**Guidelines for Sample use in GEMINI**

The general rules are:

1. It is the investigators’ responsibility to ensure that the required sample is the minimum volume required for the assay, and justify the reason for the volume requested.
2. The study management will preserve a minimum amount of each biosample from all Cohort participants not lost to follow-up according to the table below. All approved projects can use samples in green zone if they don’t change the sample status to yellow or red. Use of samples in yellow zone (provided they don’t change status to red) needs a written justification by the investigator, and PI approval. Samples in red zone are generally not included in available sample lists, unless the investigator shows an urgent necessity, and PIs agree after ample discussion in a conference call/meeting (not email alone).

| Sample type | Green zone | Yellow zone | Red zone |
| --- | --- | --- | --- |
| Plasma | 1.5-4 mL | < 1.5 mL | 0.5 mL |
| Buffy coat | 1-2 mL | < 1 mL | 0.5 mL |
| RBC | 0.5-1 mL | - | 0.5 mL |
| Urine | 1.5-4.5 mL | < 1.5 mL | 1 mL |
| Hair and nail | - | - | A few clippings |

1. For DNA extraction from buffy coat samples, due to sample heterogeneity, it is preferable to extract from more than 1 straw, and return the remaining extracted DNA to the repository.
2. Use of samples with known medical outcomes are only restricted to the scientifically relevant hypotheses (e.g. Please exclude ESCC samples when studying CVD unless it introduces bias).
3. Please refrain from using samples of individuals with outcomes occurring in the first 3 years of follow up, unless the study aims at early detection.
4. The general priority order of sample use (whenever possible) is:
   1. Use of pilot samples
   2. Use of duplicate/triplicate samples
   3. Use of subjects who are lost to follow up or died of accidents
   4. Use of case-control study samples
   5. Use of samples from participants who were not included in remeasurement or polypill
   6. Samples without an outcome of interest (death or cancer)
   7. Samples not diagnosed within the first 3 years of follow-up

Please start from the top in case you want to use samples.

1. Samples from Cohort pilot phase with duplicates/triplicates available
2. Unique samples from Cohort pilot phase with NO duplicates/triplicates available
3. Cohort samples who are lost to follow-up with duplicates/triplicates available
4. Unique Cohort samples who are lost to follow-up with NO duplicates/triplicates available
5. Samples from the case-control study with duplicates/triplicates available
6. Unique samples from the case-control study with NO duplicates/triplicates available
7. Cohort samples who died of accidents or other non-medical reasons during follow up with duplicates/triplicates available
8. Unique Cohort samples who died of accidents or other non-medical reasons during follow up with NO duplicates/triplicates available
9. Cohort samples with no known outcome during follow up who were not part of remeasurement/polypill samples with duplicates/triplicates available
10. Unique Cohort samples with no known outcome during follow up who were not part of remeasurement/polypill samples with NO duplicates/triplicates available
11. Cohort samples with no known outcome during follow up who were also part of remeasurement/polypill samples with duplicates/triplicates available
12. Unique Cohort samples with no known outcome during follow up who were also part of remeasurement/polypill samples with NO duplicates/triplicates available
13. ONLY WITH SCIENTIFIC JUSTIFICATION: Cohort samples with known outcomes during follow up who were not part of remeasurement/polypill samples with duplicates/triplicates available (use of samples diagnosed within the first 3 years restricted to studying early detection)
14. ONLY WITH SCIENTIFIC JUSTIFICATION: Unique Cohort samples with known outcome during follow up who were not part of remeasurement/polypill samples with NO duplicates/triplicates available (use of samples diagnosed within the first 3 years restricted to studying early detection)
15. ONLY WITH SCIENTIFIC JUSTIFICATION: Cohort samples with known outcomes during follow up who were also part of remeasurement/polypill samples with duplicates/triplicates available (use of samples diagnosed within the first 3 years restricted to studying early detection)
16. ONLY WITH SCIENTIFIC JUSTIFICATION: Unique Cohort samples with no known outcome during follow up who were also part of remeasurement/polypill samples with NO duplicates/triplicates available (use of samples diagnosed within the first 3 years restricted to studying early detection)