



**Supplemental Fig. S4** Evaluation of mutation loss detection on eleven datasets generated by the simulator proposed in this study. Sensitivity and specificity of mutation loss detection for SCsnvcna (red) are shown for the simulated datasets of varying A. FP rate; B. FN rate; C. missing rate; D. number of tree leaves; E. number of SNV cells; F. number of SNVs; G. percentage of CNAs detectable to SNV cells; H. mutation loss rate, I. Beta splitting variable, J. standard deviation of CP difference between CNA cells and SNV cells; and K. mean of a Beta distribution imputed to CP difference between CNA cells and SNV cells. SCARLET's results (blue) are shown for A-K.