**Additional file 1: Table S1.** List of invasive samples used to verify matches among genotypes and calculate scores' calibration.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Bear ID(Lab2) | Bear ID(Lab3) | Name of bear | Sex | Biological sample | Sampling method |
| M10 | Gen 10 | Ciccio | M | Blood tampon | Invasive |
| F04 | Gen 12 | Orsa Maggiore | F | Blood tampon | Invasive |
| M12 | Gen 24 | Cicerone | M | Blood tampon | Invasive |
| M07 | Gen 45 | Edoardo | M | Blood tampon | Invasive |
| M08 | Gen 60 | Stefano | M | Blood tampon | Invasive |
| F09 | Gen 74 | Forchetta | F | Blood tampon | Invasive |

List of the 6 selected samples representing 6 genetically different individuals sharing the lowest number of alleles, resuming the observed variability of the whole data set. These samples were analyzed by Lab2 during the Life Arctos Project [52] and by Lab3 during the present study, in order to calculate scores' calibration between labs and verify matches among 45 genotypes of individuals, that overlapped between Labs 2 and 3.