

A microsample is generally less than 50µl blood, but the following considerations should be made:

- potential plasma yield from your microsample
- plasma/serum volume required for each assay
- requirement for multiple analyses
- requirement for Incurred Sample Reanalysis (ISR) on GLP studies

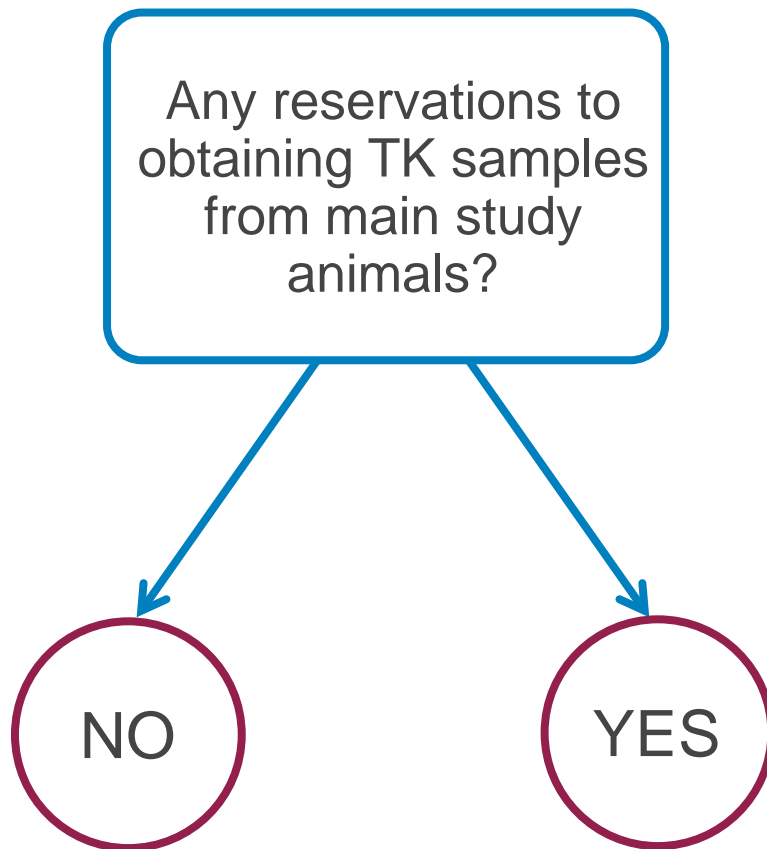
Sampling burden  
within acceptable  
limits for main study  
animals?

NO

YES

Considerations:

- length of study
- number of timepoints
- TK sampling from all animals or subsets (serial or composite sampling)
- frequency of sampling
- total blood volume required
  - haematology & blood chemistry
  - toxicokinetics
  - pharmacodynamics
  - anti-drug-antibodies
- species blood volume limits



### Considerations:

- reduced bodyweight gain
  - use experience of compound/previous studies and be conservative when ensuring total blood volume required is within limits
- cardiovascular effects
- if blood or bone marrow is possible target organ
- if taking micronucleus sample from main study animals

### Recommendation:

Discuss options with your bioanalyst and consider conventional sampling

### Further information:

- have an open and honest conversation with your bioanalyst about the possibility and limitations for adapting an assay for microsampling, and how much work this might involve
- for more information on conventional sampling, visit our [blood sampling resource](#)

## Recommendation:

Use microsampling  
from small groups of  
satellite animals

## Further information:

- access example study designs for microsampling from satellite animals [here](#)
- find details and videos on microsampling techniques [here](#)

## Recommendation:

Use microsampling  
from small groups of  
satellite animals

## Further information:

- access example study designs for microsampling from satellite animals [here](#)
- find details and videos on microsampling techniques [here](#)

## Recommendation:

Use microsampling from  
main study animals

## Further information:

- access example study designs for microsampling from main study animals [here](#)
- find details and videos on microsampling techniques [here](#)