

Data Frames and R Scripts for Statistical Analyses

Data frames for statistical analyses on calculated HgT concentrations:

Test	Site and Season	Dataframe title	R Script
Friedman's and Nemenyi post-hoc	EF December 2019 Trials 1-3	EF DEC Trial Table.csv	Statistical Testing DEC, APR & OCT Trials 3.17.25.R
Friedman's and Nemenyi post-hoc	BZ December 2019 Trials 1-3	BZ DEC Trial Table.csv	Statistical Testing DEC, APR & OCT Trials 3.17.25.R
Friedman's and Nemenyi post-hoc	EF October 2020 Trials 6-8	EF OCT Trial Table.csv	Statistical Testing DEC, APR & OCT Trials 3.17.25.R
Wilcoxon signed rank test	BZ April 2020 Trials 4-5	BZ APR Trial Table.csv	Statistical Testing DEC, APR & OCT Trials 3.17.25.R
Wilcoxon signed rank test	EF April 2020 Trials 4-5	EF Trial Table APR ORIG.csv	Statistical Testing DEC, APR & OCT Trials 3.17.25.R
ANOVA and Tukey's HSD or Kruskal-Wallis and Dunn's post-hoc	EF and BZ Assessment 2023 Trials 9-16	Collected Porewater Results 12.20.23.csv	EF & BZ 2023 Assessment Trials 3.18.25.R

Data frames for effect size calculations for December Trials 1-3:

Test	Site and Season	Dataframe title	R Script
Effect Sizes for Friedman's test	EF December 2019 Trials 1-3	EF.effsize.DEC.csv	Effect Sizes Calculated EF and BZ DEC Trials.R
Effect Sizes for Friedman's test	BZ December 2019 Trials 1-3	BZ.effsize.csv	Effect Sizes Calculated EF and BZ DEC Trials.R

Data frames for April LOD substitution scenarios:

Test	Site and Season	Dataframe title	R Script
Wilcoxon signed rank test and effect size	EF April 2020 Trials 4-5 ZEROS substituted for BLOD concentrations	EF APR Trial Table ZEROS.csv	EF and BZ April LOD Scenarios.R
Wilcoxon signed rank test	EF April 2020 Trials 4-5 HALF the LOD substituted for BLOD concentrations	EF APR Trial Table HALFS.csv	EF and BZ April LOD Scenarios.R
Wilcoxon signed rank test	EF April 2020 Trials 4-5 LOD itself substituted for BLOD concentrations	EF APR Trial Table LODS.scv	EF and BZ April LOD Scenarios.R
Wilcoxon signed rank test	BZ April 2020 Trials 4-5 ZEROS substituted for BLOD concentrations	BZ APR Trial Table ZEROS.csv	EF and BZ April LOD Scenarios.R
Wilcoxon signed rank test	BZ April 2020 Trials 4-5 HALF the LOD substituted for BLOD concentrations	BZ APR Trial Table HALFS.csv	EF and BZ April LOD Scenarios.R
Wilcoxon signed rank test	BZ April 2020 Trials 4-5 LOD itself substituted for BLOD concentrations	BZ APR Trial Table LODS.csv	EF and BZ April LOD Scenarios.R

Data frames for EF October LOD substitution scenarios:

Test or Calculation	Site and Season	Dataframe title	R Script
Friedman's and Nemenyi post-hoc	EF October 2020 original data, concentrations as calculated	EF OCT Trial Table.csv	EF OCT LOD Scenarios.R
Effect Size for Friedman's test	EF October 2020 original data, concentrations as calculated	EF.effsize.OCT.csv	EF OCT LOD Scenarios.R
Friedman's and Nemenyi post-hoc	EF October 2020 ZEROS substituted for BLOD concentrations	EF OCT Trial Table ZEROS.csv	EF OCT LOD Scenarios.R
Effect Size for Friedman's test	EF October 2020 ZEROS substituted for BLOD concentrations	EF.effsize.ZEROS.csv	EF OCT LOD Scenarios.R
Friedman's and Nemenyi post-hoc	EF October 2020 HALF the LOD substituted for BLOD concentrations	EF OCT Trial Table HALFS.csv	EF OCT LOD Scenarios.R
Effect Size for Friedman's test	EF October 2020 HALF the LOD substituted for BLOD concentrations	EF.effsize.HALFS.csv	EF OCT LOD Scenarios.R
Friedman's and Nemenyi post-hoc	EF October 2020 LOD itself substituted for BLOD concentrations	EF OCT Trial Table LODS.csv	EF OCT LOD Scenarios.R
Effect Size for Friedman's test	EF October 2020 LOD itself substituted for BLOD concentrations	EF.effsize.FULL.LOD.csv	EF OCT LOD Scenarios.R

Data frames for EF October comparison of Trial 6 vs. Trial 8 after inconclusive results with LOD substitution scenarios and Friedman's test on 3 trials:

Test or Calculation	Site and Season	Dataframe title	R Script
Wilcoxon signed rank test and effect size	EF October 2020 Trial 6 vs. Trial 8 original data, concentrations as calculated	T6vT8.csv	EF OCT T6 vs. T8.R
Wilcoxon signed rank test and effect size	EF October 2020 Trial 6 vs. Trial 8 ZEROS substituted for BLOD concentrations	T6vT8.ZEROS.csv	EF OCT T6 vs. T8.R
Wilcoxon signed rank test and effect size	EF October 2020 Trial 6 vs. Trial 8 HALF the LOD substituted for BLOD concentrations	T6vT8.HALFS.csv	EF OCT T6 vs. T8.R
Wilcoxon signed rank test and effect size	EF October 2020 Trial 6 vs. Trial 8 LOD itself substituted for BLOD concentrations	T6vT8.LOD.csv	EF OCT T6 vs. T8.R