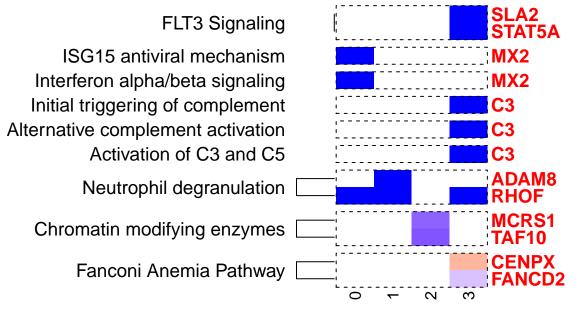
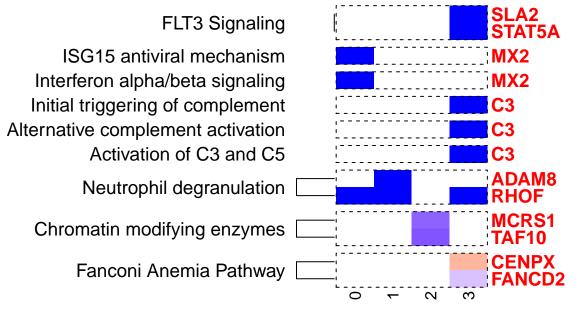
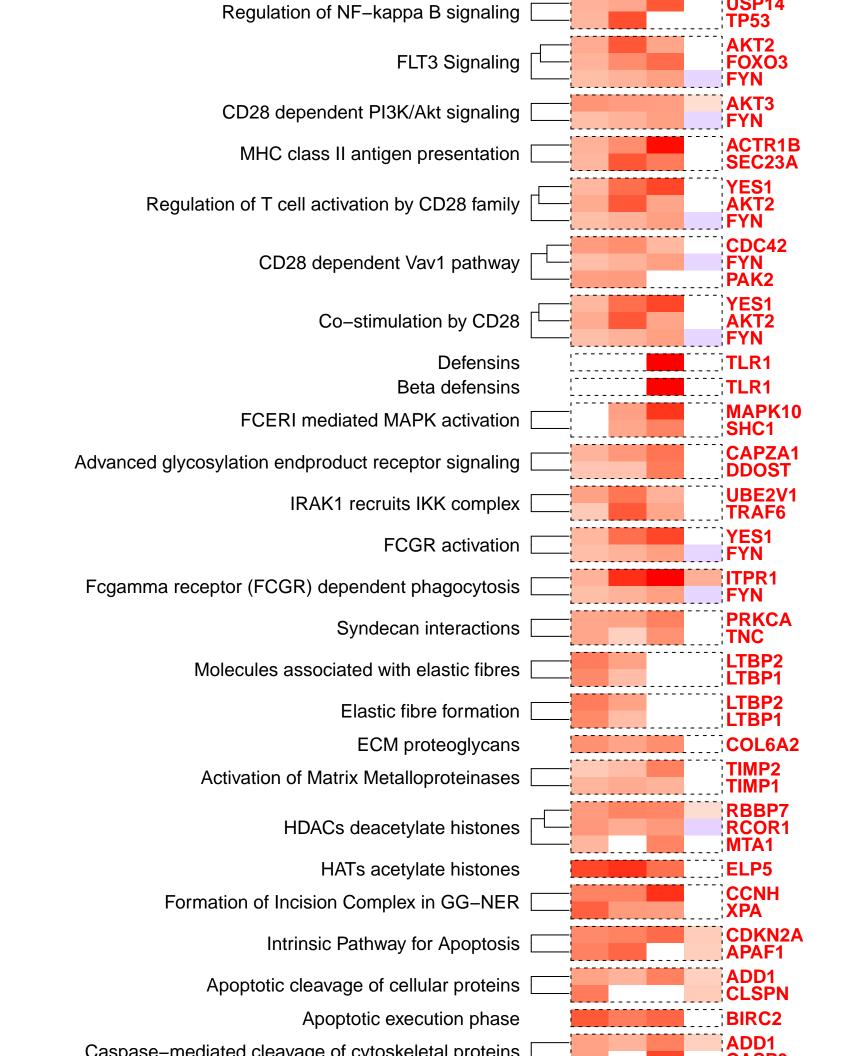


