

Additional File 1. Representative images of non-keratinizing nasopharyngeal carcinoma (NPC) and non-neoplastic tissue. Differentiated NPC (A) H&E (20X); (B) tumor cells with well-demarcated cell borders and abundant cytoplasm, H&E (100X oil immersion). Undifferentiated NPC: (C) syncytial groups of tumor cells with associated lymphocytes (*short arrows*) and plasma cells (*arrowheads*), H&E (20X), (inset) in situ hybridization for EBV (EBER) positive in tumor cells; (D) tumor cells with vesicular nuclear chromatin (*long arrows*) and prominent nucleoli (*arrowheads*); mature lymphocytes (*short arrows*) are present in the background, H&E (100X oil immersion). Non-neoplastic nasopharyngeal mucosa: (E,F) normal ciliated (arrow) nasorespiratory surface epithelium, H&E (10x, 40X respectively).

