, as a result, are not available for stereological use.

What are my options to account for a missing section?

Option 1	Randomly choose another starting section among the other possible starting points so that the missing or damaged section will not be needed.
Option 2	Substitute a neighboring section (that was not going to be included in the sampling) for the missing section if: • The **Evaluation Interval** is greater than one... AND • ... There is reasonable evidence to suggest that there are no significant changes from one section to the next (substantial differences between neighboring sections could dramatically alter the results).
Option 3	Simulate the probe for that section by marking down the number of cells if the mean number of particles for the two adjacent sections (to the missing section) seems to be the appropriate approximation for the number of particles on the missing section.
Option 4	Use the **Account for Missing Section** tool in the software if: • You have one contour per section. • The mean of all the section counts is an appropriate estimation for the missing section. See instructions below.

How do I use the Account for Missing Section tool?

1. Create a placeholder section for the missing section while counting with the serial section manager.
2. Click **Probes>Account for Missing Section**. Stereo Investigator displays **the Add Probe for Missing Section** dialog box.
    a. Select the type of probe: Fractionator, Optical Fractionator, or Cavalieri.
    b. In the list of missing sections, select the placeholder section created in **Step 1**.
    c. Click **OK**.
3. When viewing the results of the probe, two types of results are displayed:
    - **Estimated total by [probe name]**: Estimate with the missing section.
    - **Missing section corrected total by [probe name]**: Estimate with the mean of all the other section counts (the mean of the number of cells counted for all the other sections) substituted in for the missing section.