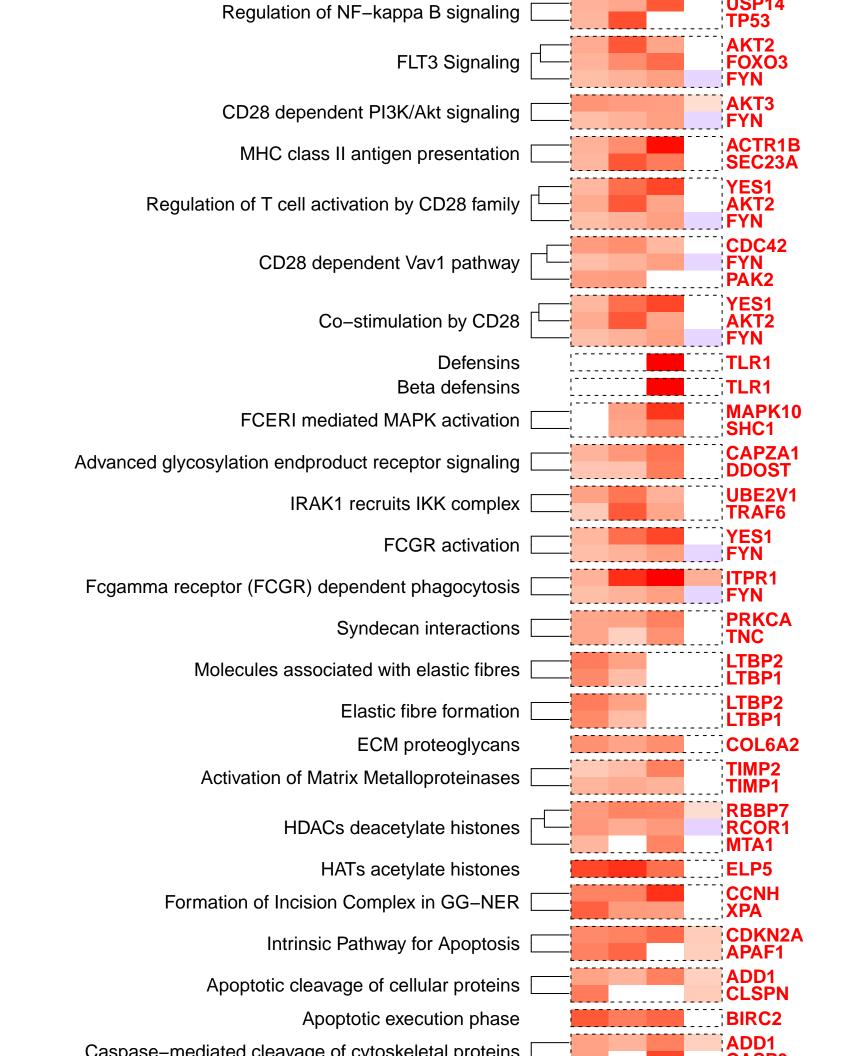
2Gy\_vs\_0Gy Differential Expression for unique Enriched pathways



2Gy\_vs\_0Gy Differential Expression for unique Enriched pathways







2Gy\_vs\_0Gy Differential Expression for common Enriched pathways **FANCB** Interferon Signaling EGR1 Interferon alpha/beta signaling EGR1 Antiviral mechanism by IFN-stimulated genes **FANCB** CCL2 STAT1 Interleukin-4 and Interleukin-13 signaling KIF15 KIF18A MHC class II antigen presentation ATP6V0C Neutrophil degranulation PTGES2 Collagen formation COL16A1 Collagen chain trimerization COL16A1 Collagen biosynthesis and modifying enzymes COL16A1 RFC3 POLE2 Translesion synthesis by Y family DNA polymerases bypasses lesions on DNA template **SPRTN** Translesion synthesis by POLK RFC3 RFC3 SPRTN Translesion Synthesis by POLH RFC3 POLE2 Resolution of AP sites via the multiple-nucleotide patch replacement pathway RFC3 POLE2 Resolution of Abasic Sites (AP sites) RFC3 POLE2 Recognition of DNA damage by PCNA-containing replication complex RFC3 PCNA-Dependent Long Patch Base Excision Repair POLE2 Homologous DNA Pairing and Strand Exchange RFC3 HDR through Single Strand Annealing (SSA) RFC3 RFC3 POLE2 HDR through Homologous Recombination (HRR) RFC3 Gap-filling DNA repair synthesis and ligation in GG-NER POLE2 RFC3 **DNA Damage Bypass** POLE2 **SPRTN** RFC3 Base Excision Repair POLE2 Apoptotic cleavage of cell adhesion proteins OCLN

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ogy\_vs\_ogy Differential Expression for confinion Enficied pathways ELOC UBC Signaling by CSF3 (G-CSF) TRAF2 Interleukin-1 signaling NFKB2 NFKB2 Interleukin-1 processing **ELOC** Inactivation of CSF3 (G-CSF) signaling **UBC CRK** Regulation of signaling by CBL Interleukin-4 and Interleukin-13 signaling CCL<sub>2</sub> STAT1 Interleukin-35 Signalling STAT4 STAT1 Interleukin–2 family signaling STAT4 STAT1 STAT4 Interleukin-21 signaling STAT1 STAT4 Interleukin–20 family signaling **IRF7** TRAF6 mediated IRF7 activation in TLR7/8 or 9 signaling TRAF6 mediated IRF7 activation IRF7 COMMD9 Neutrophil degranulation **ALDOA** AGER IRF7 DDX58/IFIH1-mediated induction of interferon-alpha/beta TRIF-mediated programmed cell death **TICAM2** TRAF2 TRAF6 mediated NF-kB activation **NFKB2** HDAC1 HDAC8 HDACs deacetylate histones NCOR<sub>2</sub> RAD18 **DNA Damage Bypass** RCHY1 Resolution of AP sites via the multiple-nucleotide patch replacement pathway RFC3 PCNA-Dependent Long Patch Base Excision Repair RFC3 Resolution of D-loop Structures through Synthesis-Dependent Strand Annealing (SDSA) RBBP8 Resolution of D-Loop Structures RBBP8 RFC3 Recognition of DNA damage by PCNA-containing replication complex RAD18 RFC3 Homologous DNA Pairing and Strand Exchange XRCC3 HDR through Single Strand Annealing (SSA) RFC3 RFC3 HDR through Homologous Recombination (HRR) XRCC3 RFC3 Dual Incision in GG-NER CHD1L **FNTA** Apoptotic cleavage of cellular proteins **STK24** KPNB1 Apoptotic execution phase STK24

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