

The figure displays 25 box plots arranged in a 5x5 grid, comparing the expression values of various DNA repair genes between two groups: High\_expression (blue boxes) and Low\_expression (orange boxes). Each plot includes a Wilcoxon test p-value and a significance bracket indicating the difference between the groups.

Repair Pathway	Wilcoxon p-value
Repair1_DNA_glycosylases	$p < 2.22e-16$
Repair2_Other_BER_and_strand_break_joining_factors	$p < 2.22e-16$
Repair3_PARP_enzymes	$p < 2.22e-16$
Repair4_Direct_reversal_of_damage	$p < 2.22e-16$
Repair5_Repair_of_DNA_topoisomerase_crosslinks	$p = 1.1e-12$
Repair6_Mismatch_excision_repair	$p < 2.22e-16$
Repair7_xeroderma_pigmentosum	$p < 2.22e-16$
Repair8_TFIIH	$p < 2.22e-16$
Repair9_NER_related	$p < 2.22e-16$
Repair10_Homologous_recombination	$p < 2.22e-16$
Repair11_Fanconi_anemia	$p < 2.22e-16$
Repair12_Non_homologous_end_joining	$p = 0.00077$
Repair13_Modulation_of_nucleotide_pools	$p < 2.22e-16$
Repair14_DNA_polymerases	$p < 2.22e-16$
Repair15_Editing_and_processing_nucleases	$p < 2.22e-16$
Repair16_Ubiquitination_and_modification	$p = 2e-13$
Repair17_Chromatin_Structure	$p < 2.22e-16$
Repair18_Genes_defective_in_diseases_associated_with	$p = 5.5e-15$
Repair19_Other_identified_genes_with_known_or_suspe	$p < 2.22e-16$
Repair20_Other_conserved_DNA_damage_response_ge	$p < 2.22e-16$
Repair21_AllGenes	$p < 2.22e-16$